

SELF-EVALUATION REPORT FOR EVALUATION OF RESEARCH ORGANIZATIONS IN THE SEGMENT OF HIGHER EDUCATION INSTITUTIONS IN YEAR 2025

HIGHER EDUCATION INSTITUTION NAME: Mendel University in Brno

COMPANY REGISTRATION NUMBER (CRN): 62156489

THE LIST OF EVALUATION UNITS IN MODULE 3:

Faculty of AgriSciences

Faculty of Forestry and Wood Technology

Faculty of Business and Economics

Faculty of Horticulture

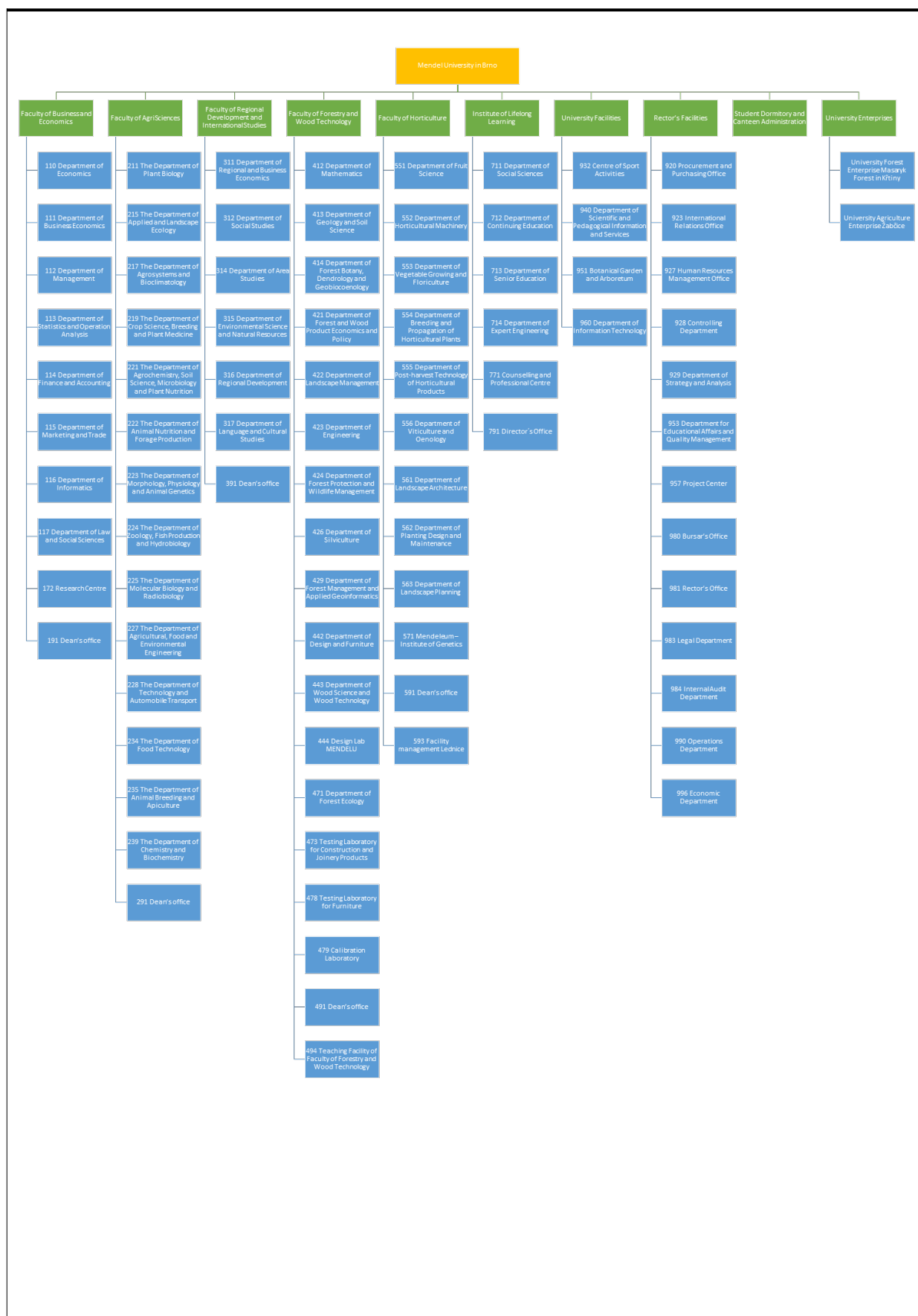
Faculty of Regional Development and International Studies

Institute of Lifelong Learning

ORGANIZATIONAL STRUCTURE OF THE HIGHER EDUCATION INSTITUTION

The University is divided into constituents as follows:

- a) **Faculties** pursuant to Section 22 (1) a) of the Act No. 172/1990 Coll. On Higher Education Institutions, as amended by Act No. 216/1993 Coll. and Act No. 192/1994 Coll., each of which implements at least one accredited study programme and carries out creative activities;
- b) Higher education **institutes** pursuant to Section 22 (1) b) of the Act, which carry out creative activities and participate in the implementation of accredited study programmes or parts of them;
- c) Other constituents pursuant to Section 22 (1) c) and d) of the Act;



1. Leadership & structure

University management

- Rector
[prof. Dr. Ing. Jan Mareš](#)
- Vice-rector for educational affairs and quality
[Mgr. Ondřej Mocek, Ph.D.](#)
- Vice-rector for research, development and innovation
[doc. Ing. Pavlína Adam Ph.D.](#)
- Vice-rector for strategy and sustainability
[doc. Ing. Martin Klimánek, Ph.D.](#)
- Vice-rector for human resources and internal affairs
[doc. Ing. et Ing. Lea Kubíčková, Ph.D.](#)
- Vice-rector for international and public affairs
[prof. Ing. Jiří Skládanka, Ph.D.](#)
- Vice-rector for information and communication technologies
[prof. Ing. Robert Pokluda, Ph.D.](#)
- Bursar
[Ing. Jiří Ševčík](#)

University authorities

Autonomous

- [Academic Senate](#)
- Rector
- [Scientific Council](#)
- [Internal Assessment Board](#)
- [Disciplinary Board](#)

Others

- [Board of Trustees](#)
- Bursar

Advisory

- [Rector's Advisory Board](#)
- [Internal accreditation committee of Mendel University in Brno](#)

HIGHER EDUCATION INSTITUTION WEBSITE (HTML LINK): <https://mendelu.cz/en/>

THE HIGHER EDUCATION INSTITUTION CONTACT PERSON

Name and surname: Iva Kleiberová
Position: Secretary of the International Evaluation Panel
Phone number: +420 545 135 103
E-mail: iva.kleiberova@mendelu.cz

Signature (Rector), stamp

Introductory information about the evaluated higher education institution

The HEI briefly introduces itself. The organizational chart, the position of the HEI within the research, development and innovation system and the system of HEIs in the Czech Republic may be commented on, the mission and vision, the size of the HEI, the number and focus of the units evaluated will be briefly presented.

Maximum 500 words.

Description:

Mendel University in Brno (MENDELU) was founded in 1919 and is the oldest independent university of its professional field in the Czech Republic. Its mission is to be an open institution offering flexible education that reflects the needs of the 21st century, fosters critical thinking and addresses global challenges in science, research and innovation relevant to society. At the same time it strives to be a dynamic, multicultural institution shaping broader social development, inspiring sustainability and social responsibility while creating a safe, supportive and stimulating work environment.

The university consists of five faculties and one university institute: Faculty of AgriSciences, Faculty of Forestry and Wood Technology, Faculty of Business and Economics, Faculty of Horticulture, Faculty of Regional Development and International Studies and Institute of Lifelong Learning. MENDELU also operates two specialized facilities – the University Forest Enterprise Masaryk Forest in Křtiny and the University Agricultural Enterprise Žabčice, which serve for scientific, educational and practical training of students. The university's forests are a unique asset in Europe, offering the largest continuous and species-diverse forest near the university. With the exception of the Faculty of Horticulture, located in Lednice, all university components, including the library, canteens, a large garden and arboretum, are concentrated in the Brno campus, with student dormitories nearby. This allows MENDELU students to have all facilities in one place.

The Faculty of AgriSciences focus on modern agricultural production, including precision agriculture, plant breeding, animal welfare, robotics and automation in agriculture, future food development, new food formulations, waste utilization, cancer treatment, but also ecology and climate change topics.

The Faculty of Forestry and Wood Technology specializes in forestry, game management, landscape architecture, arboriculture, wood biology, technology and management of wood processing and furniture manufacturing, with an emphasis on sustainable forest ecosystems, renewable natural resources, and balanced landscape management.

The Faculty of Business and Economics regularly ranks among the top in economic research (IDEAS/RePEc). Its graduates are successful in economics, management, trade, finance, public administration, and information system design.

The Faculty of Horticulture focuses on plant biology, breeding of new varieties, physiology, ecology, cultivation and plant protection technologies, technological innovations in product processing and sustainable landscape solutions.

The Faculty of Regional Development and International Studies integrates economics, political science, sociology and environmental studies, recognizing their interconnected influence. During its existence, it has gained a strong international dimension.

The Institute of Lifelong Learning serves as MENDELU's hub for professional and further education, emphasizing career growth, language development, and intergenerational learning.

MENDELU in Numbers:

- Offers over 150 study programs.
- Annual budget: CZK 2.4 billion (~EUR 94.7 million).
- Nearly 1,600 employees.
- 9,200 students, with 20% international students.
- Over 700 research and academic staff, with a growing proportion of international researchers.

MENDELU regularly participates in national and international quality assessments in education and research. It is consistently ranked among the top Czech universities in international rankings. In the QS World University Rankings 2024, MENDELU ranked 8th nationally. MENDELU is also climbing in the UI GreenMetric “green” Ranking, placing 3rd among Czech universities in 2023.

SWOT ANALYSIS

Strengths

- long tradition of specialized research dating back to the foundation of the university and the associated image of the university
- research focusing on environmental topics and developmental aid to third countries, with many years of practical experience in these fields
- dynamic development of fields with high scientific-research potential
- high diversity of research topics, increase of interdisciplinarity in research
- constituted research programs of most faculties as the outcome of pursuing research plans
- high professional level of a range of academic employees and their recognition in the scientific community as well as among the professional public
- existence of excellent worksites and excellent research teams achieving results that are of European quality
- long-term collaboration with universities and research institutes in similar areas, both domestic and international
- systematic use of collaboration with foreign academic employees, hosted at the university in order to develop research and science

Weaknesses

- absence of standardized procedures for activities in the area of process management and R&D administration
- lack of knowledge about management and planning of scientific-research activities
- management methods do not correspond to the current trends and needs for improving quality
- low flexibility of line management – a barrier for assigning employees to projects
- low level of specialization as a competitive weakness
- unclear position of certain new disciplines that combine applied, basic and industrial research
- lingering traditionalism and conservatism in research
- low interdisciplinary collaboration
- underdeveloped methods for evaluation and self-evaluation as a research institution
- insufficient level of teamwork, relatively large amount of isolation of research teams inside MENDELU
- uneven amounts of work carried out by individual academic employees
- low competitive strength in terms of international research-scientific activities, and lower interest by international partners

• increasing participation of foreign experts in research projects at the university • Implementing quality and excellence criteria to support the systematic development of university employees' scientific, research, and creative activities, driving innovation • increasing support for young researchers and their motivation to work in excellent teams • HR Excellence in Research Award • supporting scientific-research, artistic and creative work with the required shared infrastructure (lab equipment, biotechnological pavilion, collections of plants and recognized gene funds, IT equipment, study funds and available information databases, the university's service centres, kindergarten) • publication activities and citations of top employees in R&D • existence of an internal grant system to support gender in science and interdisciplinary innovative topics • office for grant support and technology transfer • participation in large national and international projects (CEITEC, science-technology parks, Moravian Science centre, collaboration with CzechGlobe) • implementation of outputs of applied research by first manufacturers and processors • collaboration with businesses, (regional) public institutions, interest and professional units and chambers as well as other relevant entities in regions • participation in JIC and RIS, link to regional innovation programs	• low participation of university employees in large international projects to date • low mobility of researchers within the possibilities offered by international collaboration - a fairly closed environment - significant in-breeding of employees in R&D • low participation in international platforms and organizations in the area of managing and administrating R&D • lack of ability to present project plans/aims and R&D results on international forums • low attractiveness of the R&D environment for foreign researchers • absence of a transparent system for recruiting high-quality employees in R&D • lack of experience of employees responsible for commercialization of research activities • unfamiliarity with standard grant management methods used in R&D on an international level • low share of employees with experience from the private sector • lack of human resources allocated to supporting processes for R&D, underdeveloped material infrastructure for support of R&D – lack of databases, grant software, etc. • absence of links between the grant office and international (or even domestic) partners; low mobility of grant management employees • lack of motivation to aim for external funding • low level of collaboration with the application sphere • difficult and strenuous application of the results of theoretical research into practice, lack of experience with technology transfer • lack of soft skill development for R&D employees • low applicability of PhD graduates in research in their field

Opportunities

- global support for basic research in the area of sustainable development, advanced materials, genome editing, molecular biology and omics sciences
- support for research activities in the area of evaluating the impacts of climate change on controlled ecosystems, quality and food safety
- growing competition as a factor for changing the behavior of the educational and research environment; pressure on monitoring qualitative performance indicators
- the new EU programming period 2021–2027 and the related grant and subsidy programs related to creative activities
- established international networks and growing internationalization within and beyond the EU support greater involvement in global research platforms and committees
- innovation development for competitiveness, requiring research-application integration and technology transfer
- new calls to support technology transfer and the interest of companies and enterprises in cooperation in the field of applied research and Innovation
- participation in the activities of the regional innovation strategy
- development of new forms of international research collaboration based on partner networks
- establishment of new fields and interdisciplinary approaches in a range of disciplines
- emerging young research teams and growing recruitment of (inter)national postdocs strengthen innovation potential for R&D and global collaboration

Threats

- lack of financial support for R&D from the Czech state and its long-term (un)stability, frequent changes in the legislative framework
- reduction of financing of research activities from other external sources, leading to a further drop of their quality
- low internal motivation among both early-career and established researchers undermines research productivity and long-term development of R&D teams
- lack of interest and/or preparation of the corporate sphere to financially contribute to applied research, low demand for the development of new products or technologies
- long-term underinvestment in research infrastructure and support facilities limits the quality and competitiveness of research outputs
- low visibility of excellent research limits recognition, collaboration opportunities, and access to competitive funding
- loss of competitive strength when carrying out contractual research via supplementary activities, as a consequence of setting inadequately high overhead costs
- reduced interest of foreign partners in collaboration
- academic inbreeding limits research quality and hinders professional growth within research units
- persistence of outdated mindsets among senior R&D staff conflicts with current strategic and innovation needs
- limited use of mobility tools reduces researcher mobility and restricts international collaboration and experience sharing
- low motivation to pursue excellence reduces research ambition and international competitiveness
- increase of the failure rate for submitted grant support applications for R&D
- loss of top R&D talent to other sectors or institutions weakens research

• rising professionalism of employees in R&D and administrative support boosts competitiveness • strengthening leadership capabilities enables clearer research strategies and enhances the university's strategic direction in R&D • growing internationalization of the research environment and services enhances global engagement and attracts high-quality partnerships • making the research environment more attractive for women • rising motivation among R&D staff to pursue new research opportunities, including international projects, expands the university's research reach • embedding mobility in R&D and project management standards fosters idea exchange, attracts new projects, and supports international collaboration • growing confidence among R&D staff enhances their engagement in international arenas and fosters stronger research positioning • growing ability to lead international research initiatives positions the university as a strategic partner in global consortia • greater transparency of the R&D environment • introduction of modern management systems, including electronic tools • creation of links between the grant office and international grant support and project management organizations • development of modern mentoring programs supports the growth of young researchers and strengthens future research capacity • EU structural funds provide a strategic opportunity to significantly upgrade research infrastructure and capacities • stronger partnerships among funders, applied research actors, and international R&D institutions enable coordinated responses to shared challenges	continuity and institutional competitiveness • limited capacity to engage with the international research community hinders participation in global projects and collaborations • further drop of the ability to actively use English language • the current research evaluation system lacks objectivity in assessing the full scope of applied research activities. • low societal recognition of research careers discourages young talent and limits excellence across disciplines • significantly lower political support for the agricultural sector and applied research compared to other EU countries hampers competitiveness and growth • declining public and private funding for applied research—e.g., due to extraordinary state expenditures • societal and legal regulations limiting innovative responses to climate change—e.g., prioritizing economic interests over natural resource protection or restricting new genomic techniques—hinder research progress and adaptation

• the new evaluation system provides R&D institutions with performance insights to support more effective management • foreign companies in agriculture and forestry represent a potential to engage Czech R&D institutions in addressing their research needs	

SELF-EVALUATION REPORT FOR MODULE 3

THE NAME OF THE UNIT BEING EVALUATED: Faculty of AgriSciences

FORD: 4 - Agriculture and veterinary sciences

SOCIAL CONTRIBUTION OF THE EVALUATED UNIT

3.1 Introductory information about the unit under evaluation

The evaluated unit will describe its mission and vision and provide a general self-reflection of the societal contribution of R&D&I, along with its long-term goals in the fields it develops. The distribution of research activities by type of research will also be commented on.¹ The evaluated unit will describe its organisational structure and size (staffing, number of students, number of study programmes implemented, etc.) based on the data provided in annex tables 3.1.1 to 3.1.6.

Maximum 1000 words.

This is a non-rated indicator that serves as an introduction to the evaluated unit, providing context for data in indicators 3.2-3.7.

Self-assessment:

Our mission is based on the fact that as a Faculty we fulfill the basic social order aimed at educating professionals in the fields of agriculture, food science, natural sciences and other disciplines related to agriculture, production of safe and quality food, care of the landscape and ecological aspects of agricultural production (Tab. 3.1.6). The Faculty mission also includes the implementation of scientific research activities in relevant fields and the transfer of scientific knowledge into practice. We carry out both basic and applied research, which predominates in our activities. Scientific research activities with high social relevance are thus one of the key pillars of our existence.

Our vision is to be an internationally respected Faculty that establishes itself as a leader in education, research and application of innovative solutions to global challenges in agriculture, life sciences and other related fields. We want to train new generations of professionals and contribute to solving current and future challenges such as sustainable agriculture, production of healthy and safe food, adaptation of agriculture and landscape to climate change, minimisation of negative environmental impacts of agricultural production, development and use of modern technologies enabling targeted and precise solutions, improvement of welfare and animal health, etc. We strive to connect science and research with both teaching and application practice in a way that is in line with current trends and at the same time brings concrete positive impacts for society.

The faculty is organised into [15 professional departments](#) and a [Dean's office](#). The Faculty employs approximately 400 staff members – converted to FTE, this is 280–300 full-time equivalents (Tab. 3.1.1). In the period under review, around 2,200 students studied at the faculty in each year (Tab. 3.1.4) in bachelor, master and doctoral study programmes (Tab. 3.1.5), which are accredited in [Czech](#) or [English](#) mutations.

¹ Basic, applied, contract, artistic research (see Definition of Terms in Methodology HEI2025+).

Staffing: Based on aggregate data, a steady growth in the total number of academic staff is evident. The number of professors remained relatively constant between 2019 and 2023. The number of associate professors increased significantly from 46 to 55. The number of assistant professors has also increased, reaching 79 in 2023, demonstrating the strengthening of this position. In 2021, there was a decline in the number of early career researchers, but in 2023 the number of early career researchers increased again. Overall, the data show stable numbers of R&D&I (science, research and innovation) workers, including female representation. For associate professors and professors, where the gender imbalance is still evident, there has been a slight but steady increase in women in recent years.

Number of students/programmes: The number of students in the bachelor's degree fluctuates between 1,293 and 1,402, and in the master's degree between 2021 and 2022 it drops from 670 to 549, before increasing slightly in 2023. The number of PhD students has slightly decreased from 206 in 2019 to 179 in 2023. The gender structure across programmes is slightly skewed in favour of women (around 60%). The number of study programmes including two undergraduate professional programmes (including the newly accredited Brewing and Malting) is stable. English programmes are also on offer, namely the Bachelor's and follow-up Master's General Agriculture programmes and a wide range of PhD programmes. Lifelong Learning courses (LLC) are only a complementary part of our activities as they are delivered centrally through the Institute of Lifelong Learning (ILL). The backbone of the study portfolio is determined by the Bachelor's programmes, while further specialisation occurs in the follow-up Master's and Doctoral degrees.

Division of research activities: During the period under review, the Faculty published approximately 1,500 impact articles that significantly push the boundaries of knowledge and achieved approximately 200 applied results that are naturally expected to be directly applicable. In this way, the Faculty contributes significantly to the dissemination of knowledge and innovation with a broad impact, both through specific applications and the development of scientific knowledge that supports the long-term development of society. Research in agricultural sciences is predominantly applied, with a focus on sustainable agricultural practices, environmental protection, maintenance, conservation and development of landscapes and the preservation of their productivity, reflecting the need for practical solutions. In the natural sciences, especially in the biological, chemical and environmental sciences, basic and applied research tends to be more balanced. Chemical sciences emphasise practical applications in industry, while biological and environmental sciences combine theoretical discoveries with concrete applications, for example in biotechnology and environmental protection. Engineering and technology shows a predominance of applied research, which includes areas such as materials engineering, mechanical and electrical engineering, usually with agronomic implications. This research focuses on innovation and practical solutions to problems in agricultural practice and industry (e.g. research on new materials). In other disciplines, such as the humanities, research is largely directed towards the basic research.

The societal relevance of the Faculty's R&D&I engagement is comprehensively presented in the form of this report, the skeleton of which is made up of 10 complex thematic blocks that reflect the developed disciplines, study programmes and the internal organisational structure. The indicators presented and annotated in the sub-sections are easily mapped to these themes using the numerical designation (1) to (10) given.

Thematic block		Fields of Research and Development (FORD)
(1)	Agroenvironmental security	1: 40%; 4: 50%; 2: 10%
(2)	Agrometeorology	1: 20%; 4: 80%

(3)	Precision Farming, Application of Smart Technologies and AI	4: 100%
(4)	Agrotechnics 4.0	4: 35%; 2: 65%
(5)	Brewing and Malting – from Barley to Beer	1: 25%; 2: 45%; 4: 25%; 5: 5%
(6)	Improving Plants and Increasing Crop Resilience for Sustainable Agriculture	1: 60%; 2: 5%; 4: 35%
(7)	Livestock Health	1: 25%; 2: 25%; 3: 10%; 4: 40%
(8)	Substitution of Antibiotics in Animal Production	4: 100%
(9)	Biotechnology for a Healthy Society	1: 15%; 2: 60%; 4: 25%
(10)	Cultural Potential of the Landscape	4: 30%; 5: 70%

Note: The percentages indicate the proportion of each Field of Research and Development (FORD) to which the thematic blocks relate.

Long-term goals in the fields under development: We aim to implement innovative technologies and methods in various areas over a period of about 10 years. In the area of agroenvironmental security **(1)**, we plan to fully implement our concept for the prevention of natural and anthropogenic threats. In crop production, we are targeting the widespread use of portals such as Agorisk.cz **(2)** and new methods for testing, evaluating and building crop resilience to current and emerging stressors **(5)** and **(6)**, with the aim of optimising production and ensuring quality agricultural output, while reducing environmental burdens and increasing competitiveness. Precision agriculture, the application of smart technologies and AI **(3)** will play a key role in this process, and we intend to further strengthen its importance in the portfolio of activities of the Faculty of AgriSciences (FA) not only in crop and livestock production, but also in mechanisation **(4)**. In fisheries, we will focus on expanding the certification of environmentally friendly fish farming **(7)**. Through research on nanotechnology in animal nutrition **(8)**, we will seek to reduce antibiotic resistance. In the area of biotechnology innovation, we will focus on the wider implementation of liquid sample analysis technology **(9)** in the forensic and pharmaceutical industries, thereby increasing the efficiency of detection of food and pharmaceutical adulteration. We also believe that economically and environmentally stable rural areas can be supported by sustainable cultural tourism, the development and enforcement of which we intend to continue to promote **(10)**.

Table 3.1.1 – Staffing per FTE²

Academic/Professional position	Total/Of which women					
	2019	2020	2021	2022	2023	Total
Professor	26.3/2.0	24.4/2.0	26.7/3.0	28.0/3.0	26.2/3.3	131.6/13.3
Associate Professor	46.0/13.0	47.7/13.8	56.8/16.9	54.0/14.9	55.2/14.9	259.5/73.4
Assistant Professor	72.0/24.0	81.5/31.4	71.3/28.2	74.4/34.0	78.8/32.3	377.8/149.8
Assistant	8.1/5.4	7.2/4.5	7.7/5.0	10.4/4.6	11.4/7.1	44.8/26.6
R&D Personnel ³	20.2/13.8	21.5/15.6	25.1/19.2	22.2/17.2	21.0/16.5	109.9/82.3
Researchers in other categories ⁴	108.5/69.2	102.5/62.9	110.9/69.7	99.0/55.9	84.5/45.8	505.3/303.3
Technical and economic staff ⁵	1.6/1.0	2.6/2.0	2.6/2.0	2.6/2.0	6.5/5.0	15.9/12.0

² The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full-time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

³ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

⁴ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

⁵ Who participates in the management and support of R&D&I in the institution.

Scientific, research and development staff involved in teaching activities	2.2/0.0	5.6/1.0	4.8/0.8	4.5/2.0	3.7/2.6	20.7/6.4
Early career researchers ⁶	47.9/18.0	36.4/18.1	29.0/15.1	22.6/13.9	25.7/12.4	161.5/77.4
Total ⁷	282.6/128.3	287.3/132.1	300.9/143.8	290.5/131.5	283.4/124.9	1444.6/660.6

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

3.1.2 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2019 (numbers of physical employees and personnel)⁸

Academic/ professional position	Under 29 years		30–39 years old		40–49 years old		50–59 years old		60–69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0.0	0.0	1.0	0.0	6.0	1.0	6.0	1.0	12.1	0.0	1.2	0.0
Associate Professor	0.0	0.0	6.8	3.0	25.2	5.2	3.9	1.9	9.7	3.0	0.5	0.0
Assistant Professor	0.0	0.0	34.9	9.4	26.6	9.8	8.6	4.9	2.0	0.0	0.0	0.0
Assistant	3.6	2.6	4.3	2.8	0.2	0.0	0	0	0.0	0.0	0.0	0.0
R&D Personnel ⁹	0.6	0.3	4.9	1.7	4.6	3.8	7.5	5.7	2.7	2.5	0.0	0.0
Researchers in other categories ¹⁰	29.8	21.8	41.4	21.2	16.7	10.8	14.1	11.5	4.4	3.4	2.1	0.5
Technical and economic staff ¹¹	0.0	0.0	0.0	0.0	1.0	1.0	0.6	0.0	0.0	0.0	0.0	0.0
Scientific, research and development staff involved in teaching activities	0.7	0.0	1.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Early career researcher ¹²	5.0	2.6	42.9	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total ¹³	34.0	24.7	93.2	37.9	80.2	31.5	40.6	24.9	30.8	8.8	3.8	0.5

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D Personnel, Researchers in other categories and Technical and economic staff are mutually exclusive, i.e. one staff member is reported in only one category. The categories of scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

⁶ See Definition of Terms in Methodology HEI2025+.

⁷ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

⁸ The total number of employees/workers as of 31st December of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

⁹ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁰ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹¹ Who participates in the management and support of R&D&I in the institution.

¹² See Definition of Terms in Methodology HEI2025+.

¹³ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I Personnel, Researchers in other categories and technical and economic staff.

3.1.3 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2023 (numbers of physical employees and personnel)¹⁴

Academic/ professional position	Under 29 years		30–39 years old		40–49 years old		50–59 years old		60–69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0.0	0.0	0.0	0.0	6.0	1.0	8.9	1.3	8.3	1.0	3.0	0.0
Associate Professor	0.0	0.0	7.0	0.0	29.0	6.8	11.2	4.0	5.4	3.1	2.6	1.0
Assistant Professor	1.0	0.0	30.2	9.3	36.2	19.9	7.4	2.1	4.0	1.0	0.0	0.0
Assistant	4.0	2.0	5.8	3.5	0.2	0.2	1.4	1.4	0.0	0.0	0.0	0.0
R&D Personnel ¹⁵	1.6	1.0	5.6	4.4	4.9	3.6	6.1	4.8	2.8	2.8	0.0	0.0
Researchers in other categories ¹⁶	13.2	5.0	32.2	16.6	21.5	11.5	9.3	7.8	7.6	5.0	0.8	0.0
Technical and economic staff ¹⁷	0.0	0.0	0.0	0.0	6.0	5.0	0.5	0.0	0.0	0.0	0.0	0.0
Scientific, research and development staff involved in teaching activities	0.0	0.0	1.0	1.0	2.1	1.0	0.0	0.0	0.6	0.6	0.0	0.0
Early career researcher ¹⁸	3.5	1.0	22.1	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total¹⁹	19.8	8.0	80.8	33.8	103.8	48.0	44.8	21.3	28.0	12.9	6.4	1.0

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

Table 3.1.4 – Students

Type of study	2019		2020		2021		2022		2023		Total	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Undergraduate	1,364	808	1,293	765	1,362	836	1,327	823	1,402	819	6,748	4,051
Master's ²⁰	660	416	722	472	670	432	549	329	592	342	3,193	1,991
Doctoral	206	126	218	123	208	109	192	101	179	95	1,003	554
Lifelong Learning Courses	6	3	0	0	18	7	25	9	14	2	63	21
Total	2,236	1,353	2,233	1,360	2,258	1,384	2,093	1,262	2,187	1,258	11,007	6,617

¹⁴ The total number of employees/workers as at 31.12. of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

¹⁵ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁶ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹⁷ Who participates in the management and support of R&D&I in the institution.

¹⁸ See Definition of Terms in Methodology HEI2025+.

¹⁹ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

²⁰ All master's degree students are listed, regardless of the length of their programme of study.

Table 3.1.5 - Study programmes in Czech/English

Type of study programme	Total ²¹ / Of which professional study programmes											
	2019		2020		2021		2022		2023		Total	
Undergraduate	8/1	1/0	8/1	1/0	8/1	1/0	8/1	1/0	9/1	2/0	41/5	6/0
Master's	12/1	0/0	12/1	1/0	12/1	1/0	12/1	1/0	12/1	1/0	60/5	4/0
Doctoral	15/8	0/0	15/8	0/0	15/8	0/0	15/8	0/0	15/8	0/0	75/40	0/0
Lifelong Learning courses	1/0	0/0	0/0	0/0	1/0	0/0	1/0	0/0	1/0	0/0	4/0	0/0
Total	36/10	1/0	35/10	2/0	36/10	2/0	36/10	2/0	37/10	3/0	180/50	10/0

Note: For each SP type, enter the number of SPs in Czech language in the first cell and insert the number of SPs in English language after the slash in the same cell (e.g. 15/3), enter the number of professional SPs in Czech language in the second cell and insert the number of professional SPs in English language after the slash. Follow a similar procedure in the last column of the table (Total).

3.1.6 – R&D&I capacities

R&D&I field	FORD	FORD share [%]	Predominant type of research	Total share of industry group [%]
1. Natural Sciences	1.1 Mathematics	0	Select an item.	37
	1.2 Computer and information sciences	0	Select an item.	
	1.3 Physical sciences	0	Select an item.	
	1.4 Chemical sciences	8	Balanced basic and applied research	
	1.5 Earth and related environmental sciences	10	Applied Research	
	1.6 Biological sciences	18	Balanced basic and applied research	
	1.7 Other natural sciences	1	Basic Research	
2. Engineering and Technology	2.1 Civil engineering	0	Select an item.	13
	2.2 Electrical engineering, Electronic engineering, Information engineering	1	Applied Research	
	2.3 Mechanical engineering	2	Applied Research	
	2.4 Chemical engineering	0	Select an item.	
	2.5 Materials engineering	2	Applied Research	
	2.6 Medical engineering	0	Select an item.	
	2.7 Environmental engineering	3	Balanced basic and applied research	
	2.8 Environmental biotechnology	1	Applied Research	
	2.9 Industrial biotechnology	0	Select an item.	
	2.10 Nanotechnology	1	Basic Research	
	2.11 Other engineering and technologies	3	Applied Research	
3. Medical and Health Sciences	3.1 Basic medicine	1	Applied Research	4
	3.2 Clinical medicine	2	Applied Research	
	3.3 Health sciences	1	Applied Research	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	28	Applied Research	45
	4.2 Animal and Dairy science	9	Applied Research	

²¹ The total number of study programmes for which admissions have been announced in a given academic year.

	4.3 Veterinary science	2	Applied Research	
	4.4 Other agricultural sciences	6	Balanced basic and applied research	
5. Social Sciences	5.1 Psychology and cognitive sciences	0	Select an item.	1
	5.2 Economics and Business	0	Select an item.	
	5.3 Education	0	Select an item.	
	5.4 Sociology	0	Select an item.	
	5.5 Law	0	Select an item.	
	5.6 Political science	0	Select an item.	
	5.7 Social and economic geography	1	Balanced basic and applied research	
	5.8 Media and communications	0	Select an item.	
	5.9 Other social sciences	0	Select an item.	
6. Humanities and the Arts	6.1 History and Archaeology	0	Select an item.	0
	6.2 Languages and Literature	0	Select an item.	
	6.3 Philosophy, Ethics and Religion	0	Select an item.	
	6.4 Arts (arts, history of arts, performing arts, music)	0	Select an item.	
	6.5 Other Humanities and the Arts	0	Select an item.	
Total		100%		100 %

RECOGNITION BY THE RESEARCH COMMUNITY

3.2 Recognition by the research community

The evaluated unit will briefly comment on its position in the research community. It shall consider individual and other prestigious R&D&I awards, participation of its academic staff in the editorial boards of international scientific journals, elected membership in professional societies, major invited lectures given by the evaluated unit's academic staff abroad or by foreign scientists and other relevant guests at the evaluated unit. Additionally, it will address the involvement of staff in the evaluation of national or European project/programme calls over the period of 2019–2023 based on the data provided in annex tables 3.2.1 to 3.2.5 (max. 10 most relevant items). If necessary, the evaluated unit shall list any additional services to the scientific community that it considers relevant.

Maximum 1000 words.

Self-assessment:

The recognition of the Faculty by the scientific community can be evidenced by the involvement of a number of staff members in international research teams, organisations, membership of editorial boards and participation in the evaluation of international and national projects. We are an expert partner of the Ministry of Agriculture, the Ministry of the Environment and many of our employees are involved in the activities of the Czech Academy of Agricultural Sciences. The expert opinions of our staff, or the Faculty, are used at national and international level. The specific involvement and selected awards are listed in the following text and tables.

Awards received:

Ing. Petr Zálešák, Ph.D. student: **Special Achievement in GIS" International ArcGIS StoryMaps Competition – 1st place, 2023 (1):**

The award-winning StoryMap project addressed wind erosion as a major threat to agroenvironmental security (*Wind Erosion: Reflect on the brighter tomorrows and don't get swept away by the past like a grain of soil*). It won 1st place in the international ArcGIS StoryMaps Competition 2023, where he was the only European winner. The competition, held by Esri and the IUCN since 2019, is typically dominated by large-budget teams with dozens of contributors, making this individual success particularly significant.

Professor Ing. Mgr. Miroslav Trnka, Ph.D.: **Climate Change Communication Award, 2021 (2):**

The UN IC and the Learned Society of the Czech Republic recognized Professor Trnka as a leading Czech scientist for his research on droughts and climate change, and for his leadership in platforms like intersucho.cz, klimatickazmena.cz, firerisk.cz, and Agrorisk.cz, which inform the public and provide early warnings for farmers. The annual "Climate Change Communication Award" in the Czech Republic promotes awareness and encourages informed, interdisciplinary debate.

Professor MVDr. Miroslava Palíková, Ph.D.: **Josef Hlávka Prize for Scientific Literature, 2020 (7):**

The award, presented annually by the Czech Literary Fund Foundation and the J., M. and Z. Hlávka Foundation, honors original scientific monographs in social, medical, and natural sciences. The winning book, **Diseases and Disease Conditions of Fish** (ed. Palíková), Vodňany: University of South Bohemia in České Budějovice, Faculty of Fisheries and Water Conservation, 2019. p. 462 ISBN 978-80-7514-085-2, is the result of long-term visual documentation efforts. Its rich illustrations, including detailed pen drawings, exceed standard textbook quality.

Participation in editorial boards:

Associate Professor Mgr. Markéta Vaculovičová, Ph.D.: **Microchimica Acta (Q1) – Associate editor (9):**

This prestigious journal publishes research on advanced methods in modern chemical, biochemical, and biological analysis using non-routine micro/nanomaterials. Covered materials include micro/nano particles, upconversion particles, quantum dots, nanowires, molecular frameworks, porous materials, nano-imprints, thin films, and hybrids. Current metrics: CHEMISTRY, ANALYTICAL category, JIF rank 15/106, Quartile Q1, percentile 86.3.

Invited lectures abroad:

Ing. Dalibor Hůska, Ph.D.: *Cyanobacteria and Microalgae: Our Green Future*, **Cambridge Zero Climate Change Festival, University of Cambridge, United Kingdom, 2020 (9):**

The lecture, attended by hundreds, emphasized that Green Revolution 4.0—based on cyanobacteria biotechnology, microalgae, and CRISPR/Cas9—could transform modern agriculture. These microorganisms are promising sources for biotechnological production of biologically active substances used in medicine, pharmacy, cosmetics, and the food industry. Besides boosting crop yields without expanding farmland, it also aims to reduce environmental harm and conserve natural resources.

Associate Professor Ing. Daniel Falta, Ph.D.: **Adopting Social and Scientific Innovations for the Climate Smart Agriculture Embassy of the Czech Republic, Washington D.C., Embassy of Hungary, USA, 2023 (3):**

Presentation at the Visegrad University Association meeting in conjunction with the Agriculture Innovation Mission for Climate (AIM4CLIMATE) as a global initiative led by the United States and the United Arab Emirates to accelerate investment in climate-smart agriculture and food systems innovation. The possibilities of innovative solutions in the field of livestock farming were presented. This was followed by visits and meetings at the Pennsylvania Department of Agriculture, Harrisburg University and AgWorks at Commonwealth Charter Academy.

Lectures by foreign scientists:

Professor Paul Maxime Nurse, Ph.D., dr. h. c: *Francis Crick Institute in London: Key Regulators of the Cell Cycle, 2020 (6):*

Paul Maxime Nurse is a British geneticist who was President of the Royal Society from 2010–2015 and is currently Director of the Francis Crick Institute and President of Rockefeller University in New York. In 2001, he received the Nobel Prize in Physiology or Medicine for his discoveries in the field of the cell cycle. During his lecture at the Faculty of AgriSciences he focused on important discoveries in the field of genetics and cell biology, especially on cell cycle regulation, on which occasion he also received an honorary doctorate.

Professor Emmanuelle Charpentier, Ph.D., dr. h.c.: *University of Berlin Umeå University: A Research Journey towards the CRISPR-Cas Genome Engineering Technology, 2023 (6):*

Professor Charpentier is a French microbiologist, geneticist and biochemist. In 2020, together with American biochemist Jennifer A. Doudna, she received the Nobel Prize in Chemistry for the development of a method for genome editing (via CRISPR-Cas9). She also summarised her fundamental scientific discoveries in a lecture for the Faculty of AgriSciences and received an honorary doctorate on this occasion.

Involvement in the evaluation of R&D&I results:

Associate Professor Ing. Hana Středová, Ph.D.: **NATO SPS, 2019–2023 (1):**

The Science for Peace and Security (SPS) programme fosters dialogue and cooperation between NATO members and partners through scientific research, innovation, and knowledge exchange. It funds civil security projects aligned with NATO's strategic goals. Representing the Faculty of AgriSciences, Associate Professor **Středová** contributed to Environmental Security evaluations and

Professor **Adam** focused on CBRN and Explosive Hazards Management.

*Professor Dr. Ing. Milada Šťastná: **ERCEA, ERC – StG, CoG, AdG, SyG, PoC 2019–2023 (10):***

The ERC funds pioneering research across disciplines, aiming for global scientific breakthroughs. It supports emerging European research leaders, evaluating solely on scientific quality. Grant types include Starting (2–7 years post-PhD, €1.5M), Consolidator (7–12 years, €2M), Advanced (€2.5M), and Synergy Grants for interdisciplinary teams. Proof of Concept Grants help commercialise research via spin-offs. Professor Šťastná participates in project evaluations.

Table 3.2.1 – Prestigious R&D&I awards granted during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the award	Awarding institution
Ing. Petr Zálešák	Special Achievement in GIS" international ArcGIS StoryMaps Competition – 1st place (2023)	Esri company and International Union for Conservation of Nature (IUCN)
Professor Ing. Mgr. Miroslav Trnka, Ph.D.	Climate Change Communication Award (2021)	UN IC and Learned Society of the Czech Republic
Professor MVDr. Miroslava Palíková, Ph.D.	Josef Hlávka Prize 2020 for scientific literature – awarded to the book "Diseases and Disease Conditions of Fish" (2020)	Czech Literary Fund and Hlávka Foundation
Ing. Monika Štěpánová	Start-up "Lightly Technologies": EIT Jumpstarter Programme Grande Finale (Nov. 30th 2023, Athens Greece) – 2nd place (2023)	EIT Jumpstarter
Ing. Miroslav Berka	Award of the Minister of Education, Youth and Sports for outstanding results in research, experimental development and innovation (2019)	Ministry of Education, Youth and Sports of the Czech Republic
Ing. Lubomír Neudert, Ph.D. doc. Ing. Vojtěch Lukas, Ph.D.	TA ČR Prize and Czech Idea Award for Research Project of TA ČR (2019)	Technology Agency of the Czech Republic
RNDr. Tomáš Ondro, Ph.D.	Young Physicist Award (2023)	Slovak Physical Society
Associate Professor Ing. Radim Cerkal, Ph.D.	Honorable mention from the jury for the Old Beer Taste Analyser – a unique method for effective beer quality control and its technological, economic and social contribution to the beverage and restaurant industry (2021)	CzechInno, Visionaries Competition
Associate Professor Ing. Pavel Horký, Ph.D.	Award of the Minister of Agriculture for Young Researchers under 35 years of age for outstanding research achievements 2nd place (2019)	Ministry of Agriculture
Professor Dr. Ing. Milada Šťastná	Selection of a SPOT project for the REA article on 20 years of EU enlargement (2023)	European Committee

Note: Provide up to 10 examples.

Table 3.2.2 Participation of academic staff of the evaluated unit in editorial boards of international scientific journals during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of scientific journal, ISSN
Associate Professor Mgr. Markéta Vaculovičová, Ph.D.	Microchimica Acta, ISSN 1436-5073
Associate Professor Mgr. Zbyněk Heger, Ph.D.	International Journal of Nanomedicine, ISSN: 1178-2013
Associate Professor Mgr. Martin Černý, Ph.D.	BMC Plant Biology, ISSN 1471-2229
Associate Professor Ing. Tomáš Vyhnánek, Ph.D.	Czech Journal of Genetics and Plant Breeding, ISSN 1805-9325
Professor RNDr. Břetislav Brzobohatý, CSc.	Journal of Plant Growth Regulation, ISSN 1435-8107
Professor Ing. Pavel Ryant, Ph.D.	Plant, Soil and Environment, ISSN 1214-1178
Professor RNDr. Zdeněk Laštůvka, CSc.	Plant Protection Science, ISSN 1212-2580
Professor Ing. Jan Mareček, DrSc., dr. h. c.	Acta Technologica Agriculturae, ISSN 1338-5267

Professor Dr. Ing. Milada Šťastná	European Countryside, ISSN 1803-8417
Professor MVDr. Leoš Pavlata, Ph.D.	Czech Journal of Animal Science, ISSN 1212-1819

Note: Please provide up to 10 examples of academic staff participation in editorial boards of international scientific journals (e.g. editor, editorial board member, etc.).

Table 3.2.3 The most important invited lectures delivered by the academic staff of the evaluated unit at foreign institutions during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Invited lecture title	Name of host institution, or name of conference or event	Year
Professor Dr. Ing. Milada Šťastná	Social and Innovative Platform on Cultural Tourism	Bar Ilan University, Israel	2019
Professor RNDr. Vojtěch Adam, Ph.D.	Antimicrobials Advanced Nanomaterials	EuroNanoForum, Bucharest, Romania	2019
Ing. Dalibor Hůska, Ph.D.	Cyanobacteria and Microalgae: Our Green Future	Cambridge Zero Climate Change Festival, University of Cambridge, UK	2020
Associate Professor Ing. Vojtěch Lukas, Ph.D.	Preparation of Application Maps for Precision Farming	OGC meeting, USA (online)	2020
Professor Ing. Mgr. Miroslav Trnka, Ph.D.	Lectures on Climate Change for Dr. Martha Anderson team	USDA – Research service, USA	2021
Ing. Jaroslav Záhora, CSc.	Contributions to Enhance Soil Protection, Productivity, Climate Change Adaptation & Biodiversity	28 th Conference of the Working Group Sustainability/Soil Protection of the Working Community of the Danube Regions, Tulln an der Donau, Austria	2021
Associate Professor Ing. Hana Štědová, Ph.D.	Agroecology – Environmental Security	Hue University, Vietnam	2022
Mgr. Jan Novák, Ph.D.	Light Quality Modulates Plant Cold Response	46 th FEBS: Federation of European Biochemical Societies Congress, Lisbon, Portugal	2022
Associate Professor Ing. Daniel Falta, Ph.D.	Adopting Social and Scientific Innovations for the Climate Smart Agriculture	Embassy of Hungary, Washington D.C., USA	2023
Associate Professor Ing. Stanislav Hejduk, Ph.D.	Importance and Persistence in Red Clover Varieties for Permanent Grasslands (incl. Mattenklees)	SLU Uppsala, Sweden	2023

Note: Provide up to 10 examples.

Table 3.2.4 - The most important lectures by foreign scientists and other guests relevant to R&D&I at the evaluated unit during the evaluation period

Name, surname and title(s) of the lecturer	Lecturer's employer at the time of the lecture	Invited lecture title	Year
Professor Dr. Philip Wigge	University of Potsdam and Leibniz IGZ, Grossbeeren, Germany	Plants in a Warming World	2019
Professor Dr. Dirk Inzé	Full Professor at Ghent University and Scientific Director of the VIB	The Pivotal Role of Plant Biology in a Rapidly Changing World	2019
Professor Paul Maxime Nurse, Ph.D., dr. h. c.	Francis Crick Institute in London	Key Regulators of the Cell Cycle	2020
Professor Mike Hayes	University of Nebraska Lincoln	Drought Research and Its Impacts 2022	2022
Professor Alberto Escarpa	University of Alcalá, Madrid, Spain	Analytical Miniaturisation and Nanotechnology	2022
Professor Robin Meeske	Department of Agriculture, Western Cape Government, South Africa	Milk production from pastures in South Africa, as part of the professional seminar "Living Environment and Breeding of Ruminants on Grasslands"	2022

Professor Emmanuelle Charpentier, Ph.D., dr. h. c.	University of Berlin Umeå University	A Research Journey towards the CRISPR-Cas Genome Engineering Technology	2023
Professor Dr. Thomas Roitsch	University of Copenhagen	Plant Phenomics of Plant Assimilate Partitioning: Importance for Development, Stress Responses & Biotechnology: From Green Islands and Impotent Pollen to Applications in Biotechnology and Agriculture	2023
Brink Van Zyl, Ph.D.	Stellenbosch University, Stellenbosch, South Africa (Head of the Department of Animal Sciences)	A Descriptive Study on the Carcass, Muscle, and Offal Yields of the Plains Zebra (<i>Equus quagga</i>) Harvested in Two Seasons	2023
Professor Anat Tchetchik	Bar Ilan University, Department of Geography and Environment, Israel	COVID-19 and the Impact on Cultural Tourism: The Case of Beit Shean Valley, Israel	2023

Note: Provide up to 10 examples.

Table 3.2.5 – Involvement in the evaluation of national/European research project/programme calls relevant to the R&D&I area at the unit during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the research project/ programme call	Name of the contracting authority/ guarantor of the project/programme call	Year
Associate Professor Ing. Hana Středová, Ph.D. Professor RNDr. Vojtěch Adam, Ph.D.	SPS Science for Peace and Security	NATO North Atlantic Treaty Organisation	2019– 2023
Professor Dr. Ing. Milada Šťastná	HORIZON 2020; HORIZON EUROPE	REA (European Research Executive Agency)	2019– 2023
Professor Dr. Ing. Milada Šťastná	ERC (European Research Council)	ERCEA (European Research Council Executive Agency)	2019– 2023
Professor Dr. Ing. Milada Šťastná	The European Metrology Research Programmes (EMRP and EMPIR) and the European Partnership on Metrology	EURAMET (The European Association of National Metrology Institutes)	2019– 2023
Associate Professor Ing. Tomáš Středa, Ph.D.	VEGA	Scientific Grant Agency of the Ministry of Education, Research, Development and Youth of the Slovak Republic and the Slovak Academy of Sciences (SK)	2019– 2023
Associate Professor Dr. Ing. Zdeněk Havlíček	Delta 2, SIGMA DC 2	TA ČR (CZECH REPUBLIC)	2019– 2023
Professor Ing. Zdeněk Žalud, Ph.D.	Environment for Life; NAZV Earth	Ministry of the Environment; Ministry of Agriculture (Czech Republic)	2019–2023
Associate Professor Mgr. Zbyněk Heger, Ph.D.	Royal Society of Chemistry – Grants Peer Review Group (member)	Royal Society of Chemistry (UK)	2019– 2023
Professor RNDr. Vojtěch Adam, Ph.D.	Research Foundation – Flanders, panel Chemistry (member)	Research Foundation – Flanders (Belgium)	2019– 2023
Associate Professor Ing. Miroslav Jůzl, Ph.D.	APVV	Slovak Research and Development Agency (SK)	2019– 2023

Note: Provide up to 10 examples.

RESEARCH PROJECTS

3.3 Research projects

The evaluated unit shall list at most 10 (considered most significant by the evaluated unit) research projects/activities (regardless of whether they are supported by public funds or based on contract research²²) that it has implemented or participated in during the period of 2019–2023²³. This should be done from the full list in annex tables (Table 3.3.1–3.3.2)²⁴, regarding particularly the results achieved or the application potential of the projects. The unit should also describe how the research projects contributed to the mission and purpose of the evaluated unit. If the evaluated unit has been a participant in listed project, it shall indicate which other entities were involved and describe its contribution to the project. The interdisciplinary aspects of the projects will also be commented on, along with any collaboration with other units of the evaluated HEI.

Maximum 300 words per project.

Self-assessment:

In the period under review, the Faculty dealt with about 80 external projects as the main beneficiary and another 85 projects as an additional project participant. The total subsidy for these projects was more than CZK 570,000,000. /EUR 22,485,207. Another more than CZK 45,000,000 /EUR 1,775,148 was raised for contract research contracts. A complete overview of the projects and contracts is given in the following tables. The text presents 10 selected projects according to the main research areas of the Faculty.

1) Preparation of documents for the comprehensive update of the MoE Crisis Plan; provider: Ministry of the Environment (MoE), duration in years: 2019–2021, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 2,470,000/EUR 97,436/ CZK 2,470,000/EUR 97,436, principal investigator for MENDELU: Associate Professor Ing. Hana Středová, Ph.D. (contract research)

Within the framework of the contract research project, commissioned by the Department of Safety and Crisis Management of the Ministry of Environment, the systematic activities of the team from the Faculty of AgriSciences continued with partial involvement of the Faculty of Horticulture regarding the comprehensive update of strategic and operational tools focused on environmental security and crisis management segment under the responsibility of the Ministry of Environment. The output of the project is a comprehensive part of the National Concept of Environmental Security 2021–2030 with a view to 2050, dedicated to naturogenic threats such as floods, droughts, extreme weather events and other threats that are the result of complex interactions between ecosystems and human activities. These phenomena then threaten ecosystems themselves, as well as the quality of human life, health and life itself, and can result in emergencies or crisis situations. The agro-sector has been a major focus, as agriculture, its stability, productivity and, consequently, food security are highly vulnerable to environmental change. The solution also focused on updating the Crisis Plan of the Ministry of the Environment and proposing specific legislative, operational and tactical measures (elaborated in the Type Plans) to avert a crisis situation or to manage it more effectively or to eliminate its consequences. The project activities included the preparation of a national report in accordance with the international Sendai Framework for Disaster Risk

²² For the definition of contract research for the purposes of evaluation in the HE segments, see Article 2.2.1 of the Community Framework for State Aid for Research, Development and Innovation 2014/C 198/01.

²³ Regardless of whether the projects are completed or still ongoing, provided that at least part of the project was implemented during the evaluation period.

²⁴ The evaluated unit shall only fill tables that are relevant to it.

Reduction, which contributed to the fulfilment of the Czech Republic's international commitments. Part of the activities of the research team (specifically Associate Professor Středová) was also active involvement in the National, European and International Platform for Disaster Risk Reduction, which emphasises the importance on interdisciplinary cooperation and sharing of innovative approaches. The project not only brings solutions to current challenges, but also inspires systemic change in risk prevention and mitigation in the context of environmental and food security.

2) Agrometeorological Early Warning System for Biotic and Abiotic Risks, (QK1910338), provider: Ministry of Agriculture (MZE), duration in years: 2019–2023, role in the project: additional project participant, total allocated funds/funds allocated to MENDELU: CZK 18,259,000/EUR 720,275/ CZK 4,451,000/EUR 175,582, principal investigator for MENDELU: Professor Ing. Mgr. Miroslav Trnka, Ph.D.

The project was designed to create an early warning system for the entire territory of the Czech Republic against the occurrence of abiotic and biotic risks. The aim was to help the agricultural sector address the impacts of increasing weather variability. Over the years, the project has incorporated direct weather algorithms and dozens of models of weather-dependent diseases and pests. All risks and their nine-day hourly forecasts are integrated into the user-friendly portal environment Agrorisk.cz, unique information on the occurrence of agro-meteorological risks in their farming areas. An important feature of the project is its sustainability in the sense of daily updating after the end of the project. The project involved the Global Change Research Institute of the Academy of Sciences (CAS) (35%), Faculty of AgriSciences (35%), Research Institute of Plant Production, R&D&I (15%), the Czech Hydrometeorological Institute (10%) and the company Josef Hlavinka (5%). The contribution of the Faculty of AgriSciences was quite substantial, as apart from the meteorologists, school staff were represented in all teams. The portal is also of interest abroad as a model for monitoring and forecasting abiotic and biotic risks. For example in Austria, a very similar system called ARIS is being developed.

3) SKYMAPS – Research project (EG20_321/0024838), provider: Ministry of Industry and Trade, duration in years: 2021–2023, role in the project: additional project participant, total allocated funds/funds allocated to MENDELU: CZK 4,048,000/EUR 159,684/ CZK 469,000/EUR 18,500, principal investigator for MENDELU: Associate Professor Ing. Vojtěch Lukas, Ph.D.

The optimisation of the use of pesticides in plant protection is a key issue in the cultivation of agricultural crops both in terms of environmental effects and in terms of ensuring the profitability of cultivation and increasing the competitiveness of Czech agricultural enterprises. The subject of the research project was the development of site-specific application of herbicides using precision agriculture technologies. The basic innovation is the integration of the previously used precision farming technology into a comprehensive process applicable to plant protection, which focuses on monitoring the occurrence of weed infestations using Remote Sensing, using machine learning methods to identify weedy plants, preparing application maps and automating the entire process. The project falls into a broader range of research projects addressing Smart Agriculture topics, which collectively contribute to the budget of the Faculty of AgriSciences for the period under review approximately CZK 5,000,000./EUR 197,239.

4) ZETOR TRACTORS a.s. – Optimal Aggregation of Machines with Tractor, (EG15_019/0004799), provider: Ministry of Industry and Trade, duration in years: 2015–2020, role in the project: additional project participant, total allocated funds/funds allocated to MENDELU: CZK 9,562,000/EUR 377,180/ CZK 4,450,000/EUR 175,542, principal investigator for MENDELU: Associate Professor Ing. Jiří Čupera, Ph.D.

The project was implemented with the historically very important tractor manufacturer Zetor. By the very nature of its mission, the Faculty of AgriSciences was responsible for infusing sustainability principles into the project design and outputs. Sustainability can be seen in the optimisation of the entire tractor-tool combination in many ways. Optimising fuel consumption leads to energy efficiency and synergistically to reduced emissions. Proper aggregation ensures optimum agrotechnical conditions with gentle soil care and long-term soil fertility. The outputs of the project range from scientific publications with a relatively high impact to applicable results. The development and production of a prototype at the level of mass production of the Tractor Engine Central Control Unit (TECU) can be considered as a key result. As a central control component, the developed unit is able to connect the communication buses of the tractor's construction groups (CAN-BUS) – engine, transmission, electro-hydraulic system for the operation of the three-point linkage (EHR) up to the control of emission reduction (after-treatment) and connection to the implements. The power of TECU enables the implementation of holistic algorithms for system control aiming at the synergistic effect of complex control while maintaining the optimal level of parameters. Within the framework of the project, partial algorithms for the regulation of individual structural groups were consistently verified. In an example of a patent-level result, the three-point linkage control achieved a 5% increase in operating efficiency under operational conditions while reducing fuel consumption by 3%.

5) Centre for Innovative Use and Strengthening of Competitiveness of Czech Brewery Raw Materials and Products, (TE02000177), provider: Technology Agency of the Czech Republic (TA ČR), duration in years: 2014–2019, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 155,234,000/EUR 6,123,629/ CZK 22,942,000/EUR 905,010, principal investigator for MENDELU: Associate Professor Ing. Radim Cerkal, Ph.D.

The aim of the project was to increase the competitiveness and profitability of the Czech food industry and related sectors with an emphasis on the promotion of the Czech beer brand. The consortium, composed of domestic public and private research organisations and companies (17 in total), which significantly contribute to shaping trends in strategic fields such as raw material production (barley, hops), brewing, malting, animal feed, food and chemical industries, managed to effectively combine the unique know-how and cutting-edge technical background of all project partners under the leadership of MENDELU. The rich scientific research experience of the project participants generated several dozens of results with high application potential in 2014–2019. Successful commercialisation has already been achieved, e.g. food products fortified with biologically active substances from barley and hops, enzymatically active additives to feed mixtures, hop preparations for simultaneous moderation of bitterness and colour of beer, unfiltered beers with increased shelf life, as well as procedures for systemic protection of hops against harmful agents, methods of multidetection of contaminants in raw materials, procedures for the evaluation of wheat varieties for brewing purposes, markers for the authentication of Czech barley and hops, traceability of raw materials and technologies by analysis of specific markers or an analytical model for detecting beer ageing, membrane filters for improving the filterability of beer, a reactor for the preparation of new hop preparations and equipment for the decontamination of grains by low-temperature plasma discharge. The knowledge and contacts gained during the project were used in the preparation of the Bachelor's degree programme in Brewing and Malting.

6) Centre for Experimental Plant Biology, (EF16_019/0000738), provider: Ministry of Education, Youth and Sports of the Czech Republic (MEYS), duration in years: 2018–2023, role in the project: additional project participant, total allocated funds/funds allocated to MENDELU: CZK 281,069,000/EUR 11,087,545/ CZK 54,955,000/EUR 2,167,850, principal investigator for MENDELU: Professor RNDr. Břetislav Brzobohatý, CSc.

The Centre for Experimental Plant Biology (EXBIO, 2018-2023, EF16_019/0000738) has become an important contribution to plant biology research in the Czech Republic. The Faculty of AgriSciences, with a 20% share of the budget, together with Masaryk University (12%) and under the leadership of the Institute of Experimental Botany of the CAS (68%), played a key role in the consortium. MENDELU contributed significantly to the achievement of the project objectives through its innovative research and technological improvements. The Centre's interdisciplinary research included molecular biology, biochemistry, biotechnology, plant production, phytopathology and plant protection. The Centre focused on the full range of plant developmental stages, from cell analysis, germination monitoring, factors affecting early development and stress tolerance to fruit development and assessment of the impact of stress on production. Participation in the centre allowed the Faculty of AgriSciences to significantly upgrade its instrumentation in the field of molecular analyses of the proteome, metabolome and lipidome, which constituted a major contribution to the realisation of the project objectives. The deepening of knowledge and research leading to improved crop resistance (barley, potato, rapeseed, rice) as well as breeding leading for enhanced resistance (apple, potato) was in line with the mission of the Faculty. The cooperation has contributed to the development of internationalisation and brought new partners for future projects, such as the University of Cologne and the University of Copenhagen. A number of students were involved in the project, including the award-winning Ing. Miroslav Berka (MEYS Award) and Ing. Markéta Luklová (Brno Ph.D. talent), demonstrating the positive impact of the project on the main mission of the University – spreading knowledge and educating a new generation of outstanding experts.

7) National Centre for Biotechnology in Veterinary Medicine (NaCeBiVet), (TN02000017), provider: TA ČR, duration in years: 2023–2028, role in the project: additional project participant, total allocated funds/funds allocated to MENDELU: CZK 361,719,000/EUR 14,268,987/ CZK 37,500,000/EUR 1,479,290, principal investigator for MENDELU: Professor Dr. Ing. Jan Mareš

The aim of the project is to create a stable and long-term base for applied research by concentrating the research capacities of 7 research organisations in the field of biotechnology in veterinary medicine, animal production and related fields. The principal investigator is the Research Institute of Veterinary Medicine. The Faculty of AgriSciences coordinates research in the field of biotechnology in animal nutrition and collaborates in the development of laboratory diagnostic methods and systems in veterinary medicine. In addition to research organisations, 19 companies from the application sector (agricultural companies, animal feed manufacturers, companies from the field of laboratory diagnostics, etc.) are part of the research team. The project is intended to contribute to the sustainable production of quality and health-safe food of animal origin in the context of the implementation of the policy of reducing the consumption of antibiotics, improving the welfare of farmed animals, maintaining biodiversity in the landscape and the principles of circular economy. The results generated in the project in the form of new or innovative products or services are intended to increase the competitiveness of the participating companies and to support the transfer of scientific knowledge into practice. During the duration of the project, a minimum of 35 applied outputs will be achieved. The research conducted at the Faculty of AgriSciences is mainly related to cattle, poultry and fish nutrition and the development of laboratory veterinary diagnostics. The project activities and published results

are oriented to the concept of one health with a focus on reducing the need for pharmaceuticals in fish farming, positively influencing the quality of the environment and targeted increase in resistance of farmed animals, especially with a focus on the use of feed additives, complemented by methods for early diagnosis of pathogens. In the field of fish research, NaCeBiVet builds on the results of basic and applied research carried out within the project of the Operational Programme Research, Development and Innovation (OP R&D&I) PROFISH (2019–2023).

8) Reduction of the Use of Zinc and Antibiotics in Pig Farming by Innovative Phytoadditives and Their Combination with Other Natural Substances with Antimicrobial Effect, (TH04030172), provider: TA ČR, duration in years: 2019–2022, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 10,378,000/EUR 409,389/ CZK 4,100,000/EUR 161,736, principal investigator for MENDELU: Associate Professor Ing. Pavel Horký, Ph.D.

The project was part of a larger group of projects being carried out at the Faculty of AgriSciences in the period under review, the research direction of which is the use of phytoadditives; short- and medium-chain fatty acid esters and zinc nanocomplexes. Both research and commercial organisations were involved in the research. These were the Research Institute of Animal Production and the company ADDICOO GROUP s.r.o., which implements the results of joint research into practice. MENDELU contributed 50% to the achieved results. Emphasis was placed on the multidisciplinary focus of the research. The aim of the project was to create a product based on active plant and other natural substances that can be used in livestock nutrition and will have similar effects as feed antibiotics. As pig farming had one of the highest therapeutic zinc consumption, feed phytoadditives can significantly contribute to mitigate the ecological burden in terms of high zinc doses in the soil. The project fits into the field of research aimed at reducing antibiotic consumption, or a comprehensive solution to reducing the incidence of bacterial resistance to antibiotics. These research projects have produced both bibliographic and non-bibliographic results that have commercial overlap into the tertiary sphere. These are products that are currently exported to both domestic and foreign markets (South America, Europe, India, Africa) and serve as feed additives in feed for non-ruminant animals.

9) Multidisciplinary Research to Increase the Application Potential of Nanomaterials in Agricultural Practice, (EF16_025/0007314), provider: MEYS, duration in years: 2018–2022, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 79,947,000/EUR 3,153,747/ CZK 79,947,000/EUR 3,153,747, principal investigator for MENDELU: Professor RNDr. Vojtěch Adam, Ph.D.

The project was an interdisciplinary activity based on the use of advanced nanomaterials and molecular biological approaches in agriculture. The project was implemented with the Faculty of Horticulture (FH). The Faculty of AgriSciences acted as a coordinator (Professor Adam) and had a majority share in the project and the allocated budget (about 75%). The objectives of the project were fully aligned with the mission of the Faculty of AgriSciences and included the development of new technologies for sustainable and precision agriculture, but also new approaches to mitigate antibiotic resistance in agricultural practice. Thanks to the project, a patent (Method of Identifying Natural Samples, Especially Liquid Samples) was created, recently licensed by Lightly Technologies, s.r.o. In addition, a significant number of published results were generated (96 articles in impact-factor journals), presenting the application of new types of materials, such as nanomaterials for fertilisation or crop protection (modified graphene oxides, metallic and metalloid nanomaterials, polymer systems, recombinant proteins, and others). Some types of nanomaterials have been successfully tested under field conditions (e.g. Se-Te nanoparticles for the treatment of bovine mastitis, or reduced graphene oxide composites for the inhibition of *Xanthomonas*

euvesicatoria infection on tomato and pepper plants). In addition, the project has confirmed for the first time the presence of PHYP65 phytoplasma on grapevines, which is crucial for the protection of vineyards against losses caused by this pathogen.

10) SPOT Social and Innovative Platform On Cultural Tourism and Its Potential Towards Deepening Europeanisation (Grant agreement ID: 870644), provider: EU HORIZON 2020, duration in years: 2020–2022, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 76,050,000/EUR 3,000,000/CZK 10,129,000/EUR 399,564, principal investigator for MENDELU: Professor Dr. Ing. Milada Šťastná
<https://cordis.europa.eu/project/id/870644>

The project was implemented under the H2020 scheme: SOCIETAL CHALLENGES – Europe In A Changing World – Inclusive, Innovative And Reflective Societies. A total of 15 universities and research institutions from Europe, Israel and the UK were involved. The aim of the project was to create a completely new approach to the understanding and solution of cultural tourism with an emphasis on supporting the development of disadvantaged areas on the one hand and its direction in areas overloaded with tourism on the other. Based on the comparison of the data collected by the partners, the SPOT project developed “Golden Rules” for stakeholders at local, regional and European level to improve the conditions supporting the development of cultural tourism. The project outputs included 15 case studies and 20 examples of good practice (e.g. the multifaceted potential of cultural tourism in rural and urban landscapes). Nearly three dozen policy briefs and nearly a hundred dissemination outputs, including articles in scientific journals, were also produced. A key project output is the SPOT-IT “tailor-made decision support” tool, which comprehensively assesses and interprets local cultural-touristic relevant characteristics (geographical location, climate, attractiveness of cultural tourism, availability of infrastructure, as well as potential social, ethnic, political and environmental challenges). The fundamental limits of the proposed solutions are always in line with the principles of sustainable development in terms of economic, ecological and social dimensions.

Table 3.3.1 Projects supported by public funds

In the role of beneficiary						
Provider ²⁵	Project name	Support (in thousands CZK/EUR) ²⁶				
		2019	2020	2021	2022	2023
GA0	Interaction Between Cold and Light in Cold Acclimation of <i>Arabidopsis</i> – Ontogenic and Phyllotactic Perspectives	0/0	1,788/70,533	1,880/74,162	1,547/61,026	333/13,136
GA0	Zinc-Dependent Signalling and Expression of Metallothionein Sub/Isoforms in Breast Cancer: Implications for Prognostic and Therapeutic Purposes	1,763/69,546	1,779/70,178	1,797/70,888	0/0	0/0
GA0	Thin Film Diffusion Gradient Technique: A Powerful Tool for Predicting Mercury Bioavailability	1,195/47,140	1,220/48,126	1,180/46,548	0/0	0/0
GA0	Redox Signalling to Chromatin During Stress Reactions in Plants	0/0	0/0	0/0	1,030/40,631	983/38,777

²⁵ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive. The total amount into Euro.

GA0/GM	Hybrid Biocompatible Nanocatalysts for Extracellular Bioorthogonal Activation of Prodrugs	0/0	0/0	0/0	0/0	4,675/184,418
GA0/GM	Modulation of the Heat Stress Response by the Cytokinin Signalling Pathway in <i>Arabidopsis</i>	0/0	0/0	0/0	0/0	2,131/84,063
HORIZON 2020	SPOTSocial and Innovative Platform on Cultural Tourism and Its Potential Towards Deepening Europeanisation	0/0	2,284/90,099	2,467/97,318	2,840/112,032	208/8,205
HORIZON EUROPE	CropPrime – Stabilising Crop Yield Under Unfavourable Conditions by Molecular PRIM(e)ing	0/0	0/0	0/0	0/0	406/16,016
INTERREG AT-CZ	AGRISAN Healthy and Drought-Adapted Soil and Landscape Care	0/0	0/0	1,615/63,708	0/0	0/0
INTERREG AT-CZ	INTEKO – Innovations in Composting Technologies, Compost Utilisation, and Soil Protection	677/26,706	0/0	0/0	0/0	0/0
INTERREG SK-CZ	Together Between Earth and Space	569/22,446	0/0	0/0	0/0	0/0
JCMMSoMoP ro	Metallothionein as Prognostic Biomarker in Skin Cancer	1,679/66,233	872/34,398	0/0	0/0	0/0
LPR	Protein Engineering to Enhance Biocompatibility of Bionanomaterials	370/14,596	0/0	0/0	0/0	0/0
MK0	Identification and Permanent Documentation of the Cultural, Landscape, and Settlement Memory of a Municipality – On the Example of Vanished Settlements in Moravia and Silesia	1,058/41,736	1,009/39,803	988/38,974	874/34,477	0/0
MSM	Multidisciplinary Research to Increase the Application Potential of Nanomaterials in Agricultural Practice	9,573/377,633	20,106/793,136	17,119/675,306	1/39	0/0
MSM	Fire Effects on Soils	0/0	880/34,714	1,211/47,771	1,236/48,757	328/12,939
MSM	New Approaches for Reducing the Negative Economic Impact of Plant Pathogens of the Genus <i>Xanthomonas</i>	762/30,059	762/30,059	0/0	0/0	0/0
MSM	Impact of Digestion and Absorption Processes on the Final Biological Activity of Plant Phytonutrients: Real Added Value for Health	0/0	0/0	125/4,931	78/3,077	0/0
MSM	Metabolic Profiling and Physiological Effects of TiO ₂ Nanoparticles When Applied to Leaves and Roots of Pepper (<i>Capsicum annuum</i> L.)	0/0	0/0	100/3,945	100/3,945	0/0
MSM	Modern Approaches for Precise Plant Genome Editing	0/0	0/0	100/3,945	100/3,945	0/0
MSM	Role of HSP Proteins in Plasmodiophora Brassicae Infection	0/0	45/1,775	85/3,353	40/1,578	0/0

MSM	Use of Physicochemical Methods for Estimating Bioavailable Forms of Arsenic in Agricultural, Urban, and Forest Soils	0/0	0/0	78/3,077	45,685/ 1,802,170	0/0
MSM	Comprehensive Analysis of Root Canker Disease and Its Possible Biological Control by an Endophytic Fungus	101/3,984	0/0	0/0	0/0	0/0
MSM MOBILITY GERMANY	International Visegrad Fund Stipend Anastazija Dimitrova	0/0	39/1,538	0/0	0/0	0/0
MZO	Ferritin as a Tool for Enzyme-Controlled Activation of Prodrugs	0/0	0/0	1,119/44,142	1,655/65,286	1,673/65,996
MZE	Innovating Conservation Maize Cropping Systems Using Intercropping to Reduce Soil Degradation and Improve Water Management Under a Changing Climate	1,450/57,199	1,595/62,919	1,595/62,919	1,522/60,039	1,305/51,479
MZE	Identification of Metabolites Correlated with Quantitative Resistance to <i>Phytophthora infestans</i>	1,165/45,957	1,281/50,533	1,281/50,533	1,218/48,047	1,046/41,262
MZE	Methods of Intensification of Organic Farming on Arable Land	0/0	0/0	0/0	2,665/ 105,128	2,665/105,128
MZE	Quantification of the Impact of Farming on Erosion, Soil Quality, and Crop Yields with the Proposal of Environmentally Friendly Cultivation Technologies	1,355/53,452	1,355/53,452	1,297/51,164	1,108/43,708	0/0
MZE	Correction of Soil Erodibility Values According to Terrain Morphology Within Erosion-Closed Units for the Purpose of Refining the Identification of Erosion-Prone Areas	0/0	0/0	1,501/59,211	1,455/57,396	1,453/57,318
MZE	Assessment of Genomic Diversity of Honey Bees in Relation to the Health Status of Their Populations in the Czech Republic	0/0	0/0	0/0	1,913/75,464	1,986/78,343
MZE	Sustainable Fish Production in Ponds Under Climate Change	982/38,738	976/38,501	866/34,162	663/26,154	0/0
MZE	Innovation of Sorghum Cultivation Technology for Use in Ruminant Nutrition as an Adaptation Measure Leading to Stabilisation of Roughage Production in the Changing Climate of the Czech Republic	0/0	0/0	0/0	1,689/66,627	1,689/66,627
MZE	Zinc Nanocomplexes as an Alternative to Antibiotic Replacement in Pigs	1,997/78,777	0/0	0/0	0/0	0/0
MZE	Assessment of the Hydrological Situation of Trout Streams in the Czech Republic and the Status of Salmonid Populations in Relation to Climate Change	0/0	0/0	0/0	0/0	1,480/58,383

MZE	Optimisation of Methods for Assessing the Threat of Wind Erosion and Designing Protective Measures in Agriculturally Intensively Used Landscapes	485/19,132	485/19,132	439/17,318	0/0	0/0
MZE	Verification of the Possibility of Demonstrating the Use of Protective Cultures in the Production of Food of Animal Origin	0/0	0/0	0/0	0/0	1,185/46,746
MZE	Consultation and Methodological Assistance to Agricultural Enterprises by Disseminating Information on Measures of the Rural Development Programme of the Czech Republic and on Current Issues in the Implementation of the Common Agricultural Policy; Transfer of Research and Development Results into Practice	550/21,696	0/0	0/0	0/0	0/0
MZE	Support for Beekeeping	6/237	0/0	0/0	0/0	0/0
TA0	Liquid Organic Fertiliser Application Systems as a Means to Improve the Soil Environment, Increase Plant Nutrient Availability, and Minimise Environmental Impact	1,886/74,398	2,322/91,598	2,277/89,822	2,402/94,753	409/16,134
TA0	Use of Waste from Biogas Production to Improve Soil Properties and Increase the Sulphur Content of Plants	1,658/65,404	2,086/82,288	2,099/82,801	2,162/85,286	395/15,582
TA0	Use of Sulphur-Based Nanocomposite Materials in Field Crop Nutrition	0/0	1,781/70,256	3,302/130,256	1,664/65,641	0/0
TA0	Effect of Foliar Application of Selenium and Zinc on Qualitative and Quantitative Parameters of Forage Crops and the Environment of Organisms Attached to Them	0/0	2,393/94,398	3,229/127,377	436/17,199	0/0
TA0	Analysis of the Spatiotemporal Dynamics of Snow Cover for the Prediction and Prevention of Hydrological Extremes and Sizing of Adaptation Measures in Land Management	0/0	0/0	0/0	2,474/97,594	2,235/88,166
TA0	Innovating Mixed Alfalfa Crop Establishment Practices to Improve Soil Quality and Produce Health-Safe Forage	1,044/41,183	1,019/40,197	1,029/40,592	1,029/40,592	0/0
TA0	Reducing the Use of Zinc and Antibiotics in Pig Farming Through Innovative Phytoadditives and Their Combination with Other Natural Substances with Antimicrobial Effect	1,005/39,645	1,035/40,828	1,050/41,420	1,010/39,842	0/0
TA0	Use of Milk Thistle in the Nutrition of Sport Horses	0/0	1,515/59,763	1,790/70,611	384/15,148	0/0
TA0	Centre for Innovative Use and Strengthening of Competitiveness of Czech Brewery Raw Materials and Products	3,665/144,576	0/0	0/0	0/0	0/0

TA0	Visualisation of Spatial Relationships – A Tool for Understanding the Functioning of the Landscape	1,003/39,566	1,225/48,323	1,239/48,876	0/0	0/0
TA0	Use of Mealworms in Animal Nutrition	1,085/42,801	1,403/55,345	267/10,533	0/0	0/0
TA0	Research and Development of Smart Farming Technologies for Small and Medium-Sized Farms	614/24,221	577/22,761	577/22,761	577/22,761	0/0
TA0	Development of Fire Prevention Equipment in Waste Management Technologies	1,004/39,606	1,006/39,684	181/7,140	0/0	0/0
TA0	Innovative Approaches to Eliminate the Negative Effect of Hatching Egg Storage on Chick Hatchability and Performance Parameters	0/0	688/27,140	980/38,659	510/20,118	0/0
TA0	Nanotransporters of Monoglyceride to Promote Diversity of the Poultry Gut Microbiome	824/32,505	963/37,988	149/5,878	0/0	0/0
TA0	SAFE-BASE: Design of a Comprehensive System for the Process of Learning from Major Accidents Involving a Dangerous Chemical Substance or Mixture	0/0	0/0	0/0	866/34,162	880/34,714
TA0	Advanced Materials as a Tool for Elimination of Mycotoxins in the Feed Industry	590/23,274	780/30,769	362/14,280	0/0	0/0
TA0	Innovative Electrochemical Flow Cell with Renewable Working Electrode for Voltammetric Applications	1,277/50,375	0/0	0/0	0/0	0/0
TA0	Nanoabsorbents of Mycotoxins in the Feed Industry	1,237/48,797	0/0	0/0	0/0	0/0
TA0	Development of an Analytical Platform for Monitoring Microplastic Circulation in Agricultural Production	0/0	0/0	0/0	0/0	1,192/47,022
TA0	Automated Electrochemical Analyser for Liquid Samples Using Disposable Electrodes	1,170/46,154	0/0	0/0	0/0	0/0
TA0	Development of an Antimethanogenic Feed Supplement to Mitigate Environmental Impact from Livestock Farming	0/0	0/0	0/0	0/0	1,001/39,487
TA0	Suppression of Common Vole (<i>Microtus arvalis</i>) Population Densities with Plant Repellents	0/0	0/0	0/0	0/0	605/23,866
TA0-NCK	National Centre for Biotechnology in Veterinary Medicine (NaCeBiVet)	0/0	0/0	0/0	0/0	3,000/118,343
TA0 PoC	PlantFriend – Independent Plant Energy Measuring Station	0/0	360/14,201	960/37,870	0/0	0/0
TA0 PoC	Integrating Industry 4.0 in Livestock Production	0/0	290/11,440	867/34,201	0/0	0/0

TA0 PoC	Preparation of Paramagnetic Particles for Nucleic Acid Separation	0/0	272/10,730	779/30,730	0/0	0/0
TA0 PoC	3D Printed Biosensors for SARS-CoV-2 Antibody Detection	0/0	0/0	1,000/39,448	0/0	0/0
TA0 PoC	SuperTree – Tree Condition Analyser	0/0	0/0	950/37,475	0/0	0/0
TA0 PoC	Production of Health-Safe Feeds from Drought-Resistant Leguminosae	0/0	0/0	800/31,558	0/0	0/0
TA0 PoC	Technology for Preparation of Antimicrobial Graphene Nanoformulations for Polymer Composite Filaments for 3D Printing	0/0	0/0	700/27,613	0/0	0/0
TA0 PoC	Minipolarograph	650/25,641	0/0	0/0	0/0	0/0
TA0 PoC	Protocol for the Magnetic Isolation of Nucleic Acids from a Biological Sample	0/0	0/0	625/24,655	0/0	0/0
TA0 PoC	Intelligent Three-Point Tractor Hitch	600/23,669	0/0	0/0	0/0	0/0
TA0 PoC	PARKISS – Revolutionary Food Quality Assessment	509/20,079	0/0	0/0	0/0	0/0
TA0 PoC	Fluorescence Profiling of Samples by Controlled Photolysis	0/0	0/0	500/19,724	0/0	0/0
TA0 PoC	Maintaining and Cooking Cabinet	456/17,988	0/0	0/0	0/0	0/0
TA0 PoC	Equipment for Simultaneous Electrical Analysis of Samples Using SPE (Solid Phase Extraction)	381/15,030	0/0	0/0	0/0	0/0
TA0 PoC	DNA Markers of Carrot Hybridisation	250/9,862	0/0	0/0	0/0	0/0
TA0 PoC	BIOREPRODUCTOR – Green Music of the 21st Century	250/9,862	0/0	0/0	0/0	0/0
TA0 PoC	Collagen Preparation for Plant Protection Against Biting by Wild Animals	200/7,890	0/0	0/0	0/0	0/0
Total		47,095/1,857,791	56,191/ 2,216,607	62,555/ 2,467,653	35,276/ 1,391,558	33,263/ 1,312,150
In the role of another participant						
Provider ²⁷	Project name	Support (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
Erasmus +	Curriculum Development In Agroecology (CDAE) KA107 – Higher Education Student and Staff Mobility Between Programme and Partner Countries (Israel)	0/0	873/34,438	534/21,065	0/0	0/0
GA0	Encapsulation of Cholinesterase Reactivators by Apoferritin to Increase Bioavailability in the Central Nervous System	1,229/48,481	1,273/50,217	1,295/51,085	0/0	0/0
GA0	A Comprehensive View of the Mechanism of Action and Metabolism of Tyrosine Kinase Inhibitors and the Study of <u>Approaches to Potentiate Their</u>	1,159/45,720	1,176/46,391	0/0	0/0	0/0
²⁷ Ibid.	Anticancer Efficacy					

GA0	Biodistribution and Real-Time Monitoring of Free or Apoferritin-Encapsulated Cholinesterase Quaternary Reactivators	0/0	0/0	0/0	1,062/41,893	1,188/46,864
GA0	Design of Modified Apoferritin Nanoparticles with Anticancer Drugs and Study of Mechanisms Potentiating Their Effectiveness in Therapy	1,174/46,312	0/0	0/0	0/0	0/0
GA0	Interaction Between Light and Cytokinins in Contrasting <i>Arabidopsis</i> Ecotypes During Cold Acclimation and Its Impact on the Response to Frost Stress	1,135/44,773	0/0	0/0	0/0	0/0
GA0	Use of Multiple Metal Nanoparticle Labeling for Bio-Imaging	705/27,811	0/0	0/0	0/0	0/0
H2020	Integrated Systems of Effective Environmental Remediation	1,890/74,556	4,016/158,422	1,057/41,696	220/8,679	1,044/41,183
H2020	SUPERG Developing SUSTainable PERmanent Grassland systems and policies	772/30,454	1,436/56,647	1,002/39,527	664/26,193	633/24,970
H2020	Galileo Enhanced Solution for Pest Detection and Control in Greenhouse Fields with Autonomous Service	2,999/118,304	708/27,929	0/0	0/0	0/0
HORIZON EUROPE	Transforming Advanced Water Skilling Through the Creation of a Network of Extended-Reality Water Emulative Centres	0/0	0/0	0/0	4,468/176,252	0/0
HORIZON EUROPE	AI-Enabled Artistic Solutions for Sustainable Food Systems	0/0	0/0	0/0	305/12,032	959/37,830
HORIZON EUROPE	FLIARA Female-Led Innovation in Agriculture and Rural Areas	0/0	0/0	0/0	0/0	742/29,270
INTERREG AT-CZ	SYM:BIO – Drought-Adapted Networks and Biodiversity Support in Urban and Rural Areas	0/0	237/9,349	546/21,538	0/0	0/0
INTERREG SK-CZ	The Use of Superabsorbent Polymers (SAPs) as an Innovative Tool for Mitigating the Impacts of Climate Change in Agriculture	0/0	0/0	1,024/40,394	0/0	0/0
INTERREG SK-CZ	Cross-Border Cooperation of Shared Laboratories to Improve the Competitiveness of Czech and Slovak Vegetable Producers	0/0	0/0	588/23,195	0/0	0/0
MIT	ZETOR TRACTORS a.s. – Optimal Machine-Tractor Aggregation	2,225/87,771	0/0	0/0	0/0	0/0
MIT	MEDIA EFEKT – Research and Development of Machine Just-in-Time Production Controlled by Augmented Reality Technology	2,278/89,862	1,816/71,637	3,982/157,081	0/0	0/0
MIT	Application Project TestLine Clinical Diagnostics s.r.o.	2,065/81,460	0/0	2,964/116,923	0/0	0/0

MIT	Development of Unique Bioactive Complexes Consisting of Unicellular Microorganisms and Native Extracts from Selected Synergistic Herbs Obtained by a New Innovative Subcritical Extraction Method	0/0	0/0	0/0	0/0	2,146/84,655
MIT	SKYMAPS – Research Project	0/0	0/0	0/0	0/0	469/18,501
MIT	Development of a New Umbilical Cord Tissue-Based Product for Achilles Tendon Regeneration After Rupture	0/0	0/0	0/0	306/12,071	0/0
MSM	Centre for Experimental Plant Biology	34,749/1,370,769	5,601/220,947	5,779/227,968	5,622/221,775	3,204/126,391
MSM	Sustainable Production of Healthy Fish in Various Aquaculture System – PROFISH	11,762/463,984	7,492/295,542	7,331/289,191	10,270/405,128	0/0
MSM	CEITEC 2020	18,406/726,075	13,508/532,860	0/0	0/0	0/0
MSM	Maintaining Continuity and Quality of Project Services in the Agrarian Sector through International Research	0/0	90/3,550	360/14,201	360/14,201	360/14,201
MSM	Support for Czech Participation of Agrarian Sector Research Organisations in International Research	375/14,793	375/14,793	0/0	0/0	0/0
MSM INTER-EXCELLENCE	Support for Czech Participation of Agrarian Sector Research Organisations in International Research	375/14,793	375/14,793	0/0	0/0	0/0
MV0	Ultra-Fast Portable SARS-CoV-2 Detection System	0/0	0/0	1,924/75,897	1,924/75,897	0/0
MZ0	Smart Biocompatible Nanotools for Selective Delivery of Drug-siRNA Cocktails for Breast Cancer Combination Therapy	0/0	1,457/57,475	1,510/59,566	1,510/59,566	1,530/60,355
MZ0	Effect of Metallothioneins on the Binding of Platinum Cytostatics to DNA in Cancer Cells	1,788/70,533	0/0	0/0	0/0	0/0
MZE	Adaptation Potential of Wheat to Drought, Heat and Frost	980/38,659	1,080/42,604	1,080/42,604	1,030/40,631	880/34,714
MZE	Development of Biofortified Pea Lines with Reduced Phytic Acid Content	1,177/46,430	1,202/47,416	1,202/47,416	1,036/40,868	0/0
MZE	Agrometeorological Early Warning System for Biotic and Abiotic Risks	865/34,122	948/37,396	952/37,554	905/35,700	781/30,809
MZE	Reducing the Burden of Surface Water from Sources of Agricultural Surface Water Pollution by Applying Drainage Runoff Control to Existing Agricultural Drainage Structures	900/35,503	900/35,503	900/35,503	900/35,503	800/31,558
MZE	Modern Methods of Diagnosis, Therapy, and Prevention of Mastitis Caused by <i>Streptococcus uberis</i> as a Tool for Designing Targeted Control Programs in Cattle Breeding	740/29,191	815/32,150	815/32,150	755/29,783	650/25,641

MZE	Strategies to Minimise the Impact of Drought on Sustainable Production and Malting Quality of Barley	717/28,284	785/30,966	785/30,966	751/29,625	641/25,286
MZE	The Importance of Lignocellulosic Complex from Intercrop Biomass for Soil Improvement	0/0	0/0	1,200/47,337	1,200/47,337	1,200/47,337
MZE	Improving Soil Stability and Increasing Infiltration Through Agrotechnical Practices	870/34,320	870/34,320	830/32,742	710/28,008	0/0
MZE	Tools to Improve the Use of Composting Facilities with a Consequent Increase in Compost Produced and Applied to Agricultural Land	1,000/39,448	1,000/39,448	1,000/39,448	0/0	0/0
MZE	Fattening of Boars as an Economically and Ethically Acceptable Solution to the Ban and Restriction of Surgical Castration	581/22,919	636/25,089	636/25,089	611/24,103	521/20,552
MZE	Metabolomics of Steroid Hormones with Significant Anabolic Effects as a Basis for New Analytical Control Methodologies for the Demonstration of Abusive Practices of Prohibited Substances in Fattening Livestock	565/22,288	621/24,497	621/24,497	593/23,393	508/20,039
MZE	Optimisation of Management on Unbalanced Land by Using Effective Mapping of Soil Conditions and Taking into Account Changes in Moisture Conditions in Order to Stabilise Yield Levels	0/0	0/0	900/35,503	900/35,503	900/35,503
MZE	Use of Alternative Components and Innovative Practices in Fish Nutrition	658/25,957	658/25,957	629/24,813	538/21,223	0/0
MZE	Organic Protection of Ware Potatoes as a Healthy Vegetable Against Selected Soil and Seed-Borne Pathogens	0/0	0/0	800/31,558	800/31,558	800/31,558
MZE	Innovation of the Agricultural Soil Rating System (BPEJ) for the Needs of the State Administration	705/27,811	774/30,533	774/30,533	0/0	0/0
MZE	Possibilities of Erosion Control Measures in Agricultural Enterprises While Eliminating the Use of Glyphosate	587/23,156	646/25,483	646/25,483	0/0	0/0
MZE	Rational Sowing Area on Soil Blocks within the Framework of GAEC Conditions for Promoting Sustainable Farming in the Czech Republic.	0/0	0/0	600/23,669	600/23,669	600/23,669
MZE	Globalisation, Modern Technology, and Climate Change: New Opportunities and Threats for Salmonid Farming Management	0/0	0/0	582/22,959	583/22,998	586/23,116
MZE	Increasing Agricultural Productivity, Economic Viability, Sustainability, Output, and Resource Efficiency in Primary Agricultural Production	1,080/42,604	559/22,051	0/0	0/0	0/0

MZE	Innovating Potato Growing Systems in Water Protection Zones: Reducing Water Pollution and Maintaining Competitiveness with Limited Pesticide and Fertiliser Inputs	450/17,751	500/19,724	495/19,527	0/0	0/0
MZE	Conditions of Food Delivery by Courier Services in Relation to the Growth of Sporogenic Bacteria	0/0	0/0	0/0	0/0	1,376/54,280
MZE	Forestry Management in Areas Affected by Long-Term Drought	676/26,667	676/26,667	0/0	0/0	0/0
MZE	A System for Long-Term Carbon Storage and Reduction of Nitrous Oxide and Methane Emissions in Agriculture: Evaluation of Effectiveness and Certification of Benefits	0/0	0/0	0/0	0/0	976/38,501
MZE	Methods for Monitoring Resistance of Economically Important Pests and Weeds to Plant Protection Products and Anti-Resistance Strategies	440/17,357	440/17,357	0/0	0/0	0/0
MZE	Implementation of Agricultural Soil Rating System (BPEJ) Innovations into the state administration system	0/0	0/0	0/0	400/15,779	400/15,779
MZE	Mechanism of Resistance of Canola Pests to Insecticides, Their Initial Susceptibility to New Insecticides, and the Impact of Insecticide Applications on the Development of Pest Larvae and Their Natural Enemies	0/0	0/0	231/9,112	231/9,112	231/9,112
MZE	New Directions in Piglet Production with Emphasis on Welfare, Environmental Protection, and Production Economics	0/0	0/0	0/0	0/0	581/22,919
MZE	Methods of Correction of Crop Moisture Requirements Considering Climate Change Scenarios in the Czech Republic for Optimisation of Irrigation Management	565/22,288	0/0	0/0	0/0	0/0
MZE	Soil Organic Matter – Evaluation of Selected Quality Indicators	0/0	0/0	180/7,101	180/7,101	180/7,101
MZE	Setting Up DZES 5 Measures to Protect Farmland from Wind Erosion and Landscape Drainage	0/0	0/0	0/0	0/0	500/19,724
MZE	New Methods of Classification for Carcasses of Pigs	0/0	0/0	0/0	145/5,720	145/5,720
TA0	Development of New Laboratory Tests for the Diagnosis of Inflammation, Sepsis, and Cardiovascular Diseases Based on Chemiluminescence Analysis on Automated Platforms	0/0	4,696/185,247	6,221/245,404	5,458/215,306	5,458/215,306
TA0	Research and Development of Innovative Solutions in Laboratory Diagnostics	0/0	4,977/196,331	4,977/196,331	4,977/196,331	0/0

TA0	Development of a New Generation of Adaptogens and Nanotransporters in Animal Feed	0/0	1,205/47,535	1,825/71,992	1,805/71,203	1,805/71,203
TA0	Development of a Sewage Sludge Recovery Dryer	0/0	0/0	1,842/72,663	2,028/80,000	1,793/70,730
TA0	Without Herder 4.0	0/0	0/0	1,307/51,558	1,700/67,061	1,750/69,034
TA0	Precision Farming on Land with Regulated Drainage as a Tool for Water Conservation and Increased Crop Production Efficiency	0/0	1,136/44,813	1,136/44,813	1,136/44,813	1,136/44,813
TA0	Centre for Landscape and Biodiversity	0/0	0/0	1,259/49,665	0/0	2,778/109,586
TA0	Environmentally Acceptable Granular Fertilisers with Controlled Release of Nutrients	1,090/42,998	1,275/50,296	1,425/56,213	0/0	0/0
TA0	Development of Equipment Maximising the Utilisation of Biodegradable Waste During Conversion to Biogas Using a Catalyst for CO ₂ Conversion and Subsequent Thermochemical Treatment of Waste Material	0/0	346/13,649	840/33,136	542/21,381	415/16,371
TA0	Responsible Production of New, Functional Food with Favourable Nutritional Properties	0/0	0/0	0/0	0/0	1,942/76,607
TA0	Processing of Gastro Waste into a Solid Carbonaceous Product for Material Recovery	484/19,093	1,001/39,487	332/13,097	0/0	0/0
TA0	An Agricultural Management System Integrating the Efficient Use of Nutrients by Crops and the Protection of Water from Surface Sources of Pollution	890/35,108	890/35,108	0/0	0/0	0/0
TA0	Advanced Methods for Evaluation and Design of Multifunctional Windbreaks	0/0	0/0	0/0	850/33,531	850/33,531
TA0	Development of a Digital Twin Crop Knowledge Base for Efficient Artificial Intelligence Learning	0/0	0/0	0/0	0/0	1,418/55,937
TA0	Agroenvironmental-Meteorological Two-Level Modular Monitoring System	0/0	0/0	0/0	0/0	1,378/54,359
TA0	Increasing Biodiversity and Promoting Ecosystem Services in Agricultural Landscapes Through Alternative Management of Grasslands	358/14,122	328/12,939	310/12,229	358/14,122	0/0
TA0	Potential of Torefaction for Treatment of Sewage Sludge for Its Further Use	314/12,387	622/24,536	267/10,533	0/0	0/0
TA0	Introduction of New Methodological Practices in Soil Erosion Protection	0/0	0/0	0/0	600/23,669	600/23,669
TA0	Effect of Selenium and Vitamin E in Wagyu Crosses on Reproductive Performance and Meat Yield	0/0	327/12,899	485/19,132	247/9,744	0/0

TA0	Development of Natural Nutrient-Releasing Controlled-Release Hydroabsorbents for Use in Crop Production	0/0	0/0	0/0	0/0	1,019/40,197
TA0	Development of Technology for Growing Seeds of Semi-Parasitic Plants and Their Application in the Reduction of Invasive Species in Lowland Meadow Wetlands	0/0	0/0	0/0	0/0	756/29,822
TA0	Removal of Selected Hazardous Substances and Elements from Sewage Sludge	288/11,361	216/8,521	210/8,284	0/0	0/0
TA0	New Technologies for Vegetation Treatment of Slopes of Highway and Road Corridors to Increase the Long-Term Effectiveness of Special Territorial Nature Protection	364/14,359	0/0	0/0	0/0	0/0
Total		100,042/ 3,946,430	67,240/ 2,652,465	66,361/ 2,617,791	58,218/ 2,296,568	47,441/ 1,871,440

Data source and provider abbreviations: Central Register of Projects: <https://www.isvavai.cz/cep>

Table 3.3.2 - Contract research activities

Client	Activity name	Revenue (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
R and D Cannabinoid CZ, s.r.o.	Propagation and Stabilisation of CBD Genotypes of Cannabis	207/8,166	0/0	0/0	0/0	0/0
JUKKA, s.r.o.	Protocol of Derivation and Multiplication of Different Fruit Trees	90/3,550	0/0	0/0	0/0	0/0
Václav Kozák	Cloning of Garlic Varieties by in Vitro Techniques	61/2,406	0/0	0/0	0/0	0/0
MoE	Preparation of Documents for the Ministry of Environment Crisis Plan 2019	701/27,653	0/0	0/0	0/0	0/0
Crop Research Institute (CRI), R&D&I	Climate Analysis for the Implementation of the Nitrates Directive	48/1,893	0/0	0/0	0/0	0/0
AGROSUMAK a.s.	Environmental Audit of an Agricultural Enterprise	36/1,420	0/0	0/0	0/0	0/0
Zemagro, spol. s r.o.	Reducing the Environmental Burden of Pesticides and Fertilisers through Variable Rate Applications	1,815/71,598	0/0	0/0	0/0	0/0
Crop Research Institute (CRI), R&D&I	Characterisation of the Habitat Conditions of Long-Term Experiments	118/4,655	0/0	0/0	0/0	0/0
AGROTEC a.s.	Creation of Yield Potential Maps for the ISARIA Sensor System	62/2,446	0/0	0/0	0/0	0/0
BAYER s.r.o.	Evaluation of Locally Targeted Herbicide Application Using Remote Sensing	451/17,791	0/0	0/0	0/0	0/0
DLF Seeds, s.r.o.	Evaluation of the Yield Potential of New Varieties of Alfalfa Sown in Mixtures with Grasses Under Dry Conditions	72/2,840	0/0	0/0	0/0	0/0

Agritec Plant Research s.r.o.	Ensuring Insect Pest Susceptibility Testing to Insecticides and Visualisation of Test Results – Creation of Resistance Maps	60/2,367	0/0	0/0	0/0	0/0
Agro Innovation International, France	Investigating the Effect of Selected Fertiliser Applications on the Yield of Maize Grown Under Arid Conditions	126/4,970	0/0	0/0	0/0	0/0
KOLBY a.s.	Physical and Agrochemical Analysis of Soil Samples, Description of Soil Profiles, and Determination of Soil Type and Subtype	92/3,629	0/0	0/0	0/0	0/0
Crop Research Institute (CRI), R&D&I	Sophisticated Analysis	50/1,972	0/0	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Expert Activity	37/1,460	0/0	0/0	0/0	0/0
EUROFARMS s.r.o.	Description of 3 soil profiles with agronomic interpretation (in the form of a lecture in the field), photodocumentation, basic analysis of intact soil samples, determination of available nutrient content, grain size, soil organic matter content and soil reaction. Determination of Ct _{tot} , Cox, C _{mic} , N _{tot} , HKaFK, DHA, BS, stability of soil aggregates.	65/2,564	0/0	0/0	0/0	0/0
ROLANA s.r.o.	Description of 3 Soil Profiles with Agronomic Interpretation.	70/2,761	0/0	0/0	0/0	0/0
František Habr, Baňovice	Implementation of Progressive Practices in Feed Ration Formulation for Beef Cattle on the Farm	3,025/119,329	0/0	0/0	0/0	0/0
SPV Pelhřimov, a.s.	Modernization of Pig Breeding Technologies with Higher Integration of ICT and Development of Comparable Calculation Methodologies	2,831/111,677	0/0	0/0	0/0	0/0
University of Chemistry and Technology in Prague	Part of the RDP (Rural Development Program) Project – Support for the Development of New Products, Procedures, and Technologies in Agricultural Product Processing and Marketing (Specific Subject of the Contract is a Commercial Secret of the Client)	375/14,793	0/0	0/0	0/0	0/0
POMONA Těšetice a.s.	Cooperation in the Introduction of New Technology in Cattle Breeding	747/29,467	0/0	0/0	0/0	0/0
NBB Bohemia s. r. o.	Determination of the Effect of Three Different Illuminating LED Panels on the Growth Kinetics of <i>Arabidopsis thaliana</i> Evaluated by Determining the Area of Their Rosettes at Weekly Intervals	157/6,193	0/0	0/0	0/0	0/0
Research Institute of Potato Growing Havlíčkův Brod, s.r.o.	Comparison of the General Metabolic Spectrum Between Cultivation Variants in <i>D. fuchsii</i>	44/1,736	0/0	0/0	0/0	0/0

Research Institute of Potato Growing Havlíčkův Brod, s.r.o.	Determination of the General Metabolomic Spectrum in Selected Samples of <i>Dactylorhiza</i> Plants	45,686/1,802,209	0/0	0/0	0/0	0/0
Palacký University Olomouc	Testing The Efficacy of Nanocomposites and Novel Iron-Based Compounds in Biotechnological Processes for Decontamination and Sanitation of Sewage Sludge	237/9,349	0/0	0/0	0/0	0/0
Ministry of Agriculture	Evaluation of Selected Wastewater Indicators for the Revision of the SA BREF and Evaluation of Methodologies for Measuring Greenhouse Gas Production	200/7,890	0/0	0/0	0/0	0/0
Chr. Hansen Czech Republic, s.r.o.	Testing Biogas Production from Biomass	181/7,140	0/0	0/0	0/0	0/0
BEDNAR FMT s.r.o.	Software for National Instruments LabVIEW Platform	235/9,270	0/0	0/0	0/0	0/0
Beskyd Fryčovice, a.s.	Increasing the Processing Efficiency and Availability of Potatoes	1,234/48,679	0/0	0/0	0/0	0/0
MLÝN HERBER spol. s r.o.	HERBER MILL – Innovation 2017–2020, Micron Grinding”	1,234/48,679	0/0	0/0	0/0	0/0
Institute of Agricultural Economics and Information	Evaluation of the Model Recipe According to the EuroFIR Methodology for the National Food Database. Documentation of Preparation and Nutritional Evaluation of Meat Products: Sausage, Liver pâté, Country-Style Meat in Its Own Juice	149/5,878	0/0	0/0	0/0	0/0
YARA Agri Czech Republic, s.r.o.	Experiment with Yara Mila, Yara Vita and Yara Bela Fertilisers in a Barley Crop, Evaluation of Yield and Grain Quality	73/2,880	0/0	0/0	0/0	0/0
Libor Urbánek	Innovation in Cattle Fattening and Monitoring of Locomotor Activity	1,622/63,984	0/0	0/0	0/0	0/0
RNDr. Milan Tyllér, DOMINANT CZ	Expert Activity	56/2,209	0/0	0/0	0/0	0/0
MORAVOSEED CZ a.s.	Conduct Contract Research to Develop an In-house Methodology for Varietal Identification of Cabbage Using Molecular Genetic Methods	150/5,917	0/0	0/0	0/0	0/0
POLABSKÉ MLÉKÁRNÝ a.s.	Goat Programme	0/0	193/7,613	0/0	0/0	0/0
R and D Cannabinoid CZ, s.r.o.	Propagation and Stabilisation of CBD Genotypes of Cannabis	0/0	207/8,166	0/0	0/0	0/0
Ing. Václav Kozák	Cloning of Garlic Varieties by <i>in Vitro</i> Techniques	0/0	60/2,367	0/0	0/0	0/0
JUKKA, s.r.o.	Protocol of Derivation and Multiplication of Different Fruit Trees	0/0	90/3,550	0/0	0/0	0/0
VITROTREE BY BATTISTINI s.r.o.	Protocol of Derivation and Multiplication of Different Fruit Trees	0/0	93/3,669	0/0	0/0	0/0
BURDOVA FARMA s.r.o.	Multiplication of Nettle Plants by <i>in vitro</i> Methods	0/0	45,682/1,802,051	0/0	0/0	0/0

MoE	Preparation of Documents for the Ministry of Environment Crisis Plan 2020	0/0	901/35,542	0/0	0/0	0/0
Crop Research Institute (CRI), R&D&I	Determination of Humus Quality.	0/0	40/1,578	0/0	0/0	0/0
Zemagro, spol. s r.o.	Reducing the Environmental Burden of Pesticides and Fertilisers through Variable Rate Applications	0/0	1,815/71,598	0/0	0/0	0/0
BAYER s.r.o.	Evaluation of Locally Targeted Herbicide Application Using Remote Sensing	0/0	451/17,791	0/0	0/0	0/0
Agrinova Services, s.r.o.	Evaluation of Heterogeneity of Vegetation on Agricultural Land in the Area of Interest	0/0	427/16,844	0/0	0/0	0/0
AGRICOLE TECH, s.r.o.	Evaluation of the Effect of Organic Fertilisers on the Yield of Selected Crops	0/0	148/5,838	0/0	0/0	0/0
Agritec Plant Research s.r.o.	Insect Pest Susceptibility Testing	0/0	50/1,972	0/0	0/0	0/0
BioAktiv CZ s.r.o.	Effect of Spring Barley Nutrition on Yield and Quality Parameters	0/0	45,675/1,801,775	0/0	0/0	0/0
VP AGRO, spol. s r.o.	Effect of Laser Seed Stimulation on Sugar Beet Yield	0/0	45,675/1,801,775	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Expert Determination of Structure	0/0	45,686/1,802,209	0/0	0/0	0/0
Crop Research Institute (CRI), R&D&I	Determination of Humus Quality.	0/0	67/2,643	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Analysis of Soil Samples	0/0	42/1,657	0/0	0/0	0/0
VUCHT, a.s. Bratislava	Study of the Effect of Liquid Fertiliser Application with IN on Yield and Grain Quality of Maize	0/0	45,686/1,802,209	0/0	0/0	0/0
Escube Agro, s.r.o.	Study of the Effect of Superabsorbent Polymers Applied in Combination with Fertilisers on the Development and Growth of Maize and Dogwood Under Different Levels of Irrigation	0/0	46/1,815	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Collection and Analysis of Intact Samples.	0/0	45/1,775	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Field Trial Sampling and Analysis	0/0	45/1,775	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Collection and Analysis of Soil Samples	0/0	46/1,815	0/0	0/0	0/0

CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Expert Determination of Structure	0/0	45,686/ 1,802,209	0/0	0/0	0/0
VUCHT, a.s. Bratislava	Study of the Effect of Granular Fertiliser Application with IN on Yield and Grain Quality of Maize	0/0	45,686/ 1,802,209	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Analysis of Intact Samples	0/0	50/1,972	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Excavation and Description of Probes, Analysis of Soil Samples	0/0	120/4,734	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Collection and Analysis of Intact Samples	0/0	45/1,775	0/0	0/0	0/0
ROLANA s.r.o.	Description of 3 Soil Profiles with Agronomic Interpretation, Basic Analysis of Intact Soil Samples, Determination of Nutrient Content, Grain Size, POH Content, and pH	0/0	36/1,420	0/0	0/0	0/0
Crop Research Institute (CRI), R&D&I	Determination of Humus Quality	0/0	35/1,381	0/0	0/0	0/0
Brno University of Technology	Analysis of Soil Samples	0/0	45,687/ 1,802,249	0/0	0/0	0/0
Lovochemie, a.s.	Potential of Agricultural Production in the Czech Republic in the Production of Organic Fertilisers and the Use of Zeolites Under Organic Farming Conditions	0/0	45,687/ 1,802,249	0/0	0/0	0/0
VUCHT, a.s. Bratislava	Study of the Effect of Extra-Root Application of Humates on Yield and Grain Quality of Maize	0/0	47/1,854	0/0	0/0	0/0
VUCHT, a.s. Bratislava	Study of the Effect of Extra-Root Application of Humates on Yield and Quality of Sunflower Seedlings	0/0	44/1,736	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Collection and Analysis of Intact Samples	0/0	45/1,775	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Expert Determination of Structure	0/0	45,686/ 1,802,209	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Analysis of Intact Samples	0/0	45,679/ 1,801,933	0/0	0/0	0/0

CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Determination of Cox and HA:FA	0/0	39/1,538	0/0	0/0	0/0
Masaryk University, RECETOX	Microbiological Analysis of Water Filter Samples	0/0	10/394	0/0	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Soil Sampling from the Soil Test	0/0	45,680/ 1,801,972	0/0	0/0	0/0
POMONA Těšetice a.s.	Cooperation in the Introduction of New Technology in Cattle Breeding	0/0	747/29,467	0/0	0/0	0/0
SPV Pelhřimov, a.s.	Modernization of Pig Breeding Technologies with Higher Integration of ICT and Development of Comparable Calculation Methodologies	0/0	566/22,327	0/0	0/0	0/0
University of Chemistry and Technology in Prague	Support for the Development of New Products, Processes, and Technologies in the Processing of Agricultural Products and Their Marketing (The Specific Subject of the Contract is a Business Secret of the Client)	0/0	375/14,793	0/0	0/0	0/0
Biomin GmbH	Effects of the Use of a ZENzyme® Under Practice Conditions	0/0	55/2,170	0/0	0/0	0/0
Research Institute of Potato Growing Havlíčkův Brod, s.r.o.	Comparison of the Specific Metabolic Spectrum Between Cultivation Variants with and Without Organic Matter in the Orchid Genus <i>Dactylorhiza</i>	0/0	72/2,840	0/0	0/0	0/0
Ministry of Agriculture	Potential Use of Wastewater from Production Facilities for Irrigation of Agricultural Crops and the Risks for Food Safety Issues	0/0	200/7,890	0/0	0/0	0/0
Chr. Hansen Czech Republic, s.r.o.	Testing Biogas Production from Biomass	0/0	150/5,917	0/0	0/0	0/0
Institute of Agricultural Economics and Information, s.p.o.	Evaluation of Model Recipes (Milk Chocolate, Pralines, Egg Pasta)	0/0	123/4,852	0/0	0/0	0/0
YARA Agri Czech Republic, s.r.o.	Experiment with Yara Mila, Yara Vita and Yara Bela Fertilisers in Barley and Wheat, Evaluation of Yield and Grain Quality	0/0	67/2,643	0/0	0/0	0/0
Delacon PNRC s.r.o.	Determination and Evaluation of Strength Characteristics of Biological Material of Poultry Slaughter	0/0	45,681/ 1,802,012	0/0	0/0	0/0
MORAVOSEED CZ a.s.	Contract Research to Extend the Internal Methodology for Varietal Identification of Cabbage (<i>Brassica oleracea</i> convar. <i>Capitata</i>) Using Other Variable Microsatellite Loci	0/0	150/5,917	0/0	0/0	0/0
University of Pardubice, CEMNAT	Performing an Antimicrobial Test on 9 Samples of Fibrous Materials	0/0	54/2,130	0/0	0/0	0/0

POLABSKÉ MLÉKÁRNÝ a.s.	Goat Programme	0/0	411/16,213	0/0	0/0	0/0
JUKKA, s.r.o.	Growing Plants	0/0	0/0	90/3,550	0/0	0/0
MoE	Preparation of Documents for the Ministry of Environment Crisis Plan 2021	0/0	0/0	968/38,185	0/0	0/0
Research Institute of Plant Production, R&D&I	Analysis of 45 Soil Samples from the Ap Horizon and Comparison and Evaluation of Changes in Climatic Characteristics at Selected Locations in the Czech Republic	0/0	0/0	48/1,893	0/0	0/0
Agritec Plant Research s.r.o.	Area Monitoring of Resistance of Selected Harmful Organisms to Pesticide Active Substances	0/0	0/0	60/2,367	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Field Experiments in Domanínk	0/0	0/0	189/7,456	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Excavation and Description of Pedological Probes and Determination of Grain Size Composition	0/0	0/0	327/12,899	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Field Experiments in Domanínk Using Biochar	0/0	0/0	148/5,838	0/0	0/0
NAFIGATE Corporation a.s.	Determination of the Effect of Coated Fertiliser Application on Maize Development and Growth – Dynamics of N Volatilisation in Soil and Soil Microbiology in the Form of a Container Experiment under Controlled Conditions (Greenhouse, Growing House)	0/0	0/0	48/1,893	0/0	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Analysis of Soil Samples – Soil Reaction, Field Experiments with Drought in Domanínk	0/0	0/0	87/3,432	0/0	0/0
Crop Research Institute (CRI), R&D&I	Analysis of 45 Soil Samples from the Ap Horizon and Comparison and Evaluation of Changes in Climatic Characteristics at Selected Locations in the Czech Republic	0/0	0/0	75/2,959	0/0	0/0
Masaryk University, RECETOX	Expert Activity	0/0	0/0	61/2,406	0/0	0/0
NutriVet, s.r.o.	Determination of the Number of Moulds, Yeasts and Lactic Acid Bacteria in 24 Samples of Maize Silage	0/0	0/0	8/316	0/0	0/0
Statutory City of Brno	Creating a Vermicomposter for Gastro Waste	0/0	0/0	666/26,272	0/0	0/0
Research Institute of Potato Growing Havlíčkův Brod, s.r.o.	Soil Analysis – Expertise	0/0	0/0	1,815/71,598	0/0	0/0

Lovochemie, a.s.	Container Trials of an Organomineral Fertiliser Based on Granulated Carcass Blood and Zeolite	0/0	0/0	38/1,499	0/0	0/0
Agra SH	Demonstration of the Fertilising Effect of Cu in the Foliar Fertiliser Chevy Cu-Combi in Wheat and Maize as a Basis for the Registration of Central Institute for Supervising and Testing in Agriculture	0/0	0/0	42/1,657	0/0	0/0
EG.D. a.s.	Assessment of Grassland	0/0	0/0	242/9,546	0/0	0/0
SPV Pelhřimov, a.s.	Modernization of Pig Breeding Technologies with Higher Integration of ICT and Development of Comparable Calculation Methodologies	0/0	0/0	566/22,327	0/0	0/0
MORAVOSEED CZ a.s.	Development of a Methodology for the Detection of Important Resistances in Cucumber	0/0	0/0	250/9,862	0/0	0/0
Ecological Centre Orlov o.p.s.	Development of Methodology and Species Determination of Samples Based on the Genetic Sequence of the Mitochondrial Gene Fragment COI	0/0	0/0	48/1,893	0/0	0/0
Ecological Centre Orlov o.p.s.	Development of Methodology and Species Determination of Samples Based on the Genetic Sequence of the Mitochondrial COI Gene	0/0	0/0	102/4,024	0/0	0/0
Biomin GmbH	Effects of the Use of a ZENzyme® Under Practice Conditions	0/0	0/0	164/6,469	0/0	0/0
Rybářství Doksy spol. s r.o.	Monitoring of the Chmelaře Pond in the 2021 Growing Season (Physico-Chemical Parameters of the Pond Water)	0/0	0/0	66/2,604	0/0	0/0
Research Institute of Potato Growing Havlíčkův Brod, s.r.o.	Determination of the Presence of Dihydrophenanthrenes in Two Hybrids of the Orchid Genus <i>Dactylorhiza</i> . Comparison of Hormone Composition in Pisum Aclis (DI and PR)	0/0	0/0	63/2,485	0/0	0/0
Moravoseed CZ a.s.	***Conduct Contract Research to Develop an In-House Methodology for the Detection of Important Resistances in Cucumber (<i>Cucumis sativus</i>) Using Molecular Genetic Methods	0/0	0/0	207/8,166	0/0	0/0
Ecological Centre Orlov o.p.s.	Contract Research for the Development of Methodology and Species Determination of Samples Based on the Genetic Sequence of the Mitochondrial Gene Fragment COI	0/0	0/0	40/1,578	0/0	0/0
Ecological Centre Orlov o.p.s.	Contract Research to Develop Methodology and Species Determination of Samples Based on the Genetic Sequence of the Mitochondrial Gene Fragment COI in 210 Lichen Samples	0/0	0/0	84/3,314	0/0	0/0
Ministry of Agriculture	Reference Document on Best Available Techniques for the Slaughterhouse and Animal By-Products Sector, Chapter 5 Conclusions on BAT	0/0	0/0	200/7,890	0/0	0/0

Research Institute of Plant Production, R&D&I	Analysis of 45 Soil Samples from the Ap Horizon and Comparison and Evaluation of Changes in Climatic Characteristics at Selected Locations in the Czech Republic	0/0	0/0	44/1,736	0/0	0/0
A. PÖTTINGER, spol. s r.o.	Aggregation Tests of the Pöttinger Servo 650	0/0	0/0	61/2,406	0/0	0/0
LOWEMAT s.r.o.	Research and Development of a Prototype Positive Displacement Pump	0/0	0/0	541/21,341	0/0	0/0
YARA Agri Czech Republic, s.r.o.	Experiments with Yara Mila and Yara Vera Fertilisers in a Wheat Crop, Evaluation of Yield and Grain Quality	0/0	0/0	41/1,617	0/0	0/0
PhosAgro Polska Sp. z o.o.	Performing a Fertiliser Experiment with the Company in the Barley Crop According to the Approved Methodology, Evaluating the Yield and Quality of the Grain	0/0	0/0	112/4,418	0/0	0/0
Neveklov a.s.	New Technical Equipment for the Introduction of ASŘ - Processes in the Stable	0/0	0/0	726/28,639	0/0	0/0
Department of Food Chemistry and Biotechnology – FCH BUT	Sample Analysis	0/0	0/0	12/473	0/0	0/0
Workpress Aviation s.r.o.	Sample Analysis	0/0	0/0	48/1,893	0/0	0/0
Lithos Crop Protect GmbH	Effect of Pheromone Application on Maize Protection	0/0	0/0	0/0	124/4,892	0/0
Agritec Plant Research s.r.o.	Insect Pest Susceptibility Testing to Insecticides	0/0	0/0	0/0	78/3,077	0/0
Statutory City of Brno	Creating a Vermicomposter for Gastro Waste	0/0	0/0	0/0	665/26,233	0/0
SALIX Moravia	Description of the Soil Profile of the 3 Probes, Soil Sampling and Analysis to Characterise Soil Properties	0/0	0/0	0/0	40/1,578	0/0
ASIO TECH, spol. s r.o.	Hygiene Tests – Determination of <i>E. coli</i> , Enterococci, <i>Salmonella</i> spp.	0/0	0/0	0/0	45,684/1,802,130	0/0
Faculty of Science MUNI	Microbiological Analysis of Water Samples	0/0	0/0	0/0	69/2,722	0/0
Brno University of Technology	Ensuring the Analysis of Microbiological Indicators Between 3/2022 and 12/2022	0/0	0/0	0/0	45,672/1,801,657	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Analysis of Soil Samples – Soil Reactions, Field Experiments with Drought in Domanín	0/0	0/0	0/0	87/3,432	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Analysis of Soil Samples – Soil Reaction, Field Experiments with Drought	0/0	0/0	0/0	189/7,456	0/0
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Analysis of Soil Samples – Soil Reaction, Field Experiments with Drought	0/0	0/0	0/0	327/12,899	0/0

SPV Pelhřimov, a.s.	Contract Under the Rural Development Programme	0/0	0/0	0/0	2,831/111,677	0/0
EG.D. a.s.	Biodiversity Development – Careful Maintenance and Controlled Planting in the Protection Zones of Distribution Lines of EG.D. a.s., a Member of the E.ON Group	0/0	0/0	0/0	242/9,546	0/0
Moravoseed CZ a.s.	Modification and Extension of an In-house Methodology for the Identification of Cabbage (<i>Brassica oleracea convar. Capitata</i>) by Incorporating Two Additional Highly Variable Microsatellites on Additional Chromosomes	0/0	0/0	0/0	141/5,562	0/0
Rybářství Doksy spol. s r.o.	Ensuring Monitoring of the Chmelář Pond in the 2022 Growing Season	0/0	0/0	0/0	65/2,564	0/0
dr. Rahul Kumar (University of Hyderabad, India)	Proteomic Analysis of Plant Material, University of India	0/0	0/0	0/0	45,681/1,802,012	0/0
Ministry of Agriculture	Creation of New Recipes and Verification of Sensory Properties of Beer Types Using Unconsumed Pastry as Secondary Raw Material to Reduce Food Waste	0/0	0/0	0/0	200/7,890	0/0
VIA ALTA, a.s.	Analysis of Composts	0/0	0/0	0/0	98/3,866	0/0
The Society for Nature and Hunting.	Research on the Revitalisation of Damaged Environmental Sites	0/0	0/0	0/0	496/19,566	0/0
Agrikomp Bohemia	Collaboration in the Design of Mixing, Heating and Desulphurisation of the Micro BPS Fermenter	0/0	0/0	0/0	258/10,178	0/0
Chr. Hansen Czech Republic, s.r.o.	Biogas Production from Maize Silage Samples Affected by Aerobic Stress	0/0	0/0	0/0	258/10,178	0/0
Via Alta a.s.	Laboratory Analysis	0/0	0/0	0/0	98/3,866	0/0
LOWEMAT s.r.o.	Research and Development of a Prototype Positive Displacement Pump	0/0	0/0	0/0	38/1,499	0/0
YARA Agri Czech Republic, s.r.o.	Conducting a Trial with Yara Mila and Yara Vera Fertilisers in a Wheat Crop, Evaluating Yield and Grain Quality	0/0	0/0	0/0	48/1,893	0/0
Institute of Agricultural Economics and Information State Contributory Organisation	Evaluation of Model Recipes	0/0	0/0	0/0	275/10,848	0/0
DM Drogerie	1st Year of the DM Academy	0/0	0/0	0/0	8/316	0/0
ATU Kazakhstan	Calculation of the Costs of Internship for PhD Students from Kazakhstan	0/0	0/0	0/0	40/1,578	0/0
DOMINANT GENETICS s.r.o.	Effect of Iron Level in the Feed Mixture on Shell Colour Stability	0/0	0/0	0/0	130/5,128	0/0
ADW FEED, a.s.	Fibre in Fattening Chickens	0/0	0/0	0/0	69/2,722	0/0
Brno University of Technology	Course – Experiments in Pilot Plants of the Institute of Food Technology	0/0	0/0	0/0	0/0	45/1,775

Wrap Up s.r.o.	Verification of the Effect of Storing Bread and Baked Goods Made According to a Precisely Known Recipe in a Functional Wrap-Up	0/0	0/0	0/0	0/0	48/1,893
Yara Agri	Conducting a Fertiliser Experiment in a Spring Barley Crop	0/0	0/0	0/0	0/0	58/2,288
AGRO CS a.s.	Comparison of Efficiency and Economic Evaluation of Harvesting Technologies	0/0	0/0	0/0	0/0	61/2,406
Ministry of Agriculture	Creation of New Recipes and Verification of Sensory Properties of Beer Types Using Unconsumed Pastry as Secondary Raw Material to Reduce Food Waste	0/0	0/0	0/0	0/0	200/7,890
ENLINO, a.s.	Analysis of the Impact of Game Preserve Farming on the Forest and Agricultural Ecosystem, Including the Proposal of Possible Compensatory Measures, Based on the Client's Request and Proposal (Hereinafter Referred to as "The Work") in the Matter of the Proposal for the Construction and Recognition of a Preserve for the Backup Breeding of White Deer in the Cadastre of Litošice	0/0	0/0	0/0	0/0	87/3,432
University Inde	Identification of Proteins in Samples	0/0	0/0	0/0	0/0	48/1,893
University of Poznan	Fattening of Broiler Chickens	0/0	0/0	0/0	0/0	211/8,323
SPV Pelhřimov, a.s.	Modernization of Pig Breeding Technologies with Higher Integration of ICT and Development of Comparable Calculation Methodologies	0/0	0/0	0/0	0/0	566/22,327
Addicoo	Analysis of Meat Quality Parameters of Broiler Chickens	0/0	0/0	0/0	0/0	46/1,815
Rapotin Agro Research	Verification and Testing of Soil Environment Reactions	0/0	0/0	0/0	0/0	302/11,913
VUCHT, a.s. Bratislava	Plant and Soil Analysis to Evaluate the Effectiveness of Organomineral Fertilisers	0/0	0/0	0/0	0/0	39/1,538
VUCHT, a.s. Bratislava	Analysis of Plant Matter, Soil and Microbiological Analysis of Soil for Evaluation	0/0	0/0	0/0	0/0	42/1,657
VUCHT, a.s. Bratislava	Implementation of a Vessel Experiment to Determine the Efficiency	0/0	0/0	0/0	0/0	59/2,327
GROOWN s.r.o.	Verification and Testing of Soil Environment Reactions	0/0	0/0	0/0	0/0	242/9,546
Brno University of Technology	Provision of Selected Pedological Analyses	0/0	0/0	0/0	0/0	45,681/ 1,802,012
Agritec Plant Research s.r.o.	Area Monitoring of Resistance of Selected Harmful Organisms	0/0	0/0	0/0	0/0	78/3,077
Limagrain	Biological Assessment of the Agroecosystem	0/0	0/0	0/0	0/0	142/5,602
Four Leaves Agro, Amsterdam	Experiment with Biostimulants in Winter Wheat	0/0	0/0	0/0	0/0	45,679/ 1,801,933
AGRO 2000 s.r.o.	Creation of a Mass of Production Zones for the Evaluation of the Area Variability of Agricultural Land in the Area of Interest	0/0	0/0	0/0	0/0	125/4,931

MJM agro, a. s.	Production of Maps of Production Zones for the Evaluation of Area Variability of Agricultural Land in the Area of Interest of the Client	0/0	0/0	0/0	0/0	234/9,231
RAGT Czech s.r.o.	Qualitative Analyses of Grain Samples of 57 Varieties and Lines of Winter Wheat	0/0	0/0	0/0	0/0	93/3,669
EG.D. a.s.	Development of Biodiversity – Careful Maintenance and Controlled Planting in the Protection Zones of HV Distribution Lines in the Hodonín Region of EG.D, a.s., a Member of the E.ON Group	0/0	0/0	0/0	0/0	674/26,588
The Jan Evangelista Purkyně University in Ústí nad Labem	Innovative Formulations and Intensification Processes to Improve the Biodegradability of Biodegradable Plastics	0/0	0/0	0/0	0/0	400/15,779
Ecological Centre Orlov o.p.s.	Optimisation of Methodology for Insect Species Determination Using the COI Gene	0/0	0/0	0/0	0/0	166/6,548
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Collection and Analysis of Intact Soil Samples from the Field Trial	0/0	0/0	0/0	0/0	36/1,420
InTec Agro Trials, s.r.o.	Evaluation of the Effect of Biostimulants on Grain Yield in Maize	0/0	0/0	0/0	0/0	106/4,181
KWS OSIVA s.r.o.	Determination of Grain Moisture Changes in Different Maize Hybrids	0/0	0/0	0/0	0/0	430/16,963
CzechGlobe, Institute of Scientific Research of the CAS, R&D&I	Soil Sampling from the Field Trial	0/0	0/0	0/0	0/0	89/3,511
Total		16,739/ 660,316	8,541/336,923	8,287/326,903	6,940/ 273,767	4,673/ 184,339

Note: List and describe contract research activities with a revenue in a given calendar year, regardless of the amount of financial revenue.

3.4 Research results with existing or prospective impact on society

The evaluated unit shall briefly comment on a maximum of 10 (considered most significant by the evaluated unit) research results already applied or realistically heading towards application during the period of 2019–2023, based on the overview annex table 3.4.1 (it is recommended to indicate results with a link to projects listed in indicator 3.3). The evaluated unit must demonstrate in its description that the research results have led or will soon lead to positive impacts²⁸, on society (e.g. description of how the results are used by various users, the range of persons/institutions for which the result is relevant, measurable economic impacts, etc.). The evaluated entity shall indicate in its commentary whether the gender dimension is considered in these results and discuss the impacts of the results regarding sustainability.

Maximum range 300 words/result.

Self-assessment:

The Faculty of AgriSciences produced over two hundred applied results during the period under review, summarised in Table 3.4.1.

1) DANIHELKA, P., KEMPNÁ, K., SMOLKA, J. et al. 2020. **Environmental Security Concept 2021–2030 with a view to 2050. Resolution of the Government of the Czech Republic of 21 December 2020 No. 1360. Territorial validity of the result: A = valid for the Czech Republic (National Legislative or Non-Legislative Regulation, National Standard)**

One of the outputs of the contract research “Preparation of Documents for the MoE Crisis Plan (2019 to 2021)”. It focuses on the identification, prevention and management of risks associated with anthropogenic and natural hazards. Practical use targets: (i) Improving security and risk prevention (providing a strategic framework for managing emergencies, e.g. floods, droughts, smog situations, extreme weather, which contributes to the protection of populations, **critical infrastructure** and ecosystems; (ii) Implementing emergency measures; (iii) Integrating climate adaptation into crisis management and urban planning; (iv) Long-term protection of natural resources. Relevant **users are the Government of the Czech Republic and the Ministry of the Environment and the Ministry of the Interior of the Czech Republic**, other public administration bodies, security forces and the crisis management sector. The Framework offers a methodology for integrating environmental security into the strategies of municipalities and regions, which supports their actionability. Measurable economic impacts are that taking preventive measures **can reduce economic losses** caused by environmental threats and that ensuring the long-term quality of ecosystem services promotes the resilience of local economies, for example **in agriculture**. The concept does not directly emphasise the gender dimension, but the implementation of its measures allows for the **needs of different population groups, including women, to be taken into account**, for example, when planning evacuations or providing assistance in crisis situations. The document strongly promotes environmental sustainability, contributes to the protection of ecosystems and the maintenance of their self-regulatory capacity, and links environmental and security aspects, which is key to achieving the **goals of the 2030 Agenda and the Sendai Framework**. The concept is an important tool for coordinating environmental protection and security measures, thus contributing to the stability and resilience of society. Successful implementation is a prerequisite for a high score in Module 1 for conceptual materials. Therefore, this result will be **offered to Module 1** after 5 years of validity.

2) ŽALUD, Z., RŮŽEK, P., PRÁŠIL, I. T. et al. 2023. **Use of the Agrorisk.cz Portal – An Early Warning System Against Negative Weather Impacts on Agriculture: Methodology for Practice**. Nmetc – Methodologies Certified by an Authorised Body. Regulation number: UKZUZ 169928/2023. 05/10/2023.

²⁸ See Terms definition.

The result of the methodology is a **direct output of the project “Agrometeorological Early Warning System for Biotic and Abiotic Risks”**. Specifically, it has been developed as a procedure how to make the most effective use of the information from the portal and how to obtain **information** on the cadastral level **about current risks** including their 9-day hourly forecast. It is displayed in a five-colour traffic light intensity, with yellow indicating a low probability of occurrence, while red indicates certainty. It is therefore possible to react in good time **by operative planning your agronomic measures** with a positive impact on the organisation of the operation and to target the necessary measures precisely. This not only has a **significant economic effect** on the agricultural production itself and its output, but also on the environment, where the information provided minimises the burden on the landscape by significantly reducing the application of fertilisers and pesticides. **The environmental aspect** was one of the very strong motivations for the creation of the **portal Agrorisk.cz**. Overall, the portal monitors virtually all abiotic risks, e.g. occurrence of vegetation frosts, strong winds, drought, winter freeze, frost heaving, suitable conditions for the application of selected fertilisers, but also unsuitable conditions for the application of plant protection products, as well as dozens of meteorologically strongly conditioned occurrences of diseases and pests, such as e.g. European corn borer, leaf beetle, aphids, flea beetles, cydias, cercospora, fungi, and a variety of other crop-specific pathogens. **The portal, which is publicly and freely available**, is used mainly by the broad agricultural community (especially agronomists and plant doctors), as well as by vegetable growers, fruit growers, viticulturists, but also foresters and landscapers. **The result has been submitted for assessment in Module 1 in 2024 and there is a reasonable expectation of a high rating** as it builds on the research team's wider work on regional yield forecasting methodology which was rated **2** in this module in 2022.

3) MENDEL UNIVERSITY IN BRNO. 2023. **Locally Targeted Herbicide Application in Precision Agriculture**. Author: LUKAS, V., ŠIRŮČEK, P., MEZERA, J. et al; **Verified Technology** – Internal result identification code: 0024838-2023-01.

A proven technology for locally targeted control of fouling by chemical treatments, which enables **effective application of herbicides** based on the location and intensity of fouling, is the result of the **project SKYMAPS**. The method involves collecting data using unmanned aerial vehicles, processing it in a GIS and using decision criteria to guide the application technique. The procedures were successfully **verified in the agricultural company ROSTĚNICE, a.s.**, whereby on 22 tested areas with a total area of 1 095 ha it turned out that the average area requiring treatment was only 50% when optimising the doses. In real conditions on 78.4 ha, only 29.9 ha were applied, which means a **62% saving of herbicides** compared to a full-scale application. This technology has direct **economic benefits** by reducing herbicide consumption, which is particularly important in the face of rising chemicals costs. In addition, it contributes to environmental protection by reducing the chemical load on the soil and surrounding ecosystems. The main users of the results are agricultural enterprises, especially those wishing to optimise their costs and increase their environmental responsibility. The technology is also relevant to **agricultural consultancy services and application technology developers**. The gender dimension is not directly reflected in the project, but modern technologies such as remote sensing can be attractive to a wider range of workers regardless of gender. The method promotes sustainability through precise application that minimises unnecessary herbicide use while maintaining yields. This **reduces negative impacts on soil and biodiversity**, while increasing the economic and environmental efficiency of agricultural production. **The result will be sent to the Module 1 evaluation in 2025.**

4) MENDEL UNIVERSITY IN BRNO. 2022. **Method of Force Regulation of Three-Point Linkage of Agricultural Tractors and System for This Regulation**. Author: FAJMAN, M., ČUPERA, J., BAUER, F. et al. CZ 18 November 2022. Patent number 309425. Industrial Property Office. 18 November 2022. <https://isdv.upv.cz/doc/FullFiles/Patents/FullDocuments/309/309425.pdf>

One of the **outputs of the project ZETOR TRACTORS a.s.** – Optimal aggregation of machines with tractor is the result of intellectual property – patent, focused on the methodology of regulation of

the three-point linkage of the tractor so as to **optimise the operating parameters** of the electrohydraulic system of the tractor (EHR) for controlling the three-point linkage of the tractor (TBZ) in compliance with the principles of agrotechnics. For decades, **Bosch** has been the world leader in the three-point linkage of the tractor (TBZ) using electrohydraulic system of the tractor (EHR), setting the standard for control in several modes: position, force and mixed control. The patented solution focuses on optimising the so-called force control, whereby raising the arms of the three-point linkage, the electrohydraulic system of the tractor (EHR) helps the tractor (engine) to overcome the immediate pulling power requirements. However, the significant elevation of the three-point linkage of the tractor arms leads to a reduction in the working depth of the implements and a change in the agrotechnical conditions. The proposed solution, in combination of two fuzzy controllers arranged in series, allows to **provide all the above mentioned controls**, but applies a different principle in maximising the time, trying to maintain the agrotechnical conditions in the form of working depth and responding dynamically to the need for pulling power. The patented algorithm was implemented in software in the tractor control unit and verified in operation. In addition to verifying functionality, **savings in fuel consumption** were also achieved **for increased work efficiency**. The solution is designed to be modular for implementation in a complex tractor and implement control model. The outcome was **scored as a 2** in the H23 **Module 1** assessment.

5) STŘEDA, T., JOVANOVIĆ, I., BŘEZINOVÁ BELCREDI, N. et al. 2022. **Testing the Vitality of Field Crop Seeds Nmetc – Methodologies Certified by an Authorised Body**. Regulation number: UKZUZ 242237/2022. 20 December 2022.

The social and international relevance of the result, which has been **certified by a national seed certification authority**, lies in the potential to produce genotypes, seed lots and malting barley with higher quality and the ability to produce **viable individuals even under stress conditions**. This benefit will be reflected in increased crop yields, increased stability of production, as well as increased quality of raw materials for food industry use. The methodology is focused exclusively on objective and scientific aspects of seed viability assessment and was designed to be “gender neutral”, thus not favouring any group of people, which greatly increases its social impact. Moreover, the application of the method **does not require any additional inputs with negative environmental consequences**. From an economic and business point of view, it is an immediately applicable tool in international trade in agricultural and food commodities. The essential application potential of the result lies in its implementation in the production of malt for beer production – an **important export commodity of the Czech Republic**. The objectives and mission of the **project Centre of Competence Centre for Innovative Utilisation and Strengthening of Competitiveness of Czech Brewery Raw Materials and Products**, whose results are directly linked to the project, are thus fulfilled. The annual **turnover in the seed trade alone is in the order of billions of CZK in the Czech Republic**. Even if certified practices were applied to only a fraction of the commodities traded, their societal, economic and environmental benefits are undeniable. This outcome was **sent to Module 1 for evaluation** in 2024.

6) SKALÁK, J., VERCRUYSEN, L., CLAEYS, H. et al. 2019. **Multifaceted Activity of Cytokinin in Leaf Development Shapes Its Size and Structure in Arabidopsis**. *Plant Journal*. 97(5), 805-824. ISSN 0960-7412.

<https://doi.org/10.1111/tbj.14285>

The publication, which is one of more than 2 dozen impacted articles produced within the **framework of the Centre for Experimental Plant Biology project**, was selected for the cover of the *Plant Journal* (first decile of Plant Science) and presented in the Research Highlights section of the journal. This study showed how the plant hormone cytokinin can be used to influence leaf development, with **cytokinin levels** having a major impact on the coordination of cell division, leaf expansion and differentiation, and **biomass production**. Since its publication, the publication has already received 80 citations according to Web of Science, which testifies to its high relevance and recognition in the scientific

community. However, the result of the basic research goes far beyond the model plant *Arabidopsis* on which the research was carried out. The correct timing and dose of the hormone or its inhibitors in chemical treatments can significantly increase biomass production and contribute to plant production. The result thus extends the field of basic research, but also has **significant application potential for agriculture**. The benefit of research to society lies in the potential to improve crop resilience and yield, which is key to **global food security** and **agricultural sustainability**. The result was also rated the **best in Module 1 in 2021 (H20) with a score of 1**. The reviewers particularly appreciated the originality of the approach, the excellence of the research methodology and the overlap of the model plant framework, as the results obtained have real applications for improving crop production. The result has no gender dimension, the research team itself was mixed (M/F: 10/5)

7) MENDEL UNIVERSITY IN BRNO, Institute of Zoology, Fisheries, Hydrobiology and Apiculture (2023): **Certification Standards and the "Sustainable Fish Farming" Trademark: Ten Principles for Sustainable Farming**. Author: MAREŠ, J. et al.

The applied result provides a practical framework for fishery enterprises aiming at supplying to commercial chains. The "Sustainable Fish Farming" certification guarantees compliance with ecological and quality standards, including traditional methods of fish farming and harvesting. This promotes local production, environmental sustainability and raises awareness of the benefits of freshwater fish. The certification guarantees the consumer the traditional way of breeding and catching Czech fish, but also quality meat. The initiator of the certification is the **Albert supermarket chain**, the **project is patronised by the Fishermen's Association of the Czech Republic**, which is also the owner of the trademark. Compliance with the certification conditions will be monitored annually by scientists from the Fisheries and Hydrobiology Department of the Faculty of AgriSciences. In addition to environmental benefits such as pond protection and sustainable farming, the result also has **measurable economic impacts**. Certification increases the competitiveness of Czech fishing enterprises and contributes to the stability of local economies, for example by **reducing dependence on imports of marine fish**. Promoting domestic freshwater fish benefits consumers through higher quality and freshness of local production. The gender dimension is not explicitly highlighted, but implementation of the principles can contribute to the involvement of a wider range of workers in the sector, including women, for example in areas such as certification or promotion. The project promotes environmental sustainability by linking traditional fish farming with modern approaches and in relation to the **Farm to Fork strategy**. It minimises the negative impact of farming on the environment, contributes to biodiversity conservation and ensures the sustainability of fish production for future generations. The policy also responds to the challenges of climate change and promotes both local and quality production, which is in line with the trends of modern organic and socially responsible farming. This certification process belongs to a comprehensive set of applied results directly applicable to fisheries practice obtained **in the PROFISH project and leading to the NaCeBiVet project**.

8) KOČIOVÁ, S., DOLEŽELÍKOVÁ, K., HORKÝ, P. et al. 2020. **Zinc Phosphate-Based Nanoparticles as Alternatives to Zinc Oxide in Diet of Weaned Piglets**. *Journal of Animal Science and Biotechnology*. 11(9 June), 59. ISSN 1674-9782.

<https://doi.org/10.1186/s40104-020-00458-x>

The restriction of the use of zinc oxide in medicated doses for the prevention of diarrhoea in weaned piglets has been a "hot topic" in the EU since 2017, when a **decision of the European Commission banned zinc as a substitute for antibiotics from 2022**. Zinc in medicated doses has so far been one of the cheapest and most effective solutions for managing post-weaning diarrhoea, which causes up to 30% of losses. However, the reason for its restriction was the high accumulation of zinc in soils fertilised with pig manure. In research, zinc nanoparticles have been developed as an alternative to zinc oxide. In an experiment with weaned piglets, the hypothesis that zinc nanoparticles counteract post-weaning diarrhoea at much lower concentrations than with medicated doses of zinc oxide was confirmed.

The use of zinc nanoparticles and selected phytoadditives can reduce the zinc oxide dose in piglet diets by up to 75%, representing a significant **dose reduction while maintaining antibiotic effects and reducing environmental impacts** with significant **application potential**. All phytogetic substances and substances used for the synthesis of zinc nanocomplexes are legally permitted. Since its publication, the publication has already received over 30 citations according to Web of Science, which testifies to its high scientific relevance. The results have a great potential for application not only on the domestic but also on the global market. Phytoadditives and short- and medium-chain fatty acid esters were tested as other promising substances with antimicrobial activity. This **transfer of results takes place in the form of cooperation with feed companies** (e.g. ADDICOO GROUP s.r.o.). The result was developed in connection with the research **thematically linked to the project** *Reduction of Zinc and Antibiotic Use in Pig Farming by Innovative Phytoadditives and Their Combinations with Other Natural Substances with Antimicrobial Effect* and was evaluated in the H23 results assessment **with a grade 2 in Module 1**.

9) MENDEL UNIVERSITY IN BRNO. 2022. **Method of Identification of Natural Samples, Especially Liquid Samples**. Author: NEJDL, L.; ADAM, V.; VACULOVIČOVÁ, M.; CZ. 22/04/2022. **Patent No. 309221**. Industrial Property Office. 22/04/2022.

The subject of the patent is a low-cost technology using exposure of an analysed liquid sample to UV radiation followed by real-time detection of changes in the optical behaviour of the substance. **The license was transferred in 2023 through contract No. UM/18840/2023-1 to the start-up company** Lightly Technologies s.r.o. The company is already working to bring the technology to market and is testing the technology for drug analysis, especially fentanyl, in cooperation with the Police Bureau, Interpol and other authorities (e.g. the US Alabama Sheriff's office). For **further international application**, the technology has been patented by the **European Patent Office (EPO)** under patent number [EP3857204A1](#). The company also plans to use the technology for rapid detection of food and beverage adulteration and is working with hospitals on potential uses for **early detection of urine-borne diseases**. It can thus be concluded that, thanks to its versatility, the technology could have a significant societal impact in the years to come. The potential of the technology is confirmed by the **2nd place for the company Lightly Technologies s.r.o. at the EIT Jumpstarter programme Grande Finale** (30 November 2023, Athens, Greece). The technology was developed during the project CZ.02.1.01/0.0/0.0/16_0_25/0007314, in which it was tested within the analytical team mainly as a tool for **food adulteration** detection with possible use for **geographical determination of wines**. The technology was developed by a gender-balanced team and its use is not gender-specific. The company Lightly Technologies s.r.o. is led by a woman, Ing. Monika Štěpánová, who holds the position of CEO. Based on successful implementation in practice, confirming the social relevance of the result, it will be **offered for evaluation in Module 1** in the following period.

10) ŠŤASTNÁ, M., VAISHAR, A. et al. 2023. **Cultural Tourism: Eighth Golden Rules – EU Stakeholders Level Golden Rules for EU Stakeholders: A Set of Rules/Principles for practice**.

<https://www.spotprojecth2020.eu/media-and-downloads?pgid=li9vjI7e-6a7f8e11-f920-4c1a-87be-874742dab975>

A set of golden rules for the sustainable development of cultural tourism is one of the main **outcomes of the H2020 SPOT project**. This document contains eight key principles providing recommendations for the planning and implementation of cultural tourism with an emphasis on sustainability. The rules are **aimed at policy makers, local communities, businesses and academia** and contribute to improving the economic and social development **of disadvantaged regions**. The result has had positive impacts, particularly in **strengthening the local economy**, increasing business incomes and creating jobs. At the same time, it promotes resident involvement and strengthens community cohesion. The rules take into account the **gender dimension and promote equality and participation of all residents, including disadvantaged groups**. The emphasis is on sustainability in economic, social and environmental terms, for example through the **protection of cultural heritage**, sustainable infrastructure development and

the prevention of tourism congestion. The result serves as a valuable tool for strategy development at national and international level and has the potential to contribute significantly to the long-term development of rural regions and the improvement of the quality of life of their inhabitants. The result is widely communicated and disseminated, e.g. at the Conference on Cultural Tourism Advances (2023) in Belgium. It is expected that the proceedings will be published **by the renowned publishing house Springer.**

Table 3.4.1 - Overview of research results in the period under evaluation

Type of result ²⁹	Year of application	Name
Result Implemented by the Provider and Reflected in Approved Strategic and Conceptual Documents of State or Public Administration Bodies (1)	2020	Environmental Security Concept 2021-2030 with a View to 2050
Methodologies Certified by an Authorised Body (2)	2023	Use of the Agrorisk.cz Portal – An Early Warning System Against Negative Weather Impacts on Agriculture: Methodology for Practice
Proven technology (3)	2023	Locally Targeted Herbicide Application in Precision Agriculture
Patent (4)	2022	Method of Force Regulation of Three-Point Linkage of Agricultural Tractors and System for This Regulation
Methodologies Certified by an Authorised Body (5)	2022	Testing the Vitality of Field Crop Seeds
Peer-reviewed Article, Jimp (6)	2019	Multifaceted Activity of Cytokinin in Leaf Development Shapes its Size and Structure in Arabidopsis
Certification Standards and Trademark (7)	2023	Ten Principles for Sustainable fish Farming
Peer-reviewed Article, Jimp (8)	2020	Zinc Phosphate-Based Nanoparticles as Alternatives to Zinc Oxide in Diet of Weaned Piglets
Patent (9)	2022	Method of Identification of Natural Samples, Especially Liquid Samples
Set of Rules/Principles of Practice (10)	2023	Cultural Tourism: Eight Golden Rules – EU Stakeholders Level

Note 1: Please list and describe the results already applied in practice or heading towards application in practice with existing or prospective impact on the society (e.g. domestic or foreign patents, sold licenses, spin-offs, prototypes, varieties and breeds, methodologies, significant analyses, surveys, expert outputs for policymaking or other forms of non-publication outputs, etc.). Indirect results of research, development and creative activities with documented societal impact, e.g. expert activities, services to the public/government/scientific community, may also be reported.

²⁹ Specify the specific type of result. Add rows as needed.

TRANSFER OF RESULTS INTO PRACTICE

3.5 Transfer of results into practice

The evaluated unit shall briefly describe its system for transferring results into practice. It shall also indicate up to five of the most typical users of its results, whether in the university environment or in the non-university application/corporate sphere, detailing how it collaborates with them and how it seeks out new users (using a maximum of five specific examples).

It will also indicate whether and how it commercialises R&D&I results (e.g. selling licences, setting up start-up or spin-off companies, etc.)³⁰, providing brief description of the commercialisation methods used. The effectiveness of the transfer of results and the commercialisation of R&D&I results will be described using a selection of results (max. five) listed in annex table (Table 3.4.1).³¹

Additionally, the evaluated unit shall briefly comment on the funds received during the period of 2019–2023 from non-public, non-grant sources (e.g. licences sold, spin-off revenues, donations, etc.). A full summary shall be provided in annex table (Table 3.5.1).

Maximum 500 words plus 200 words for each provided example of finding a new user of results and commercialization.

Self-assessment:

Cooperation with:

At the Faculty of AgriSciences, the emphasis is on systemic collaboration with the users of our results – typical examples include: **1) State administration:** e.g. the Environmental Safety Concept has been developed for the Ministry of the Environment, which serves as a strategic framework for risk prevention or crisis management; **2) Agricultural practice:** e.g. the portal Agrorisk.cz used by agronomists, foresters and other users monitors abiotic risks (e.g. drought, strong winds) and biological threats (diseases, pests); **3) Companies and start-ups:** e.g. the developed low-cost technology for identification of liquid samples (including drugs) has been licensed to the start-up Lightly Technologies s.r.o, which is working on its market launch, as well as other collaborations with biotechnology companies such as Biovendor a.s., Testline s.r.o., GeneProof a.s, Enantis s.r.o. and others, which are focused on the transfer of researched biotechnologies into commercial practice; **4) Scientific community:** e.g. the study on cytokine hormones affecting leaf development is fundamentally advancing global scientific research knowledge; **5) Students or education:** e.g. the project coordinated by the Faculty to support the Czech brewing industry led to the establishment of a bachelor's degree programme in Brewing and Malting linking practice and research. This section is complementary to 3.3.

Systematically building collaboration with partners across sectors is key to finding new users: **1) Networking:** Conferences and Workshops for Public Administration (e.g., State Land Office), Participation in Trade Fairs (TechAgro, Země živilka, Flora Olomouc), and Participation (DLG Feldtage) and Organisation (MendelAgro) of Field Days; **2) Collaboration with Professional Organisations and Associations** (Association of Private Farming of the Czech Republic, Agrarian Chamber of the Czech Republic, Agricultural Union of the Czech Republic); **3) Targeted Communication of Results:** Professional Portals, Publications, and Social Media; **4) Strategic Partnerships:** Entering into research contracts with the commercial sector, government or foreign

³⁰ In the case of military HEIs, their specific position is taken into account when evaluating the commercialisation/evaluation of R&D&I results.

³¹ If the commercialisation of R&D&I results is carried out in this way.

institutions. This part is partly complementary to 3.6.

Method of Commercialisation:

The Faculty of AgriSciences focuses on systematic support for the commercialisation of R&D&I results through diverse approaches that link academic activities with practical application in the commercial sphere. The principles of support can be summarised as follows: i) Technology transfer and licensing: The faculty actively seeks to protect intellectual property (patents, utility and industrial designs) and subsequent licensing of innovations. Examples include technologies for the detection of natural samples and a universal immunoanalyzer platform. These technologies are gaining interest from start-ups and established companies and expanding application possibilities to different sectors; ii) Infrastructure sharing and partnerships: Rental of specialised laboratories and [equipment](#) and research facilities to partners and commercial entities, including start-ups, enables synergies between research and practice, as demonstrated by the collaboration with the company [Mewery, s.r.o.](#) This model links Faculty income, scientific collaboration and student training; iii) Direct collaboration with agricultural practice: Specialised facilities, such as field experiment stations and accredited laboratories, bridge the academic and commercial spheres. They offer services such as agricultural technology testing or genetic analysis of animals, which yield practical results and income; iv) Targeted support to projects and experts: The Faculty invests in funding application projects and strengthening the project office. It uses the university's technology transfer office to systematically commercialise results. These approaches allow for long-term sustainability, linking theory to practice and ensuring benefits for both academia and society. The following is a more detailed description of 5 specific examples:

1) Know-how Licensing: Method for Identifying Natural Samples (Patent No. 309221)

Liquid sample identification technology uses UV exposure followed by real-time detection of changes in the optical behaviour of the substance. In 2023, this innovation was licensed (non-exclusive licence; CZK 25,000/EUR 986 per year) of the start-up company Lightly Technologies s.r.o., which is now working on its launch. The technology is already being tested by major bodies such as the Police Presidium of the Czech Republic, Interpol and other international institutions, especially for the detection of drugs such as fentanyl. The versatility of the technology's application opens up possibilities for its deployment in other areas such as rapid detection of adulterated food or analysis of urine-borne diseases. The technology has also been patented by the European Patent Office, which increases its attractiveness on the international market. The success of the start-up is confirmed by the 2nd place in the final of the EIT Jumpstarter competition (2023). Despite the fact that the economic impact of the technology cannot yet be fully assessed, the very emergence of a start-up signals that the technology has real commercial potential and can contribute to society-wide development. The commercialisation of this technology also responds to the recommendations of the evaluators of the previous evaluation.

2) Know-how Licensing: Universal Portable Analyzer Platform "MALIA" (NANTEO)

NANTEO s.r.o. is a biotechnology company that, in addition to consulting in the field of nanotechnology, biotechnology and diagnostics, has been developing a prototype of a universal platform of portable immunoanalyzer, later called "MALIA" for human use since 2019. The development of the technology including the device itself, its wiring and critical HW components tightly connected to the device, including the SW control, is the responsibility of the company NANTEO s.r.o. A part of the technology including a "disposable cartridge", which is specific for the purpose of transporting chemical components, storage of these components before the analysis itself, is included in the outputs of the TA ČR TREND project (FW01010202) *Research and Development of Innovative Solutions in Laboratory Diagnostics* in the form of a utility model application from XII.2023 "Cartridge for Performing the Full Process of Chemiluminescence Immunoassay" and an industrial design application from XII. 2023 "Chemicals reservoir"

(registration of both these applied results is expected in 2024). As part of the optimisation and development of the TA ČR project, this cartridge is equipped with an optical element to perform chemiluminescence analysis with the highest possible yield and repeatability. In response to the recommendations of the evaluators of the previous MEP evaluation, final preparations for licensing this know-how to company NANTEO s.r.o. are underway in 2023.

3) Sharing Research Infrastructure: Commercialisation of Results Through Long-Term Rental of Research Facilities and Scientific Collaboration

The evaluation of R&D&I results is also carried out by renting modern scientific research facilities to innovative companies with high application potential. An example is the start-up **Mewery s.r.o.** focused on the development of laboratory-cultured meat based on freshwater algae. Since 2022, the company has been using the premises of the Department of Food Technology for a long time, including a registered meat production facility and a sensory laboratory for verification and simulation of commercial production. The cooperation brought mutual benefits – the Faculty received an income of CZK 726,000/EUR 28,640, while the start-up benefited from scientific and technical support from the university, including expert advice in the areas of legislation and technology. Graduates of the Food Technology programme are also employees of the company, which illustrates the link between research and practical application. This cooperation goes beyond the lease. The company is also preparing project proposals in cooperation with the Faculty, which indicates the potential for long-term scientific and economic cooperation. This model shows how the Faculty can develop commercialisation of R&D&I results through partnerships with external entities. Rental income, know-how transfer and access to unique technologies create an effective symbiosis between academia and applications.

4) Expert Field Experimentation: Experimental Station Žabčice

The field experimental station in Žabčice is an exceptional field laboratory focused on field experimentation including certification under the GEP (Good Experimental Practice) methodology according to the standards of the European and Mediterranean Plant Protection Organization (EPPO). It offers a wide range of services in testing and evaluation of agricultural technologies, chemical products and other innovations. This station provides companies and organisations with access to specialised test areas and expertise to test their products in real-world conditions. In terms of commercialisation, this model brings stable revenues, provides valuable access for commercial entities to experimental sites, quality infrastructure and expertise, while linking academia with practice. Another important benefit for the Faculty of AgriSciences is that students (especially from the Professional Agriculture programme) can directly participate in the design, implementation and evaluation of field trials, which is a valuable experience that prepares them for practical application of the acquired knowledge and skills in agricultural practice. The economic efficiency and sustainability of this model is supported by revenue generation. The current challenge is to resolve the internal system of financing and distribution of revenues among the individual departments involved in order to achieve an ideal balance between costs and revenues while supporting the development of R&D&I activities.

5) Accredited Laboratory: Animal DNA Testing

The accredited laboratory focuses on animal genetic testing, which provides valuable information for improving breeding and quality control in agriculture. It offers tests such as genetic typing (cattle, horses, pigs), pedigree verification, double muscling test for cattle, colour and coat quality testing for horses and stress sensitivity measurement for pigs. The laboratory is equipped with modern equipment, including PCR boxes and sequencers, which guarantees high accuracy of results. The translation of results into practice is done in the form of detailed reports that help breeders implement genetic information into their breeding strategies. Typical users are animal breeders, including individuals and breeders' associations, who use testing to improve the genetic

characteristics and health of animals. While this model enables revenue generation and uses advanced technology, it is currently being revised to create a more efficient and sustainable structure that will ensure long-term profitability and added value for our partners.

Summary Commentary on Financial Resources:

In addition to the above examples of commercialisation, the Faculty of AgriSciences also creates commercially interesting products in its research activities, especially in the food sector. These include, for example, innovative bakery and meat products, beer and chocolate, which are created through the use of modern technology. Other examples are lab-grown meat, 3D printing of food or eco-friendly packaging. These products find outlets in two main ways: through sales, for example through the university canteen, whereby the Faculty generates direct income and ensures a return on investment, or through internal use to supply the Faculty and the University, which contributes to operational efficiency and sustainability. Another source of income is the renting of R&D&I premises to external entities such as company Pawlica s.r.o. or companies organising professional workshops or conferences. Stable income also includes the “food tech production” of the Department of Food Technology. The Faculty also receives funds through donations, which often serve to finance participation in projects, organisational support of R&D&I activities or popularisation of research.

It can be summarised that the Faculty of AgriSciences generates revenues primarily from traditional sources, which include revenues related to teaching activities and the Long-term Conceptual Development of a Research Organisation (DKRVO). A significant component of the Faculty's funding is also funds obtained from research projects and contract research. The direct commercialisation of R&D&I results is still a rather complementary source of funds (total income from direct commercialisation amounted to over CZK 22,000,000 in the period under review). /EUR 867,850 and only in 2023 the amount of CZK 5,769,000/EUR 227,574, which is a noticeable increase compared to previous years), but the Faculty perceives its potential and plans to strengthen it in the future, for example, by expanding the infrastructure for research projects, improving internal processes and intensifying cooperation with external partners.

Table 3.5.1 – Summary of non-public revenues received during the period under evaluation

Type of revenue	Revenue (in thousands CZK/EUR)				
	2019	2020	2021	2022	2023
Accredited laboratory: Animal DNA Tests	788/31,085	949/37,436	1,196/47,179	703/27,732	0/0
Field Experimental Station Žabčice: Expert Field Experimentation	3,032/119,606	1,970/77,712	2,882/113,688	4,072/160,631	5,040/198,817
Sharing of R&D&I Premises (Rentals)	346/13,649	303/11,953	277/10,927	426/16,805	373/14,714
Food Tech Production	250/9,862	250/9,862	250/9,862	250/9,862	250/9,862
Donations	178/7,022	803/31,677	1,017/40,118	81/3,195	106/4,181
Total	3,806/150,138	3,326/131,203	4,426/174,596	4,829/190,493	5,769/227,574

Note: Enter funds raised for R&D&I from non-public sources besides grants or contract research (e.g. licences sold, spin-off company revenues, donations, etc.) in the calendar year.

POPULARIZATION OF VAVAI

3.6 The most important activities in the field of popularization of R&D&I and communication with the public

The evaluated unit shall briefly describe its main activities related to the popularisation of R&D&I and communication with the public (e.g. popularisation lectures, citizen science initiatives, etc.) during the period of 2019–2023 and provide up to 10 examples that it considers the most significant.

Maximum 500 words plus 200 words for each example given.

Self-assessment:

The Faculty implements a range of activities aimed at improving awareness of scientific and research activities, promoting public interest in science, and developing collaboration with the general public. The following types of activities are involved:

Popularisation lectures and seminars where students and the general public can get an overview of current research topics in agronomy, sustainable agriculture, climate change and innovation in nutrition, active animal health, etc. The Faculty of AgriSciences is regularly involved in educational activities and professional seminars aimed mainly at the agricultural community, often in cooperation with the **Czech Technology Platform for Agriculture (CTPZ)**. **The seminars focus on current topics in agriculture** such as innovation, sustainability, precision agriculture, soil conservation and more. The Faculty of AgriSciences participates in the professional support of these events through lecturers, sharing of research outputs and presentation of the latest scientific knowledge, thus contributing to the deepening of professional discussion and application of innovative methods in practice. This example demonstrates the link between Faculty research and its application in real-world practice, which is key to ensuring the relevance of scientific results to the broader agricultural community.

Educational Exhibitions and Workshops: The Faculty of AgriSciences regularly organises thematic exhibitions and workshops focusing on various aspects of agriculture and the environment, including nature conservation, biodiversity and organic farming. The exhibitions are enriched with hands-on activities and interactive presentations that allow visitors to deepen their knowledge and understanding of these important topics. An example of this is the **Exhibition on Vanishing and Disappearing Settlements in Moravia and Silesia after 1945**, held in 2023. The exhibition focuses on the process of the disappearance of villages, settlements and solitudes, specialising in border areas such as Šumperk, Bruntál and Jeseník. Many of the settlements were caused by the displacement of the German population, but the exhibition also highlights other causes such as the extraction of raw materials, the construction of water reservoirs, the building of military training facilities and border zones. During the exhibition, visitors were introduced to the historical circumstances and the process of merging of previously inhabited and cultivated areas with the natural environment. Many settlements have disappeared completely without a trace, but others have left artefacts and remains in the landscape that still testify to their former existence. The exhibition included not only textual and pictorial materials, but also modern 3D modelling of selected sacral buildings and two extinct villages. The interactive presentation allowed visitors to deepen their awareness of this phenomenon and to better understand the historical and ecological context. Another example is the **Fascination of Plants Day**, which is an annual pan-European event. Its aim is to introduce the public to the fascinating world of plants and the work of plant scientists. Mendel University in Brno and its Faculty of AgriSciences have been actively involved in the Plant Fascination Day since its inception in 2012. It regularly organises interactive exhibitions, workshops, lectures, tours of the botanical garden, and creates programs for schools and the general public that include hands-on demonstrations, experiments, and interaction with experts in botany and agriculture.

Researchers' Night – Popularisation of Science and Research: **Researchers' Night** is an annual event that takes place all over the world, including the Czech Republic. Its main goal is to popularise science and research among the general public, especially young people and students. The Faculty, or rather the University, regularly participates in this festival, where it exhibits its research projects and innovations. Visitors have the opportunity to see the laboratories, learn about current research and discuss with scientists. The programme includes interactive activities such as experiments, workshops, live demonstrations and presentations that are designed to be both entertaining and educational. Each edition of the Researchers' Night has a specific theme, not only in the field of agronomy and environmental science, but also across broader scientific fields. The Faculty regularly cooperates with various institutions, for example with the Research Institute of Veterinary Medicine (VÚVeL), which enriches the programme and expands opportunities for sharing scientific knowledge and ideas. Researchers' Night inspires young people to take an interest in science and technology, stimulating their creativity and critical thinking.

Citizen Science – Science for Citizens: The Faculty of AgriSciences actively supports Citizen Science projects that enable the general public to get involved in scientific research. One example is the project Educational Trails of Vanished Villages of Moravia and Silesia, which combines historical and ecological research of the landscape structure. The project includes an **interactive map and the Modern Chronicle of the village website**, where people can contribute photos, texts and videos to create a “memory of places”. This method of data collection actively engages citizens and allows the general public to participate in historical and environmental research. Another initiative, **project Intersucho (InterDrought)**, allows experts and the public to monitor the impact of drought in the Czech Republic and Slovakia. Although it primarily targets professionals (farmers, foresters), the regular collection of data from respondents who monitor the situation on their land contributes to the creation of a scientific database. The data helps not only scientific research but also practice – for example, providing farmers with valuable information for yield planning and responding to climate change. In this way, the public is also involved in monitoring environmental change. These projects illustrate active public participation in scientific research and promote wider awareness of environmental issues.

Open Days: The Faculty of AgriSciences regularly organises Open Days, which are an opportunity for the general public, students and potential applicants to visit the Faculty's research laboratories and farms. During these days, visitors have the opportunity to learn about current research projects and innovations, meet experts from different areas of agriculture and get detailed information about study programmes. **Open days are usually held twice a year.** They are regularly attended by several hundred people. The event targets not only those interested in studying, but also the general public interested in the scientific and practical aspects of agriculture, ecological studies and technology. University-wide Open Days will also be held from 2024 onwards, in which the Faculty of AgriSciences also participates.

Podcasts and Online Videos on Scientific Topics: The Faculty of AgriSciences effectively uses modern technology to disseminate scientific information and popularise research to the wider public through podcasts and a YouTube channel. These media focus on a wide range of topics including news on sustainable agriculture, research into new technologies and other current scientific issues. An example is the podcast of the Faculty of AgriSciences (as of 2022) called **Fakt výživnej podcast**, which has 24 episodes and covers a wide range of scientific topics related to agronomy and the environment. In 2023, the podcast was renamed **V zorném poli** and released eight episodes in its first year. The science podcast **Chci vědět** on Spotify and YouTube, hosted by faculty junior scientists, brings viewers topics in scientific research and sustainable production.

Public Discussions and Panel Debates: The Faculty of AgriSciences is actively involved in organising panel discussions and public debates on current scientific and societal topics such as climate change, the future of agriculture and new approaches to environmental protection. These meetings serve as a platform for academics to share their expertise with the wider public and engage them in a debate

on key issues affecting our future. An example of such a public forum is the **VIDA! science park in Brno**, which organises interactive exhibitions and discussions for different age groups. In October 2023, for example, lectures were held for high school and 8th-9th grade elementary school students covering topics such as “Sewerage: The waste that cannot be seen”, “Myths and facts about food of animal origin” and “The story of the river”. These meetings not only provide scientific information, but also encourage young people to become actively involved in current scientific and environmental issues.

Excursions for Schools and the Public: The Faculty also regularly organises similar and educational excursions, for example, events for high school students ***We Fly on an Excursion to the Faculty of AgriSciences at MENDELU*** (15/ 11/ 2023) prepared in cooperation with the Institute of Agricultural Economics and Information and the Ministry of Agriculture, where four interactive stations were prepared for those interested in university studies: Phytotechnics and Plant Science, Zootechnics and Fisheries, Food Technology, and Agroecology and Environmental Engineering.

Cooperation with media: The Faculty actively communicates with local and national media, where it presents scientific outputs and research, which contributes to better public awareness. Examples of this cooperation are the appearances of Faculty experts in various media. In 2019 and 2022, Miroslav Trnka participated in discussions on **Fokus Václava Moravce** programme **on the Czech Television**, where he commented on current research in the field of sustainable agriculture and climate change, and repeatedly in 2019 and 2022. Milada Šťastná was also featured on the same show in 2022 on “Science as Salvation”. Other presentations include an interview by Vojtěch Adam about CRISPR/Cas9 technologies on **DVTV**, which has more than 190,000 subscribers. In 2023, the Faculty of AgriSciences received a unique 457 media mentions and 36 press releases. The most frequent mentions are in the so-called public service media, namely Czech Television and Czech Radio.

IMPLEMENTATION OF RECOMMENDATIONS

3.7 Implementation of the recommendations in Module 3

The evaluated unit will briefly describe how it has implemented the recommendations for Module 3 from the previous evaluation period, if applicable.

Maximum 1000 words.

Self-assessment:

Recommendation 3.2, 3.3 and 3.4: The Faculty of AgriSciences focuses intensively on applied research, which is manifested by intensive cooperation with partners from practice within the framework of contract research. This cooperation is increasingly becoming the basis for submitting industrial research projects from various programmes, such as operational programmes, TA ČR and others that support cooperation between universities and the commercial sector. The support of academic staff in the solution of these projects by the Faculty consists in: i) covering the costs of participation, ii) advisory activities of the project centre, iii) taking into account the emerging commercially applied results in the motivational system of financial remuneration of staff, iv) reflecting and increasing the importance of these results in the system of performance evaluation, v) launching a pilot system (2023) of selection and evaluation of excellent applied results, especially in relation to Module 1, with a logical overlap into Module 3.

A major challenge remains the establishment of a comprehensive institutional (faculty to university) framework to support commercialisation, particularly in i) establishing start-up and spin-off companies, ii) protecting intellectual property and iii) preparing licensing and contractual arrangements. The Faculty is fully aware of the need for concrete application of outputs and therefore focuses on supporting student and employee start-ups. In 2023/2024, a project of the Operational Programme Jan Amos Komenský (OP JAK) of the European Regional Development Fund (ERDF) was prepared and subsequently accepted for financing in 2024, where it is planned to build the MENDELU Innovation Hub in the total value of CZK 80,000,000/EUR 3,155,819. This initiative will aim to promote technology transfer and create opportunities for incubating new businesses.)

The Faculty of AgriSciences is also actively developing commercial sharing systems for research infrastructure to increase revenue. An example of this approach is the long-term lease of scientific premises to innovative companies such as the start-up company MEWERY s.r.o., which focuses on the development of laboratory-cultured algae-based meat. This model of cooperation is a model of successful linking of the academic and commercial spheres, with the Faculty receiving an income of CZK 726,000/EUR 28,640, where the company uses the scientific and technical support of the university. In addition, the field experiment station in Žabčice, which specialises in testing agricultural technologies and chemical products, is an important tool for commercialisation. This project provides companies and organisations with access to expertise, testbeds and other services. The collaborative model brings stable income to the Faculty, connects the academic and practical spheres and at the same time allows students to participate in real research activities.

In terms of financing and revenue management, the current challenge is to set up an efficient system of cost sharing and revenue distribution among the actors involved. The Faculty continues to develop and validate these collaborative models, focusing on efficient revenue management and administration that supports the growth of research activities and commercialisation.

In response to the evaluators' recommendations, the Faculty continues to work on projects funded by European funds in the area of international cooperation. Revenues from these projects amount to almost CZK 38,000,000/EUR 1,499,014, which represents a significant increase compared to

the previous period and demonstrates the continued growth of its international exposure.

Recommendation 3.5 and 3.6: The recommendation encouraging the Faculty to remain adaptive and resilient in dealing with challenges such as climate change, pandemics and societal transformations has been fully considered. The Faculty actively responds to these challenges and integrates them into its research and teaching activities. Individual projects and their results show how the Faculty effectively adapts its approach to the current situation, uses new financial resources and develops scientific and commercial cooperation.

Recommendation 3.7, 3.8 and 3.9: Despite the existing reserves, the Faculty of AgriSciences tries to support the commercialisation of R&D&I results through cooperation with start-ups. This approach is partly in line with the recommendations of evaluators from the last evaluation, who pointed to the need for better technology transfer, product finalisation and links with investors. While a **comprehensive system of support for start-ups is still taking shape**, the Faculty is already implementing initiatives to transfer innovations from research to practice. For example, the **start-up Lightly Technologies s.r.o.** was founded on the basis of university patent No. 309221. This technology for the identification of liquid samples finds application in the fields of forensic analysis or food industry and shows significant commercial potential. Similarly, the **start-up NANTEO s.r.o.** is developing the "MALIA" platform with direct support from university know-how, which brings opportunities for future licensing income and economic value. The very fact that the technologies developed at the Faculty stimulate the establishment of start-ups and their promotion on the market can be considered a significant success. The Faculty thus gains practical experience that gradually contributes to the further development of a systemic approach to technology transfer.

Recommendation 3.10 and 3.11: The recommendation to continue the Faculty's focused and long-term efforts to maintain excellence, develop innovative technologies and knowledge, and strengthen its role as a sought-after partner nationally and internationally is fully reflected, as evidenced by the commented results and recognition from the scientific community.

Recommendation 3.12: The Faculty of AgriSciences fully understands the importance of popularising scientific and research activities and strives to make its achievements more widely known, both nationally and internationally. Popularising science connects the academic world with the public, spreads awareness of research and inspires the younger generation to take a greater interest in their studies. The Faculty focuses primarily on the national public through modern communication, such as social networks, where they regularly share news, achievements, photos and videos. The Faculty also broadcasts a podcast *V zorném poli* and publishes a magazine *af.magazín*. These digital channels reach a wide audience, including potential students. The websites of the individual departments present not only domestic projects but also offers for international cooperation. The Faculty actively participates in international conferences and organises its own professional and scientific events (e.g. [MendelNet](#)). In addition, it focuses on working with the media and news agencies to make its activities as visible and accessible to the public as possible (see more in chap. 3.6): the academic staff is also involved in the popularisation of science in the media and organises lectures and excursions for primary and secondary school students, thus motivating interest in the fields developed by the Faculty. These steps lead to increased publicity for the Faculty and support for the further development of its scientific activities. In connection with these activities, the Faculty is also upgrading its English web presentation, which is available at <https://af.mendelu.cz/en/>. The website is regularly updated to reflect the latest research projects, achievements and collaborative partnerships, thus providing the wider international community with a comprehensive and clear picture of the Faculty's activities and objectives.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 3

Document name	No. criteria	Location (link in HTML)

-	-		-

SELF-EVALUATION REPORT FOR MODULE 3

THE NAME OF THE UNIT BEING EVALUATED: Faculty of Forestry and Wood Technology

FORD: 4 - Agriculture and veterinary sciences

SOCIAL CONTRIBUTION OF THE EVALUATED UNIT

3.1 Introductory information about the unit under evaluation

The evaluated unit will describe its mission and vision and provide a general self-reflection of the societal contribution of R&D&I, along with its long-term goals in the fields it develops. The distribution of research activities by type of research will also be commented on.¹ The evaluated unit will describe its organisational structure and size (staffing, number of students, number of study programmes implemented, etc.) based on the data provided in annex tables 3.1.1 to 3.1.6.

Maximum 1000 words.

This is a non-rated indicator that serves as an introduction to the evaluated unit, providing context for data in indicators 3.2–3.7.

Self-assessment:

The **Faculty of Forestry and Wood Technology** (FFWT) is an academic and research institution dedicated to advancing knowledge in **forest sciences, wood technology, and environmental sciences**. As the second-largest faculty at MENDELU, and one of only two specialised institutions in the Czech Republic, FFWT plays a pivotal role in shaping the future of sustainable landscape management, forestry, wildlife conservation, urban arboriculture, wood processing, and furniture design.

Mission and Vision

FFWT is committed to excellence in tertiary education, pioneering research, and innovation while embracing its role in societal engagement and sustainable development. Its vision is to be a European-recognised centre of expertise, fostering interdisciplinary collaboration to address environmental challenges and advance the responsible use of natural resources. With a strong foundation in sustainability, resilience, and resource efficiency, FFWT strives to bridge scientific research with real-world applications, ensuring a positive impact on society, industry, and the environment.

Societal Contributions of Research, Development, and Innovation (R&D&I)

FFWT actively integrates its research into practical applications, contributing to sustainable forestry practices, innovative wood technologies, and landscape conservation strategies. Its scientific endeavours align with global challenges and sustainable development goals (SDGs), particularly in **climate change mitigation, carbon and water management, and biodiversity conservation**. The faculty's commitment to knowledge transfer and outreach ensures that research findings benefit academia, industry professionals, policymakers, and local communities. FFWT collaborates with

¹ Basic, applied, contract, artistic research (see Definition of Terms in Methodology HEI2025+).

governmental and non-governmental organisations, contributing to evidence-based policymaking and sustainable development initiatives.

Long-Term Goals and Strategic Development

- Enhancing international collaboration through research consortia, exchange programs, and joint initiatives.
- Expanding interdisciplinary research to address global environmental challenges and technological advancements in forestry, wood processing and related fields.
- Strengthening partnerships with industry to accelerate the transfer of innovative solutions into practice.
- Advancing sustainability education by updating curricula to incorporate cutting-edge developments in climate science, ecosystem management, and bio-based materials.
- Increasing research funding and impact by securing competitive grants and fostering strategic alliances.

Research Infrastructure and Distribution of Activities

FFWT's research is diverse but comprehensive, covering applied and fundamental research. Applied research dominates through numerous industry partnerships, while basic research is expanding, particularly in climate resilience, biodiversity, and sustainable materials.

The faculty's state-of-the-art research infrastructure includes:

- University Forest Enterprise Masaryk Forest Křtiny (UFE) – Over 10,000-hectares of a living laboratory hub for sustainable forest management research, the facility contributes to international networks like ProSilva, PEFC, and FSC.
- Rájec Ecosystem Research Station – This station is a key component of the CzeCOS/ICOS network and contributes to global climate and carbon cycle research.
- Specialised research centers such as the Josef Ressel Research Centre, Phytophthora Research Centre, and MENDELU Design Lab support innovation in wood science, forest pathology, and product design.
- Testing laboratories facilitate industry collaborations and applied research, including the Furniture Testing Laboratory, Calibration Laboratory for Measuring Equipment, and Testing Laboratory for Construction Joinery Products.

Organisational Structure and Academic Growth

FFWT's well-structured organisation ensures effective leadership and innovation. The faculty leadership consists of the Dean, six Vice-Deans (three female, three male), and the Faculty Secretary, supported by 13 specialised departments. This structure fosters multidisciplinary collaboration and research excellence, positioning FFWT as a key player in forestry and environmental sciences.

In recent years, the FFWT has experienced growth, undergoing a comprehensive re-accreditation and now offering:

- 9 Bachelor's, 9 Master's, and 18 Doctoral programs, including 9 English-taught programs.
- A 19.94% increase in student enrollment from 1,414 students in 2019 to 1,696 in 2023, with female student enrollment surging by 24.68%, reflecting a commitment to diversity and inclusion.
- An increase in academic staff, including a rise in female associate professors from five to six, demonstrating progress toward gender balance in academia.

Excellence in Research, International Leadership, and Funding Growth

At the European level, the faculty has successfully led high-profile projects, including the **ASFORCLIC** project (Grant Agreement ID: 952314) under Horizon 2020 (H2020), followed by the **EXCELLENTIA** project (Grant Agreement ID: 101087262) funded by Horizon Europe (HEU). Building on this success, FFWT continues its international research leadership through the **EuAsiaN-ROOT** project (Grant

Agreement ID: 101182734) under HEU, further solidifying its role in cutting-edge scientific advancements.

Additionally, FFWT actively engages in development cooperation, implementing annual projects with the Czech Development Agency (CZDA) and the Ministry of Foreign Affairs of the Czech Republic (MFA). It also coordinates the **STREAM** project under the Food and Agriculture Organization (FAO) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), reinforcing its role in sustainable global development.

The faculty's ability to secure competitive research funding continues to grow, with contractual research revenues increasing from CZK 6,055,000 (EUR 239,000) in 2019 to CZK 10,531,000 (EUR 415,000) in 2023. This trend reflects FFWT's expanding research capabilities and growing impact on scientific advancements and industry applications.

Global Influence and Future Outlook

FFWT is an active member of the global research community, holding memberships in esteemed organisations such as:

- International Union of Forest Research Organizations (IUFRO)
- European Forestry Institute (EFI)

By combining academic excellence, scientific innovation, and societal engagement, FFWT remains a leader in forestry, wood technology, and environmental research. Looking ahead, the faculty remains dedicated to expanding its research frontiers, strengthening international partnerships, and driving sustainable solutions for a rapidly changing world.

Table 3.1.1 – Staffing per FTE²

Academic/ Professional position	Total / Of which women					
	2019	2020	2021	2022	2023	Total
Professor	7.0/0.0	8.1/0.0	7.6/0.0	9.0/0.0	7.7/0	39.4/0.0
Associate Professor	32.3/4.8	33.5/4.8	35.6/4.7	36.3/5.4	35.7/5.4	173.4/25.1
Assistant Professor	56.9/16.6	70.1/19.9	76.3/22.8	80.4/24.4	78.4/23.0	362.1/106.7
Assistant	14.3/6.7	20.3/7.8	20.8/8.2	20.8/8.5	20.9/8.0	97.1/39.2
R&D Personnel ³	12.8/7.1	8.9/2.6	4.9/1.2	35.1/15.3	34.4/15.1	96.1/41.3
Researchers in other categories ⁴	57.3/19.0	57.0/18.5	57.2/19.7	22.2/5.7	18.5/5.9	212.2/68.8
Technical and economic staff ⁵	39.9/24.7	48.5/31.0	46.1/28.7	51.9/31.8	49.8/30.8	236.2/147.0
Scientific, research and development staff involved in teaching activities	24.6/5.8	18.7/5.1	17.6/5.4	14.2/5.1	13.4/3.9	88.5/25.3
Early career researchers ⁶	6.2/6.2	1.0/0.0	1.0/0.0	2.0/0.0	2.0/0.0	12.2/6.2

² The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full-time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two is shown.

³ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

⁴ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

⁵ Who participates in the management and support of R&D&I in the institution.

⁶ See Definition of Terms in Methodology HEI2025+.

Total ⁷	220.5/78.9	246.4/84.6	248.5/85.3	255.7/91.1	245.4/88.2	1216.5/428.1

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

3.1.2 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2019 (numbers of physical employees and personnel)⁸

Academic/ professional position	Under 29 years		30–39 years old		40–49 years old		50–59 years old		60–69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	1	0	3	0	3	0	0	0
Associate Professor	0	0	3	0	15	2	5	0	12	3	0	0
Assistant Professor	0	0	38	8	23	10	9	4	6	0	0	0
Assistant	4	2	6	0	6	3	4	3	3	2	0	0
R&D Personnel ⁹	9	6	11	6	8	4	0	0	0	0	0	0
Researchers in other categories ¹⁰	28	12	32	8	15	2	6	1	3	1	6	1
Technical and economic staff ¹¹	5	2	13	5	28	12	12	12	2	1	0	0
Scientific, research and development staff involved in teaching activities	1	0	15	2	7	2	5	2	2	0	3	2
Early career researcher ¹²	0	0	9	1	0	0	0	0	0	0	0	0
Total ¹³	46	22	103	27	96	33	39	20	29	7	6	1

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D Personnel, Researchers in other categories and Technical and economic staff are mutually exclusive, i.e. one staff member is reported in only one category. The categories of scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

3.1.3 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2023 (numbers of physical employees and personnel)¹⁴

Academic/ professional	Under 29 years	30–39 years old	40–49 years old	50–59 years old	60–69 years old	70 years and older

⁷ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

⁸ The total number of employees/workers as of 31st December of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

⁹ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁰ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹¹ Who participates in the management and support of R&D&I in the institution.

¹² See Definition of Terms in Methodology HEI2025+.

¹³ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I Personnel, Researchers in other categories and technical and economic staff.

¹⁴ The total number of employees/workers as at 31.12. of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

position	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	3	0	4	0	3	0	2	0
Associate Professor	0	0	1	0	16	2	8	1	11	2	3	1
Assistant Professor	2	0	40	8	45	17	15	6	4	0	2	1
Assistant	5	1	13	3	6	2	4	1	3	3	0	0
R&D Personnel ¹⁵	8	2	22	9	15	6	3	2	1	1	1	0
Researchers in other categories ¹⁶	8	5	12	5	11	4	7	2	1	0	2	1
Technical and economic staff ¹⁷	14	6	12	7	26	15	13	9	6	3	0	0
Scientific, research and development staff involved in teaching activities	2	2	2	1	2	0	2	0	3	0	2	2
Early career researcher ¹⁸	0	0	3	0	0	0	0	0	0	0	0	0
Total ¹⁹	37	14	100	32	122	46	54	21	29	9	10	3

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

Table 3.1.4 – Students

Type of study	2019		2020		2021		2022		2023		Total	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Undergraduate	969	367	1,046	422	1,086	440	1,154	462	1,290	527	5,545	2,218
Master's ²⁰	327	148	321	147	292	126	330	145	295	125	1,565	691
Doctoral	118	40	116	43	112	41	102	37	111	40	559	201
Lifelong Learning Courses	0	0	0	0	0	0	0	0	0	0	0	0
Total	1,414	555	1,483	612	1,490	607	1,586	644	1,696	692	7,669	3,110

Table 3.1.5 – Study programmes in Czech/English

Type of study programme	Total ²¹ / Of which professional study programmes											
	2019		2020		2021		2022		2023		Total	
Undergraduate	4/3	0/0	7/1	3/0	6/1	3/0	6/1	3/0	6/1	3/0	10/4	3/0
Master's	4/3	0/0	4/2	0/0	4/2	0/0	4/2	0/0	5/2	0/0	8/5	0/0
Doctoral	3/3	0/0	4/3	0/0	2/1	0/0	2/1	0/0	1/0	0/0	5/4	0/0
Lifelong Learning courses	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0

¹⁵ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁶ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹⁷ Who participates in the management and support of R&D&I in the institution.

¹⁸ See Definition of Terms in Methodology HEI2025+.

¹⁹ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

²⁰ All master's degree students are listed, regardless of the length of their programme of study.

²¹ The total number of study programmes for which admissions have been announced in a given academic year.

Total	11/9	0/0	15/6	3/0	12/4	3/0	12/4	3/0	12/3	3/0	23/13	3/0

Note: For each SP type, enter the number of SPs in Czech language in the first cell and insert the number of SPs in English language after the slash in the same cell (e.g. 15/3), enter the number of professional SPs in Czech language in the second cell and insert the number of professional SPs in English language after the slash. Follow a similar procedure in the last column of the table (Total).

3.1.6 – R&D&I capacities

R&D&I field	FORD	FORD share [%]	Predominant type of research	Total share of industry group [%]
1. Natural Sciences	1.1 Mathematics	1	Balanced basic and applied research	31
	1.2 Computer and information sciences		Select an item.	
	1.3 Physical sciences		Select an item.	
	1.4 Chemical sciences	1	Balanced basic and applied research	
	1.5 Earth and related environmental sciences	10	Applied Research	
	1.6 Biological sciences	18	Basic Research	
	1.7 Other natural sciences	1	Applied Research	
2. Engineering and Technology	2.1 Civil engineering	3	Applied Research	15
	2.2 Electrical engineering, Electronic engineering, Information engineering		Select an item.	
	2.3 Mechanical engineering	1	Applied Research	
	2.4 Chemical engineering		Select an item.	
	2.5 Materials engineering	10	Applied Research	
	2.6 Medical engineering		Select an item.	
	2.7 Environmental engineering	1	Applied Research	
	2.8 Environmental biotechnology		Select an item.	
	2.9 Industrial biotechnology		Select an item.	
	2.10 Nanotechnology		Select an item.	
	2.11 Other engineering and technologies		Select an item.	
3. Medical and Health Sciences	3.1 Basic medicine		Select an item.	
	3.2 Clinical medicine		Select an item.	
	3.3 Health sciences		Select an item.	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	45	Balanced basic and applied research	46
	4.2 Animal and Dairy science		Select an item.	
	4.3 Veterinary science	1	Applied Research	
	4.4 Other agricultural sciences		Select an item.	
5. Social Sciences	5.1 Psychology and cognitive sciences		Select an item.	5
	5.2 Economics and Business	1	Applied Research	
	5.3 Education		Select an item.	
	5.4 Sociology	1	Applied Research	
	5.5 Law		Select an item.	
	5.6 Political science		Select an item.	
	5.7 Social and economic geography	2	Applied Research	
	5.8 Media and communications		Select an item.	
	5.9 Other social sciences	1	Applied Research	

6. Humanities and the Arts	6.1 History and Archaeology	1	Balanced basic and applied research	3
	6.2 Languages and Literature		Select an item.	
	6.3 Philosophy, Ethics and Religion		Select an item.	
	6.4 Arts (arts, history of arts, performing arts, music)	1	Balanced basic and applied research	
	6.5 Other Humanities and the Arts	1	Applied Research	
Total		100%	-	100%

RECOGNITION BY THE RESEARCH COMMUNITY

3.2 Recognition by the research community

The evaluated unit will briefly comment on its position in the research community. It shall consider individual and other prestigious R&D&I awards, participation of its academic staff in the editorial boards of international scientific journals, elected membership in professional societies, major invited lectures given by the evaluated unit's academic staff abroad or by foreign scientists and other relevant guests at the evaluated unit. Additionally, it will address the involvement of staff in the evaluation of national or European project/programme calls over the period of 2019–2023 based on the data provided in annex tables 3.2.1 to 3.2.5 (max. 10 most relevant items). If necessary, the evaluated unit shall list any additional services to the scientific community that it considers relevant.

Maximum 1000 words.

Self-assessment:

The FFWT is a dynamic and engaged member of numerous national, international, and professional organisations, reinforcing its position as a key player in forest sciences, wood technology, and environmental research. Memberships provide access to state-of-the-art scientific advancements, policy dialogues, and best practices in sustainable forest management, bio-based materials, and environmental conservation. Through long-standing participation in renowned global networks, such as:

- International Union of Forest Research Organizations (IUFRO) (iufro.org)
- European Forest Institute (EFI) (efi.int)
- Silva Network (ica-silva.eu)
- European Network for Wood Research, Innovation and Education (InnovaWood) (innovawood.com)
- International Forestry Students' Association (IFSA) (ifsa.net)

Beyond academic networking, FFWT fosters strategic partnerships with international consortia, participating in high-impact European and global research projects. It collaborates with numerous leading universities for example (BOKU university, University of Ghent, Wageningen University), research institutions (Norwegian Institut of Bioeconomy Research, Fraunhofer Institute for Wood Research – Wilhelm Klauditz Institute), private-sector stakeholders, and technology clusters. These partnerships ensure that scientific discoveries and innovative technologies are seamlessly transferred into practical applications, bridging the gap between research and industry.

By actively engaging in global initiatives and fostering cross-sector collaborations, FFWT strengthens its scientific excellence and international reputation and drives meaningful progress in sustainable forestry, wood science, and environmental stewardship at regional and global levels.

Individual R&D&I awards

In recent years, several awards have acknowledged its commitment to technological advancement and practical application. One of the most notable came in 2022–2023, when Professor **Radomír Ulrich**, received an honorary recognition from the **CzechInno association** for his pioneering work in renewable energy under the category **Visionary project**. His research on the technique and technology for processing stumps as a sustainable energy source has advanced scientific knowledge and had a tangible impact on the forestry and energy industries. In the same year, the **Faculty, in collaboration with MISTRA, s.r.o. and Agama, a.s.**, developed an innovative **technology for harvesting and planting self-seeded woody plants**, further solidifying its role in applied forestry

research and technological development.

At the international level, FFWT's leadership in sustainable forest management was underscored when the **STREAM** project, a collaborative initiative supported by the European Union and the German Federal Ministry for Economic Cooperation and Development, received the **Czech National Agency for International Education and Research Award for Best Project in the Sustainability** category in 2023. Focusing on the sustainable management of Mongolian forests, STREAM exemplifies the Faculty's commitment to addressing global environmental challenges and fostering international cooperation in sustainable forestry practices.

FFWT's dedication to academic excellence and innovation is also reflected in its students' achievements. In 2022, **Jan Hába and Martin Coufal** were honoured with the **Professor Jindřich Halabala Prize** for their furniture and interior design semester projects, highlighting the Faculty's ability to nurture creativity and excellence in wood-based design disciplines.

Beyond awards and research projects, the Faculty actively shapes the broader academic and scientific landscape. Its academic staff serve as key members of scientific councils at both Czech and international universities, as well as research institutions, helping to steer the direction of forestry and environmental sciences. Many also hold **editorial positions in scientific journals**, such as **Frontiers in Forests and Global Change, Forests, Siberian Journal of Forest Science, Annals of Forest Research, Journal of Forest Science, Plant Protection Science, and Journal of Landscape Ecology**, further amplifying the Faculty's influence on international research.

FFWT's extensive international partnerships have brought distinguished scholars worldwide to collaborate with its research teams. Among them, **Burenjargal Otgonsuren, Ph.D.**, from the **Mongolian University of Life Sciences**, has worked closely with the Faculty for several years and is now an integral member of the EXCELLENTIA research team under Professor **Douglas Godbold, Ph.D.** Similarly, **Kris van Poucke and Kurt Heugens, Ph.D.** from the **Flanders Research Institute for Agriculture, Fisheries, and Food** in Belgium have long collaborated with the research team of Dr. **Thomas Jung** at FFWT's Phytophthora Research Centre, contributing valuable expertise to the Faculty's internationally recognised research in plant pathology. Additional international collaborations have been strengthened through visits from Associate Professor **Kitichate Sridith** from the **Prince of Songkla University** in Thailand, as well as Professors **Milan Mataruga and Branislav Cvjetković** from the **University of Banja Luka** in Bosnia and Hercegovina, whose institutions are among FFWT's strategic partners.

At the same time, FFWT's academic staff travel abroad to share their expertise and engage with international colleagues. In 2022, Associate Professor **Aleš Bajer, Ph.D.**, presented his research on the Geological and Geodiversity Attractions of the Czech Republic at the **University of Banja Luka in Bosnia and Herzegovina**, while Associate Professor **Jitka Fialová, MSc, Ph.D.**, contributed to academic discussions at the **Warsaw University of Life Sciences in Poland**. In 2023, **Jakub Dömény, Ph.D.**, continued this tradition by delivering a lecture at the **University of Ljubljana** in Slovenia, reinforcing FFWT's reputation as an internationally engaged institution.

The Faculty's influence extends beyond academia into scientific evaluation and research funding, where its **experts serve as evaluators** and reviewers for leading national and international funding agencies. Faculty members contribute to the **Technology Agency of the Czech Republic (TA ČR)**, which assesses proposals for programs such as TREND and Environment for Life. They also play a critical role in the **National Agency for Agricultural Research (NAZV)** and the **Grant Agency of the Czech Republic (GA ČR)**, evaluating projects across diverse fields, including building mechanics, fluid mechanics, architecture, and civil engineering. Their expertise is further sought after by the **Ministry of Education, Youth and Sports (INTER-EXCELLENCE program)** and international funding bodies, such as the **VEGA Commission**.

Through its research, dynamic international collaborations, and leadership in scientific evaluation, FFWT continues to push the boundaries of forest and environmental sciences. Whether through pioneering technological innovations, its role in shaping global sustainability efforts, or its deep commitment to education and knowledge exchange, the Faculty remains a driving force in its field, with a lasting impact nationally and internationally.

Table 3.2.1 – Prestigious R&D&I awards granted during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the award	Awarding institution
Associate Professor Ing. Radek Pokorný, Ph.D.	Science slam MUNI 2021	Masaryk University Brno
student Veronika Trojáčková	Professor Jindřich Halabala Prize 2021	Mendel University in Brno
student Martin Coufal	Professor Jindřich Halabala Prize 2021	Mendel University in Brno
Professor Ing. Radomír Ulrich, CSc. (Consortium Mendel University in Brno, Faculty of Forestry and Wood Technology, Institute of Technology, MISTRA, s.r.o. and AGAMA, a.s.	Visionary 2022	CzechInno
student Pavol Klimo	Josef Vavroušek Award 2022	Charles University
students Jan Hába and Martin Coufal	Professor Jindřich Halabala Prize 2022	Mendel University in Brno
Professor Ing. Radomír Ulrich, CSc.	Visionary 2023	CzechInno
Ing. Jan Šebesta, Ph.D. (Sustainable Resilient Ecosystem and Agriculture Management in Mongolia (STREAM) project team)	Best project in the Sustainability category 2023	Czech National Agency for International Education and Research

Note: Provide up to 10 examples.

Table 3.2.2 Participation of academic staff of the evaluated unit in editorial boards of international scientific journals during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of scientific journal, ISSN
Associate Professor Ing. Josef Urban, Ph.D.	Frontiers in Forests and Global Change, ISSN: 2624-893X
Professor Douglas Lawrence Godbold, Ph.D.	Frontiers in Forests and Global Change, ISSN: 2624-893X Forests, EISSN 1999-4907
Associate Professor Ing. Josef Urban, Ph.D.	Siberian Journal of Forest Science, ISSN 2312-2099
Associate Professor Ing. Luboš Purchart, Ph.D.	Folia Oecologica, ISSN 1336-5266
Professor Ing. Vladimír Gryc, Ph.D.	Wood Research, ISSN 1336-4561
Professor Dr. Ing. Libor Jankovský	Plant Protection Science, ISSN: 1212-2580
Professor Dr. Ing. Libor Jankovský	Journal of Forest Science, ISSN: 1212-4834
Professor RNDr. Michal Tomšovský, Ph.D.	Journal of Species Research, ISSN 2234-7909
Professor Dr. Ing. Petr Maděra	Journal of Landscape Ecology, ISSN 1803-2427
Associate Professor Dipl. Biol. Dr. rer. nat. Boris Rewald	Frontiers in Plant Sciences, ISSN 1664-462X

Note: Please provide up to 10 examples of academic staff participation in editorial boards of international scientific journals (e.g. editor, editorial board member, etc.).

Table 3.2.3 The most important invited lectures delivered by the academic staff of the evaluated unit at foreign institutions during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Invited lecture title	Name of host institution, or name of conference or event	Year
Dr. Thomas Jung	Diversity, Distribution and Pathogenicity of Phytophthora Species Worldwide	Hasanuddin University of Makassar, Indonesia	2019

Ing. Petr Jelínek, Ph.D.	Forestry in the Czech Republic and Mendel University	Royal University of Agriculture, Phnom Penh, Cambodia	2020
Associate Professor Bc. Ing. Jitka Fialová, MSc, Ph.D.	Sustainable Nature Trail in the Area of Sobesice District (Czech Republic)	Kasetsart University, Thailand	2021
Ing. Petr Váhalík, Ph.D.	GIS and Remote Sensing in Development Projects	The Copperbelt University, Kitwe, Zambia	2021
Associate Professor Mgr. Aleš Bajer, Ph.D./ Ing. Aleš Kučera, Ph.D.	Fundamental Pedological and Geoarchaeological Survey at Bibracte – Preliminary Results	European Archaeological Centre Bibracte, France	2022
Associate Professor Mgr. Aleš Bajer, Ph.D.	Geological and Geodiversity Attractions of the Czech Republic	University of Banja Luka, Bosnia and Herzegovina	2023
Ing. Tomáš Vichta	Significance of Subsurface Flow Near-Tree Stems in a Forested Micro-Watershed	Technical University of Munich, Germany	2023
Associate Professor Leticia Botella Sánchez	Connecting the Study of Fungal and Oomycete Viruses with a More Sustainable Forest Management	University of Valladolid, Spain	2023
Ing. Václav Sebera, Ph.D.	Introduction and Applications of Finite Element Simulations in Wood Science	Faculty of Wood Engineering and Creative Industries, University of Sopron, Hungary	2023
Ing. Jakub Dömény, Ph.D.	Wood Modification and Microwave Treatment at the Department of Wood Science and Technology	University of Ljubljana, Slovenia	2023

Note: Provide up to 10 examples.

Table 3.2.4 – The most important lectures by foreign scientists and other guests relevant to R&D&I at the evaluated unit during the evaluation period

Name, surname and title(s) of the lecturer	Lecturer's employer at the time of the lecture	Invited lecture title	Year
Kris van Poucke/ Dr. Kurt Heugens	Flanders Research Institute for Agriculture, Fisheries and Food, Belgium	Unravelling Hybridization in the Genus <i>Phytophthora</i> using Phylogenomics and Genome Size Estimation	2019
Associate Professor Kitichate Sridith	Prince of Songkla University, Thailand	Mountainous Vegetation of the Bhutan Himalayas	2019
Professor Dr. Jean Philippe Schütz	University Zürich, Switzerland	Close to Nature Silviculture in Europe	2019
Dr. Ivana Perić	University of Zagreb, Croatia	Competitive Advantages of the Croatian Wood Industry – Overview	2019
Professor Dr. Julien Pétilion	University of Rennes, France	Drivers of Spider Diversity in Neotropical Forests	2019
Professor Dr. Branislav Cvjetković	University of Banja Luka, Bosnia and Herzegovina	Transfer of Forest Genetic Resources Locally and Globally in Light of Climate Change and Planted Forests: Yesterday, Today, Tomorrow	2022
Dr. Angeliki Kourmouli and Robert Grzesik	University of Birmingham, United Kingdom	BIFoR Face Facility	2022
Dr. Burenjargal Otgonsuren, Ph.D.	Mongolian University of Life Science, Mongolia	Ectomycorrhizas in Mongolian Boreal Forests	2023
Dr. Pawel Staniszewski, DSc	Warsaw University of Life Sciences, Poland	Non-wood Forest Products Utilisation in Poland: Current Problems, Trends and Challenges	2023
Dr. Cihan Yilmaz	DOGUS University, Turkey	Causes of Occupational Accidents and Principles of Protection	2023

Note: Provide up to 10 examples.

Table 3.2.5 – Involvement in the evaluation of national/European research project/programme calls relevant to the R&D&I area at the unit during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the research project/ programme call	Name of the contracting authority/ guarantor of the project/programme call	Year
Associate Professor Mgr. Aleš Bajer, Ph.D.	ÉTA Programme	TA ČR	2019
Associate Professor Ing. Radek Pokorný, Ph.D.	Scientific Grant Agency of the Ministry of Education, Research, Development and Youth of the Slovak Republic and the Slovak Academy of Sciences	VEGA commission No. 8	2020
Associate Professor RNDr. Jozef Ráhel', Ph.D.	APVV – Slovak Research and Development Agency	Ministry of Education, Research, Development and Youth of the Slovak Republic	2020
Associate Professor Bc. Ing. Jitka Fialová, MSc, Ph.D.	INTER-EXCELLENCE II, INTER-ACTION: LUAUS23 (Bilateral projects Czech Republic-USA)	Ministry of Education, Youth and Sport	2022
Professor Ing. Jindřich Neruda, CSc.	Cultural and Educational Grant Agency of the Ministry of Education, Research, Development and Youth of the Slovak Republic	KEGA Commission No.: Commission No. 2 for new technologies, methods and forms in education	2019–2022
Professor Douglas Lawrence Godbold, Ph.D.	Flanders Research Council, German Research Council, Slovenian Research Agency	Flanders Research Council, German Research Council, Slovenian Research Agency	2023
Associate Professor Dipl. Biol. Dr. rer. nat. Boris Rewald	Klimatag, Deutsche Forschungsgemeinschaft	Klimatag, Deutsche Forschungsgemeinschaft	2023
Ing. Jan Tippner, Ph.D.	Standard / International Projects	GA ČR, panel 105	2019–2023
Professor Ing. Roman Gebauer, Ph.D.	Basic research	Research and Development Agency (Slovakia)	2019–2023
Professor Dr. Ing. Vladimír Gryc, Ph.D.	Standard / International Projects	GA ČR, panel 104	2019–2023

Note: Provide up to 10 examples.

RESEARCH PROJECTS

3.3 Research projects

The evaluated unit shall list at most 10 (considered most significant by the evaluated unit) research projects/activities (regardless of whether they are supported by public funds or based on contract research²²) that it has implemented or participated in during the period of 2019–2023²³. This should be done from the full list in annex tables (Table 3.3.1–3.3.2)²⁴, regarding particularly the results achieved or the application potential of the projects. The unit should also describe how the research projects contributed to the mission and purpose of the evaluated unit. If the evaluated unit has been a participant in listed project, it shall indicate which other entities were involved and describe its contribution to the project. The interdisciplinary aspects of the projects will also be commented on, along with any collaboration with other units of the evaluated HEI.

Maximum 300 words per project.

Self-assessment:

Among the most significant European projects of excellent research are:

HEU project **ERA Chair: Striving for Excellence in Forest Ecosystem Research**, EXCELLENTIA, (Grant Agreement ID: 101087262), provider: European Commission (EC), duration in years: 2023–2028, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 63,363,000/EUR 2,499,530/ CZK 63,363,000/EUR 2,499,530, principal investigator: Professor Libor Jankovský.

Abstract: EXCELLENTIA aims to advance excellence in forest ecosystem research by establishing a cutting-edge interdisciplinary research platform. EXCELLENTIA is also dedicated to driving structural changes within the FFWT through its research platform, fostering sustainable research and innovation. It serves as a beacon for career development, offering a supportive environment for emerging researchers. Its primary focus is on understanding the impacts of climate change on European forests and developing strategies to ensure their long-term stability and sustainability. Combining state-of-the-art fundamental research with investigations into the social dimensions of ecosystem services, the project takes a holistic approach to forest science. Research activities are centered at the UFE, providing a unique opportunity to study Central European forest ecosystems under real-world conditions.

Professor Douglas L. Godbold, an internationally renowned scientist serving as ERA Chair, leads the project. With extensive academic experience in Germany, the UK, and Austria, he brings a wealth of scientific expertise and leadership in coordinating national and international research initiatives. Under his guidance, the Faculty will benefit from high-impact publications, new research projects, and transformative structural advancements. The EXCELLENTIA scientific team comprises mid-career and early-stage researchers, fostering a collaborative and dynamic research environment. Notably, 50% of the team members are women, underscoring the project's commitment to gender balance and diversity in academia. FFWT is the sole beneficiary.

HEU project **Plant Pest Prevention Through Technology-Guided Monitoring and Site-Specific Control** (Grant Agreement ID: 101060634), provider: EC, duration in years: 2023–2026, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 164,071,000/EUR 6,472,233/

²² For the definition of contract research for the purposes of evaluation in the HE segments, see Article 2.2.1 of the Community Framework for State Aid for Research, Development and Innovation 2014/C 198/01.

²³ Regardless of whether the projects are completed or still ongoing, provided that at least part of the project was implemented during the evaluation period.

²⁴ The evaluated unit shall only fill tables that are relevant to it.

CZK 11,948,000/EUR 471,303, principal investigator: Dr. Thomas Jung.

Abstract: With climate change accelerating, pest invasions are expected to rise, posing a significant threat to the food industry and plant health. Early detection and prevention are, therefore, a top priority for Europe. The PURPEST project addresses this challenge by developing and demonstrating an innovative sensor platform capable of detecting five key pests in the field and during plant importation. By stopping the spread of pathogens at critical points, a key aim is to reduce pesticide use by at least 50%. The sensor platform detects pest-specific volatile organic compounds (VOCs) emitted by infested plants or the pests themselves. Through this cutting-edge technology, the project will establish a VOC signature profile of pest-infested plants under varying abiotic stress conditions, improving early detection accuracy and response strategies.

Coordinated by the Norwegian Institute of Bioeconomy Research (NIBIO), PURPEST brings together 15 partner institutions. Within this framework, the FFWT plays a key role in studying pathogens of the genus *Phytophthora*, with a particular focus on *Phytophthora ramorum*. FFWT also contributes to testing and validating the sensor platform across different environments. Additionally, the Faculty of AgriSciences (FA), specifically the Department of Molecular Biology and Radiobiology, is actively identifying VOCs emitted by pests and infested host plants.

The primary outcome of the PURPEST project will be a highly effective sensor platform designed for practical application in plant transport and nursery production. By integrating advanced detection methods with real-world agricultural and forestry needs, the project will play a crucial role in enhancing biosecurity, safeguarding plant health, and reducing reliance on chemical pest control measures.

Project H2020 **Adaptation Strategies in Forestry Under Global Climate Change Impact**, (Grant agreement ID: 952314), provider: EC, duration in years: 2021–2023, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 22,688,000/EUR 895,000/CZK 7,789,000/EUR 307,256, principal investigator: Associated prof. Petr Čermák, Ph.D.

Abstract: ASFORCLIC brought together researchers from Germany, Sweden, Slovenia, and Austria under FFWT leadership. It addressed forests' critical role in Europe's carbon cycle while recognising their vulnerability to climate change. It focused on the forest-wood value chain, examining how environmental changes affect species composition, forest structure, health, and growth and exploring adaptation strategies to enhance forest resilience. Additionally, it examined new wood materials in response to anticipated shifts in wood assortments and properties. ASFORCLIC investigated using lesser-utilized wood species, such as alder and birch, in plywood production, utilising both densified and non-densified veneers. It also evaluated the feasibility of manufacturing lightweight particleboards by incorporating agricultural waste – specifically sunflower stalk particles – alongside wood particles. This approach aligns with integrating wood-based raw materials with agricultural fibers to produce low-density boards while optimising raw material usage. On the applied research side, the project developed an innovative technology and process for continuous wood surface charring, which has been officially registered as a utility model. It provides facade materials with sustainably enhanced surface properties and is ready for immediate industrial application.

ASFORCLIC supported the development of early-career researchers, ensuring that the next generation of scientists is well-equipped to address future challenges. It yielded more than 30 peer-reviewed publications in impact-factor journals and facilitated over 40 international research visits to MENDELU and more than 45 to foreign partner institutions. Participation in major international conferences, the organisation of summer schools, and seminars focused on scientific writing and data analysis reinforced its role in advancing knowledge and academic training in forest science and wood research. Thus, it significantly enhanced FFWTs' international collaboration.

Interreg AT-CZ project **From Linear to Rotary Cutting of Hardwood**, (ATCZ276), provider: Interreg/

ERDF, duration in years: 2021–2022, role in the project: lead partner, total allocated funds/ funds allocated to MENDELU: CZK 6,447,000/EUR 254,338/ CZK 4,056,000/EUR 160,000, principal investigator: Ing. Jan Tippner, Ph.D.

Abstract: The project has laid the groundwork for transferring the results of linear cutting – developed through long-term collaboration with partners and the previous Interreg AT-CZ project “HARDIS” – to rotary cutting processes, the most widely used machining method in the woodworking industry. In partnership with Kompetenzzentrum Holz GmbH at the Universität für Bodenkultur Wien and Brno University of Technology, the project has produced experimental analyses examining rotary cutting from multiple perspectives. Additionally, numerical analyses facilitated the development of a computational model for rotary cutting.

The BiodivRestore programme *Marine Forests of Animals, Plants, and Algae: Nature Based Tools to Protect and Restore Biodiversity* project RESTORESEAS: **Sea Ecosystems–Animals, Plants And Algae: Natural Tools of Their Protection and Restoration of Biodiversity** (SS71020002) Provider: TA ČR, duration: 2023–2025, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 3,787,000/EUR 149,380/ CZK 3,787,000/EUR 149,380, principal investigator: Dr. Thomas Jung.

Abstract: The RESTORESEAS aims to enhance the scientific understanding of marine ecosystem restoration through three key objectives: assessing the climatic suitability for marine forest conservation and restoration, including future climate projections; investigating the role of species and genetic diversity in restoration efforts; and quantifying the long-term benefits of conservation and restoration initiatives.

Supported under the international Biodiversa RESTORESEAS consortium – which brings together 12 global partners – the project addresses the decline of seagrass ecosystems, a critical component of ocean biodiversity. The FFWT's primary role within this consortium is to analyse the diversity, distribution, and origins of oomycetes in marine ecosystems and their connected freshwater and brackish environments, mainly focusing on their pathogenic impact.

The project's key outputs will include high-impact scientific publications and a specialised map detailing the occurrence of the most aggressive oomycetes in Moravia, employing advanced detection and identification methods. FFWT MENDELU is the only partner from the Czech Republic.

ERC CZ project **Tree Dynamics: Mechanical Load Response Description**, (LL1909), provider: MEYS, duration in years: 2020–2024, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 37,787,000/EUR 1,490,611/ CZK 37,787,000/EUR 1,490,611, principal investigator: Jan Tippner, Ph.D.

Abstract: Tree biomechanics is an increasingly important field, driven by environmental and societal needs. Urban greenery plays a vital role in enhancing human well-being amid a changing climate. However, intensifying weather extremes pose growing threats to forests, urban trees, and infrastructure, increasing risks to public safety and property. Trees' mechanical behaviour is a critical factor in assessing these hazards. Existing prediction methods for tree stability and failure risk rely on significant simplifications, including idealised geometry, elastic material assumptions, and static load models. However, a comprehensive understanding of a tree's dynamic mechanical response to external forces remains largely unexplored. Addressing this gap is the project's overarching goal.

The research specifically aims to develop and experimentally validate a comprehensive physical model that describes a tree's dynamic response to external loading in both the frequency and time domains. The model fully integrates detailed geometry, material properties, and realistic loading conditions, enabling a more precise evaluation of how various tree parameters influence mechanical behavior.

The ERC CZ programme supported the project, which funds high-potential frontier research that has

undergone rigorous international evaluation in European Research Council (ERC) calls. This project ERC-STG (proposal no. 805372) passed the second round of evaluation by council and received a panel score “A – fully meets the ERC's excellence criterion and is recommended for funding if sufficient funds are available”. However, the ERC did not fund it directly due to budget constraints. FFWT was the sole beneficiary at MENDELU.

Project OP VVV **Phytophthora Research Centre**, (EF15_003/0000453), provider: MEYS, duration 2016–2023, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 223,737,000/EUR 8,825,917/ CZK 223,737,000/EUR 8,825,917, principal investigator for MENDELU: Professor Dr. Ing. Libor Jankovský

Abstract: An excellent international research team was assembled to investigate pathogens of the genus *Phytophthora* (*Chromalveolata*, *Heterocontophyta*, *Oomycetes*), advancing fundamental and applied knowledge in forest phytopathology. The team aimed to deepen the understanding of global species diversity, evolutionary history, mechanisms of interspecific hybridisation, factors influencing genus adaptability, and molecular processes governing resistance and susceptibility of woody plants to disease. It identified more than 100 new *Phytophthora* species and over 50 species from other oomycete genera – along with several entirely new genera – effectively doubling the number of known *Phytophthora* species. Many of these newly discovered species are aggressive pathogens affecting key European forest trees, posing potential risks to forestry and environmental stability. The study also elucidated the global biogeography of six major *Phytophthora* clades, including insights into the geographic origins of invasive, high-impact forest pathogens such as *Phytophthora cinnamomi*, *P. lateralis*, *P. plurivora*, *P. × cambivora*, and *P. ramorum* (a quarantine-listed pathogen).

A new international scientific team was set up at FFWT, strengthening its expertise in forest phytopathology. Dr. Thomas Jung was pivotal in advancing the Faculty's research capacity in this domain. It also resulted in the initiation of five new international research projects.

The research yielded unique findings, which have been published in over 85 peer-reviewed publications in high-impact journals and translated into practical conservation strategies to mitigate the spread of *Phytophthora* pathogens in natural ecosystems. Transferring knowledge to tree growers and plant distributors ensures that these scientific discoveries will be applied to enhance disease prevention and management strategies.

Phytophthora Research Centre, a new research infrastructure was established, which now serves as a hub for ongoing studies in tree disease research. The project also benefited from the participation of the Faculty of AgriSciences, particularly the Department of Molecular Biology and Radiobiology.

Project GA ČR **Extension of the Czech Millennial Oak Annual Ring Chronology**, (GA18-11004S), provider: GA ČR, duration 2018–2020, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 3,417,000/EUR 134,793/ CZK 3,417,000/EUR 134,793, researcher for MENDELU: Associate Professor Ing. Michal Rybníček, Ph.D.

Abstract: Over the past few decades, extensive oak chronologies spanning centuries and millennia have been developed across Europe. The latest version of the Czech Oak Standard Chronology incorporates nearly 4,000 samples from living trees, historical wooden structures, and archaeological and subfossil remains. This project aimed to extend the chronology by at least a thousand years BCE by analysing archaeological and subfossil oak wood.

Newly obtained annual ring sequences were dated using established dendrochronological methods, comparing them with reference chronologies available in national and international dendrochronological laboratories. In cases where dendrochronological dating was not feasible, samples were subjected to radiocarbon analysis to refine their placement within the chronology. Well-correlated sequences were then integrated into the Czech Oak Standard Chronology,

strengthening its temporal depth and reliability.

The extended chronology is a critical tool for the dendrochronological dating of archaeological oak samples and has broader applications in paleoclimatology. The project, conducted independently without external partners, has significantly enhanced the uniqueness and impact of Czech dendrochronological research, as demonstrated by its high-profile publication outputs. With this achievement, the Faculty has successfully extended the Czech oak chronology by over a millennium, providing a valuable resource for future research in tree-ring science, archaeology, and climate reconstruction. FFWT was the sole beneficiary.

Project of the Ministry of Education, Youth and Sports **Participation of the Czech Republic in the TreeDivNet Network of Experiments**, (LTT20017), project provider: MEYS, duration 2020–2024, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 9,985,000/EUR 393,886/ CZK 2,871,000/EUR 113,254, researcher for MENDELU: Martin Svátek, Ph.D.

Abstract: The project integrates Czech scientists into TreeDivNet, the foremost global network dedicated to experimental research on forest biodiversity. TreeDivNet comprises 25 experiments across 24 countries, with over 1 million trees planted on 821 hectares. The scientific objective of the project was to explore how species composition, species richness, and functional diversity of trees influence growth, stability, and stress in forest ecosystems, particularly under the growing threat of more frequent, prolonged, and intense droughts – a challenge increasingly faced by Czech forests.

Led by the Czech University of Life Sciences in Prague, the project enabled Faculty scientists to join this prestigious global network of experimental research on forest biodiversity. Special attention was devoted to understanding the impacts of escalating drought conditions, which are profoundly affecting tree functioning within forest ecosystems. The research has significantly contributed to a deeper understanding of how environmental changes affect forest biodiversity and ecosystem dynamics, a key area of focus at the Faculty and one that aligns with global research priorities.

The results of the Faculty's involvement in the project were published in high-impact journals, underscoring the importance and visibility of the research. FFWT was the sole beneficiary at MENDELU.

MIT project **Development of a Unique Door System** (EG19_262/0019922), project provider: Ministry of Industry and Trade (MIT), duration 2020–2022, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 11,846,000/EUR 467,298/ CZK 3,110,000/EUR 122,682, researcher for MENDELU: Ing. Martin Plachý, Ph.D.

Abstract: The project focused on research and development in innovative doors and resilience. It aimed to create *Muteo*-based products that surpass the performance of existing products on the market. One of the key areas of exploration was the design of a door and handle system as a single unit, with various resistance levels and practical usability, addressing the novel concept of a door without a visible handle. Additionally, the project sought to bring a successful design study to market. The Faculty partnered with SAPELI, a.s. in developing this product, contributing primarily to the design study phase. This project exemplifies the Faculty's successful collaboration with the commercial sector. The project led to the creation of five prototypes, with the final output being a unique door design, with a gender neutral ease of opening and closing. FFWT was the beneficiary at MENDELU.

The research projects' examples contribute to advancing scientific knowledge and addressing contemporary environmental challenges. The faculty focuses on its key areas through active participation in European and national projects. These projects support fostering innovative solutions in forest science, wood technology, and environmental sustainability. The research outputs, including

high-impact publications and the development of practical technologies, reinforce the Faculty's role in the research field. Key initiatives like the EXCELLENTA and ASFORCLIC strengthen forest ecosystem research by fostering interdisciplinary collaboration and supporting early-career researchers. The Faculty's involvement in projects like PURPEST and the Phytophthora Research Centre underscores its commitment to plant health and biosecurity. ASFORCLIC and TreeDivNet contribute to forest resilience and biodiversity research. Innovations in wood technology, demonstrated through projects like developing a unique door system and advancements in rotary cutting, showcase the Faculty's impact on sustainable material processing. By collaborating with industry and international partners, the FFWT ensures that its research has a broad and lasting impact on scientific advancements and real-world applications, supporting global sustainability goals.

Table 3.3.1 Projects supported by public funds in Euros and CZK

In the role of beneficiary						
Provider ²⁵	Provider ²⁶	Provider ²⁷				
		2019	2020	2021	2022	2023
MK0	Historic Wooden Constructions: Typology, Diagnostics and Traditional Woodworking	6,577/259,448	6,160/242,998	0/0	0/0	0/0
MSM	Research Centre for the Study of Pathogens of the Genus Phytophthora	30,140/1,188,955	24,527/967,535	3,365/132,742	173/6,824	0/0
MSM	Czech Mountain Forests Climate-Smart Forestry – CZECLIMO	500/19,724	180/7,101	0/0	0/0	0/0
TA0	Forwarder Tractor Unit for Timber Transport with a Hybrid Chassis Drive.	2,979/117,515	662/26,114	0/0	0/0	0/0
TA0	Innovation of Compound Feeds to Improve the Condition of Livestock and Game	4,624/182,406	2,975/117,357	0/0	0/0	0/0
MSM	Czech Scientists in the SBE Experiment	2,039/80,434	1,954/77,081	1,870/73,767	0/0	0/0
MSM	Integration of Czech Scientists into the Pan-European Research Platform FunDivEUROPE	1,926/75,976	1,925/75,937	1,850/72,978	0/0	0/0
MSM	Anisotropic Character of Hygroexpansion in Modified Wood	52/2,051	0/0	0/0	0/0	0/0
TA0	Factors Influencing the Attractiveness and Availability of Field Crops for Wildlife as the Main Tools for Preventing Damage	1,655/65,286	0/0	0/0	0/0	0/0

²⁵ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

²⁶ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

²⁷ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

GA0	Extension of the Czech Millennial Oak Tree Annual Ring Chronology	1,163/45,878	1,061/41,854	0/0	0/0	0/0
MZE	Potential for Structural Changes in Sustainable Forestry and Timber Processing	4,444/175,306	2,448/96,568	0/0	0/0	0/0
TA0	Prototype Harvester with Multifunctional Travel and Hybrid Drive	8,686/342,643	3,306/130,414	965/38,067	0/0	0/0
TA0	Urban Parks as a Quality Social and Natural Environment for Life	2,406/94,911	2,389/94,241	1,410/55,621	0/0	0/0
TA0	Promoting the Functional Diversity of Soil Organisms Through the Application of Conventional and Modified Stable Organic Matter while Maintaining the Productive Properties of Soils	7,250/285,996	7,250/285,996	7,250/285,996	1,838/72,505	0/0
GA0	Hygrothermo-Mechanical Behaviour of Modified Wood-Based Materials at Different Observation Levels	1,837/72,465	1,894/74,714	1,855/73,176	0/0	0/0
MSM	The Impact of Changing Environmental Conditions on Forest Ecosystems of the South Moravian Meadows	892/35,187	875/34,517	782/30,848	0/0	0/0
MZE	Impact of Defence Measures on Bark Beetle Populations Depending on Population Densities	3,346/131,992	3,339/131,716	3,336/131,598	0/0	0/0
TA0	Defensive Measures Against the Northern Bark Beetle	2,286/90,178	2,178/85,917	437/17,239	0/0	0/0
TA0	Development of Surface Carbonisation Technology for Wooden Building Elements: Elimination of Moisture and Biodegradation Effects	1,306/51,519	2,249/88,718	1 096/43,235	0/0	0/0
TA0	Determination of Vertical Mobility of Heavy Metals in Forest Soils as a Basis for Optimisation of Tree Species Composition to Reduce the Risk of Their Transfer to Edible Fungi	1,857/73,254	3,160/124,655	1,291/50,927	0/0	0/0
TA0	Bar Elements of a Timber Frame Building Using Hardwood	1,534/60,513	1,865/73,570	412/16,252	0/0	0/0
TA0	Creation of a Software Tool for Efficient Data Collection and Automation of the Determination of Total Biomass in Coppice Stands	1,363/53,767	1,589/62,682	201/7,929	0/0	0/0
TA0	Multifunctional Anti-Erosion Measures as Part of an Adaptable Landscape	1,414/55,779	1,129/44,536	197/7,771	0/0	0/0
TA0	Geodiversity Within the City: Perception, Function, Potential	1,931/76,174	1,815/71,598	1,822/71,874	0/0	0/0

TA0	Conditions for a Harmonious Combination of Cycling in the Forest Environment with the Needs of Nature Protection and Regional Development	2,162/85,286	2,305/90,927	2,264/89,310	0/0	0/0
TA0	Tools and Measures for Minimizing Root Damage to Nursery Seedlings After Planting by Wild Boars	3,525/139,053	3,537/139,527	3,421/134,951	3,414/134,675	0/0
MSM	Participation of the Czech Republic in the Global GEM Network	0/0	1,735/68,442	2,034/80,237	2,315/91,321	1,460/57,594
MK0	Mapping the Cultural Heritage of Human Economic Activity in Forests	0/0	5,183/204,458	4,428/174,675	4,960/195,661	0/0
TA0	Impact of Plant Protection Products on Non-Target Species and Regulation of the Use of Hazardous Products in Agriculture	0/0	2,292/90,414	2,670/105,325	1,292/50,966	0/0
TA0	Functionality of the Territorial System of Ecological Stability and its Perspective in the Conditions of Global Climate Change	0/0	3,657/144,260	2,600/102,564	2,488/98,146	547/21,578
MSM	Tree Dynamics: Description of the Mechanical Response to Load	0/0	5,183/204,458	7,691/303,393	7,706/303,984	7,706/303,984
MZE	Adapting Forestry for Sustainable Use of Natural Resources	0/0	7,027/277,199	4,384/172,939	4,765/187,968	4,413/174,083
MSM	Analysis of the Properties of Lesser Known European Wood Species in Composite Materials	837/33,018	0/0	0/0	527/20,789	1,119/44,142
TA0	Marine Ecosystems – Animals, Plants and Algae: Natural Tools for Conservation and Biodiversity Restoration	3,280/129,389	0/0	1,255/49,507	147/5,799	0/0
EU	HARDIS – MechNISCHER Aufschluss von Laubholz – Mechanical Disintegration of Hardwoods	0/0	980/38,659	0/0	0/0	0/0
EU	Adaptation Strategies for Climate Change (ASFORCLIC)	0/0	5,949/234,675	838/33,057	3,040/119,921	0/0
EU	ROTCUT – From Linear to Rotary Cutting of Hardwood	0/0	0/0	125/4,931	2,228/87,890	0/0
EU	VALID: Added Value from Residuals	0/0	0/0	997/39,329	0/0	0/0
EU	ERA Chair: Striving for Excellence in the Forest Ecosystem Research	0/0	2,057/81,144	0/0	0/0	6,357/250,769
Total		103,403/ 4,079,014	109,652/4,325,5 23	60,846/2,400,23 7	34,893/1,376,45 0	21,602/852,150
In the role of another participant						

Provider ²⁸	Provider ²⁹	Provider ³⁰				
		2019	2020	2021	2022	2023
TA0	New Technologies for Vegetation Treatment of Slopes of Highway and Road Corridors to Increase the Long-Term Effectiveness of Special Territorial Nature Protection	322/12,702	0/0	0/0	0/0	0/0
MV0	Multiplexed xMAP Technology for Comprehensive Detection of Pathogens Relevant for the Protection of Human and Animal Health	200/7,890	1,025/40,434	1,061/41,854	1,001/39,487	1,001/39,487
MIT	Composite Sandwich Elements for the Construction of Timber-Glass Facade Systems	297/11,716	0/0	0/0	0/0	0/0
MZE	Soil and Landscape Retention Capacity and Possibilities for Increasing it Under Climate Change	661/26,075	0/0	0/0	0/0	0/0
TA0	Design and Development of Unique Wood-Based Composite Elements for Sports and Theatre Floors	624/24,615	0/0	0/0	0/0	0/0
TA0	Elimination of Moisture Load on the Musical Instrument	497/19,606	558/22,012	0/0	0/0	0/0
TA0	Effect of Application of Biologically Transformed Organic Matter and Biochar on Stability of Soil Production Properties and Reduction of Environmental Risks	982/38,738	982/38,738	0/0	0/0	0/0
TA0	Utilisation of Maize Cultivation Technology in the Form of Mixed Culture to Produce Silage for Use in a Biogas Plant	1,425/56,213	1,425/56,213	0/0	0/0	0/0
TA0	Progressive Design and Management of Drying Kilns for Hard-To-Dry Timber Species, Including Exotics	1,021/40,276	0/0	0/0	0/0	0/0
TA0	Determination of Norway Spruce Stress by Direct Methods	572/22,564	0/0	0/0	0/0	0/0
TA0	Oak Fasteners in Timber Structures: Basis for Normative Anchorage	311/12,268	0/0	0/0	0/0	0/0
GA0	The Impact of Climate and Air Pollution on Forest Productivity	444/17,515	370/14,596	0/0	0/0	0/0
TA0	Non-Contact Dendrometer for Forestry Research and Practice	186/7,337	183/7,219	0/0	0/0	0/0

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

TA0	Agroforestry – a Chance for Regional Development and Sustainability of Rural Landscapes	216/8,521	2,016/79,527	0/0	0/0	0/0
TA0	Protection of Water Structures and Natural Banks Against the Effects of Oscillating Wind Waves	286/11,282	286/11,282	286/11,282	0/0	0/0
TA0	Green Roofs and Facades as a Means to Improve the Thermal and Water Balance in Industrial Space	2,187/86,272	1,637/64,576	1,758/69,349	0/0	0/0
TA0	Growing Maize for Grain in a Controlled Mixed Cropping System Using Clovers	1,200/47,337	1,200/47,337	1,200/47,337	0/0	0/0
MK0	Significant Trees – Living Symbols of National and Cultural Identity	1,669/65,838	1,802/71,085	1,588/62,643	1,015/40,039	0/0
MZE	Influence of Tree Species Composition and Forest Structure on Microclimate and Hydrological Conditions in the Landscape	832/32,821	761/30,020	773/30,493	755/29,783	0/0
TA0	Centre for Advanced Materials and Efficient Buildings	1,444/56,963	1,444/56,963	722/28,481	722/28,481	0/0
MZE	Research and Verification of the Effectiveness of Available Technical and Biological Means and Procedures for the Prevention of the Spread of African Swine Fever in the Wild Pig Population in the Czech Republic	1,198/47,258	1,319/52,032	1,319/52,032	0/0	0/0
MZE	Comprehensive Solutions for Forest Restoration and Cultivation in Areas With Rapid Large-Scale Forest Mortality	869/34,280	900/35,503	900/35,503	0/0	0/0
MIT	Multi-Purpose Modular System for Stump Harvesting and Other Commodities	659/25,996	1,037/40,907	1,324/52,229	1,182/46,627	0/0
TA0	Promotion of Tourism by Entering the Landscape Painting and Photography	1,192/47,022	835/32,939	883/34,832	871/34,359	0/0
TA0	Restoring Coppice Management: A Way to Diversify the Use of the Social, Economic, and Ecological Potential of Central European Forests	364/14,359	415/16,371	380/14,990	370/14,596	0/0
MZE	Optimisation of the Subsidy for Afforestation of Agricultural Land	752/29,665	752/29,665	787/31,045	787/31,045	675/26,627
MZE	Effectiveness of New Pest Control Practices in Fruit Production	518/20,434	540/21,302	540/21,302	528/20,828	495/19,527
MK0	The Memory of the Landscape of the Moravian and Silesian Sudetenland in Danger	0/0	0/0	326/12,860	303/11,953	295/11,637

MIT	Development of a Unique Door System	0/0	0/0	0/0	705/27,811	2,405/94,872
MIT	TP EUROwindows Application	0/0	0/0	1,735/68,442	675/26,627	90/3,550
MIT	Ergonomic Furniture for the 21st Century Created on the Basis of Ergonomic Optimisation of the Relationship and Interaction Between Man, Furniture, and Technology	0/0	0/0	269/10,611	410/16,174	534/21,065
MIT	Development of Equipment for the Production of Carbonised Wood Surfaces	0/0	0/0	697/27,495	541/21,341	1,185/46,746
TA0	Multi-Purpose Branching Machine	0/0	754/29,744	1,055/41,617	1,120/44,181	710/28,008
TA0	Innovative Design and Technology of Solid Wood Panel Production	0/0	2,457/96,923	2,873/113,333	3,337/131,637	3,526/139,093
TA0	Quantification of Drought Impacts on Forestry Important Tree Species in the Climatic Gradient of the Czech Republic	0/0	176/6,943	307/12,110	275/10,848	47/1,854
MSM	Participation of the Czech Republic in the TreeDivNet Network of Experiments	530/20,907	584/23,037	584/23,037	584/23,037	589/23,235
MIT	Research and Development of Furniture Parts with Reduced Flammability in the company Jan Ficek Dřevovýroba s.r.o.	0/0	0/0	534/21,065	631/24,892	1,910/75,345
MIT	Optimisation of Treatment and Processing of Sewage from Sewage Treatment Plants in the Production of Growing Media and Their Safe Use	0/0	0/0	0/0	1,602/63,195	5,080/200,394
GA0	Adaptation, Avoidance, or Extinction: Linking Community Ecology and Ecophysiology to Understand the Impact of Moisture Deficit in Temperate Forests	0/0	0/0	2,146/84,655	2,186/86,233	1,846/72,821
GA0	Experimental and Numerical Estimation of the Notch Capacity in Structural Timber Beams at a General Location Using LEFM	0/0	0/0	306/12,071	236/9,310	326/12,860
GA0	Physiological, Morphological, and Growth Responses of Fir and Beech Along a Geographical Gradient – A Basis for Predicting Future Trends	0/0	0/0	187/7,377	756/29,822	776/30,611
MZE	Optimising Silvicultural Practices for Adaptation of Forest Ecosystems to Climate Change	0/0	0/0	960/37,870	960/37,870	960/37,870
MZE	Possibilities for the Use of Larch in Czech Forests Under the Impact of Global Climate Change	0/0	0/0	399/15,740	337/13,294	332/13,097

TA0	A Database of Annual Ring Chronologies as a Tool for Recording and Predicting the Response of Major Forest Tree Species to Climate Change	0/0	0/0	289/11,400	416/16,410	400/15,779
TA0	Milling Machine with Adapters and Sprayer on Carrier for Standing Trees in the Framework of Forest Ecosystem Protection	0/0	0/0	735/28,994	999/39,408	1,262/49,783
MZE	Comprehensive Evaluation of the Fulfilment of Production and Non-Production Functions of Forests in Stands of Preparatory Tree Species	0/0	0/0	0/0	1,395/55,030	1,395/55,030
MZE	Potential of Geographically Non-Native Tree Species in the Forestry of the Czech Republic	0/0	0/0	0/0	630/24,852	630/24,852
MZE	Technical Recommendations for Water Management Within the Forest Transport Network	0/0	0/0	0/0	5,547/218,817	1,292/50,966
MZE	Changes in Forest Soils After Calamitous Logging – The Effect of Deforestation on Carbon Sequestration, Nutrient Balance, and Mobility of Risk Elements	0/0	0/0	0/0	901/35,542	905/35,700
TA0	Detection, Identification, and Monitoring of Animals by Advanced Computer Vision Methods	0/0	0/0	0/0	612/24,142	509/20,079
TA0	The Spread of Invasive Parasite Species and Their Overwhelming Impacts on the Biodiversity of Native Ruminant Species	0/0	0/0	0/0	422/16,647	461/18,185
EU	HOMED – Holistic Management of Emerging forest pests and Diseases	742/29,270	1,659/65,444	693/27,337	1,278/50,414	0/0
EU	Plant Pest Prevention Through Technology-Guided Monitoring and Site-Specific Control	0/0	0/0	0/0	0/0	1,077/42,485
EU	Achieving Remediation And Governing Restoration of Contaminated Soils Now	0/0	0/0	0/0	0/0	0/0
Total		22,200/875,740	25,117/990,809	27,616/1,089,389	34,089/1,344,734	30,713/1,211,558

Data source and provider abbreviations: Central Register of Projects: <https://www.isvavai.cz/cep>

Table 3.3.2 – Contract research activities

		Revenue (in thousands CZK/EUR)

Client ³¹		2019	2020	2021	2022	2019
Lesy České republiky, s.p.	Optimisation of Forest Management on Slopes Threatened by Rockfalls – Methodology of Forest Management Practices	46/ 1,815	0/0	0/0	0/0	0/0
Lesy České republiky, s.p.	Optimisation of Breeding of the Extralimital Population of the Bezoar Goat in the Vřísek Game Reserve	583/ 22,998	0/0	0/0	0/0	0/0
Lesy České republiky, s.p.	Stump Management of the Křivoklát Forest Park	233/ 9,191	399/ 15,740	632/ 24,931	0/0	0/0
Lesy České republiky, s.p.	Elimination of Unproductive Seeds in the Seed Section Using the IDS Method	433/ 17,081	462/ 18,225	303/ 11,953	250/ 9,862	0/0
Senckenberg Museum Frankfurt (Germany)	Support to the Integrated Programme for the Conservation and Development of the Socotra Archipelago	1,587/ 62,604	0/0	0/0	0/0	0/0
Archaeological Centre Olomouc	Processing Geochemical Analyses of Samples from Archaeological Research Along the D11 Motorway (Hradec Králové – Jaroměř)	98/ 3,866	0/0	0/0	0/0	0/0
Lesy města Olomouce a.s.	Determination of the Economic Management and Financial Loss of the Forest Kingdom Nature Reserve	14/ 552	0/0	0/0	0/0	0/0
Njovu o.p.s.	Expert Guarantee and Consultancy, in the Framework of the Project “Improving Farm Incomes of Small and Medium-Sized Farmers Through the Introduction of Integrated Farming.”	72/ 2,840	0/0	0/0	0/0	0/0
České sdružení pro biomasu, z.s.	Analysis and Prediction of the Development of the Raw Material Base of Forest Dendromass for Energy Purposes With Regard to the Current Development of Random Timber Harvesting in the Czech Republic	133/ 5,247	0/0	0/0	0/0	0/0
Czech University of Life Sciences Prague	The Economics and Cultivation of Birch Stands as an Alternative to the Regeneration of Declining Spruce Stands in the Czech Republic	72/ 2,840	115/ 4,536	40/ 1,578	0/0	0/0
Lesy České republiky, s.p.	Options for Remediation of Harvested Bark Beetle Wood and Standing Infested Trees With Electricity	435/ 17,160	61/ 2,406	0/0	0/0	0/0
Vysočina Region	A Model for the Design of Modifications of the Tree Species Composition of Stand Mixtures With Regard to Ecological Stability and Economics of Forest Management in the Natural Conditions of the Highlands	122/ 4,813	35/ 1,381	0/0	0/0	0/0
Českomoravský cement, a.s.	Expert Determination of Cellulase Activity, Mapping of Soil Depth Under Plantations, and Planting of Selected Area of Failed Forestry Reclamation of Mokrá Quarry	88/ 3,471	0/0	0/0	0/0	0/0

³¹ If the client is from abroad, indicate in brackets the country of origin of the client.

BIOCONT LABORATORY s.r.o.	Comparison of Plant Biodiversity in Selected Orchards and Vineyards With Different Management Regimes	350/ 13,807	0/0	0/0	0/0	0/0
Lesy České republiky, s.p.	Defensive Measures Against the Northern Bark Beetle	211/ 8,323	230/ 9,073	474/ 18,698	0/0	0/0
Nature and Landscape Protection Agency of the Czech Republic	Bear monitoring	45,955/ 1,812,821	0/0	0/0	0/0	0/0
Nature and Landscape Protection Agency of the Czech Republic	Bear monitoring	77/ 3,037	0/0	0/0	0/0	0/0
Municipality Písek	Revitalization of the Oxbow of the Olše River in the Municipality of Písek	104/ 4,103	0/0	0/0	0/0	0/0
Mlýny J. Voženílek, s.r.o	Creation of Technical Documentation for the Production of a Prototype Bran Pressing Machine	395/ 15,582	0/0	0/0	0/0	0/0
FF Servis , s.r.o.	Testing of Material Made from Birch Wood Chips	395/ 15,582	0/0	0/0	0/0	0/0
Institute of Global Change Research, CAS, Public Research Institute	Processing of Phenological Data from Ecosystem Stations Rájec and Bílý Kříž	206/ 8,126	0/0	0/0	0/0	0/0
Českomoravský štěrk, a.s.	Botanical, Arachnological, and Carabidological Research of the Koprovkva Site in the Mining Area	59/ 2,327	0/0	0/0	0/0	0/0
Institute for Forest Management Brandýs nad Labem	Methodological Support for the Parameterisation of the Dendrometric Model of the Morphological Curve of the Trunk of Norway Spruce According to Kozák in the Barkless Variant and Solution of the Related Tasks	82/ 3,235	0/0	0/0	0/0	0/0
CEMEX Sand, k.s.	Preparation of Documents for the Implementation of the Nature Trail "Jezera Napajedla".	37/ 1,460	0/0	0/0	0/0	0/0
Institute of Global Change Research, CAS, Public Research Institute	Retention Curves on the Test Site in Lanžhot	55/ 2,170	0/0	0/0	0/0	0/0
CEMEX Sand, k.s.	Study of the Final Reclamation of Kluk	86/ 3,393	0/0	0/0	0/0	0/0
Ing. Kolařík	Pedological Assessment of the Onen svět Area	17/ 671	0/0	0/0	0/0	0/0
National Heritage Institute, Heritage Conservation Office in Kroměříž	Evaluation of the Biological Efficacy of Insecticidal Products on the Corn Earworm	1/ 39	0/0	0/0	0/0	0/0
Masaryk University Brno	TOC/TN analysis	17/ 671	0/0	0/0	0/0	0/0
Landfill Bystřice, s.r.o.	Landfill Imaging for the Purpose of Calculating Cubic Capacities	11/ 434	2/ 79	0/0	0/0	0/0
EUROFARMS JIHLAVA s.r.o.	Analysis of Soil Samples	13/ 513	0/0	0/0	0/0	0/0

Institute of Archaeological Heritage Care Brno, Public Research Institute	C/N Analyses of 25 Selected Samples from the Research Brno-Trnitá: Vlněna, CDE stage	0/0	5/ 197	2/ 79	0/0	0/0
Ministry of Agriculture	Elaboration of the Opposition to the Documents for the Newly Prepared Tax Tables and Submission	0/0	49/ 1,933	0/0	0/0	0/0
Archaeological Centre Olomouc	Analysis of TOC, TS, and TN from Well Fillings in Ostrov for 29 Samples	0/0	8/ 316	0/0	0/0	0/0
CARE ČR z.s.	Livelihood Stabilisation and Development in Response to Climate Change, Southern Province, Zambia	0/0	216/ 8,521	334/ 13,176	0/0	0/0
UNDP Istanbul Regional Hub (Turkey)	Production of Innovative Solar Dryers in Cambodia	0/0	45,683/ 1,802,091	791/ 31,203	0/0	0/0
DUHA movement Olomouc	Monitoring of a Large Predator	0/0	18/710	0/0	0/0	0/0
SAFETY PRO s.r.o.	Technical Assistance in the Implementation of Wooden Structures on the Project "D1 Motorway 0137 - D 131 SSÚD Přerov"	0/0	113/ 4,458	438/ 17,278	0/0	0/0
Regional Police Directorate of the Zlín Region	Expert Report No. 142/2020	0/0	3/ 118	0/0	0/0	0/0
Nature and Landscape Protection Agency of the Czech Republic	Microclimate of the Macocha Abyss and Monitoring of the Population Dynamics of the Endemic Matthioli's Moravian Crustacean	0/0	56/ 2,209	19/ 750	17/ 671	92/ 3,629
Czech University of Life Sciences Prague	Analysis of Sedimentary Samples	0/0	0/0	17/671	0/0	0/0
Charles University	Genetics of the Wolf Population	0/0	0/0	3/ 118	4/ 158	84/ 3,314
Village Srnojedy	Preparation of a Pedological Survey for the Exclusion from the Agricultural Land Fund in the Cadastre Area Srnojedy	0/0	0/0	55/ 2,170	0/0	0/0
Silva Tarouca Research Institute for Landscape and Ornamental Horticulture, Public Research Institute	Hydropedological Analysis of 24 Soil Profiles	0/0	0/0	66/ 2,604	0/0	0/0
Institute of Global Change Research, CAS, Public Research Institute	Soil Analysis Station Rájec	0/0	0/0	2/79	20/ 789	0/0
Institute of Global Change Research, CAS, Public Research Institute	Adaptation Strategies for the Sustainability of Ecosystem Services and Food Security Under Adverse Natural Conditions	0/0	0/0	5/ 197	67/ 2,643	0/0
National Heritage Institute, Heritage Conservation Office in Kroměříž	Expert Opinion on the Impact of Forest Harvesting Consequences on the Condition of the Ruins of Šaumburk Castle	0/0	0/0	8/ 316	0/0	0/0
Lesy České republiky, s.p.	Traditional and Contemporary Forest Management in the Křivoklátsko Forest Enterprise	0/0	35/ 1,381	323/ 12,742	1,377/ 54,320	0/0

DUHA movement Olomouc	Monitoring of a Large Predator	0/0	0/0	231/ 9,112	55/2,170	0/0
CARE ČR z.s.	Implementation of Agroforestry Research and Activities in Zambia within the Project "Livelihood Stabilization and Development....."	0/0	0/0	524/ 20,671	0/0	0/0
Caritas Czech Republic	Implementation of Agricultural Production Analysis and Potential for Integrated Farming Implementation in the Mayukwayukwa Refugee Area within the Project "Support for Education (Lusaka) and Livelihoods of Refugees and Host Communities in Zambia	0/0	0/0	176/ 6,943	0/0	0/0
Lesy České republiky, s.p.	The Effect of Stratification Time and the Use of Thermotherapy in the Pre-Sowing Preparation of Beech Nuts	0/0	0/0	405/ 15,976	250/ 9,862	664/ 26,193
Lesy České republiky, s.p.	Monitoring of Biodiversity and Ecological Changes in Floodplain Forests and Meadows in the Area of the Confluence of the Rivers Dyje and Morava	0/0	0/0	678/ 26,746	1,217/ 48,008	2,642/ 104,221
Vojenské lesy a statky ČR, s.p.	Independent Assessment of Changes in Property Relations of the State Enterprises Lesy ČR and Vojenské lesy a statky ČR	0/0	0/0	80/ 3,156	0/0	0/0
Institut pro křesťansko-demokratickou politiku, z. ú.	Expert Research and Elaboration of Identification of Impacts on Forestry and Forest Management of the "Fit for 55 – EU Green Transformation Plan" Package in Key Documents	0/0	0/0	18/ 710	0/0	0/0
Atregia s.r.o.	Research Activities in the Field of Forest Hydrology	0/0	0/0	184/ 7,258	0/0	0/0
Vodovody a kanalizace Břeclav, a.s.	Vegetation Restoration of the Catchment Area in Nová Ves near Pohořelice	0/0	0/0	120/ 4,734	0/0	0/0
CEMEX Sand, k.s.	Eco-Monitoring of the Spytihnev – South Area	0/0	0/0	94/ 3,708	0/0	0/0
ASITIS s.r.o.	Study of the Water Regime of the Štěpánka Forest Park	0/0	0/0	75/ 2,959	0/0	0/0
Research Institute of Forestry and Hunting, Public Research Institute	Restoration of Calamitous Areas	0/0	0/0	245/ 9,665	321/ 12,663	34/ 1,341
Landfill Bystřice, s.r.o.	Landfill Imaging for the Purpose of Calculating Cubic Capacities	0/0	0/0	17/ 671	0/0	0/0
Ostrava Museum	Dendrochronological Analysis of 2 Samples	0/0	0/0	2/ 79	0/0	0/0
Museum of East Bohemia in Pardubice	Dendrochronological Dating of Wooden Structures	0/0	0/0	7/ 276	0/0	0/0
Museum of Podblanicko, state-funded institution	Dendrochronological Dating and Anatomical Identification of Archaeological Wooden Samples (Skalkov)	0/0	0/0	6/ 237	0/0	0/0
TIC Brno, state-funded institution	Tree Stability Assessment	0/0	0/0	20/ 789	0/0	0/0

City of Kroměříž	Assessment of the Condition of the Spruce Tree for Its Installation as a Christmas Tree in the Great Square in Kroměříž	0/0	0/0	17/ 671	0/0	0/0
Technologie hlavního města Prahy, a.s.	Assessment of the Operational Safety of the Tree Before Its Installation on the Old Town Square in Prague	0/0	0/0	32/ 1,262	0/0	0/0
Prague 4 Municipal District Authority	Expert Opinion-Assessment of Operational Safety of 2 Acacia Trees	0/0	0/0	14/ 552	0/0	0/0
Czech Inspection of the Environment	Expert Opinion on the Assessment of Tree Trimming in Hradec Králové	0/0	0/0	14/ 552	0/0	0/0
PLAN 5 s.r.o.	Carrying Out and Evaluation of the Tensile Test and Drawing Up an Expert Opinion on the Condition of the Tree (Uherský Brod)	0/0	0/0	18/ 710	0/0	0/0
Municipality of Hradec Králové	Assessment of the Condition of Trees-Beech.	0/0	0/0	40/ 1,578	0/0	0/0
Municipal District Office Prague-Kunratice	Preparation of an Expert Opinion-Assessment of the Operational Safety of 2 Acacia Trees	0/0	0/0	15/ 592	0/0	0/0
Šumava National Park Administration	Revision Expert Opinion to Determine the Condition and Prospects of the Memorial Tree in the Village of Strážný	0/0	0/0	33/ 1,302	0/0	0/0
National Heritage Institute	Expert Opinion (Oak, Lysice Chateau)	0/0	0/0	8/ 316	0/0	0/0
DEZA a.s.	Impregnation Tests with DEZA Creosote Oil and Oil from Another Manufacturer	0/0	0/0	68/ 2,682	0/0	0/0
Masaryk University Brno	Manufacture and Testing of Plates for Complex Physical and Mechanical Property Tests	0/0	0/0	8/ 316	0/0	0/0
ORLIMEX CZ, s.r.o.	Test of Mechanical Properties of Birch Plywood	0/0	0/0	23/ 907	0/0	0/0
ORLIMEX CZ, s.r.o.	Cooperation in the Innovation of Plywood Edge Finishing	0/0	0/0	83/ 3,274	177/ 6,982	0/0
Danzer Bohemia Dýhárna s.r.o.	Test of Physical and Mechanical Bonding Properties	0/0	0/0	50/ 1,972	0/0	0/0
Egoé kovo a.s.	Carrying Out a Laboratory Test to Determine the Resistance of Thermally Modified Pine and Ash Wood to Wood-Boring Fungi	0/0	0/0	77/ 3,037	0/0	0/0
REFORK SE	Species Identification of Wood Shavings Samples	0/0	0/0	12/ 473	0/0	0/0
Statutory City of Brno	Expert opinion (Impact of the Construction on the Tree Line)	0/0	0/0	2/ 79	11/ 434	0/0
VYDONA s.r.o.	Development of Three New Generations of Multi-Cutting Section Machines with Regard to Research on Process Effects in Machining	0/0	0/0	49/ 1,933	236/ 9,310	0/0

Správa městských lesů Jihlava, s.r.o.	Analytical Study of the Management of the Company Municipal Forests Management Jihlava and the Revitalisation of the Company Premises	0/0	0/0	0/0	149/ 5,878	0/0
Nature and Landscape Protection Agency of the Czech Republic	Assessment of the Influence of Interventions in the Knee Stands of the Jeseníky Mountains on the Parameters of Their Hydric and Soil Protection Capacity	0/0	0/0	0/0	124/ 4,892	0/0
ALFA Blades a.s.	Testing of Blades Installed in a Ring Sprayer for Use in the Disintegration of Native and Recycled Wood	0/0	0/0	0/0	153/ 6,036	0/0
ARCHAIA Praha z.ú. 1	Dendrochronological and Anatomical Analysis of Wood Samples	0/0	0/0	0/0	4/158	0/0
ARCHAIA Praha z.ú. 2	Dendrochronological and Anatomical Analysis of Wood Samples	0/0	0/0	0/0	9/355	0/0
Bibracte CPCC (France)	The Implementation of Pedological Survey	0/0	0/0	0/0	354/ 13,964	14/ 552
Caritas Czech Republic	Livelihood Stabilisation and Development in Response to Climate Change, Southern Province, Zambia	0/0	0/0	0/0	387/ 15,266	0/0
Caritas Czech Republic	Implementation of Agricultural Production Analysis and Potential for Integrated Farming Implementation in the Mantapala/Meheba Refugee Area within the Project "Support for Education (Lusaka) and Livelihoods of Refugees and Host Communities in Zambia"	0/0	0/0	0/0	300/ 11,834	0/0
Cemex Czech Republic, s.r.o.	Eco-Monitoring of the Spytihněv – South Area	0/0	0/0	0/0	105/ 4,142	0/0
Českomoravský štěrk a.s.	Botanical, Arachnological, and Carabidological Research of the Koprovka Site in the Mining Area	0/0	0/0	0/0	702/ 27,692	0/0
Czech University of Life Sciences Prague	Preparation of the Expert Report	0/0	0/0	0/0	64/ 2,525	0/0
Danzer Bohemia Dýhárna s.r.o.	Test of Physical and Mechanical Bonding Properties for Veneers with the Same Moisture Content	0/0	0/0	0/0	40/ 1,578	2/ 79
Danzer Bohemia Dýhárna s.r.o.	Test of Physical and Mechanical Bonding Properties for Veneers with Different Moisture Content	0/0	0/0	0/0	36/ 1,420	2/ 79
Danzer Bohemia Dýhárna s.r.o.	Test of Physical Bonding Properties of Samples Taken from Production	0/0	0/0	0/0	9/ 355	0/0
Danzer Bohemia Dýhárna s.r.o.	Test of Physical and Mechanical Properties of Bonding for Different Moisture Contents of Veneers – OAK	0/0	0/0	0/0	43/ 1,696	0/0
Danzer Bohemia Dýhárna s.r.o.	Test of Physical and Mechanical Bonding Properties for Veneers with Different Moisture Content	0/0	0/0	0/0	43/ 1,696	0/0

City of Mikulov	Geotechnical Assessment of Rock Outcrops and Slopes in Koží hrádek, Mikulov	0/0	0/0	0/0	9/ 355	0/0
Sedlčany City Museum	Dendrochronological and Anatomical Analysis of Samples from House no. 23 in Sedlčany	0/0	0/0	0/0	2/ 79	0/0
MISTRA s.r.o.	Operational Trials of the Planting Success of Seedlings Transplanted into Calamitous Forest Plantations Using the Tree Seedling Picker	0/0	0/0	0/0	32/ 1,262	0/0
Municipality of Jeseník	Expert Opinion – Norway Maple	0/0	0/0	0/0	17/ 671	0/0
Museum of Podblanicko, state-funded institution	Dendrochronological Dating and Anatomical Identification of 2 Archaeological Wooden Samples from the Excavations of the Pýchovec Pond	0/0	0/0	0/0	2/ 79	0/0
National Heritage Institute	Dendrochronological and Anatomical Analysis of 4 Wood Samples from the Research	0/0	0/0	0/0	3/ 118	0/0
Ostrava Museum	Conducting Dendrochronological Analysis of Samples	0/0	0/0	0/0	4/ 158	0/0
Sedlčany City Museum	Dendrochronological and Anatomical Analysis of Photographs of Cross-Sections of Subfossil Wood from the Kostomlátky Gravel Pit	0/0	0/0	0/0	2/ 79	0/0
SECUPACK s.r.o.	Manufacture and Testing of Disposable Plates Made from Brewery Malt and Other Additives	0/0	0/0	0/0	24/ 947	116/ 4,576
Trosky State Castle	Survey of the Condition of the Gallery in the Baba Tower of Trosky Castle	0/0	0/0	0/0	20/ 789	0/0
Statutory City of Ostrava	Expert Opinion on the Horse Chestnut Tree on Plot No. 2620/20 Cadastral Area of Moravská Ostrava	0/0	0/0	0/0	10/ 394	0/0
Slovak University of Technology in Bratislava (Slovakia)	Pedological Analyses	0/0	0/0	0/0	25/ 986	0/0
Technická správa komunikací hl. m. Prahy, a.s.	Performing Tensile Tests on Selected Trees Managed by TSK, a.s.	0/0	0/0	0/0	126/ 4,970	0/0
TIC Brno, state-funded institution	Tree Stability Assessment	0/0	0/0	0/0	20/ 789	0/0
UNDP Istanbul Regional Hub (Turkey)	Use of Mango Pits as a Source of Valuable Fats and Renewable Energy	0/0	0/0	0/0	19/ 750	893/ 35,227
Nature and Landscape Protection Agency of the Czech Republic	Implementation of Measures Within the One Nature Project	0/0	0/0	0/0	42/ 1,657	0/0
Institute of Global Change Research, CAS, Public Research Institute	Analysis of 24 Soil Samples for Carbon, Nitrogen and pH Including Sample Grinding	0/0	0/0	0/0	10/ 394	0/0
	Laboratory Determination of Mechanical and Hydrophysical Properties from Qualitatively Collected Soil Samples in Kopecký Rollers, Including Determination of the Skeleton Mass Fraction	0/0	0/0	0/0	10/ 394	0/0

Institute of Global Change Research, CAS, Public Research Institute	Soil Survey for TA ČR NIVA	0/0	0/0	0/0	33/ 1,302	0/0
Silva Tarouca Research Institute for Landscape and Ornamental Horticulture, Public Research Institute	Analysis (Thermal Fractionation of Carbon)	0/0	0/0	0/0	50/ 1,972	0/0
Silva Tarouca Research Institute for Landscape and Ornamental Horticulture, Public Research Institute	Analysis (Thermal Fractionation of Carbon)	0/0	0/0	0/0	16/ 631	0/0
Brno University of Technology	Pedological Investigation	0/0	0/0	0/0	46/ 1,815	0/0
Brno University of Technology	Analysis and Prediction of the Development of Raw Timber Stocks in Forest Stands and the Development of the Available Raw Material Base of Forest Dendromass for Technological and Energy Purposes in the Pelhřimovka Region	0/0	0/0	0/0	55/ 2,170	0/0
Brno University of Technology	Analysis and Prediction of the Development of Raw Timber Stocks in Forest Stands and the Development of the Available Raw Material Base of Forest Dendromass for Technological and Energy Purposes in the Vsetín Region	0/0	0/0	0/0	82/ 3,235	0/0
Wienerberger s.r.o.	Creation of a Biodiversity Action Plan for the Hranice and Jezernice Sites	0/0	0/0	0/0	100/ 3,945	0/0
VYDONA s.r.o.	Development of 3 new Generations of Multi-Blade Sectional Tools with Regard to Research on Process Effects in Machining	0/0	0/0	0/0	129/ 5,089	0/0
MISTRA s.r.o.	Operational Trials of the Planting Success of Seedlings Transplanted into Calamitous Forest Plantations Using the Tree Seedling Picker	0/0	0/0	0/0	0/0	175/ 6,903
Archaeological Centre Olomouc	Dendrochronological Dating of the Well from Opatovec	0/0	0/0	0/0	0/0	7/ 276
City of Holešov	Determination of Species in Two Plywood Samples from the "Green Roof on the Funeral Hall Building" Construction	0/0	0/0	0/0	0/0	8/ 316
Česká zbrojovka a.s.	Analysis of the Mechanical Properties of Walnut Wood and the Effect of Defects on the Dynamic Response of Walnut Cross-Sections	0/0	0/0	0/0	0/0	38/ 1,499
Česká zbrojovka a.s.	Analysis of Method and Equipment Design Options for Post-Carriage Quality of Cross-Sections for the Production of Gunstocks	0/0	0/0	0/0	0/0	39/ 1,538
Česká zbrojovka a.s.	Modal Analysis of Gunstock Cross-Section	0/0	0/0	0/0	0/0	37/ 1,460

Česká zbrojovka a.s.	Testing of Non-Destructive Methods for Assessing the Quality of Billets for Gunstock Production	0/0	0/0	0/0	0/0	39/ 1,538
Mejzlík Propellers s.r.o.	Design of Material and Technological Process for the Production of a Wooden Core from Modified Wood Using Adhesives	0/0	0/0	0/0	0/0	204/ 8,047
Danzer Bohemia Dýhárna s.r.o.	Testing the Physical Bonding Properties of Samples Taken from Production.	0/0	0/0	0/0	0/0	9/355
Museum of Podblanicko, state-funded institution	Dendrochronological Dating and Anatomical Identification of Wood from the Rescue Archaeological Excavation "Reconstruction of the Family House in Právořín"	0/0	0/0	0/0	0/0	5/ 197
National Heritage Institute, Heritage Conservation Office in Ostrava	Dendrochronological Analysis of the Species Identification of the Tree Species	0/0	0/0	0/0	0/0	2/ 79
National Heritage Institute, Heritage Conservation Office in Ostrava	Dendrochronological and Anatomical Analysis of Wood Samples from Ostrava Research	0/0	0/0	0/0	0/0	6/ 237
National Heritage Institute, Heritage Conservation Office in Ostrava	Dendrochronological Analysis – Data from Archaeological Research	0/0	0/0	0/0	0/0	1/ 39
Academy of Fine Arts in Prague	Identification of Wood Samples	0/0	0/0	0/0	0/0	4/ 158
Slovak Museum in Uherské Hradiště, state-funded institution	Dendrochronological Analysis of the Sample (Hluk Fortress)	0/0	0/0	0/0	0/0	5/ 197
Unilin Flooring Romania S.R.L. (Romania)	Dendrological Assessment of Tree Species According to Samples	0/0	0/0	0/0	0/0	8/ 316
Mejzlík Propellers s.r.o.	Test of Supplied Wooden Cores	0/0	0/0	0/0	0/0	39/ 1,538
Česká zbrojovka a.s.	Determination of Physical and Mechanical Properties of Walnut Wood for the Production of Gunstocks	0/0	0/0	0/0	0/0	204/ 8,047
Roman Catholic Parish Uherský Ostroh	Assessment of the Condition and Extent of Damage to the Wooden Spindle Staircase in the Church Tower of St. Ondřej (Uherský Ostroh)	0/0	0/0	0/0	0/0	9/ 355
Mejzlík Propellers s.r.o.	Design of the Material and Technological Process for the Production of a Wooden Core from Modified Wood Using Different Types of Adhesives, Together with its Production and Verification of its Properties	0/0	0/0	0/0	0/0	5/ 197
Danzer Bohemia Dýhárna s.r.o.	Testing of Physical and Mechanical Bonding Properties for Different Moisture Contents of Veneers – OAK	0/0	0/0	0/0	0/0	2/ 79
Danzer Bohemia Dýhárna s.r.o.	Test Production for Linea – Creating the Ideal Beam – Moisture Measurement	0/0	0/0	0/0	0/0	6/ 237

Martin Petera	Dendrochronological Analysis	0/0	0/0	0/0	0/0	1/ 39
ESPAMO LAND s.r.o.	Assessment of the Condition of the Arch Roofing of the Hanešův Mlýn Leisure Complex	0/0	0/0	0/0	0/0	4/ 158
Ostrava Museum	Dendrochronological Analysis	0/0	0/0	0/0	0/0	5/ 197
FF servis spol. s r.o.	Measurement of Bending Characteristics, Processing of the Measured Data Set and Their Evaluation	0/0	0/0	0/0	0/0	8/ 316
Lesy České republiky, s.p.	Creation of a Working Procedure and Methodology for the Application of the Forest Management Method Based on Operational Inventory in the Conditions of the State Forests of the Czech Republic	0/0	0/0	0/0	0/0	39/ 1,538
Lesy České republiky, s.p.	Determining the Trapping Capacity of Poisoned Logs During Spruce Bark Beetle Swarming, With a Focus on Peak Swarming	0/0	0/0	0/0	0/0	50/ 1,972
Cemex Czech Republic, s.r.o.	Study of Ecological Surveillance of the Spytihněv – South Area	0/0	0/0	0/0	0/0	6/ 237
Forestry and Woodworking Chamber of the Czech Republic	Analysis and Prediction of Raw Wood Stocks in Forest Stands of the Czech Republic and Development of the Available Raw Material Base of Forest Dendromass for Technological and Energy Purposes in the Czech Republic	0/0	0/0	0/0	0/0	98/ 3,866
Ministry of Agriculture	A Study of the Trade and GVA Balance of Trade and GVA for Individual Production Segments within the Wood Processing Industry	0/0	0/0	0/0	0/0	2/ 79
CARE Česká republika z.s.	Implementation of Subcontracting Activities for the Project “Livelihood Stabilisation and Development in Response to Climate Change, Southern Province, Zambia”	0/0	0/0	0/0	0/0	2/ 79
Caritas Czech Republic	Implementation of an Analysis of Agricultural Production and Potential for the Implementation of Integrated Farming in the Mantapala/Mehepa Refugee Area in Zambia	0/0	0/0	0/0	0/0	7/ 276
Nature and Landscape Protection Agency of the Czech Republic	Implementation of Measures Within the Framework of the “One Nature” Project (LIFE Project)	0/0	0/0	0/0	0/0	12/ 473
Caritas Czech Republic	Activities related to the implementation of the project “Green Solutions for Sustainable Development and Growth in Monze District” in Zambia.	0/0	0/0	0/0	0/0	4/ 158
Lesy České republiky, s.p.	Evaluation of the Growth and Prosperity of Plantings of Introduced Tree Species at the Vítkov Forest Management	0/0	0/0	0/0	0/0	495/ 19,527

Masaryk University Brno	Thermal Differentiation Analyses of Carbon	0/0	0/0	0/0	0/0	6/ 237
Institute of Global Change Research, CAS, Public Research Institute	Laboratory Determination of Hydrolimits	0/0	0/0	0/0	0/0	50/ 1,972
Geological Institute of the CAS, Public Research Institute	TOC Analyses	0/0	0/0	0/0	0/0	17/ 671
University of South Bohemia in České Budějovice	Pedological Analyses of Eight Sedimentary Materials from Extinct Villages	0/0	0/0	0/0	0/0	66/ 2,604
Wienerberger s.r.o.	Creation of a Biodiversity Action Plan for Wienerberger Sites	0/0	0/0	0/0	0/0	400/ 15,779
Bibracte EPCC (France)	The Implementation of Pedological Survey	0/0	0/0	0/0	0/0	397/ 15,661
Association of Forestry and Wood Processing Enterprises	Analysis of Coniferous Timber Price Indexation Under Forestry Contracts with Timber Sales for the Period 2022+	0/0	0/0	0/0	0/0	55/ 2,170
Total		5,662/ 223,353	1,833/ 72,308	6,955/ 274,359	7,462/ 294,359	7,119/ 280,828

Note: List and describe contract research activities with a revenue in a given calendar year, regardless of the amount of financial revenue.

3.4 Research results with existing or prospective impact on society

The evaluated unit shall briefly comment on a maximum of 10 (considered most significant by the evaluated unit) research results already applied or realistically heading towards application during the period of 2019–2023, based on the overview annex table 3.4.1 (it is recommended to indicate results with a link to projects listed in indicator 3.3). The evaluated unit must demonstrate in its description that the research results have led or will soon lead to positive impacts³², on society (e.g. description of how the results are used by various users, the range of persons/institutions for which the result is relevant, measurable economic impacts, etc.). The evaluated entity shall indicate in its commentary whether the gender dimension is considered in these results and discuss the impacts of the results regarding sustainability.

Maximum range 300 words/result.

Self-assessment:

The faculty's applied results were mainly achieved through research projects and contract research in cooperation with the application sphere. There are 1 European patent, 8 Czech patents, 38 utility models, 27 prototypes, 20 industrial designs, and 20 certified methodologies. The technologies, prototypes, and methods described contribute to enhancing sustainability, economic efficiency, and environmental protection. Its innovative design enhances operational safety and ecological sustainability, making it valuable for researchers and forestry practitioners. The wood technology enhances wood material properties and opens new market possibilities for previously underutilised wood, contributing to economic growth while promoting renewable, recyclable materials. The challenge of processing wood waste offers manufacturers economic savings and enhanced efficiency. The certified methodology for establishing coppices by directly sowing tree mixtures represents a breakthrough in erosion control and land management, especially for small farmers. The results also consider gender equality by providing accessible, cost-effective solutions that benefit a broad range of users, including small farmers, urban planners, and environmental researchers, ensuring inclusivity in their development and application. Regarding sustainability, each solution prioritises environmental stewardship, from reduced emissions and energy efficiency to promoting renewable resources, highlighting their long-term positive impact on society and the planet.

The Most Important Outcomes Include:

Patents

Universal Branching Machine. Author: HOLICKÝ, Jiří; ULRICH, Radomír; CZ. Patent number 309525. Industrial Property Office. 08/02/2023.

The universal branching machine, equipped with various additional devices, facilitates research in areas such as dendromass, tree growth dynamics, and the circulation of substances within trees using radio, laser, and scanning technologies. It also enables adequate individual tree protection through targeted spraying against harmful pests, rusts, fungal diseases, and fire hazards. The machine's design overcomes the limitations of previous solutions by allowing it to climb the tree trunk. Upon start-up, the machine accelerates to a defined speed, generating enough energy to move upward. The movement can be continuous or intermittent, advancing along the trunk in sections while removing excess branches up to a specified height. The design prioritises ecological sustainability and operational safety, ensuring ease of use, a favourable weight for portability, and excellent field manoeuvrability. This result was achieved in collaboration within the TA ČR project FW01010178.

Forwarder Tractor Unit and Trailer or Semi-Trailer. Author: ULRICH, Radomír; NERUDA, Jindřich; JUŘÍK, Josef; VÍTEK, Ondřej; PROCHÁZKA, Petr; CZ. Patent number 308774. Industrial

³² See Terms definition.

Property Office. 31/03/2021.

The contribution of this invention lies in enhancing the efficiency and sustainability of forestry and agriculture. Featuring an electro-hydraulic drive unit, the balancing tractor boosts performance when transporting timber or dendromass across rugged terrain. Its energy storage system and ability to provide short-term power boosts of up to 100% enable access to previously inaccessible areas, reducing the need for large, costly tractors. The innovative design minimises soil damage, reduces erosion, and lowers emissions by optimising energy use. By using conventional tractors without modifications, the invention increases economic accessibility and facilitates the adaptation of older models. Additionally, integrated brake energy recovery enhances energy efficiency and reduces fuel consumption. This invention marks a significant step toward sustainable, environmentally friendly technologies in the harvesting and transporting of forest materials, supporting natural resource conservation and minimising environmental impact.

Method of plasticisation and subsequent pressing of wooden parts, press for pressing wooden parts and equipment for pressing wooden parts. Author: ČERMÁK, Petr; DÖMÉNY, Jakub; KRÁL, Pavel; TIPPNER, Jan; KYSELÁK, Pravoslav; CZ. Patent number 308315. Industrial Property Office. 26/03/2020.

This industrial research outcome offers significant potential for economic benefits by increasing the use and market value of feedstock. The patented technology of microwave plasticisation and wood pressing alters the material properties of wood with low initial density and strength, thereby enhancing its utility and competitiveness. The innovation lies in integrating transient and permanent wood modification within a single technological process, utilising microwave energy as an alternative to traditional plasticisation methods, and improving the production process's efficiency and cost-effectiveness. This technology expands the potential for using wood as a renewable, recyclable, and eco-friendly raw material that would otherwise lack market viability.

Method of staining wood and determining phenolic compounds content in wood. Author: PALCER, Jaroslav; PAŘIL, Petr; BAAR, Jan; FORET, František; KŘENKOVÁ, Jana; Patent No. WO/2019/096336. Netherlands Patent Office. 23/05/2019.

This solution addresses the current challenges of reactive wood staining technologies. The patented product can be applied to existing production lines and, unlike competing solutions, is completely non-toxic, environmentally friendly, and free from legislative restrictions. Its world-class quality is demonstrated by global research and longstanding collaboration with the multinational company UNILIN, part of Mohawk Industries, which has manufacturing facilities worldwide and distributes its products globally. A business cooperation and licensing agreement has been signed with ADICHEM spol. s r.o., which will handle the industrial production and commercialisation of the wood stain.

The development and integration of wood stain into production technologies are being carried out in collaboration with UNILIN and PRINC PARKET (specialising in oak parquet production). The product has been tested on production lines, with a reference floor produced, and final testing, validation, and commercial negotiations are underway. Research and development on wood formulations and testing of treated wood were conducted at the Faculty. The result is a patented, water-dilutable wood stain containing iron oxide nanoparticles with an average particle size of 5–10 nm. The project's impact includes increased competitiveness through collaboration with ADICHEM spol. s r.o., which will produce and market the product, potentially creating new jobs in production and sales. Additionally, the global adoption of this non-toxic wood stain is expected to positively impact human health and the environment by replacing harmful, environmentally damaging alternatives.

Setup for Measuring Longitudinal Electrical Resistivity of Trees and the Method of Measurement Author: ULRICH, Radomír; Štykar, Jan; Staněk, Zdeněk; Koller Jan; CZ. Patent number 309 679. Industrial Property Office. 31/05/2023.

The electrical resistivity of wood is a quantity without which it is impossible to perform almost any macroscopic electrical measurement on woody plants. It can be measured by several methods (e.g.

modified Wenner method, long cylinder method, two-point difference method). The methods mentioned are laborious and time-consuming and work with polarizable metal electrodes driven or drilled into the living tissue of trees. In doing so, it is necessary to eliminate or at least consider the existence of exceptionally large transient ohmic resistances. A dangerous phenomenon is the possibility of easily penetrating fungal disease germs into wood. The invention created in cooperation with the Czech Technical University, Prague is to enable measurement of the longitudinal resistivity of wood without driving or inserting electrodes into the body of wood, based on the introduction of a measuring electric current into the tree through the faradic capacity of a metal electrode - a living electrically conductive mesh. Capacitive metal electrodes are placed at any height from the ground and are "connected" to the tree non-invasively and for a short time in several turns. The necessary measuring alternating sinusoidal electric current with a frequency of the order of units to the first tens of kilohertz is introduced into the body of the measured tree without the need for driven spikes, while the measured trunks, branches, protruding roots can have any diameter and cross-sectional shape and the bark remains in its natural state before the measurement. The measurement method is simple, non-destructive, and gentle on the measured tree and is intended for protective and research electrical measurements on trees susceptible to diseases, legislatively protected. The proposed measurement method is completely identical to existing methods in terms of achievable results and their quality. The necessary instrumentation is common and easily available in specialized stores.

Multifunctional Grooving Head. Author: HOLICKÝ, Jiří; ULRICH, Radomír; CZ. Patent number 309525. Industrial Property Office. 08/02/2023.

The invention provides an effective device in forestry and nature conservation and allows the elimination of insect development on standing trees. This method replaces the use of chemical agents in areas of increased interest in nature conservation. So far, the elimination of bark beetles has been carried out mainly by debarking standing trees through the physical activity of arborists who are suspended on ropes - very slow, inefficient, and dangerous. Milling grooves in the bark of a standing tree is not used in practice at all; there is no available technology. Milling is carried out only on lying, felled trees (Bavarian National Park), e.g. for research and verification of the effectiveness of other methods of eliminating bark beetles. Milling on lying trees is carried out using special chainsaw attachments. The invented method reduces the need to use undesirable chemicals (e.g. sprays against bark beetles) and significantly eliminates the gradation of the development of calamitous bark beetles. This procedure can be used even in the higher levels of trees, especially in the transition from the trunk to the living part of the tree crown. In current practice, spraying of standing trees is carried out to a maximum height of 6 to 7 m; a multifunctional grooving allows intervention to a height limited by the capabilities of the supporting equipment (usually 11 m). The invention is one of the outputs of the current applied research project, where the implementation is its natural activity. It was used in the Boubín nature reservation; the method was presented to the professional public (e.g.: An international professional exhibition of innovative technologies for the care of greenery, trees, and public areas DemoGreen).

A Method of Manufacturing Composite Panels from Extruded PMMA and Wood Pieces, and a Composite Panel Made in This Way Author: PIPÍŠKA, Tomáš; KRÁL, Pavel; PASCHOVÁ, Zuzana; KOLOMAZNÍK, Petr; CZ. Patent number 307977. Industrial Property Office. 15/08/2019.

The patent covers a method of producing composite boards from extruded polymethylmethacrylate (PMMA) and wooden particles, in which layers of extruded PMMA chips are gradually poured between the underlying pressed sheet metal boards or tempered glass. The sheets are alternately interspersed with intermediate layers of wood particles; the material is hot pressed to the desired thickness and cooled freely in the air. Another subject is a composite board produced in this way. This patent uses waste plastic and wood material for the manufacturing of high-value panels. The manufacturing process is simple, and the added value is very high. Industrial tests in the company Jan

Ficek Dřevovýroba s.r.o. and Grena a.s. were successfully made on the standard industrial machines. Currently, the faculty is dealing with the company about future collaboration in the industrial manufacturing of the patent outputs. There is a potential for licensing/selling the patent to the industry.

Prototype

Agglomerated wood-based material with the addition of treated wood fibre particles. Author: PIPÍŠKA, Tomáš; KRÁL, Pavel; NOCIAR, Marek; CZ; 2022.

The prototype introduces an agglomerated material made with the addition of waste materials, addressing the challenge of processing wood fiber clumps and residual particles from fiberboard production. This issue is commonly encountered by manufacturers of agglomerated boards worldwide. By utilizing these waste materials, the yield of the input material can be significantly increased while maintaining or even reducing adhesive consumption, without compromising the physical and mechanical properties of the boards. The main challenge with using fibrous waste materials is their high adhesive uptake compared to standard wood chips, which has been resolved by discontinuous freezing of the material's surface. The economic benefit lies in utilizing waste raw materials that contain high-quality wood fibers in clumps, with estimated savings of 4 to 6% on feedstock. Prototype was created within the project TA ČR MENDELU Proof of Concept 2 (TP01010018).

Utility Model

Soil Substrate for Green Facades and a Kit Containing It. Author: VAVŘÍČEK, Dušan; LVONČÍK, Samuel; ŘEPKA, Radomír; CZ. Utility model number 36235, Industrial Property Office. 26/07/2022.

The substrate offers high water retention capacity, reduces weight when fully saturated, and provides essential nutrients for plant growth, making it ideal for vertical gardens in residential buildings. Its development addresses key challenges related to climate change and urban environments, improving air quality, reducing ambient temperatures, and creating more comfortable microclimates. The substrate ensures long-term stability, optimal drainage, and adequate water retention by combining organic and mineral components such as zeolite, crushed ceramic aggregate, white peat, and bark compost. It is suitable for various facades, including those in extreme conditions, and allows easy installation and maintenance. Additionally, it offers flexibility in composition to meet specific needs, supporting sustainable construction while enhancing the aesthetic value of buildings and contributing significantly to urban greening efforts. The result was produced within the TA ČR project TH03030230 and has significant ecological and economic benefits.

Certified methodology

Methodology for Incorporating Multifunctional Anti-Erosion Measures into the Economically Used Landscape – Establishment of Coppice by Sowing Tree Mixtures. Author: BAJER, Aleš; BALKOVÁ, Marie; SEDLÁK, Petr; DEUTSCHER, Jan; KUBALÍKOVÁ, Lucie; BEDNÁŘ, Michal; 2021. Methodologies approved by the competent authority (regulation number: 3005/2021-MZE-16222/M220. 18/01/2021).

The methodology supports the implementation of necessary changes in the Czech Republic's agricultural policy, emphasising the role of interaction elements in the agricultural landscape. It introduces an innovative approach to establishing and maintaining coppices as a key anti-erosion measure on agricultural land, offering numerous environmental and social benefits. The innovation lies in a novel method of planting trees directly on-site, bypassing the traditional nursery-grown seedlings. This direct sowing technique brings several advantages: 1) tree species grown this way are better adapted to ongoing climate change and challenging habitat conditions (such as climatic, hydrological, and soil factors); 2) it requires minimal maintenance, both in terms of time and cost; and 3) the overall planting cost is about half that of conventional methods.

The methodology holds great potential for small and medium-sized farmers, who benefit from its low initial and long-term financial requirements. It is designed for practical use by many farmers in the typical Czech landscape and across the entire temperate climate zone. It addresses the need for an ecological approach to soil management and the need to subdivide larger soil blocks into smaller units. Additionally, it meets the demand for creating vegetation interaction elements (as outlined in Government Regulation No. 48/2017), especially in regions where traditional planting methods fail due to unfavorable climatic, soil, and water conditions. Implemented by the project partner Paměť krajiny s.r.o., the methodology has gained significant interest from small farmers, who have received consultations on its practical application. Developed within the TA ČR project TJ02000265.

Table 3.4.1 – Overview of research results in the period under evaluation

Type of result ³³	Year of application	Name
European patent	2019	Method of Staining Wood and Method of Determination of Phenolic Compounds Content in Wood
Czech Patent	2019	A Method of Manufacturing Composite Panels from Extruded PMMA and Wood Pieces, and a Composite Panel Made in This Way
Czech Patent	2020	Method of Plasticization and Subsequent Pressing of Wooden Parts, Press for Pressing Wooden Parts, and Equipment for Pressing Wooden Parts
Czech Patent	2021	Forwarder Tractor Unit and Trailer or Semi-Trailer
Certified methodology	2021	Methodology for Incorporating Multifunctional Anti Erosion Measures into the Economically Used Landscape – Establishment of Coppice by Sowing Tree Mixtures
Czech Patent	2022	Multifunctional Grooving Head
Utility Model	2022	Soil Substrate for Green Facades and a Kit Containing It
Prototype	2022	Agglomerated Wood-Based Material with Added Modified Wood Fiber Particles
Czech Patent	2023	Universal Branching Machine
Czech Patent	2023	Setup for Measuring Longitudinal Electrical Resistivity of Trees and the Method of Measurement

Note 1: Please list and describe the results already applied in practice or heading towards application in practice with existing or prospective impact on the society (e.g. domestic or foreign patents, sold licenses, spin-offs, prototypes, varieties and breeds, methodologies, significant analyses, surveys, expert outputs for policymaking or other forms of non-publication outputs, etc.). Indirect results of research, development and creative activities with documented societal impact, e.g. expert activities, services to the public/government/scientific community, may also be reported.

³³ Specify the specific type of result. Add rows as needed.

TRANSFER OF RESULTS INTO PRACTICE

3.5 Transfer of results into practice

The evaluated unit shall briefly describe its system for transferring results into practice. It shall also indicate up to five of the most typical users of its results, whether in the university environment or in the non-university application/corporate sphere, detailing how it collaborates with them and how it seeks out new users (using a maximum of five specific examples).

It will also indicate whether and how it commercialises R&D&I results (e.g. selling licences, setting up start-up or spin-off companies, etc.)³⁴, providing brief description of the commercialisation methods used. The effectiveness of the transfer of results and the commercialisation of R&D&I results will be described using a selection of results (max. five) listed in annex table (Table 3.4.1).³⁵

Additionally, the evaluated unit shall briefly comment on the funds received during the period of 2019–2023 from non-public, non-grant sources (e.g. licences sold, spin-off revenues, donations, etc.). A full summary shall be provided in annex table (Table 3.5.1).

Maximum 500 words plus 200 words for each provided example of finding a new user of results and commercialization.

Self-assessment:

The FFWT focuses on transforming research into real-world solutions, bridging the gap between scientific innovation and industry needs. It ensures that research directly benefits businesses, policymakers, and conservation efforts through patents, prototypes, utility models, and certified methodologies. Supported by applied and contract research, FFWT collaborates with key industry players to drive technological advancements and sustainable practices. The Technology Transfer Department at MENDELU plays a pivotal role in this process, providing expert guidance in intellectual property protection, business negotiations, and contract development – ensuring that research-driven innovations reach their full potential in practice.

Key Users of R&D&I Results and Collaboration Methods

- **Large Industrial Enterprises** – The Faculty collaborates with major industrial companies on contract research projects, applying cutting-edge findings to modernise industrial processes, particularly in forestry and wood processing. Notable partners include *Česká zbrojovka a.s.* and *Matrix a.s.*
- **Small and Medium-Sized Enterprises (SMEs)** – Through contract research, certified methodologies, and tailored training, the Faculty enhances SMEs' efficiency, competitiveness, and sustainability. Key partners include *Českomoravský štěrk, a.s.*, *DANZER BOHEMIA-DÝHÁRNA s.r.o.*, *MISTRA s.r.o.*, and *Petrof spol. s r.o.*
- **Public Administration and Government Bodies** – The Faculty contributes expertise to regional and ecological policy development through methodologies and strategic recommendations. Collaborating institutions include the *Ministry of the Environment*, *Ministry of Agriculture*, *museums*, and *local and regional governments*.
- **Manufacturers of Technological Equipment** – Working closely with technology developers, the Faculty contributes to prototype development and cutting-edge technologies, such as automated forest management systems. Partners include *Agama, a.s.* and *LIKO-S, a.s.*
- **Non-Profit Organizations in Ecology and Nature Conservation** – The Faculty's research findings directly support environmental protection efforts by providing methodologies for natural

³⁴ In the case of military HEIs, their specific position is taken into account when evaluating the commercialisation/evaluation of R&D&I results.

³⁵ If the commercialisation of R&D&I results is carried out in this way.

resource conservation. Key beneficiaries include the *DUHA Movement and the Partnership Foundation*.

Expanding Collaboration and Seeking New Users

The Faculty continuously seeks new partners and expands the reach of its research results through:

- **Expert conferences** – Presenting research innovations and fostering industry partnerships.
- **Industry meetings** – Engaging with companies to explore tailored research applications.
- **Seminars for public administration** – Providing insights for policy-making and sustainable practices.
- **Workshops for businesses and NGOs** – Offering practical guidance on implementing Faculty-developed methodologies.

The evaluation of the effectiveness of the transfer of results is based on the financial indicators of contract research, which increased from CZK 6,364,000/ EUR 251,045 to CZK 10,335,000/ EUR 407,692 between 2019 and 2023. The indicators of commercialisation effectiveness are described using the selected results presented in Table 3.4.1.

During the period under review, the faculty received funding from non-public, non-grant sources. Tab. 3.5.1 provides a detailed overview.

The Faculty established no start-up or spin-off companies during the review period.

Table 3.5.1 – Summary of non-public revenues received during the period under evaluation

Type of revenue	Revenue (in thousands CZK/EUR)				
	2019	2020	2021	2022	2023
Advertising	45/1,775	0/0	0/0	0/0	30/1,183
Courses and Training	1,385/54,635	253/9,980	39/1,538	537/21,183	564/22,249
Other Contractual Arrangements	1,003/39,566	10,098/398,343	1,029/40,592	761/30,020	919/36,252
Testing rooms	3,252/128,284	5,041/198,856	5,896/232,584	7,438/293,412	8,172/322,367
Commercial Contract Research	6,364/251,045	2,033/80,197	6,584/259,724	7,066/278,738	10,335/407,692
Total	12,049/475,306	8,425/332,347	13,548/534,438	15,802/623,353	20,020/789,744

Note: Enter funds raised for R&D&I from non-public sources besides grants or contract research (e.g. licences sold, spin-off company revenues, donations, etc.) in the calendar year.

POPULARIZATION OF VAVAI

3.6 The most important activities in the field of popularization of R&D&I and communication with the public

The evaluated unit shall briefly describe its main activities related to the popularisation of R&D&I and communication with the public (e.g. popularisation lectures, citizen science initiatives, etc.) during the period of 2019–2023 and provide up to 10 examples that it considers the most significant.

Maximum 500 words plus 200 words for each example given.

Self-assessment:

The Faculty actively engages with professional and public audiences through various communication channels. It regularly contributes to professional and popular science magazines such as *Lesnická práce*, *ŽIVA*, *Svět myslivosti*, and *Sylvarium*. Research findings and expert analyses are also disseminated through the Faculty's website and shared on social media platforms like Facebook and X. FFWT frequently presents research outcomes and expert commentary through mass media and highlights its international collaborations.

Active Participation in Scientific and Public Events

To foster knowledge exchange and industry partnerships, FFWT actively participates in major trade fairs:

- Silva Regina (a leading Central European forestry and hunting fair),
- Země Živitelka
- FOR WOOD
- MOBITEX.

It also engages with students by participating in study fairs like GAUDEAMUS and by organising educational exhibitions:

- Life in Forests (2022),
- Forest with the Brno City Museum (2023)
- Landart (2023).

The Faculty is also a key organiser or participant in professional conferences:

- Law in the Practice of Landscape Engineering IV (2020),
- Geodiversity within the City of Brno II (2021),
- 8th Conference of the Czech Society for Ecology – Ecology 2022,
- Friends of Socotra – 19th Conference (2022)
- Oomycete Molecular Genetics Network – OMGN 2022
- Uneven-aged silviculture: insights into forest adaptation in times of global change (2023).

Beyond conferences, it hosts summer schools and specialised courses to further professional education:

- Summer School within the H2020 ASFORCLIC Project (2023),
- Forest and Plant Valuation Course (held regularly),
- Training Course for Secondary Forestry School Teachers (2022).

Community Engagement and Public Outreach

The Faculty actively engages with the public and future students through:

- Researchers Night, showcasing scientific advancements,
- Open Days, including excursions to UFE, a living laboratory for research,
- Educational nature trails and hiking routes co-organised by UFE,
- Guided tours in the arboreta at Křtiny and Řícmanice,

- Public involvement in forest care through the Our Diverse Forest programme, which invites schools and community groups to participate in sustainable forest management.

Flagship Events and Notable Collaborations

The [Silva Regina Forestry and Hunting Fair](#) is among the most significant Central European industry fairs. The FFWT is a regular exhibitor and active partner, engaging with companies specialising in forestry, agricultural technology, and wood processing. This cooperation fosters the exchange of expertise and strengthens industry ties.

A standout collaboration was the [Through the Forest Exhibition](#) (Sept 2023 – June 2024) at Špilberk Castle, organised with the Brno City Museum. This event presented the forests' historical and ecological significance, incorporating diverse perspectives from forestry, conservation, hunting, and traditional crafts. Partners included the Brno City Forests, the National Museum of Agriculture, and the Czech-Moravian Hunting Union.

The Faculty co-organised the **8th Conference of the Czech Society for Ecology – Ecology 2022**, the largest ecology conference in the Czech Republic, covering topics from fundamental ecology to applied conservation. The international **OMGN2022 Meeting on Oomycete Biology, Pathology, and Ecology** (August 2022) gathered 88 scientists from the Netherlands, UK, USA, and New Zealand, fostering global collaboration in disease ecology. **Uneven-aged silviculture: insights into forest adaptation in times of global change** (2023) gathered 63 scientists from Japan, the USA, Slovenia, Chile and other European and non-European countries. The conference focused on the challenges and benefits of uneven-aged and mixed-species silviculture in adapting forests to climate change while ensuring sustainable wood production and biodiversity. Key topics included species and spatial structure changes, ecosystem services, and forest dynamics in response to evolving environmental and social needs.

H2020 ASFORCLIC Project Summer School (October 2023) focused on forestry's economic and political aspects. It provided hands-on training, with participation from experts at the Czech University of Life Sciences Prague, the Research Institute of Forestry and Hunting, and key industry stakeholders.

Historic Wooden Constructions Project

The Historic Wooden Constructions Project, part of the National and Cultural Identity Programme under the Ministry of Culture of the Czech Republic in collaboration with the Institute of Theoretical and Applied Mechanics of the Czech Academy of Sciences, led to:

- Dozens of scientific publications,
- Legally protected methodologies,
- A web application mapping historic wooden structures in the Czech Republic,
- The acclaimed exhibition "Under the Protection of St. Josef" (Rožnov pod Radhoštěm, 2020–2022), attracted over 41,500 visitors in its first two months.

This initiative combined historical research, material analysis, and conservation strategies, providing insights into traditional woodworking techniques and their application in modern conservation. [Basic photogallery](#) and [critical catalogue](#).

Media Engagement and Public Science Communication

The Faculty provides expert commentary (in Czech language) on forestry, climate change, and environmental conservation i.e. on topics such as:

- [The impact of fungal infections on maple trees, which also poses risks to human health \(Czech Television\)](#)
- [Using driftwood to study ocean currents \(Czech Television\)](#)
- [Beaver dam impacts on ecosystem, visible even from satellite images \(Czech Radio\)](#)

IMPLEMENTATION OF RECOMMENDATIONS

3.7 Implementation of the recommendations in Module 3

The evaluated unit will briefly describe how it has implemented the recommendations for Module 3 from the previous evaluation period, if applicable.

Maximum 1000 words.

Self-assessment:

Strengthening Research Partnerships and Enhancing Scientific Communication

Concerning 3.2 to 3.4, the Faculty has significantly expanded its collaborations with academic and commercial entities. It has actively participated in projects supported by the **Technology Agency of the Czech Republic** and the **Operational Programme Technology and Applications for Competitiveness** (OP TAK). It has led to tangible application outputs, including prototypes, proven technologies, utility and industrial designs, and patents. In 2023, FFWT secured several industry contracts under the **Innovation Vouchers** initiative within OP TAK. It also leverages the expertise of the Technology Transfer Department to optimise result management and facilitate communication with commercial partners, in line with recommendations 3.7 to 3.9.

FFWT has demonstrated a **notable increase in research agreements**: 40 contracts in 2021, 31 in 2022, and 46 in 2023. The proportion of contracts involving international partners continues to grow. A prime example is the Faculty's participation in the **Austrian Research Promotion Agency** (FFG) **Comet Module project, I3SENSE – Development of Advanced Sensors for Wood-Based Composites**. It brings together five universities and nine application partners, including major industry players such as Audi AG, Hendrickson Commercial Vehicles Europe, and Stora Enso Wood Products. This highlights the Faculty's role in industrial research and development.

The Faculty utilises the **UFE, a living laboratory** with dedicated field research areas to ensure the practical implementation of research findings. The number of European partnerships linked to the UFE has grown steadily, reflecting the FFWT's increasing international impact. The Erasmus+ **ForDil**, launched in 2023 with Belgian partners, aims to enhance **digital learning in continuous cover forestry**, while the HEU **EXCELLENTIA** focuses on **advancing forest ecosystem research**. The Faculty's concerted efforts in securing European collaborations for the 2024–2028 are expected to expand research opportunities further and strengthen financial support for forestry and wood science innovation.

Between 2022 and 2023, **European-funded projects accounted for 30% of the Faculty's total research initiatives**. Key projects include the **EXCELLENTIA** (GA No: 101087262) as coordinator, **PURPEST** (GA No: 101060634) and **ARAGORN** (GA No: 101112723) as partners. It has also undertaken major international projects such as **LIFE WILD WOLVES** (ID: LIFE21-NAT-IT-4417), **Interreg CE LECA** (ID: CE0100170), **Interreg AT-CZ ROTCUT** (ID: ATCZ276) and **FORRISK** (ID: ATCZ251). Its involvement in development projects under the Czech Development Agency and the Ministry of Foreign Affairs of the Czech Republic reflects its **commitment to global outreach**, particularly in Africa. The successful implementation of the **STREAM** project, which coordinated a consortium of 12 partners across Europe, Mongolia, and the United States, further underscores FFWT's leadership in international research collaborations.

Advancing Scientific Communication and Research Visibility

Concerning 3.5, 3.6, and 3.12, the Faculty has strengthened its position as a key research partner. A **comprehensive overhaul of its website** – including an enhanced English version, improved structure, and expanded content – has significantly boosted its online presence. Active engagement through **social media platforms** such as Twitter-X, Facebook, Instagram, and YouTube has further amplified the visibility of its research. Faculty members receive regular updates on funding opportunities and project calls through targeted emails and newsletters managed by the Faculty Project Office. Strong partnerships with the Technology Centre Prague and the Czech Association of Research Managers and Administrators (CZARMA) provide faculty staff with opportunities for professional development and international networking in research management.

The Faculty also benefits from the expertise of specialised university departments, including the Open Science Centre, Technology Transfer Department, and Project Department, all promoting research excellence. In line with open science principles, the Faculty actively supports open-access publishing, recognising it as a standard in grant applications. Through targeted training and workshops on academic writing and publishing, the Faculty ensures that its researchers, particularly doctoral students, have access to the resources needed for high-quality publications. Annual funding through the **MENDELU Open Access Fund** and the **Faculty Open Access Fund** further supports these initiatives.

World-Class Research Infrastructure and Excellence in Publishing

The Faculty's commitment to high-quality research and innovation is reflected in its cutting-edge infrastructure. The **Josef Ressel Research Centre**, the first research centre in the Czech Republic dedicated to wood science, houses state-of-the-art laboratories with advanced testing facilities, including a chamber for artificial aging, a microwave modification line, a laboratory splinter machine, and an impregnation line. This infrastructure supports interdisciplinary teams conducting pioneering research, such as the tree biomechanics team within the ERC CZ project.

Between 2019 and 2023, two additional excellent research teams were established:

- **Phytophthora Research Centre** (EF15_003/0000453): The team has made significant strides in understanding Phytophthora pathogens, which cause over two-thirds of global tree root diseases. Their findings have improved strategies for preventing pathogen spread and protecting forest ecosystems.
- **EXCELLENTIA** – Focused on the long-term impact of climate change on European forests, it provides crucial insights into forest sustainability and adaptation strategies.

These teams, along with interdisciplinary research groups across the Faculty's departments, continue to advance cutting-edge projects in forest and environmental sciences.

An **FFWT's publishing trends** analysis reveals marked improvements in key areas (recommendations 3.10 and 3.11). Between 2019 and 2023, faculty researchers published **1,005 articles indexed in the Web of Science**, a clear testament to the institution's growing scientific output. It has strategically prioritised high-impact journals, achieving **355 publications in Q1** journals and 364 in Q2 journals during this period. In 2021 alone, 97 papers were published in Q1 journals – a significant milestone reflecting the Faculty's enhanced research profile.

The adoption of **open-access** publishing has increased substantially, with an average of **174 open-access publications** per year from 2021 to 2023 – nearly double the output of the previous evaluation period. While the Faculty continues to diversify its research outputs, maintaining a strong presence in books, book chapters, and applied research results (e.g., utility models, patents, and proven technologies), there has been a strategic shift toward publishing high-impact journal articles. The relative decline in conference proceedings reflects a deliberate focus on producing publications with more significant academic influence. However, active participation in international conferences remains vital to the FFWT's research dissemination strategy.

The FFWT's continued emphasis on fostering **international collaborations**, strengthening **research infrastructure**, and enhancing **scientific communication** has positioned it as a leading forest science and environmental research institution. Its achievements in securing **competitive research funding**, increasing **high-quality publications**, and expanding **industry partnerships** highlight its commitment to innovation and academic excellence. Moving forward, the Faculty's proactive approach to European project engagement, open-access publishing, and interdisciplinary research will further solidify its reputation as a centre of excellence in forest science and sustainable development.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 3

Document name	No. criteria	Location (link in HTML)
Website of the Faculty of Forestry and Wood Technology	3.1	https://ldf.mendelu.cz/en/
Organisational structure of the Faculty	3.1	https://ldf.mendelu.cz/en/about-faculty/leadership-and-structure/
Recognition by the research community	3.2	https://ifsa.net/
Recognition by the research community	3.2	https://www.iufro.org/
Recognition by the research community	3.2	https://efi.int/
Recognition by the research community	3.2	https://ica-silva.eu/
Recognition by the research community	3.2	https://innovawood.com/
Science at the Faculty of Forestry and Wood Technology	3.7	https://ldf.mendelu.cz/en/science-and_research/science-at-ffwt/
The Most Important Activities in the Field of Popularisation of R&D&I and Communication with the Public	3.6	https://www.slpkrtiny.cz/pro-verejnost/#vylet
The Most Important Activities in the Field of Popularisation of R&D&I and Communication with the Public	3.6	https://www.cspe.cz/en/konference/ekologie-2022/

SELF-EVALUATION REPORT FOR MODULE 3

THE NAME OF THE UNIT BEING EVALUATED: Faculty of Business and Economics

FORD: 5 – Social sciences

SOCIAL CONTRIBUTION OF THE EVALUATED UNIT

3.1 Introductory information about the unit under evaluation

The evaluated unit will describe its mission and vision and provide a general self-reflection of the societal contribution of R&D&I, along with its long-term goals in the fields it develops. The distribution of research activities by type of research will also be commented on.¹ The evaluated unit will describe its organisational structure and size (staffing, number of students, number of study programmes implemented, etc.) based on the data provided in annex tables 3.1.1 to 3.1.6.

Maximum 1000 words.

This is a non-rated indicator that serves as an introduction to the evaluated unit, providing context for data in indicators 3.2–3.7.

Self-assessment:

In its 65 years of existence, the Faculty of Business and Economics (FBE) has more than 20,000 successful graduates and regularly ranks at the top of the economic research ([IDEAS/RePEc](#)). It currently has nearly 3,000 students in the fields of management and economics and computer science, in both Czech and English. Successful graduates find employment in economics, management, business, the financial sector, public administration or as information systems designers. The employment rate of graduates immediately after graduation exceeds 97%.

The Faculty consists of eight professional departments, a Research Centre and a Dean's Office. The role of the Research Centre, which is a specialised department of the Faculty, is to provide professional and administrative support for the Research and Development (R&D) of academic staff and talented students, including the organisation of conferences and other events. The organisational structure of the Faculty is defined in its Statutes. The definition of the competences of the Vice-Deans and the respective agendas provided by individual faculty departments is captured in the organisational regulations, which have the formal form of a Dean's Directive. The structure of the Faculty includes independent bodies, in particular the Disciplinary Committee, the Academic Senate (15 members) and the Scientific Council (33 members, 13 of whom are external), which also perform a control function.

In 2023, the Faculty management was changed and the number of departments was reduced by merging two of them. Furthermore, the method of allocating funds has been changed in order to increase staff motivation for higher quality teaching and R&D activities.

¹ Basic, applied, contract, artistic research (see Definition of Terms in Methodology HEI2025+).

The Faculty applies modern educational approaches with an emphasis on the full-time form (including the online form) using current research findings and connecting with practice. It expands the offer of study programmes in Czech and English in line with the expected needs of the labour market.

Out of a total of 26 study programmes at bachelor, master and doctoral level, 9 are taught entirely in English. The Faculty also offers habilitation and professor appointment procedures in the fields of Finance, Economics and Management and Systems Engineering and Informatics. In educational activities, it emphasises the activity of students and supports their mutual knowledge contributing to the building of networks of contacts, also at the international level, especially by supporting foreign and international mobility. The Faculty, in broad collaboration with its graduates and other partners, cultivates an environment of diversity that respects personal freedoms, societal values, and principles of sustainability.

The R&D activity is primarily focused on the five areas defined by the supported research teams and is closely linked to the educational activity. These interdepartmental research teams with independent budgets and their own leaders are financially supported by the Faculty budget based on the excellence of their R&D activity over the last five years.

(1) The *Bioeconomic Modelling* research team deals with management models in agriculture and forestry, validation and verification of decision-making systems, planning and evaluation of experiments. The research also focuses on risk analysis with an emphasis on business performance and credit risk.

(2) The *Smart Society* research team focuses on socio-economic research and managerial decision-making. The socio-economic area focuses on human capital and social phenomena in the context of global trends in modern society such as retirement, ageing, demographic change and gender factors. Ethical values and academic integrity are also part of the research.

(3) *Spatial Hub* is an interdisciplinary team primarily focused on the analysis of the behaviour of economic entities. The team's projects are diverse, analysing the impact of environmental change on society, designing user interfaces and location-based services. Innovative interfaces such as augmented and virtual reality, smart environments and wearable electronics are also targeted.

(4) *FinAct's* research team models the impact of economic policy under uncertainty, with a particular focus on financial market vulnerabilities, regulatory and monetary policy institutions, corporate access to funding, bank-firm relationships including the impact on performance and riskiness, financial asset pricing and forecasting, and portfolio optimisation.

(5) The *Consumer Lab's* research team focuses on changing the determinants of consumer behaviour with an emphasis on sustainable consumption. It quantifies the impact of current and emerging factors determining consumer segmentation as a result of structural changes in society and identifies how the income situation affects the consumption behaviour of different social groups.

A connecting feature of R&D activity within the Faculty and in the university context is sustainability and the preference for quality over quantity of results. Faculty members are active in submitting and solving international and national projects as well as projects using cooperation with partner companies, organisations and public administration. The Faculty focuses on both basic and applied research supported by external grant agencies. It addresses issues of optimising European business groups, migration, the geography of time characteristics of people with disabilities, and corporate behaviour in response to CSR (Corporate Social Responsibility) policies. The Faculty also implements applied and contract research projects corresponding to the National Research and Innovation Strategy for Smart Specialisation of the Czech Republic, which are implemented especially in the field of information technology and environmental impacts of consumer behaviour. It also achieves applied research results through close cooperation with the commercial sector.

At the interface between R&D and educational activities are specialised laboratories that contribute to the involvement of students in R&D activities (a detailed overview of the laboratories is available on the website <https://vyzc.pef.mendelu.cz/en/32000-software-databases>).

The Faculty is managed based on a collaboratively developed and communicated strategy, which is periodically reviewed. This strategy serves as the foundation for key processes, quality assessment, budgeting, and employee remuneration. The internal environment of the Faculty is characterised by mutual respect among staff and students, purposeful collaboration towards common goals, and frequent open and diverse discussions.

This vision is fulfilled through strategic objectives as well as sub-objectives that respond flexibly to the dynamics of the environment and current challenges in the roles of universities and faculties. The Faculty aims to address societal issues, the key to their solution and dissemination is their inclusion in research and teaching activities carried out at the Faculty.

Table 3.1.1 – Staffing per FTE²

Academic/ Professional position	Total / Of which women					
	2019	2020	2021	2022	2023	Total
Professor	20.6/16.6	6.8/2.0	6.7/2.0	6.8/1.8	7.3/2.0	48.2/24.4
Associate Professor	26.6/11.4	25.5/10.2	27.3/11.9	27.4/12.5	28.9/13.9	135.7/59.9
Assistant Professor	62.5/26.4	70.1/30.2	74.7/30.3	76.2/30.9	75.0/31.7	358.5/149.5
Assistant	4.6/3.1	4.8/4.1	3.9/2.5	7.3/4.4	6.2/4.0	26.8/18.1
R&D Personnel ³	13.8/8.0	0.4/0.4	0.0/0.0	5.0/1.6	0.0/0.0	19.2/10.0
Researchers in other categories ⁴	6.0/3.9	5.7/3.5	6.5/3.2	5.7/2.8	2.5/0.9	26.4/14.3
Technical and economic staff ⁵	20.6/16.6	35.9/26.8	35.9/24.6	38.7/24.7	33.7/22.4	164.8/115.1
Scientific, research and development staff involved in teaching activities	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.2/0.0	0.2/0.0
Early career researchers ⁶	0.4/0.0	1.0/0.0	0.0/0.0	0.0/0.0	0.2/0.0	1.6/0.0
Total ⁷	154.7/86.0	298.4/77.2	155.0/149.0	167.1/78.7	153.6/74.9	779.6/391.3

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

² The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full-time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

³ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

⁴ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

⁵ Who participates in the management and support of R&D&I in the institution.

⁶ See Definition of Terms in Methodology HEI2025+.

⁷ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

3.1.2 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2019 (numbers of physical employees and personnel)⁸

Academic/ professional position	Under 29 years		30–39 years old		40–49 years old		50–59 years old		60–69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	1	1	3	0	2	0	2	1
Associate Professor	0	0	2	0	16	6	7	5	4	2	0	0
Assistant Professor	3	2	42	17	25	10	13	6	4	3	0	0
Assistant	6	6	1	0	2	1	0	0	0	0	2	1
R&D Personnel ⁹	6	2	8	3	3	2	1	1	3	3	2	2
Researchers in other categories ¹⁰	6	4	8	6	6	2	0	0	0	0	0	0
Technical and economic staff ¹¹	7	3	12	7	8	5	5	5	2	2	0	0
Scientific, research and development staff involved in teaching activities	0	0	0	0	0	0	0	0	0	0	0	0
Early career researcher ¹²	0	0	1	0	0	0	0	0	0	0	0	0
Total ¹³	28	17	74	33	61	27	29	17	15	10	6	4

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D Personnel, Researchers in other categories and Technical and economic staff are mutually exclusive, i.e. one staff member is reported in only one category. The categories of scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

3.1.3 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2023 (numbers of physical employees and personnel)¹⁴

Academic/ professional position	Under 29 years		30–39 years old		40–49 years old		50–59 years old		60–69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	2	1	3	0	0	0	4	1
Associate Professor	0	0	0	0	17	8	9	4	6	4	1	0
Assistant Professor	2	0	27	14	42	19	13	4	7	4	0	0
Assistant	1	0	4	2	6	4	0	0	2	1	2	1

⁸ The total number of employees/workers as of 31st December of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

⁹ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁰ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹¹ Who participates in the management and support of R&D&I in the institution.

¹² See Definition of Terms in Methodology HEI2025+.

¹³ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I Personnel, Researchers in other categories and technical and economic staff.

¹⁴ The total number of employees/workers as at 31.12. of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

R&D Personnel ¹⁵	0	0	0	0	0	0	0	0	0	0	0	0
Researchers in other categories ¹⁶	0	0	0	0	2	2	0	0	0	0	0	0
Technical and economic staff ¹⁷	5	3	17	11	8	6	6	5	2	2	1	1
Scientific, research and development staff involved in teaching activities	0	0	0	0	0	0	0	0	0	0	0	0
Early career researcher ¹⁸	1	0	0	0	0	0	0	0	0	0	0	0
Total ¹⁹	9	3	48	27	77	40	31	13	17	11	8	3

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

Table 3.1.4 – Students

Type of study	2019		2020		2021		2022		2023		Total	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Undergraduate	1,755	1,025	2,051	1,134	2,041	1,082	1,983	966	2,108	949	9,938	5,156
Master's ²⁰	733	447	664	396	746	432	781	433	767	441	3,691	2,149
Doctoral	167	42	193	57	149	51	112	37	133	41	754	228
Lifelong Learning Courses	0	0	0	0	0	0	0	0	0	0	0	0
Total	2,655	1,514	2,908	1,587	2,936	1,565	2,876	1,436	3,008	1,431	14,383	7,533

Table 3.1.5 – Study programmes in Czech/English

Type of study programme	Total ²¹ / Of which professional study programmes											
	2019		2020		2021		2022		2023		Total	
Undergraduate	7/3	1/0	11/6	2/0	11/6	2/0	11/6	2/0	11/6	3/0	51/27	10/0
Master's	6/3	0/0	9/5	0/0	9/5	0/0	9/5	0/0	10/5	0/0	43/23	0/0
Doctoral	7/6	0/0	7/6	0/0	7/6	0/0	7/6	0/0	9/8	0/0	37/32	0/0
Lifelong Learning courses	0	0	0	0	0	0	0	0	0	0	0	0
Total	20/12	1/0	27/17	2/0	27/17	2/0	27/17	2/0	30/19	3/0	131/82	10/0

Note: For each SP type, enter the number of SPs in Czech language in the first cell and insert the number of SPs in English language after the slash in the same cell (e.g. 15/3), enter the number of professional SPs in Czech language in the second cell and insert the number of professional SPs in English language after the slash. Follow a similar procedure in the last column of the table (Total).

¹⁵ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁶ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹⁷ Who participates in the management and support of R&D&I in the institution.

¹⁸ See Definition of Terms in Methodology HEI2025+.

¹⁹ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

²⁰ All master's degree students are listed, regardless of the length of their programme of study.

²¹ The total number of study programmes for which admissions have been announced in a given academic year.

3.1.6 – R&D&I capacities

R&D&I field	FORD	FORD share [%]	Predominant type of research	Total share of industry group [%]
1. Natural Sciences	1.1 Mathematics		Select an item.	
	1.2 Computer and information sciences		Select an item.	
	1.3 Physical sciences		Select an item.	
	1.4 Chemical sciences		Select an item.	
	1.5 Earth and related environmental sciences		Select an item.	
	1.6 Biological sciences		Select an item.	
	1.7 Other natural sciences		Select an item.	
2. Engineering and Technology	2.1 Civil engineering		Select an item.	
	2.2 Electrical engineering, Electronic engineering, Information engineering		Select an item.	
	2.3 Mechanical engineering		Select an item.	
	2.4 Chemical engineering		Select an item.	
	2.5 Materials engineering		Select an item.	
	2.6 Medical engineering		Select an item.	
	2.7 Environmental engineering		Select an item.	
	2.8 Environmental biotechnology		Select an item.	
	2.9 Industrial biotechnology		Select an item.	
	2.10 Nanotechnology		Select an item.	
	2.11 Other engineering and technologies		Select an item.	
3. Medical and Health Sciences	3.1 Basic medicine		Select an item.	
	3.2 Clinical medicine		Select an item.	
	3.3 Health sciences		Select an item.	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries		Select an item.	
	4.2 Animal and Dairy science		Select an item.	
	4.3 Veterinary science		Select an item.	
	4.4 Other agricultural sciences		Select an item.	
5. Social Sciences	5.1 Psychology and cognitive sciences		Select an item.	100
	5.2 Economics and Business	80	Basic Research	
	5.3 Education		Select an item.	
	5.4 Sociology		Select an item.	
	5.5 Law		Select an item.	
	5.6 Political science	10	Basic Research	
	5.7 Social and economic geography	10	Basic Research	
	5.8 Media and communications		Select an item.	
	5.9 Other social sciences		Select an item.	
6. Humanities and the Arts	6.1 History and Archaeology		Select an item.	
	6.2 Languages and Literature		Select an item.	
	6.3 Philosophy, Ethics and Religion		Select an item.	
	6.4 Arts (arts, history of arts, performing arts, music)		Select an item.	
	6.5 Other Humanities and the Arts		Select an item.	
Total		100 %	–	100 %

RECOGNITION BY THE RESEARCH COMMUNITY

3.2 Recognition by the research community

The evaluated unit will briefly comment on its position in the research community. It shall consider individual and other prestigious R&D&I awards, participation of its academic staff in the editorial boards of international scientific journals, elected membership in professional societies, major invited lectures given by the evaluated unit's academic staff abroad or by foreign scientists and other relevant guests at the evaluated unit. Additionally, it will address the involvement of staff in the evaluation of national or European project/programme calls over the period of 2019–2023 based on the data provided in annex tables 3.2.1 to 3.2.5 (max. 10 most relevant items). If necessary, the evaluated unit shall list any additional services to the scientific community that it considers relevant.

Maximum 1000 words.

Self-assessment:

The Faculty has long been ranked among the top 25% of research institutions in the Czech Republic in the economic sciences, and in recent years it has risen to 4th place (according to the international ranking of IDEAS/RePEc, <https://ideas.repec.org/top/top.czech.html#inst>). Faculty members (senior and junior positions) regularly win prestigious awards.

Significant awards have been achieved, for example, by Mgr. Hana Porkertová, Ph.D., for the best article of the year in the British periodical *The Sociological Review Journal*. The Young Economist of the Year 2022 was Jan Hanousek, M.A., Ph.D. He won the prize for his work *Social Networks and Strategic Behaviour: Case of Political Inside Information*, which examines the stock trades of U.S. Senators. The Czech Economic Society awards this prize annually to economists under the age of 30. The winners of the prestigious SEA (Slovak Economic Association) Award for Young Economists in 2023 are Ing. Daniel Pastorek, Ph.D., Ing. Michal Drábek and Ing. Peter Albrecht, PhD. In 2023, Ing. Peter Albrecht, PhD., also received the prestigious Governor's Award of the National Bank of Slovakia.

Recognition is also being achieved by Master's students, particularly awards given by the commercial sector. The students Nina Škarbalová and Kateřina Vacková took 3rd and 4th place in the competition for the best economic thesis, which is announced annually by Atlas Copco. Students dealt with the perception of personalised videos and their use in marketing and the effectiveness of the current system of performance and time charging for vehicle traffic in the Czech Republic. The students Michal Jaroš, Sarah Hajduková, Eliška Forróová, Martin Vatrť and Ondřej Nedoma were among the list of exceptional talents who went beyond expectations and left behind an unmistakable academic footprint, which was crowned with awards in the Ernst and Young competition, the Atlas Copco Services award, and the CAFIN competition.

Staff and students are very active in international cooperation. Two examples of many are given. Doctoral student Ing. Dominik Svoboda has gained a unique opportunity to join a prestigious PhD programme in the USA at the University of Memphis, where he is developing his research in the field of capital market dynamics and issues related to information asymmetry and market efficiency. Mgr. Martin Lakomý, Ph.D., from the Department of Management, was awarded a prestigious Fulbright Scholarship to spend a year doing research at Syracuse University. His work focuses on the social consequences of ageing, in particular the situation of older workers in the labour market and their role in the family. Faculty members are also part of scientific committees of international conferences, competitions, participate in project evaluations and serve on editorial boards of internationally recognised journals. They are members of evaluation panels for selected research, development, and innovation results of the Office of the Government of the Czech Republic.

The evaluation activity also includes membership in the evaluation panels of the National Accreditation Bureau.

In terms of national grant agencies and staff involvement in the evaluation process, we should mention the Grant Agency of the Czech Republic (GA ČR), the Technology Agency of the Czech Republic (TA ČR), the Grant Agency of Agricultural Sciences, the Operational programme Johannes Amos Comenius, the Grant Agency of Charles University, the Agency for Research and Development Support of the Ministry of Education, Science, Research and Sport of the Slovak Republic, the Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic. Faculty members are also involved in the evaluation activities of the EU Framework Programme Horizon Europe.

In addition to the above, Faculty members are also active in professional organisations, expert associations, academies at both national and international levels, and institutions aligned with the areas of education and research pursued by the Faculty.

In the economic, financial and social fields, we can mention membership in the College of Experts for Key Area I – Bioeconomy, as well as economic associations such as the American Economic Association, Eurasia Business and Economics Society, The Econometric Society, Euro Area Business Cycle Network, Centre for Economic Policy Research, and the Czech Economic Society. Additionally, membership includes the European Financial Planning Association, cooperation with the Good Tax Guide institution of Transport & Environment Brussels, membership in The Network of Institutes and Schools of Public Administration in Central and Eastern Europe, representation in the Management committee CA21107, Work inequalities in later life redefined by digitalisation (DIGI-net), membership in the working group of the Committee for Social Policy, Family and Care of the Office of the Government of the Czech Republic and vice-chairmanship in the Gender Expert Chamber of the Czech Republic.

In terms of focus on management and marketing, membership in the Society of Scientific Experts in Tourism, the Expert Council of Czech Rural, or the Food Waste Institute, the Stakeholder Platform for Social Responsibility, the Association for Social Responsibility, or the Academy of Management and the Strategic Management Society is important.

In the field of informatics, these include membership of the EOSC Data Management Working Group on Artificial Intelligence and Machine Learning.

Thanks to all the above-mentioned activities, Faculty members are frequently invited to deliver guest lectures at prestigious international institutions, examples of which are listed in Table 3.2.3. The listed lectures typically cover pressing societal issues, to which the Faculty seeks to actively contribute solutions.

Interdisciplinarity and alignment with the institution's overall profile are demonstrated by membership in the Czech Academy of Agricultural Sciences.

These activities contribute to the dissemination of research results, their media coverage and the synergistic effect of connecting the academic and professional spheres.

Table 3.2.1 – Prestigious R&D&I awards granted during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the award	Awarding institution
Mgr. Hana Porkertová, Ph.D.	The Sociological Review Journal Article of the Year (2022)	The Social Review Foundation
Ing. Daniel Pastorek Ph.D., Ing. Michal Drábek, Ing. Peter Albrecht, Ph.D.	SEA Award for Young Economists (2023)	Slovak Economic Association
Ing. Peter Albrecht, Ph.D.	Governor's Award of the National Bank of Slovakia (2024)	National Bank of Slovakia

Note: Provide up to 10 examples.

Table 3.2.2 Participation of academic staff of the evaluated unit in editorial boards of international scientific journals during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of scientific journal, ISSN
Ing. Petr Polák, Ph.D.	Society, ISSN 0147-2011
Ing. Petr Polák, Ph.D.	Humanities & Social Sciences Communications, eISSN 2662-9992
Associate Professor Ing. David Hampel, Ph.D.	Agricultural Economics, ISSN 0139-570X
Associate Professor Ing. Kateřina Ryglová, Ph.D.	European Countryside, ISSN1803-8417
Professor Ing. Radim Farana, CSc., FEng.	Transport Problems, ISSN 1896-0596
Associate Professor Mgr. et Mgr. Robert Stojanov, Ph.D.	International Journal of Climate Change Strategies and Management, ISSN 1756-8692
Associate Professor Mgr. et Mgr. Robert Stojanov, Ph.D.	Population and Environment, ISSN 0199-0039
Associate Professor Ing. Svatopluk Kapounek, Ph.D.	Czech Journal of Economics and Finance, ISSN 0015-1920
Associate Professor Ing. Svatopluk Kapounek, Ph.D.	Forum Scientiae Oeconomia, eISSN 2353-4435
Associate Professor Ing. Svatopluk Kapounek, Ph.D.	Journal of Economics, ISSN 0013-3035

Note: Please provide up to 10 examples of academic staff participation in editorial boards of international scientific journals (e.g. editor, editorial board member, etc.).

Table 3.2.3 The most important invited lectures delivered by the academic staff of the evaluated unit at foreign institutions during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Invited lecture title	Name of host institution, or name of conference or event	Year
Associate Professor Ing. Luděk Kouba, Ph.D.	Trust, Institutions and Crowdfunding	IFN Stockholm, Sweden	2019
JUDr. Ing. Jitka Matějková	Green Public Procurement	Reykjavik University, Iceland	2019
Professor Ing. Lubor Lacina, Ph.D.	Eurozone membership after Brexit: case study of Visegrad countries	Katowice University of Economics, Poland	2019
Associate Professor Ing. Svatopluk Kapounek, Ph.D.	Recovery from the COVID-19 Recession in Visegrad Countries	International Final of the Economics Olympiad, Budapest, Hungary	2020
Associate Professor Ing. František Dařena, Ph.D.	Text Mining and Natural Language Processing	Technical University Graz, Austria	2020
Professor RNDr. Jan Hanousek, CSc. DSc.	Invited lecture: Poland's Special Economic Zones: Effects on Regional Economic Development	University of East Anglia, Norwich, England	2022
Associate Professor Ing. Svatopluk Kapounek, Ph.D.	Business Group Effects in the Creation and Resolution of Financial Distress	Austrian Institute of Economic Research (WIFO), Vienna, Austria	2022

Associate Professor Mgr. et Mgr. Robert Stojanov, Ph.D.	Sea Level Rise as an Existential Threat to the Maldives and Climate Mobility	Columbia University, New York, United States	2023
Ing. Mgr. Jana Dannhoferová, Ph.D.	Data Ethics Checklists	Uppsala University, International Conference on Integrity in Higher Education, Business and Society, Sweden	2023
Professor RNDr. Jan Hanousek, CSc. DSc.	Business Group Effects in the Creation and Resolution of Financial Distress	University of East Anglia, Norwich, England	2023

Note: Provide up to 10 examples.

Table 3.2.4 – The most important lectures by foreign scientists and other guests relevant to R&D&I at the evaluated unit during the evaluation period

Name, surname and title(s) of the lecturer	Lecturer's employer at the time of the lecture	Invited lecture title	Year
Professor Steve Yamarik	California State University, United States	International Cultural Institutes and their Impact on Bilateral Trade and Investment Flows	2019
Professor Makram El-Shagi	Henan University, China	ECB's Monetary Policy Shocks on CEECs	2021
Professor Jack Hou	California State University, United States	Weather Shocks, Agriculture Productivity and Green GDP	2022
Professor Florentina Paraschiv	Zeppelin University, Germany	Sustainable Finance Trends Reshaping the Markets	2022
Professor Sushanta Mallick	Queen Mary University of London, United Kingdom	Revisiting Human Development in the Post-Covid World: The Importance of Digitalisation	2023
Associate Professor Michaela Bednárová	Pablo de Olavide University, Spain	Forging a Sustainable Future: A Comprehensive Framework for Corporate Digital Responsibility Reporting	2023
Professor Stephen P. Ferris	Indiana University of Pennsylvania, Pennsylvania, USA	An Opaque Crystal Ball: Thoughts about the Future of Academic Research	2023
Professor Tobias Goessling	KEDGE Business School in Marseille, France	Bringing Capitalism Back into Capitalism. A Market Economy Critique on Corporate Dominance.	2023
Dr. Olivér Kovács	Ludovika University of Public Service, Hungary	Beyond Resilience – Zombification and its Pros- and Cons	2023
Professor Catherine Luther	The University of Tennessee, United States	Disinformation in the Czech Republic and Digital Activism in the Czech Republic	2023

Note: Provide up to 10 examples.

Table 3.2.5 – Involvement in the evaluation of national/European research project/programme calls relevant to the R&D&I area at the unit during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the research project/ programme call	Name of the contracting authority/ guarantor of the project/programme call	Year
Associate Professor Ing. Svatopluk Kapouněk, Ph.D.	COST Actions	European Cooperation in Science and Technology	2019–2023
Professor Ing. Lubor Lacina, Ph.D.	College of Evaluators of the Institute of International Studies at the Ministry of Foreign Affairs	Ministry of Foreign Affairs of the Czech Republic	2019–2023
Associate Professor Ing. Svatopluk Kapouněk, Ph.D.	Business and Management Science, Financial Econometrics and Operational Research	GA ČR	2019–2022

Professor Ing. Petr David, Ph.D.	ETA Programme	TA ČR	2020
Mgr. Martin Lakomý, Ph.D.	INTER-EXCELLENCE, sub-programme INTER-VECTOR	The Ministry of Education, Youth and Sports of the Czech Republic (MŠMT)	2020–2023
Associate Professor Ing. Bc. Petr Suchánek, Ph.D.	Horizon 2020	Horizon	2023
Associate Professor Ing. Mgr. Jitka Janová, Ph.D.	College of Experts in Key Area I – Bioeconomy	Ministry of Agriculture (MZE)	2023
Mgr. Martin Lakomý, Ph.D.	INTER-EXCELLENCE, sub-programme INTER-VECTOR	MEYS	2023
Associate Professor Ing. Luboš Střelec, Ph.D.	Economic Sciences, Macroeconomics, Microeconomics, Econometrics (excluding Financial Econometrics), Quantitative Methods in Economics (excluding Operations Research)	GA ČR	2023
Professor Ing. Lubor Lacina, Ph.D.	Expert Panel of Evaluators of the Research, Development and Innovation (R&D&I) Council	MEYS	2023

Note: Provide up to 10 examples.

RESEARCH PROJECTS

3.3 Research projects

The evaluated unit shall list at most 10 (considered most significant by the evaluated unit) research projects/activities (regardless of whether they are supported by public funds or based on contract research²²) that it has implemented or participated in during the period of 2019–2023²³. This should be done from the full list in annex tables (Table 3.3.1–3.3.2)²⁴, regarding particularly the results achieved or the application potential of the projects. The unit should also describe how the research projects contributed to the mission and purpose of the evaluated unit. If the evaluated unit has been a participant in listed project, it shall indicate which other entities were involved and describe its contribution to the project. The interdisciplinary aspects of the projects will also be commented on, along with any collaboration with other units of the evaluated HEI.

Maximum 300 words per project.

Self-assessment:

As a partner of international research consortia, the Faculty is involved in domestic and international research programmes.

1) In 2015–2019, Faculty members were the investigators of the project *Revisioning the “Fiscal EU”: Fair, Sustainable, and Coordinated Tax and Social Policies*, (649439), provider: HORIZON 2020, duration in years: 2015–2019, role in the project: partner of the coordinator Linkopings Univeritet in a consortium of 9 universities, total allocated funds/funds allocated to MENDELU: CZK 62,684,000/EUR 2,472,750 / CZK 6,781,000/EUR 267,500, researcher for MENDELU: Professor Ing. Danuše Nerudová, Ph.D., annotation: The plans for economic and monetary integration in the European Union require fundamental changes in fiscal relations between EU Member States and other countries. The 2012 proposal for the Economic and Monetary Union of the European Union (EMU) calls for deeper integration of fiscal policies at the EU member level, including the establishment of EU revenues from own resources. This fiscal review also needs to improve the coordination of employment and social policies after the crisis to offset declines in government revenues, to assess fragmented policy initiatives during the crisis, and to enhance people's welfare and capabilities, thus creating the conditions for stable integration and sustainable growth.

The project significantly deepened the interdisciplinary cooperation between the Faculty's departments by involving members of the Department of Accounting and Taxes, the Department of Economics and the Department of Statistics and Operations Research, thus providing one of the first incentives for the institutionalisation of inter-institutional research teams at the Faculty. It was also of great significance for establishing strategic international partnerships and implementing research results into economic policy decision-making processes through impact studies, policy briefs, and the active participation of researchers in the media and at meetings of important international institutions, such as the European Parliament. As a result of the project, the Faculty management redefined incentive programs and adjusted the evaluation of the R&D activity outcomes to reflect the application potential of selected excellent results.

2) Following the previous project and many other significant international projects, a network of partner universities was established. As a result, in 2022, the Faculty became the only institution in

²² For the definition of contract research for the purposes of evaluation in the HE segments, see Article 2.2.1 of the Community Framework for State Aid for Research, Development and Innovation 2014/C 198/01.

²³ Regardless of whether the projects are completed or still ongoing, provided that at least part of the project was implemented during the evaluation period.

²⁴ The evaluated unit shall only fill tables that are relevant to it.

the Czech Republic to be involved as the main coordinator of a COST action, covering 36 countries and addressing work inequalities in later life in the context of digitalisation WIDIGInet – Work Inequalities in Later Life Redefined by Digitalisation (DIGI-net), (CA21107), provider: COST Action, duration in years: 2022–2026, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: EUR 818,000/EUR 818,000, researcher for MENDELU: Associate Professor PhDr. Martina Rašticová, Ph.D., annotation: The aim of the project is to overcome critical gaps in conceptual innovations regarding the impact of digitalisation on work inequalities in later life, with the goal of addressing the inconsistency between research and policies and tackling work inequalities in later life in the context of digitalisation. The project will enhance scientific knowledge by integrating various disciplines and schools of thought, fostering collaboration with public policy representatives, international policy bodies, non-academic experts, civil society NGOs, trade unions, organisational leadership, and older workers themselves. The project thus contributes not only to interdisciplinary collaboration between departments, but also to the transfer of research results into economic and political practice and into educational activities. As part of broader teams, the Faculty is involved in a number of international COST consortia, especially in the areas of migration, sustainable economy and climate change. Apart from cooperation on projects in COST consortia, the Faculty is a partner of several Erasmus+ Strategic Partnerships, Visegrad fund and other projects. However, the most important in terms of the Faculty involvement in grant agency projects are the domestic projects of GA ČR and TA ČR specialising in basic and applied research.³⁾ In the social sciences (Ford 5), one of the most important projects providing a significant contribution to knowledge can be identified as the project *Interaction of the Financial Sector and the Real Economy*, (19–22488S), provider: GA ČR, duration in years: 2019–2021, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 3,908,000/EUR 154,162, researcher for MENDELU: Associate Professor Ing. Svatopluk Kapouněk, Ph.D., annotation: The project tested the relationships between bank lending activity and corporate performance, and whether corporate performance influences the way banks allocate loans. The project expanded the financial accelerator by incorporating the role of specific company and aggregate information related to credit costs in relation to the financial health of banks and the quality of the institutional environment in different financial systems. Using microeconomic data, the project primarily focused on the financial premium paid by borrowers and their financial health, measured through financial distress and covenant violations. It also explored the relationships between the firm and the bank, as well as the impact of the bank's credit capacity on the amount of loans granted and the investment activity of companies. At the end of the project, endogenous switching rules were used, and changes in company behaviour were identified depending on the risk of covenant violations. The results were published in the *Journal of Corporate Finance*, *Economic Systems* and *International Review of Economics and Finance*. Selected articles were prepared in collaboration with Ichiro Iwasaki (Hitotsubashi University, Tokyo), Jarko Fidrmuc (Zeppelin University in Friedrichshafen, Germany), Steve Yamarik (California State University, USA) and Makram El-Shagi (Henan University, China). The project was rated “excellent” in terms of its contribution by the grant agency. Thanks to the results, it contributed not only to strengthening the excellence of research teams but also to enhancing interdisciplinary collaboration between the Department of Finance, the Department of Business Economics, and the Department of Computer Science.

The Faculty's contractual and applied research aligns with the National Research and Innovation Strategy for Smart Specialisation of the Czech Republic and is primarily conducted in the fields of information technology and the environmental impacts of consumer behaviour.

4) In the field of applied research, which was supported by the Technology Agency of the Czech Republic, the Faculty members focused on the identification of pro-environmental behavioural patterns and incentives for behavioural change in food waste and waste production in the project *Supporting pro-environmental behavioural patterns and incentives for behavioural change in food waste and waste production*, (TL02000092), provider: TA ČR, duration in years: 2019–2022, role in the project: coordinator, total allocated funds/funds allocated to MENDELU:

CZK 8,723,000/EUR 344,103, CZK 4,364,000/EUR 172,150, researcher for MENDELU: Associate Professor Ing. et. Ing. Lea Kubíčková, Ph.D., annotation: The aim of the project was to provide the application guarantors and local self-government units (LSGUs) with the procedures and results of the application of behavioural change of households in a form that was relatively easy to apply for waste management actors (i.e. LSGUs). The microeconomic basis for household behaviour change was a change in the utility perception of the pro-environmental behaviour function of consumer behaviour and a change in transaction costs (access to observation of the consequences of one's own behaviour leads to active response and behavioural adaptation). The basic essence of the project was the so-called intervention experiment. This was a controlled experiment, the aim of which was both to identify how accurate households' perceptions of the volume and structure of waste they generate are and to quantify the effect of the intervention. The project has contributed significantly to the establishment of an inter-institutional interdisciplinary research team bringing together researchers from the Department of Marketing, the Department of Management and the Department of Law and Humanities. Thanks to the project, the Faculty's internal processes for transferring research results were better aligned, not only in the area of corporate practice but, more importantly, in setting up information media channels to the general public.

5) Another applied research project was *Fiscal Quantification of Environmental Costs of Operating Freight Motor Vehicles in the Czech Republic*, (TL01000308), provider: TA ČR, duration in years: 2018–2020, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 3,854,000/EUR 152,020, researcher for MENDELU: Associate Professor Ing. Petr David, Ph.D., annotation: The main goal of the project was to propose a suitable alternative for including the value of environmental impacts in the operating costs of freight motor vehicles during the project's implementation period. The formulated alternative was based both on the application of theoretical requirements in terms of fulfilling fundamental environmental principles, but also on the parameters of practical applicability and the European context of addressing the given issue. The project outcome enabled the fiscal quantification of the environmental costs of operating heavy goods vehicles in the Czech Republic. Thanks to the project, the Faculty better defined its goals in sustainability and the circular economy, which led to the creation of an entirely new study programme in Circular Economy in the following years, including the prestigious CFA certification.

6) An equally significant applied research project was *Ethics in Public Administration*, (TL01000260), provider: TA ČR, duration in years: 2018–2021, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 5,320,000/EUR 209,864, CZK 1,145,000/EUR 45,168, researcher for MENDELU: Associate Professor PhDr. Martina Rašticová, Ph.D., annotation: The aim of the project was to strengthen ethics and integrity in public administration in the Czech Republic. Current efforts to raise ethical awareness and competencies of officials were analysed, gaps and shortcomings in the implementation of existing tools were identified and recommendations were formulated for the development of a common integrity framework and streamlining of existing practices, taking into account the basic research findings and best practices (4/2019). Recommendations were discussed to obtain feedback at the International Conference (6/2019). In dialogue with relevant stakeholders and through workshops, educational needs for enhancing/updating competencies were identified, an educational programme was designed, and a teaching text was created (2020). Pilot trials were conducted and training of potential supervisors was also held at the end of the project. The project analysed current efforts to raise ethical awareness and competencies of officials, identified gaps and shortcomings in the implementation of existing tools, and formulated specific recommendations for creating a common integrity framework and streamlining existing practices, taking into account basic research findings and best practices. The project was carried out in cooperation with the Economics Institute of the Czech Academy of Sciences (CAS) and the Faculty of Business and Management at Brno University of Technology. Thanks to the project, the Faculty supported interdisciplinary cooperation not only between institutes, but especially with other important partners in the Czech Republic. The expansion of the project partner network to include the Economics Institute of the Czech Academy

of Sciences (CAS) brought a significant shift in the specialisation of the research team leading to excellence.

7) Project *Smart Migration in the Czech Republic*, (TL01000468), provider: TA ČR, duration in years: 2018–2022, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 6,135,000/EUR 242,019, CZK 5,248,000/EUR 207,039, researcher for MENDELU: Associate Professor Mgr. et Mgr. Robert Stojanov, Ph.D., annotation: The first goal of the project was to offer direct and personalised support in the form of a new mobile application for immigrants in the Czech Republic who are dealing with real problems in everyday life or for Ukrainian residents (about 40% of immigrants from non-EU countries) considering migration to the Czech Republic. A user-friendly application would facilitate their integration, while also providing feedback to the application guarantors, ensuring that their services and integration tools are properly configured. The second objective of the project was to analyse three key socio-demographic challenges (migration risks and challenges; coherence of migration and development policies; active migration policy model), the results of which will be used by the application guarantors to develop public policies, strategic materials and appropriate tools for their application. Other objectives of the project included the analysis of three key socio-demographic challenges (migration risks and challenges; coherence of migration and development policies; active migration policy model), the results of which were used by the application guarantors in the development of public policies, strategic materials and appropriate tools for their application. The research was carried out in cooperation with the Metropolitan University Prague. The main benefit of the project was the transfer of the results of R&D activities into the national economic practice, including the transfer of knowledge through media channels to the public. The interdisciplinarity of the research lay primarily in connecting specialists in information technology and software development with researchers focused on migration and economic policy.

The following three research projects, which were supported under the Enterprise and Innovation for Competitiveness Operational Programme (OP PIK) and the Operational Programme Technologies and Applications for Competitiveness (OP TAK), were solved in cooperation with partners from the commercial sphere. They contributed mainly to the optimisation of the Faculty's internal processes in setting the conditions for cooperation between the academic sphere and industry. This included establishing contractual relationships for transferring R&D outputs into practice, setting up processes for involving talented master's and doctoral students, strengthening events for the professional public (see activities specified in section 3.6), and improving methods for reaching out to new potential collaborators. The projects also contributed to the identification and development of a significant research direction for the Faculty in the field of natural language processing using machine learning and artificial intelligence methods. On this basis, a working group involving a broad spectrum of workers not only from the field of information and communication technologies (ICT) was established. The team is capable of complex software development including deployment and operation of internet services. This contributes to increasing the competitiveness of the Faculty in the field of project activities and the growth of interest from companies. In the projects, the Faculty acted as a partner and provided both research activities in the field of natural language processing or time series analysis, as well as the implementation side providing development, deployment and operation of software modules.

8) An important partner of research in the application sphere in the above mentioned projects is the company Cyrrus Advisory, a.s., which within the framework of the OP PIK project *Multicriterial Text Analysis Software*, (EG16_084/0010315), provider: Ministry of Industry and Trade, duration in years: 2017–2020, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 12,104,000/EUR 477,477, CZK 11,951,000/EUR 471,439, researcher for MENDELU: Ing. Jan Přichystal, Ph.D., annotation: The aim of the project was to develop 3 modules of functional software ready to be sold as partial or complex licensing solutions, also customisable for the needs of other development companies. The software has also been directly used for the implementation of own

projects in the market of search for services, information and goods and allows the most accurate understanding of user behaviour. Software modules based on natural language processing have been developed in collaboration with the Faculty researchers. The developed solution is ready to be sold as a partial solution or a complex licensing solution and is modifiable for the needs of other development companies. The software is also used to implement our own projects in the market of search for services, information and goods and enables the most accurate understanding of user behaviour.

9) The previous project was followed up and further developed by the project *Data Processing Software*, (EG17_176/0015722), provider: Ministry of Industry and Trade, duration in years: 2020–2023, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 28,957,000/EUR 1,142,311, CZK 11,809,000/EUR 465,843, researcher for MENDELU: Ing. Jan Přichystal, Ph.D., annotation: The applicant's vision was to bring added value to users by removing information asymmetry in the form of reduced transaction costs, streamlined work processes, and the discovery of new business opportunities. The aim of the project was to acquire new knowledge for the development of new products.

10) In cooperation with the company Cyrrus Advisory, a.s. the project *SQTrader – Research and Development of Optimisation Solutions in Asset Management*, (EG16_084/0010365), provider: Ministry of Industry and Trade, duration in years: 2017–2020, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 14,883,000/EUR 587,115, CZK 1,900,000/EUR 74,983, researcher for MENDELU: Ing. Jan Přichystal, Ph.D., annotation: The subject of the project was the implementation of R&D activities with the aim of creating modules together forming a software solution for the creation, testing, evaluation and management of a portfolio of assets. The subject of the project was the implementation of scientific research activities and the acquisition of new knowledge in the field of solving optimisation issues and their application to modelling and prediction of time series, the composition of a portfolio of assets and the management of this portfolio, including risk management. The output of the project was a unique software – a business platform (CZ NACE 62.0), operating on the principles of neural networks (convolutional, recurrent, and LSTM neural networks). The uniqueness of the solution lies in the application of artificial intelligence and machine learning in asset management and time series modelling.

Table 3.3.1 Projects supported by public funds

In the role of beneficiary						
Provider ²⁵	Provider ²⁶	Provider ²⁷				
		2019	2020	2021	2022	2023
GA0	Comparative Study of Crowdfunding Projects in the EU: Access to Finance, Risks, and Regulation	1,317/51,558	0/0	0/0	0/0	0/0
GA0	Optimal Policies in the Presence of Non-linear Linkages in the Economy of Mixed Forests	674/26,588	539/21,262	0/0	0/0	0/0
GA0	Fair Corporate Taxation: Measuring the Impact of Profit Shifting on the Budget of the Czech Republic	1,549/61,104	995/39,250	0/0	0/0	0/0
GA0	Interaction Between the Financial Sector and the Real Economy	1,226/48,363	1,315/51,874	1,367/53,925	0/0	0/0
GA0	Digitalisation in the Labour Market: Challenges, Opportunities and Inequalities for Older Workers	0/0	0/0	487/19,211	1,081/42,643	1,069/42,170
GA0	New Methods in Government Debt Valuation: Uncertainty and Economic Policy Implications	0/0	0/0	0/0	1,414/55,779	1,480/58,383
TA0	Fiscal Quantification of Environmental Costs in the Operation of Freight Vehicles in the Czech Republic	1,526/60,198	1,510/59,579	0/0	0/0	0/0
TA0	Development of Fire Prevention Equipment in Waste Management Technologies	1,004/39,586	1,006/39,685	181/7,134	0/0	0/0
TA0	Smart Migration in the Czech Republic	1,527/60,231	1,340/51,660	1,714/67,618	547/21,590	0/0
TA0	Promoting Pro-Environmental Behaviour Patterns and Incentives for Behavioural Change in Food Waste and Waste Production	735/28,994	1,363/53,767	1,574/62,091	692/27,298	0/0
Total		9,558/376,622	8,068/317,077	5,323/209,979	3,734/147,310	2,549/100,553

²⁵ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

²⁶ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

²⁷ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

In the role of another participant						
Provider ²⁸	Provider ²⁹	Provider ³⁰				
		2019	2020	2021	2022	2023
MIT	Analytical Platform 2.0. – Automated Portfolio Management Platform Using Machine Learning Systems	0/0	0/0	0/0	0/0	0/0
MIT	Multicriterial Text Analysis Software	7,059/278,442	5,078/200,336	0/0	0/0	0/0
MIT	SQTrader – Research and Development of Optimisation Solutions for Asset Management	830/32,742	703/27,724	0/0	0/0	0/0
MIT	Data Processing Software	0/0	0/0	3,098/122,211	3,407/ 134,391	5,304/209,241
MIT	Location Insights For Business Intelligence	0/0	0/0	0/0	377/14,857	2,151/84,858
MIT	Research and Development of a Software Platform with Artificial Intelligence Elements for a Digital Office	0/0	0/0	0/0	1,900/74,960	2,671/105,369
GA0	The Actual Functioning of a Centrally Planned Economy in Czechoslovakia	0/0	0/0	0/0	0/0	0/0
GA0	Modelling and Simulation of Sustainable Investment for Decision-Making Support	328/12,939	0/0	0/0	0/0	0/0
GA0	Geography of Disadvantage: The Blind Experience of Urban Space	0/0	227/8,955	302/11,913	247/9,744	0/0
TA0	Ethics in Public Administration	405/15,989	249/9,809	109/4,308	0/0	0/0
TA0	Forecasting the Road Transport Emissions Savings by 2030 Achieved Through the Application of Selected Tax and Fee Instruments.	0/0	0/0	721/28,455	849/33,498	856/33,778
MV0	System for Managing Recovery Processes in Crisis Situations.	0/0	0/0	1,409/55,597	1,409/55,597	0/0
Total		8,622/340,112	6,257/246,824	5,639/222,484	8,189/323,047	10,982/433,24

Data source and provider abbreviations: Central Register of Projects: <https://www.isvavai.cz/cep>

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

Table 3.3.2 – Contract research activities

Client ³¹	Activity name	Revenue (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
European Climate Foundation	Measurement of CABM Impact on the Czech Republic	0/0	0/0	580/22,882	288/11,347	0/0
European Parliament European Conservatives and Reformists Group	Expert Study on Increasing Competitiveness of Micro-and-Small Farms in an Environment of Sustainable Development in Comparison to Large Farms	0/0	0/0	195/7,693	53/2,083	0/0
Council of Europe	Integrity in Higher Education	487/19,199	110/4,352	0/0	0/0	0/0
Total		487/19,199	110/4,352	775/30,575	341/13,430	0/0

Note: List and describe contract research activities with a revenue in a given calendar year, regardless of the amount of financial revenue.

³¹ If the client is from abroad, indicate in brackets the country of origin of the client.

3.4 Research results with existing or prospective impact on society

The evaluated unit shall briefly comment on a maximum of 10 (considered most significant by the evaluated unit) research results already applied or realistically heading towards application during the period of 2019–2023, based on the overview annex table 3.4.1 (it is recommended to indicate results with a link to projects listed in indicator 3.3). The evaluated unit must demonstrate in its description that the research results have led or will soon lead to positive impacts³², on society (e.g. description of how the results are used by various users, the range of persons/institutions for which the result is relevant, measurable economic impacts, etc.). The evaluated entity shall indicate in its commentary whether the gender dimension is considered in these results and discuss the impacts of the results regarding sustainability.

Maximum range 300 words/result.

Self-assessment:

In recent years, the Faculty has made significant efforts to increase its success in transferring basic research findings into practice. It does this primarily through the development of software, many of which make a significant contribution to sustainability, and the dissemination of findings published in major journals that manage to take into account the gender dimension.

1) **MTA Software** developed by the Faculty team is actively used in practice. It is a comprehensive system for analysing natural language text using machine learning and natural language processing methods. In particular, this product makes the decision-making phase easier and faster for customers when choosing specific products. The software also makes use of gender aspects relevant to the study of language patterns.

2) **The Envoutliers package** provides users with an implementation of three “semi-parametric” methods for automatic outlier detection that do not impose requirements on the distribution or model of the data being analysed, consider trends, and do not require a training set, unlike all outlier detection algorithms developed to date. The developed methods are used, for example, by the Global Change Research Institute of the Czech Academy of Sciences.

3) **The Software Strategy Game** provides significant social impact in the field of business management, not only domestically but also abroad. This management simulation game facilitates the orientation of newly hired employees, as well as more experienced managers in the economic processes of the company and allows demonstration of the rationale for decisions and illustration of their impact. The product is used both in the implementation of study programmes at the Faculty and by major companies in practice, such as E.ON or PPG. The software integrates the gender dimension in decision-making issues and the involvement of women and men in management processes.

4) **The Fiscal Quantification of Environmental Costs of Road Vehicle Traffic software** provides a basis for the implementation of measures leading to the reduction of the environmental burden caused by road transport and the related negative impacts on the health of the population in a form that can be described as efficient, fair and not market-distorting. The software is not only used by the Ministry of Finance of the Czech Republic, but is also available to the general professional and lay public in order to increase the information impact on the existing externalities of road transport. The output is also highly relevant to the issue of sustainability.

5) **DNA Analyser**, a web server for nucleotide sequence analysis, provides significant international societal impact for the scientific community and the DNA analysis community. The software uses unique results of our own research on nucleotide sequences in collaboration with the Academy

³² See Terms definition.

of Sciences of the Czech Republic. The result, including a range of functionalities, is freely presented through a user-friendly web platform. This product is primarily intended for international research and study in the field of molecular biology and genetics.

6) **The Smart Migration application** is the primary point of communication for a significant number of foreigners arriving in the Czech Republic, addressing the critical problem of unfamiliarity with the local formal and informal environment. The mobile application does not replace the web portals of ministries, but serves as a clear and interactive hub with a digital personal assistant that helps users navigate the basics and, if needed, directs them to further detailed information. The application was launched in cooperation with the Ministry of Labour and Social Affairs of the Czech Republic. The gender dimension is integrated through different information for migrant women who face specific challenges such as childcare and employment opportunities.

7) **NLP Studio software** allows users to create natural language processing tasks in the form of visual programming without writing programming language code. Compared to other competing tools, it offers a broader range of functions for preprocessing input datasets and an extensive set of input data sources. The application is part of the commercial Analytical Platform system, where it provides users with access to in-depth analysis of textual information and the ability to interpret the results into models to support decision-making in the area of stock trading on financial markets.

8) Among the bibliographic results with significant societal impact, one example is the article **Corporate Profitability and the Global Persistence of Corruption** published in the Journal of Corporate Finance, which is a unique study providing a completely new approach to estimating corruption at the micro level from publicly available sources. The global contribution and society-wide impact lie primarily in this new approach to estimating corruption, which enables future research to expand on the impact of corruption on various corporate behaviours and practices. This area has not been explored before due to data unavailability or national limitations. The article integrates the gender dimension by analysing the different levels of corruption of men and women in the role of Chief Executive Officer (CEO).

9) Article **Basic Economic Gap Related to Smoking: Reconciling Tobacco Tax Receipts and Economic Costs of Smoking-Attributable Diseases** provides evidence of the existence and magnitude of a global smoking-related economic gap. Based on data from 124 countries representing 94% of global cigarette consumption, it formulates global and local implications regarding appropriate regulation, forms, and levels of tobacco taxation as one of the most effective tools for reducing the global tobacco epidemic. The article was published in the journal Tobacco Control. The output is highly relevant to the issue of sustainability.

10) Article **Macroeconomic Impact of Basel III: Evidence from a Meta-Analysis** is a unique study of different assessments of the impact of the Basel III regulatory framework on economic activity by different institutions and research groups. The authors confirmed the negative impact of the new regulation on economic activity, but at the same time, through a meta-regression, they showed a significant publication bias in the estimates of the impact of the new regulation. The article was published by the Journal of Banking and Finance. The gender dimension is integrated through the differential effect identified by women and men as authors.

Table 3.4.1 – Overview of research results in the period under evaluation

Type of result ³³	Year of application	Name
Software	2019	DNA analyser
Peer-reviewed article, Jimp	2019	Basic Economic Gap Related to Smoking: Reconciling Tobacco Tax Receipts and Economic Costs of Smoking-Attributable Diseases
Software	2019	Strategy Game
Software	2020	Envoutliers: Methods for Identification of Outliers in Environmental Data
Software	2020	Fiscal Quantification of the Environmental Costs of the Operation of Road Motor Vehicles in the Czech Republic
Software	2020	MTA Software
Peer-reviewed article, Jimp	2020	Macroeconomic Impact of Basel III: Evidence from a Meta-Analysis
Peer-reviewed article, Jimp	2021	Corporate Profitability and the Global Persistence of Corruption
Software	2022	NLP Studio
Software	2022	Smart Migration

Note 1: Please list and describe the results already applied in practice or heading towards application in practice with existing or prospective impact on the society (e.g. domestic or foreign patents, sold licenses, spin-offs, prototypes, varieties and breeds, methodologies, significant analyses, surveys, expert outputs for policymaking or other forms of non-publication outputs, etc.). Indirect results of research, development and creative activities with documented societal impact, e.g. expert activities, services to the public/government/scientific community, may also be reported.

³³ Specify the specific type of result. Add rows as needed.

TRANSFER OF RESULTS INTO PRACTICE

3.5 Transfer of results into practice

The evaluated unit shall briefly describe its system for transferring results into practice. It shall also indicate up to five of the most typical users of its results, whether in the university environment or in the non-university application/corporate sphere, detailing how it collaborates with them and how it seeks out new users (using a maximum of five specific examples).

It will also indicate whether and how it commercialises R&D&I results (e.g. selling licences, setting up start-up or spin-off companies, etc.)³⁴, providing brief description of the commercialisation methods used. The effectiveness of the transfer of results and the commercialisation of R&D&I results will be described using a selection of results (max. five) listed in annex table (Table 3.4.1).³⁵

Additionally, the evaluated unit shall briefly comment on the funds received during the period of 2019–2023 from non-public, non-grant sources (e.g. licences sold, spin-off revenues, donations, etc.). A full summary shall be provided in annex table (Table 3.5.1).

Maximum 500 words plus 200 words for each provided example of finding a new user of results and commercialization.

Self-assessment:

The Faculty regularly evaluates and identifies the results of R&D activities and their applicability in practice. It uses periodic annual evaluation through (1) reports of individual authors, selected results of R&D activity from the Faculty database of projects and results, in which the authors evaluate mainly the societal relevance of the result and its contribution to practice, (2) presentations by research teams at an annual internal workshop, (3) annual presentations by talented students who present their results with a view to possible transfer to practice, and based on (4) proposals by student thesis supervisors as part of the annual evaluation at the state final examination. Results with the potential for practical application are managed by the Vice-Dean for Project Activities and Information Technology and disseminated through specific platforms designed for communication with the main recipients of R&D activity outcomes. The success of the transfer of results into practice is monitored through (1) profits generated, including projects acquired, (2) the number and significance of newly acquired partnerships, (3) the number of concrete applicable results and their citations (especially software, methodologies, datasets and patents), and (4) the number of participants in public and professional presentations, conferences, lectures and workshops.

The main recipients of the results of the R&D activities of the Faculty include (1) state and local government institutions (especially the Ministry of Labour and Social Affairs of the Czech Republic, the Ministry of the Interior of the Czech Republic and the Ministry of Agriculture), (2) international institutions (especially the European Parliament and the European Commission) and central banks, (3) commercial companies, including financial market institutions, (4) the professional public, (5) the general public. The most frequent output of the Faculty's R&D activity that can be applied in practice is methodology or software that cannot be patented in the EU and thus commercialised in a standard way. Therefore, state and local government institutions cooperate with the Faculty in the development of methodologies on the basis of applied research projects, especially TA ČR projects (see examples in section 3.3).

³⁴ In the case of military HEIs, their specific position is taken into account when evaluating the commercialisation/evaluation of R&D&I results.

³⁵ If the commercialisation of R&D&I results is carried out in this way.

The most significant transfer of the results of R&D activity into practice through international institutions can be considered the study of Professor Ing. Danuše Nerudová, Ph.D., and Associate Professor Ing. Veronika Solilová, Ph.D., for the European Parliament's Committee on Budgets (Margit Schratzenstaller, Danuše Nerudová, Veronika Solilová, et al., 2022, New EU Own Resources: Possibilities and Limitations of Steering Effects and Sectoral Policy Co-benefits).

The study assesses the European Commission's legislative proposals for its own new sources, including contributions based on the consideration of plastics, the EU Emissions Trading Scheme and the Carbon Border Adjustment Mechanism (CBAM). It also examines potential own resources derived from the redistribution of taxes on the profits of large multinational companies and the taxation of corporations and financial transactions.

It is also worth mentioning in this area the expert study commissioned by the European Parliament for the formulation of the EU agricultural policy reform entitled Increasing Competitiveness of Micro-and-Small Farms in an Environment of Sustainable Development in Comparison to Large Farms in Selected Countries of EU, prepared by Ing. Jan Vavřina, Ph.D. and Professor Lubor Lacina. In addition to the mentioned expert study Professor Lubor Lacina led an international team of authors who prepared a research report for the V4 foreign ministries entitled Economic Implications of a Post-Covid World: Pitfalls and Opportunities for the V4. Furthermore, Professor Lubor Lacina is a co-author of an expert study for the Ministry of Foreign Affairs of the Czech Republic and the Office of the Government of the Czech Republic entitled EU Enlargement in Terms of its Functionality and Integrity (Economic, Budgetary and Sectoral Aspects).

Commercial companies cooperate with the Faculty mainly through projects of TA ČR, OP PIK and OP TAK (see examples in section 3.3). The number of projects submitted and received in this area has doubled compared to the previous period.

The transfer of the results of R&D activity into practice through the professional public is mainly carried out in the form of public lectures and professional events (see examples in section 3.6).

Funding received over the evaluation period from non-public, non-grant sources declined during 2019–2023, with a decrease in 2020 due to the COVID-19 pandemic and the associated decline in the level of Faculty collaboration with companies. In the following years, there is a gradual increase again, but it is negatively affected by the lower budget of foreign companies for cooperation with universities. The number of partner companies has been increasing over the period under review, which is due to increased activity and a broadening of the portfolio of ways of networking in this area. Cooperation with partner companies primarily involves participation in teaching through guest lectures or educational courses, as well as offering topics for final theses, student internships, collaboration on research activities through projects, awarding scholarships for talented students, and organising professional conferences.

The Faculty acquires new partnerships mainly by individually searching for contacts in sectors related to the Faculty's focus, by participating in social and professional networking events or by being approached directly by a company. It regularly organises *BusinessDay*, where it presents potential partners with opportunities for cooperation, particularly in the fields of education and science and research. In 2023, in cooperation with the South Moravian Innovation Centre, the *Velvet Innovation Meetup* was organised, where research activities were presented. Contacts with new partners are also established through career days, where companies can present job opportunities to students.

Among the most significant in terms of the volume of financial resources are projects supported by the calls of the Ministry of Industry and Trade OP PIK and OP TAK, which the Faculty implemented in cooperation with the company Cyrrus Advisory a. s. These are projects Data Processing Software (CZK 11.8 mil./EUR 465,483), Multicriterial Text Analysis Software (CZK 11.6 mil./EUR 457,594) and Analytical Platform 2.0 (CZK 9.1 mil./EUR 358,974). These are successive projects that demonstrate

the ability of long-term cooperation in the field of science and research with a commercial company, specifically solved by the Natural Language Processing working group under the leadership of Ing. Jan Přichystal, Ph.D. Other significant projects in terms of the amount of financial resources include TA ČR projects Potential Revitalisation of Brownfields with the Possibility of Partial Self-Funding (CZK 6.5 mil./EUR 256,410), whose researcher was Ing. Ladislava Issever Grochová, Ph.D., and Smart Migration in the Czech Republic (CZK 5.2 mil./EUR 205,128), whose researcher was Mgr. et Mgr. Robert Stojanov, Ph.D.

Table 3.5.1 – Summary of non-public revenues received during the period under evaluation

Type of revenue	Revenue (in thousands CZK/EUR)				
	2019	2020	2021	2022	2023
Donations and promotional activities	1,542/60,829	360/14,201	950/37,475	697/27,495	782/30,848
Contract research	964/38,027	1,261/49,743	514/20,276	725/28,600	395/15,582
Total	2,506/98,856	1,621/63,945	1,464/57,751	1,422/56,095	1,177/46,430

Note: Enter funds raised for R&D&I from non-public sources besides grants or contract research (e.g. licences sold, spin-off company revenues, donations, etc.) in the calendar year.

POPULARIZATION OF VAVAI

3.6 The most important activities in the field of popularization of R&D&I and communication with the public

The evaluated unit shall briefly describe its main activities related to the popularisation of R&D&I and communication with the public (e.g. popularisation lectures, citizen science initiatives, etc.) during the period of 2019–2023 and provide up to 10 examples that it considers the most significant.

Maximum 500 words plus 200 words for each example given.

Self-assessment:

The Faculty is a visible actor of social events, publicly presents the results of its activities and actively participates in current events. The main activities are focused on communication through (1) national television broadcasts, (2) national radio media, (3) national print periodicals, (4) events for the professional public and businesses, (5) international Internet media, (6) the international video platform Youtube, (7) invited lectures to high schools, (8) public courses, (9) charity events, and (10) websites.

1. In the period under review, national television broadcasts featured, for example, Ing. Lucie Veselá, Ph.D. from the Department of Marketing and Trade, who presented an interesting Smart Food project dealing with food waste in a live broadcast on ČT24. This topic was also significantly popularised by Associate Professor Kubíčková, not only for public television stations, but also for Czech Radio and Hospodářské noviny journal.

2. The national radio media have featured, for example, Professor Lubor Lacina from the Department of Finance and Accounting, who spoke on Czech Radio's "Money Speeches" about the European Union's decision to impose tariffs on Chinese electric cars and a possible trade war between Europe and China. He also commented on 20 years in the EU, when the Czech Republic is prospering but wages are lagging behind. Associate Professor Robert Stojanov spoke to Czech Radio about the new EU migration pact. He also gave an interview to Czech Radio on the topic of the effectiveness of border controls.

3. For example, Associate Professor Martina Rašticová from the Department of Law and Humanities, whose DIGI-net project examines the impact of digitalisation on labour market inequalities for people over 50, made a contribution to nationwide newspapers. She spoke about the issue of adapting older workers to new technologies in an interview for iDNES.cz.

4. At the events for the professional public, for example, Associate Professor Rašticová, who presented the topic of technostress and its impact on society at the Science Slam of Masaryk University. The Natural Language Processing team, led by Ing. Jan Přichystal, Ph.D. presented the results of applied research at the AI Days, where innovative technologies using artificial intelligence are presented.

5. An example of popularisation in international online media is the prestigious Times Higher Education, which quoted Dr. Tomáš Foltýnek in connection with the planned merger of anti-plagiarism systems. Tomáš Foltýnek is a co-founder of the European Network for Academic Integrity, a group of 28 institutions from 18 countries that are trying to fight plagiarism and the writing of custom-made papers.

6. Through the Youtube platform with an international reach, the results of research of doctoral students were presented (Pastorek, D., Drabek, M., Albrecht, P. 2023. Confirmation of T+35 Failure-To-Deliver Cycles: Evidence from GameStop Corp, Czech Journal of Economics and Finance, 73(1)), specifically by the prominent American investment influencer and youtuber Richard Newton. An episode based on the findings of this study quickly became one of his most watched videos. Faculty researchers in 2022 revealed that some traders in the financial markets use rules that allow them to delay delivery of stocks by up to 35 days, making abnormal profits on short sales.

7. The Faculty has built a network of cooperating secondary schools, where lectures of their staff were held in 2019–2023. We can mention, for example, Professor Lacina, Associate Professor Kubíčková, Associate Professor Kapouněk, Associate Professor Rozmahel, Associate Professor Dařena or Associate Professor Rašticová, who spoke on topics related to economic policy, consumer behaviour and investment, the impact of robotics, machine learning and stereotypes and prejudices. In total, more than 20 Faculty members were involved in these activities.

8. The Faculty regularly conducts attractive courses for the public, e.g. MS office tools courses, Python programming tools and AI tools, mobile application development courses, typography courses (Associate Professor Trenz, Ing. Haluza, Ph.D., Associate Professor Rybička), additionally, courses focusing on fostering entrepreneurship and business development are offered (Ing. Kučerová, Ph.D.), lectures dealing with personal finance and investments (Ing. Ptáček, Ph.D.), lectures on economic policy (Professor Lacina, Ing. Mádr, Ph.D., Associate Professor Kouba), consumer behaviour (Ing. Antošová, Ph.D.), interpretation of statistical data (Associate Professor Janová) or the impact of ageing and the digital age on society (Associate Professor Rašticová). In recent years, there has been great interest in the area of ESG reporting and CSR (Associate Professor Formánková).

9. The most important charity event, where the public is also informed about the goals and visions of CSR principles, ESG principles and the transition to a circular economy, is the annual “Dobrotrh” event.

10. Popularisation of the results of R&D activities is realised on the Faculty’s website not only through the *News* section but also through the *Selected publications and research results* section, where the most important results of the Faculty are presented not only to the professional public but also to companies.

IMPLEMENTATION OF RECOMMENDATIONS

3.7 Implementation of the recommendations in Module 3

The evaluated unit will briefly describe how it has implemented the recommendations for Module 3 from the previous evaluation period, if applicable.

Maximum 1000 words.

Self-assessment:

Institutional support at the Faculty level is provided by the *Research Centre*, which, among other things, identifies international grant schemes, publishes the information *Bulletin*, manages the website, organises seminars for academic staff focused on describing grant opportunities and providing information on the support, importance and benefits of involving staff, departments and research teams in international grant opportunities. The Faculty envisages a position in the Research Centre dedicated exclusively to foreign grant opportunities, consortium membership offers and support provided in this area. In addition, the Faculty management actively initiates international cooperation by establishing personal contacts with foreign partners at top universities, most recently with partners at The University of Memphis, The University of Chicago Booth School of Business, King's College London and Kedge Business School.

Given the current themes of the *Horizon Europe* programme calls, the departments are taking advantage of their unique specialisations in the social sciences and are involved in projects focusing mainly on bioeconomic modelling and circular economy, e.g. the *Circular Bio-based Europe Joint Undertaking* (CBE-JU) within *Horizon Europe*. The Faculty has also become a member and coordinator of the international network *Bioeast Uni Net*. The Faculty also coordinates the *COST Action: Work Inequalities in Later Life Redefined by Digitalisation (DIGI-net)*, and is involved in other *COST Action* projects and is working on *Visegrad Fund* projects. The social impact of the project activity is determined by the relevance of the topics and the problems being addressed.

The amount of funds acquired from domestic grant schemes increased by more than 50% during the period from 2019–2023. International projects have more than doubled this indicator.

An important motivating element for the expansion of international cooperation and its institutionalisation at the level of the departments was the change in the funding rules that took place at the Faculty in 2023. The Faculty also defined thematic priorities and according to them selected five research teams whose long-term goal is to significantly strengthen excellence in economic research.

Proof of concept activities are supported by internal university-wide schemes. The Faculty has started to cooperate very closely with the *South Moravian Innovation Centre* and the *CzechInvest Agency for Enterprise and Investment Promotion*.

Due to the official rules for evaluating R&D activity results in the Czech Republic, non-bibliometric results of research activities, primarily in the form of software, are being implemented. In the period 2019–2023, the Faculty produced a total of 16 non-bibliometric results.

In order to obtain feedback and information on current trends from external companies and commercial entities, professionally focused events are organised. These events include, for example, *Velvet Innovation Meetup*, the *Cryptonight* conference, *FinTech Roadmap* and others.

The Faculty actively informs the public about its projects and research through various communication channels like professional conferences and seminars, international meetings with partner universities, publications affiliated to the Faculty in prestigious scientific journals, official website, social media and press releases. Thanks to these activities, the Faculty manages to raise awareness of the topics

addressed and their social significance.

To strengthen the soft skills supported by activities such as *Start up MENDELU*, “*Podnikni to!*” or *MENDELU Boost* and to facilitate the transformation of research into results such as patents and licences, the *MENDELU Innovation Hub* is creating the necessary infrastructure. This practice has proven itself at many renowned universities such as Spin-Offs Universitat Wien, Starthub Wageningen University and Research, and Startup support University of Cambridge.

The potential to achieve R&D results other than publications is brought by cooperation with other faculties of the University. These are mainly acquired and solved projects of TA ČR and *Horizon Europe* Programme proposals.

A tool that contributes to improving awareness among the different teams at the University about the topics they are working on is the project database, which records the topics submitted by each faculty.

MENDELU with a significant Faculty representation has become part of the international *Bioeast Uni Netinitiative*, which brings together institutions from Central and Eastern Europe. It aims to promote environmental sustainability and support the circular bioeconomy.

Monitoring of international rankings and evaluation of the university and Faculty is systematically carried out at the university level. The individual indicators entering the international evaluations are newly written into the internal structure of the Faculty from 2023 onwards through new rules for evaluating the performance of individual staff members. Awards in international competitions are supported by other prizes and individual awards based on internal decrees of the Dean.

Records of participation and membership in editorial boards, institutions, review panels are kept at the Faculty and university level and awareness is raised about the importance of these activities. Examples include membership on the boards of journals the Society, the International Journal of Climate Change Strategies and Management, or Population and Environment, as well as associations and professional societies such as the American Economic Association, the Econometric Society, and the Academy of Management.

The Faculty’s PR department was fundamentally restructured in 2023. It currently intensively communicates in media all significant research activity results through a pull rather than push strategy, actively reaching out to academic staff. A list of experts has been created to whom the media can refer in defined areas.

A database of experts is being created at the Faculty, which presents individual researchers and their topics on the Faculty and University websites. The results of their activities are then presented on social networks (Facebook, LinkedIn, Twitter, etc.).

Interdisciplinarity and multidisciplinary research activities of young scientists are supported at the University and Faculty level by internal grant schemes.

The Faculty provides direct contact for academic staff with renowned and globally recognised scientists. Very inspiring and suggestive of opportunities for international cooperation were, among many others, presentations and lectures, which were held at the Faculty by Professor Jack Hou from California State University (*Contemporary Economic Policy* journal), Professor Sushanta Mallick from Queen Mary University of London (*Economic Modelling* journal), or Professor Steven Yamarik from California State University (*Journal of Economic Growth* journal).

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 3

Document name	No. criteria	Location (link in HTML)
The website of the Faculty of Business and Economics	3.1	https://pef.mendelu.cz/en/?psn=0

The international network <i>Bioeast Uni Net</i>	3. 7	https://bio-hub.cz/en/bioeast-twg/twg-bioeconomy-edu/bioeast-uninet-en
South Moravian Innovation Centre	3. 7	https://www.jic.cz/en/
The Business and Investment Development Agency CzechInvest	3. 7	https://www.czechinvest.org/en?force
PEF Research Centre website	3. 7	https://vyzc.pef.mendelu.cz/en/

SELF-EVALUATION REPORT FOR MODULE 3

THE NAME OF THE UNIT BEING EVALUATED: Faculty of Horticulture

FORD: 4 - Agriculture and veterinary sciences

SOCIAL CONTRIBUTION OF THE EVALUATED UNIT

3.1 Introductory information about the unit under evaluation

The evaluated unit will describe its mission and vision and provide a general self-reflection of the societal contribution of R&D&I, along with its long-term goals in the fields it develops. The distribution of research activities by type of research will also be commented on.¹ The evaluated unit will describe its organisational structure and size (staffing, number of students, number of study programmes implemented, etc.) based on the data provided in annex tables 3.1.1 to 3.1.6.

Maximum 1000 words.

This is a non-rated indicator that serves as an introduction to the evaluated unit, providing context for data in indicators 3.2–3.7.

Self-assessment:

The Faculty of Horticulture (FH), based in Lednice, is a key educational and research institution, distinct from other University faculties located in Brno. The historical environment of the Lednice-Valtice area, which has been a UNESCO World Heritage Site since 1996, provides an inspiring framework for teaching and scientific research.

Mission of the Faculty

The Faculty provides top-tier education in horticulture and landscape architecture, emphasising the integration of theory and practice. Activities include national and international research with a multidisciplinary approach. The Faculty is a respected centre of scientific knowledge and an important regional partner, granting it a distinguished position in the Czech Republic.

Reflecting current trends in cultural and economic development, it promotes the sustainable use of resources, the protection of biodiversity and innovative approaches to sustainability that contribute to quality of life.

The region, developed since the time of the Liechtensteins, is distinguished by diverse gene pools of fruit and vine varieties, underlining its research significance. The development of landscape planning, reflecting the specifics of UNESCO, is also important.

The main strategic objectives of the Faculty include:

- Responding to global challenges: The Faculty educates professionals capable of addressing current and future problems related to environmental and social changes.

¹ Basic, applied, contract, artistic research (see Definition of Terms in Methodology HEI2025+).

- Improvement of quality of life: The research and education are focused on the production of high-quality horticultural commodities and thus healthy food, environmental protection and the development of landscape solutions.
- Innovation and sustainability: The Faculty is involved in paradigm shifts in horticulture and landscape architecture, promoting ecological approaches and the protection of biodiversity.
- Regional and international cooperation: The Faculty strengthens its regional links, while increasing its influence in the European and global context.

Vision for future development

The Faculty strives for excellence through a multidisciplinary approach, reflected in its education, research and social engagement. Emphasis is placed on transparent, efficient and high-quality management. Research activities

The Faculty is engaged in a wide range of research activities, which can be divided into three main categories:

- Basic research: It focuses on plant biology, cultivating of new varieties, physiology and ecology.
- Applied research: It focuses on the practical application of scientific knowledge, such as the development of methods for growing and protecting plants, technological innovations in product processing and the design of sustainable landscape solutions.
- Experimental development: Collaboration with industrial partners enables the development of new technologies and processes that have commercial potential.

Regional and international cooperation

One of the strengths of the Faculty is its close cooperation with commercial entities, non-profit organisations and academic institutions (the Fruit Growers Union, the Czech Republic Nursery Association, Czech Florists and Flower Growers Association, the Association for the Establishment and Maintenance of Greenery, the Society for Garden and Landscape Design, the National Wine Centre Valtice, the Association of Winemakers of the Czech Republic and others). The Faculty is involved in national and international projects and exchange programmes, enabling students and academics to gain valuable experience and contribute to the development of scientific knowledge at a global level.

Educational activities and the role of graduates

The Faculty provides education in bachelor's, master's, and doctoral degree programmes, covering the fields of horticulture and landscape architecture, including related disciplines. In the period under review, studies were carried out in 6 bachelor's, 5 master's and 3 doctoral study programmes. Thanks to the emphasis on linking theory with practice, the Faculty's graduates are well-prepared for the job market. They find employment in horticultural companies, design offices, public administration, and the non-profit sector. Their expertise and interdisciplinary collaboration enable them to respond to the complex challenges of modern society.

Contribution to sustainable development

The Faculty contributes to sustainable development not only in the field of horticulture but also in the wider social context. It focuses on organic farming, the protection of natural resources, and the improvement of the environment. It emphasises resource efficiency and innovative approaches that promote biodiversity conservation and the long-term sustainability of ecosystems.

Organisational structure

In terms of organisational structure, the Faculty is divided into ten specialised institutes with their own technical facilities and research capacities including specialised laboratories, greenhouses, technical isolates, and experimental plots. The Faculty comprises ten specialised institutes with modern technical facilities, enabling multidisciplinary research and efficient use of shared equipment. Institutes have their own technical facilities and research capacities including specialised laboratories, greenhouses,

technical isolates, and experimental plots.

Size (staffing, number of students)

In the first year of the evaluation period, the Faculty employed 96 academic and research staff (47 of whom are women). The full team of scientists includes professors, associate professors, assistant professors and PhD students who are actively involved in scientific projects and publications. Gender diversity in teams brings broader perspectives, encourages innovative approaches and improves collaboration between academics and students, which positively influences the quality of projects and creative learning outcomes. In 2019–2023, the Dean of the Faculty of Horticulture was Associate Professor Dr. Ing. Alena Salašová, during the same period, the Vice-Dean for Internationalisation was Ing. Eva Žallmannová, Ph.D., and since 2023, the Vice-Dean for Strategy and Development has been Ing. Jana Čechová, Ph.D., the secretary of the Faculty for the whole evaluated period has been Ing. Eva Spěváková, which demonstrates gender balance also at the level of the Faculty management. In 2023, approximately 966 students were studying at the Faculty of Horticulture in bachelor's, master's and doctoral programmes. In 2024, 465 men and 338 women were admitted to the first year. The Faculty currently offers study programmes focusing on horticulture, landscaping, viticulture and other related fields (6 bachelor's, 5 master's and 4 doctoral programmes).

The Faculty is committed to gender balance across education, research and management. It promotes equal opportunities and inclusive conditions for all, with special focus on removing barriers for women in science and engineering. Gender-sensitive approaches in research and teaching ensure relevance to diverse societal needs and support broader equality.

Table 3.1.1 - Staffing per FTE²

Academic/ Professional position	Total / Of which women					
	2019	2020	2021	2022	2023	Total
Professor	6.2/0.0	4.8/0.0	6.2/0.0	7.0/0.0	7.3/0.0	31.5/0.0
Associate Professor	11.6/3.5	10.4/3.5	12.9/4.9	11.9/3.1	13.2/3.6	60.0/18.6
Assistant Professor	22.9/7.3	23.4/7.3	24.0/7.3	26.6/8.6	29.0/8.7	125.8/39.2
Assistant	5.5/3.8	8.7/6.2	10.2/6.9	8.2/5.2	8.6/6.1	41.2/28.2
R&D Personnel ³	13.2/8.6	1.6/1.0	3.0/2.1	12.9/6.0	5.1/3.4	35.8/21.1
Researchers in other categories ⁴	14.9/5.8	23.1/10.3	21.5/8.2	11.6/4.0	12.6/4.8	83.7/33.1
Technical and economic staff ⁵	44.8/28.0	61.8/40.9	56.8/36.7	56.0/37.8	54.7/38.5	274.1/181.9
Scientific, research and development staff involved in teaching activities	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Early career researchers ⁶	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Total ⁷	119.1/57.0	133.8/69.2	134.6/66.1	134.2/64.7	130.5/65.1	652.2/322.1

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

3.1.2 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2019 (numbers of physical employees and personnel)⁸

Academic/ professional position	Under 29 years		30–39 years old		40–49 years old		50–59 years old		60–69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	3	0	1	0	1	0	2	0
Associate Professor	0	0	3	0	2	0	4	3	5	1	0	0
Assistant Professor	0	0	14	6	14	4	1	0	1	1	0	0
Assistant	4	3	3	3	4	1	1	0	0	0	0	0
R&D Personnel ⁹	5	2	7	5	4	3	2	2	3	2	0	0
Researchers in other categories ¹⁰	5	3	12	4	6	2	5	2	0	0	1	0

² The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full-time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

³ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

⁴ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

⁵ Who participates in the management and support of R&D&I in the institution.

⁶ See Definition of Terms in Methodology HEI2025+.

⁷ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

⁸ The total number of employees/workers as of 31st December of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

⁹ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁰ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

Technical and economic staff ¹¹	7	2	8	4	11	9	18	14	7	2	0	0
Scientific, research and development staff involved in teaching activities	0	0	0	0	0	0	0	0	0	0	0	0
Early career researcher ¹²	0	0	0	0	0	0	0	0	0	0	0	0
Total ¹³	21	10	47	22	44	19	32	21	17	6	3	0

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D Personnel, Researchers in other categories and Technical and economic staff are mutually exclusive, i.e. one staff member is reported in only one category. The categories of scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

3.1.3 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2023 (numbers of physical employees and personnel)¹⁴

Academic/ professional position	Under 29 years		30–39 years old		40–49 years old		50–59 years old		60–69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	2	0	4	0	2	0	1	0
Associate Professor	0	0	3	0	3	1	2	0	7	3	1	0
Assistant Professor	0	0	6	1	25	11	3	0	1	1	1	0
Assistant	2	1	4	3	4	2	3	1	2	1	0	0
R&D Personnel ¹⁵	2	1	1	1	2	2	1	1	1	0	0	0
Researchers in other categories ¹⁶	5	4	9	5	1	0	1	1	0	0	0	0
Technical and economic staff ¹⁷	3	2	10	5	17	11	22	20	8	6	0	0
Scientific, research and development staff involved in teaching activities	0	0	0	0	0	0	0	0	0	0	0	0
Early career researcher ¹⁸	0	0	0	0	0	0	0	0	0	0	0	0
Total ¹⁹	12	8	33	15	54	27	36	23	21	11	3	0

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

¹¹ Who participates in the management and support of R&D&I in the institution.

¹² See Definition of Terms in Methodology HEI2025+.

¹³ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I Personnel, Researchers in other categories and technical and economic staff.

¹⁴ The total number of employees/workers as at 31.12. of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

¹⁵ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁶ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹⁷ Who participates in the management and support of R&D&I in the institution.

¹⁸ See Definition of Terms in Methodology HEI2025+.

¹⁹ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

Table 3.1.4 – Students

Type of study	2019		2020		2021		2022		2023		Total	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Undergraduate	664	444	698	476	692	476	713	507	737	531	3,504	2,434
Master's ²⁰	243	156	192	119	200	128	181	120	182	119	998	642
Doctoral	58	33	65	34	55	24	51	23	47	23	276	137
Lifelong Learning Courses	26	10	26	9	26	9	25	9	25	8	128	45
Total	991	643	981	638	973	637	970	659	991	681	4,906	3,258

Table 3.1.5 – Study programmes in Czech/English

Type of study programme	Total ²¹ / Of which professional study programmes											
	2019		2020		2021		2022		2023		Total	
Undergraduate	4/0	0/0	4/0	0/0	4/0	0/0	4/0	0/0	4/0	0/0	5/0	0/0
Master's	3/1	0/0	3/1	0/0	3/1	0/0	3/1	0/0	3/1	0/0	4/2	0/0
Doctoral	2/1	0/0	2/2	0/0	2/2	0/0	2/2	0/0	2/2	0/0	2/2	0/0
Lifelong Learning courses	1/0	0/0	1/0	0/0	1/0	0/0	1/0	0/0	1/0	0/0	1/0	0/0
Total	9/2	0/0	9/3	0/0	9/3	0/0	9/30	0/0	9/3	0/0	11/4	0/0

Note: For each SP type, enter the number of SPs in Czech language in the first cell and insert the number of SPs in English language after the slash in the same cell (e.g. 15/3), enter the number of professional SPs in Czech language in the second cell and insert the number of professional SPs in English language after the slash. Follow a similar procedure in the last column of the table (Total).

3.1.6 – R&D&I capacities

R&D&I field	FORD	FORD share [%]	Predominant type of research	Total share of industry group [%]
1. Natural Sciences	1.1 Mathematics		Select an item.	24
	1.2 Computer and information sciences		Select an item.	
	1.3 Physical sciences		Select an item.	
	1.4 Chemical sciences		Select an item.	
	1.5 Earth and related environmental sciences	3	Basic Research	
	1.6 Biological sciences	21	Basic Research	
	1.7 Other natural sciences		Select an item.	
2. Engineering and Technology	2.1 Civil engineering		Select an item.	12
	2.2 Electrical engineering, Electronic engineering, Information engineering		Select an item.	
	2.3 Mechanical engineering	1	Basic Research	
	2.4 Chemical engineering		Select an item.	
	2.5 Materials engineering		Select an item.	
	2.6 Medical engineering		Select an item.	
	2.7 Environmental engineering		Select an item.	
	2.8 Environmental biotechnology		Select an item.	
	2.9 Industrial biotechnology		Select an item.	
	2.10 Nanotechnology	2	Basic Research	

²⁰ All master's degree students are listed, regardless of the length of their programme of study.

²¹ The total number of study programmes for which admissions have been announced in a given academic year.

	2.11 Other engineering and technologies	9	Applied Research	
3. Medical and Health Sciences	3.1 Basic medicine		Select an item.	0
	3.2 Clinical medicine		Select an item.	
	3.3 Health sciences		Select an item.	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	55	Basic Research	62
	4.2 Animal and Dairy science		Select an item.	
	4.3 Veterinary science	1	Basic Research	
	4.4 Other agricultural sciences	6	Basic Research	
5. Social Sciences	5.1 Psychology and cognitive sciences		Select an item.	0
	5.2 Economics and Business		Select an item.	
	5.3 Education		Select an item.	
	5.4 Sociology		Select an item.	
	5.5 Law		Select an item.	
	5.6 Political science		Select an item.	
	5.7 Social and economic geography		Select an item.	
	5.8 Media and communications		Select an item.	
	5.9 Other social sciences		Select an item.	
6. Humanities and the Arts	6.1 History and Archaeology		Select an item.	2
	6.2 Languages and Literature		Select an item.	
	6.3 Philosophy, Ethics and Religion		Select an item.	
	6.4 Arts (arts, history of arts, performing arts, music)	2	Applied Research	
	6.5 Other Humanities and the Arts		Select an item.	
Total		100%	–	100%

RECOGNITION BY THE RESEARCH COMMUNITY

3.2 Recognition by the research community

The evaluated unit will briefly comment on its position in the research community. It shall consider individual and other prestigious R&D&I awards, participation of its academic staff in the editorial boards of international scientific journals, elected membership in professional societies, major invited lectures given by the evaluated unit's academic staff abroad or by foreign scientists and other relevant guests at the evaluated unit. Additionally, it will address the involvement of staff in the evaluation of national or European project/programme calls over the period of 2019–2023 based on the data provided in annex tables 3.2.1 to 3.2.5 (max. 10 most relevant items). If necessary, the evaluated unit shall list any additional services to the scientific community that it considers relevant.

Maximum 1000 words.

Self-assessment:

The Faculty is a recognised member of the research community nationally and internationally, with a nearly forty-year tradition. Specialising in the fields of horticulture and landscape architecture, it actively contributes to scientific progress in these areas through intensive involvement in research, international collaborations and professional networks.

International cooperation and prestigious partnerships

Faculty of Horticulture has long been collaborating with leading foreign institutions such as the Université de Reims Champagne-Ardenne (France) in the framework of the Barrande Fellowship Programme 2022 project aimed at protecting grapevines against the GTD disease complex using bioactive substances of botanical origin. Another key partner is the Instituto de Ciencias de la Vid y del Vino (Spain), where the Faculty is involved in research on Grapevine Trunk Diseases (GTD). Cooperation is also ongoing with other major universities, such as Louisiana State University (USA), Slovak University of Agriculture in Nitra (Slovakia), University of Agriculture in Krakow (Poland), University of York (UK) and several Italian universities (Florence, Ancona, Naples Federico II) and institutions (ISVEA srl). These activities include Erasmus+ mobility exchanges, joint projects and the development of new research initiatives.

Prestigious awards and important events

The Faculty actively contributes to the development of the scientific community through the organisation of conferences, participation in international research networks and the provision of professional facilities for student and academic staff exchanges. Its activities make it a respected centre of research and scholarship in its profile areas.

In 2022, it organised the 12th International Workshop on Grapevine Trunk Diseases, which was attended by 133 researchers from 25 countries. The workshop included 61 lectures and 49 poster presentations, which contributed significantly to the international scientific discussion.

The Faculty was also the main organiser of the International Conference of The European Council of Landscape Architecture Schools (ECLAS 2023), which brought a discussion on the current global changes and their impact on landscape architecture. The event was attended by 189 academics, researchers, students and representatives of the wider professional community, government institutions, professional associations and organisations from a total of 30 countries, mainly from Europe, but also from North America, New Zealand and Asia. After the requested lectures of the main invited guests (such as Professor Kristina Hill from UC Berkeley, USA, Dr. Philipp Urech from UTH Zurich, Switzerland), the programme was divided into 6 thematic sessions, in which a total of 71 presentations were given on-site and 19 presentations were given online. The conference included 5 thematic workshops, a Scholaludus, a colloquium of Ph.D. students, Orbis Pictus studies, a panel discussion,

an ECLAS plenary session and other sub-events. In 2023, Professor Ing. Ivar Otruba, CSc. was awarded in memoriam, with the ECLAS Lifetime Achievement Award for his lifetime contribution to landscape architecture.

Associate Professor Ing. Jiří Martinek, Ph.D., was the only florist in the Czech Republic to successfully pass the International Certified Judge in Floristry Design exam in 2023. Passing the exam entitles him to be part of the jury in international floristry competitions. Certification means providing quality and impartial evaluators for national and international floristry competitions, and it also improves the overall level and quality of competitions. The whole process is provided by the international florist association FLORINT with expert partners Aeres University (Netherlands) and FLORNET.

In 2022, the Faculty was awarded the prestigious prize in the category Company: applied research project funded by the Technology Agency of the Czech Republic (TA ČR) entitled *Revitalisation of Agricultural Land in Drought-Prone Areas of the Czech Republic*. The head of the research team was Associate Professor Dr. Ing. Petr Salaš.

A total of three projects by landscape architects from the Faculty succeeded in the Park of the Year competition in 2023. The monument restoration of the Jubilee Park in Znojmo came in second place. The revitalisation of the former barracks area in Vysoké Mýto and the Pod Kalichem forest park in Sušice achieved honourable mention. The authors or co-authors of these projects are Professor Ing. Pavel Šimek, Ph.D., and Associate Professor Ing. Lukáš Štefl, Ph.D.

Involvement in professional boards, societies, editorial boards and projects

The Faculty is a member of international organisations such as the International Society for Horticultural Science (ISHS), the European Council of Landscape Architecture Schools (ECLAS) and the LE:NOTRE Institute. Faculty members serve on the editorial boards of scientific journals such as *Diversity*, *Folia Horticulturae*, *Frontiers in Plant Science*, *Phytopathologia Mediterranea* and others.

Faculty of Horticulture employees represent it in many prestigious scientific and professional societies. Participation in COST programme councils is important, for example, Associate Professor Mgr. Miroslav Baránek, Ph.D., and Associate Professor Ing. Jiří Sochor, Ph.D., are members of several action groups. Associate Professor Ing. Aleš Eichmeier, Ph.D., is not only a member of several COST events, but also the chairman of the International Council on Grapevine Trunk Diseases. The Faculty is also involved in the evaluation of research projects, for example within the Deutsche Forschungsgemeinschaft. Academics and researchers represent the Faculty of Horticulture in a number of scientific and professional societies. The most significant representations include:

- Associate Professor Mgr. Miroslav Baránek, Ph.D. – MC member COST action CA16107, CA22158, CM1406, CA19125
- Associate Professor Ing. Jiří Sochor, Ph.D. – MC member COST action CA15114, CA17111
- Associate Professor Ing. Aleš Eichmeier, Ph.D. – MC member COST action CA22134, Chairman of the International Council on Grapevine Trunk Diseases

Ing. Tomáš Nečas, Ph.D., is involved in A European Genebank Integrated System, specifically in the ECPGR Prunus Working Group (*P. armeniaca*), Professor Ing. Pavel Pavloušek, Ph.D., is involved in the ECPGR *Vitis* Working Group and PIWI international.

The wide range of activities and involvement in international structures confirms the important position of the Faculty of Horticulture within the scientific community and its contribution to the development of the fields of horticulture, landscape, viticulture and ecology.

Table 3.2.1 – Prestigious R&D&I awards granted during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the award	Awarding institution

Ing. Petra Kunovská	Josef Vavroušek Award 2019	Partnership Foundation
Ing. Kamil Prokeš, Ph.D.	Sommelier of the Year of the Czech Republic, 2019 and 2022	Bohemia Sekt Trophée
Professor Ing. Pokluda Robert, Ph.D.	Honorary recognition for contributions to the advancement of science	Czech Academy of Agricultural Sciences
Ing. Eliška Vraspírová	Josef Vavroušek Award 2021	Partnership Foundation
Ing. RNDr. Jaroslav Rožnovský, CSc.	Bronze medal for outstanding contribution to the development of science and research in the agricultural sector	Czech Academy of Agricultural Sciences
Associate Professor Ing. Jiří Martinek, Ph.D.	International Certified Judge in Floristry Design	International Florist Organisation
Ing. Eliška Zezulová	MENDELU Rector's Prize 2023 (Prize for outstanding doctoral students)	Mendel University in Brno
Ing. Tereza Zezulová	1st place in the category Life Sciences and Chemical Sciences	Czech Academy of Sciences and Akademia Publishing House
	MENDELU Rector's Prize 2023 (Prize for outstanding Master's students)	Mendel University in Brno
Professor Ing. Patrik Burg, Ph.D., Ing. Vladimír Mašán, Ph.D., Professor Ing. Pavel Zemánek, Ph.D.	Golden Sickie Award 2023	Ministry of Agriculture and Rural Development of the Slovak Republic

Note: Provide up to 10 examples.

Table 3.2.2 Participation of academic staff of the evaluated unit in editorial boards of international scientific journals during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of scientific journal, ISSN
Associate Professor Mgr. Miroslav Baránek, Ph.D.	Frontiers in Plant Science (SI), 1664-462X
Associate Professor Mgr. Miroslav Baránek, Ph.D.	Czech Journal of Genetics and Plant Breeding, 1805-9325
Professor Ing. Mojmír Baroň, Ph.D.	Horticultural Science, 1805-9333
Associate Professor Ing. Aleš Eichmeier, Ph.D.	Journal of Fungi (SI), 2309-608X
Associate Professor Ing. Aleš Eichmeier, Ph.D.	Phytopathologia Mediterranea (SI), 1593-2095
Associate Professor Ing. Aleš Eichmeier, Ph.D.	Frontiers in Plant Science (SI), 1664-462X
Ing. Tomáš Nečas, Ph.D.	Turkish Journal of Agriculture and Forestry, 1300-011X
Ing. Tomáš Nečas, Ph.D.	Horticultural Science, 1805-9333
Professor Ing. Pavel Pavloušek, Ph.D.	Mitteilungen Klosterneuburg, 0007-5922
Professor Ing. Robert Pokluda, Ph.D.	Folia Horticulturae, 2083-5965

Note: Please provide up to 10 examples of academic staff participation in editorial boards of international scientific journals (e.g. editor, editorial board member, etc.).

Table 3.2.3 The most important invited lectures delivered by the academic staff of the evaluated unit at foreign institutions during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Invited lecture title	Name of host institution, or name of conference or event	Year
Associate Professor Ing. Jarmila Neugebauerová, Ph.D.	Edible Flowers	University of Agriculture in Krakow, Poland	2021
Professor Ing. Robert Pokluda, Ph.D.	Aquaponic culture	University of Frederico II, Naples, Italy	2021
Ing. Radim Klepárník, PhD.	UAVs in digital landscape architecture	Anhalt University of Life Sciences, Germany	2021
Ing. Jozef Sedláček, Ph.D.	Let's talk about Landscape. Landscape planning in European context	Kasetsart University, Bangkok, Thailand	2021

Professor Ing. Patrik Burg, Ph.D.	Modern trends in vineyard mechanization	University of Life Sciences in Lublin, Poland	2022
Associate Professor Ing. Aleš Eichmeier, Ph.D.	Detailed survey of fungal communities of four vineyards with different cultivars located in the Palava region (Czech Republic)	16th Congress of the Mediterranean Phytopathological Union, Limassol, Cyprus	2022
Associate Professor Mgr. Ing. Tomáš Kopta, Ph.D.	Sustainable plant production	MATE (Hungarian University of Agriculture and Life Sciences), Hungary	2022
Professor Ing. Robert Pokluda, Ph.D.	Green infrastructure and Urban agriculture	Louisiana State University, Baton Rouge, USA	2022
Associate Professor Mgr. Miroslav Baránek, Ph.D.	The influence of different stress conditions on DNA methylation and mobilome of grapevine	Bulgarian Academy of Sciences, Sofia. Epigenetic mechanisms of crop adaptation to climate change, Bulgaria	2023
Associate Professor Mgr. Ing. Tomáš Kopta, Ph.D.	Circular Economy and Sustainable Urban Environment	Warsaw University of Life Sciences, Poland	2023

Note: Provide up to 10 examples.

Table 3.2.4 – The most important lectures by foreign scientists and other guests relevant to R&D&I at the evaluated unit during the evaluation period

Name, surname and title(s) of the lecturer	Lecturer's employer at the time of the lecture	Invited lecture title	Year
Dr. Kahtryn Fontenot	Louisiana State University, Baton Rouge, USA	Organic production systems	2019
Prof., Bożena Grażyna Gładyszewska, Ph.D.	University of Life Sciences in Lublin, Poland	Physical instruments and techniques applied to the study of biological materials	2019
Dr. Aryana Kayanush	Louisiana State University, Baton Rouge, USA	Quality and processing of plant products	2019
Dr. Stephane Compant	Austrian Institute of Technology, Austria	The plant endosphere world – bacterial life within plants, Biocontrol of Xylella and its vector in olive trees for integrated pest management	2020
Professor Gianluca Caruso, Ph.D.	University of Federico II, Naples, Italy	Innovation in vegetable production	2022
Professor Davor Kralik, PhD, DSc.	Josip Juraj Strossmayer University of Osijek, Croatia	Biogas stations and by-products in food production as raw materials for biogas production	2022
Dr. hab., Ing. Piotr Salachna	West Pomeranian University of Technology in Szczecin, Poland	Sustainable floral design, New methods, techniques, and mechanics for flower arranging, New "chemical-free" mechanics for floral design	2022
Dr. Audrius Sasnauskas	Lithuanian Research Centre for Agriculture and Forestry, Kaunas, Lithuania	Research of genetic approach in stressors limitation	2022
Professor Florence Fontaine	Université de Reims Champagne-Ardenne, France	Grapevine trunk disease: different strategies to manage them	2023
Jacek Salamon, PhD, DSc.	University of Agriculture in Krakow, Poland	Renewable energy sources for greenhouse heating	2023

Note: Provide up to 10 examples.

Table 3.2.5 – Involvement in the evaluation of national/European research project/programme calls relevant to the R&D&I area at the unit during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the research project/programme call	Name of the contracting authority/guarantor of the project/programme call	Year

Associate Professor Ing. Aleš Eichmeier, Ph.D.	ZÉTA	Technology Agency of the Czech Republic	2019–2023
Professor Ing. Robert Pokluda, Ph.D.	COUNTRY I, COUNTRY II	Ministry of Agriculture of the Czech Republic	2019–2023
Professor Ing. Robert Pokluda, Ph.D.	TREND 4, 5, 6, 9, ZÉTA	Technology Agency of the Czech Republic	2019–2023
Ing. RNDr. Jaroslav Rožnovský, CSc.	COUNTRY I, COUNTRY II	Ministry of Agriculture of the Czech Republic	2019–2023
Associate Professor Dr. Ing. Petr Salaš	VEGA, KEGA	Scientific Grant Agency of the Ministry of Education, Research, Development and Youth of the Slovak Republic and the Slovak Academy of Sciences	2019–2023
Associate Professor Ing. Aleš Eichmeier, Ph.D.	Grant Proposal DA	Deutsche Forschungsgemeinschaft/ German Research Foundation	2020
Ing. Vladimír Mašán, Ph.D.	Environment for Life 6, 7, TREND 6, TREND 9	Technology Agency of the Czech Republic	2022, 2023
Professor Ing. Robert Pokluda, Ph.D.	Innovation in the Agriculture and Food Sector	Research Foundation Flanders, FWO	2022, 2023
Associate Professor Ing. Aleš Eichmeier, Ph.D.	INTER-COST	Ministry of Education, Youth and Sports of the Czech Republic	2023
Associate Professor Ing. Aleš Eichmeier, Ph.D.	Lead Agency (LA)	Grant Agency of the Czech Republic	2023

Note: Provide up to 10 examples.

RESEARCH PROJECTS

3.3 Research projects

The evaluated unit shall list at most 10 (considered most significant by the evaluated unit) research projects/activities (regardless of whether they are supported by public funds or based on contract research²²) that it has implemented or participated in during the period of 2019–2023²³. This should be done from the full list in annex tables (Table 3.3.1-3.3.2)²⁴, regarding particularly the results achieved or the application potential of the projects. The unit should also describe how the research projects contributed to the mission and purpose of the evaluated unit. If the evaluated unit has been a participant in listed project, it shall indicate which other entities were involved and describe its contribution to the project. The interdisciplinary aspects of the projects will also be commented on, along with any collaboration with other units of the evaluated HEI.

Maximum 300 words per project.

Self-assessment:

Among the most important projects of the Faculty of Horticulture in 2019–2023 were mainly research initiatives in the field of horticulture, landscape architecture and cultural heritage conservation.

1. *Utilising New Fruit Species for the Long-Term Maintenance of the Production Potential of Fruit Plantations in the Context of Climate Change*, (QK1910137), provider: Ministry of Agriculture (MZe), duration: 2019–2023, role in the project: coordinator, total allocated funds/means allocated to MENDELU: CZK 18,970,000 CZK/748,323 EUR/7,384,000 CZK/291,282 EUR, researcher for MENDELU: Ing. Tomáš Nečas, Ph.D., annotation: The aim of the project in general terms was to expand the species and especially the varietal composition of cultivated fruit and thus strengthen the competitiveness of the Czech fruit industry through a comprehensive project solution with the following defined solution areas: For promising cultivars, the level of susceptibility to common pathogens damaging fruit plantations was determined, along with phenological data, growth and nursery characteristics, pomological traits, and economic properties. Furthermore, the nutritional properties, shelf life and potential for processing of food product from this fruit were verified. Based on the findings, suitable varieties for the current climatic conditions of the Czech Republic were selected and recommended. The project contributed to the fulfilment of the Faculty's vision by promoting innovation in fruit growing, expanding the range of fruit species and varieties grown and enhancing the adaptability of fruit plantations to changing climatic conditions. This increased the competitiveness of the Czech fruit industry and supported the sustainability of fruit production in the Czech Republic.

2. *Metagenomic Survey of Vineyard Health and Use of GTD Antagonists of the Family Pseudonocardia*, (TJ02000096), provider: TA ČR, duration: 2019–2021, role in the project: coordinator, total allocated funds/means allocated to MENDELU: CZK 2,325,000 CZK/91,716 EUR/1,975,000 CZK/77,909 EUR, researcher for MENDELU: Associate Professor Ing. Aleš Eichmeier, Ph.D., annotation: Increased efficiency in the preparation of healthy grapevine seedlings was achieved by applying the results obtained by elucidating the full spectrum

²² For the definition of contract research for the purposes of evaluation in the HE segments, see Article 2.2.1 of the Community Framework for State Aid for Research, Development and Innovation 2014/C 198/01.

²³ Regardless of whether the projects are completed or still ongoing, provided that at least part of the project was implemented during the evaluation period.

²⁴ The evaluated unit shall only fill tables that are relevant to it.

of endophytic grapevine fungi in young vines using high-throughput sequencing and by improving the protection of grapevine seedlings against Grapevine Trunk Diseases (GTD) using GTD antagonists, particularly bacteria of the *Pseudonocardiaceae* family. The aim of the project, in line with the ZETA programme, was to involve students and young researchers in research, thereby increasing their interest in applied research, closely linking the research plan with the needs of practice and ensuring a balanced representation of women and men in the implementation team. The project has contributed to the development of innovative approaches in the protection and preparation of vine seedlings and has promoted the link between research and practice as well as generational and gender balance in applied research. In line with the vision of the Faculty, the project contributed to the development of innovative methods in the protection and preparation of vine seedlings, supported the link between research and practice and strengthened the involvement of young scientists in applied research, thus contributing to the sustainability and competitiveness of viticulture in the Czech Republic.

3. *Revitalisation of Agricultural Land in Drought-Prone Areas of the Czech Republic*, (TH02030073), provider: TA ČR, duration: 2017–2020, role in the project: coordinator, total allocated funds/means allocated to MENDELU: CZK 11,148,000 CZK/439,763 EUR/3,214,000 CZK/126,785 EUR, researcher for MENDELU: Associate Professor Dr. Ing. Petr Salaš, annotation: The main objective of the project was to use promising technologies to improve the parameters of damaged soils in arid areas of the Czech Republic and to increase biodiversity in these areas, which is in line with the objective R&D&I 1.1.2. The application of high quality lignite from local sources in combination with hydroabsorbents was tested on a model area of degraded soil in the Hodonín region, which allowed to gradually improve the physical and chemical properties of the soil and the conditions for increasing biodiversity. A secondary objective was to test a new technology, WASP, which allows to increase the percentage of seed germination. The project **was awarded the prize: Technology Agency of the Czech Republic Award for 2022** in the Company category. In line with the vision of the Faculty, the project contributed to development of innovative methods for improving the vitality of extensively used areas in drought-prone areas of the Czech Republic. This promoted sustainable management of land and water resources, which is key to adapting to changing climate conditions. The project also strengthened the link between research and practice and contributed to environmental protection through the application of environmentally friendly technologies.

4. *Overlooked Topics in Landscape Architecture for Heritage Conservation Needs*, (DG18P02OVV007), provider: Ministry of Culture, duration: 2018–2022, role in the project: coordinator, total allocated funds/means allocated to MENDELU: CZK 19,993,000 CZK/788,679 EUR/16,446,000 CZK/648,757 EUR, researcher for MENDELU: Associate Professor Ing. Jiří Martinek, Ph.D., annotation: The main objective of the project focused on the field of monuments of garden art was to develop selected tools and methodological procedures necessary for addressing topics that have not yet been satisfactorily treated/resolved. At the same time, the selected themes cause constant problems in the systematic care of garden art monuments and in the application of modern methods that can ensure their functionality. By combining these themes into one project with the common denominator of the above characteristics, methods and tools with high application potential were created. As part of the research topic “History of the use of plants in interiors”, methodological procedures specifying the attributes of cultivation and appropriate presentation of plants in historic interiors have been developed for the needs of heritage conservation. The main objective of the research topic “Flowers and the flower bed” was to formulate recommendations for achieving high authenticity of the restoration of garden art monuments in the field of floral detail. A separate topic was devoted to the creation of methodological tools for assessing the condition and designing measures for

stabilising tree stands in monuments of garden art. Systematic management of vegetation has so far lacked any methodological recommendations. The purpose of the research topic “Historic orangeries, collection greenhouses and plant assortments related to these buildings” is to draw attention to the general loss of awareness of the importance of the subject. The aim of the research activity was to create tools for the identification and protection of this specific segment of cultural heritage. “Gardeners and other personalities of the horticultural field, their influence on contemporary garden design” was a research topic, the aim of which was, among other things, to elaborate the characteristics of the field’s contemporary scene and its main actors. The project contributed to the development of professional practices in the field of landscape architecture and conservation, interdisciplinary cooperation, strengthened theoretical research, practical applications in the protection and restoration of cultural heritage.

5. *Viticulture and Winemaking for the Preservation and Restoration of the Cultural Identity of Wine-growing Regions in Moravia*, (DG16P02R017), provider: Ministry of Culture, duration: 2016–2020, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 20,739,000 CZK/818,107 EUR/12,287,000 CZK/484,694 EUR, researcher for MENDELU: Associate Professor Ing. Jiří Sochor, Ph.D., annotation: The aim of the project was to make a significant contribution to the preservation of the national cultural heritage in the field of wine culture, to map, preserve and verify traditional wine-making technologies (including the necessary microorganisms) linked to the regional and local customs of wine-growing communities. With the rise of the *terroir* phenomenon in viticulture and winemaking, or in society in general, interest in the origin, originality and authenticity of the product is coming to the fore instead of industrial uniformity (as evidenced by the growing interest in WOC wines (Wines of Original Certification) in the Czech Republic). This process has been accompanied by the development of local and regional identity, not only of the vine growers and winegrowers themselves, but of entire communities of wine-growing communities. It has been shown that the term *terroir* is not only determined by natural and technological parameters, but also includes the cultural sphere of socio-economic structures, institutions and customs that have changed over time. The concept of *terroir* thus applies not only to natural and agricultural sciences, but also to the social and human sciences. The main objective of the project was therefore to study the identity of wine regions in relation to *terroir* and to provide tools for its preservation and development. Both in a material sense (i.e. by separating typical regional yeasts and creating a collection of typical and local varieties) and in a cultural sense (to identify the historical roots of *terroir* and determine its place in the tradition of wine regions in Moravia, to study architectural elements in the landscape with an emphasis on the cultural values of the area in relation to the focus of the project, to document local traditions, customs and folklore). Overall, the project has contributed to the preservation of the material and cultural heritage of wine regions and their uniqueness in the context of the global market.

The above projects have contributed significantly to the mission of the evaluated unit, which focuses on research and development in horticultural sciences, but also on the preservation of cultural landscapes and historic buildings. All projects were interdisciplinary and were implemented in collaboration with other institutions, which promoted synergistic use of expertise in different fields. The projects were not implemented in cooperation with other MENDELU units.

Table 3.3.1 Projects supported by public funds

In the role of beneficiary						
Provider ²⁵	Project name	Support (in thousands CZK/EUR) ²⁶				
		2019	2020	2021	2022	2023
MK0	Czech Garden Art and Landscape Architecture in the Context of European Development	3,572/140,907	3,654/144,142	0/0	0/0	0/0
MK0	Viticulture and Winemaking for the Preservation and Restoration of the Cultural Identity of Wine-growing Regions in Moravia	2,972/117,239	3,074/121,262	0/0	0/0	0/0
MK0	Historical Cultural Landscape under Threat and its Vision in the Context of Contemporary Changes	0/0	0/0	0/0	0/0	1,641/64,734
MK0	History of the Use and Cultivation of Medicinal Plants as Part of National and Cultural Identity	0/0	0/0	0/0	0/0	916/36,134
MK0	Identification, Interpretation and Typology of the Material Structure of Monuments of Garden Art	0/0	0/0	0/0	0/0	1,392/54,911
MK0	Cultural, Historical and Natural Aspects of Terroir in the Czech Republic	0/0	0/0	0/0	0/0	1,687/66,548
TA0	Metagenomic Survey of Vineyard Health and Use of GTD Antagonists of the Family Pseudonocardiaceae	535/21,105	1,336/52,702	363/14,320	0/0	0/0
TA0	Possibilities of Using Precision Farming Methods for the Detection of Grapevine Trunk Disease Complex	650/ 25,641	650/25,641	710/28,008	0/0	0/0
MSM	New Approaches for Reducing the Negative Economic Impact of Plant Pathogens of the Genus Xanthomonas	762/ 30,059	762/30,059	0/0	0/0	0/0
MSM	Protection of Vines Against the GTD Complex Using Bioactive Substances of Botanical Origin	0/0	0/0	0/0	78/3,077	78/3,077
MK0	Overlooked Topics in Landscape Architecture for Heritage Conservation Needs	4,375/172,584	3,983/157,120	3,919/ 154,596	3,547/ 139,921	0/0
MK0	Manorial Farms of Bohemia, Moravia, and Silesia and Their Harmonious Cultural Landscape – Identification and Contemporary Interpretation of Cultural Values	2,733/ 107,811	2,773/ 109,389	3,438/ 135,621	2,430/ 95,858	0/0
TA0	Revitalisation of Agricultural Land in Drought-Prone Areas of the Czech Republic	803/31,677	813/32,071	0/0	0/0	0/0
TA0	Reducing Pesticide Use in Grapevine Conservation Through Efficient Breeding and Molecular Genetics	0/0	0/0	0/0	0/0	1,460/ 57,594
TA0	Spontaneous Fermentation in Wine Production as a Controllable Technology	1,000/ 39,448	600/23,669	0/0	0/0	0/0
MZE	Sustainability of Horticultural Practices Using Targeted Applications and Robotic Platforms	0/0	0/0	0/0	0/0	2,000/ 78,895

²⁵ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

MSM	Influence of Microbial Biodiversity on Soil Conservation in an Agricultural Cropping System	0/0	20/789	23/907	43/1,696	0/0
TA0	Delineation of Green Infrastructure in Spatial Planning Documentation, Especially in the Spatial Plan, as a Tool for Strengthening Ecosystem Services in the Territory	173/6,824	534/21,065	40/1,578	0/0	0/0
MZE	Utilising the Innovative Potential of Nanotechnology to Increase the Profitability of Selected Agricultural Production Areas	0/0	0/0	0/0	2,426/ 95,700	2,432/ 95,937
MZE	Utilising New Fruit Species for the Long-Term Maintenance of the Production Potential of Fruit Plantations in the Context of Climate Change	1,437/ 56,686	1,580/ 62,327	1,580/ 62,327	1,508/ 59,487	1,279/ 50,454
TA0	Development of Detection Systems for Pathogenic Bacteria in Tomatoes, Peppers, and Cucumbers Using Molecular Biology Method Real-Time PCR	1,380/ 54,438	0/0	0/0	0/0	0/0
TA0	Development of Detection Systems for Vegetable Pathogens of the Apiaceae Family by Molecular Biological Methods	1,089/ 42,959	2,261/89,191	836/32,978	0/0	0/0
MSM	Development of New Materials Suitable for 3D Printing with Antimicrobial Properties (3D ANTIMICROB)	1,625/ 64,103	500/19,724	0/0	0/0	0/0
MSM	Research Infrastructure for Young Scientists	30,220/ 1,192,110	10,000/ 394,477	5,469/ 215,740	0/0	0/0
MK0	Important and Unresolved Topics in Landscape Architecture	0/0	0/0	0/0	0/0	4,750/ 187,377
MK0	Garden and Architectural Design During the Period of Totalitarian Regimes in the Years 1939–1989 in the Czech Republic	1,858/ 73,294	1,615/ 63,708	1,382/ 54,517	1,244/ 49,073	0/0
Total		50,809/ 2,004,300	34,155/ 1,347,337	17,760/ 700,592	11,276/ 444,813	17,635/ 695,661
In the role of another participant						
Provider ²⁷	Project name	Support (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
MZE	Analysis and Modification of Compost Application Schemes Aimed at Strengthening the Soil Protection System in the Context of Stabilising the Production Capacity	0/0	0/0	0/0	830/ 32,742	830/ 32,742
MK0	Identification and Presentation of the Heritage Potential of the Historical Cultural Landscape of the Czech Republic	998/ 39,369	945/37,278	0/0	0/0	0/0
MZE	Identification of Causes of Premature Dieback and its Reduction in Apricot Cultivation in the Czech Republic.	550/ 21,696	459/18,107	459/18,107	0/0	0/0
MZE	Implementation of Ecosystem Services with a Focus on Water Balance in Viticulture Practice	0/0	0/0	690/27,219	690/ 27,219	690/ 27,219
MZE	Innovations in Integrated and Organic Fruit and Vine Production in Response to Newly Emerging Harmful Organism Species	0/0	0/0	0/0	600/ 23,669	535/ 21,105

²⁷ Ibid.

MZE	Innovations in Integrated Production of Thermophilic Fruit with a Focus on the Health Status of Production Plantings and Stone Fruit Propagation Material	700/ 27,613	770/30,375	770/30,375	0/0	0/0
MZE	Innovative Apple Orchard Management Practices to Increase the Competitiveness of Domestic Production	0/0	0/0	0/0	0/0	400/ 15,779
MZE	Foods High in Sulforaphane	475/ 18,738	510/20,118	510/20,118	490/ 19,329	0/0
MVO	Establishment of Methods for Assessing Urban Climate, Especially the Heat Island, Identification of Procedures and Proposal of Measures to Reduce the Negative Impacts of Meteorological Extremes on Inhabitants and the Environment, Especially in Large Urban Agglomerations	0/0	1,013/ 39,961	1,367/ 53,925	0/0	0/0
TA0	Technology for Point Application of Organic Matter to the Root System of Perennial Crops	0/0	2,379/ 93,846	631/24,892	629/ 24,813	630/ 24,852
TA0	Use of Vines for Research and Development of an Adjuvant for Ecological Plant Protection	497/ 19,606	497/ 19,606	0/0	0/0	0/0
TA0	Utilisation of Temperature Monitoring in the Forecasting and Protection Against Powdery Mildew in Grapevines	589/ 23,235	588/23,195	587/23,156	591/ 23,314	0/0
TA0	Development and Validation of Equipment for Deep Incorporation of Organic Matter into the Soil in Vineyards and Orchards	456/ 17,988	492/19,408	0/0	0/0	0/0
MIT	Research and Development of Growth LED Luminaires with Dynamic Spectrum Control	0/0	0/0	0/0	1,543/ 60,868	1,193/ 47,061
TA0	Healthy Buxus – the Basis for Ecologically Sustainable Care of Historic Gardens and Parks, and Public Green Spaces	0/0	0/0	0/0	712/ 28,087	716/ 28,245
Total		4,265/ 168,245	5,511/ 217,396	5,014/ 197,791	6,085/ 240,039	4,994/ 197,002

Data source and provider abbreviations: Central Register of Projects: <https://www.isvavai.cz/cep>

Table 3.3.2 – Contract research activities

Client ²⁸	Activity name	Revenue (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
Ministry of Agriculture	Additional activities	0/0	195/7,692	0/0	0/0	0/0
NEA biotek s.r.o.	Additional Activity – Verifying the Possibility of Using the Lalitha Preparation on Selected Horticultural Crops	0/0	19/750	72/2,840	0/0	0/0
KERA GREEN s.r.o.	Additional Activity – Verifying the Possibility of Using a Natural Substance-Based Preparation on Selected Horticultural Crops	0/0	60/2,367	105/4,142	0/0	105/4,142
Petr Divácký Šardice	Additional Activity – Verifying the Possibilities of Using Vermicompost on Selected Horticultural Crops	0/0	0/0	0/0	0/0	25/986
Silesian University in Opava	Concept of a Joint Study Programme – Educational Activities of the Eden Silesia Project – Educational and Research Park	0/0	0/0	0/0	390/15,385	0/0
Municipality Mikulčice	Břízky Park in Mikulčice – Study and Expert Assessment for Greenery Implementation After the Tornado of 24 June 2021	0/0	0/0	0/0	0/0	160/6,312
David Smetana, Svobodné Dvory	Support for the Development of New Procedures	746/29,428	0/0	0/0	0/0	0/0
LIPINA Agro, Hrubá Vrbka	Support for the Development of New Products, Processes, and Technologies in Agricultural Primary Production	248/9,783	4/158	0/0	0/0	0/0
VYKRUT, garden services	Preparation for the Development of New Sector Standards for Landscape Architecture through Contract Research.	0/0	0/0	5/197	102/4,024	0/0
Envi Product, s.r.o.	Implementation of a Field Experiment with HUMANIC Agro Preparations on Selected Vegetable Species	0/0	0/0	70/2,761	0/0	0/0
MK OBCHOD	Implementation of a Field Experiment with Samples of Selected Organic Fertilisers on Selected Crop Species	0/0	0/0	230/9,073	0/0	0/0
Institute of Archaeology of the Czech Academy of Sciences, Brno, public research institution	Contract Research – Prospecting of Protohistoric Sites – Acquisition, Processing, and Interpretation of Aerial Multispectral Drone Images.	0/0	43/1,696	37/1,460	0/0	0/0
Brickyard, a.s., Olomouc	Study of Brickworks Olomouc	0/0	0/0	0/0	0/0	93/3,669
SEVA – FLORA s.r.o.	Testing Fruit Tree Varieties for the Presence of Viruses	0/0	489/ 19,290	408/ 16,095	268/ 10,572	243/9,586
OVOČNÁ A OKRASNÁ ŠKŮLKA BIELE KARPATY s. r. o. (SK)	Testing Plant Material for the Presence of Phytoplasms	0/0	0/0	0/0	0/0	24/947
Landesverband der Absolventen landwirtschaftlicher Lehranstalten in NÖ (D)	Testing Plant Material for the Presence of Phytoplasms, Seed Collection	0/0	0/0	0/0	0/0	75/2,959
CEZEA Šlechtitelská stanice, a.s.	Yield Trials of Silage Maize	50/1,972	47/1,854	55/2,170	56/2,209	0/0

²⁸ If the client is from abroad, indicate in brackets the country of origin of the client.

STROMMY COMPANY	Research and Development of an Intelligent Blue-Green Insulation and Cooling System for Building Envelopes	0/0	0/0	0/0	106/4,181	164/6,469
Lovochemie, a.s.	Establishment of an Experiment and Implementation of Experimental Measurements to Verify the Effect of Mineral Fertiliser Coated with a Polymer Layer	0/0	0/0	75/2,959	54/2,130	82/3,235
City of Milovice	Development of Specific Documentation for Nature-Based Approaches to Urban Greenery Restoration, Respecting Species Diversity and the Current Needs of Urban Development, through Contract Research.	0/0	222/8,757	123/4,852	0/0	0/0
City of Břeclav	Development of Specific Project Documentation for the Built-Up Area of the City, Comprising Three Cadastral Areas: Břeclav, Charvátská Nová Ves and Poštorná in the Form of Contract Research.	0/0	361/ 14,241	87/3,432	0/0	0/0
Total		1,044/ 41,183	1,440/ 56,805	1,266/ 49,941	975/ 38,462	782/ 30,848

Note: List and describe contract research activities with a revenue in a given calendar year, regardless of the amount of financial revenue.

3.4 Research results with existing or prospective impact on society

The evaluated unit shall briefly comment on a maximum of 10 (considered most significant by the evaluated unit) research results already applied or realistically heading towards application during the period of 2019–2023, based on the overview annex table 3.4.1 (it is recommended to indicate results with a link to projects listed in indicator 3.3). The evaluated unit must demonstrate in its description that the research results have led or will soon lead to positive impacts²⁹, on society (e.g. description of how the results are used by various users, the range of persons/institutions for which the result is relevant, measurable economic impacts, etc.). The evaluated entity shall indicate in its commentary whether the gender dimension is considered in these results and discuss the impacts of the results regarding sustainability.

Maximum range 300 words/result.

Self-assessment:

Applied results were mainly achieved through research projects and contract research in cooperation with the application sector. The total amount of data obtained during the period under review was: 1 European patent, 9 Czech patents, 44 utility models, 29 certified methodologies and 6 varieties.

The Most Important Outcomes Include:

1. BAROŇ, M., KUMŠTA, M., LICEK, J. **Use of a Mixture of MediumChain Fatty Acids to Reduce the Content of Carbonyl Compounds in Wine**. Patent; No. document: 309771. The research brings technology to improve wine quality by reducing the content of undesirable carbonyl compounds that affect the taste and stability of wine. This innovation is important for winemaking companies seeking to improve the quality of their products. Improving the quality of wine can increase its market value, which brings economic benefits. The results have significant sustainability implications as they eliminate the need for additional chemicals to stabilise the wine. The patent enables the reduction of undesirable carbonyl compounds in wine, which can negatively affect its taste and aroma. In this way, it contributed to the optimisation of the technological procedures of wine production and ensuring its higher quality. It has significantly supported research focused on innovative methods that can enhance the sensory properties of wine and extend its shelf life. In the context of the vision of Faculty of Horticulture, the patent has contributed to sustainability of viticulture by helping to improve wine production without the use of chemical additives, aligning with the Faculty's goals of ecological and efficient agriculture. It also promotes applied research and the linking of scientific innovation with the practice of wine regions, which contributes to their competitiveness and development.

2. HÍC, P., BALÍK, J., KULICHOVÁ, J., ŠNURKOVIČ, P., HOUSKA, M., STROHALM, J., LANDFELD, A., TŘÍŠKA, J., VRCHOTOVA, N. **Beer or Beer-Based Beverage Containing Lignans and Method of Production**. European patent; document No.: EP3313973. The patent brings innovation in the food and beverage industry by adding lignans (natural antioxidants) to beer beverages. The resulting product is attractive both to consumers looking for healthier alternatives and to breweries looking to offer new types of products. Economic impacts include the potential for new markets and increased demand for healthier drinks. Sustainability is promoted by using natural raw materials and reducing the use of artificial additives. The patent directly reflects the Faculty's vision, which includes promoting innovative technologies in the agriculture, food and beverage industry, sustainability and the development of regional economies. Promoting health through development of functional foods and beverages is another important aspect of achieving this vision. The patent also supports the involvement of the academic community in practical solutions and links scientific knowledge with market needs, thus strengthening the role of the Faculty as a centre of excellence in applied research.

²⁹ See Terms definition.

3. NOVOTNÝ, D., BARÁNEK, M., EICHMEIER, A., SALAVA, J., PEŇÁZOVÁ, E., PEČENKA, J., KOUDELA, M. **Diagnosics and Protection Measures Against Selected Harmful Microorganisms in Cabbage.** Certified methodology applied; ISBN: 978-80-7427-291-2. The result contributes to the protection of vegetable crops, especially cabbage, against harmful microorganisms. Innovation is key for farmers and horticultural companies involved in the production of this crop. The economic benefits are reduced losses due to disease and improved crop quality. Sustainability is supported by the fact that the products are environmentally friendly and reduce the need for chemical pesticides. The methodology has contributed to sustainable agricultural development and environmentally sound food production, which are key pillars of the vision of the Faculty of Horticulture. It supported innovative approaches to crop protection, increased the competitiveness of agriculture in the Czech Republic and contributed to the training of experts who can further implement and develop these practices. Overall, it strengthened the Faculty's position as a leader in applied research for modern and sustainable agriculture.
4. SALAŠ, P., VYMYSLICKÝ, T., PEKAŘ, M., LOŠÁK, M. **Preparation for Revitalisation of Soil Environment Affected by Drought.** Utility Model; Document No.: 34750. The research has led to the development of a preparation that increases the drought resistance of soils, thereby supporting sustainable agriculture in areas that face frequent droughts. The results are crucial for farmers and landscape managers who need to adapt their practices to climate change. Measurable impacts are mainly in terms of higher crop yields in dry areas and increased long-term sustainability of agriculture. The utility model is a concrete example of an innovative approach to soil conservation and adaptation to climate challenges, which reflects the long-term vision of the Faculty of Horticulture. It has contributed to the promotion of organic and sustainable agriculture, linked scientific research with practice and strengthened the position of the Faculty as a leader in applied research and technology. This also supported the training of professionals who can implement and disseminate these solutions in agricultural practice.
5. BAROŇ, M., SOCHOR J., KUMŠTA, M. **A Mixture of Purified Fermentation Gases from Grape Must, a Filtration System for Purification, and a Carbonated Beverage Enriched with These Gases.** Utility Model; No.: 36582. The result is an innovative use of fermentation gases from wine production, which after purification are used to produce carbonated beverages. This process has the potential to reduce waste gas emissions from winemaking and contributes to sustainable production. Wineries can use this technology to increase their competitiveness and ecological footprint. The utility model reflects the commitment of the Faculty of Horticulture to sustainable and innovative approaches in agriculture and food processing. It has contributed to the development of environmentally friendly technologies, promoted the use of natural resources and by-products, and at the same time created new opportunities for commercialisation and increased competitiveness of the regional wine industry. It has also strengthened the position of the Faculty as a centre of applied research that brings practical solutions to the challenges of our time.
6. SALAŠ, P., LOŠÁK, M., VYMYSLICKÝ, T., PEKAŘ, M., ROŽNOVSKÝ, J., RAAB, S., ENEV, V., KNOTOVÁ, D., VLK, R., ŠEVČÍKOVÁ, M. **Use of Coated Seeds for Establishing Grass and Clover Crops.** Certified methodology; ISBN: 9788075097521. The methodology contributes to increasing the efficiency of plant establishment in agriculture, especially on less fertile soils. The coated seed protects the seeds during germination and increases their resistance to adverse conditions. This approach is relevant to farmers and agrotechnical companies, and can have measurable economic impacts through higher success rates of crop emergence and growth. This methodology has contributed to fulfilling the vision of the Faculty by promoting ecological, sustainable and innovative approaches to agricultural production. It strengthened the role of the Faculty of Horticulture as a centre of excellence in applied research and education, creating a bridge between academia and practice. The emphasis on sustainable land management and adaptation to changing climatic conditions is a key element of its contribution. The methodology has thus improved the efficiency and environmental friendliness of

agricultural processes in line with the needs of contemporary agriculture.

7. SALAŠ, P., VYMYSICKÝ, T., LOŠÁK, M., PEKAŘ, M., BURGOVÁ, J., CHOVANČÍKOVÁ, E., ENEV, V., KNOTOVÁ, D., ROŽNOVSKÝ, J., FRYDRYCH, J., KALINA, M., PELIKÁN, J. **Use of Soil Amendments to Improve the Vitality of Extensively Used Areas in Drought-Prone Areas of the Czech Republic.**

Certified methodology; ISBN: 978-80-7509-768-2. The methodology has contributed to development of soil amendments that improve soil resistance to drought and thus increase the sustainability of agricultural areas. The results are important for farmers and forestry in regions affected by climate change. Economic impacts include increasing yields on less fertile soils and protecting agricultural production from the negative effects of climate change. The methodology contributed to the vision of the Faculty of Horticulture by promoting sustainable land management and adaptation to climate change. Strengthened the Faculty's position as a centre of excellence in applied research focused on environmentally friendly and innovative approaches. It also supported the development of regional practices and raised awareness of the importance of soil and water conservation in drought-prone areas, thus contributing to the sustainable development of agriculture in the Czech Republic.

8. MAŠÁN, V., BURG, P., NEDOROST, L. **Equipment for Seed and Bulb Disinfection.** Utility Model; No.: 36902. The development of the equipment brings innovation to improve hygiene and protection of plant material from pathogens, contributing to higher quality production in horticulture and agriculture. The result is particularly relevant for growers and horticultural companies facing challenges in the field of plant diseases. Measurable impacts are higher cultivation success and protection of seeds from contamination. Sustainability is promoted by reducing the need for chemical pesticides. The utility model has contributed to the vision of the Faculty of Horticulture by promoting environmentally friendly, efficient and innovative approaches to plant protection. It has strengthened sustainable agriculture, linking scientific research to practice and developing technologies that respond to today's agricultural challenges. The Utility Model also strengthens the Faculty's position as a leader in applied research focused on modern and environmentally friendly agricultural technologies.

The research results of the Faculty of Horticulture presented in this review show a clear positive impact on the sustainability of agriculture, food processing and environmental protection. The gender dimension was not systematically reflected in the individual results, but the economic and social impacts of these results are universal and contribute to equality of opportunity in all areas of application of the results.

Table 3.4.1 – Overview of research results in the period under evaluation

Type of result ³⁰	Year of application	Name
Certified methodology	2019	Diagnostics and Protection Measures Against Selected Harmful Microorganisms in Cabbage
Pilot Plant	2019	Use of Soil Amendments to Improve the Vitality of Dry Soils
Certified methodology	2020	Use of Coated Seeds for Establishing Grass and Clover Crops
Utility Model	2021	Preparation for Revitalisation of Soil Environment Affected by Drought
European patent	2022	Beer and Beer-Based Beverage Containing Lignans, and Method of Their Production
Utility Model	2022	A Mixture of Purified Fermentation Gases from Grape Must, a Filtration System for Purification, and a Carbonated Beverage Enriched with These Gases
Patent	2023	Use of a Mixture of Medium-Chain Fatty Acids to Reduce the Content of Carbonyl Compounds in Wine
Utility Model	2023	Equipment for Seed and Bulb Disinfection

Note 1: Please list and describe the results already applied in practice or heading towards application in practice with existing or prospective impact on the society (e.g. domestic or foreign patents, sold licenses, spin-offs, prototypes, varieties and breeds, methodologies, significant analyses, surveys, expert outputs for policymaking or other forms of non-publication outputs, etc.). Indirect results of research, development and creative activities with documented societal impact, e.g. expert activities, services to the public/government/scientific community, may also be reported.

³⁰ Specify the specific type of result. Add rows as needed.

TRANSFER OF RESULTS INTO PRACTICE

3.5 Transfer of results into practice

The evaluated unit shall briefly describe its system for transferring results into practice. It shall also indicate up to five of the most typical users of its results, whether in the university environment or in the non-university application/corporate sphere, detailing how it collaborates with them and how it seeks out new users (using a maximum of five specific examples).

It will also indicate whether and how it commercialises R&D&I results (e.g. selling licences, setting up start-up or spin-off companies, etc.)³¹, providing brief description of commercialisation methods used. The effectiveness of the transfer of results and the commercialisation of R&D&I results will be described using a selection of results (max. five) listed in annex table (Table 3.4.1).³²

Additionally, the evaluated unit shall briefly comment on the funds received during the period of 2019–2023 from non-public, non-grant sources (e.g. licences sold, spin-off revenues, donations, etc.). A full summary shall be provided in annex table (Table 3.5.1).

Maximum 500 words plus 200 words for each provided example of finding a new user of results and commercialization.

Self-assessment:

System for transferring results into practice

The Faculty uses a systematic approach to the transfer of results into practice, which includes close cooperation with industry, agricultural enterprises, small and medium-sized companies and other application partners. This system involves developing innovative technologies and processes, testing them in collaboration with users, and then optimising them based on their feedback. Cooperation with users of the results is carried out both through contract research and direct technology transfer, and is supported by participation in professional seminars, trade fairs and conferences. The system for actively seeking new users includes regular consultations with experts from industry, agriculture and food industry, networking at trade fairs and through technology platforms. An important role is played by [MENDELU Technology Transfer Department](#), which ensures and mediates communication between scientists and academics of the faculty and practice. The most significant achievement in technology transfer was the utility model A Mixture of Purified Fermentation Gases from Grape Must, a Filtration System for Purification, and a Carbonated Beverage Enriched with These Gases. The licence was sold for CZK 4,247,000. EUR 167,535. The Institute of Viticulture and Enology at the Faculty of Horticulture received the “Achievement of the Year 2021” award for the implementation of an innovative project focused on the reuse of fermentation gases. License agreements for the sale of apricot varieties developed by the institute are concluded through a German distributor [Artevos](#) and [The Holovously Fruit Growers Research and Breeding Institute](#). Cooperation with companies is also supported by project calls for proposals from grant agencies NAZV or TA ČR.

Typical Users of the Results

1. **Winemakers** – collaborate on the implementation of research results related to wine and fermentation.
2. **Agricultural farms** – use research results in the field of soil revitalisation and efficient planting of crops.

³¹ In the case of military HEIs, their specific position is taken into account when evaluating the commercialisation/evaluation of R&D&I results.

³² If the commercialisation of R&D&I results is carried out in this way.

3. **Food companies** – benefit from innovations in the production of beverages such as carbonated beverages from fermentation gases or beverages containing lignans, production of spreads, beer additives, cider production, etc.
4. **Horticultural companies** – collaborate in the development of seed and bulb disinfectants, testing of new technologies, development of LED lights for vegetable cultivation, improvement of aquaponics technologies and improvement of horticultural mechanisation.
5. **Specialist plant protection institutions** – these organisations use innovative diagnostic tools to protect plants from harmful microorganisms.

In Section 3.3.2, the specific companies for which contract research was carried out are listed in detail. Contract research well illustrates the disciplines in which the Faculty of Horticulture excels.

New users of the results are sought by the faculty through industry and agricultural associations, based on the results of research focused on current challenges (e.g. climate change, the need for ecological solutions). The Faculty cooperates very closely with [MENDELU Technology Transfer Department](#), jointly seeking application partners.

The Faculty **commercialises** its results primarily through the sale of licenses and contract research. Commercialisation includes collaboration with partner companies and the sale of licenses for the use of research results. The most strategically significant revenues from contract research in the period under review include contracts with the company SEVA – FLORA s.r.o. (CZK 1,408,000 CZK/EUR 55,542), the city of Breclav (448,000 CZK/17,673 EUR) or the company KERA GREEN s.r.o. (CZK 270,000 EUR 10,651).

The Faculty also received funding from **non-public sources**, from the sale of licenses for innovative technologies and contract research, especially in the field of agricultural innovation and food processing. In addition, it has received financial resources from donations. It was about financing science, education, and the comprehensive development of the University and its students.

Examples of concrete R&D&I results

1. A Mixture of Purified Fermentation Gases from Grape Must, a Filtration System for Purification, and a Carbonated Beverage Enriched with These Gases

The result (Utility Model No. 36582) represents an innovation in the field of wine fermentation using fermentation gases for the production of carbonated beverages. The cooperation takes place with wineries that are interested in ecological and innovative solutions in production. The utility model licence was sold for CZK 4,247,000. /167,535 EUR).

2. Use of Coated Seeds for Establishing Grass and Clover Crops

The result (Certified methodology, ISBN 9788075097521) focuses on increasing the efficiency of establishing crops, with the results being particularly useful in agricultural enterprises. The result can be commercialised through direct licensing of seed and technology for its application.

3. Use of a Mixture of Medium-Chain Fatty Acids to Reduce the Content of Carbonyl Compounds in Wine

The innovation (Patent, Document No. 309771) improves the quality of wine and reduces the content of undesirable substances. The research results are licensed to winemaking companies, allowing the implementation of this technology directly in the production process. The innovation has been licensed so far with only one license in 2024, in the amount of CZK 49,000. /1,933 EUR). The licence agreement was concluded with the company Vinný dům, spol. s r.o.

4. Preparation for Revitalisation of Soil Environment Affected by Drought

Research has provided solutions for improving soil vitality in drought-affected areas. The results (Utility Model Document No. 34750) are used by agricultural and forestry entities, **which implement the recommended methods** and preparations for soil restoration.

5. Use of Soil Amendments to Improve the Vitality of Extensively Used Areas in Drought-Prone Areas of the Czech Republic

Research contributes to the sustainability of agriculture in drought-affected areas. Commercialisation (Certified Methodology ISBN 978-80-7509-768-2) can be through licensing and partnership agreements with the producers of these substances who provide their distribution.

Table 3.5.1 – Summary of non-public revenues received during the period under evaluation

Type of revenue	Revenue (in thousands CZK/EUR)				
	2019	2020	2021	2022	2023
Donations	1,045/41,223	943/37,199	693/27,337	764/30,138	722/28,481
Licence agreement relating to the utility model “A Mixture of Purified Fermentation Gases from Grape Must, a Filtration System for Purification, and a Carbonated Beverage Enriched with These Gases” – company Vinný dům spol. s r.o.	0/0	0/0	0/0	4,247/167,535	0/0
Total	1,045/41,223	943/37,199	693/27,337	5,011/197,673	722/28,481

Note: Enter funds raised for R&D&I from non-public sources besides grants or contract research (e.g. licences sold, spin-off company revenues, donations, etc.) in the calendar year.

POPULARIZATION OF VAVAI

3.6 The most important activities in the field of popularization of R&D&I and communication with the public

The evaluated unit shall briefly describe its main activities related to the popularisation of R&D&I and communication with the public (e.g. popularisation lectures, citizen science initiatives, etc.) during the period of 2019–2023 and provide up to 10 examples that it considers the most significant.

Maximum 500 words plus 200 words for each example given.

Self-assessment:

In 2019–2023, the Faculty actively contributed to the popularisation of science and research and communication with the general public through several key initiatives:

Celebration of 200 years since the birth of Gregor Johann Mendel: The Faculty participated in international celebrations of this anniversary, organised popularisation lectures, workshops and exhibitions. Published a comic book about the life of J. G. Mendel and introduced a website [Mendel Lives](#) which brought his life and scientific work to the attention of the general public. **Travelling exhibition about Mendel:** The exhibition based on the comic about Mendel was presented in several countries, including Slovenia, Belgium, and Mongolia, promoting Czech science and Brno as a centre of science and research.

Mendel Genetics Conference

The Faculty co-hosted an International Genetics Conference. It was the culmination of the celebration and included presentations by three Nobel laureates.

Gregor Johann Mendel – meteorologist

The Faculty co-organised an International Conference to present Gregor Johann Mendel's other professional activities outside genetics.

12th International Workshop on Grapevine Trunk Diseases

The Faculty co-organised an International Conference held every 3 years on a different continent; focusing on phytopathology/mycology concentrating on grapevine wood pathogens. The event was held under the auspices of [International Council on Grapevine Trunk Diseases](#), the chairman of the group is Associate Professor Ing. Ales Eichmeier, Ph.D., from the Faculty of Horticulture. The conference included a competition of young scientists for the best poster and lecture presentation.

ECLAS 2023

International Conference entitled *Labyrinth of the World – Landscape Crossroads*. The event was organised by the Faculty in cooperation with the European Council of Schools of Landscape Architecture. The conference included 5 thematic workshops, a Scholaludus, a colloquium of Ph.D. students, Orbis Pictus studies, a panel discussion, an ECLAS plenary session and other sub-events.

Cooperation with the media

The Faculty regularly communicated the results of its research through press releases and interviews in the Czech media aimed at the general and professional public, especially in the fields of viticulture and winemaking, phytopathology and landscape architecture. Academics regularly present research results for the commercial sphere in periodicals such as Zahradnictví, Vinař sadař, Rostlinolékař or Vinařský obzor.

Educational websites and applications

In addition to the aforementioned Mendel website, the Faculty has also developed a number of other online tools for the public, such as educational software to identify varieties of grapevine or to identify yeast. The educational website is TaxonWeb.cz, an online portal that contains approximately 3,000 described plant taxa, which are mainly used for teaching at the Faculty of Horticulture, for example in field exercises and preparing students for exams. TaxonWeb also includes a system of name tags located on the Faculty campus.

Popularisation lectures

The Faculty organised a series of lectures and workshops for the public focused on horticulture, landscape architecture and ecology. **Open days and excursions:** The Faculty regularly held open days for the public and excursions where interested parties could get a glimpse of the Faculty's research activities. The faculty also organises lectures for producers unions – Vegetable Growers Union of Bohemia and Moravia, or annually a series of lectures on integrated grapevine production the Association of Winemakers of the Czech Republic. A total of 36 public lectures, 32 exhibitions and 18 workshops were held during the period under review, see [facebook](#) the Faculty of Horticulture, MENDELU.

Cooperation with Citizen Science

The Faculty involved the general public in projects aimed at collecting data and monitoring biological processes, for example in the field of plant conservation and biodiversity. Involvement in national and international grants: The Faculty has received significant grants to support the popularisation of science and research ([CZ.02.1.01/0.0/0.0/16_017/0002334](#) and [CZ.02.1.01/0.0/0.0/16_025/0007314](#)), including funding for projects focused on the protection of cultural heritage and ecology. Faculty staff present their findings as part of the integrated wine production course, visits to secondary schools, and hosting students at the Faculty. Students participate in student competitions, and Faculty members are also involved in the activities of the National Agricultural Museum, contributing to several of its branches across the country.

These activities contributed significantly to the dissemination of scientific knowledge among the public and to the popularisation of the Faculty's research activities.

IMPLEMENTATION OF RECOMMENDATIONS

3.7 Implementation of the recommendations in Module 3

The evaluated unit will briefly describe how it has implemented the recommendations for Module 3 from the previous evaluation period, if applicable.

Maximum 1000 words.

Self-assessment:

In the past period 2019–2023, the Faculty actively participated in implementing recommendations of the previous International Evaluation Panel, namely to focus on submitting international projects and organising international conferences, to increase the visibility of the Faculty's gene resources, to include students in corporate research, to commercialise results, to increase the number of members in international scientific groups and editorial boards, to create a more user-friendly Faculty website.

A large share of activities was devoted to strengthening the reputation of the Faculty internationally. The Faculty published in the Web of Science Core Collection in 2019 (26 publications/4*Q1), 2020 (46 publications/9*Q1), 2021 (51 publications/9*Q1), 2022 (40 publications/12*Q1) and 2023 (48 publications/14*Q1). The number of involvement in preparation and implementation of international projects as well as involvement in international research consortia reflecting current topics based on the trends of economic and cultural development in 21st century Europe has also increased significantly. The Faculty participates in the project [CA19125 – EPIgenetic Mechanisms of Crop Adaptation To Climate Change](#) (2020–2024). In this project, it has a representative in the so-called core group management – a person responsible for ITC grants allocated for organizing conferences. It also has representatives as MC members in 2 other COST projects, [CA22158 – Exploiting Plant-Microbiomes Networks and Synthetic Communities to improve Crops Fitness](#) (2023–2027) and [CA22134 – Sustainable Network for Agrofood Loss and Waste Prevention, Management, Quantification and Valorisation](#) (2023–2027). In 2022 and subsequently in 2023, a LIFE project proposal *LIFE BeeGrapes – Strategies to Protect Biodiversity and Pollinators in Vineyards Affected by FD and Subjected to Mandatory Control Against Scaphoideus titanus* was submitted. In addition, the INTERREG project proposal *Improving Climate Awareness Through Data Driven Risk Management and Climate Change Mitigation Processes by Creating an Agri-Environmental Decision Support Platform* was also submitted twice in the same years. The Faculty participated in the submission of project proposals: Horizon Emerging technologies, *ARIES – AI and Robotics Based Decision Support Platform for Integrated and Environmentally Friendly Greenhouse Management* (2022). The Faculty of Horticulture participates in the project *Mobility in Innovative Green Technologies for Climate Change Mitigation and Sustainable Bioeconomy* ([INTERACT-Africa](#)), INTERACT-Africa is an academic mobility project within Africa funded by the European Union (EU). The project focuses on chemistry, biology and information technology, with an emphasis on the conversion of organic waste into valuable bioproducts for the transition to environmentally sustainable and socially inclusive economies.

Workshops and conferences organised at European and global level contribute to the visibility and development of international cooperation. An example is the International Workshop on Grapevine Trunk Disease ([12th International Workshop on Grapevine Trunk Diseases](#)), the 12th edition of which was organised by the Faculty of Horticulture in cooperation with the Association of Winemakers of the Czech Republic on 10–14 July 2022. The event was attended by 133 researchers from 25 countries and included a student competition. Another important event was the International Conference [ECLAS 2023](#) entitled *Labyrinth of the World – Landscape Crossroads*. The event was organised by the Faculty of Horticulture in cooperation with the European Council of Schools of Landscape Architecture. The Conference took place on 11–13 September 2023. The event was attended by 189 participants from 30 countries, mainly from Europe, but also from North America, New Zealand and Asia. A total of

71 on-site presentations and 19 online presentations were given. The conference included 5 thematic workshops, a Scholaludus, a colloquium of Ph.D. students, Orbis Pictus studies, a panel discussion, an ECLAS plenary session and other sub-events.

Applied outputs are created primarily in collaboration with practice, with the aim of implementation and commercialisation. Among the utility models with real application in operational practice is, for example, the *Equipment for Seed and Bulb Disinfection*. An example of a commercially successful applied result is the utility model *A Mixture of Purified Fermentation Gases from Grape Must, a Filtration System for Purification, and a Carbonated Beverage Enriched with These Gases*. In the varietal category, there are 3 new grape varieties, Ulrika, Diadem and Fragment, which are characterised by increased resistance to fungal diseases (downy mildew and powdery mildew). Among fruit species are the cultivars *Karkulka* and *Kyklop*, and many newly bred varieties of aster. Functional samples include, for example, a *Equipment for Spot Application of Organic Matter to the Root System of Grape Vine Bushes*. In 2021, a Memorandum of Understanding (MoU) was signed with the company Oro Agri International B.V., with whom the Faculty wants to jointly commercialise biological plant protection products, and in 2022 an extension of the MoU and *Material Transfer and Confidentiality Agreement* were signed. Together, the Faculty of Horticulture and a South African-based company are preparing 2 international patent applications.

Students participated in the international competition *LE:Notre Institute + ECLAS: Neckar Landscape Park* (2023), *Streetlife Design Competition* (2023), [Laurus Competition \(2023\)](#), where one of the students (Johana Kratochvílová) won one category. In addition, students participated in a competition [ProKARSTerra 2022](#), where students won the 2nd (Adriana Kotlárová) and 3rd place (Eliška Vraspirová). A student (Tereza Zezulová) of the Landscape Architecture study programme ranked first in 2021 in the [Student Competition of Academia Publishing House](#) under the auspices of the Centre for Joint Activities of the Czech Academy of Sciences. The students were also connected with research and commercialisation in private companies through projects of the International Organisation of Vine and Wine (Jakub Humaj) or the Ministry of Industry and Trade (Josef Licek), whose results were implemented in the company's operations.

In the field of landscape architecture, a number of exhibitions for the public have been organised and numerous award-winning landscape projects and works have been realised. The Faculty of Horticulture has only one florist in the whole Czech Republic (Jiří Martínek) who has passed the international level of the exam *International Certified Judge in Floristry Design*. The Faculty actively develops expert and advisory activities, strengthens its position through the representation of its staff in 14 editorial boards of foreign professional journals and 19 editorial boards of domestic journals in the field of horticulture, agriculture and garden and landscape architecture. It is also worth mentioning the membership in the scientific councils of partner faculties and universities (The Holovousy Fruit Growers Research and Breeding Institute, Czech University of Life Sciences Prague, Slovak University of Agriculture in Nitra, etc.). The faculty's website and social networks are used to promote these activities, outputs and results and are undergoing a continuous process of transformation and adaptation into English. In the past period, the capacity of the Faculty's PR department was also strengthened with the addition of student representatives. The Faculty of Horticulture also uses the following to promote and internationalise [Facebook](#) and [Instagram](#).

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 3

Document name	No. criteria	Location (link in HTML)
Website of the Faculty of Horticulture	3.1	https://zf.mendelu.cz/en/

SELF-EVALUATION REPORT FOR MODULE 3

THE NAME OF THE UNIT BEING EVALUATED: Faculty of Regional Development and International Studies

FORD: 5 – Social sciences

SOCIAL CONTRIBUTION OF THE EVALUATED UNIT

3.1 Introductory information about the unit under evaluation

The evaluated unit will describe its mission and vision and provide a general self-reflection of the societal contribution of R&D&I, along with its long-term goals in the fields it develops. The distribution of research activities by type of research will also be commented on.¹ The evaluated unit will describe its organisational structure and size (staffing, number of students, number of study programmes implemented, etc.) based on the data provided in annex tables 3.1.1 to 3.1.6.

Maximum 1000 words.

This is a non-rated indicator that serves as an introduction to the evaluated unit, providing context for data in indicators 3.2–3.7.

Self-assessment:

The Faculty of Regional Development and International Studies (FRDIS) is gradually establishing itself as a renowned institution that effectively responds to the socio-economic and environmental challenges of contemporary society. Its goal is to become a centre of excellence that successfully connects research with practice and at the same time fulfils the role of an educational institution that prepares graduates with a high degree of employability in the labour market, where thinking in context is essential, i.e. in the decision-making sphere, public administration and self-government, non-profit organisations, and the corporate sphere. In pursuit of this vision, it focuses on continuously improving the internal environment and strengthening external relations with partners from practice and academia. This approach serves as a tool to increase employee motivation, leading to a higher quality and efficiency of the educational and R&D activities. The mission of the Faculty is to contribute to social development and fulfil its social mission.

Societal benefits of R&D&I: The Faculty implements two key profiles (*Regional Development* and *International Territorial Studies*), which are interdisciplinary in nature and are based on the interconnection of several disciplines; primarily social science disciplines – Economics, Sociology, Political Science, and Geography. The partial focus of the disciplines is on the environmentally anchored fields of natural sciences and agriculture with an emphasis on their spatial component. It is the interconnection of different disciplines based on a spatial perspective that has been a long-term goal of the Faculty in the field of science and research in relation to society.

¹ Basic, applied, contract, artistic research (see Definition of Terms in Methodology HEI2025+).

In its strategic plan, the Faculty has set seven priority objectives that aim to achieve this vision. The first objective is to develop students' competences that are directly relevant to life and practice in the 21st century. It also focuses on improving the availability and relevance of flexible forms of learning that allow access to learning in different forms and for different target groups. The promotion and development of doctoral studies is a key priority, as it aims to contribute to research excellence and the generation of new knowledge. In the area of research and development, the Faculty focuses on strengthening strategic management and effective use of capacity to achieve the best possible results. An important part of the strategy is building capacity for strategic management, which is essential for the long-term success and effective leadership of the Faculty. Other priorities include promoting internationalisation, which includes developing international collaborations and engaging in global academic and research networks. Finally, the Faculty emphasises the continuous improvement of the internal environment, which contributes to the personal and professional development of employees and students.

The Faculty is gradually building knowledge transfer mechanisms and directing research activities from basic research to applied research – the role of the Technology Agency of the Czech Republic (TA CR) and contract research. It also builds partnerships with foreign institutions through Visegrad Fund and Interreg projects with results that have the potential to have a positive impact on society (social relevance) and scientific research (contribution to knowledge). At the same time, the Faculty is building a research base in key areas of its work.

The number of academic staff in the period under review ranged from 50–55 FTE, of which over 40% were women. The structure of the staff is classic; more than half of the academics are assistant professors, one fifth are assistants and one quarter were associate professors and professors. Women predominate as assistant professors and assistants. As the Faculty strives to consistently support the teaching and research activities of its staff, there are no persons in the staff structure who act only as researchers.

The total cumulative number of students for the 2019–2023 reporting period was 5,163, of which 3,349 were women. The number of students increased by 28% to 1,114 students in the period under review. The faster growth in the number of students was in the Bachelor's degree. The number of female students grew less dynamically, by 17%. The cumulative total of students in the Master's programmes was 1,317, of whom 851 were women (the actual number of students was smaller, as Table 3.1.4 shows the numbers without regard to year, i.e. one student appears more than once in this statistic). These data show that women make up approximately 65% of students at both Bachelor's and Master's level, reflecting the significant representation of women in these degree programmes. The Faculty is attractive for students coming from abroad. In the English-taught study programs, 70–100 international students were enrolled each year. They accounted for 9–11 % of the Faculty's students in the period under review, and all continents except Australia were represented.

The Faculty is headed by a Dean working with Vice-Deans who are responsible for the areas of science and research, accreditation and human resources, educational activities, conception and development, and international affairs. The Secretary is in charge of administrative matters. The Faculty is divided into several Departments respecting its focus and is supported by bodies such as the Academic Senate, the Scientific Council and the Disciplinary Committee. They are as follows:

- The Department of Regional Development focuses on regional development, spatial planning, rural development and regional policies. Its key area is sustainable regional development and strategic planning at the municipal and regional level.
- The Department of Area Studies specialises in international relations, development cooperation and global challenges. Here, students and researchers explore the dynamics of international relations and their impact on development projects and global security.
- The Department of Regional and Business Economics focuses on the economic aspects of regional development and entrepreneurship. Key areas include economic analysis, regional economic

development and corporate strategies. The Department focuses on research and teaching in areas such as regional economics, rural development, business economics and corporate financial management.

- The Department of Social Studies focuses on the social dimensions of regional development, including migration, social inclusion, education and demographic change.
- The Department of Environmental Science and Natural Resources is dedicated to sustainable development, environmental protection and natural resource management. It examines environmental risks, biodiversity conservation and the efficient use of natural resources.
- The Department of Language and Cultural Studies teaches not only classical courses in general and specialised languages, but also specialised subjects. These include Academic Writing in English, Presentation Skills in English, and other courses focused on linguistic and cultural studies.

Table 3.1.1 - Staffing per FTE²

Academic/ Professional position	Total / Of which women					
	2019	2020	2021	2022	2023	Total
Professor	5.7/1.7	5.8/1.3	6.1/0.8	6.5/0.3	6.3/0.1	30.4/4.2
Associate Professor	7.8/4.5	8.4/5.3	8.1/5.1	8.2/4.8	7.2/4.6	39.7/24.3
Assistant Professor	30.4/9.4	27.0/7.9	27.0/7.6	25.2/7.9	27.4/9.3	137.0/42.1
Assistant	9.7/6.6	9.9/7.5	10.8/8.1	10.4/7.8	10.8/8.2	51.6/38.2
R&D Personnel ³	1.0/0.0	0.0/0.0	0.0/0.0	0.4/0.0	0.0/0.0	1.4/0.0
Researchers in other categories ⁴	0.5/0.5	0.1/0.1	0.3/0.3	0.0/0.0	0.2/0.2	1.1/1.1
Technical and economic staff ⁵	8.3/6.4	8.7/5.7	9.4/6.2	11.1/7.9	11.8/8.0	49.3/34.2
Scientific, research and development staff involved in teaching activities	0.0/0.0	0.0/0.0	0.0/0.0	0.5/0.0	0.8/0.0	1.3/0.0
Early career researchers ⁶	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Total ⁷	63.4/29.1	59.9/27.8	61.7/28.1	61.8/28.7	63.7/30.4	310.5/144.1

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

3.1.2 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2019 (numbers of physical employees and personnel)⁸

	Under 29 years	30–39 years old	40–49 years old	50–59 years old	60–69 years old	70 years and older

² The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full-time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

³ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

⁴ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

⁵ Who participates in the management and support of R&D&I in the institution.

⁶ See Definition of Terms in Methodology HEI2025+.

⁷ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

⁸ The total number of employees/workers as of 31st December of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

Academic/ professional position	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	1	0	2	0	0	0	3	2
Associate Professor	0	0	0	0	7	4	2	1	0	0	0	0
Assistant Professor	0	0	24	8	9	3	1	0	1	0	0	0
Assistant	6	1	5	4	2	2	1	1	1	1	0	0
R&D Personnel ⁹	0	0	1	0	0	0	0	0	0	0	0	0
Researchers in other categories ¹⁰	0	0	1	1	0	0	0	0	0	0	0	0
Technical and economic staff ¹¹	3	3	4	2	1	1	2	2	0	0	0	0
Scientific, research and development staff involved in teaching activities	0	0	0	0	0	0	0	0	0	0	0	0
Early career researcher ¹²	0	0	0	0	0	0	0	0	0	0	0	0
Total ¹³	9	4	35	15	20	10	8	4	2	1	3	2

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D Personnel, Researchers in other categories and Technical and economic staff are mutually exclusive, i.e. one staff member is reported in only one category. The categories of scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

⁹ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁰ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹¹ Who participates in the management and support of R&D&I in the institution.

¹² See Definition of Terms in Methodology HEI2025+.

¹³ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I Personnel, Researchers in other categories and technical and economic staff.

3.1.3 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2023 (numbers of physical employees and personnel)¹⁴

Academic/ professional position	Under 29 years		30–39 years old		40–49 years old		50–59 years old		60–69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	2	0	1	0	3	0	1	0
Associate Professor	0	0	0	0	6	3	2	2	0	0	0	0
Assistant Professor	0	0	13	4	14	5	3	2	2	0	0	0
Assistant	2	1	4	3	3	2	2	2	1	1	0	0
R&D Personnel ¹⁵	0	0	0	0	0	0	0	0	0	0	0	0
Researchers in other categories ¹⁶	0	0	0	0	0	0	0	0	0	0	0	0
Technical and economic staff ¹⁷	3	2	5	3	5	4	0	0	1	1	0	0
Scientific, research and development staff involved in teaching activities	0	0	0	0	0	0	2	0	0	0	0	0
Early career researcher ¹⁸	0	0	0	0	0	0	0	0	0	0	0	0
Total ¹⁹	5	3	22	10	30	14	8	6	7	2	1	0

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

Table 3.1.4 – Students

Type of study	2019		2020		2021		2022		2023		Total	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Undergraduate	605	408	738	501	874	572	791	504	838	513	3,846	2,498
Master's ²⁰	264	176	244	150	267	175	266	177	276	173	1,317	851
Doctoral	0	0	0	0	0	0	0	0	0	0	0	0
Lifelong Learning Courses	0	0	0	0	0	0	0	0	0	0	0	0
Total	869	584	982	651	1,141	747	1,057	681	1,114	686	5,163	3,349

¹⁴ The total number of employees/workers as at 31.12. of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

¹⁵ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁶ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹⁷ Who participates in the management and support of R&D&I in the institution.

¹⁸ See Definition of Terms in Methodology HEI2025+.

¹⁹ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

²⁰ All master's degree students are listed, regardless of the length of their programme of study.

Table 3.1.5 - Study programmes in Czech/English

Type of study programme	Total ²¹ / Of which professional study programmes											
	2019		2020		2021		2022		2023		Total	
Undergraduate	2/2	0/0	2/1	0/0	2/1	0/0	2/1	0/0	2/1	0/0	4/3	0/0
Master's	2/2	0/0	2/1	0/0	2/1	0/0	2/1	0/0	2/1	0/0	4/3	0/0
Doctoral	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Lifelong Learning courses	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Total	4/4	0/0	4/2	0/0	4/2	0/0	4/2	0/0	4/2	0/0	4/6	0/0

Note: For each SP type, enter the number of SPs in Czech language in the first cell and insert the number of SPs in English language after the slash in the same cell (e.g. 15/3), enter the number of professional SPs in Czech language in the second cell and insert the number of professional SPs in English language after the slash. Follow a similar procedure in the last column of the table (Total).

3.1.6 – R&D&I capacities

R&D&I field	FORD	FORD share [%]	Predominant type of research	Total share of industry group [%]
1. Natural Sciences	1.1 Mathematics		Select an item.	9
	1.2 Computer and information sciences		Select an item.	
	1.3 Physical sciences		Select an item.	
	1.4 Chemical sciences		Select an item.	
	1.5 Earth and related environmental sciences	4	Basic Research	
	1.6 Biological sciences	4	Basic Research	
	1.7 Other natural sciences	1	Basic Research	
2. Engineering and Technology	2.1 Civil engineering		Select an item.	1
	2.2 Electrical engineering, Electronic engineering, Information engineering		Select an item.	
	2.3 Mechanical engineering		Select an item.	
	2.4 Chemical engineering		Select an item.	
	2.5 Materials engineering		Select an item.	
	2.6 Medical engineering		Select an item.	
	2.7 Environmental engineering	1	Basic Research	
	2.8 Environmental biotechnology		Select an item.	
	2.9 Industrial biotechnology		Select an item.	
	2.10 Nanotechnology		Select an item.	
	2.11 Other engineering and technologies		Select an item.	
3. Medical and Health Sciences	3.1 Basic medicine		Select an item.	3
	3.2 Clinical medicine		Select an item.	
	3.3 Health sciences	2	Basic Research	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	10	Basic Research	15
	4.2 Animal and Dairy science	1	Basic Research	
	4.3 Veterinary science	1	Basic Research	
	4.4 Other agricultural sciences	3	Basic Research	
5. Social Sciences	5.1 Psychology and cognitive sciences	4	Basic Research	69
	5.2 Economics and Business	20	Basic Research	

²¹ The total number of study programmes for which admissions have been announced in a given academic year.

	5.3 Education	1	Basic Research	
	5.4 Sociology	12	Basic Research	
	5.5 Law		Select an item.	
	5.6 Political science	16	Basic Research	
	5.7 Social and economic geography	13	Basic Research	
	5.8 Media and communications		Select an item.	
	5.9 Other social sciences	3	Basic Research	
6. Humanities and the Arts	6.1 History and Archaeology	3	Basic Research	3
	6.2 Languages and Literature		Select an item.	
	6.3 Philosophy, Ethics and Religion		Select an item.	
	6.4 Arts (arts, history of arts, performing arts, music)		Select an item.	
	6.5 Other Humanities and the Arts		Select an item.	
Total		100%		100%

RECOGNITION BY THE RESEARCH COMMUNITY

3.2 Recognition by the research community

The evaluated unit will briefly comment on its position in the research community. It shall consider individual and other prestigious R&D&I awards, participation of its academic staff in the editorial boards of international scientific journals, elected membership in professional societies, major invited lectures given by the evaluated unit's academic staff abroad or by foreign scientists and other relevant guests at the evaluated unit. Additionally, it will address the involvement of staff in the evaluation of national or European project/programme calls over the period of 2019–2023 based on the data provided in annex tables 3.2.1 to 3.2.5 (max. 10 most relevant items). If necessary, the evaluated unit shall list any additional services to the scientific community that it considers relevant.

Maximum 1000 words.

Self-assessment:

In the period under review, academic staff received several significant awards for their work in the Faculty's fields of activity showing their pedagogical and scientific excellence. The awards include:

- The Dean's Award of the Faculty of Business Administration of the University of Economics and Business (VŠE) in Prague: 1. best Publication in the category Article in a Professional Journal (VŠE), Associate Professor Ing. Ivana Blažková, Ph.D.
- EMN Research Award 2023 (European Microfinance Network), Associate Professor Ing. Gabriela Chmelíková, Ph.D.
- Rector's Award for a Book in Social Sciences (Elections and Democracy in Malaysia: Politics of Contrasts) for 2020 (Palacký University in Olomouc, UPOL), PhDr. Martin Petlach, Ph.D.
- Plaque of Appreciation for the Unwavering Support and Unrelenting Guidance that helped in leading our Institution to excellence (Guimaras State College), Ing. Jiří Schneider, Ph.D.
- Letter of appreciation from the Czech Academy of Agricultural Sciences (CACS) in Prague for the work in the field of veterinary medicine, Professor MVDr. Ivo Pavlík, CSc.
- Masaryk University Vice-Rector's Award for Excellence in Doctoral Studies – Supervisor, 2023 (MUNI), Ing. Mgr. Jiří Čeněk, Ph.D.
- The representation of FRDIS staff participation in scientific societies reflects the overall diversity of the fields in which they work. The staff are part of key scientific societies (13 entities) relevant to regional development studies in the Czech Republic. They are also members of 19 international companies, or companies operating outside the Czech Republic.

Academics are active in international scientific societies such as Association for Politics and the Life Sciences, Association of Southeast Asian Studies, Croatian Society of Soil Science, Ecosystem Services Partnership, European Regional Science Association, European Association of Agricultural Economists (EAAE), European Population Society, German Society of Plant Nutrition, German Soil Science Society, Gesellschaft deutschsprachiger Odonatologen, International Association of Landscape Ecology, International Food and Agribusiness Management Association, Commission of the Scientific Grant Agency of the Ministry of Education, Research, Development and Youth of the Slovak Republic and the Slovak Academy of Sciences (VEGA) and the Slovak Academy of Sciences (SAV), Royal Society for Asian Affairs, Societas Internationalis Odonatologica, Society for Urban Ecology (SURE), Worldwide Dragonfly Association and Young Ecosystem Services Specialists. Staff members are involved in fifteen editorial boards of foreign journals (see table).

In the period under review, the Faculty successfully developed its internationalisation through cooperation with experts from different parts of the world. The most frequent were academics from European institutions (e.g. Germany, the Netherlands, Poland, Hungary, Austria or Slovakia), reflecting the natural connections within regional research networks. The participation of experts from more

distant destinations such as North America, Latin America, Southeast Asia and Central and Southern Africa was also significant, giving the Faculty a global perspective and enabling it to establish collaborations. These guests contributed not only with lectures and seminars, but also with consultations that enriched research projects and educational activities. The mobility activities were aimed at promoting the exchange of professional experience, the development of interdisciplinary cooperation and the sharing of innovative approaches.

Only some of the trips are selectively listed here; the Faculty hosted experts (primarily academics or local representatives) from almost all continents, most notably Europe, for example:

- Germany was represented by experts from Ruhr University Bochum.
- Experts from the University of Leiden came from the Netherlands.
- From Poland the Faculty hosted experts from the University of Agriculture in Krakow, Polish Academy of Sciences, Wroclaw University, AE Katowice and Jagellonian University in Krakow.
- Austria was represented by experts from the University of Natural Resources and Life Sciences, Vienna.
- Experts from Harokopio University of Athens came from Greece.
- The UK was represented by experts from University College London.
- Representatives from the Escuela Universitaria de Turismo de Lanzarote came from Spain.
- Experts from the University of Gothenburg from Sweden visited the Faculty.
- Experts from the Federal Office for the Environment, Switzerland visited the Faculty.
- Experts from the University of Palermo, the University of Catania and the Council for Agricultural Research and Economics (CREA) came from Italy.

Other experts came from non-European territories, although in smaller numbers e.g.:

- From the United States, the Faculty hosted experts from Louisiana State University and Northwestern University.
- Experts from the Universidad del Azuay, the Municipality of Gualaquiza and Corporación UNSA came from Ecuador.
- From Peru, the Faculty welcomed a representative from the Universidad Nacional de Ucayali.
- Experts from the University of Ghana were welcomed at the Faculty.
- Representatives from the Federal University of Agriculture, Nigeria came from Nigeria.
- From the Philippines, the Faculty welcomed experts from Guimaras State University (GSU).
- Representatives from Bar Ilan University came from Israel.

Selected lectures are listed in Table 3.2.4.

Mutual cooperation has meant that a number of Faculty members have lectured abroad, most notably in Europe, for example:

- in Denmark, they gave lectures at the University College of Northern Denmark,
- in France, they visited the Institut Agro Montpellier,
- in Italy, they worked at the Università di Palermo and the University of Catania,
- in Lithuania, they lectured at Vilnius University,
- in Germany, they have presented at the University of Würzburg, Frei Universität Berlin and Ruhr University Bochum,
- in Poland, the academics gave lectures at the University of Agriculture in Krakow (UAK), Jagiellonian University and the Faculty of Political Science and Journalism at Marie Curie Skłodowska University in Lublin,
- in Portugal, they visited the University of Minho,
- in Austria, they attended lectures at the University of Natural Resources and Life Sciences, Vienna and the University of Graz,
- in Greece, they gave lectures at the University of Crete,
- in Sweden, they gave lectures at Dalarna University,

- in the USA, the academics lectured at Louisiana State University – LSU,
- in Nicaragua, they participated in activities at the Universidad Nacional Agraria, Managua,
- in Chile, they worked at the Universidad Austral de Chile, Universidad de Austral, Valdivia and Universidad de la Frontera, Temuco,
- in Ecuador, they visited the Universidad del Azuay and the Universidad del Cuenca,
- in Ghana, the academics presented at the University of Ghana Business School, Legon Accra,
- in South Africa, they were at Stellenbosch University,
- in the Philippines, they lectured at Guimaras State University,
- in Israel, they visited Bar Ilan University,
- in Jordan, the University of Jordan.

Academics evaluated calls from several major research and grant agencies. Among them are the French National Research Agency (ANR), the Czech Science Foundation (GA ČR), the Scientific Grant Agency of the Slovak Republic (VEGA), the Technology Agency of the Czech Republic with programmes such as Éta, Sigma and Environment for Life, as well as challenges from the European Horizon Framework Programme. These calls cover a wide range of research areas, from basic research to applied research aimed at technological development and innovation.

Table 3.2.1 - Prestigious R&D&I awards granted during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the award	Awarding institution
Associate Professor Ing. Gabriela Chmelíková, Ph.D.	EMN Research Award 2023	European Microfinance Network
Associate Professor Ing. Ivana Blažková, Ph.D.	Award of the Dean of the Faculty of Business Economics, University of Economics and Business in Prague: 1. best Publication in the category Article in a Professional Journal	Prague University of Economics and Business
Ing. Jiří Schneider, Ph.D.	Plaque of Appreciation for the Unwavering Support and Unrelenting Guidance that helped in leading our Institution to excellence. Guimaras State College, Guimaras. Rogellio T. Artajo, College president	Guimaras State University
PhDr. Martin Petlach, Ph.D.	Rector's Prize for a Book in Social Sciences ("Elections and Democracy in Malaysia: The Politics of Contrasts") for 2020 (Palacký University in Olomouc).	Palacký University Olomouc
Professor MVDr. Ivo Pavlík, CSc.	Letter of appreciation from the Czech Academy of Agricultural Sciences (CACS) in Prague for work in the field of veterinary medicine	Czech Academy of Agricultural Sciences
Ing. Mgr. Jiří Čeněk, Ph.D.	Masaryk University Vice-Rector's Award for Excellence in Doctoral Studies – Supervisor, 2023, MUNI	Masaryk University Brno

Note: Provide up to 10 examples.

Table 3.2.2 Participation of academic staff of the evaluated unit in editorial boards of international scientific journals during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of scientific journal, ISSN
Ing. Věra Bečvářová, CSc.	Visegrad Journal on Bioeconomy and Sustainable Development, 1338-8339
Associate Professor RNDr. Mgr. Miroslav Horák, Ph.D.	Universidad-Verdad, 1390-2849
Dr. hab. Luis Inostroza	Ecosystem services, 2212-0416

Dr. hab. Luis Inostroza	Landscape and Urban Planning, 0169-2046
Dr. hab. Luis Inostroza	Landscape Architecture, 2096-336X
Professor Ing. Tomáš Lošák, Ph.D.	Acta Agriculturae Scandinavica Section B: Soil and Plant Science, 0906- 4710
Professor Ing. Tomáš Lošák, Ph.D.	Agriculturae Conspectus Scientificus, 1331-7768
PhDr. Jiří Nesiba, Ph.D.	International Journal of Public Administration Management and Economic Development, 2533-4077
Mgr. RNDr. Pavel Ptáček, Ph.D.	Revija za geografijo, 1854-665X
Ing. Jiří Schneider, Ph.D.	Studia Ekonomiczne i Regionalne, 2451-182X

Note: Please provide up to 10 examples of academic staff participation in editorial boards of international scientific journals (e.g. editor, editorial board member, etc.).

Table 3.2.3 The most important invited lectures delivered by the academic staff of the evaluated unit at foreign institutions during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Invited lecture title	Name of host institution, or name of conference or event	Year
Mgr. Martin Hrabálek, Ph.D.	Migration and V4 Countries	Universita di Palermo	2019
Dr. hab. Luis Inostroza	Identifying and Analysing Urban Ecosystem Services	Norwegian University of Life Science	2020
Associate Professor RNDr. Mgr. Mgr. Miroslav Horák, Ph.D.	El Turismo de Naturaleza y su Contribución Para la Dinamización de las Economías Locales Post COVID 19	Universidad del Azuay	2020
Ing. Jiří Schneider, Ph.D.	Applicability of the Sustainable Development Goals	Universidad del Cuenca	2021
Mgr. Eva Taterová, M.A., Ph.D.	Czech Translation to Democracy	Aydin University	2022
Ing. Samuel Darkwah, Ph.D.	Urbanisation and the Growth of Mega Cities in Africa	University of Ghana Business School	2022
Associate Professor Ing. Gabriela Chmelíková, Ph.D.	Sustainable Finance	Universitat Politècnica de València	2023
PhDr. Martin Petlach, Ph.D.	Diplomacy in the Modern World	Guimaras State University	2023
Beatrice-Elena Chromková Manea, M.A., Ph.D.	Gender Roles and Value Change in Central and Eastern Europe	Graz University	2023
Francois Lategan, Dr.	The Circular Economy and SA-EU Trade and Implications for Production Systems	Stellenbosch University	2023

Note: Provide up to 10 examples.

Table 3.2.4 – The most important lectures by foreign scientists and other guests relevant to R&D&I at the evaluated unit during the evaluation period

Name, surname and title(s) of the lecturer	Lecturer's employer at the time of the lecture	Invited lecture title	Year
Professor Harald Zepp	Ruhr University Bochum (Europe)	Who Pays the Bill? Assessing Ecosystem Services Losses in an Urban Planning Context	2021
Associate Professor Marjetka Rangus	University of Maribor (Europe)	Approaches to Marketing and Segmentation	2022
Professor Erik Gómez-Bagettun	Norwegian University of Life Sciences (Europe)	Ecosystem Services from Theory to Decision Making	2022
Professor Alessandro Paletto	Council for Agricultural Research and Economics (CREA) (Europe)	Economic Evaluation of Ecosystem Services Provided by Forests	2022
Associate Professor Bo Lagerqvist	University of Gothenburg (Europe)	UN SDG's and the Concepts of Heritage and Conservation	2023
Associate Professor Sándor Némethy	University of Tokaj, Hungary / University of Gothenburg (Europe)	The role of Multifunctional Agriculture in Rural Development Observatories	2023
Associate Professor Marko Petek	University of Zagreb (Europe)	Blue and Green Croatia	2023
Professor Matt Fannin	Louisiana State University (America)	Regional Food Systems Modelling	2022
Professor Benjamin Frommer	Northwestern University (America)	History of International War Crimes Prosecution	2022
Professor Daniel Twerefou	University of Ghana (Africa)	The role of Internationalisation in Universities Rankings and Chinese Activities in Ghana	2023

Note: Provide up to 10 examples.

Table 3.2.5 - Involvement in the evaluation of national/European research project/programme calls relevant to the R&D&I area at the unit during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the research project/ programme call	Name of the contracting authority/ guarantor of the project/programme call	Year
Dr. hab. Luis Inostroza.	–	French National Research Agency (ANR)	2019–2023
Professor MVDr. Ivo Pavlík, CSc.	–	GA ČR	2019–2023
Associate Professor Ing. Veronika Večeřová, Ph.D., Mgr. Ondřej Konečný, Ph.D.	–	VEGA	2019–2023
Ing. Zdeněk Šilhan, Ph.D., Ing. Markéta Chaloupková, Ph.D., Ing. Jiří Schneider, Ph.D.	–	TA ČR (Éta, Sigma, Environment for Life)	2019–2023
Ing. Jiří Schneider, Ph.D.	–	Horizon	2019–2023

Note: Provide up to 10 examples.

RESEARCH PROJECTS

3.3 Research projects

The evaluated unit shall list at most 10 (considered most significant by the evaluated unit) research projects/activities (regardless of whether they are supported by public funds or based on contract research²²) that it has implemented or participated in during the period of 2019–2023²³. This should be done from the full list in annex tables (Table 3.3.1–3.3.2)²⁴, regarding particularly the results achieved or the application potential of the projects. The unit should also describe how the research projects contributed to the mission and purpose of the evaluated unit. If the evaluated unit has been a participant in listed project, it shall indicate which other entities were involved and describe its contribution to the project. The interdisciplinary aspects of the projects will also be commented on, along with any collaboration with other units of the evaluated HEI.

Maximum 300 words per project.

Self-assessment:

The Faculty has made great progress in the project area (see implementation of recommendation 3.7). The number of projects solved, the number of projects submitted and the financial amount of supported projects increased. The selection was made to reflect the different types of projects. Of the projects, the following were selected as the most important ones, for which the faculty is the principal investigator. At the same time, the selection was made to reflect the different types of projects and to show some projects where the faculty was a co-investigator but its role was important in the project.

1) *Hey, Slavs! Visual Culture of Propaganda Inspired by Slavic Nationalisms in the Czech Republic and Slovakia and its Anti-European Character*, (GA20-07592S), provider (Czech Science Foundation), duration in years: 2020–2022, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 4,731,000/EUR 186,627/CZK 3,672,000/EUR 144,852, researcher for MENDELU: Associate Professor JUDr. PhDr. Marek Čejka, Ph.D., annotation: The aim of the project was to investigate how Slavic nationalisms influence the visual culture of propaganda in the Czech Republic and Slovakia and how this cultural phenomenon contributes to anti-European attitudes. The research identified key visual elements and narratives in propaganda materials, analysed their impact on public opinion and placed them in a historical and cultural context. These insights have not only provided a deeper understanding of the interconnection between nationalist ideologies and visual propaganda tools, but have also created a basis for the development of more effective strategies to combat disinformation. The outputs of the project can contribute significantly to strengthening democratic values and promoting European integration. The project also reflected the strategic priorities of the Faculty, linking academic research with practice, and strengthened its role as a key workplace responding to current societal challenges. This has contributed to improving the quality of educational and R&D activities. The project was strongly interdisciplinary, as it included elements of political science, sociology, cultural anthropology and visual studies. In the project, the Faculty played a key role in all the activities in which colleagues from Masaryk University collaborated.

2) *Small Farms and Short Food Supply Chains Under Economic Crisis – Evidence from COVID-19 Pandemic*, (GF23-04055L), provider (Czech Science Foundation; International grant projects evaluated on the LEAD Agency principle), duration in years: 2023–2025, role in the project: coordinator, total

²² For the definition of contract research for the purposes of evaluation in the HE segments, see Article 2.2.1 of the Community Framework for State Aid for Research, Development and Innovation 2014/C 198/01.

²³ Regardless of whether the projects are completed or still ongoing, provided that at least part of the project was implemented during the evaluation period.

²⁴ The evaluated unit shall only fill tables that are relevant to it.

allocated funds/funds allocated to MENDEL: CZK 3,140,000/EUR 123,865/CZK 3,140,000/EUR 123,865, researcher for MENDEL: Professor Dr. Ing. Libor Grega, annotation: The project aims to investigate how small farms and short food chains respond to economic challenges during the COVID-19 pandemic. The project focuses on identifying key factors that influence their resilience and ability to adapt to a crisis situation. It reveals that small farms and short food chains demonstrate high levels of adaptability and resilience in times of pandemics. These entities play a key role in securing local food resources at a time when global supply chains are facing significant disruptions. The results of the project show that supporting small farms and short food chains can be a key factor in ensuring the resilience of food systems in future crises. The project contributes to the Faculty's mission by promoting sustainable development and linking research with practice. It also strengthens the Faculty's role as a centre of excellence in agricultural and economic research with practical impact on society. The project is interdisciplinary as it combines agricultural sciences, economics and social sciences, allowing a comprehensive analysis of the impact of the pandemic on food chains and their capacity to adapt to crisis conditions. The FRDIS staff is equally involved in the project as colleagues from the collaborating university in Poznan (Poznan University of Economics and Business, Poland).

3) *Health Inequalities in the Czech Republic: Importance and Relationship of Health Determinants of Population in Territorial Disparities*, (TL03000202), provider (Technology Agency of the Czech Republic), duration in years: 2020–2021, role in the project: coordinator, total allocated funds/funds allocated to MENDEL: CZK 3,247,000/EUR 128,087/CZK 2,716,000/EUR 107,140, researcher for MENDEL: Associate Professor PhDr. Dana Hübelová, Ph.D., annotation: The aim of the project was to classify and quantify the determinants of population health and spatial disparities in health. The project focused on identifying the main causes of health inequalities at the structural and individual level and on identifying the areas and population groups where these inequalities are most pronounced. It provided important insights into regional differences in population health in the Czech Republic. The key determinants contributing to these disparities were identified and interactive maps were created to visualise health disparities at different levels of local government. The results of the project had a significant impact on improving the understanding of health inequalities in the Czech Republic. These findings can be used to form policymaking aimed at reducing health disparities and improving quality of life in affected areas. The project supported the Faculty's mission to establish itself as a renowned institution that responds to current social and health challenges. The project contributed to improving research on regional development and public health promotion. The project was interdisciplinary, involving sociology, demography and public health. This approach has enabled a comprehensive analysis of health inequalities in different regions, leading to a better understanding of their causes and consequences. FRDIS was the main participant in the project and collaborated with colleagues from Masaryk University. However, the project also cooperated (without financial support) with other institutions specialising in public health and demography (the State Institute of Health, the Regional Hygiene Station of the South Moravian Region).

4) *Non-Tuberculous Mycobacteria in the Czech Republic: Current Risks and Improved Prevention*, (NU20-09-00114), provider (Ministry of Health of the Czech Republic, Health Research Agency), duration in years: 2020–2023, role in the project: coordinator, total allocated funds/funds allocated to MENDEL: CZK 11,432,000/EUR 450,966/CZK 4,768,000/EUR 188,087, researcher for MENDEL: Professor MVDr. Ivo Pavlík, CSc., annotation: The aim of the project was to identify current risks associated with the occurrence and spread of non-tuberculous mycobacteria (NTM) in the Czech Republic and to improve methods of prevention and control of these pathogens. The project brought new knowledge about the distribution and prevalence of NTM in different regions of the Czech Republic, which led to improved diagnosis and treatment of infections caused by these organisms. New diagnostic methods and preventive procedures have been developed that have contributed to reducing the risk of infections, especially in immunocompromised patients. The results of the project have improved the understanding of NTM and the development of effective preventive and diagnostic tools,

leading to a reduction in the number of infections and complications caused by these microorganisms, which has improved the health status of the population and reduced healthcare costs. The research strengthened the position of the Faculty as a centre linking research with practice and contributed to social development, which is in line with the Faculty's vision to improve the quality of the educational and R&D activities and to strengthen cooperation with partners from practice and academia. The project was highly interdisciplinary, as it linked microbiology, epidemiology, clinical medicine and public health. The combination of these disciplines has enabled a comprehensive approach to the study of NTM, including both basic research and applied aspects of prevention and treatment, which has contributed to a broader understanding and more effective management of this health problem. FRDIS managed the project and collaborated with other entities such as research institutions and clinical workplaces that focus on the study and prevention of infectious diseases (University Hospital Hradec Králové, Health Institute based in Ostrava). At the same time, the Faculty collaborated with academics from the Faculty of AgriSciences MENDEL.

5) *Impact of FTA EU – Mercosur on Czech Agriculture and Food Sectors*, Impact of FTA EU – Mercosur on Czech Agriculture and Food Sectors, (Contract research), provider (Institute of Agricultural Economics and Information), duration in years: 2020, role in the project: coordinator, total allocated funds/funds allocated to MENDEL: CZK 200,000/EUR 7,890/CZK 200,000/EUR 7,890, researcher for MENDEL: Ing. Ivo Zdráhal, Ph.D., annotation: The goal of the project was to analyse the potential impacts of a Free Trade Agreement (FTA) between the EU and Mercosur on various sectors of Czech agriculture and the food industry. The project focused on identifying the risks and opportunities that this Agreement brings and on formulating recommendations for Czech agricultural policy and trade strategy. It provided important insights into the potential impacts of the EU-Mercosur FTA on Czech agriculture and food industry, including the identification of vulnerable sectors and products that could face increased competition from Mercosur. Strategies have also been proposed to minimise these impacts and to take advantage of the potential opportunities offered by the Agreement. The results of the project have provided valuable information for the development of national agricultural policy and international trade strategy. They helped to better prepare Czech farmers and food businesses for the changes that could occur as a result of the ratification of the EU-Mercosur FTA and contributed to the formulation of measures that could mitigate the negative impacts on the Czech economy. The project supported the Faculty's mission to analyse and address current economic and social challenges at the regional and international level. The project was strongly interdisciplinary, involving elements of economics, agriculture, international trade and public policy. This approach enabled a comprehensive analysis of the impact of the trade agreement on the Czech agricultural sector and the formulation of practical recommendations for its protection and development. Within the project, FRDIS cooperated with the Institute of Agricultural Economics and Information and the Ministry of Agriculture of the Czech Republic.

6) *Local Climate Change Adaptation Strategy and Mitigation Measures of the Town of Tišnov*, (Contract research), provider (City of Tišnov), duration in years: 2020–2021, role in the project: coordinator, total allocated funds/funds allocated to MENDEL: CZK 303,000/EUR 11,953/CZK 303,000/EUR 11,953, researcher for MENDEL: Ing. Jiří Schneider, Ph.D., annotation: The aim of the project was to develop and implement a strategy that will help the city of Tišnov to adapt to the consequences of climate change while reducing greenhouse gas emissions. The strategy includes specific measures aimed at protecting the environment, improving the quality of life of residents and increasing the city's resilience to climate change. The project has led to the development of a comprehensive plan that includes both short-term and long-term climate change adaptation measures. This plan includes infrastructure improvements, increased green spaces, improved water management and implementation of measures to reduce energy consumption. The strategy also takes into account the need for education and public participation in the adaptation process. The results of the project have a significant impact on the quality of life of the inhabitants of Tišnov. The implementation of mitigation measures and adaptation to climate change increases the city's resilience to extreme climate

events, improves the environment and contributes to sustainable development. The project can serve as a model for other cities and municipalities facing similar challenges. The project contributed to the mission of the Faculty by supporting sustainable regional development and urban adaptation to climate change. It also strengthened the role of the Faculty in linking research with practice and supporting local communities in environmental protection. The project was strongly interdisciplinary, involving environmental sciences, urban planning, regional development and social sciences. This comprehensive approach has enabled the effective integration of different measures and strategies for climate change adaptation and GHG reduction at the city level. In the project, FRDIS cooperated with experts from the field of urban planning, environment and regional development in close cooperation with the clients, the city of Tišnov and the Partnership Foundation.

In the position of co-principal investigator, the Faculty had the following selected projects in the monitored period:

7) *China's Multifaceted Economic Diplomacy in the Era of the Belt and Road Initiative*, (GA19-01809S), provider (Czech Science Foundation), duration in years: 2019–2021, role in the project: co-principal investigator, total allocated funds/funds allocated to MENDELU: CZK 2,517,000/EUR 99,290/CZK 978,000/EUR 38,580, researcher for MENDELU: Ing. Mgr. Richard Turcsányi, Ph.D., annotation: The aim of the project was to analyse how China is expanding its geopolitical and geo-economic influence in emerging countries through the *Belt and Road Initiative* (BRI). The research focused on three main strategic tools that China uses to achieve its goals: (1) infrastructure construction by Chinese firms, (2) credit financing by Chinese state banks, and (3) a state-controlled “soft power offensive”. These aspects were examined in the context of Chinese investment and policy in various regions covered by the BRI, including Central and Eastern Europe, Central Asia, the Middle East, South and Southeast Asia. The project provided valuable insights into the ways in which China is advancing its economic interests and expanding its influence through the Belt and Road Initiative (BRI). The results have been published in major journals and publishing houses, contributing to a deeper understanding of China's economic diplomacy and its global impact. The results of the project have provided important information for foreign policy making not only in the Czech Republic but also in other BRI. A better understanding of China's strategy can help formulate responses to the challenges posed by this global initiative and help protect national interests. The project contributed to the mission of the Faculty by providing an in-depth analysis of a current international phenomenon that has a major impact on global politics and economics. The project was strongly interdisciplinary, including elements of political science, economics and international relations. The project was carried out in cooperation with the Prague University of Economics and Business, which was the main investigator of the project. The role of FRDIS was to collect primary data and compile several publications.

8) *Accumulating Environmental Injustices and the Emergence of Climate Vulnerability in Central-European Coal Regions: Socio-Spatial Perspectives*, (GA23-07382S), provider (Czech Science Foundation), duration in years: 2023–2025, role in the project: co-principal investigator, total allocated funds/funds allocated to MENDELU: CZK 4,737,000/EUR 186,684/CZK 1,671,000/EUR 65,917, researcher for MENDELU: Mgr. Petr Klusáček, Ph.D., annotation: The aim of the project is to analyse and understand the accumulated environmental injustices and their contribution to climate vulnerability in the coal regions of Central Europe. The research focuses on identifying the key socio-economic and environmental factors that influence the vulnerability of communities in these areas and understanding the dynamics of their interactions. The project provides a deeper understanding of how environmental injustices accumulate in coal regions and how they contribute to climate vulnerability. It identifies the key factors affecting this vulnerability, including socio-economic inequalities and environmental degradation. The research results also point to the need for specific policies aimed at mitigating these vulnerabilities through more equitable environmental and social measures. The results of the project have a significant societal impact by contributing to a better understanding

of the problems associated with environmental injustice and climate vulnerability in coal regions. The project contributes significantly to the fulfilment of the Faculty's mission to establish itself as a renowned institution responding to current socio-economic and environmental challenges. By focusing on key issues of environmental justice and climate vulnerability, the project supports Faculty in their efforts to connect research to practice and contribute to solving pressing societal problems. The project is strongly interdisciplinary, involving sociology, geography, environmental studies and public policy. FRDIS is another participant in the project and cooperates with the main investigator Palacký University in Olomouc (UPOL). FRDIS is primarily responsible for conducting qualitative data collection and interpretation.

9) *Strengthening rural resilience via empowerment of local stakeholders and land owners* (TL03000007), provider (Technology Agency of the Czech Republic), duration in years: 2020–2023, role in the project: co-principal investigator, total allocated funds/funds allocated to MENDELU: CZK 9,157,000/EUR 361,223/CZK 1,065,000/EUR 42,012, researcher for MENDELU: Mgr. Ondřej Konečný, Ph.D., annotation: The aim of the project was to increase landowners', including municipalities' activism and responsibility for the management of their land in order to strengthen landscape resilience. The project focused on identifying key motivations for landowners to own land responsibly, addressing barriers to a more responsible approach to farming, and creating a web portal for public engagement in soil and crop monitoring. It provided important insights into the state of the land and landowner motivations in the context of climate change. Tools and strategies have been developed to improve communication and cooperation between landowners and farmers to promote more sustainable farming and increase the resilience of rural areas. The results of the project have contributed to the development of more sustainable approaches to land management and increased the resilience of rural communities to climate change. Improved cooperation between landowners and other actors can lead to healthier and more resilient ecosystems and rural areas. The project contributed to the mission of the Faculty by promoting sustainable regional development and the involvement of local communities in responsible management. It also reinforces the interdisciplinary approach of the Faculty and its focus on linking research with practice in the environmental and social sciences, as it was distinctly interdisciplinary, encompassing environmental science, sociology, geography and economics. The project was led by Tomas Bata University in Zlín in cooperation with other participants, namely Masaryk University, the Institute of the Czech Academy of Sciences – Geonics, Association of Private Agriculture and Envipor. FRDIS was responsible for conducting qualitative research techniques (interviews with mayors), linking with the application guarantors (the Regional Office of the South Moravian Region) and completing the scientific outputs (proceedings, article). At the same time, FRDIS participated in other outputs of the project as a co-researcher.

10) *Development of effective tools for monitoring and assessment of ecological status and ecosystem services of fishponds and for an improvement of communication with stakeholders*, (SS05010009), provider (Technological Agency of the Czech Republic), duration in years: 2022–2025, role in the project: co-principal investigator, total allocated funds/funds allocated to MENDELU: CZK 9,281,000/EUR 366,114/CZK 5,340,000/EUR 210,651, researcher for MENDELU: Ing. Jiří Schneider, Ph.D., annotation: The main objective of the project is to develop effective tools and methodologies for monitoring and assessing the ecological status of ponds, which at the same time enable better communication with relevant stakeholders. The project aims to improve understanding of ecological processes in ponds and to promote sustainable management of these aquatic ecosystems. It introduces new methodologies for assessing the ecological status of ponds, which are successfully applied in practice. These tools allow more accurate monitoring and assessment of changes in pond ecosystems, contributing to better management and protection of these important natural resources. Project results also include the development of communication strategies that facilitate collaboration between scientists, pond managers and other stakeholders. The results of the project have an impact on the management and protection of aquatic ecosystems in the Czech

Republic. New tools and methodologies allow more effective monitoring and management of ponds, leading to more sustainable use of these ecosystems and better protection of biodiversity. The societal benefit of the project also lies in improved communication between scientists and practical pond managers, which contributes to better sharing of knowledge and practices. The project contributes to fulfilling the Faculty's mission to establish itself as a renowned institution that responds effectively to contemporary environmental challenges. The project is interdisciplinary and includes elements of environmental science, ecology, hydrology and communication studies. The principal investigator is the Botanical Institute of the Czech Academy of Sciences. At the same time, the Faculty collaborated with academics from the Faculty of AgriSciences. FRDIS is primarily responsible for stakeholder communication and communication strategy.

Table 3.3.1 Projects supported by public funds

In the role of beneficiary						
Provider ²⁵	Provider ²⁶	Provider ²⁷				
		2019	2020	2021	2022	2023
TA ČR	Health Inequalities in the Czech Republic: Importance and Relationship of Health Determinants of Population in Territorial Disparities	0/0	1,078/42,525	1,522/60,048	0/0	0/0
GA ČR	Hey, Slavs! Visual Culture of Propaganda Inspired by Slavic Nationalisms in the Czech Republic and Slovakia and Its Anti-European Character	0/0	1,708/67,377	1,633/64,418	1,543/60,868	0/0
GA ČR	Small Farms and Short Food Supply Chains Under Economic Crisis – Evidence from the COVID-19 Pandemic	0/0	0/0	0/0	0/0	1,253/49,428
Ministry of Health of the Czech Republic	Non-Tuberculous Mycobacteria in the Czech Republic: Current Risks and Improved Prevention	0/0	2,614/103,116	3,069/121,065	3,058/120,631	2,850/112,426
Ministry of Education, Youth and Sports of the Czech Republic	New Political Parties in the Party Systems of Poland and the Czech Republic	0/0	76/2,998	76/2,998	0/0	0/0

²⁵ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

²⁶ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

²⁷ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

GA ČR	Mycobacteria in Bats and Their Role in Health and Disease	0/0	0/0	3,304/130,335	3,340/131,755	3,352/132,229
Total		0/0	5,476/216,016	5,476/216,016	9,604/378,865	7,941/313,254
In the role of another participant						
Provider ²⁸	Provider ²⁹	Provider ³⁰				
		2019	2020	2021	2022	2023
GA ČR	China's Multifaceted Economic Diplomacy in the Era of the Belt and Road Initiative	859/33,886	872/34,398	884/34,872	0/0	0/0
GA ČR	Accumulating Environmental Injustices and the Emergence of Climate Vulnerability in Central-European Coal Regions: Socio-Spatial Perspectives	0/0	0/0	0/0	0/0	501/19,763
TA ČR	Strengthening Rural Resilience via Empowerment of Local Stakeholders and Landowners	0/0	222/8,773	297/11,697	166/6,567	167/6,583
TA ČR	Development of Effective Tools for Monitoring and Assessment of Ecological Status and Ecosystem Services of Fishponds and for Improvement of Communication with Stakeholders	0/0	0/0	0/0	2,364/93,244	2,711/106,932
Total		859/33,886	1,094/43,171	1,181/46,569	2,530/99,812	3,379/133,278

Data source and provider abbreviations: Central Register of Projects: <https://www.isvavai.cz/cep>

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

Table 3.3.2 - Contract research activities

Client ³¹	Activity name	Revenue (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
Municipality Stražisko	In-depth Audit of the Management of the Municipality of Stražisko for the Period 2011–2018	80/3,156	0/0	0/0	0/0	0/0
Institute of Agricultural Economics and Information	Impact of FTA EU – Mercosur on Czech Agriculture and Food Sectors	0/0	200/7,890	0/0	0/0	0/0
Institute of Agricultural Economics and Information	Impact of FTA EU – Japan on Czech Agriculture and Food Sectors	0/0	200/7,890	0/0	0/0	0/0
The city of Tišnov	Local Climate Change Adaptation Strategy and Mitigation Measures of the Towny of Tišnov	0/0	0/0	303/11,933	0/0	0/0
Porta Microregion	Walking routes in the Porta Microregion	0/0	0/0	0/0	0/0	30/1,183
Nature and Landscape Conservation Agency of the Czech Republic, Regional Office South Bohemia	Preparation of documents for the management plan for the Zlatý potok National Nature Monument – FOREST PART	0/0	0/0	0/0	0/0	97/3,842
ATELIER FONTES, s. r. o.	Study of the Use of the Kozinec Subsidence Area in the Municipality of Doubrava	0/0	0/0	0/0	0/0	260/10,262
City of Mikulov	Evaluation of the Socio-Economic Impact of the Mikulov Art Symposium “Workshop” 30th Year and the Benefits of Building the Municipal Collection of Contemporary Art for the Development of Mikulov	0/0	0/0	0/0	0/0	73/2,864
Total		80/3,156	400/15,779	303/11,933	0/0	430/16,970

Note: List and describe contract research activities with a revenue in a given calendar year, regardless of the amount of financial revenue.

³¹ If the client is from abroad, indicate in brackets the country of origin of the client.

3.4 Research results with existing or prospective impact on society

The evaluated unit shall briefly comment on a maximum of 10 (considered most significant by the evaluated unit) research results already applied or realistically heading towards application during the period of 2019–2023, based on the overview annex table 3.4.1 (it is recommended to indicate results with a link to projects listed in indicator 3.3). The evaluated unit must demonstrate in its description that the research results have led or will soon lead to positive impacts³², on society (e.g. description of how the results are used by various users, the range of persons/institutions for which the result is relevant, measurable economic impacts, etc.). The evaluated entity shall indicate in its commentary whether the gender dimension is considered in these results and discuss the impacts of the results regarding sustainability.

Maximum range 300 words/result.

Self-assessment:

The selected 2019–2023 outcomes fulfil the dimension of societal relevance, i.e. they are linked to positive impacts on society. Results were selected that are both diverse in form and demonstrate the interdisciplinary focus of the Faculty. They are sorted according to the type of results. The dynamics in the quality of science and research results are discussed in section 3.7 on the implementation of the recommendations.

1) Chmelíková, G., Krauss, A., & Dvouletý, O. (2019). Performance of Microfinance Institutions in Europe – Does Social Capital Matter?. Socio-Economic Planning Sciences, 68, 100670.

The result is socially relevant as it provides new insights into the impact of social capital on the quality of microfinance institutions' portfolios in Europe, using a unique data base. The results show that strong social capital, typical of rural areas of European countries, can replace traditional financial capital in the lending relationships of microfinance institutions. This knowledge contributes to the development of financial inclusion, especially for the socially disadvantaged, and is useful for regulatory policy makers aiming to reduce social and regional disparities. The paper provides valuable recommendations for financial system regulators on how to enhance social inclusion at low transaction costs, with important implications for improving living conditions in rural areas and the regional economy. In 2023, the publication was awarded by the European Microfinance Network (EMN) as the best research paper in the field of microfinance, confirming its relevance and quality at the international level. The main and corresponding author of this publication was Associate Professor Gabriela Chmelíková from MENDELU, who was behind the conception of a research project focusing on the analysis of efficiency factors of European microfinance institutions, for which she received funding from the Swiss National Science Foundation (SNSF) and whose main output is the present publication. The research project and the publication were carried out in close cooperation with the University of Zurich (Centre for Sustainable Finance and Private Wealth – Department of Banking over Finance).

The study indirectly takes into account the gender dimension, as microfinance institutions often play a key role in supporting women's entrepreneurship, especially in marginalised and rural areas. Research confirms that strengthening social capital allows women to improve their access to financial resources, which promotes equality of opportunity and strengthens their economic independence. The article contributes to sustainability from a social and economic perspective. Strengthening financial inclusion through social capital supports the long-term development of rural areas and improves the living conditions of marginalised populations. Economic sustainability is supported by recommendations that enable microfinance institutions to use resources more efficiently.

³² See Terms definition.

2) Chmelíková, G., Redlichová, R. (2020). Is There a Link Between Financial Exclusion and Over-Indebtedness? Evidence from Czech Peripheral Municipalities. Journal of Rural Studies. 78(August), 457-466. ISSN 0743-0167.

The article provides important insights into the impact of financial exclusion on the over-indebtedness of people living in peripheral areas of the Czech Republic. Identifying a direct link between lack of access to traditional banking services and higher levels of dependence on informal sources of credit (e.g. usury) is a key contribution of the research. The results contribute to the understanding of the economic and social challenges faced by the inhabitants of these areas and provide recommendations on how to address them. Recommendations include the promotion of socially oriented financial institutions, the introduction of local financial literacy programmes and the creation of an inclusive financial system to make financing more accessible to disadvantaged groups. Practical applications of the results are possible especially for policy makers, regional development agencies, NGOs working to combat poverty and financial exclusion, and educational institutions. Economic impacts include reducing dependence on usury, strengthening people's trust in the banking sector and increasing the financial stability of communities.

The paper does not explicitly address gender differences, but its conclusions have an indirect impact on the gender dimension. Women in peripheral areas often face specific challenges related to financial exclusion, for example as single mothers or carers. The recommendations made in the study, such as promoting more accessible financial services and training programmes, can help improve women's living conditions and thus strengthen their economic and social independence. The article has implications for social and economic sustainability. Social sustainability is supported by improving people's access to financial services, which can reduce the negative impacts of debt and contribute to community stability. Economic sustainability is about fostering a sound financial environment that minimises the risks associated with usury and over-indebtedness.

3) Konečný, O., Šilhan, Z., Chaloupková, M., Svobodová H., (2021). Area-Based Approaches are Losing the Essence of Local Targeting: LEADER/CLLD in the Czech Republic. European Planning Studies, 29 (4), 619-636.

In the published result, the team of authors shows that the pan-European territorial development instrument, Community-led local development (CLLD), is losing the advantage of local targeting, one of the basic building blocks of integrated territorial development instruments, in the 2014–2020 programming period. The research was carried out in cooperation with the key implementing institution, the Ministry for Regional Development of the Czech Republic, the National Network of Local Action Groups and intensively communicated with individual Local Action Groups. It is this cooperation that has led to the results being used by the institutions in the post-2021 programming period and reflected in the implementation set-up. Through intensive cooperation with stakeholders, the transfer of research findings into practice and the fulfilment of societal relevance was achieved. The article demonstrates that the increasing role of the state in creating policy corridors for the functioning of local communities has been reflected in the time delay of implementation by the restrictive conditions and the breadth of possible topics that can be applied through CLLD. In the article, the authors make suggestions on how to avoid these limits. The head of the team has thus capitalised on his long-term research on the issue of neo-endogenous development, which he continues to focus on in the pedagogical level (projects of the Internal Grant Agency and the Technology Agency of the Czech Republic, publications, teaching), as well as in voluntary activities in the area where he lives (chairman of the local action group *Brána Vysočiny*).

The gender dimension was not taken into account in the research, but most of the communication partners were women. The research has strong implications for the long-term sustainable development of rural areas. By identifying limits and obstacles in the implementation of CLLD and proposing more effective strategies, it contributed to a more economical and meaningful use of financial and human resources. These proposals promote social sustainability by strengthening

the capacity of local communities to address their specific needs, while contributing to environmental sustainability through a greater emphasis on local and spatially anchored planning.

4) Blažková, I., & Dvouletý, O. (2022). Zombies: Who are They and How do Firms Become Zombies? Journal of Small Business Management, 60(1), 119–145.

The article provides important insights into the existence of zombie firms in the Czech environment and their impact on the economy, which is of crucial importance for the development of effective economic policies. The identification and analysis of these firms offers valuable inputs for economic planning and regulatory decision-making, especially in sectors with a high incidence of zombie firms, such as the agri-food industry. The study provides empirical evidence that zombie firms tend to persist in an environment with inadequate regulation, undermining the overall productivity of the sector and preventing more innovative and productive firms from entering the market. The conclusions of the paper suggest specific measures such as tightening financing conditions, more effective use of bankruptcy law and the introduction of mechanisms to identify and eliminate zombie firms. These steps could improve the efficiency of the Czech economy and create a more favourable business environment. In addition to the economic impact, the study is also relevant to wider social stability. Eliminating zombie firms and promoting healthy, productive businesses can lead to sustainable employment growth, boost market confidence and increase the overall competitiveness of the Czech Republic. The paper thus contributes not only to understanding the causes and impacts of zombie firms, but also to creating a framework for their effective elimination, which is crucial for long-term economic development.

The article does not directly address the gender dimension, but indirectly contributes to a broader understanding of the structural issues that affect different segments of the workforce, including gender differences. Reducing the negative impacts of zombie firms and improving productivity could lead to a more level playing field for all employees, including women, who often face specific barriers within less productive firms. The study does not address the topic of sustainability.

5) Hübelová, D., Čaha, J., Janošíková, L., Kozumplíková, A. (2023). A Holistic Model of Health Inequalities for Health Policy and State Administration: a Case Study in the Regions of the Czech Republic. International Journal for Equity in Health, 22(1), 183.

The results of the study are unique in that they present a holistic model of the determinants of health that takes into account the complex relationships between the various determinants of health inequalities and their associations with health status. This approach is unique in that it incorporates a wide range of determinants such as economic status, education, demographics, environmental status, individual living conditions, road safety and crime, health and social care resources. It thus fills the gaps in the data base of health-oriented issues. The impact of the study on society lies in the interdisciplinary approach used, as the study highlights the need for interdisciplinary collaboration in addressing health inequalities. This involves collaboration between health and non-health disciplines, which can lead to more effective policies and interventions. The results of the study provide important evidence for policymaking aimed at reducing health inequalities, while the identification of specific regional health inequalities in the Czech Republic allows for more targeted interventions and policy decisions.

Although the study does not explicitly address gender differences, its results have an indirect impact on the gender dimension. Analysing determinants of health, such as access to health care, economic conditions or education, contributes to understanding the factors that influence health inequalities between different population groups, including women and men. The outcome supports long-term sustainability in terms of the health system and the quality of life of the population. By identifying key determinants of health and their spatial and temporal changes, it enables more effective health care planning and resource optimisation. Social sustainability is strengthened through proposals aimed at reducing health inequalities and promoting equity in access to care. The study also highlights

the importance of prevention and targeted interventions that can contribute to greater health system resilience to socio-economic and environmental challenges.

6) Akalibey, S., Ahenkan, A., Duho, K. C. T., Maloreh-Nyamekye, T., Schneider, J. (2023). Drivers of Green Economy in an Emerging Market: Generic and Sector-Specific Insights. Journal of Cleaner Production, 425, 138857.

The study on the implementation of the green economy provides a comprehensive analysis of the benefits and challenges of the transition to a more sustainable economy, with a specific focus on developing countries (using Ghana as an example). The results provide key empirical evidence for policymaking to support the green economy at regional and global levels. The study shows how sustainable economic policies can not only reduce environmental burdens but also boost economic growth and improve social conditions. The insights are directly applicable to governments, policy makers and international organisations involved in the implementation of sustainable initiatives. In the context of Ghana, the study has contributed to a framework for assessing the effectiveness of the transition to a green economy and can be applied to other developing countries. Positive impacts include improving the living standards of the population through job creation in green economy sectors, reducing environmental risks and enhancing the sustainability of natural resources. Measurable impacts include, for example, reducing greenhouse gas emissions, increasing energy efficiency and introducing more inclusive economic policies that take into account regional specificities. The study also strengthens the global dialogue on sustainability and contributes to the United Nations Sustainable Development Goals, particularly in the areas of combating climate change and promoting sustainable economic growth.

The study does not explicitly address the gender dimension, but it indirectly influences gender issues in that the transition to a green economy opens up new employment opportunities for women, especially in sectors that promote sustainable technologies and innovation. The results of the study support the development of inclusive policies that can improve the position of women in the economy, for example by promoting education and training in green skills.

7) Hübelová, D., Chromková Manea, E. B, Kozumplíková, A. (eds.) 2021. Territorial Differentiation of Health Inequalities in the Czech Republic. Prague: Grada. p. 98 ISBN 978-80-271-4655-0.

The expert book is the result of the project Inequalities in Health in the Czech Republic, which provides key data and analyses for understanding spatial differences in the health status of the population. By analysing more than 100 indicators in 77 regions of the Czech Republic over three time periods, it provides the basis for the development of strategic health policy and regional development programmes. This output is unique in its comprehensiveness and public availability of data that serves a wide range of users including health professionals, public authorities, non-profit organisations and other actors focused on improving population health. The book has practical implications by providing a basis for targeted responses to regional specificities of health inequalities. Data and analysis contribute to reducing disparities in access to health care, improving the effectiveness of health interventions and developing prevention programmes. The economic impact is a more efficient use of health care resources and a reduction in the costs associated with the treatment of chronic and preventable diseases.

The book reflects the gender dimension by analysing determinants of health that may be differently relevant for women and men. For example, indicators related to access to health care, economic conditions or education, which can help identify differences in health needs between the two genders. In doing so, the book contributes to the development of policies and strategies that reflect the specific needs of different population groups and contribute to greater health equity. Social sustainability is promoted through efforts to reduce health inequalities and improve access to healthcare in different regions. Economic sustainability is affected by the theme of more efficient use of resources and more targeted health care interventions that can reduce the overall cost of the health system.

The publication also promotes sustainability by emphasising healthy lifestyles and prevention, which can indirectly influence the reduction of environmental burdens such as pollution or increased use of health resources.

8) Đorđević, V., Ramet, S.P. (2022). The Importance of Civic Culture – A Conclusion. In: Ramet, S.P., Šorđević, V., Hassenstab, C.M. (eds) Civic and Uncivic Values in the Czech Republic. Palgrave Macmillan, Cham.

The final chapter, *The Importance of Civic Culture – A Conclusion*, summarises key findings that have implications not only for academic research but also for the wider social environment. The book as a whole edited by Associate Professor Đorđević and Professor Ramet serves as a comprehensive analysis of the dynamics of civic and non-citizen values in the Czech Republic, placing these themes in a broader European context. The paper highlights the crucial importance of civic values such as participation, trust and respect for democratic institutions for the stability and sustainability of liberal democracy. On a societal level, the publication opens up space for debate on current risks such as the weakening of the rule of law, the polarisation of society or the growth of populism, and encourages the active strengthening of civic virtues as the basis for a healthy society. Thanks to its interdisciplinary nature, the book can inspire not only academics but also the general public to reflect on the importance of civic education, the protection of democratic institutions and active participation in public affairs.

Although the chapter does not directly address gender issues, some chapters contain analyses that indirectly contribute to the understanding of gender in social and political transformations. Through this approach, the book reflects the broader impacts of civic values on different groups of people. The chapter and the book as a whole promote social sustainability by analysing the key values necessary for the stability of democratic institutions and the rule of law. Identifying and discussing civic values, their transformations and the risks of weakening democracy contribute to understanding how to maintain a stable and inclusive society. It makes a significant contribution to the long-term sustainability of liberal democracy by promoting civic virtues and social dialogue about the values that are central to the functioning of the democratic system.

9) Schneider, J., Kozumplíková, A., Floková, L., Rožnovský, J., & Fic, P. (2021). Local Climate Change Adaptation Strategy of the City of Tišnov – Proposal Section. The City of Tišnov. MENDELU FRDIS, Brno.

The Local Climate Change Adaptation Strategy of the city of Tišnov has an impact on various aspects of the life of the inhabitants of the town and its surroundings. As well as direct measures to mitigate the impacts of climate change, the strategy has wider implications for improving quality of life, strengthening community cohesion and inspiring other communities. The strategy includes measures aimed at retaining water in the landscape, improving the condition of public green spaces and introducing green and blue infrastructure such as retention basins, green roofs or revitalisation of green spaces. These measures help to protect the property and health of residents from extreme weather events such as heat waves or intense rainfall. Mitigating heat islands in the city also has a significant impact, improving working and daily life conditions, especially for vulnerable groups such as children, the elderly and people with health problems. The emphasis on environmental education and the involvement of residents in the implementation of measures also raises their awareness of the consequences of climate change and encourages more responsible behaviour. In addition, the strategy brings significant social benefits by strengthening resident participation and promoting community activities such as public green space adoption programmes or community gardens.

Although the strategy does not directly address gender aspects, its measures have an indirect impact on improving the living conditions of vulnerable groups, including women. Awareness-raising activities and public participation in the implementation of measures contribute to greater inclusion and equality in access to public resources. The strategy contributes significantly to the environmental, social and

economic sustainability of the city. Promoting environmental measures such as improved water management, green space revitalisation and soil protection strengthens the landscape's ability to adapt to climate change. Social sustainability is promoted through improved quality of public space, community engagement and resident education. Economic benefits include more efficient use of resources and reduced costs of dealing with climate-related emergencies.

10) Fremrová, I., Ulmann, V., Pavlík, I. (2022). Water Quality – Determination of Atypical Mycobacteria in Water according to ČSN 75 7840. ČSN 75 7840. Territorial validity of the result: A = validity for the Czech Republic (national legislative or non-legislative regulation, national standard).

The uniqueness of the result lies in the fact that the standard represents a breakthrough standard that specifies a methodology for the identification of atypical mycobacteria in water. This approach has direct positive impacts on public health and hygiene, as it allows for the efficient identification and quantification of these microorganisms, which can pose a health risk, especially for immunocompromised people. The standard is applicable to a wide range of users such as health care facilities, industrial plants, hygiene laboratories and facilities providing water for personal hygiene. It is specifically applied to the control of water used in hospitals (e.g. for cardiothoracic surgery or rinsing endoscopes) and in households where safe water for hygienic purposes is needed. Economic impacts include improved prevention of health risks, which can lead to reduced costs of treating chronic diseases such as mycobacterioses, and shorter hospitalisation periods. The standard also contributes to ensuring a higher quality of service in healthcare and industry, which has a positive impact on the quality of life and safety of patients and staff.

The standard does not include explicit gender aspects, but indirectly contributes to improving conditions for all groups. As women often occupy caring roles or work in sectors that involve increased exposure to hygiene risks (e.g. health or beauty services), the standard promotes equal access to safe environments and improved working conditions. This indirectly increases the protection of vulnerable groups, which may include women, children and people with medical predispositions, thus contributing to better protection and prevention of health complications. The standard does not specifically deal with the topic of sustainability.

Table 3.4.1 - Overview of research results in the period under evaluation

Type of result ³³	Year of application	Name
Peer-reviewed article, Jimp	2019	Performance of Microfinance Institutions in Europe – Does Social Capital Matter?
Peer-reviewed article, Jimp	2020	Is There a Link Between Financial Exclusion and Over-Indebtedness? Evidence from Czech Peripheral Municipalities
Peer-reviewed article, Jimp	2021	Area-Based Approaches are Losing the Essence of Local Targeting: LEADER/CLLD in the Czech Republic
Final Report	2022	Zombies: Who are They and How do Firms Become Zombies?
Peer-reviewed article, Jimp	2023	A Holistic Model of Health Inequalities for Health Policy and State Administration: A Case Study in the Regions of the Czech Republic
Peer-reviewed article, Jimp	2023	Drivers of Green Economy in an Emerging Market: Generic and Sector-Specific Insights
Expert book	2021	Territorial Differentiation of Health Inequalities in the Czech Republic
Chapter in an expert book	2022	The Importance of Civic Culture – A Conclusion
Final Report	2021	Local Climate Change Adaptation Strategy of the city of Tišnov
Results reflected in guidelines and regulations of a non-legislative nature binding within the competence of the relevant provider	2022	ČSN 75 7840: Water quality – Determination of Atypical Mycobacteria in Water

³³ Specify the specific type of result. Add rows as needed.

Note 1: Please list and describe the results already applied in practice or heading towards application in practice with existing or prospective impact on the society (e.g. domestic or foreign patents, sold licenses, spin-offs, prototypes, varieties and breeds, methodologies, significant analyses, surveys, expert outputs for policymaking or other forms of non-publication outputs, etc.). Indirect results of research, development and creative activities with documented societal impact, e.g. expert activities, services to the public/government/scientific community, may also be reported.

TRANSFER OF RESULTS INTO PRACTICE

3.5 Transfer of results into practice

The evaluated unit shall briefly describe its system for transferring results into practice. It shall also indicate up to five of the most typical users of its results, whether in the university environment or in the non-university application/corporate sphere, detailing how it collaborates with them and how it seeks out new users (using a maximum of five specific examples).

It will also indicate whether and how it commercialises R&D&I results (e.g. selling licences, setting up start-up or spin-off companies, etc.)³⁴, providing brief description of the commercialisation methods used. The effectiveness of the transfer of results and the commercialisation of R&D&I results will be described using a selection of results (max. five) listed in annex table (Table 3.4.1).³⁵

Additionally, the evaluated unit shall briefly comment on the funds received during the period of 2019–2023 from non-public, non-grant sources (e.g. licences sold, spin-off revenues, donations, etc.). A full summary shall be provided in annex table (Table 3.5.1).

Maximum 500 words plus 200 words for each provided example of finding a new user of results and commercialization.

Self-assessment:

The Faculty focuses on social sciences such as regional development, economics, political science, sociology and environmental studies, which creates unique opportunities for transferring results into practice in areas where analytical and strategic approaches are needed. Research outputs, such as policy analyses, regional strategies and sustainable development studies, are mainly used in the public sector and non-profit organisations. These results support policy-making, implementation of development projects and strategic planning, including adaptation to current socio-economic and environmental challenges.

Thanks to its focus, the Faculty cooperates effectively with partners such as state administration, local governments, international institutions and non-profit organisations. While other disciplines often commercialise technologies or products, the outputs of FRDIS are used to form specific decision-making processes and societal interventions, resulting in long-term positive impact. This approach not only supports applied research, but also strengthens the role of the Faculty as a key partner in addressing current challenges.

The Faculty transfers results into practice through cooperation with four types of subjects. These include state institutions and ministries (1), regional and local governments (2), non-profit organisations (3) and the private sector (4). Each type of cooperating entities is listed as a possible example of users (see the first paragraph of the assignment). This area is also addressed in Chapter 3.7 on the implementation of the recommendations.

The Faculty has long been cooperating with several ministries of the Czech Republic and state institutions (1), especially with the Ministry of Agriculture of the Czech Republic, the Ministry of Regional Development of the Czech Republic and the Ministry of the Environment of the Czech Republic. The following are selected from the cooperation in the period under review:

- The Faculty provides expert consultations in the development of strategies, such as the preparation of the Strategic Plan CAP 2021-2027 (Ministry of Agriculture of the Czech Republic) and methodologies of the *Municipal Development Programme* or setting up the implementation of

³⁴ In the case of military HEIs, their specific position is taken into account when evaluating the commercialisation/evaluation of R&D&I results.

³⁵ If the commercialisation of R&D&I results is carried out in this way.

Community-led Local Development (Ministry of Regional Development of the Czech Republic). For the National Institute of Public Health, the Faculty prepared a web application with automatic data processing and data visualisation in maps and evidence for targeted health protection strategies and reduction of health inequalities.

- In 2020 the Faculty cooperated with the Institute of Agricultural Economics and Information and the Ministry of Agriculture of the Czech Republic on the analysis of the impact of EU-Mercosur (see chapter 3.4 for more details) and EU-Japan trade agreements on Czech agriculture and food industry (contract research), provider (Institute of Agricultural Economics and Information), duration in years: 2020, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 200,000/EUR 7,890/CZK 200,000/EUR 7,890, researcher for MENDELU: Ing. Ivo Zdráhal, Ph.D. Environmentally oriented projects were represented by the project *Elaboration of Documents for the Management Plan for the National Natural Monument Zlatý potok*, (Contract research), provider (Agency for Nature Protection and Landscape of the Czech Republic), duration in years: 2023, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 97,000/EUR 3,826/CZK 97,000/EUR 3,826, researcher for MENDELU: Ing. Jiří Schneider, Ph.D.

Cooperation of the Faculty with regional and local governments (type 2) brought results through involvement in development themes, strategies and plans for municipalities and regions such as the South Moravian Region, the South Moravian Innovation Centre, the city of Brno, the city district of Silesian Ostrava or the Šternberk microregion. Four contract research projects for representatives of local and regional government were carried out at the Faculty in the monitored period, e.g. *Evaluation of the Socio-Economic Impacts of the Mikulov Art Symposium "Workshop" 30th year and the Benefits of Building the Municipal Collection of Contemporary Art for the Development of the Town of Mikulov* (contract research), provider (the town of Mikulov), duration in years: 2023, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 73,000/EUR 2,880/CZK 73,000/EUR 2,880, researcher for MENDELU: Associate Professor Ing. Jaroslava Rajchlová, Ph.D., or *Walking Routes in the Porta Microregion* (contract research), provider: Porta Microregion, duration in years: 2023, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 30,000/EUR 1,183/CZK 30,000/EUR 1,183, researcher for MENDELU: Mgr. Ondřej Konečný, Ph.D. In 2021, the Faculty created a *Local Climate Change Adaptation Strategy and Mitigation Measures* for the city of Tišnov (see Chapter 3.5). The outputs of this cooperation formed an important basis for local government decision-making and had a direct impact on the lives of the inhabitants of the area.

The FRDIS put the results into practice by cooperating with non-profit organisations (type 3) in various activities that were not project-protected, such as Local Action Groups (LAGs). The Faculty cooperated with various LAGs in the development of community-led local development strategies. Very close cooperation is taking place, for example, with the LAG Brána Vysočina in the development of a community-led local development strategy for the period 2021–2027 and with the LAG Buchlov in the development of municipalities within the LAG area of operation. Since 2019, the Faculty has been working with the National Network of LAGs to create a self-assessment of the LAG to show its position and role in the territory.

The last type of cooperation is cooperation with the private sector (type 4). Given the focus of the Faculty, the frequency of this collaboration is not so frequent. Activities include, for example, consulting activities. In 2021, cooperation with KINSKÝ Žďár, a.s. was implemented. (educational activities, student trip to the castle in Žďár nad Sázavou, evaluation of services and product). The Faculty provides expert consultations for companies such as OLIVIA s.r.o., for example in the evaluation of ecological elements of linear buildings or thermal bridges. With GaREP, a Regional Economic Consultancy Company, the Faculty addressed the issue of the role of LAGs in the development of the territory in the new programming period 21+. For a private entity, the Faculty prepared a *Study of the Use of the Kozinec Subsidence Area in the Village of Doubrava* in 2023 (Contract

Research), provider: Atelier Fontes, duration in years: 2023, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 260,000/EUR 10,256/CZK 260,000/EUR 10,256, researcher for MENDELU: Ing. Alice Kozumplíková, Ph.D.

Contact with these users was established through personal, professional, etc. contacts, through student internships and placements and through PR teams. Below are four examples of how to find new users of the results according to the type of collaborating entities: state institutions and ministries (1), regional and local governments (2), non-profit organisations (3) and the private sector (4).

- Type 1 – State institutions and ministries. Ministry of Agriculture of the Czech Republic: The Faculty established contact through targeted consultations on topics relevant to the Ministry, in particular the development of the CAP Strategic Plan 2021–2027. Experts from the Faculty participated in seminars organised by the Ministry, where they presented their results from projects focused on rural development, thus promoting mutual cooperation, e.g. within the framework of cooperation on contract research through the state institution – Institute of Agricultural Economics and Information.
- Type 2 – Regional and Local Governments. Porta Microregion: The contact was established because of the long-term cooperation of the Faculty representatives with the LAG Brána Vysočina. Thanks to this activity, the Faculty was awarded a contract research to create a proposal for walking routes in the Porta Microregion, which led to further cooperation in the area's development planning. The outputs of this activity were subsequently used by the microregion to prepare applications for subsidies.
- Type 3. – Non-profit organisations – National Network of LAGs of the Czech Republic: The cooperation was established thanks to the involvement of the Faculty in the activities of the Technology Agency of the Czech Republic (TA ČR) project led by the private company GAREP, within which the results of research focused on community-led local development were presented. The active participation of the Faculty in these events and joint workshops with various LAGs led to the specific assignment of developing the LAG evaluation model for the period 2021+.
- Type 4. – Private sector – Žďár KINSKÝ, a.s.: The partnership with this company was established based on the involvement of the company's representatives in the university's board of trustees. Based on the presentation of the Faculty activities, student internships and excursions to the castle in Žďár nad Sázavou were developed. The cooperation has developed through close cooperation with the company's marketing department by evaluating the services provided and suggesting improvements to the product offer, which has opened the door to other forms of cooperation (e.g. questionnaire surveys in the area of territorial development through tourism).

Although the Faculty did not receive funding from licenses or spin-off companies during the evaluation period, its research had significant socio-economic impacts. By focusing on regional development, sustainable solutions and policy strategies, the Faculty has contributed to the formation of public policies, more effective decision-making by local governments and the implementation of development projects. The results, although non-commercialisable (outside of grants or contract research), have a direct impact on improving quality of life, sustainability, and socio-economic stability, highlighting the value of Faculty research to society.

Table 3.5.1 - Summary of non-public revenues received during the period under evaluation

Type of revenue	Revenue (in thousands CZK/EUR)				
	2019	2020	2021	2022	2023
-	-	-	-	-	-
Total	-	-	-	-	-

Note: Enter funds raised for R&D&I from non-public sources besides grants or contract research (e.g. licences sold, spin-off company revenues, donations, etc.) in the calendar year.

POPULARIZATION OF VAVAI

3.6 The most important activities in the field of popularization of R&D&I and communication with the public

The evaluated unit shall briefly describe its main activities related to the popularisation of R&D&I and communication with the public (e.g. popularisation lectures, citizen science initiatives, etc.) during the period of 2019–2023 and provide up to 10 examples that it considers the most significant.

Maximum 500 words plus 200 words for each example given.

Self-assessment:

FRDIS is actively involved in the popularisation of science and research and makes a significant contribution to the development of society through communication with the general public. It presents the results of its activities to the general public through various events and projects, promotes awareness of current social issues and engages the public in scientific dialogue. Academic staff give lectures for the professional and general public, organise conferences, workshops, summer schools and engage in various popularisation and PR activities. These initiatives reinforce the Faculty's position as a renowned academic institution in the field of regional development and international territorial studies and support its strategic goals in education, research and social action. Individual activities are visible in the Faculty's Facebook communication (<https://www.facebook.com/FRRMS>) and on the website (news) (<https://frms.mendelu.cz/en/news/>). The selected examples of popularisation and communication are typologically divided into three groups, namely:

- popularisation lectures, seminars, public debates and round tables,
- conferences and workshops for a wide audience,
- other PR activities and public communication.

3.6.1 Popularisation lectures, seminars, public debates and round tables

The Faculty regularly organises popularisation lectures and seminars focused on current topics in the field of regional development (see example lecture and webinar), international relations, agriculture and other fields. FRDIS organises public debates and roundtables (see example) to provide a platform for discussion on important global and local issues among experts, students and the wider public. Below are four examples:

- *Discussion with the Governor of the South Moravian Region (2021-2023)*
 - o In order to link the study of regional development, practice and local engagement, the Governor of the South Moravian Region Jan Grolich was a guest at the Faculty for several consecutive years. For example, in 2022 he gave a lecture on the topic "The Role of the South Moravian Region in Regional Development". During the lecture, the Governor focused on key aspects of regional development in the South Moravian Region, including strategies to support economic growth, improve infrastructure and strengthen social cohesion. He also discussed the challenges facing the region, such as demographic change, the impact of climate change and the need for innovation in education and technology. This event was open not only to students and academics, but also to the general public. The lecture was followed by an open discussion, during which the Governor answered questions about specific projects, possibilities of cooperation between the region and the University and future plans for sustainable development of the region. The event provided a unique opportunity for the participants (approximately 150 people) to gain a deeper insight into the practical aspects of regional policy and development, while engaging in a dialogue with a regional government representative on current issues affecting their region.

- *Debate: European Union in One Week Since the Start of the War in Ukraine (2022)*
 - o A debate of experts analysing the EU's response and actions in the context of the conflict in Ukraine was organised one week after Russia invaded Ukraine. The discussants were academics from MENDEL: Mgr. Ondřej Mocek, Ph.D., Professor Ing. Lubor Lacina, Ph.D., and Associate Professor Mgr. Vladimír Ďorđević, Ph.D., who summarised the development of the situation from the crisis in 2014 to the invasion on 24 February 2022, analysed the EU sanctions and the possible evolution of the situation. The discussion was directed both to MENDEL students and the general public. It was attended by about 150 people. Several Belarusian, Russian and Ukrainian students were also present and the whole event was held in a constructive discussion atmosphere. The purpose of the event was to raise awareness of the situation and prevent stigmatisation of students in the region.
- *Round Table on the situation in the Gaza Strip (2023)*
 - o The discussion on the situation in Gaza took place two months after the escalation of the conflict in the Middle East. The event was attended by about 80 people. The discussants were Associate Professor JUDr. PhDr. Marek Čejka, Ph.D., and Mgr. Eva Taterová, M.A., Ph.D., who are experts on the political situation in the region and often appear in the media. They put the audience in a historical context from both an Israeli and an Arab perspective. The steps that preceded the tensions and the attack of 7 October were presented, which opened and stimulated a rich discussion that did not end even after the allotted 90 minutes. The discussants then moved to the S-Club, where they also discussed the EU and Czech steps in a closer circle. Representatives of the academic community from among Muslims and Israelis also joined the discussion. The whole event was held in an atmosphere of understanding, despite the shaky topic.
- *Webinar: Determinants of Health Inequalities for Health Policy and Government (2023)*
 - o The event was addressed to the professional public, especially to the employees of the state administration, public administration and health policy (20 participants). The main objective was to present the results of research focused on territorial differences in health across regions of the Czech Republic. During the webinar, key determinants of health inequalities were analysed, such as socio-economic factors (unemployment, education), access to health care or environmental influences. The Faculty researchers presented a holistic model of health inequalities, which enables effective data interpretation and the creation of targeted measures to improve the health conditions of the population in the most affected regions, such as the Karlovy Vary and Ústí nad Labem regions. Hosting a webinar is an example of how the Faculty approaches the dissemination of results into practice. At the same time, it complemented the communication of the results of the project to the general public through media appearances of the principal investigator, Associate Professor PhDr. Dana Hübelová, Ph.D.

3.6.2 Conferences and workshops for general audiences

The Faculty is actively involved in the organisation of international conferences, workshops and summer schools that promote the exchange of knowledge and experience between academics, practitioners and the public. These activities focus on current challenges in regional development, international studies, education and innovation. Key events include the annual RESPO international conference (see example) reflecting the focus of the Faculty, thematic workshops such as Design Thinking (see example) and summer schools. These events attract participants from different countries, different areas of interest, thus contributing to the development of local and international cooperation and openness to a wide range of participants.

- RESPO International Scientific Conference (2019, 2023)
 - o RESPO is an annual conference aimed at sharing knowledge from economic, social, political, security, demographic, geographic and environmental perspectives. The conference emphasises

a multidisciplinary approach as well as the practical application of knowledge from regional development and international studies. That is why representatives from practice (local government units, non-profit organisations, state institutions) are invited to participate in the conference among the keynote speakers and participants. The 12th edition of the event took place in 2024 (the event was not held during the COVID-19 pandemic). Every year the conference is an important meeting place for professionals, students and the general public interested in the topics. The number of participants ranged from 70 to 200. The event was also open to students with their contributions related to their theses and students involved in the projects of the Internal Grant Agency.

- *Design Thinking (2022) Workshop*

- o The 2022 Design Thinking Workshop was a three-day international event aimed at promoting innovative thinking and problem solving in education. It is intended for teachers, educators and their students. It was led by foreign experts. The aim was to answer the question: "How can we help students gain valuable and engaging learning experience through innovative teaching methods?" Participants learned creative approaches to engage students in learning through engaging and collaborative methods. The event had a strong practical impact as participants took away tools and inspiration for direct application in their teaching practice. The workshop received a positive response and contributed to strengthening innovation in the educational process. Link to the event here: <https://frms.mendelu.cz/en/invitation-for-design-thinking-workshop/>

3.6.3 Other PR activities and public communication

FRDIS works systematically to improve its image and build its reputation through strategic PR activities and effective communication with various target groups including students, alumni and the general public. The Faculty uses modern communication channels to disseminate information about its activities and to strengthen relationships with its communities. The activities and tools that are applied throughout the period under review include media appearances and information (see examples – MF Dnes and Czech Television), information on online platforms and newsletters, Faculty participation in Gaudeamus fairs, festivals (e.g. Ekofilm – see example) and presentation events (e.g. Exhibitions – see example) or events organised throughout the university (e.g. Night of Scientists or Career Day).

- *Photography exhibition showing the results of research and student internships – Amazonia Through the Eyes of an Anthropologist (2019)*

- o The Faculty organised a photo exhibition entitled Amazonia through the Eyes of an Anthropologist, which presented the results of research and student internships in the Amazon region. The exhibition offered visitors a unique insight into the life of indigenous communities, biodiversity and the environmental challenges of the area. The photographs were taken during the field research and internships of the students of the Faculty, which emphasises the connection between academic education and practical experience in the field. This initiative served as an effective communication bridge between the academic community and the general public, presenting research results in a clear and visually appealing way. The exhibition not only raised awareness of the cultural and ecological aspects of the Amazonia, but also inspired discussion on the importance of environmental protection and sustainable development.

- *EKO FILM Festival (2019)*

- o The Faculty participates in the popularisation of environmental scientific topics through participation in the EKO FILM festival, the oldest international festival with environmental themes in Europe. During the festival, the Faculty organises lectures, discussions and workshops focused on current challenges in the field of sustainable development, environmental protection and adaptation to climate change. These events are aimed not only at professionals but also at

the general public, including young people, thus promoting environmental education and public participation in addressing key global issues. One of the specific contributions of the Faculty was a presentation and debate led by Ing. Jiří Schneider, Ph.D., on the topic of the Czech landscape, ecosystem services, climate change in the regional context, where experts discussed with visitors about adaptation to drought and floods, the role of municipalities in the fight against climate change and examples of good practice from the Czech Republic and abroad. The results of the Moravian Karst research were presented by a short film by Professor MVDr. Ivo Pavlík, CSc. Participation in the EKOFILM festival allows the Faculty to present not only its research activities, but also to effectively communicate the importance of sustainable solutions to the public and to strengthen its role as a leader in regional and environmental development.

- *Article about the research results in the national newspaper MF Dnes (2020)*
 - o Ing. Mgr. Jiří Čeněk, Ph.D., presented the first results of his research on the impact of the coronavirus pandemic on regional development in the national newspaper MF Dnes (one of the most important in the Czech Republic in terms of readership). This international study focuses on the analysis of socio-economic factors affected by the pandemic and proposes strategies to mitigate the negative impacts on local communities. The research identifies key areas that have been most affected by the pandemic, including SMEs, employment and public services. By publishing the article in the national press and disseminating it on the Faculty's social networks, the results were made available to the general public. In this way, the Faculty not only supported the dissemination of information about the regional impacts of the pandemic, but also initiated a public debate that can serve as a platform for future recovery and resilience strategies. This approach emphasises the importance of combining scientific analysis with targeted communication and linking academic research to the needs of society.
- *Appearance and commentary on TV – Horizont (Czech Television) (2023)*
 - o The performance of Mgr. Martin Hrabálek, Ph.D., in the programme Horizont ČT24 is an example of the possible transfer of scientific information to the general public. The interview includes a commentary on the current situation (shipwreck and sinking) linked to the topics of migration and the risks faced by migrants on the routes across the Mediterranean. The interview gave the audience a deeper insight into an issue that is often framed only by media headlines. The form of national television appearances is an effective way of communicating scientific knowledge and expert analysis to the general public. Broadcasting on a platform such as Czech Television allows you to reach thousands of viewers across age, socio-economic and educational groups. Audiences not only get an overview of current challenges, but can feel better informed and involved in the public discourse. This approach also reinforces trust in scientific knowledge and experts as important sources of information in an era of false or distorted information. Similar forms of communication, such as media interviews, are a key tool for raising awareness of global issues and the importance of academic research in addressing them.

IMPLEMENTATION OF RECOMMENDATIONS

3.7 Implementation of the recommendations in Module 3

The evaluated unit will briefly describe how it has implemented the recommendations for Module 3 from the previous evaluation period, if applicable.

Maximum 1000 words.

Self-assessment:

In order to achieve an increase in participation in project calls, the Faculty has adopted a number of systemic management measures, namely restructuring and professionalisation of the project centre, clarification of the competences of project managers, evaluation of the suitability and success of call types at the annual meeting of management and project managers, discussion of the strategy of R&D activities with the participation of the Vice-Dean and the Dean, and targeted information about suitable calls and participation in possible consortia. The Faculty evaluates the indicators of the R&D activities annually.

As a result, the number of project submissions (128) for the 2019–2023 evaluation period was double the 64 project proposals for the 2014–2018 period. In the period 2014–2018, the Faculty was awarded 14 projects, in the follow-up period it was already 35 projects. The average number of projects in progress has increased from 7.6 in 2014–2018 to 13.8 in 2019–2023. The financial amount of the projects solved at the Faculty is also increasing from CZK 14.7 million (EUR 580,000) for the period 2014–2018 compared to CZK 41.5 million (EUR 1,637,000) for the period 2019–2023.

Participation of the Faculty in international consortia was realised through involvement in international projects in the period 2019–2023, such as projects of GA ČR Czech Republic, -Poland, Visegrad fund, Aktion, Erasmus, Interreg or NAWA with partners mainly from the academic environment (Poland, Slovakia, Hungary, Austria, Italy, Portugal).

Since the establishment of the Faculty in 2014 until 2018, the Faculty has been involved in three contract research projects and one TA ČR project, but since 2019 the number of projects has increased (eight contract research projects and nine TA ČR projects). The main partners in practice for the Faculty from public administration have gradually emerged as the Regional Authority of the South Moravian Region, the Brno City Council, the Ministry of the Environment of the Czech Republic. Cooperation with the Ministry of Health of the Czech Republic and the Ministry of the Environment of the Czech Republic was related to the preparation of methodologies and strategies, provision of expert advice and implementation of research projects.. The Faculty also cooperates with regional governments and local action groups within projects focused on regional development. The private entities included, for example, GaREP or SV – Ateliér Fontes.

The publishing strategy is reflected in a set incentive programme that significantly favours quality results in international teams and in fields related to regional development and territorial studies. The share of quality publications is increasing in the long term, i.e. in quartiles Q1 and Q2. Q1 publications alone accounted for more than 40% of all impacted publications in 2023. In 2023, the ratio was 74:26 in favour of Q1 and Q2 journals. In 2019, authors from FRDIS published only 3 articles in Q1 and 7 articles in Q2 (i.e. 53% share of impacted publications). In the period 2014–2020, journals dominated in Q3 and Q4. The highest Normalised Citation Impact are publications by Faculty members in fields of History, Area Studies and Public, Environmental & Occupational Health (value over 2.0).

Faculty staff were co-authors or authors of 68 publications in 2023. In 2019, there were only 46 publications. Exactly half of these publications were impact factors (journals with an impact factor in the Web of Science database), 30% were journals in the Scopus database and 16% were chapters in

peer-reviewed books. There is a significant increase in the number of citations of publications by FRDIS academics and those with an H-index greater than 5. The number of citations of publications on Web of Science doubled in the period 2019–2023 compared to the previous period.

In collaboration with the Faculty of Business and Economics, the Faculty is addressing the joint development of the topic of applying Environmental, Social and Governance (ESG) at the University, an important common theme, as well as business economics and circular (bio)economics.

In 2023, the Faculty had a proposal under consideration by the National Accreditation Office for a doctoral programme in *Rural Development*. This was approved by its Board in 2024, and therefore its implementation will enable the Faculty to develop talented students for the Master's programme and strengthen science and research in the future.

As part of the research strategy (a tool for employing foreign workers), Dr. hab. Luis Inostroza (H-index 22), an expert in environmental sciences and spatial development from the University of Bochum, was recruited to strengthen international scientific collaboration and publication performance. He has already actively prepared proposals for several international projects and won/resolved a project supported by Swiss Confederation to support the implementation of international workshops (support of EUR 40 000). By supporting incoming mobility, the Faculty tries to gain contacts to quality foreign scientists and, in case of their interest, to create a job position (e.g. dr. Lategan, South Africa).

In order to increase the applicability of research results in practice within the commercialisation strategy, the following tools were used by the Faculty: support for submission of projects in which research results are used (e.g. TA CR and contract research), organisation and support of internships and work experience for students, organisation of conferences and workshops and support for publication of practice-oriented results through an incentive programme.

In the area of PR, the website was redesigned; for English degree programmes, the Faculty started to film bilingual graduation videos with existing students. It uses them for a social media campaign, where it succeeds in increasing the international visibility of the Faculty and being attractive to international students (approximately 10% of all students). The Faculty has made the biggest shift in social media activities, namely Facebook and Instagram, where it publishes its events, but also other innovations such as the involvement of academic staff in projects or publications and international cooperation. It is involved in popular science events at the University, such as the *Night of the Scientists* or, more recently, the programme of the VIDA! Science Amusement Park.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 3

Document name	No. criteria	Location (link in HTML)
Motivational programme to support career management of academic staff of the Faculty of Regional Development and International Studies of Mendel University in Brno	3.3, 3.4, 3.7	https://is.mendelu.cz/dok_server/slozka.pl?id=86089;download=244864
Dean's Decision No. 1/2021 Minimum Faculty Requirements for the Classification of Academic Staff of the Faculty of Regional Development and International Studies of Mendel University in Brno to a Higher Salary Grade	3.7	Click here.
Dean's Directive No. 1/2023 Support for Gifted Students at the Faculty of Regional Development and International Studies of Mendel University in Brno	3.6	Click here.
Dean's Directive No. 02/2023 FRDIS Scholarship Award Principles	3.6	https://is.mendelu.cz/dok_server/slozka.pl?id=86091;download=308443
Projects and Grants	3.3, 3.5	https://frms.mendelu.cz/en/projects-grants/

Organisational Structure	3.1	https://frms.mendelu.cz/en/about-the-faculty/organisational-structure/
Looking for a solution (web page)	3.7	https://frms.mendelu.cz/en/looking-for-a-solution/
FB profile – FRDIS	3.6	https://www.facebook.com/FRRMS
News (web page)	3.1, 3.2, 3.6	https://frms.mendelu.cz/en/news/
Hübelová, D., Caha, J., Janošíková, L., Kozumplíková, A. (2023). A Holistic Model of Health Inequalities for Health Policy and State Administration: a Case Study in the Regions of the Czech Republic. <i>International Journal for Equity in Health</i> , 22(1), 183.	3.4	https://equityhealth.biomedcentral.com/articles/10.1186/s12939-023-01996-2
Konečný, O., Šilhan, Z., Chaloupková, M., Svobodová H., (2021). Area-Based Approaches are Losing the Essence of Local Targeting: LEADER/CLLD in the Czech Republic. <i>European Planning Studies</i> , 29 (4), 619-636.	3.4	https://www.tandfonline.com/doi/full/10.1080/09654313.2020.1764913
Akalibey, S., Ahenkan, A., Duho, K. C. T., Maloreh-Nyamekye, T., & Schneider, J. (2023). Drivers of Green Economy in an Emerging Market: Generic and Sector-Specific Insights. <i>Journal of Cleaner Production</i> , 425, 138857.	3.4	https://www.sciencedirect.com/science/article/abs/pii/S0959652623030159
Chmelíková, G., Redlichová, R. 2020. Is There a Link Between Financial Exclusion and Over-Indebtedness? Evidence from Czech Peripheral Municipalities. <i>Journal of Rural Studies</i> . 78(August), 457–466. ISSN 0743-0167.	3.4	https://www.sciencedirect.com/science/article/abs/pii/S0743016719315116
Chmelíková, G., Krauss, A., & Dvouletý, O. (2019). Performance of Microfinance Institutions in Europe – Does Social Capital Matter? <i>Socio-Economic Planning Sciences</i> , 68, 100670.	3.4	https://www.sciencedirect.com/science/article/abs/pii/S0038012118300831
Blažková, I., & Dvouletý, O. (2020). Zombies: Who are They and How do Firms Become Zombies? <i>Journal of Small Business Management</i> , 60(1), 119–145.	3.4	https://doi.org/10.1080/00472778.2019.1696100
Hübelová, D., Chromková Manea, E. B., Kozumplíková, A. (eds.) 2021. <i>Territorial Differentiation of Health Inequalities in the Czech Republic</i> . Prague: Grada. p. 98 ISBN 978-80-271-4655-0.	3.4	Click here.
Đorđević, V., Ramet, S.P. (2022). The Importance of Civic Culture – A Conclusion. In: Ramet, S.P., Šorđević, V., Hassenstab, C.M. (eds) <i>Civic and Uncivic Values in the Czech Republic</i> . Palgrave Macmillan, Cham.	3.4	https://doi.org/10.1007/978-3-030-91225-3_11
Fremrová, I.; Ulmann, V.; Pavlík, I.; (2022). Water Quality – Determination of Atypical Mycobacteria in Water according to ČSN 75 7840. ČSN 75 7840. Territorial validity of the result: A = validity for the Czech Republic (national legislative or non-legislative regulation, national standard).	3.4	https://shop.normy.biz/detail/515943

SELF-EVALUATION REPORT FOR MODULE 3

THE NAME OF THE UNIT BEING EVALUATED: Institute of Lifelong Learning

FORD: 5 – Social sciences

SOCIAL CONTRIBUTION OF THE EVALUATED UNIT

3.1 Introductory information about the unit under evaluation

The evaluated unit will describe its mission and vision and provide a general self-reflection of the societal contribution of R&D&I, along with its long-term goals in the fields it develops. The distribution of research activities by type of research will also be commented on.¹ The evaluated unit will describe its organisational structure and size (staffing, number of students, number of study programmes implemented, etc.) based on the data provided in annex tables 3.1.1 to 3.1.6.

Maximum 1000 words.

This is a non-rated indicator that serves as an introduction to the evaluated unit, providing context for data in indicators 3.2–3.7.

Self-assessment:

The University **Institute of Lifelong Learning** (ILL) is an integral part of Mendel University in Brno (MENDELU) and its pillar in the field of professional development and further education. The mission and purpose of the Institute is to promote lifelong learning by providing quality educational programmes for different target groups. The Institute extends educational opportunities not only to the University's students, but also to staff, seniors and the wider community. It emphasises the development of professional, linguistic and personal competences, the promotion of career development and intergenerational learning. Its activities contribute to the accessibility of education, the promotion of innovation and the improvement of the quality of life of its participants, thus fulfilling the University's values of education, science and social responsibility. The mission of the University institute is also the implementation of educational and creative activities primarily in the areas of *Teaching* and *Non-Teaching Pedagogy*, which reflect the needs of the University (employees, students, graduates), the application sphere, the region and society in the 21st century.

Scientific research is not the Institute's primary focus. These are carried out mainly by the Department of Social Sciences, which had 8 to 12 employees during the review period. Its research centres on the human and social sciences. It reflects the practical activities of individual departments. Staff focus mainly on adult education – pedagogy, andragogy, VET, psychology, sociology, social work, and counselling. Research draws on creative outputs and practical experience from all departments. The following text is structured according to the individual departments of the Institute of Lifelong Learning.

¹ Basic, applied, contract, artistic research (see Definition of Terms in Methodology HEI2025+).

The **Department of Social Sciences**, which is the only one composed of academic staff, focuses on the implementation of two accredited Bachelor's degree programmes in the field of *Teaching* and *Non-Teaching Pedagogy*. There is a year-on-year increase in interest in studying pedagogically oriented bachelor's degree programmes. While in 2019 there were 204 registered applicants, in 2023 there were 526 (see [Development of the number of students in study programmes of the Institute of Lifelong Learning](#)). The research focuses on topics related to teaching vocational subjects for secondary schools, adult education, psychological aspects of education, etc. The scientific focus of the department on teachers of vocational subjects for secondary schools is unique in the Czech Republic. In addition, it is the only institute in the Czech Republic that deals with the history of secondary vocational education in the period of communist Czechoslovakia (1948–1989). Among other things, a project of the Czech Science Foundation (GAČR) was obtained for this topic in the period under review (details [here](#)). The main results of the project have been published on Web of Science and presented at international conferences or invited lectures (see [List of main activities and publications of the Czech Science Foundation](#)).

Academic members work closely with the technical-economic staff of all departments of the Institute of Lifelong Learning, while the activities and results of the work of other departments, jointly acquired data and experience, are from a comprehensive perspective a valuable source and inspiration for the creative activities of the university institute as such.

The **Department of Continuing Education** has long offered a wide range of professional, language, and interest-based courses for university staff and the general public. Their themes reflect the University's professional profile. Courses range from one-day sessions to two-year programmes, both accredited and non-accredited. Topics are regularly updated based on participant demand (see the [Courses and Participants](#)).

The Department follows current trends and is completing a project to implement a system for issuing and recognising microcertificates for short learning units. The goal is to become a university-wide centre for methodological and implementation support.

The MENDELU **Counselling Centre** has long provided support to applicants for studies and students with specific needs and psychological, study and career counselling services to students, employees of all faculties and the university institute and the general public in the form of individual counselling and group activities. These activities aim primarily at reducing academic failure, promoting the employability of students and graduates in the labour market, education of students and employees in the area of soft skills, as well as helping individuals in difficult life situations (see the [Activities](#) of the Counselling Centre).

The **Department of Senior Education** fulfils in particular the so-called third role of the University, i.e. it significantly contributes to the dissemination of scientific research knowledge among the general public, in this case among seniors (55+) through educational activities – The [University of the Third Age](#) (U3V) (Link [here](#)). It draws on the expertise and academic staff of all the faculties of the University. The University of the Third Age provides extra-curricular education through courses (see the [Courses of the University of the Third Age](#)).

The focus of education is based on the accredited study programmes of all MENDELU faculties. This gives seniors the opportunity to keep in touch with the latest outputs of the University's scientific activities and to disseminate information in their surroundings. In addition to its activities at the University's headquarters (Brno), it also focuses on creating branches in smaller towns and villages where the availability of this type of education is fundamentally lower. It currently has 5 branches (Bruntál, Kyjov, Vyškov, Rožnov pod Radhoštěm, Velké Pavlovice) and more are in the pipeline.

The Institute of Lifelong Learning generally aims to develop lifelong learning through quality programmes reflecting the needs of different target groups. The Institute's vision includes strengthening the role of the professional development pillar at MENDELU, promoting innovation in education and implementing modern approaches such as microcertificates and distance learning.

The long-term goal is to be a centre of excellence in adult education, to promote the employability of students and graduates on the labour market and to develop their competences. The Institute also plans to expand the branches of the University of the Third Age and to continue its research on secondary vocational education, which is quite unique in the Czech Republic. It also wants to provide comprehensive counselling services with a positive impact on the academic and professional success of participants.

Table 3.1.1 – Staffing per FTE²

Academic/ Professional position	Total / Of which women					
	2019	2020	2021	2022	2023	Total
Professor	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Associate Professor	0.4/0.0	0.3/0.0	0.1/0.0	0.2/0.0	0.0/0.0	1.0/0.0
Assistant Professor	9.4/5.4	8.8/5.2	7.8/4.2	6.8/3.0	5.6/2.0	38.4/19.8
Assistant	1.5/1.2	2.3/1.2	1.9/0.7	1.2/0.0	1.6/0.4	8.5/3.5
R&D Personnel ³	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Researchers in other categories ⁴	0.0/0.0	0.1/0.1	0.0/0.0	0.0/0.0	0.0/0.0	0.1/0.1
Technical and economic staff ⁵	9.5/6.9	17.8/13.9	20.5/15.9	23.7/19.2	18.9/15.4	90.4/71.3
Scientific, research and development staff involved in teaching activities	0.0/0.0	0.1/0.1	0.1/0.1	0.1/0.1	0.0/0.0	0.3/0.3
Early career researchers ⁶	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0	0.0/0.0
Total ⁷	20.8/13.5	29.3/20.4	30.3/20.8	31.9/22.2	26.1/17.8	138.3/94.7

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

² The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full-time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

³ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

⁴ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

⁵ Who participates in the management and support of R&D&I in the institution.

⁶ See Definition of Terms in Methodology HEI2025+.

⁷ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

3.1.2 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2019 (numbers of physical employees and personnel)⁸

Academic/ professional position	Under 29 years		30–39 years old		40–49 years old		50–59 years old		60–69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	0	0	0	0	0	0	0	0
Associate Professor	0	0	0	0	1	0	0	0	0	0	0	0
Assistant Professor	0	0	7	3	4	3	1	1	0	0	0	0
Assistant	0	0	2	1	0	0	1	1	0	0	0	0
R&D Personnel ⁹	0	0	0	0	0	0	0	0	0	0	0	0
Researchers in other categories ¹⁰	0	0	0	0	0	0	0	0	0	0	0	0
Technical and economic staff ¹¹	2	1	9	7	0	0	0	0	0	0	0	0
Scientific, research and development staff involved in teaching activities	0	0	0	0	0	0	0	0	0	0	0	0
Early career researcher ¹²	0	0	0	0	0	0	0	0	0	0	0	0
Total ¹³	2	1	18	11	5	3	2	2	0	0	0	0

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D Personnel, Researchers in other categories and Technical and economic staff are mutually exclusive, i.e. one staff member is reported in only one category. The categories of scientific, research and development staff involved in teaching activities and early career researchers are reported collectively for all the above-mentioned categories.

3.1.3 Age structure of R&D&I personnel of the evaluated unit and their structure by job title and gender in the year 2023 (numbers of physical employees and personnel)¹⁴

Academic/ professional position	Under 29 years		30–39 years old		40–49 years old		50–59 years old		60–69 years old		70 years and older	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0	0	0	0	0	0	0	0	0	0	0	0
Associate Professor	0	0	0	0	0	0	0	0	0	0	0	0
Assistant Professor	0	0	3	1	5	1	0	0	1	1	0	0
Assistant	0	0	1	0	1	1	0	0	0	0	0	0

⁸ The total number of employees/workers as of 31st December of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

⁹ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁰ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹¹ Who participates in the management and support of R&D&I in the institution.

¹² See Definition of Terms in Methodology HEI2025+.

¹³ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I Personnel, Researchers in other categories and technical and economic staff.

¹⁴ The total number of employees/workers as at 31.12. of the calendar year in question is to be entered, irrespective of the level of time worked, but only in an employment relationship (including agreement on work activity, excluding agreement on work performance). Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

R&D Personnel ¹⁵	0	0	0	0	0	0	0	0	0	0	0	0
Researchers in other categories ¹⁶	0	0	0	0	0	0	0	0	0	0	0	0
Technical and economic staff ¹⁷	6	4	5	4	14	12	2	2	0	0	0	0
Scientific, research and development staff involved in teaching activities	0	0	0	0	0	0	0	0	0	0	0	0
Early career researcher ¹⁸	0	0	0	0	0	0	0	0	0	0	0	0
Total ¹⁹	6	4	9	5	20	14	2	2	1	1	0	0

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, R&D personnel, researchers in other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

Table 3.1.4 – Students

Type of study	2019		2020		2021		2022		2023		Total	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Undergraduate	256	175	289	198	249	182	239	184	228	182	1261	921
Master's ²⁰	24	11	36	12	16	6	2	0	0	0	78	29
Doctoral	0	0	0	0	0	0	0	0	0	0	0	0
Lifelong Learning Courses	4,039	3,280	1,883	1,412	2,214	1,612	3,302	2,487	3,640	2,752	15,078	11,543
Total	4,319	3,466	2,208	1,622	2,479	1,800	3,543	2,671	3,868	2,934	16,417	12,493

Table 3.1.5 - Study programmes in Czech/English

Type of study programme	Total ²¹ / Of which professional study programmes											
	2019		2020		2021		2022		2023		Total	
Undergraduate	2/0	0/0	1/0	0/0	2/0	2/0	2/0	2/0	2/0	2/0	4/0	2/0
Master's	1/0	0/0	1/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	1/0	0/0
Doctoral	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Lifelong Learning courses	77/0	0/0	48/0	0/0	80/0	0/0	129/0	0/0	126/0	0/0	129/0	0/0
Total	80/0	0/0	50/0	0/0	82/0	2/0	131/0	2/0	128/0	2/0	135/0	2/0

Note: For each SP type, enter the number of SPs in Czech language in the first cell and insert the number of SPs in English language after the slash in the same cell (e.g. 15/3), enter the number of professional SPs in Czech language in the second cell and insert the number of professional SPs in English language after the slash. Follow a similar procedure in the last column of the table (Total).

¹⁵ The category "R&D Personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁶ The category "Researchers in other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹⁷ Who participates in the management and support of R&D&I in the institution.

¹⁸ See Definition of Terms in Methodology HEI2025+.

¹⁹ Total is the sum of the categories: professor, associate professor, assistant professor, assistant, R&I personnel, researchers in other categories and technical and economic staff.

²⁰ All master's degree students are listed, regardless of the length of their programme of study.

²¹ The total number of study programmes for which admissions have been announced in a given academic year.

3.1.6 – R&D&I capacities

R&D&I field	FORD	FORD share [%]	Predominant type of research	Total share of industry group [%]
1. Natural Sciences	1.1 Mathematics		Select an item.	
	1.2 Computer and information sciences		Select an item.	
	1.3 Physical sciences		Select an item.	
	1.4 Chemical sciences		Select an item.	
	1.5 Earth and related environmental sciences		Select an item.	
	1.6 Biological sciences		Select an item.	
	1.7 Other natural sciences		Select an item.	
2. Engineering and Technology	2.1 Civil engineering		Select an item.	2
	2.2 Electrical engineering, Electronic engineering, Information engineering		Select an item.	
	2.3 Mechanical engineering		Select an item.	
	2.4 Chemical engineering		Select an item.	
	2.5 Materials engineering	2	Balanced basic and applied research	
	2.6 Medical engineering		Select an item.	
	2.7 Environmental engineering		Select an item.	
	2.8 Environmental biotechnology		Select an item.	
	2.9 Industrial biotechnology		Select an item.	
	2.10 Nanotechnology		Select an item.	
	2.11 Other engineering and technologies		Select an item.	
3. Medical and Health Sciences	3.1 Basic medicine		Select an item.	
	3.2 Clinical medicine		Select an item.	
	3.3 Health sciences		Select an item.	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	3	Balanced basic and applied research	3
	4.2 Animal and Dairy science		Select an item.	
	4.3 Veterinary science		Select an item.	
	4.4 Other agricultural sciences		Balanced basic and applied research	
5. Social Sciences	5.1 Psychology and cognitive sciences	5	Balanced basic and applied research	95
	5.2 Economics and Business		Select an item.	
	5.3 Education	90	Balanced basic and applied research	
	5.4 Sociology		Select an item.	
	5.5 Law		Select an item.	
	5.6 Political science		Select an item.	
	5.7 Social and economic geography		Select an item.	
	5.8 Media and communications		Select an item.	
	5.9 Other social sciences		Select an item.	
6. Humanities and the Arts	6.1 History and Archaeology		Select an item.	
	6.2 Languages and Literature		Select an item.	

	6.3 Philosophy, Ethics and Religion		Select an item.	
	6.4 Arts (arts, history of arts, performing arts, music)		Select an item.	
	6.5 Other Humanities and the Arts		Select an item.	
Total		100%	-	100%

RECOGNITION BY THE RESEARCH COMMUNITY

3.2 Recognition by the research community

The evaluated unit will briefly comment on its position in the research community. It shall consider individual and other prestigious R&D&I awards, participation of its academic staff in the editorial boards of international scientific journals, elected membership in professional societies, major invited lectures given by the evaluated unit's academic staff abroad or by foreign scientists and other relevant guests at the evaluated unit. Additionally, it will address the involvement of staff in the evaluation of national or European project/programme calls over the period of 2019–2023 based on the data provided in annex tables 3.2.1 to 3.2.5 (max. 10 most relevant items). If necessary, the evaluated unit shall list any additional services to the scientific community that it considers relevant.

Maximum 1000 words.

Self-assessment:

The ILL is well recognised by the research community as a key partner in professional development, innovation and lifelong learning. Through its activities, it contributes to expanding the knowledge and skills necessary for a successful professional life and academic growth. The Institute is valued for its contribution to interdisciplinary collaboration, which enables the linking of theoretical knowledge with practice. The Institute is more than just a learning centre – it is a platform for sharing innovative approaches and methodologies that impact the development of society as a whole. It has built its reputation not only through quality educational programmes, but also through active involvement in R&D that contributes to scientific excellence. This status makes the Institute an integral part of MENDEL and highlights its role in science, education and social responsibility. This is evidenced by the *Rector's Award*, granted twice for contributions to civil society. In 2019, it was awarded to Mgr. Kateřina Pevná and Mgr. et Mgr. Lenka Kamanová, Ph.D., founders of the first Intergenerational University in Moravia. This unique project fosters intergenerational dialogue and strengthens social cohesion through educational activities for grandparents and grandchildren. The Intergenerational University creates meaningful social impact by connecting generations. The Rector's Award was also granted in 2022 to Mgr. Barbora Šimová and PhDr. Zdeňka Hort, Ph.D. (more [here](#)), for their exceptional psychological and academic support to students during the COVID-19 pandemic. They provided flexible one-to-one consultations, led online webinars, and established one of the first student support groups in a university setting.

The activities of the Institute obviously go beyond the scope of MENDEL and it is gaining recognition in the research community not only in the Czech Republic but also abroad. This is evidenced by the numerous requested lectures given by the Institute staff at various foreign universities and conferences during the period under review. Examples are the requested lectures of Associate Professor Mgr. Petr Adamec, Ph.D., Mgr. et Mgr. Lenka Kamanová, Ph.D., Mgr. Kateřina Pevná or Mgr. et Mgr. Michal Šimáně, Ph.D., at universities and professional institutions, as well as in plenary presentations at conferences in Latvia, Germany, Hungary, Slovakia and other countries. Mgr. et Mgr. Michal Šimáně, Ph.D., additionally served as a visiting lecturer (as a "Viesdocents") at Daugavpils University in Latvia from 2019–2021. During this cooperation, the Institute not only passed on examples of good practice from the Institute to foreign colleagues, but also actively contributed, for example, to the initial plans for the establishment of the University of the Third Age at Daugavpils University and the focus on the development of digital literacy of academic staff of this University. The importance of his work was recognised by, among other things, the fact that his tenure at the University was extended until 2021, this time fully funded by Daugavpils University itself.

The Institute also welcomed significantly more foreign experts in the period under review than in the previous period under review (2014–2018). Guests presented their research results and other creative activities in the form of invited lectures. Among them were experts from France, Italy, Latvia, Poland, Hungary, Slovakia, USA and other countries, which confirms the position of the Institute of Lifelong Learning as an important international partner.

A number of staff from the Institute, especially academic staff, have served and continue to serve on the editorial boards of international journals (see table below) included in reputable databases such as ERIH/EBSCO or SCOPUS. Some of them also serve as section editors, providing expert management of the articles in their assigned sections, coordinating the peer review process and ensuring that high standards of quality are maintained in the content of published papers. In this way, they contribute not only to raising the professional level of the journals concerned, but also to the development of scientific communication on an international scale. At the same time, some of the staff members also serve as evaluators in domestic and foreign evaluation panels of various grant agencies or councils for science, research and innovation (see Table 3.2.5).

Academics have been active throughout the review period in numerous major international societies, associations, and professional platforms representing key players in their fields. These include the European Real Estate Society (ERES), the Global Research Institute for Business Academics (GRIBA), the European Association for Transactional Analysis (EATA), the International Transactional Analysis Association (ITAA), the International Coach Federation (ICF), and the International Standing Conference for the History of Education (ISCHE). In the Czech Republic, engagement includes the Czech Association of Pedagogical Research (ČAPV), the Czech Pedagogical Society (ČPdS), the Czech Association of Transactional Analysis (ČATA), ReferNet, Age Management, z. s., the International Project Management Association Czech Republic (IPMA, z. s.), and especially the Czech Oral History Association (COHA), where Mgr. et Mgr. Michal Šimáně, Ph.D., has served as an elected member of the Review Committee since 2015. The ILL also has strong representation in the Association of Universities of the Third Age (AU3V). In 2019, Mgr. et Mgr. Lenka Kamanová, Ph.D., served as an elected member of its Review Committee. Since 2021, Mgr. Kateřina Pevná, head of the University of the Third Age and long-time contributor to research and development, has served as an elected member of the AU3V presidium.

The students of the ILL must not be overlooked either, as their achievements contribute significantly to the Institute's reputation, not only in terms of academic results, but also in other areas such as sports, culture and civic activities, which are regularly reflected in the competitions held (e.g. the annual Student Competition, see more [here](#)), professional conferences (e.g. ICOLLE, see more [here](#)) or various public projects, thus contributing to the promotion of the Institute of Lifelong Learning as a centre of excellence in lifelong learning. These students become an inspiration for their peers, as demonstrated by the increasing number of applicants to study at the Institute of Lifelong Learning each year (see more [here](#)), and also show that education and active participation in society have no age limits.

Table 3.2.1 – Prestigious R&D&I awards granted during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the award	Awarding institution
Mgr. et Mgr. Lenka Kamanová, Ph.D. Mgr. Kateřina Pevná	Award for significant contribution to the development of civil society	MENDELU
PhDr. Zdeňka Hort, Ph.D. Mgr. Barbora Šimová	Award for significant contribution to the development of civil society	MENDELU

Note: Provide up to 10 examples.

Table 3.2.2 Participation of academic staff of the evaluated unit in editorial boards of international scientific journals during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of scientific journal, ISSN
Associate Professor Mgr. Petr Adamec, Ph.D.	Lifelong Learning, ISSN 1804-526X
Associate Professor Mgr. Pavel Pecina, Ph.D.	AD ALTA: Journal Of Interdisciplinary Research, ISSN 1804-7890
Mgr. David Kryštof, Ph.D.	International Journal of Transactional Analysis Research & Practice, ISSN 2218-3159
Mgr. et Mgr. Michal Šimáně, Ph.D.	Lifelong Learning, ISSN 1804-526X
Mgr. et Mgr. Michal Šimáně, Ph.D.	Discourse and Communication for Sustainable Education, ISSN 2255-7547
Mgr. et Mgr. Michal Šimáně, Ph.D.	International e-Journal of Educational Studies, ISSN 2602-4241
Mgr. et Mgr. Michal Šimáně, Ph.D.	Journal of Computer and Education Research, ISSN 2148-2896
Mgr. et Mgr. Michal Šimáně, Ph.D.	Věsture: avoti un cilvēki, ISSN 1691-9297

Note: Please provide up to 10 examples of academic staff participation in editorial boards of international scientific journals (e.g. editor, editorial board member, etc.).

Table 3.2.3 The most important invited lectures delivered by the academic staff of the evaluated unit at foreign institutions during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Invited lecture title	Name of host institution, or name of conference or event	Year
Associate Professor Mgr. Petr Adamec, Ph.D.	Example of good practice and mutual cooperation in the support and development of digital competences of teachers and pupils of secondary schools in the Czech-Slovak border region	<i>Students' and Teachers' Digital Competencies in the Context of Information and Digitalisation of Schools.</i> DTI College, Dubnica nad Váhom, Slovak Republic, 27 April 2023	2023
Associate Professor Mgr. Petr Adamec, Ph.D. Mgr. et Mgr. Lenka Kamanová, Ph.D.	Current Preferences of Third Age University Participants – We Were Here Before COVID, and We'll Be Here After	<i>EDUCOM Current Trends in Psychosocial Support in Education and Preparation for Active Ageing in the Process of Inclusive Education.</i> University of St. Cyril and Methodius in Trnava, Trnava. Slovak Republic. 7 December 2023	2023
Mgr. et Mgr. Lenka Kamanová, Ph.D. Mgr. Kateřina Pevná	Education at U3V Branches of Mendel University in Brno	<i>ASUTV Council Meeting.</i> ASUTV, Bratislava. Slovak Republic. 14 December 2023	2023
Mgr. et Mgr. Michal Šimáně, Ph.D.	From the History of Everyday Life in Primary and Secondary Vocational Schools in Socialist Czechoslovakia: Past Research, Current Studies, and Future Challenges	<i>The Involvement of the Socialist Regime in the Field of Education, Training and Upbringing in Czechoslovakia.</i> Moravany nad Váhom, 27–28 April, 2023, Slovak Republic	2023
Mgr. et Mgr. Michal Šimáně, Ph.D.	Methodological Aspects of Contemporary History-of-Education Research on the Example of Secondary Technical Schools in Socialist Czechoslovakia	<i>Summer School for Doctoral Students as a part of joint Daugavpils University and University of Latvia Doctoral Study Programme "History and Archeology" (LEC 51228).</i> Daugavpils University, Latvia. May 23–27, 2022.	2022
Mgr. et Mgr. Michal Šimáně, Ph.D.	Discrimination, Corruption, and Frauds in Secondary Technical Schools During Socialist Czechoslovakia	<i>"A felsőfokú oktatás minőségének és hozzáférhetőségének együttes javítása a Pannon Egyetemen" [Improving the quality and accessibility of higher education at University of Pannonia], University of Pannonia, Veszprém (Hungary), February 21st, 2022.</i>	2022
Mgr. et Mgr. Michal Šimáně, Ph.D.	Hidden Curriculum and Everyday Life of Socialist Primary Schools in Czechoslovakia	<i>Conference Hidden Curriculum, University of Latvia, Riga (June 19–20, 2019), Latvia</i>	2019

Mgr. et Mgr. Michal Šimáně, Ph.D.	Secondary Technical Schools in Socialist Czechoslovakia by Point of View of Methodology	<i>Department of Educational Sciences and Pedagogical Innovations, Faculty of Education, Psychology and Arts, University of Latvia, Riga, Latvia, 23rd May, 2019.</i>	2019
Mgr. et Mgr. Michal Šimáně, Ph.D.	Methodological Inspirations and Analytical Techniques in Research of Secondary Vocational/Technical Education in Socialist Czechoslovakia	<i>Annual meeting of Baltic Association of Historians of Pedagogy, Riga, Latvia, 24th May, 2019.</i>	2019
Mgr. et Mgr. Michal Šimáně, Ph.D.	Primary Education and Teaching Profession in Czechoslovakia between the Prague Spring and the Velvet Revolution	<i>Moulding Democratic Citizens: Democracy and Education in Europe's Twentieth Century, 7–9 November 2019, Halle, Germany.</i>	2019

Note: Provide up to 10 examples.

Table 3.2.4 – The most important lectures by foreign scientists and other guests relevant to R&D&I at the evaluated unit during the evaluation period

Name, surname and title(s) of the lecturer	Lecturer's employer at the time of the lecture	Invited lecture title	Year
Dr. Barnabás Gulyás and Dr. Zsuzsa Kovács	<i>Eötvös Loránd University (Hungary)</i>	Enhancing Lifelong Learning Through Intergenerational Learning	2023
Professor Jan Borm	<i>University of Versailles Saint-Quentin-en-Yvelines (France)</i>	How to Provide Educational Offers for Senior Citizens on the University Campus?	2023
Dr.paed., Mg.psych Māriete Kravale-Pauliņa	<i>Daugavpils University (Latvia)</i>	Career Counselor and Youth work Specialist	2022
Professor Letterio Todaro, Ph.D.	<i>Università di Catania (Italy)</i>	Towards a Transnational History of Education: Constructing Europe as a "Common Home".	2022
Associate Professor Lajos Somogyvári, Ph.D.	<i>University of Pannonia (Hungary)</i>	How the Computers Arrived in the Hungarian Schools: a Long Journey from the 1960's to 2000's	2021
Leslie Blanchard, Ph.D.	<i>Louisiana State University (USA)</i>	Climb the LADDER: Increasing Retention Through Disposition Development of Teachers and the Leaders that Serve Them	2021
Sonia Wawrzyniak, Ph.D.	<i>Adam Mickiewicz University in Poznan (Poland)</i>	A Student with Passion – Supporting Students in Discovering Individual Resources (Poland 2019)	2020
Monika Christoph, Ph.D.	<i>Adam Mickiewicz University in Poznan (Poland)</i>	Contemporary Dialogue with the Employer. Around Vocational Training and the Future of Work	2020
Dr. Ing. Sylwia Badowska, Ph.D.	<i>University of Gdansk (Poland)</i>	Towards Competences in the Acceptance and Use of Technology by the Elderly People	2019
Leslie Blanchard, Ph.D.	<i>Louisiana State University (USA)</i>	The Leadership Development Institute in Education at Louisiana State University	2019

Note: Provide up to 10 examples.

Table 3.2.5 – Involvement in the evaluation of national/European research project/programme calls relevant to the R&D&I area at the unit during the evaluation period

Name, surname and title(s) of the evaluated unit's staff member	Name of the research project/ programme call	Name of the contracting authority/ guarantor of the project/programme call	Year
Mgr. et Mgr. Michal Šimáně, Ph.D.	Charles University Grant Agency	Charles University	2021
Mgr. et Mgr. Michal Šimáně, Ph.D.	Expert Body of Evaluators	Research, Development and Innovation Council	2022–present
PhDr. Mgr. Kristýna Balátová, Ph.D.	Charles University Grant Agency	Charles University	2020–2023

PhDr. Mgr. Kristýna Balátová, Ph.D.	Cultural and Educational Grant Agency (KEGA)	Ministry of Education, Research, Development and Youth of the Slovak Republic	2019–present
Associate Professor Mgr. Petr Adamec, Ph.D.	Cultural and Educational Grant Agency (KEGA)	Ministry of Education, Research, Development and Youth of the Slovak Republic	2020–present
PhDr. Mgr. Kristýna Balátová, Ph.D.	Scientific Grant Agency (VEGA)	Ministry of Education, Research, Development and Youth of the Slovak Republic and the Slovak Academy of Sciences	2019–present
Associate Professor Mgr. Petr Adamec, Ph.D.	Scientific Grant Agency (VEGA)	Ministry of Education, Research, Development and Youth of the Slovak Republic and the Slovak Academy of Sciences	2020–present

Note: Provide up to 10 examples.

RESEARCH PROJECTS

3.3 Research projects

The evaluated unit shall list at most 10 (considered most significant by the evaluated unit) research projects/activities (regardless of whether they are supported by public funds or based on contract research²²) that it has implemented or participated in during the period of 2019–2023²³. This should be done from the full list in annex tables (Table 3.3.1–3.3.2)²⁴, regarding particularly the results achieved or the application potential of the projects. The unit should also describe how the research projects contributed to the mission and purpose of the evaluated unit. If the evaluated unit has been a participant in listed project, it shall indicate which other entities were involved and describe its contribution to the project. The interdisciplinary aspects of the projects will also be commented on, along with any collaboration with other units of the evaluated HEI.

Maximum 300 words per project.

Self-assessment:

1. Secondary Vocational School in Socialist Czechoslovakia Through the Eyes of the History of Everyday Life. Oral History Interviews with Teachers (GA ČR, reg. no. 19-24776S), provided by: GA ČR, duration in years: 2019–2022, role in the project: principal investigator, total allocated funds/funds allocated to MENDELU including currency: CZK 2,046,000 /EURO 80,710, researcher for MENDELU: Mgr. et. Mgr. Michal Šimáně, Ph.D., annotation: The project focused on the study of contemporary history in the field of secondary vocational education, with the main aim of exploring and describing the everyday life of secondary vocational schools in socialist Czechoslovakia. The project was based on a historiographical approach to the history of everyday life. The key method was oral history, through which interviews were conducted with teachers (memorials) who worked at secondary vocational schools before 1989. This method enabled the collection of data not only on the life of the schools, but also on the work experiences and life stories of the teachers themselves. The research was further supplemented by the study of archival sources stored in the National Archives, the Moravian Provincial Archives and the Brno City Archives. The project contributed to the mission of the Institute of Lifelong Learning by promoting historical understanding of educational processes and providing valuable insights for current and future reflection on vocational education. The results of the project strengthen the development of educational programmes and contribute to intergenerational learning by capturing stories that link the experiences of past generations with today's educational needs. The interdisciplinary character of the project consisted in the interconnection of historiography, pedagogy and sociology. Although the project was not implemented in cooperation with other units of Mendel University in Brno, its results may inspire other academic and educational activities, especially in the field of history of education. The output of the project was a professional monograph, which is a valuable resource for experts and the public (see more [here](#)).

2. TAPATE Model and its Implementation in the Czech Environment (OP VVV, Reg. No: CZ.02.3.68/0.0/0.0/19_019/0016421), provider: Ministry of Education, Youth and Sports (MEYS), duration in years: 2020–2022, role in the project: coordinator, total allocated funds/funds allocated to MENDELU including currency: CZK 11,364,000 /EURO 448,292, researcher for MENDELU:

²² For the definition of contract research for the purposes of evaluation in the HE segments, see Article 2.2.1 of the Community Framework for State Aid for Research, Development and Innovation 2014/C 198/01.

²³ Regardless of whether the projects are completed or still ongoing, provided that at least part of the project was implemented during the evaluation period.

²⁴ The evaluated unit shall only fill tables that are relevant to it.

Mgr. David Kryštof, Ph.D., PCC, annotation: The aim of the project was to transfer good practice of the British TAPATE model through seminars and individual support to teachers and to conduct action research on its effectiveness in the Czech school system. The research focused on contracting in teaching (teacher–pupil), respectful approach to pupils, improving communication and cooperation (teacher–pupil, teacher–parent, teacher–teacher), reducing communicationally challenging situations and improving the provision of constructive feedback. The outcome was the acquisition of tools for respectful relationships, effective communication and dealing with difficult situations. The project contributed to the mission of the Institute of Lifelong Learning by supporting the development of teachers’ professional competencies and striving to improve the quality of education. It focused on improving communication and collaboration skills, which has a direct impact on improving the quality of teaching and the overall learning environment. The interdisciplinary aspects of the project included the interconnection of pedagogy, psychology and communication. This has supported a broader approach to addressing challenges in the educational environment with the potential to use the results in other areas such as school management and social work. Although the project was not implemented in cooperation with other parts of MENDELU, its results can be used in other educational activities of the University (see more [here](#)).

3. The Erasmus+ 60 Project is an international research and educational project of eight European universities, where MENDELU acts as a co-principal investigator (Mgr. et Mgr. Lenka Kamanová, Ph.D., and Mgr. Kateřina Pevná) – Université de Versailles Saint-Quentin-en-Yvelines, France – Principal Investigator, European University Foundation – Campus Europae, Luxembourg, Sveučilište u Splitu, Croatia, Universidade do Porto, Portugal, Latvijas Universitāte, Latvia, Eotvos Lorand Tudományegyetem, Hungary and Universität Zurich, Switzerland. The project focuses primarily on the analysis of the wide range of existing higher education offers for citizens aged 60+. The provider is: Erasmus+ KA220 – Cooperation between partners in higher education, FR01–Agency Erasmus+ France. Duration 2022–2025. Total allocated funds: CZK 1,004,000/EUR 39,643.

Annotation: The project has launched a research to analyse the senior education provision of partner institutions in a national context. It identified the main barriers such as personal motivation, IT skills and critical thinking and mapped the needs and attitudes of seniors towards third age education. Based on the results, 7 pilot online courses and a methodology for intergenerational learning connecting seniors and university students were developed. Outputs included a European online platform of learning activities for citizens 60+ with internationally shared content and a study published in 2024 on Web of Science (see [here](#)). The project contributes to the mission of the Institute of Lifelong Learning by promoting access to lifelong learning for seniors, developing their digital skills, critical thinking and engaging them in intergenerational collaboration. This strengthens educational inclusion and contributes to improving the quality of life of participants. The tools and courses developed reflect the need for innovative approaches and promote social cohesion between generations, which is in line with the Institute’s mission. Although the project was not implemented in cooperation with other parts of Mendel University in Brno, its results can be an inspiration for other academic and educational activities. The results of the survey will be further used as a basis for methodological recommendations at policy level, thus supporting systemic changes in senior education (see more [here](#)).

4. Analysis of Training Needs and Creation of a System of Training for Technical-Economic Employees of the St. Anne’s University Hospital Brno – contract research, sponsor: St. Anne’s University Hospital in Brno, duration in years: 2023–2024, role in the project: coordinator, total allocated funds/funds allocated to MENDELU including currency: CZK 107,000/EUR 4,248, researcher for MENDELU: Mgr. David Kryštof, Ph.D., PCC, annotation: The aim of the project was to carry out contract research for St. Anne’s University Hospital Brno, focused on the analysis of training needs of technical-economic employees. On the basis of the research investigation and

analysis of the data obtained, a complex training system was designed, including the adaptation of new employees, deepening and improving the qualifications of existing employees and a talent management programme. This system aims to respond effectively to the educational needs of the hospital and to contribute to increasing the competencies of its employees. The project has contributed significantly to the mission of the Institute of Lifelong Learning, which specialises, among other things, in the development of professional competences and the promotion of career development. Thanks to its focus on systemic education, the project contributes to innovations in the field of further education and improves the quality of the working environment within the Czech healthcare sector. The interdisciplinary nature of the project consisted in linking the fields of education, HR and healthcare management, thus creating an effective model of education that can serve as a model for other organisations. Although the project was not implemented in cooperation with other units of Mendel University in Brno, its outputs can be used in other educational activities in various sectors.

5. Mapping of Work Capabilities in Selected Organisations (2022–2025) – Contract Research, Institute of Lifelong Learning is the principal investigator (Mgr. et Mgr. Lenka Kamanová, Ph.D.), the project is commissioned by Age Management z.s., and the revenues from contract research for the years 2022 and 2023 amount to: CZK 60,000 /EUR 2,367, annotation: The project focuses on the application of age management tools in a corporate environment to improve or maintain the work ability of employees. As part of the contract research, the work capability of employees of specific organisations is analysed and the results are then shared with the management of the companies along with recommendations based on the interim findings. The key tool is the Personnel and Company Radar, a scientifically proven method based on the internationally recognised concept of work capability. This tool provides a detailed analysis of the current situation, identifies the strengths and weaknesses of organisations and enables the planning and implementation of measures to improve working conditions. The project contributes to the mission of the Institute of Lifelong Learning by supporting the lifelong learning and professional development of employees, thereby strengthening their work competencies and ability to adapt to changing working conditions. Evidence-based recommendations help create an environment that supports career growth and long-term sustainability of work performance, which contributes to improving the quality of life of employees and the development of their organisations. The interdisciplinary approach of the project combines knowledge from age management, HR and organisational psychology. Although the project is not implemented in cooperation with other units of Mendel University in Brno, its results can be inspiring for other academic and educational activities aimed at supporting professional and occupational development.

6. Increasing Digital Skills of Teachers and Pupils of 24 Secondary Schools in the Slovak-Czech Border Region (Interreg, Reg. No. NFP304011AZV5), provided by: Interreg, duration in years: 2021–2023, role in the project: partner, total allocated funds/funds allocated to MENDELU including currency: CZK 3,573,000 /EUR 140,947, researcher for MENDELU: Associate Professor Mgr. Petr Adamec, Ph.D. (see more [here](#)), annotation: The project focused on training secondary school teachers in digital skills, covering information technology, digital information security and online education. The scientific research objective was to analyse the competences of teachers and, based on the data obtained, to develop them so that they could effectively educate secondary school students in the Trenčín and Žilina regions in Slovakia and in the South Moravian region in the Czech Republic. Emphasis was placed on the development of students' digital skills through online learning to increase their employability in the Slovak-Czech border region. The project supported the development of teachers' professional competences and innovation in educational methods, with an emphasis on digital transformation. Strengthening digital skills and security has been a key aspect for sustainable education in modern society and has contributed to improving the lives of educators and their students. The interdisciplinary approach of the project, combining educational sciences, information technology and regional development, has enabled

the creation of a coherent model of training within the framework of cross-border cooperation. Although the project has not been implemented in cooperation with other units of MENDEL, its outputs can serve as inspiration for future educational activities in the field of digital competences. The result of the project is e.g. a paper in the proceedings of Associate Professor Mgr. Petr Adamec, Ph.D., *The Importance of ICT Competencies Development Within the Pregradual Education of Future Teachers in the Current Situation Context* (more see [here](#)).

Table 3.3.1 Projects supported by public funds

In the role of beneficiary						
Provider ²⁵	Project name	Support (in thousands CZK/EUR) ²⁶				
		2019	2020	2021	2022	2023
Grant Agency of the Czech Republic	Secondary Vocational School in Socialist Czechoslovakia Through the Eyes of the History of Everyday Life. Oral History Interviews with Teachers (2019–2022)	586/23,116	626/24,694	561/22,130	118/4,655	0/0
Operational Programme Research, Development and Education	The TAPATE Model and its Implementation in the Czech Environment (2020–2022)	0/0	2,634/103,905	3,395/133,925	4,767/188,047	0/0
Total		586/23,116	3,260/128,599	3,956/156,055	4,885/192,702	0/0
In the role of another participant						
Provider ²⁷	Project name	Support (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
Interreg V-A SK-CZ	Increasing the Digital Skills of Teachers and Pupils of 24 Secondary Schools in the Slovak-Czech Border Region (2021–2023)	0/0	0/0	480/18,935	1,929/76,095	1,164/45,917
Erasmus+	Erasmus+ 60 (2022–2025)	0/0	0/0	0/0	146/5,759	420/16,568
Total		0/0	0/0	480/18,935	2,075/81,854	1,584/62,485

Table 3.3.2 - Contract research activities

Client ²⁸	Activity name	Revenue (in thousands CZK/EUR)				
		2019	2020	2021	2022	2023
St. Anne's University Hospital in Brno	Analysis of Educational Needs and Creation of a System of Education of Technical-Economic Employees of the St. Anne's University Hospital Brno (2023–2024)	0/0	0/0	0/0	0/0	55/2,170
Age management, z. s.	Mapping Work Capabilities in Selected Organisations (2022–2025)	0/0	0/0	0/0	30/1,183	30/1,183
Total		0/0	0/0	0/0	30/1,183	85/3,353

Note: List and describe contract research activities with a revenue in a given calendar year, regardless of the amount of financial revenue.

²⁵ If the provider is from abroad, please indicate the provider's country of origin in brackets. For the determination of the country of origin of the provider, the place of residence of the provider is decisive.

²⁷ Ibid.

²⁸ If the client is from abroad, indicate in brackets the country of origin of the client.

3.4 Research results with existing or prospective impact on society

The evaluated unit shall briefly comment on a maximum of 10 (considered most significant by the evaluated unit) research results already applied or realistically heading towards application during the period of 2019–2023, based on the overview annex table 3.4.1 (it is recommended to indicate results with a link to projects listed in indicator 3.3). The evaluated unit must demonstrate in its description that the research results have led or will soon lead to positive impacts²⁹, on society (e.g. description of how the results are used by various users, the range of persons/institutions for which the result is relevant, measurable economic impacts, etc.). The evaluated entity shall indicate in its commentary whether the gender dimension is considered in these results and discuss the impacts of the results regarding sustainability.

Maximum range 300 words/result.

Self-assessment:

1) Adamec, P. (2023). Teaching Vocational Subjects in Secondary School: A New Career or a Backup Plan? *International Journal of Engineering Pedagogy (iJEP)*, 13(5), 142–160.

The study, published in a periodical indexed in the SCOPUS database, deals with the current issue of the shortage of qualified teachers of vocational subjects in secondary schools, which has long been the subject of discussion not only in the Czech Republic but also internationally. The paper presents a new three-semester course to be implemented from 2020 at a public university in the Czech Republic, focusing on the qualification of teachers of vocational subjects. Run by a school with over 60 years of experience in teacher training, the course responds to the growing need for professionally qualified teachers in secondary vocational education. Research among the course participants yielded interesting insights into the motivations and socio-demographic composition of the participants. Approximately 60% of respondents took the course not because of a current job need, but to expand their future employment opportunities. It is also interesting to note that 80% of the participants are women and that the average age of the graduates is approximately 40 years. These results highlight the benefits of the course in broadening the professional base of vocational educators and increasing diversity among vocational subject teachers. The gender dimension is reflected through the high proportion of women among the course participants, suggesting that the course may contribute to a greater representation of women in vocational training, which has traditionally been dominated by men. This aspect can be seen as an important contribution to diversity and equality in the teaching profession. In terms of sustainability, the study highlights key factors that can contribute to the long-term strengthening of the vocational education system. The findings show that such courses can effectively address challenges such as the ageing education workforce and the shortage of qualified teachers, and thus ensure the continuity of vocational education in the Czech Republic. Support for new teachers of vocational subjects has a direct impact on the sustainability of the quality and availability of secondary vocational education, which is essential for the development of the labour market and the competitiveness of the vocational professions.

2) Kamanová, L. (2023). Do Children Carry a Stork? Or the Image of Sexual Intercourse During Sex Communication in the Family. *Ad Alta*, 13(2), 134–141.

The study published on Web of Science (Q3) focuses on the importance and communication of sexual topics in families, with an emphasis on the role of parents as key actors in children's sexual education. The publication focuses not only on the content and method of communication, but also on its possible effects on the behaviour of young people, especially in relation to the prevention of

²⁹ See Terms definition.

sexually risky behaviour. The text provides useful insights and recommendations that can be used in education, health and social work. The importance of the text lies in its practical applicability. It offers a valuable resource for educational institutions and educators working in the field of sex education and can serve as a background material for curriculum development at the national level. Research findings on the image of sexual intercourse in family communication may also be relevant for health professionals working in the field of prevention of sexually transmitted diseases and sexually risky behaviour. The publication has the potential to influence a wide range of users from parents and educators to health professionals and education policy makers. The gender dimension is implicitly present as the text takes into account the differences in approach to sex education between boys and girls and offers suggestions for an equal representation of topics for both genders. From a sustainability perspective, the text contributes to long-term improvements in health awareness and prevention of risky behaviours, which can have positive economic and social impacts.

3) Kryštof, D. & Adamec, P. (2023). *Design of the FNUSA THP Education System: Outcomes of the Analysis of the Training Needs of Technical-Economic Staff of FNUSA and Recommendations for Their Development*. Brno.

The result, which is one of the outputs of the contract research, focuses on the development of the training of technical-economic staff (THP) at St. Anne's University Hospital Brno (FNUSA). While the training of medical staff is often legislated, the training of the technical-economic staff, who provide key technical, administrative and economic processes of the hospital, remains in the shadows. These employees cover a wide range of expertise from the IT and economics departments to the catering and security departments, whose synergistic cooperation with the medical staff is essential for the efficient functioning of the hospital. On the basis of the analysis of the training needs of the technical-economic staff, a comprehensive system including adaptive training, deepening and improving qualifications and talent management was designed. This system aims not only to increase the qualification of employees, but also to support their professional growth and motivation, thus contributing to the competitiveness and prestige of the hospital as an employer. The analysis included a gender dimension, focusing on the specific training needs of men and women in different job roles. The system promotes equal opportunities for development, thereby contributing to greater inclusion and diversity in the workplace. In terms of sustainability, the output offers long-term benefits not only for the hospital itself, but also for its employees. Increased qualification and motivation of the technical-economic staff can positively influence operational efficiency and quality of service delivery, which is also crucial for future challenges in the healthcare sector.

4) Šimáně, M. (2023). *Secondary Vocational Schools in Czechoslovakia During Communism: Everyday Life from the Perspective of Teachers in the South Moravian Region*. Prague: Wolters Kluwer.

The book, which is the main result of a project of the Czech Science Foundation, is an original historical-pedagogical monograph that provides a detailed view of secondary vocational schools in Czechoslovakia during the communist era. The topic is treated with an emphasis on everyday history and microhistory, which corresponds to current trends in historical research. The publication draws on extensive domestic and foreign sources of information and authentic testimonies of witnesses, thus offering a previously unexplored insight into the everyday reality of education at the time. The monograph covers a range of topics from teachers' career paths, their adaptation to the school environment and continuing teacher education to admissions, teaching and graduation exams. The text also reveals hidden aspects of school practice, such as the functioning of school inspectorates, corrupt practices, fraud and nepotism, which affected the daily running of schools. The book also includes figures and graphs to make the results clearer, and appendices reflecting

the ideological pressure on education at the time. The publication is beneficial for historians, educators, students and the general public because it reveals an important, but so far neglected, aspect of the history of the Czechoslovak educational system. It contributes to the understanding of how communist ideology influenced the daily life of schools and their actors. In terms of the gender dimension, the issue has not been explicitly addressed, but the accounts of witnesses include the experiences of both men and women in the role of teachers. From the perspective of sustainability, the book promotes the preservation of historical memory and deeper reflection on the totalitarian past, which may contribute to the prevention of similar practices in the future.

5) Šimáně, M. (2023). *Socialist Egalitarianism in Everyday Life of Secondary Technical Schools in Czechoslovakia during the Normalisation Period (1969–89)*. *Communist and Post-Communist Studies*, 56(1), 129–151.

The study, which is one of the results of the project of the Czech Science Foundation, *Socialist Egalitarianism in Everyday Life of Secondary Technical Schools in Czechoslovakia during the Normalisation Period (1969–89)*, deals with the politics of egalitarianism in Czechoslovakia during the normalisation period (1969–1989). The aim was to map the manifestations of the socialist egalitarian policy as it was applied in the daily life of secondary vocational schools, and to reveal not only the official implementation of government regulations, but also the “unofficial” practices that were quietly tolerated by the regime. The research draws on the oral history method, primarily through interviews with teachers who worked at vocational schools during the period in question. This method is supplemented by an analysis of contemporary legislation, periodicals and archival documents stored in the National Archives in Prague and the Brno City Archives. The results of the study provide new insights into egalitarian policies, particularly how admissions, disciplinary measures, and graduation were influenced by informal practices that often went beyond official government regulations. The findings of the study are important for understanding the everyday reality of the educational system during the communist totalitarian regime in Czechoslovakia. The research reveals the specific mechanisms of egalitarian policies and their impact on pupils and teachers, providing valuable insights not only for Czech and Slovak historians, but also for foreign audiences interested in the functioning of totalitarian regimes. The gender dimension was not the primary focus of the research, but the recollections of the memoirs included experiences without gender distinction. The study contributes to sustainability by raising awareness of past regimes and their practices, which can be used to educate and promote democratic values in society.

6) Kryštof, D., & Adamec, P. (2022). *Transactional Analysis as a Tool for the Development of Teachers’ Competencies in Vocational Education*. In Adamec, P., Šimáně, M. & Miškelová, M. (Eds.), *Trends and Competencies in Vocational Education* (pp. 84–101). London: Sciemcee Publishing.

The chapter in the book, which is one of the outputs of the project of the Operational Programme Research, Development and Education (OP RDE), focuses on the use of transactional analysis as a tool for the development of teachers’ competences in vocational education. The text introduces the foreign model TAPATE (Transactional Analysis Pedagogy for Adult Teaching and Education) and explores the possibilities of its adaptation in the Czech educational environment, which is historically characterised by a paternalistic approach and a focus on memorisation rather than on the development of critical thinking and student independence. The application of transactional analysis promotes effective communication between teacher and student, improves the learning climate and contributes to students’ personal growth. Thanks to this approach, pupils learn to take responsibility for their education, which is crucial for their future success in the labour market. For teachers, the model provides concrete tools to engage in dialogue with students, strengthen their motivation and build a partnership based on respect and trust. The gender dimension was observed

in the application of the TAPATE model, particularly in relation to the different needs and responses of students and teachers to transactional analysis approaches. In doing so, the chapter contributes to creating a more inclusive learning environment. The outcome has the potential to positively influence pedagogical practice in vocational education, which can increase the quality of teaching in the long term and contribute to the adaptation of the Czech education system to current challenges in the field of vocational training. This innovation also contributes to sustainability by supporting the development of pupils' and teachers' competences for a dynamic and changing work environment.

7) Blackburn, A. M., Vestergren, S., Pírko, M. ...; & the COVIDiSTRESS II Consortium. (2022). COVIDiSTRESS Diverse Dataset on Psychological and Behavioural Outcomes One Year into the COVID-19 Pandemic. *Scientific Data*, 9(1), 1–25.

The paper published on Web of Science (Q1) presents the second phase of the international COVIDiSTRESS research, which analyses the psychological and behavioural consequences of the COVID-19 pandemic and its impact on public health. The research was conducted with the support of more than 150 researchers worldwide and involved over 15,000 respondents from 137 countries. This has created a large dataset that allows us to examine how the pandemic has affected different aspects of mental health, including stress levels, resilience, attitudes towards vaccination, trust in institutions, and adherence to preventive measures. These data may have practical applications for policy makers and public health organisations looking for ways to improve the mental well-being of populations or improve responses to future health crises.

Focusing on gender differences is an important part of the research. As the majority of respondents were women, analyses can reveal the specific challenges and impacts of the pandemic in different gender groups, which can help tailor future interventions to better meet different needs. The research also takes into account issues of sustainability – the data can be used to design long-term support programmes to increase psychological resilience and social cohesion, thus contributing to the stability and resilience of society in the event of future crises. In addition, the research results are publicly available, allowing them to be used by a wide range of users, including government agencies, research organisations and non-profit organisations that can apply the data to their own projects aimed at promoting mental health and social stability.

8) Adamec, P., & Kamanová, L. (2021). The Importance of Physical Activities for Participants of the University of the Third Age and Their Preferences in this Area. In M. Švamberk Šauerová (Ed.), *Movement and Experience in a Multidisciplinary Approach* (pp. 51–72). College of Physical Education and Sport PALESTRA, spol. s r.o.

The chapters in the book were written as part of the Erasmus+ international project and are relevant for third age universities and other institutions working with older people across Europe. Research highlights the key role of physical activities in educational programmes for the elderly, which are preventive, rehabilitative and socialising. Movement courses promote a healthy lifestyle, improve physical and mental fitness and contribute to quality and active ageing. The results of the research provide concrete insights into the preferences and needs of seniors in the field of physical activity, allowing for more effective planning and adaptation of these programmes. The outcome is also beneficial from a sustainability perspective, as promoting active and healthy ageing contributes to reducing healthcare costs and strengthening social cohesion. The gender dimension was taken into account in the research especially in relation to the different preferences and approaches to physical activity between men and women. This result has the potential to inspire other educational institutions and organisations working with the elderly to include similar activities in their programmes. It also offers useful recommendations for policy makers to promote healthy ageing and prevent social isolation of older people.

9) Lieberoth, A., Lin, S. Y., Stöckli, S., Han, H., Kowal, M., Gelpi, R., Pírko, M. ... & Dubrov, D. (2021). Stress and Worry in the 2020 Coronavirus Pandemic: Relationships to Trust and Compliance with Preventive Measures Across 48 Countries in the COVIDiSTRESS Global Survey. *Royal Society Open Science*, 8(2), 200589.

A paper published on Web of Science (Q1) examines the relationship between stress, worry and adherence to preventive measures against the spread of COVID-19 in 48 countries using data from more than 173,000 respondents. The results show that health concerns increase individuals' efforts to protect themselves and others. At the same time, higher stress levels paradoxically reduce compliance. Research suggests that trust in government action can improve compliance, especially where measures are strict. Based on these findings, government and health institutions can better plan how to strengthen confidence in protective measures and reduce the psychological burden on the population.

The research takes into account the gender dimension, focusing on the different responses of men and women to the pandemic, which is useful for targeting future interventions. In terms of sustainability, the study suggests that long-term social support strategies can mitigate the negative effects of stress and strengthen psychological resilience, contributing to overall social stability in the event of future crises. The data are publicly available (see [here](#)), allowing the research results to be widely used by various institutions, such as governments, non-profit organisations and academics, who can draw on the data to develop health and prevention policies.

10) Štěpánková, L., Kadlčíková, D., & Zaragoza Scherman, A. (2020). Czech and Slovak Life Scripts: the Rare Case of two Countries that Used to Be One. *Memory*, 28(10), 1204–1218.

The study published on Web of Science (Q2) deals with cultural life scenarios in the Czech Republic and Slovakia. A cultural life script represents shared social expectations about the order and timing of important events during an ideal life course. For many decades, the Czech Republic and Slovakia formed one state – Czechoslovakia. After the regime change in 1989 and the subsequent partition in 1993, their cultures began to develop independently, making these countries a unique case for examining life scenarios. The research revealed that participants from both countries reported 25 common categories of events, which accounted for 89.3% of the categories in the Czech sample and 80.6% in the Slovak sample (including the “Other” category). At the same time, however, unique categories of events were identified – 10.7% in the Czech sample and 19.4% in the Slovak sample – reflecting the specific cultural characteristics of both countries. The events were generally arranged in the order in which they are expected to occur during life, were mostly positive, and corresponded to the well-known phenomenon of peak reminiscence. Participants showed higher agreement in age estimates for positive events than for neutral and negative events. The vast majority of the reported events were social, not biological. These results are consistent with the existing literature on life scenarios. The results of the study have the potential to contribute to a better understanding of cultural differences and commonalities in two countries with a shared history. They can be used in educational, social and psychological contexts, for example in the development of programmes aimed at intercultural understanding and the promotion of social cohesion. The gender dimension was not explicitly taken into account. However, the study contributes to sustainability by promoting cultural reflection and respect for differences, which is key to strengthening intercultural ties in the long term.

Table 3.4.1 - Overview of research results in the period under evaluation

Type of result ³⁰	Year of application	Name
Peer-reviewed article, Jimp	2023	Teaching Vocational Subjects in Secondary School: A New Career or a Backup Plan?
Peer-reviewed article, Jimp	2023	Do Children Carry a Stork? Or the Image of Sexual Intercourse During Sex Communication in the Family
Research Report	2023	Design of the FNUSA THP Education System: Outcomes of the Analysis of the Training Needs of Technical-Economic Staff of FNUSA and Recommendations for their Development
Academic book	2023	Secondary Vocational Schools in Czechoslovakia During Communism: Everyday Life from the Perspective of Teachers in the South Moravian Region
Peer-reviewed article, Jimp	2023	Socialist Egalitarianism in Everyday Life of Secondary Technical Schools in Czechoslovakia during the Normalisation Period (1969–89)
Chapter in an academic book	2022	Transactional Analysis as a Tool for the Development of Teachers' Competencies in Vocational Education
Peer-reviewed article, Jimp	2022	COVIDISTRESS Diverse Dataset on Psychological and Behavioural Outcomes One Year into the COVID-19 Pandemic
Chapter in an academic book	2021	The Importance of Physical Activities for Participants of the University of the Third Age and Their Preferences in this Area
Peer-reviewed article, Jimp	2021	Stress and Worry in the 2020 Coronavirus Pandemic: Relationships to Trust and Compliance with Preventive Measures Across 48 Countries in the COVIDISTRESS Global Survey
Peer-reviewed article, Jimp	2020	Czech and Slovak Life Scripts: The Rare Case of Two Countries That Used to Be One

Note 1: Please list and describe the results already applied in practice or heading towards application in practice with existing or prospective impact on the society (e.g. domestic or foreign patents, sold licenses, spin-offs, prototypes, varieties and breeds, methodologies, significant analyses, surveys, expert outputs for policymaking or other forms of non-publication outputs, etc.). Indirect results of research, development and creative activities with documented societal impact, e.g. expert activities, services to the public/government/scientific community, may also be reported.

³⁰ Specify the specific type of result. Add rows as needed.

TRANSFER OF RESULTS INTO PRACTICE

3.5 Transfer of results into practice

The evaluated unit shall briefly describe its system for transferring results into practice. It shall also indicate up to five of the most typical users of its results, whether in the university environment or in the non-university application/corporate sphere, detailing how it collaborates with them and how it seeks out new users (using a maximum of five specific examples).

It will also indicate whether and how it commercialises R&D&I results (e.g. selling licences, setting up start-up or spin-off companies, etc.)³¹, providing brief description of the commercialisation methods used. The effectiveness of the transfer of results and the commercialisation of R&D&I results will be described using a selection of results (max. five) listed in annex table (Table 3.4.1).³²

Additionally, the evaluated unit shall briefly comment on the funds received during the period of 2019–2023 from non-public, non-grant sources (e.g. licences sold, spin-off revenues, donations, etc.). A full summary shall be provided in annex table (Table 3.5.1).

Maximum 500 words plus 200 words for each provided example of finding a new user of results and commercialization.

Self-assessment:

The Institute of Lifelong Learning focuses mainly on the promotion of lifelong learning and the development of professional competences and innovation in vocational education didactics. The research activities of the Institute, mainly carried out by the Department of Social Sciences, are oriented towards applied research in areas such as educational needs analysis, mapping of work skills and historical research on educational institutions. The results of these activities are transferred into practice through cooperation with:

Public institutions

An example is St. Anne's University Hospital Brno, which used the research of the Institute to design an education system for its employees. Such institutions benefit from expert analysis, training strategies and consultancy to improve the skills and effectiveness of their staff.

Non-profit organisations

Organisations such as Age Management, z.s. work with the Institute to apply innovative tools such as HR and Corporate Radar to improve employees' working skills and conditions.

Schools and educational institutions

Secondary schools in the Czech-Slovak border region involved in Interreg projects benefited from programmes aimed at developing the digital skills of teachers and pupils. These activities have not only contributed to improving the quality of teaching, but also represent an added value for the development of didactics of vocational education in the Czech Republic.

Seniors and the public

Through the University of the Third Age and projects such as Erasmus+ 60, seniors are direct beneficiaries of educational programmes that improve their digital literacy, critical thinking and promote intergenerational cooperation.

³¹ In the case of military HEIs, their specific position is taken into account when evaluating the commercialisation/evaluation of R&D&I results.

³² If the commercialisation of R&D&I results is carried out in this way.

Academic and research community

Academics and researchers benefit from the outputs of the Institute, such as studies published in international journals or staff involvement in international conferences, which enhance scientific knowledge in the fields of education, sociology and other humanities.

The Institute actively seeks new users of its results through several key strategies. It regularly organises professional conferences such as ICOLLE (web [here](#)), which serve as a platform for networking with schools, non-profit organisations and public institutions. The intensive cooperation with the Department of Technology Transfer MENDELU (DTT) allows for networking with industrial partners, analysis of the commercial potential of the results and presentation of the outputs to potential users. An important role is played by strategic partnerships with regional actors, such as the Statutory City of Brno or the South Moravian Region, through which new needs and opportunities for the application of research results are identified. Specialised courses focusing on entrepreneurial competences, which include competitions supporting the implementation of start-ups, are used to reach students and young innovators. The results are further presented through workshops and training activities that allow the identification and involvement of other users. This comprehensive approach, combining direct contact, education and collaboration, ensures that the results of the Institute are put into practice and contribute to the long-term development of education, employment and social inclusion.

Examples:

1) Adamec, P. (2023). Teaching Vocational Subjects in Secondary School: A New Career or a Backup Plan? *International Journal of Engineering Pedagogy (iJEP)*, 13(5), 142–160.

This study, published in a SCOPUS-indexed journal, describes the implementation of a three-semester course for teachers of vocational subjects that responds to the growing need for qualified teachers in secondary vocational education. The research highlights the demographic make-up of participants and their motivations, pointing to the wider applicability of courses of this type. The potential for transferring the results lies in the possibility of adapting this educational model to other regions or countries facing similar teacher shortage problems. The results can be used as a basis for the preparation of programmes aimed at the development of pedagogical qualifications. A systematic evaluation of the outcome could take the form of its inclusion in national or regional education strategies.

2) Kryštof, D. & Adamec, P. (2023). *Design of the FNUSA THP Education System: Outcomes of the Analysis of the Training Needs of Technical-Economic Staff of FNUSA and Recommendations for Their Development*. Brno.

The result of contract research for St. Anne's University Hospital Brno, led to the creation of a system of education for technical and economic workers. This system focuses on adaptive training, talent management and equal opportunities, which improves the efficiency of the Hospital. The evaluation of the result was carried out through the implementation of the proposed system in FNUSA and the increase in the qualification of employees, which contributed to the competitiveness of the Hospital. The potential effectiveness of the transfer lies in applying this model to improve operational efficiency and employee satisfaction. A systemic evaluation could include a pilot application in other organisations and an evaluation of its impact.

3) Šimáně, M. (2023). *Secondary Vocational Schools in Czechoslovakia During Communism: Everyday Life from the Perspective of Teachers in the South Moravian Region*. Prague: Wolters Kluwer.

The monograph deals with the historical aspects of education in Czechoslovakia during communism, analysing the everyday experiences of teachers in secondary vocational schools.

The work provides valuable insights into the relationship between ideology and educational practices, which has the potential to inspire discussions about modern education. The results can be evaluated through their use in the training of future teachers, the development of teaching materials or as a resource for professional conferences and seminars. In terms of the effectiveness of the transfer of results, the publication can be a basis for the development of a critical approach to totalitarian history in educational institutions.

4) Blackburn, A. M., Vestergren, S., Pírko, M. ...; & the COVIDiSTRESS II Consortium. (2022). COVIDiSTRESS Diverse Dataset on Psychological and Behavioural Outcomes One Year into the COVID-19 Pandemic. *Scientific Data*, 9(1), 1–25.

The COVIDiSTRESS research analyses the psychological and behavioural impact of the pandemic through a large international study involving more than 15,000 respondents. The published data is freely available and offers the opportunity to explore the effects of the pandemic on different aspects of life. The potential for transferring the results lies in their use in the design of mental health interventions, which can inform public policies or NGO programmes. The results can be evaluated by applying them in designing preventive strategies to manage crisis situations and build resilience in society.

5) Adamec, P., & Kamanová, L. (2021). The Importance of Physical Activities for Participants of the University of the Third Age and Their Preferences in this Area. In M. Švamberk Šauerová (Ed.), *Movement and Experience in a Multidisciplinary Approach* (pp. 51–72). College of Physical Education and Sport PALESTRA, spol. s r.o.

The chapter in the book, produced within the framework of the Erasmus+ international project, focuses on the role of physical activity in educational programmes for older people. The research provides insights into the preferences and needs of seniors that are key to effective planning of these activities. The results emphasise the preventive, rehabilitative and socialisation benefits of movement courses, which support the physical and mental fitness of participants and contribute to active and quality ageing. The potential of evaluating this result lies in its use in the development of educational programmes for the elderly in universities of the third age and in other institutions. By identifying differences in the preferences of men and women, programmes can be targeted to the specific needs of different groups. The results can be applied to the design of policies aimed at healthy ageing and preventing social isolation, promoting overall sustainability and reducing healthcare costs. This result also has the potential to inspire educational institutions and organisations working with the elderly to include physical activity as a key element of their programmes. The effectiveness of the transfer of results can be further enhanced by sharing findings through conferences, workshops and publications, thereby extending the reach of the research into wider practice in the field of older people's education.

Table 3.5.1 - Summary of non-public revenues received during the period under evaluation

Type of revenue	Revenue (in thousands CZK/EUR)				
	2019	2020	2021	2022	2023
-	-	-	-	-	-
Total	-	-	-	-	-

Note: Enter funds raised for R&D&I from non-public sources besides grants or contract research (e.g. licences sold, spin-off company revenues, donations, etc.) in the calendar year.

POPULARIZATION OF VAVAI

3.6 The most important activities in the field of popularization of R&D&I and communication with the public

The evaluated unit shall briefly describe its main activities related to the popularisation of R&D&I and communication with the public (e.g. popularisation lectures, citizen science initiatives, etc.) during the period of 2019–2023 and provide up to 10 examples that it considers the most significant.

Maximum 500 words plus 200 words for each example given.

Self-assessment:

Compared to the last period under review, the Institute has expanded its presence not only on its website and Facebook, but also on Instagram. In the period under review, there was a significant increase in the number of accesses to these platforms. For example, in 2019, 898 people followed the Institute's Facebook page, while in 2023, 2,245 already followed it, which shows the growing public interest in the Institute's activities (see [WEB, FB and IG accesses](#)). This growth demonstrates the effective use of social media to communicate and promote the activities of the Institute. In addition to these digital platforms, the Institute continues to make use of various media such as television, radio, print and electronic publications and magazines aimed at the wider public (see the [List of popularisation activities](#)). Thanks to this breadth of communication means, it is possible to reach different target groups effectively. On the one hand, information about the scientific and educational activities of the Institute is made available to the professional public through these channels, which promotes collaboration and professional exchange. On the other hand, the general public is offered inspirational stories, practical examples and outputs from the activities of the Institute that have the potential to motivate individuals to further their education and active participation in society. The broad media coverage thus contributes significantly to raising awareness of the importance of lifelong learning and reinforces the Institute position as a centre open to all generations.

The involvement of the **ambassadors of the Institute**, who are the students of the Institute, was a new feature in the period under review. These ambassadors have provided and continue to provide communication with the public through email, social media and direct participation in various popularisation events. In the period under review, they played a key role in promoting the activities of the Institute at university-wide events such as the Researchers' Night, the Gaudeamus university fair and open days. Through their direct involvement and personal approach, they have helped and continue to help build a positive image of the Institute, spread awareness of its activities and inspire others to further their education. Through their activities, they not only spread awareness of the Institute, but also actively contributed to strengthening its position as an important centre for lifelong learning.

The following activities are listed as the most important popularisation activities in the period under review, with a brief description.

1) PhDr. Zdeňka Hort, Ph.D. *Psychological Help for Students* – Report on Události v regionech, Czech Television (2023).

A report in the Czech Television's Události v regionech programme presented psychological help for students in the context of the COVID-19 pandemic and its impact on the mental health of university students. It highlighted the increase in the number of clients at university counselling centres, where psychologists are currently working with twice as many students as before the pandemic. The report highlighted the burden of distance learning, stress and uncertainty that increase

the need for professional support for students. The availability of free counselling services to help reduce psychological stress and improve the quality of life of students was positively highlighted. The activity also contributed to raising awareness of the importance of mental health care and breaking down the stigma associated with seeking professional help. This initiative shows how universities are responding to current challenges and supporting their students not only academically but also on a personal level.

2) Mgr. Alena Krejčí, DiS., *Teaching at the Time of the Coronavirus – Report on Události v regionech (2021, at 6:47).*

A report in Czech Television's Události v regionech programme highlighted the growing demand for psychological counselling at Mendel University in Brno during the COVID-19 pandemic. Prolonged restrictions, isolation, lack of social contacts and loss of motivation have led to a significant increase in psychological problems among students. In the second wave of the pandemic, the University saw double the number of people seeking counselling compared to previous years. The report featured innovative approaches such as online one-to-one consultations and regular online support groups, which provided a space for students to share experiences and support each other. The activity highlighted the key role of mental health promotion in the academic environment and contributed to the popularisation of this topic. The increased demand for these services also confirms the importance of accessible psychological support to help manage challenging life situations and improve the quality of life of students.

3) Mgr. et Mgr. Lenka Kamanová, Ph.D., *How Third Age Universities Work Today – interview Dobré ráno plus (2021).*

The interview on Czech Television's Dobré ráno plus focused on the current functioning of universities of the third age (U3V) in the context of changing educational conditions. Mgr. et Mgr. Lenka Kamanová, Ph.D., described how U3V overcomes the obstacles associated with the pandemic and offers seniors not only the opportunity for education, but also a space for social interaction and active participation in community life. The discussion highlighted the importance of third age universities for developing personal skills, enhancing psychological well-being and combating the isolation that the pandemic has exacerbated. This activity demonstrates that learning is not limited by age or circumstance and presents U3V as an important tool for promoting active ageing and lifelong learning.

4) PhDr. Zdeňka Hort, Ph.D., *University Students are Expected to Master Distance Learning. But they Often Struggle with Depression, Says Psychologist – Radio Wave interview (2021).*

The interview with Radio Wave focused on the impact of the COVID-19 pandemic and the move to online learning on the mental health of university students. Psychologist PhDr. Zdeňka Hort, Ph.D., pointed to the increasing incidence of psychological problems such as depression, anxiety, loss of motivation and problems with concentration. The interview also highlighted the difficulties associated with adapting to a new way of studying, lack of personal contact with teachers and classmates, disruption of interpersonal relationships and difficulties with managing emotions. The aim of the conversation was to raise awareness of these challenges and highlight ways in which universities can support students in this situation. The role of psychological counselling and other measures that can mitigate the negative effects of the pandemic and contribute to better coping with challenging situations in the academic environment was highlighted.

5) Mgr. Martin Pírko, *Relationships in a Time of Pandemic – Czech Television report (2021).*

The appearance on Czech Television's Studio 6 programme provided an opportunity to present current scientific research on interpersonal relationships in the context of the pandemic to the general public. This awareness-raising activity highlighted not only the impact of the pandemic on everyday interactions, but also deeper issues such as adaptation to crisis situations and

the psychological resilience of society. The outcome highlighted the importance of social connections and provided inspiration on how to build relationships during challenging times and what happens to already established relationships during similar times. Awareness of these issues has been raised through clear communication of science. The research is also an example of how science responds to current societal challenges and contributes to improving the quality of life. Popularising such topics promotes public interest in scientific knowledge and contributes to a greater understanding of its relevance in real life.

6) Mgr. et Mgr. Lenka Kamanová, Ph.D., Mgr. Kateřina Pevná, *Online teaching at U3V – report on Události v regionech plus (Brno) (2020).*

The report on the programme Události v regionech plus of Czech Television presented the innovative approach of the University of the Third Age in introducing online learning in response to the COVID-19 pandemic. The activity showcased how the university has adapted to the new conditions and enabled seniors to continue their education during the restrictions. Online learning not only ensured continuity of the educational process, but also supported the social connections and psychological well-being of participants who faced isolation. The report highlighted how modern technology can make education more accessible to the older generation, while also highlighting the challenges of adapting seniors to the digital environment. The example shows that lifelong learning can be implemented even in adverse circumstances, thereby promoting active ageing and improving quality of life.

7) Mgr. et Mgr. Michal Šimáně, Ph.D., *Teachers Had to Keep Watch at Churches and Record Their Students. Researchers Map the Life of Teachers During Socialism. – report on the Czech Television: Studio ČT24, Události (January 26, 2019).*

The appearance on Studio ČT24 provided an opportunity to present to the general public research focused on the everyday reality of teachers during the socialist period. The popularisation activity highlighted the specifics of the regime at the time, when educators had to perform duties that went beyond education – for example, keeping watch at churches and registering their students who attended religious services. This research provides a deeper insight into the lives of teachers who found themselves in a complex situation at the intersection of ideological pressures and societal expectations. The aim of the activity was to present in an engaging and accessible way not only the historical significance of these events, but also the consequences for the status of teachers and their professional identity. The presentation of the research results helped to raise awareness of the impact of the totalitarian regime on the education system and the everyday life of teachers. Popularising such research promotes understanding of the historical context and highlights how scientific knowledge can contribute to a better understanding of the past and its impact on the present.

8) Mgr. et Mgr. Michal Šimáně, Ph.D., *Pedagogy in Totalitarianism. Czech Television: Týden v regionech (March 9, 2019).*

The appearance on the Týden v regionech programme focused on the topic of pedagogy during the period of totalitarianism, when education was not only a tool for development but also a means of ideological control. The popularisation activity brought to the attention of the general public key aspects of the research, which examined how the totalitarian regime influenced not only the content of education, but also the position of teachers and their daily practice. The audience was presented with concrete examples of the pressures that educators faced and the impact that this era left on the education system and society as a whole. The report showed how communist practices affected not only the education system but also the teachers themselves. This popularisation activity emphasised the importance of exploring the past to better understand the present and highlighted the importance of education not only as a tool for knowledge transfer,

but also as a space where values and resilience to external pressures are formed. Popularising such topics helps to increase public interest in historical and social contexts and fosters a deeper understanding of the importance of education in each era.

9) Mgr. et Mgr. Lenka Kamanová, Ph.D., *Connecting Generations*. Mendel University Has Launched a Project of Joint Education of Children and Seniors. – interview Czech Radio (2019).

The interview for Czech Radio introduced a unique MENDELU project aimed at connecting generations through joint education of children and seniors. The activity allowed these groups to share knowledge, experience and inspire each other in the framework of educational programmes. The project emphasised the importance of intergenerational cooperation, which contributes to better understanding between generations, strengthens social ties and promotes the active participation of seniors in social life. At the same time, it helps children to develop respect and empathy for older generations. The project is an example of how educational institutions can promote innovative approaches to lifelong learning and create platforms for sharing experiences across generations.

IMPLEMENTATION OF RECOMMENDATIONS

3.7 Implementation of the recommendations in Module 3

The evaluated unit will briefly describe how it has implemented the recommendations for Module 3 from the previous evaluation period, if applicable.

Maximum 1000 words.

Self-assessment:

Compared to the previous evaluation period (2015–2018), the ILL has undergone significant qualitative and quantitative development. Following a change in leadership in 2018 and in response to recommendations from the previous international evaluation, internal management processes were revised. This strengthened interdepartmental cooperation and brought a synergistic effect: more project proposals, higher-quality and more numerous publications, more professional development activities for academic staff, stronger ties with the application sphere, and an increase in contract research. These achievements have enhanced the Institute's prestige both within MENDELU and among external partners and the public.

The publication activity of the staff of the **Department of Social Sciences** has increased tenfold compared to the previous period under review. For example, while in 2018 (at the end of the last period under review) the department produced 3 relevant results of creative activity (submitted to the Register of Information on Results – RIV), in 2023 there were 40. The performance was not only quantitative, but mainly qualitative (see the web [graph](#) and the [list of the most important Institute publications](#)).

Compared to the previous period under review, the staff of the Department of Social Sciences in 2019–2023 were more active in submitting applications for financial support from public grant competitions (GA ČR, TA ČR, Ministry of Health, etc.). During the processing of applications and subsequent project solutions, the staff of the Department also cooperated with colleagues from other faculties of MENDELU (for details, see the [Department of Social Sciences Projects](#) website).

The staff of the Department of Social Sciences also significantly contributed (as authors) to the elaboration of concepts and strategies for professional development and education of MENDELU staff. In the period under review, concepts for the education of academic and non-academic staff of the University were developed, including their implementation (see e.g. [Support for Career Development – Human Resource Management Guidelines](#)).

In addition to a wide range of vocational, language and interest courses offered by the **Department of Continuing Education** (see e.g. [here](#)), it was also an important partner of the faculties in the promotion of technology transfer and intellectual property protection in the period under review. The Department collaborates closely with MENDELU's academic staff and external experts, drawing on the professional expertise of university faculties when developing courses and educational programmes. Its activities ensure that the latest scientific and research findings are effectively disseminated to both the general public and professionals. Since the previous period (2015–2018), there has been a growing inclusion of courses focused on the Green Deal and sustainability (see e.g. [here](#) and [here](#)). One of the most important and exclusive courses is for example the Specialisation Study of Plant Medicine (see [here](#)), which is offered by MENDELU as the only department in the Czech Republic. Only graduates of this study can work at a specialised department of the Ministry of Agriculture – the Central Institute for Agricultural Inspection and Testing.

The Department offers teacher training courses for graduates of agricultural, forestry, technical, or economic universities and ranks among the most sought-after in the South Moravian Region (see

the [Candidate Numbers](#) of the Department of Continuing Education). In the period under review, the Institute was an important provider of Czech language teaching (see [here](#)) for the inhabitants of Ukraine who left their country as a result of the Russian invasion.

The role of the **Counselling and Career Centre** has grown significantly compared to the previous period, especially due to the COVID-19 pandemic, which led to a sharp rise in demand for individual psychological counselling. In some areas, demand and the number of activities increased by tens of percent, in others even doubled (see the [Activities website of the Counselling Centre](#)). The Centre also coordinates support for students with special needs, ensuring equal opportunities in their studies. The number of supported students continues to grow each year. Compared to the previous period, they are triple. While in 2018 there were 58 of these students registered across the University, in 2021 there were 101 and in 2023 there are 147 (see the website of the [Students with Specific Needs](#)). The Counselling Centre now also offers EEG biofeedback therapy to students and staff, supporting well-being, personal development, and coping with challenges such as sleep disorders, stress, migraines, and learning or attention difficulties.

The Counselling Centre also supports the development of entrepreneurial competences through two university-wide elective courses: *Podnikni to!* and *Startup MENDELU*. Around 300 students completed these courses during the review period.

Interest in the **University of the Third Age**, run by the **Department of Senior Education**, has been steadily growing. Currently, MENDELU ranks 2nd to 3rd among 26 Czech universities in performance, up from 7th to 8th in the previous review period (see the [U3V Courses](#)). During the review period, the University of the Third Age offered various study programmes, including online courses such as *Genetics and Health*, differing in length, content, and format.

Since 2020, the Department has offered a new programme – *the Intergenerational University* – aimed at fostering intergenerational dialogue through educational activities for seniors and their grandchildren. This initiative was the first of its kind in Moravia and remains unique in the South Moravian, Moravian-Silesian, and Zlín regions.

In 2023, the Regional Authority of the South Moravian Region invited the Institute to help implement senior education in smaller municipalities with limited access to such activities. This cooperation led to a multi-year subsidy for the creation of the South Moravian Senior Academy – a unique programme offering seniors practical knowledge in areas such as safety, health, psychology, and finance to support them in complex life situations.

In the period under review, the Department of Senior Education also received funding from foreign sources (see [U3V Projects](#) website). One example is the *Erasmus+ 60* project, in which 8 European universities are analysing the wide range of existing higher education offers for people aged 60+. The project also included a research investigation to develop a comprehensive view of the existing senior education provision at partner institutions and within their own national context.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 3

Document name	No. criteria	Location (link in HTML)
Website of the Institute of Lifelong Learning	3.1	https://icv.mendelu.cz/en/
Development of the number of students in the Institute of Lifelong Learning study programmes	3.1	https://icv.mendelu.cz/en/development-of-the-number-of-students/
List of main activities and publications of the Czech Science Foundation (GA ČR)	3.1	https://icv.mendelu.cz/en/list-of-main-activities-gacr/
The courses and participants of the Department of Continuing Education	3.1	https://icv.mendelu.cz/en/dce-courses-and-participants/
Activities of the Counselling Centre	3.1	https://icv.mendelu.cz/en/cpc-activities/
U3V courses	3.1	https://icv.mendelu.cz/en/u3a-courses/
Development of the number of students in the Institute of Lifelong Learning study programmes	3. 2	https://icv.mendelu.cz/en/development-of-the-number-of-students/
WEB, FB and IG access	3. 6	https://icv.mendelu.cz/en/web-fb-and-ig-accesses/
List of popularisation activities	3. 6	https://icv.mendelu.cz/en/list-of-the-most-significant-popularization-activities-of-institute-of-lifelong-learning-2019-2023/
Chart and list of the most important publications of the Institute of Lifelong Learning	3. 7	https://icv.mendelu.cz/en/graph-of-publications-dss/
DSS projects	3. 7	https://icv.mendelu.cz/en/projects-dss/
The Number of candidates of the Department of Continuing Education	3. 7	https://icv.mendelu.cz/en/dce-candidate-numbers/
Activities of the Counselling Centre	3. 7	https://icv.mendelu.cz/en/cpc-activities/
Students with Specific Needs – Counselling Centre	3. 7	https://icv.mendelu.cz/en/sen-cpc/
U3V courses	3. 7	https://icv.mendelu.cz/en/u3a-courses/
U3V projects	3. 7	https://icv.mendelu.cz/en/u3a-projects/

SELF-EVALUATION REPORT FOR MODULES 4 AND 5

HIGHER EDUCATION INSTITUTION NAME: Mendel University in Brno

COMPANY REGISTRATION NUMBER (CRN): 62156489

MODULE 4 – VIABILITY

ORGANISATION AND MANAGEMENT OF R&D&I

4.1 Organisation and management of R&D&I

The HEI will briefly describe its organisational structure¹ and describe the R&D&I management system including the role of the HEI's central management, the management of faculties, and the HEI's institutes in organizing and managing R&D&I. It should also describe the role and structure of the technical and economic apparatus.

Maximum 1000 words.

Self-assessment:

Mendel University in Brno (MENDELU), a public university with a 105-year tradition of scientific research activities, has long been profiling itself as a research university focused on sustainable development, particularly in the areas of landscape management, agriculture, forestry and other key areas of human activity. MENDELU consists of **five faculties** (Faculty of AgriSciences, Faculty of Forestry and Wood Technology, Faculty of Business and Economics, Faculty of Horticulture, Faculty of Regional Development and International Studies) and a **university institute** (Institute of Lifelong Learning); (Fig. 1). Great emphasis is placed on organisational units at the level of "**institute/department**", which form the individual faculties/university institute and which significantly contribute to the development of scientific knowledge, implementation of research projects and transfer of new knowledge into pedagogical activities. The Faculty of AgriSciences has 14 institutes, the Faculty of Forestry and Wood Technology has 12, the Faculty of Horticulture has 10, the Faculty of Business and Economics has 9, the Faculty of Regional Development and International Studies has 6, and the Institute of Lifelong Learning has 4. **Research teams** are established by individual institutes or are interdisciplinary (inter-faculty) within the framework of implemented grants.

Two unique parts of the University are its university enterprises which function as living labs for researchers, students and stakeholders. The **University Forest Enterprise Masaryk Forest Křtiny** represents a forest complex with a total area of 10,492 ha (forest land itself 10,265 ha) and serves as a scientific base for MENDELU, where the objective of cultivating diverse forests prepared for climate change is fulfilled, taking into account various site conditions. The premises of the **University Agricultural Enterprise Žabčice** include small-plot and semi-operational experimental areas (2,300 ha of agricultural land) where the testing of the latest technologies and implementation of applied research projects take place in cooperation with partners from both research and commercial sectors.

¹ A graphical representation of the organisational structure will be provided as an annex.

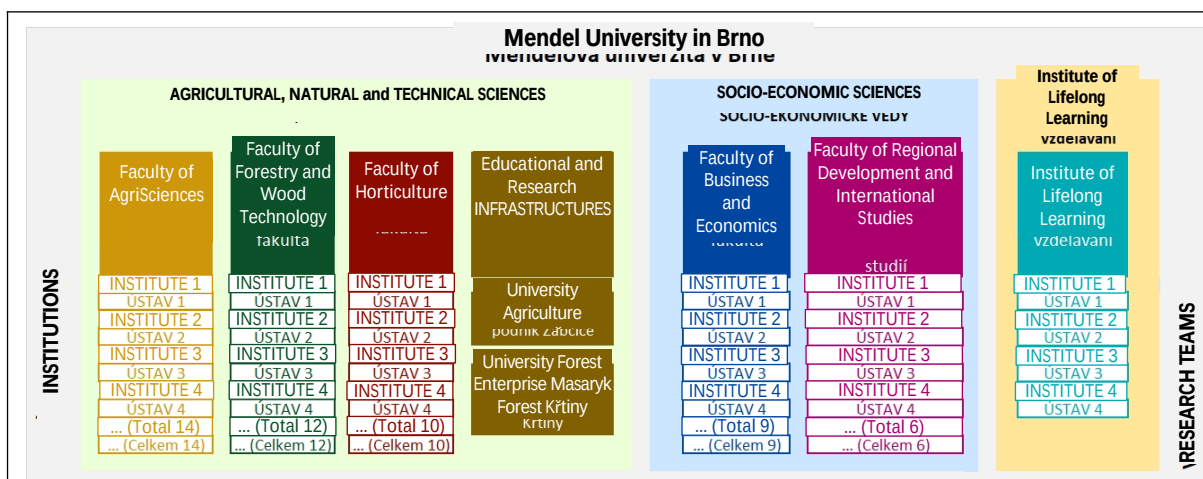


Figure 1: University Organisational Chart

The University's research and creative activities include **basic and applied research, development, innovation, artistic activities** and other professional activities and are inseparably connected with educational activities. The fundamental characteristic of research is the joint application of knowledge from biological, technical and social science disciplines in agriculture, horticulture, forestry, landscape management and timber industry, in economics and environmental studies, as well as the development of artistic disciplines in garden and landscape architecture and furniture making. A key aspect of the University's research activities is the interconnection between research and application spheres. The University engages in cooperation with businesses, public administration and the civic sector with the aim of addressing current issues and challenges in relevant fields.

The organisational structure of the university management is designed to support effective **management of scientific research and innovation activities** while enabling interdisciplinarity, internationalisation and linking research with practice. The Rector is the head of the University and acts and makes decisions in university matters. The Rector appoints a team of Vice-Rectors, each responsible for a specific area of university activities: Educational Affairs and Quality, Strategy and Sustainability, Research, Development and Innovation, Human Resources Development, Internationalisation and Information Technologies. The Bursar is responsible for the economic and operational matters of the University.

The Research, Development and Innovation (R&D&I) management system at MENDELU comprises several key bodies. The Rector has strategic responsibility and chairs the Scientific Board, which assesses applications for habilitation procedures and procedures for appointment as professor, accreditations and strategic plans. The Internal Evaluation Board monitors the quality of research and its connection to education, particularly in accreditation processes. Operational management is delegated to the Vice-Rector for Research, Development and Innovation, who coordinates the development of research activities and is responsible for the activities of the Rector's Commission for Research, Development and Innovation, the Grant Council of the Gregor Johann Mendel Grant Agency (GA GJM) and the Commercialisation Board. The Rector's Board is an advisory body to the Rector and consists of the Rector, Vice-Rectors, Bursar and Deans/Director of the University Institute. Links the strategic objectives of university units with university priorities not only in the area of research, but also in international cooperation and other key areas. The Rector's Advisor for Development and Commercialisation ensures cooperation between the University and state administration, particularly with the Ministry of Agriculture and the Ministry of Environment, and promotes the social relevance of research.

The University has a **technical and administrative apparatus** that provides researchers with comprehensive support – not only economic, but also project-related, IT, personnel, legal and organisational.

The **Bursar's Office** coordinates the University's operational matters, whilst the **Public Procurement and Purchasing Department** manages the efficient procurement of equipment and services. The **Operations Department** ensures the administration of buildings, energy management and vehicle fleet. The **Finance Office** is responsible for budget management, accounting and payroll. The **Educational Affairs and Quality Department** ensures the accreditation of study programmes, oversees the quality of teaching and promotes modern educational methods. The **Department of Scientific and Pedagogical Information and Services** provides information support for scientific, research and educational activities through its key Departments. The **Audiovisual Centre** ensures functional teaching equipment in classrooms and participates in the creation of multimedia educational materials. The **Publishing House** is dedicated to publishing scientific monographs, journals and professional publications. The **Library** provides access to electronic and printed literature and offers spaces for independent study for students and academics. The **Open Science Centre** promotes open science and open research data, provides methodological support to academics and monitors current Open Science trends. The **Research Department** provides administrative support. The **Technology Transfer** focuses on transferring research results into practice, cooperation with industry and commercialisation of innovations.

The **Project Office** focuses on the administration of national and international research projects. Each university unit has its project managers who seek grant opportunities in accordance with the mission and vision of individual University units. The **Sports Activities Centre** contributes to improving the physical and mental well-being of students and staff. The **Botanical Garden and Arboretum** maintains plant collections, contributes to ecological studies and science popularisation. The **Strategy and Analysis Department** develops concepts and development strategies, whilst the **International Relations Office** supports international cooperation, student and staff mobility, and university involvement in international consortia (e.g. HEROES). The **Human Resources Management Department** focuses on personnel development and the **Department of Information Technology** manages IT infrastructure. All these workplaces collectively form the basic support for effective scientific and pedagogical activities.

R&D&I QUALITY MANAGEMENT AND SUPPORT SYSTEM

4.2 System of support for a quality R&D&I environment and incentive measures for quality science

The HEI will briefly describe the systemic incentive measures/tools to support quality R&D&I (if applicable). For each measure/tool described, an example will be provided to illustrate the effectiveness of the measure/tool in practice (e.g. number of projects supported by internal grants, statistics on the use of advisory systems, number of newly established research teams, etc.). The description will pay particular attention to:

- A system of support for attracting national and international projects of projects.
- A system for project consultancy/management/administrative support.
- Science management (e.g., personnel and financial capacity for R&D&I transfer, personnel and financial capacity of the project acquisition support system, science managers, data analysts, business and innovation advisors, etc.).
- The existence of internal funding schemes.
- Strategy/opportunities for establishing new research teams (including international ones) and supporting them within the HEI (e.g. sharing of R&D&I equipment, laboratory and information facilities, administrative support, etc.).
- Support system for students and early career researchers².
- a system to support excellent science (e.g. support for excellent scientists, research teams, PhD students, collaborations, infrastructure, etc.).
- A system of support for interdisciplinary research and collaboration within the HEIs.
- The concept of providing conditions for the emergence of new, high quality research directions/topics, especially those with application potential.

Maximum 300 words per point.

Self-assessment:

Project Acquisition Support System (National and International)

The Project Office continuously provides methodological support to proposers and investigators of national and international projects. In the period 2021–2024, it prepared more than 34 methodological guidelines for announced calls from both national providers and calls within international portals. It organised dozens of seminars and workshops, which were attended by 1,380 participants. Training sessions for 170 participants were organised for projects submitted within the National Agency for Agricultural Research. The Project Office has established an organisational structure with defined agendas to support national, international and University-wide projects. During professional internships in Brussels in 2023–2024, a manager for Horizon, COST and MSCA projects was trained. Project Office staff participate in training and education as needed.

The Project Office sends a newsletter to registered University employees with information about newly opened grant calls and internal competitions. In addition, employees are provided with opportunities for further education through this channel, as well as invitations to various seminars and webinars on announced calls for proposals and the results of public tenders.

System of Project Consultancy/Management/Support Administration

The Head of the Project Office organises regular monthly seminars for project managers from University units with special topics and training sessions (experts from Czech Liaison Office for

² Student grants, support for PhD students, postdocs and early career scientists.

Education and Research – CZELO, Technology Agency of the Czech Republic). Project managers are contact persons for communication between individual units, project investigators and the Project Office. The Head of the Project Office is a member of the Rector's Commission for Research, Development and Innovation, and regularly provides information about project calls and success rates in project application submissions.

Science Management System (e.g. human and financial resources for the transfer of science, research and innovation results to society, human and financial resources of the project acquisition support system; science managers, data analysts, business and innovation consultants, etc.)

Project managers within defined agendas provide necessary information to proposers and subsequently to project investigators regarding current grant calls. During project implementation, they ensure communication with the provider and methodological support to investigators. Through seminars and training sessions, they establish contacts across both Czech and international environments in the project sphere. The Technology Transfer Office ensures the connection of outputs and results from implemented projects with the commercial sector. More information is provided in Chapter 4.4.

Since February 2024, the Rector's Advisor for Development and Commercialisation has been working at the University, ensuring cooperation with state administration, particularly the Ministry of Agriculture and the Ministry of the Environment, to increase the social relevance of research and research for state needs.

In the same year, memoranda of cooperation were also signed between MENDELU and the aforementioned ministries, aimed at deepening cooperation in science, research and innovation, and supporting student internships to better link state needs with research and education targeting. Since then, MENDELU has welcomed representatives from both ministries at the University Agricultural Enterprise Žabčice, the Josef Ressel Research Centre (centre for wood studies) and the Faculty of Horticulture. In all cases, research supply and demand were defined on both sides. Since then, MENDELU has been more actively involved in the preparation of departmental strategic documents (Ministry of Agriculture's Counselling Concept, advisor accreditation system, EKOfilm).

Existence of internal grant schemes

Internal grant schemes at the University are implemented through the [Gregor Johann Mendel Grant Agency](#) (GA GJM), which was established in 2020 by the [Rector's Guidelines No. 2/2020 Gregor Johann Mendel Grant Agency of Mendel University in Brno](#). The Guidelines were amended in 2023 by [Rector's Guidelines 4/2023](#), by adding support for applied results with social relevance. The Agency's activities are managed by a grant board headed by the chairperson, the Vice-Rector for Research, Development and Innovation. The evaluation is carried out by the internal research advisory panel *MENDELU Research Board*, which consists of University experts nominated by Deans/Director of the University Institute. The order of projects is determined by a board composed of Vice-Deans from individual faculties, a representative of the Director of the University Institute and external members. The GA GJM supports research through four project categories: A – Interdisciplinary Internal Research Projects, B – MENDELU Research Chair Advanced Grant, C – Return Projects and D – Applied Research Projects.

Research teams have access to a specialised manager (GA GJM Secretary) at the Project Office who provides them with complete advisory services and support. In the period 2020–2024, 10 projects were supported by the Grant Agency.

Another tool supporting scientific activities at MENDELU is the **Internal Grant Agency of MENDELU (IGA)**. It focuses on supporting specific University research, particularly individual projects of

doctoral study programme students, their active involvement in science and promotion of research results. The organisation and rules of this competition are defined by the [Rector's Order 15/2020](#), which establishes the Principles of Student Grant Competition and Specific University Research at Mendel University in Brno. The internal grant competition is guaranteed by the University and is implemented independently at individual faculties/University institutes whilst respecting their field-specific characteristics. In the period 2020–2024, 646 projects were supported by the Internal Grant Agency.

Strategies/options for establishing new research teams (including international ones) and their support within the University operations (e.g. sharing of instrumental, laboratory and information equipment for science, research and innovation, administrative support, etc.)

MENDELU actively supports the establishment of new research teams, including international ones, through sharing instrumental, laboratory and information equipment for science, research and innovation, and providing administrative support. Since 2020, GAGJM has been operating here, strengthening the quality and prestige of research work at the University through internal projects.

Category B – MENDELU Research Chair Advanced Grant was created to attract excellent researchers and significantly enhance the University's scientific excellence. Although the category has not yet been announced, the University has already created conditions for its future implementation. Participation in Horizon programme consortia is crucial for the development of international research teams; therefore, greater attention is paid to systematic preparation of Horizon project applications (more than 10 projects funded by EU Horizon 2020 and Horizon Europe programmes were implemented during the evaluated period) and MSCA, where there is an opportunity to invite excellent foreign scientists and visit excellent foreign workplaces, which is important for further professional growth. MENDELU develops cooperation and contacts with foreign educational and research institutions through international educational programmes, particularly in Erasmus+, Leonardo and Ceepus programmes. Additionally, academic staff and student mobility is implemented through LE:NOTRE programmes and the Academic Information Agency of the Czech Republic. Thanks to the established contacts, cooperation with the partner workplace can continue even after the completion of the project/mobility.

Student and Early-Stage Researcher Support System

Excellent doctoral students and early-stage researchers at MENDELU have long been supported through specific grant and scholarship competitions. A unique initiative is the University [competition](#) **MENDELU Ph.D. Talent**, which has been providing creative scholarships to students since 2021. The competition consists of two rounds and is conducted in English. Applicants submit a project proposal and subsequently present their research before the Rector's Commission for Research, Development and Innovation. Project defence follows after one year. As of July 2024, 16 students have been supported through this competition, receiving scholarships totalling CZK 1,520,000/EUR 59,961. Students can also utilise the support of a specialised Project Office Manager who provides assistance not only for the University competition but also for the external [programme](#) **Brno Ph.D. Talent**, and helps prepare applications for awards such as [Danubius Young Scientist Award](#).

At MENDELU, students are supported through grants from the **Internal Grant Agency** (IGA) funded from specific University research provided by the Ministry of Education, Youth and Sports of the Czech Republic (MEYS). This research is carried out pursuant to Act No. 130/2002 Coll. and includes research by doctoral and master's programme students in connection with their education. The MENDELU Internal Grant Agency was established in 2003. Its rules were updated in 2021 by the [Rector's Order No. 15/2020](#), which sets out the Principles of Student Grant Competition and Specific University Research. In the period 2020–2024, nearly 1,800 students were supported through this agency with a sum of CZK 164,500,000/EUR 6,489,152. The organisation and

redistribution of resources takes place at the level of individual faculties, which provide their own activity reports.

Students and employees are awarded the **Rector's Awards** for outstanding achievements in science, education, sports, arts and contributions to civil society. Nominations for awards are submitted by deans, directors of university institutes or the chair of the academic senate. The award is granted by the University Rector. Recipients receive a diploma, a medal of Mendel University in Brno and a financial reward.

Mendelu PhD Week aims to address current topics that directly concern doctoral students. Students can learn a wealth of useful information about project issues, publishing, science popularisation and matters related to employment relationships.

System of support for excellent science (e.g. support for outstanding scientists, research teams, doctoral students, cooperation, infrastructure, etc.)

The system of support for excellent science at MENDELU includes the development of outstanding scientific teams, support for doctoral students, interdisciplinary cooperation, and effective use of infrastructure. Within the internal grant agency **Gregor Johann Mendel Grant Agency category A is established – Interdisciplinary Internal Research Projects**, which focuses on excellent research with high added value. Emphasis is placed on cooperation between disciplines with different focus areas, which ensures a unique interdisciplinary approach and excellent results. This support system not only develops excellent scientific capacities but also contributes to the emergence of new research directions with significant societal impact.

Excellent teaching forms the foundation of scientific excellence. For its development, innovative methods linked to scientific activities are implemented, enabling students to actively participate in research. The quality of teaching is ensured by modern material and technical facilities and practical training based on cutting-edge technologies. Internationalisation is supported by a wide range of programmes and internships that enrich the experience of both students and teaching staff. The systematic development of pedagogical competencies of teaching staff ensures an effective transfer of scientific knowledge into the educational process.

System for Supporting Interdisciplinary Research and Cooperation within University Units

Within the Internal Grant Agency **Gregor Johann Mendel Grant Agency – Category A – Interdisciplinary Internal Research Projects**, support is intended for a research team composed of academic and research staff from at least two University units, and at the same time these are early-career researchers. Research topics must be interdisciplinary, innovative, with high added value, and not supported by other sources. Cross-sectoral cooperation with various focuses is a prerequisite. It is an opportunity for the establishment of a new team that can thus share infrastructure across two or more University units.

Below are examples of completed projects of the Gregor Johann Mendel Grant Agency in category A – Interdisciplinary Internal Research Projects:

- *Landscape as a Whole and Landscape in Detail. Interdisciplinary Research of the Hranice Karst* (2021–2024), CZK 8,954,000/ EUR 353,211, Faculty of Horticulture and Faculty of AgriSciences.
- *Production Efficiency of Recycled Wood Use for Composite Materials Manufacturing* (2022–2025), CZK 3,000,000/EUR 118,343, Faculty of Forestry and Wood Technology and Faculty of Business and Economics.
- *Food Waste Collection System in Urban Housing Estate Conditions* (2022–2025), CZK 6,000,000/EUR 236,685, Faculty of AgriSciences and Faculty of Business and Economics.
- *Dynamics Of The Bovine Mammary Gland Microbiome Before The Onset And During Mastitis And The Development Of New Types Of Antibacterial Substances For Its Treatment* (2024–2027), CZK 2,991,000/EUR 117,984, Faculty of AgriSciences and Faculty of Horticulture.

Concept for ensuring conditions for the development of new high-quality research directions/topics, particularly those with application potential

To support research teams with new topics having application potential, **category D** of the **Gregor Johann Mendel Grant Agency – Applied Research Projects** has been established, where projects focus on completing applied research results and experimental development leading to commercial use. Research teams are informed about new calls through newsletters and on the Project Office website. A seminar is held for applicants for each call.

In 2024, a new call was announced in this programme, and support was granted to the project *Root System Active Zones Estimator and Detector (RAZT) – Upgrade from TRL5 to TRL6 Prototype System* (2024–2026), CZK 1,500,000/EUR 59,168, Faculty of Forestry and Wood Technology.

Researchers interested in consulting on planned outcomes of applied research and experimental development leading to commercial use may contact the Technology Transfer Office of MENDEL.U. Here they will receive information on whether and how any result can be protected and what steps need to be taken to achieve this.

The Technology Transfer Office is repeatedly the investigator of projects of the Technology Agency of the Czech Republic “Proof of Concept” support system at MENDEL.U. The aim of the project is to support activities that will help ensure the development of technology and knowledge transfer between research organisations and businesses that can apply research results in practice. The programme aims to strengthen ties between research organisations and the application sphere, develop the economy and enhance company competitiveness. In 2024, it was a great success for the Technology Transfer Office that in the highly competitive environment of technology transfer departments of other research organisations, it ranked 1st out of more than 40 submitted applications.

4.3 Quality control system for R&D&I environment

The HEI will briefly describe the system of internal and external evaluation of research units, including the following aspects:

- Internal and external evaluation of R&D&I quality: This includes the evaluation of R&D&I by the HEI's authorities, the evaluation of research teams (if such a system exists), and the involvement of international scientific councils or other independent advisory bodies in quality control and of R&D&I management.
- The ethical aspects of research: This includes adherence to ethical principles and good scientific practice, compliance with related legislation (codes of ethics, ombudspersons, ethics committees and ethics hotlines, and systems for reporting whistleblowing and ethical misconduct).

The HEI shall demonstrate the functioning of the quality control systems in the R&D&I environment by examples (e.g., brief information on the evaluations carried out and their results, specific examples of the use of whistleblowing or the handling of ethical violations, etc.).

Maximum 500 words plus 200 words for each example described (max. five).

Self-assessment:

Internal and external evaluation of the quality of science, research and innovation

The evaluation of research and scientific activities is carried out at the national level through the evaluation system (Methodology 17+) and through an internal evaluation system within the university that meets the requirements set by Methodology 17+. As part of the **national evaluation**, the University submits selected results for Module 1, which focuses on evaluating excellent research outcomes regardless of whether it is basic or applied research. The evaluation is carried out through **peer-review**. Evaluators assess the innovativeness and contribution of the results to the development of scientific disciplines or societal relevance. Module 2 focuses on **research performance**, using bibliometric analyses based on Article Influence Score (AIS) or Scimago Journal Rank (SJR). This module provides a quantitative view of the University's scientific productivity, including comparison with research output common in the given field worldwide or in the European Union member states.

Internal evaluation is closely linked to the allocation of institutional support for long-term conceptual development of the research organisation, which motivates targeted research direction. The assessment primarily focuses on **publication performance**, with emphasis on excellence in impact factor journals. Furthermore, the ability to obtain **national and international grants** (e.g. Horizon Europe, COST) and implementation of **contractual research** is assessed, with emphasis on cooperation with companies and knowledge transfer into practice. The financial resources shall be distributed as follows: 73% for research outcomes, 15% for success in international projects, 4% for contractual research and 8% for external national projects.

Since 2022, a peer-review evaluation system has been implemented for selected high-quality basic and applied research results by external experts. This entire system ensures effective targeting of research activities and development of innovations with high added value. Rules for the distribution of institutional support for long-term conceptual development of research organisation are available [here](#).

The evaluation of creative activities in the field of applied results is carried out by the **Commercialisation Council**, newly with one-third representation by University staff and two-thirds representation by successful external experts from commercial and financial sectors, who are private investors and high-ranking representatives of, for example, the banking sector and

the South Moravian Innovation Centre. The Council's scope is governed by the [Rector's Order No. 12/2019, Protection and Commercialisation of Industrial Property at Mendel University in Brno](#).

Each year, **a report on Research, Development and Innovation** is prepared and presented to the Rector's Board, University Academic Senate and University Scientific Board. The University Scientific Board plays a key role in evaluating the results of creative activities. It has a total of 52 members, of whom 22 are external experts representing the broad spectrum of scientific disciplines carried out at the University. Together with internal members, they ensure transparent and objective evaluation of the quality of the University's scientific work. The Scientific Boards of the University's constituent parts perform a similar function at the level of faculties/University institutes. They ensure that the assessment complies with both general academic standards and specific requirements of individual fields. The main objective of these bodies is to support excellence in science, research and innovation.

Example:

*Within the national evaluation H23 for the years 2019–2023 in Module 1, we managed to increase the number of grades 1 and 2 and reduce the number of poor grades 4 and 5. This state is evidenced by a citation from the commentary of the Chairman of Expert Panel 4. Agricultural and Veterinary Sciences Professor Dr. Ing. Luboš Borůvka: "The number of evaluated results of Mendel University in Brno has only slightly fluctuated in recent years, with 13 being evaluated in 2023. **There is a noticeable improvement in the last year**, when the number of grade 2 evaluations increased (5 compared to 2 in the previous year) and conversely, the number of grade 3 evaluations decreased (from 9 to 4, which is a decrease from 75.0 to 30.8%), moreover, one result was evaluated as grade 1."*

Example:

Within FORD 4.1 Agriculture, Forestry and Fisheries, MENDELU ranks among the most significant organisations in terms of output in the first decile and first quartile according to AIS.

5a) Most significant organisations in the field – first DECILE

4.1. Agriculture, forestry, and fisheries (2018–2022, WoS database)

Order	Research organisation	National share in the field in D1	Number of results per org. In D1	Share of results with corresponding authors in D1 within the organisation	Share of results with international collaboration in D1 within the organisation
1	Czech University of Life Sciences Prague	27%	120	42%	69%
2	Charles University	15%	65	29%	48%
3	University of South Bohemia in České Budějovice	14%	62	42%	66%
4	Global Change Research Institute, CAS, Public Research Institute	14%	61	28%	80%
5	Mendel University in Brno	13%	57	26%	67%
6	Biology Centre of the CAS, Public Research Institute	12%	53	45%	62%
7	Masaryk University Brno	9%	39	31%	59%
8	Institute of Microbiology of the CAS, Public Research Institute	8%	35	31%	54%
9	Institute of Botany of the CAS, Public Research Institute	7%	29	45%	59%
10	Palacký University Olomouc	7%	29	28%	45%

Source: Evaluation 2023. *Bibliometric Report for Fields and Field Groups. 4.1 Agriculture, Forestry and Fisheries. Report 1, p. 7.*
<https://hodnoceni.rvvi.cz/hodnoceni2023/biblio-obory>

5b) Most significant organisations in the field – first QUARTILE

4.1. Agriculture, forestry, and fisheries (2018–2022, WoS database)

Order	Research organisation	National share in Q1 field	Number of organisation's results in Q1	Share of results with corresponding authors in Q1 within the organisation	Share of results with international collaboration in Q1 within organisation
1	Czech University of Life Sciences Prague	30%	332	43%	70%
2	University of South Bohemia in České Budějovice	16%	180	42%	68%
3	Mendel University in Brno	14%	156	33%	59%
4	Charles University	13%	140	32%	54%
5	Masaryk University Brno	12%	133	26%	75%
6	Biology Centre of the CAS, Public Research Institute	11%	117	43%	62%
7	Global Change Research Institute, CAS, Public Research Institute	10%	115	28%	77%
8	Institute of Botany of the CAS, Public Research Institute	9%	101	35%	62%
9	Institute of Microbiology of the CAS, Public Research Institute	5%	55	31%	47%
10	Palacký University Olomouc	5%	54	31%	52%

Source: Evaluation 2023. Bibliometric Report for Fields and Field Groups. 4.1 Agriculture, Forestry and Fisheries. Report1, p. 7. <https://hodnoceni.rvvi.cz/hodnoceni2023/biblio-obory>

Compliance with ethical principles and good scientific practice

In 2024, regulations relating to research ethics and integrity were unified. The main regulatory document **Code of Ethics** containing comprehensive mechanisms and methods for preventing misconduct in research integrity and academic freedoms has been adopted. It also sets out general requirements for the conduct of employees and students. The Ethics Committee is the body responsible for addressing violations of the Code of Ethics.

Based on the newly formulated concept of ethics and integrity in the University's Strategic Plan, the [Rector's Guidelines No. 5/2023](#) was issued in 2023, establishing the scope and rules of procedure for ethical **committees for animal handling**, unifying the work of 4 ethical committees differing in location and animal species. Furthermore, in 2024, the **Ethics Committee for Research with Human Subjects** was established, which deals with both applications from academic and research staff, including doctoral students, for the assessment of ethical aspects of research activities involving human subjects, as well as providing consultancy in this area. Within the assessment process, potential ethical risks are considered in the areas of scientific contribution, research design, research methodology, suitability and feasibility of research projects, whilst ensuring the minimisation of identified risks. Another control mechanism established at MENDELU was the **Ethics Committee for Research and Innovation Integrity**. The Commission is appointed ad hoc with regard to field-specific research, development and artistic activities, thereby ensuring oversight of ethical integrity in all areas of research and innovation at the University.

Within the framework of ensuring good awareness of the academic community about the area of ethics, a centralised [web platform](#) was created to provide clear and up-to-date information about control mechanisms and the scope of individual university ethics committees. For easy access to information, the platform contains a directory of ethics committees, their statutes and rules of procedure, contact information, and procedures for submitting applications for ethical approval or

addressing concerns.

The Research Department provides regular training events and informs the academic community about opportunities for education in the field of ethics through continuous delivery of the library newsletter and the Science and Research newsletter. Annual seminars on current topics are also organised.

A **communication channel** has been created in MS Teams *PRIME – Principles, Respect, Integrity, Morality and Ethics*. Members of the MENDELU ethics committees have been invited to this channel. It serves to share webinars and supporting materials, e.g. those organised by the European University Association, and as an operational communication channel for sharing information. Joint meetings of committee chairs and the Vice-Rector for Research, Development and Innovation serve to build professional relationships and share good practices in the field of ethical standards across various disciplines.

The international dimension is achieved through the University's membership (2022) in the **ENAI – European Network for Academic Integrity** and through the participation of the Vice-Rector for Research, Development and Innovation in international cooperation in the field of ethics and integrity in science, research and innovation.

In 2023, Act No. 171/2023 Coll., on the Protection of Whistleblowers, came into effect, establishing rules for safe and confidential reporting of unethical or unlawful conduct through **whistleblowing** mechanisms. In accordance with this Act, MENDELU has implemented an internal system for receiving reports pursuant to Section 2 of the said Act. The procedure for submitting and assessing reports is transparently published on the [University's official notice board](#). To facilitate reporting, a new email address whistle@mendelu.cz has been established to which reports may be sent.

Example:

The Applicant for research assessment by the Ethics Committee for Research with Human Subjects submitted all required documents, including the assessment application, participant consent template and personal data processing consent form. During the assessment, committee members identified deficiencies in the description of the data collection process and the deadline for participants to withdraw from the research. The Applicant was advised to supplement this information. After making the amendments and submitting the revised documents, the commission reassessed the Application, approved it and issued a resolution. This transparent process ensures both the protection of research participants' rights and its implementation according to ethical rules.

4.4 Sustainability and resilience of R&D&I

The HEI will describe the arrangements for sustainability and increasing the resilience of R&D&I, if such a system exists, and provide examples of its implementation. These include:

- The sustainable development concept (strategy, objectives, plan and implementation).
- Social responsibility strategy.
- A knowledge transfer system, if it is established at central level.³
- The third role, the transfer of R&D&I results to society and interaction with local actors.
- The concept of research data management (data collection, access and sharing of data, use of the information obtained for R&D&I management, responsibility for data files, archiving and backup of data).
- Ethics and personal data protection.
- Intellectual property protection.
- Ensuring institutional resilience (resistance to foreign influence, cyber security, risk prevention, prevention of misuse of R&D&I and knowledge transfer results, a system to prevent or mitigate the negative impacts of R&D&I and knowledge transfer in society).
- Digitisation and the use of smart technologies.
- The institutional strategy for Open Science 2.0/Open Access (if one exists), including information on the operation of the institutional repository or similar tools.
- A system for training undergraduate and postgraduate students as well as staff in the field of intellectual property protection and technology transfer.

The HEI will demonstrate the effectiveness of its procedures by examples (e.g., the number of people trained in intellectual property protection and technology transfer, data on the usage of Open Access repositories, handling of risk incidents, etc.).

Maximum 300 words per point.

Self-assessment:

Sustainable Development Concept (strategy, objectives, plan and implementation method)

At the University, the Strategy and Analysis Department, as part of its agenda, focuses on inter-faculty cooperation in the field of sustainability, sharing good practice and raising awareness of sustainability amongst staff and students through the initiation of the **MENDELU Sustainability** working group. The department was the investigator of projects *UNILEAD I and II* of the Centralised Development Programme of the Ministry of Education, Youth and Sports, focusing on the implementation of the UN Sustainable Development Goals (UN SDGs). MENDELU primarily endorses six goals: zero hunger, quality education, gender equality, clean water and sanitation, climate action, and life on land. Cooperation has been established between the *MENDELU Centre for Social Responsibility and Sustainability* and the [South Moravian Innovation Agency JINAG](#). MENDELU is a member of the [Association of Social Responsibility](#) and the Institute of Circular Economy. The University also publishes **Sustainability News**, where readers can find interesting information on the given topic and information about events related to *sustainability*. Since 2024, the Rector and Vice-Rector for Strategy and Sustainability have been leading the Working Group for Sustainability of the Czech Rectors Conference.

The concept of sustainable development and social responsibility is addressed in the [Sustainability Strategy of Mendel University in Brno for 2025–2030](#), which was discussed and approved by university bodies in December 2024. Research, Development and Innovation is one of its five pillars. The implementation of the strategy will be ensured annually through the strategic intent

³ If the knowledge transfer system is decentralised to the unit level, the HEI shall describe how the system works.

implementation plan; separate action plans for the sustainability strategy will not be developed.

Social Responsibility Strategy

In 2024, MENDELU launched its first University-wide applicant campaign focused on sustainability. The campaign utilises stories of alumni who, through their studies at MENDELU, acquired the necessary knowledge and skills and are already achieving significant changes in their fields. The aim of the campaign is to demonstrate how the University actively addresses sustainability-related topics, which includes both environmental issues and social inequalities.

Example:

A graduate of the Faculty of AgriSciences manages a modern hydroponic greenhouse, which is more environmentally friendly and efficient than traditional cultivation methods. A graduate of the Faculty of Horticulture works on enhancing biodiversity in wine-growing regions and a graduate of the Faculty of Business and Economics collaborates on educating women in IT.

The MENDELU Sustainability Strategy is based on long-term objectives including the integration of sustainability principles into education, research and operational activities. The University regularly monitors its activities in this area through the [Sustainability Report](#) and participates in global assessments such as UI GreenMetric and THE Impact Rankings. The Centre for Social Responsibility and Sustainability also plays a key role, supporting initiatives focused on climate action, equality and inclusion, thereby strengthening the university's positive impact on society and the environment.

In the area of healthy lifestyle and community care, the University shall ensure, in accordance with the Sustainability Strategy, appropriate working and study conditions in all University premises. Emphasis is placed on ensuring that career and psychological counselling is accessible to all and that everyone is informed about these options. Students shall be involved in the University's sustainable activities and implementation of this strategy, while obtaining their feedback shall be of importance.

Knowledge Transfer System

The [Technology Transfer Department](#) is the University's contact office for administration, protection and **commercialisation of applied science and research results**. The Department is directly responsible for cooperation with commercial entities. An important part of the job description is communication with the Industrial Property Office. In the period 2020–2024, **32 patents were obtained, including 5 European patents, 117 utility models and 32 industrial designs**.

The Technology Transfer Department also serves as a contact and advisory point for employees regarding the preparation of cooperation with **contractual partners** – typically licence negotiations, preparation of joint projects in Innovation Voucher programmes and Knowledge Transfer Partnerships. Through direct cooperation with Project Offices of University units, it helps identify outputs of obtained research projects suitable for commercialisation.

By ranking first among evaluated applications for the Technology Agency of the Czech Republic (TA CR) SIGMA **Proof of Concept** project, important external funding for the commercialisation of results was secured in 2024. Thanks to these facts, knowledge transfer at MENDELU has a solid foundation and can fulfill an important task - transferring scientific results into the commercial sphere where they can benefit the public.

In addition to the mentioned external sources, MENDELU also has its own financial instruments to support the creation of applied results, e.g. the internal competition of the Gregor Johann Mendel Grant Agency of Mendel University in Brno, specifically category D, which directly supports technology transfer in ongoing projects with specific results – the aim is to support proof-of-concept research and development outputs from the University's own resources.

To motivate patent originators, the university follows the [Rector's Decision No. 26/2014](#) on Remuneration of Inventors of Patents, Utility Models and Other Industrial Property Objects and

Management of Commercialisation Income, which regulates financial gains from licence sales and represents an important motivation for inventors towards commercialisation of results.

The third role, transfer of R&D&I , results to society and interaction with local actors

MENDELU cooperates with the [South Moravian Innovation Centre](#), a key #brnoregion player, as South Moravia is a leading Central European region in innovation and entrepreneurship support.

Cooperation with the application sphere is strengthened through events like **Career Day**, **JobChallenge** or **Internship Portal**. These offer collaboration opportunities for the university and help students connect with employers.. Company representatives give lectures in specialised subjects and are also members of examination boards and scientific councils of University departments. Students' final theses address companies' issues. University students participate in professional trade fairs (AgroContact.cz, [Grand Prix Mobitex](#), Forum of Design, [Design Shaker](#), Land Art, [Prof.Jindřich Halabala Award](#), etc.). The Faculty of Business and Economics organises **Business Day** as an opportunity to meet and deepen mutual cooperation with already cooperating companies, as well as to address and present cooperation opportunities for entirely new companies.

Example:

A proof of successful transfer of R&D&I results is the sale of a non-exclusive licence to Vinný dům s.r.o. –capturing fermentation gases during wine fermentation and their utilisation in carbonating non-alcoholic beverages patent. Cooperation is being developed on the basis of the Intellectual Property Licence and Commercialisation Agreement with ORO AGRI company, ensuring global cooperation in the commercialisation of microbial plant protection. MENDELU has three university start-ups – Lightly Technologies s.r.o., Gentleman idea s.r.o., Mojo SYSTEM s.r.o. Negotiations are underway regarding the sale of the Intellectual Property Licence to Nanteo s.r.o.

Knowledge transfer and cooperation with local actors are fostered through MENDELU's long-term participation in clusters, technology platforms and associations (Czech Technology Platform for Agriculture – Faculty of AgriSciences, [Czech Furniture Cluster](#) – Faculty of Forestry and Wood Technology). MENDELU became the **host of the Cluster Day in the South Moravian Region**, which took place on 16 October 2024. Lectures, workshops and networking opportunities supported cooperation between academia, industry and public administration.

Research Data Management Concept

In 2020, the National Research, Development and Innovation Policy of the Czech Republic 2021+ was established. Measure 8) was focused on open access to research results and data. In 2023, MENDELU launched the [Open Science Centre](#) to support research data management for scientists and students. A university data steward, assists with project application preparation and Data Management Plans (DMPs). [Supporting websites](#) have been created for researchers to manage their research data. The Centre provides guidance, training, and online resources, including a [methodological instruction](#) on Open Science for project applicants The University has established a regular cycle of training on DMPs and research data management (307 persons were trained in 2024), practical workshops for doctoral students with a data steward, data management consultations (39 consultations were conducted in 2024). The University has its own instance of the [Data Stewardship Wizard](#) for creating DMPs, including an instructional video guide and methodological support.

MENDELU or contractual partners are responsible for data backup in the case of storage facilities available at MENDELU. In 2023, an overview of storage options, including additional information and tools, was created on the [website](#) of the Department of Information Technology. The University has [storage facilities](#) for storing raw research data. The open [repository](#) of research and development results at MENDELU provides free access to full texts of articles, books and other publications by MENDELU authors in the form that publishers allow to be archived under their licensing terms. The Open Science Centre provides [information](#) and support on sharing and publishing research data in

accordance with FAIR principles. Researchers have the option to utilise **data repositories**: both the [national data repository](#) and international and discipline-specific ones. The Open Science Centre assists researchers with selecting data repositories and provides practical training to authors on how data repositories work. Link [here](#).

Ethics and Personal Data Protection

The position of Data Protection Officer **has been established** at MENDELU, who has been assigned the contact email address dpo@mendelu.cz. The Data Protection Officer also works closely with the Ethics Committee for Research with Human Subjects and participates in reviewing the feasibility of research projects involving the collection of personal data from participants. As part of security measures at MENDELU, a [web platform](#) has been established that includes information regarding personal data protection. Here is also displayed [the declaration](#) on ethical and responsible handling of University data.

Intellectual property protection

Protection of sensitive information refers particularly to such information about the University's intellectual property whose disclosure or acquisition by third parties could prevent the University from obtaining patent protection or other types of industrial property protection; furthermore, such information whose disclosure or acquisition by third parties could result in the loss of the University's competitive advantage for potential commercialisation of the respective industrial property subject matter. Protection and commercialisation of industrial property at Mendel University in Brno is governed by the [Rector's Order 12/2019](#) Protection and Commercialisation of Industrial Property at Mendel University in Brno.

Ensuring institutional resilience (resilience against foreign power influence, cybersecurity, risk management, prevention of misuse of science, research and innovation results and knowledge transfer, system for preventing or mitigating negative impacts of science, research and innovation and knowledge transfer on society)

The importance of institutional resilience, including cybersecurity, prevention of research results misuse and protection against influence operations, is perceived as crucial. Current trends and examples of good practice in this area are being monitored. In 2020, disk arrays in the data centre hosting the University's key production systems were replaced. By implementing a new series of disk arrays, the speed and availability of educational and scientific research applications were significantly increased, whilst also improving the security of stored data. Following the designation of the University Information System as a significant information system in January 2021, it became necessary to comply with the requirements of the Cyber Security Act. Information security management system was gradually implemented through organisational and technical measures.

As an example of an organisational measure, the establishment of the **Cybersecurity Committee and the introduction of the role of cyber manager** can be mentioned. Comprehensive penetration tests were conducted on the University infrastructure, and a range of technical and organisational measures were implemented to enhance the resilience of information systems, including continuous monitoring of network operations through HW and SW means. At the end of 2023, two-factor authentication for access to the University Information System was introduced, which is mandatory for all University employees. Training sessions in cybersecurity are organised for employees and students. A web [portal](#) for the entire University security concept has been established.

Employees who are exposed to the influence of foreign powers may contact the Vice-Rector for Science and Research to consult on further steps against such influence.

Example:

MENDELU was targeted by a phishing that compromised a student's email account, leading to the distribution of fraudulent messages with a spoofed loginlink to another organization. The student's credentials were promptly reset, and they were advised on proper credential handling.

Digitisation and Use of Smart Technologies

In 2020–2024, the University's processes underwent significant digitisation using modern tools, which was notably accelerated by the coronavirus pandemic. In 2020, universities had to quickly adapt to newly emerging conditions. **Online teaching, virtual conferences and remote work** became a common part of working life, not only for scientific research staff. Digitisation enabled the creation of an electronic system for project activity records in the form of a project notification as another electronic form alongside the science and research results notification. There was also a complete upgrade of the system for Grants and Projects and for the Internal Grant Agency, which primarily stimulates student involvement in creative activities and financially supports the development of science and research and the promotion of their results through internal grants within the grant competition.

Significant digitisation was achieved in the travel orders agenda, previously paper-based. Since 2021, all domestic and international travel reimbursements are processed electronically, including payments. Integration with University systems and automated approval workflows streamlined operations and reduced administrative workload. The electronic attendance system replaced MS Excel tracking, eliminated paper holiday requests and expanded the Employee Portal's functionality.

The University continuously **develops and adds new functionalities** to its own mobile **application MyMENDELU**, which is available to employees and students on iOS and Android platforms. During the given period, the Campus Interactive Guide functionality and Important News in the form of mobile application notifications (for crisis situations) were created.

Several study-related processes have been digitised through the Contact Centre module in the University Information System, where students access standardised forms and submit applications electronically. A system repository stores related documents.

Institutional Strategy for Open Access and Open Science, Institutional Repository

In 2022, the project was completed of the Operational Programme Research, Development and Education: Development of Research and Development Capacities at Mendel University in Brno II. The main output was the **Open Access Strategy** and **Open Science 2023–2030** with the following objectives: 1. support for open access publishing, 2. establishment of a support centre for open science, and 3. development of open science infrastructure at the University.

The Open Repository has served since 2021 for long-term archiving of scientific results, promotion of Open Access publications by university authors, and for depositing publications created within projects where open access requirements have to be met. As of 18 November 2024, 687 publications have been stored here. The annual increase in 2024 was 134 publications. The repository is indexed in OpenDOAR, ROAR, BASE databases and is linked to the OpenAIRE portal. Open Access publishing monitoring is ongoing, with the proportion of Open Access articles by University authors published in journals for 2023 being 64%. [Rector's Methodological Instruction 2/2022](#) The Open Repository of Science and Research Results establishes rules for the implementation of open access.

Since 2021, **the Open Access Publishing Support Fund** has been opened annually with a budget of CZK 1 million/EUR 39,448. To date, 116 articles have been supported through the fund. The University annually records APC fee payments in accordance with the [Rector's Methodological Instruction 1/2021](#) Recording of Open Access Publication Fees.

The University publishing house publishes publications under the Open Access regime. These publications are assigned a permanent DOI identifier and Creative Commons licences. Since 2020, 37

methodologies and monographs have been published in [Open Access](#). The University reviews journals upon request to prevent publishing in [predatory journals](#). In the period 2020–2024, a total of 166 journals were reviewed.

System for Education of Undergraduate and Postgraduate Students and Employees in the Field of Intellectual Property Protection and Technology Transfer

The Institute of Scientific Information and Services offers over 50 annual seminars, including online sessions, training nearly 5,000 participants. Topics cover IP, citations, plagiarism, predatory journals, data management and publication ethics.

The Technology Transfer Department (RTT) provides education on IP protection and technology transfer through its [website](#) and other channels. Staff attends courses by the Industrial Property Office, EPO and ASTP. As a member of Transfera.cz platform RTT supports national technology transfer development. RTT implements projects within the calls of the TA CR GAMA and SIGMA programmes to support “Proof of Concept” activities.

In 2024, a project was submitted under the OP JAK Environments call, with major part of the budget focused on developing RTT, through training and twinning activities. These aim to build competencies and foster collaboration with leading U.S. innovation consultancy.

Undergraduate education in technology transfer is supported through [courses](#) like *Podnikni to!* and *Start up MENDELU*, along with follow-up competitions. In 2024, the **MENDELU Boost** competition, held with the South Moravian Innovation Centre (JIC), received 36 project submissions. Four winners advanced to the next round, receiving CZK 150,000/EUR 5,917 each, with a chance to compete for an additional CZK 220,000/EUR 8,678.

Podnikni to! guides students through practical steps to launch a business with minimal risk, led by experienced entrepreneurs in small-group (8-16) workshops.

Start up MENDELU teaches idea development and Design Thinking, helping students build and test sustainable business plans with expert support.

Postgraduate entrepreneurship is supported through the **JIC Ph.D. Academy: From Research to Business**. The program helps Brno university students turn research into business, pitch projects and explore commercial potential.

Example:

In 2022, MENDELU held **the Best Business Idea Competition**. 20 TOP business plans advanced to the next round, where participants presented their ideas. Evaluation focused on plan quality, potential, feasibility, goal achievability, and presentation.

PERSONNEL POLICY

4.5 Structure of human resources

The HEI shall describe the current state, age structure, degree of internationalization and development trends of the staff involved in R&D&I, along with their distribution by a job title and gender for the period of 2020–2024 as detailed in annex tables (Tables 4.5.1 to 4.5.3) (including the provision of technical and economic facilities).

Maximum 1000 words.

Self-assessment:

Current state of staff involved in R&D&I

In 2020, the total volume of employee workloads in positions involved in research, development and innovation at Mendel University in Brno amounted to 1,601.3 FTE (Full-Time Equivalent). By 2024, this figure decreased to 1,584 FTE, representing only a very slight decline.

Academic positions show a positive trend. The number of professors increased from 51.7 to 55.8 FTE (+7.9%), the number of associate professors increased from 127.2 to 141.3 FTE (+11.1%), and the number of assistant professors increased from 282.2 to 300.2 FTE (+6.4%). Conversely, the technical and administrative staff experienced a decrease from 868.2 to 844.0 FTE, i.e. by 24.2 FTE (-2.8%).

The overall development is stable, with growth in academic positions, indicating the University's focus on improving research and educational activities. The decrease in technical and administrative personnel can be understood as compensation for the growing volume of workloads in the academic sphere.

Age structure

In 2020, the 60–69 age category dominated among professors, accounting for 39.3%. In 2024, the most numerous category is 50–59 years (32.4%), whilst the 70+ category has increased by nearly 5%. Among associate professors, the 40–49 age category remains most strongly represented, comprising almost 50%. There has also been an increase in the oldest category, from 1.3% to 5.1%. Assistant professors had a younger age profile in 2020, with the highest representation in the 30–39 age category (48.2%). Nearly half of the assistant professors in 2024 have moved into the 40–49 age category, suggesting an ageing trend within this group.

The age structure has shifted towards higher age categories for technical and administrative staff as well.

Degree of Internationalisation

In 2020, foreign employees constituted 4.4% of all staff members (70.3 FTE). By 2024, their representation increased to 7.0% (111.2 FTE). This trend confirms that the University is intensively developing its internationalisation and attracting an increasing number of experts from abroad, thereby strengthening its scientific and research base.

Structure by Job Classification and Gender

In 2020, women constituted 36% of University employees. They held the highest proportion of positions as teaching assistants (58.1%) and assistant professors (35.6%). The representation of women in professorial positions was significantly lower, reaching only 10.3%. By 2024, the overall proportion of women slightly increased to 37%. From the perspective of gender distribution in academic positions, there is a noticeable gradual decrease in women's representation towards higher positions. While 55.8% of assistant positions are held by women, only 36.7% of assistant professor positions, 30.3% of associate professor positions, and merely 9.5% of full professor positions are

occupied by women.

Development Trends

Based on the available data, it can be stated that the University shows an increase in the proportion of foreign workers, particularly in junior research positions. This trend demonstrates the growing level of internationalisation and interest from foreign experts in participating in the University's scientific activities. The overall increase in employees in academic positions supports research, development and innovation, thereby strengthening the University's scientific and pedagogical capacity.

The development of the age structure indicates an ageing of the entire employee population.

4.5.1 Staff involved in R&D&I of the university (FTE) in the period under review

Academic/professional position	Total 2020	Of which women [%]	Of which foreign [%] ⁴	Total 2024	Of which women [%]	Of which foreign [%]
Professor	51.7	10.3	0.2	55.8	9.5	0.2
Associate Professor	127.2	30.3	0.0	141.3	30.3	0.2
Assistant Professor	282.2	35.6	3.0	300.2	36.7	4.8
Assistant	53.7	58.1	2.1	60.2	55.8	2.2
R&D Personnel ⁵	32.8	56.7	31.1	92.0	49.8	6.0
Researchers in other categories ⁶	161.2	46.8	2.5	68.9	48.3	16.1
Technical and economic staff ⁷	868.2	57.5	0.3	844.0	58.7	2.9
Early career researcher ⁸	2	0.0	0.0	3.9	17.9	38.7
Scientific, research and development staff involved in teaching activities	22.3	26.5	26.5	17.7	34.5	38.0
Total number of foreign nationals	70.3	40.9	-	111.2	46.0	-

Note: The categories professor, associate professor, assistant professor, assistant, other scientific, research and development staff, scientific staff not falling into other categories and technical and economic staff are mutually exclusive, i.e. one staff member is reported under one category only. Scientific, research and development staff involved in teaching activities, as well as early career researchers are reported collectively for all the above-mentioned categories.

Note: The average number of hours worked is calculated as the ratio of the total number of hours actually worked during the reference period, from 1 January to 31 December, by all staff (including agreement on work activity, excluding agreement on work performance) to the total annual working time pool per full-time employee. The full-time status of the worker in the evaluated unit is always reported. If an employee holds more than one type of full-time job within the evaluated unit, the total sum of the two shall be reported.

⁴ Researchers with Slovak citizenship are not considered foreign.

⁵ The category "Other scientific, research and development personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

⁶ The category "Researchers not falling under other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

⁷ Who participates in the management and support of R&D&I in the institution.

⁸ See Definition of Terms in Methodology HEI2025+.

4.5.2 Percentage of HEI's staff involved in R&D&I, categorized by age structure, job title, and gender in the year 2020 (number of physical employees and staff)

Academic/professional position	Under 29 years [%]		30–39 years [%]		40–49 years [%]		50–59 years [%]		60–69 years [%]		70 years and over [%]	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0.0	0.0	1.8	0.0	19.6	3.6	25.0	0.0	39.3	5.4	14.3	1.8
Associate Professor	0.0	0.0	9.4	2.0	49.0	13.4	16.1	6.7	24.2	8.7	1.3	0.0
Assistant Professor	0.8	0.8	48.2	16.7	35.9	14.8	11.2	4.7	3.6	1.0	0.3	0.0
Assistant	20.7	11.5	41.4	19.5	19.5	10.3	11.5	6.9	4.6	4.6	2.3	1.1
Early career researcher ⁹	0.0	0.0	33.3	0.0	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R&D Personnel ¹⁰	8.8	1.5	25.0	20.6	39.7	2.9	11.8	2.9	5.9	1.5	8.8	0.0
Researchers in other categories ¹¹	28.5	18.9	42.4	18.6	14.7	7.9	7.9	4.5	4.5	2.8	2.0	0.8
Technical and economic staff ¹²	14.2	8.7	27.8	17.4	29.4	18.8	21.8	18.8	6.3	4.4	0.5	0.3
Scientific, research and development staff involved in teaching activities	3.1	0.0	34.4	6.3	21.9	9.4	18.8	12.5	12.5	3.1	9.4	6.3

Note: The total number of employees/workers as of 31.12. of the calendar year in question is to be given, irrespective of the proportion of full-time equivalents, but only in an employment relationship, i.e. not including persons working parttime agreements. Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

4.5.3 Percentage of HEI's staff involved in R&D&I, categorized by age structure, job title, and gender in the year 2024 (number of physical employees and staff)

Academic/professional position	Under 29 years [%]		30–39 years [%]		40–49 years [%]		50–59 years [%]		60–69 years [%]		70 years and over [%]	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women	Total	Women
Professor	0.0	0.0	0.0	0.0	22.1	2.9	32.4	2.9	26.5	1.5	19.1	1.5
Associate Professor	0.0	0.0	7.1	0.0	46.2	13.5	21.2	7.1	20.5	8.3	5.1	1.3
Assistant Professor	1.6	0.3	35.1	11.9	45.9	20.3	11.4	3.8	5.1	1.9	0.8	0.3
Assistant	17.0	6.8	37.5	17.0	23.9	13.6	10.2	4.5	9.1	6.8	2.3	1.1
Early career researcher ¹³	16.7	0.0	66.7	16.7	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
R&D personnel ¹⁴	24.0	10.1	36.4	16.3	24.0	9.3	9.3	7.8	5.4	3.1	0.8	0.0
Researchers in other categories ¹⁵	21.3	11.0	39.4	24.4	24.4	15.7	9.4	4.7	2.4	0.8	3.1	0.8
Technical and economic staff ¹⁶	10.9	5.5	20.1	12.3	29.6	18.9	25.2	16.0	12.8	6.0	1.5	0.8
Scientific, research and development staff involved in teaching activities	9.1	9.1	9.1	4.5	22.7	9.1	18.2	0.0	27.3	13.6	13.6	9.1

Note: The total number of employees/workers as of 31.12. of the calendar year in question is to be given, irrespective of the proportion of full-time equivalents, but only in an employment relationship, i.e. not including persons working parttime agreements. Other types of contractual relationships under the Civil Code that involve purchase of services are not included.

⁹ See Definition of Terms in Methodology HEI2025+.

¹⁰ The category "Other scientific, research and development personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹¹ The category "Researchers not falling under other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹² Who participates in the management and support of R&D&I in the institution.

¹³ See definitions in Methodology HEI2025+.

¹⁴ The category "Other scientific, research and development personnel" includes technical and professional personnel who are not directly involved in R&D&I but are indispensable for the research activity (e.g. operators of research facilities).

¹⁵ The category "Researchers not falling under other categories" includes all other staff who cannot be classified under any of the above categories (e.g. independent researcher/scientist).

¹⁶ Who participates in the management and support of R&D&I in the institution.

4.6 Academic and Research Careers

The HEI will briefly describe the central system for HR recruitment, placing particular emphasis on recruitment from outside the HEI, especially from abroad, as well as system of career development of academic and research staff, if such system exists. Information will be provided on:

- Career development rules and legislation related to the recruitment and career development of domestic and foreign employees (e.g. Career Code, HR Award, OTMR policy, etc.).
- International tenders.
- The process of new employee adaptation and mentoring.
- Transparent distribution of institutional time, attitudes towards chaining of contracts and senior academic positions.
- Rules for filling senior positions in the context of R&D&I.
- The rules and support system of sabbaticals.
- Measures for the return of workers after a stay in an external workplace, including a foreign workplace.
- Arrangements for workers to return after maternity/parental leave or other career breaks (e.g. caring for family members).
- Other relevant information at HEI discretion.

The HEI shall provide a reference to an existing career code or similar document (if one exists). The HEI shall describe the effectiveness of the systems used with examples (e.g. a model example of the adaptation process, a specific anonymised example of an academic's career path, statistics on the return after maternity/parental leave or career breaks before and after the implementation of the measures, etc.).

Maximum 300 words per point.

Self-assessment:

Rules for career growth and legislation governing recruitment and career growth of domestic and foreign workers

Career development of University employees is defined in the [Rector's Guidelines No. 4/2021 Human Resources Management](#). This is a regulation that includes, among other things, the **career code**, which obliges managers to support the career development of their subordinates and create **annual personal plans** for them. A system of feedback and creation of annual personal plans for individual employees has been implemented across the University. Managers received methodological support and are being trained in this activity. In the 2023 employee satisfaction survey, it was verified that 82% of respondents receive feedback from their superiors in the form of an individual meeting at least once a year. Two thirds of respondents state that they have created an annual personal plan. The forms for creating personal plans can be found [here](#).

Recruitment and selection of employees is carried out through the Human Resources Management Department. The process is defined by the internal regulation [Selection Procedure Code](#). It is based on the so-called [OTM-R policy](#) (Open, Transparent and Merit-based Recruitment). The department has established a recruiter position responsible for the entire cycle from receiving a request from a University unit to fill a vacancy through to communicating job offers to selected candidates.

Systematic training support is based on the [Concept of the Training and Development of MENDELU Academic Staff](#) (2021) and [Training and development policy for technical and economic personnel of MENDELU](#) (2023). Educational and development activities are primarily provided by the [Institute of Lifelong Learning](#) through seminars (pedagogical, managerial and soft-skills courses), coaching, and individual and organisational counselling. The Department of Scientific and Pedagogical Information and

Services also offers a wide range of educational opportunities for academic and non-academic research staff. Another provider of educational activities is, for example, the Project Office. The Human Resources Management Department provides courses focused on soft skills, management education, and language courses. In the aforementioned Satisfaction Survey, more than 80% of respondents indicated that professional development opportunities are available at the University, and more than three-quarters of respondents also expressed interest in such development.

Since 2021, a series of training sessions called **MENDELU PhD School/Week** has been regularly organised for doctoral students, supporting young researchers across the University in developing core competencies for their future careers.

The same recruitment and career advancement conditions apply to international applicants/employees, and key documents are also available in English.

Information about international selection procedures and rules for filling management positions in relation to science, research, development and innovation

MENDELU has long aimed to strengthen the interest of international candidates in academic and scientific positions. All academic and research staff, including managers, are recruited through selection procedures, the rules of which are set out in the Selection Procedure Code.

Job advertisements and applications for academic and research positions are as standard bilingual (Czech and English) and available to both Czech and international candidates through the University website and relevant job servers, including the Euraxess portal. All information for potential job seekers at the University can be found [here](#).

Employee selection is carried out through selection committees consisting of at least three members. The committees may include external members, including those from abroad, which is particularly common for significant management positions or international projects such as Horizon Europe. Selection committee members are familiarised with the [recruitment process and procedures](#) through e-learning and a methodological interview guide.

New Employee Onboarding Process and Mentoring

Future employees coming to the University from abroad receive assistance from the [Welcome Office](#), which is also part of the Human Resources Management Department. The Welcome Office's main task is to provide personal assistance and guidance in completing all formal requirements for employment commencement and relocation to Brno, as well as ongoing assistance throughout employment at MENDELU. The proportion of international employees at the university is slightly increasing. It currently stands at 7% compared to 3% in 2019. The majority of foreign employees are from Slovakia.

The adaptation process for new employees is not currently systematically established at the level of the entire University. In practice, adaptation takes place at individual workplaces depending on the individual approach and capacities of supervisors, e.g. in the form of training and adaptation interviews.

The adaptation tools used so far include the guide for new employees [MENDELU Employee Guide](#) and the mobile application **MOJE MENDELU**.

Transparent distribution of institutional workloads and the stance on the chaining of contracts and management positions

MENDELU typically initially concludes fixed-term employment contracts with employees, both academic and scientific staff as well as non-academic staff. Subsequently, the employment contract is usually extended for an indefinite period. For employment contracts directly linked to projects, the contract is concluded for the duration of the project; however, possibilities of the employee's potential further engagement at the University after project completion are discussed with the employee. The concurrent holding of academic positions with managerial functions is perceived as

an issue at the University (as well as at other universities in the Czech Republic). This solution is currently the subject of the PPROVŠ 2024–2025 project, which aims to unify this agenda at universities (universities approach it differently) and adjust it so that employees in given positions and roles can fully dedicate themselves to the tasks and objectives that the position entails whilst having space for work-life balance.

Rules for Filling Senior Positions

Filling senior positions at the University is subject to a selection procedure, which is mandatory for positions such as the Bursar, Faculty and Institute Secretaries, Directors of Institutes, Estates and Facilities, Heads of Institutes, and other positions as per organisational rules. Exceptions are possible, for instance in cases of repeated employment contracts, successful selection procedures for similar positions within 12 months, or career advancement associated with fulfilling personal development plans. Senior positions also require selection procedures, except when scientific-pedagogical or research objectives have been met. The rules are described in the Selection Procedure Code.

Rules and Support System for Sabbaticals

Sabbatical leave is provided to academic staff at the earliest after 6.5 years of teaching practice at Mendel University in Brno for a period of 6 months once every seven years, unless prevented by serious circumstances related to fulfilling the educational tasks of the workplace. An exception to this condition may be granted by the Dean at faculties, the Director at the University Institute, and the Rector for Deans, the Director of the University Institute, and academic staff of University-wide departments. Sabbatical Leave may be granted in particular in connection with the preparation of a habilitation thesis, scientific or similar publication whose publication is in the Employer's interest. The period of sabbatical leave is considered as work performance; however, selected wage supplements shall not be paid to employees during this period. An agreement on the conditions of sabbatical leave shall be concluded and signed by the Dean/Director of the University Institute.

Measures for employee reintegration after working at external workplaces, including abroad

Employees are provided with necessary time to adapt to their original work environment to ensure their smooth reintegration. An individual plan is prepared for each returning employee, taking into account their current needs and situation. Managers receive ongoing training through courses focused on conducting evaluation interviews and creating personal plans, thereby strengthening their ability to provide support during the return process.

Measures for employee return after maternity/parental leave or other career interruptions

The university supports employees-parents primarily through activities such as work-life balance and maternity/parental leave management. Maternity/parental leave management aims to declare permanent interest in employees, maintain their professional competencies and social contact, and facilitate their return to work after maternity/parental leave. Therefore, since 2022, a work-family balance coordinator has been working at the University, maintaining contact with employees on maternity/parental leave. Furthermore, handbooks are available for employees and their supervisors containing a basic overview of administrative and legislative aspects of going on maternity/parental leave and returning to work, as well as other common situations related to parenthood, and a checklist to verify compliance with all requirements throughout the process from pregnancy announcement to return to work. A significant measure is also the so-called Return Grant, provided by GAGJM, intended for scientists who are or have been on maternity/parental leave and care for a child under six years of age, which motivates them whilst having high potential to achieve excellent results in their future scientific career. The main aim of the Grant is to enable scientists to return to a full-fledged scientific career at the University, support their further development, and provide them with the opportunity to achieve outstanding scientific results in the long term. In 2022, it was awarded to one employee of the Faculty of Forestry and Wood Technology, and in 2023 to two employees of the Faculty of AgriSciences, in 2024 to one employee of the Faculty of AgriSciences and one employee of the Faculty

of Forestry and Wood Technology. The provided financial resources are used to cover childcare services and mentoring by assigned “talent managers”.

Other measures supporting the return of [employees – parents](#) include: part-time work opportunities, flexible working hours, entitlement to 6-8 weeks of holiday (depending on the position), University nursery school, summer day camp for employees’ children, or unpaid leave after parental leave up to the child’s age of 4, and for childcare purposes for children under 15 during school holidays (in the case of a single employee, also outside school holidays).

Female employees contacted after parental leave in the period 6/2022–12/2024* (divided by positions)				
	2022 (June–December)	2023	2024	Total
Academic staff and non-academic research staff	12	15	13	40
Technical and Administrative Staff and Manual Workers	6	13	3	22
Total	18	28	16	62

Female employees after parental leave processed in the period 6/2022–12/2024* according to resulting work status	
Return to employment	27
Subsequent maternity/parental leave	18
Termination of the Employment Relationship	11
Currently being addressed	6
Total	62

*The tables cover the period since the appointment of the work-life balance coordinator at the University, i.e. from 2022.

75% of female employees who returned from parental leave work part-time.

Further relevant information

MENDELU regularly conducts employee surveys and round tables, using their results and conclusions to develop its human resources management strategy. The following surveys were conducted during the monitored period: HRS4R feedback (2020), Survey on the impact of the pandemic on working life (2021), Equal Opportunities Audit (2021) and Employee Satisfaction Survey (2023) also related to evaluating the success of the HRS4R/HR Award strategy. The surveys are available [here](#).

In 2022 and 2023, 9 round tables were held with employees and postgraduate students on topics related to human resources management and working conditions at the University. The results of the discussions were incorporated into the subsequent HRS4R Action Plan.

In 2024, as part of the gender re-audit, 6 group discussions were held with employees from the following categories: regular administrative and technical staff, employees aged 65+, employees on maternity/parental leave, postgraduate students, international employees, and academic management staff. The focus was on equal working conditions at the University. The results of the discussions were incorporated into the draft of the new Gender Equality Plan.

Example

An academic achieved significant success through long-term engagement in landscape protection and ecology at Mendel University in Brno. During his career, he focused on interdisciplinary research in biodiversity and adaptive landscape management, which led to the publication of dozens of scientific articles and the implementation of prestigious grant projects. The experience gained in the academic environment enabled him to become a guarantor of key subjects and actively collaborate with international research teams. His work thus contributed not only to the development of the field but also to the education of a new generation of experts.

Example

An academic began her University journey as a student, where she completed both Master's and Doctoral studies in Business Economics and Management. After completing her studies, she continued at the University as an assistant professor, where she focused on research and teaching in digital transformation of business processes. Following her parental leave, she successfully returned thanks to a re-entry grant, which enabled her to develop research in digitalisation and business innovation. She further utilised her experience from international fellowships in Hungary and Great Britain to enrich her research and collaboration on international projects, thereby significantly contributing to the development of her field.

4.7 Gender equality measures

The HEI will briefly describe the measures relating to the application of gender equality in the areas required for assessment criteria 4.5, 4.6, with an emphasis on:

- Gender equality in recruitment and career development.
- Legislation and documents regulating gender equality (e.g. Gender Equality Plan, Action Plans, strategic documents for equality, including links to overarching strategies, etc.).
- The filling of leadership positions (including gender balance in leadership positions, see Table 4.7.1).
- Nominations to professional bodies.
- Evaluation and remuneration.
- Measures to reconcile the work and family life of researchers (flexible working hours, flexible forms of work, maternity/parental leave management, facilitating child/dependent care, age management in relation to gender).
- Measures to eliminate negative workplace behaviour such as mobbing and sexual harassment.

The HEI shall provide evidence of the examples from practice (e.g. use of flexible working hours, dealing with cases of mobbing or sexual harassment, compliance with the principles of gender equality in HEI professional bodies, etc.).

Maximum 300 words per point.

Self-assessment:

In 2022, the first University [Gender Equality Plan of Mendel University in Brno for 2022–2024](#) was issued, which serves as a practical tool for promoting and systematically supporting equal opportunities for women and men in research, development and human resources management at the University. The plan was created in accordance with the current European **Strategy for Gender Equality for 2020–2025** and the requirements of Horizon Europe, and was compiled based on the recommendations of a gender audit conducted by the NORA Gender Information Centre according to the Gender Audit Standard of the Government Office of the Czech Republic. In addition to the analysis of internal documents and other background materials, a University-wide quantitative questionnaire survey was conducted, in which 651 employees participated (of whom 58% were women and 42% were men). As part of the qualitative investigation, 5 group discussions and a total of 27 individual in-depth interviews were conducted. At the end of 2024, at the conclusion of its three-year implementation, an internal gender re-audit was carried out at the University and a follow-up [Gender Equality Plan of Mendel University in Brno for 2025–2028](#) was developed. The University is actively working on achieving gender equality objectives.

Gender Equality System in Recruitment and Career Development

Gender equality in recruitment is addressed in the Selection Procedure Rules, specifically in Article 1, Paragraph 2: In applying these Rules, there must be no discrimination or unequal treatment. Furthermore, through the requirement for balanced composition of selection committees in Article 4, Paragraph 4: The announcer shall ensure that the committee has the most balanced representation of women and men possible, considering field-specific circumstances. If gender balance in composition is not possible, the present recruiter ensures gender correctness, for example, when asking questions or evaluating candidates. Monitoring of committee composition shows that on average, women's representation is approximately 50% (data for 2024), which meets the requirement for balanced representation. Committee members undergo training through the e-learning course "Recruitment and Selection of Employees", which also covers the topic of awareness of gender bias in candidate evaluation. Recruitment and selection of employees is gender-neutral, including in terms of gender-sensitive communication (particularly in job advertisements and offers).

Gender equality in career development is supported primarily through the following measures: promotion of staff to management and senior positions through selection procedures, promotion of equal remuneration (based on the LOGIB equal pay analysis in 2021 or the wage cohesion project in 2024), flexible working conditions (particularly part-time work, flexible working hours), return grant for scientists returning from parental leave, awareness-raising activities to eliminate gender stereotypes.

Legislation and documents governing gender equality (e.g. Gender Equality Plan, Action Plans, strategic documents for equality, including links to superior strategies, etc.)

The University has equal treatment enshrined in its [Statutes of Mendel University in Brno](#), [Code of Ethics](#), [Work Rules](#) and [Selection Procedure Rules](#). Achieving gender equality is also one of the objectives of the University's Strategic Plan.

The key document is the aforementioned Gender Equality Plan 2022–2024 and the subsequent Gender Equality Plan 2025–2028.

The implementation of the Gender Equality Plan is also part of the [Human Resources Strategy HRS4R – Action Plan 2024–2026](#).

Filling management positions (including gender balance in management positions)

Women are represented in leadership positions across all University units. Management positions are filled in accordance with the Selection Procedure Rules – see above. Appointments to positions are guided by the effort to achieve gender balance, which is particularly evident in Vice-Rector and Vice-Dean positions. One of the measures in the proposed Gender Equality Plan 2025–2028 is an educational programme aimed at supporting women's career advancement.

Nominations to expert bodies

Nominations to expert bodies are also made with consideration for gender balance where permitted by field-specific characteristics.

Assessment and remuneration

In 2021, a LOGIB equal pay analysis was conducted, and in 2024, a wage cohesion project was implemented, which unifies the tariff wages for individual positions. The analysis resulted in the evaluation of the gender pay gap at individual units as well as at the University as a whole. At MENDEL, a 94.7% pay equality between men and women was identified based on the analysed data for the entire year 2021. The identified salary difference (adjusted Gender Pay Gap) between men and women amounts to 5.3% to the disadvantage of women. The statistical analysis confirmed a statistically significant effect of gender on remuneration. In the context of the situation in the Czech Republic, this represents a good result. The evaluation system is the subject of the Project PPROVŠ 2024–2025 in terms of unifying evaluation criteria across the University, including measures for periods of academic and research career interruption.

Measures for balancing family and professional life of research workers (flexible working hours, flexible forms of work, management of maternity/parental leave, facilitating childcare / care for a close person, age management in relation to gender)

The University offers several flexible forms of work arrangements (e.g. part-time positions, flexible working hours, extended annual leave – 8 weeks for academic staff and 6 weeks for non-academic staff, possibility of working from home for most positions). To support their implementation, a seminar [round table](#) for managers titled “How to Use Flexible Forms of Work in the University Environment” was organised in 2024. <https://orl.mendelu.cz/en/article/discussion-how-to-use-flexible-working-in-a-university-environment> Increased attention is also paid to maternity and parental leave management (see above). As part of the support for scientist and researcher parents returning from parental leave, there is an opportunity to apply for a MENDEL return grant. The University Nursery School “Hrášek” (Little Pea) has been in operation since 2013. Since 2020, the University has been organising summer

day camps for employees' children. For the purpose of implementing age management at the University, an employee of the Human Resources Management Department completed a specialised course NPO: Implementation of age management in the University environment, which strengthened the institution's professional capacity in this area. The topic was also addressed during the gender re-audit, when a group discussion was organised with employees aged 65+. The age management agenda is also part of the proposed Gender Equality Plan 2025–2028.

Measures eliminating negative workplace behaviour such as mobbing and sexual harassment

To ensure social security at work and study at the University, the platform **Safe MENDEL** was established in 2023. These activities include prevention and resolution of cases of inappropriate behaviour, such as bullying and sexual or gender-based harassment. A fifteen-member team of internal advisers has been appointed and trained to report and address cases of inappropriate behaviour. The team consists of representatives from individual University units and is gender-balanced. The role of Safe MENDEL advisers is to identify, investigate and eliminate inappropriate behaviour as well as to propose systemic measures at the University and its constituent parts. Students and staff may contact counsellors of their choice regardless of their University unit affiliation. This concept is justified by the need for trust in the selected person, maintaining independence while utilising knowledge of the university environment. Furthermore, an information [website](#) has been created where both employees and students can learn about what bullying and sexual or gender-based harassment are, what their consequences are, how to behave in such situations, and where to turn for help in resolving the situation as well as psychological support. For prevention purposes, the website provides guidelines and tips on how to behave and not to behave in all roles and relationships that exist at the University: between employees and students, students towards employees and vice versa.

Other ways of supporting gender equality

The University strives to promote gender equality, also through a number of awareness-raising events (part of implementing the Gender Equality Plan 2022–2024): in 2022, it participated in the Science Slam “Women Belong in Science” as part of the International Day of Women and Girls in Science and contributed to the creation of a short film “(Un)equal Opportunities” in cooperation with Masaryk University, Mendel University in Brno, and Thermo Fisher Scientific (film premiere in November 2022). In the following year, a discussion forum was organised on the topic of How to Communicate with Generation Z (October 3, 2023), where experts from various fields discussed how to manage intergenerational differences in communication at the University. On the occasion of awarding the title of doctor honoris causa on 13 September 2023, the University welcomed a distinguished scientist, Professor **Emmanuelle Charpentier**, recipient of the Nobel Prize in Chemistry for developing a method for genome editing. Professor Charpentier also delivered a public lecture, which was attended by more than 350 students and members of the academic community. This event was perceived as supporting the **motivation of women to pursue careers in science**. In 2023, one issue of the University magazine [Mendel Green](#) was dedicated to the topic of gender. As part of the International Day of Women and Girls in Science 2024, a travelling exhibition on the topic of Gender Stereotypes was organised in the centre of Brno and its surroundings. In the same year, a discussion forum “Equality Begins at Home” was held (4 December 2024), addressing how the distribution of household duties affects the lives and career opportunities of both genders.

Example:

In 2023, an employee filed a complaint with the MENDEL Rector against her superior who was allegedly engaging in workplace bullying (bossing) towards her. The Rector appointed a complaint resolution team consisting of 3 members of Safe MENDEL. The team members successively interviewed the complainant, the manager in question, and witnesses proposed by both parties. The case was subsequently evaluated, finding no evidence of intentional bullying; the manager's conduct was attributed to insufficient managerial competencies and certain procedural shortcomings. The final report recommended mediation of the conflict to both parties, which was subsequently

implemented, managerial training was proposed for the superior, and certain systemic measures were recommended to the management of the respective unit.

Example:

In 2023, a female academic staff member – an assistant professor with a full-time position (1.0 FTE) commenced her maternity leave, followed by parental leave. After her child reached one year of age, she returned to work on a 0.2 FTE position following an agreement with her superior.

Example:

In 2024, a candidate who at that time was working part-time on a research project in České Budějovice won the selection procedure for the position of Research Worker. The candidate was interested in continuing to work on this project for several more months. As the candidate's expertise appeared to be crucial for the MENDELU project and it was necessary for him to join the project, or rather commence employment at MENDELU, as soon as possible, his employment contract and working hours were adjusted according to his needs, i.e. he was allowed to work on a 0.8 full-time equivalent basis and partially from home.

4.7.1 Gender balance in management positions

Senior staff	2020		2024	
	Men	Women	Men	Women
Rector	0	1	1	0
Vice-Chancellor	3	2	4	2
Dean ¹⁷	4	1	5	0
Academic Senate	23	9	23	9
Scientific/Artistic/Academic Council	39	13	45	9
Quaestor	1	0	1	0
Board of Directors	9	0	9	1

Note: If one person holds more than one of these positions within the HEI, he/she will be counted in each.

¹⁷ or other head of a relevant work unit of a higher education institution under Section 22(1) of the Higher Education Act performing R&D&I activities, regardless of the designation.

4.8 Mobility of academic and research staff (including sectoral and inter-sectoral mobility)

The HEI shall describe in a concise and structured manner its strategies and objectives for the mobility of academic and research staff (including PhD students), with particular emphasis on mobility related to the development of excellent science and interdisciplinary (intersectoral) mobility. The HEI shall identify potential barriers to mobility, including gender-based barriers. The HEI shall provide information on long-term stays abroad by its own academic staff or, conversely, by foreign staff at the HEI being evaluated.¹⁸

The achievement of the set objectives will be demonstrated by the HEI by describing specific examples of mobility or by brief statistics on mobility during the period of 2020–2024.

Maximum 500 words plus 200 words for each example given (max. five examples with a specific description of the relevance of mobility to the stated objectives).

Self-assessment:

The mobility of academic and research staff at MENDELU in 2020–2024 was a key instrument for the development of science and internationalisation. During this period, the University focused on strategic objectives including strengthening international cooperation, quality of education and research, whilst in 2023 it adopted a new [Internationalisation Strategy of Mendel University in Brno](#).

After the COVID-19 pandemic, MENDELU renewed its international activities through participation in professional fairs EAIE, APAIE and NAFSA. The mobility of academic staff was funded primarily from programmes such as Erasmus+, AKTION, GA CR, TA CR and internal IGA grants. It successfully developed cooperation in CEEPUS professional networks, where it is involved in 13 of them (2024), but also COST Action, where since 2021 it has been coordinating the network **Work inequalities in later life redefined by digitalisation**. For the period 2020–2024, a total of 1,676 international mobility stays of academic staff took place (excluding pandemic years, an average of 462/year), with the most being implemented in 2024 (556) and the least in 2020 (98). The unique model of trips with an academic staff member supports mobility related to applied research, as well as pedagogical cooperation, and is implemented to countries outside the EU. Twenty trips with an academic staff member to 10 countries around the world were undertaken. 170 students were involved in this. This unique and award-winning model has resulted in dozens of publications for the University.

The University introduced new forms of mobility, such as the Blended Intensive Programme within Erasmus+, combining virtual and physical participation. Cooperation was also developed with key partners overseas, including Louisiana State University (USA), Mongolian University of Life Sciences (Mongolia), Stellenbosch University (South Africa), University of Azuay (Ecuador) and Guimaras State University (Philippines). The partnerships supported both scientific cooperation and student exchanges.

MENDELU was active in more than 60 European consortium projects, particularly in Interreg, Visegrad Fund and Erasmus+ KA2 programmes, where it led four projects focused on innovation and linking education with research. The University participated in eight Horizon Europe projects and ten Horizon 2020 projects, coordinating four of them. The University continued to strengthen its position in the international scientific environment, inter alia through conferences such as [EURAF 2024](#), or symposia such as the [Food Symposium](#) organised with strategic partner Louisiana State University, which supported networking of experts and doctoral student exchanges. Joint lectures were organised in the virtual environment.

¹⁸ Long-term mobility means an uninterrupted period of more than three months.

International cooperation at the University is supported through regular organisation of the **International Week**, attended by partners from foreign universities. In 2024, it was complemented by the **conference ECOS** (March) and **PEFnet** (November), which received positive feedback, particularly among doctoral students who were offered workshops and lectures on publishing and scientific activities.

In terms of long-term mobility, 24 academic staff members and 2 researchers were sent on 3–6 month internships, whilst 5 doctoral students completed long-term research stays. Long-term mobility activities were directed to 29 institutions worldwide. The University also hosted 9 international researchers on a long-term basis, including two post-doctoral researchers, which significantly contributed to the development of international cooperation and scientific capacities. More information [here](#).

An inclusive approach to mobility has been supported in the long term, with nearly two-thirds of mobilities being undertaken by women. Nevertheless, the University has identified barriers, such as the difficulty of reconciling long-term stays abroad with family life, which may more frequently limit women. Self-critically, it also acknowledges that language barriers or limited flexibility in working conditions may complicate some employees' involvement in international activities.

Example:

Support for long-term stays abroad is also ensured through projects, e.g. Development of Internationalisation of the Research Environment at Mendel University in Brno, (EF16_027/0007953), provider: MEYS, duration in years: 2017–2022, role in the project: coordinator, total allocated funds: CZK 21,635,000/EUR 853,454, researcher for MENDEL: Associate Professor Ing. Martina Lichovníková, Ph.D., annotation: The project focused on implementing internships to increase the competitiveness of supported individuals in both European and global labour markets. Through the project activities, the range of opportunities for international mobility was expanded and the recruitment of foreign staff was supported with the aim of internationalising the working environment. Many work stays were implemented thanks to the project. One post-doc from abroad (Spain) and three senior research workers (Portugal, Japan, Brazil) came to Mendel University in Brno, whilst 14 junior research workers travelled abroad (4× USA, 3× Spain, 2× Austria, Switzerland, Great Britain, Belgium, Netherlands, Latvia) and 5 senior research workers (Austria, Sweden, Germany, Japan, South Africa).

Example:

The aforementioned project was followed by the project Development of Internationalisation of the Research Environment at Mendel University in Brno II, (EF18_053/0016930), provider: MEYS, duration in years: 2020–2023, role in the project: coordinator, total allocated funds: CZK 21,990,000/EUR 867,444, researcher for MENDEL: Professor RNDr. Vojtěch Adam, Ph.D., annotation: Through the support of research fellowships at prestigious foreign institutions, the project responded to the opportunity to enhance the international scope of the Applicant's research activities. The implementation of internships increased the competitiveness of supported individuals in both European and global labour markets. Through the project activities, support was also provided for the recruitment of international workers. Within the project framework, 9 research staff work placements at the University were supported, specifically from South Africa, South Korea, Poland, Spain, Sweden, Thailand and the USA. Other key activities included research staff work placements – junior researchers abroad (22 mobilities: 4× Austria, 4× USA, Denmark, Canada, Thailand, Japan, Portugal, Finland, Israel, Slovenia, 3× Germany, Belgium, Spain, Great Britain) and senior researchers abroad (5 mobilities: Spain, 2× Austria, Thailand, Japan).

RESEARCH INFRASTRUCTURE

4.9 Research infrastructure

The HEI will describe the system for acquiring/optimizing expensive instruments and equipment, as well as refurbishing outdated expensive instruments. The HEI will also briefly present the internal organisation of the research infrastructure (including technology, expensive instruments, and instrumentation)¹⁹. The HEI will describe the system of sharing (including external research entities) of instruments and instrumentation, including expensive instruments and instrumentation units, referred to as 'core facilities' (if such a system exists). The HEI will demonstrate the effectiveness of the systems with examples (e.g., specific instruments acquired/optimised and their relevance to the achievement of research objectives, examples of sharing of expensive instruments and instrumentation, statistics on sharing of expensive instruments and instrumentation, etc.). The HEI will briefly comment on the data in Table 4.9.1.

The HEI shall also indicate whether it hosts large research infrastructure projects. The name and a brief description will be provided.

Maximum 500 words plus 200 words for each example given (max. five examples).

Self-assessment:

MENDELU possesses extensive and modern research infrastructure that supports scientific research and educational activities across its constituent parts, which approach the acquisition and renewal of costly equipment strategically, based on consultations with research groups and regular assessment of the existing equipment condition. The aim is to ensure the continuity of scientific activities and support educational processes. Investments are planned with regard to sustainability and long-term infrastructure development. Research stations and field trial areas also constitute a key component of the infrastructure.

The quality of MENDELU's research infrastructure has been positively influenced in recent years by the acquisition of several projects at both Rectorate and faculty levels, or inter-faculty level. MENDELU has been involved in 14 projects under the Operational Programme Research, Development and Education (OP RDE) with a total value of CZK 1,115,810,000/EUR 44,016,174. The University is also a recipient of three projects from the National Recovery Plan (NRP) with a total value of CZK 156,844,000/EUR 6,187,140. These projects include: Innovative MENDELU (InMendelu), Support for Green Skills and Sustainability at MENDELU, and Implementation of SDG Regulation – Introduction of University Services. Furthermore, MENDELU implements three projects within the Operational Programme Jan Amos Komenský (OP JAK) with a total value of 90,212,000/EUR 3,558,639. Specifically, these projects are: Development of Research-Oriented Study Programmes at Mendel University in Brno (MENDELU PhD Infra), [Development of Competencies of Relevant Actors in Pre-graduate Teacher Training for Secondary Vocational Education](#) and MSCA FELLOWSHIPS CZ MENDELU.

The University has long been striving to develop shared infrastructure that enables efficient utilisation of costly equipment. University units may, based on internal agreements, provide access to their instruments and experimental facilities, ensuring flexibility and availability of key infrastructure for both research and educational needs. Some University units have established rules and price lists for the use of equipment, facilitating equipment sharing with external entities. This approach strengthens open science and enables effective engagement with industrial partners and other research institutions. To enhance clarity further, directories of shared infrastructure were created at faculties/University

¹⁹ The definition of research infrastructure is set out in the Framework for State Aid for Research, Development and Innovation (2014/C 198/01) and Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in accordance with Articles 107 and 108 of the Treaty.

institutes during the period under review.

CEITEC MENDELU, a scientific centre ranking among leading European institutions, is an inter-university centre where four prestigious Brno universities and two research institutes based in Brno collaborate. CEITEC MENDELU represents a significant component of MENDELU's research infrastructure. It focuses on research in the field of genomics and proteomics of plant systems, thereby providing unique technologies and expert facilities for cutting-edge scientific projects. The organisation of shared instrumentation units, so-called "core facilities", is based on an open access approach, which increases their usability and benefits. The CEITEC MENDELU research groups participate in interdisciplinary research across the entire CEITEC infrastructure, which promotes knowledge exchange and international cooperation. Evidence of the effectiveness of this infrastructure is demonstrated by publications in prestigious scientific journals with high impact factors, such as Nature Communications.

Example:

The Faculty of AgriSciences possesses a wide range of shared infrastructure that supports both research and education in agriculture and related fields. Within the framework of the Operational Programme Research, Development and Education project MENDELU Central Laboratories, there has been development of shared infrastructure operated on the principle of openness and sustainability (acquisition of investment units with operational support), as well as the establishment of original and specialised equipment at individual faculty departments, ensuring that each workplace has the necessary infrastructure not only for conducting high-quality scientific research and related educational activities, but also for the development of doctoral studies and the creation of quality diploma and bachelor's theses with results from original experiments.

The shared infrastructure is closely related to the provision of these services when conducting specialised analyses and expert assessments within Mendel University in Brno, where the price list for these services is specified in the Dean's Order No. 5/2021 Structure and Price List of Services of the Department of Chemistry and Biochemistry and the Dean's Order No. 1/2020 Structure and Price List of Services of the Department of Morphology, Physiology and Animal Genetics. More information [here](#).

Example:

The Josef Ressel Research Centre in Brno-Útěchov is the first domestic research centre for wood studies and is an integral part of the Department of Wood Science and Wood Technology. It is located in the renovated premises of the University Forest Enterprise Masaryk Forest Křtiny. The centre includes more than ten laboratories, e.g. laboratories for composite materials, wood protection and modification, acoustics, mechanical properties of wood, and thermal-moisture properties of materials. The centre includes, for example, a chamber for artificial wood ageing, a special microwave modification line, a laboratory chipper, a laboratory impregnation line, a chamber for thermal wood modification, a set of analytical instruments for studying the structure and properties of materials, and other state-of-the-art equipment focused on teaching and research of renewable raw material – wood. More information.

Example

The Research Centre at the Faculty of Business and Economics provides services not only to researchers and students but also to external scientists. The infrastructure consists of (1) research laboratories and co-working centres (specifically Virtual Reality Laboratory, Pneumatic Systems Laboratory, Intelligent Systems Laboratory, Network Laboratory, Information Systems and Process Modelling Laboratory, Rail Vehicle Control Laboratory, Consumer Behaviour Lab, Financial Laboratory, Co-working Education Centre and Multimedia Commercial Communication Laboratory), (2) software equipment (the Faculty provides faculty-wide licences for Matlab, Stata, SPSS, Maxqda and Statistica) and (3) unique data sources (Orbis, Morningstar Direct, Albertina, Beck-online, Crowdsurfer, Share, Kibot and others).

Information about the research infrastructure is available on the [website](#) of the Research Centre.

Example

The sharing of research infrastructure is further supported by the faculty's ICT Management Department, which enables not only remote access to selected resources but also shared use of high-performance computers for demanding calculations. The ICT Management Department extends the basic services offered by the University's Information Technology Department, thus contributing to the efficient sharing of research infrastructure.

Selected research infrastructure of the Faculty is also used for commercial research. The most utilised laboratory is the Consumer Behaviour Lab, whose research infrastructure is offered not only for contractual research purposes but its capacities are also shared with other research organisations, e.g. the Czech University of Life Sciences Prague.

Example

The Institutes of the Faculty of Horticulture share laboratories, greenhouses, technical isolation facilities and land whilst supporting multidisciplinary research teams. Significant infrastructure modernisation was carried out through OP RDE projects, which increased competitiveness and enabled more efficient sharing of key equipment such as digital and confocal microscopes, sequencing platforms and liquid chromatographs. Sharing takes place not only between institutes but also contractually with external partners such as universities and private companies. Equipment is utilised according to capacity rules. Equipment logs are maintained for the most costly devices. The renewal plan ensures regular modernisation of equipment with emphasis on sustainability and efficiency. The websites of individual institutes provide an overview of available equipment and analysis capabilities. This [shared infrastructure](#) supports open science and enables access to unique technologies and data.

Costs associated with the acquisition of research infrastructure are recorded within separate accounting records. In terms of acquiring and maintaining assets, attention is paid to the efficient and meaningful use of financial resources. The decrease in expenditure on the acquisition of minor and intangible fixed assets in 2023 and 2024 was caused by the termination of funding from OP RDE, when the previous programming period ended and projects were being prepared for new calls funded from 2025. At the same time, the University is repairing and modernising facilities for the subsequent development of teams and core facilities, as evident from the Land, Buildings and Structures line and from the costs incurred on tangible fixed assets (machines, instruments, equipment, etc.) from Table 4.9.1. However, an upward trend is evident in the overall balance. It can be stated that during the monitored period 2020–2024, there was a doubling of financial resources invested in infrastructure compared to the period 2014–2018 (CZK 119,650,000/EUR 4,719,921).

4.9.1 Summary of expenditure/costs on research infrastructure and equipment for the period under review (including related non-investment and personnel costs).

Costs/expenses in thous. CZK/EUR/year	2020	2021	2022	2023	2024	Total value of assets ²⁰
Costs/expenses related to the acquisition of small fixed assets for R&D&I	9,865/ 389,152	8,919/ 351,834	9,466/ 373,412	7,735/ 305,128	7,069/ 278,856	43,054/ 1,698,382
Cost of repairs and maintenance of equipment	1,586/ 62,564	1,527/ 60,237	2,403/ 94,793	1,293/ 51,006	1,150/ 45,365	7,959/ 313,965
Acquisition of tangible (DH) and intangible (DN) assets for R&D&I (investments)						
Of which software	108/ 4,260	71/2,800	0/0	0/0	0/0	179/ 7,060
Of which other intangible fixed assets	12,353/ 487,298	15,101/ 595,700	6,720/ 265,089	1,453/ 57,318	0/0	35,627/ 1,405,405
Of which land, buildings and structures	24,328/ 959,684	16,948/ 668,560	164/6,469	48,377/ 1,908,363	115,385/ 4,551,677	205,202/ 8,094,753
Other intangible fixed assets (machinery, apparatus, equipment, etc.	26,709/ 1,053,609	11,588/ 457,120	6,889/ 271,755	3,972/ 156,686	18,445/ 727,613	67,60/ 2,666,783
Total infrastructure spending in years ²¹	63,498/ 2,504,851	43,708/ 1,724,180	13,773/ 543,313	50,802/ 2,122,367	133,830/ 5,279,290	305,611/ 12,174,001

²⁰ Enter the sum of the row.

²¹ Enter the sum of the column.

FINANCES

4.10 Budget and structure of financial resources

The HEI shall provide and comment on an overview of the total R&D&I budget in the period of 2020–2024, broken down by organisational units of the evaluated HEI and by source of funds (Table 4.10.1). The HEI shall also comment on the shares of total costs/outputs covered by public and non-public sources by type of R&D&I for the period under evaluation as shown in Table 4.10.2.

As complementary data, the university will provide an overview of prestigious research projects obtained during the period of 2020–2024 (ERC²², MSCA²³, HHMI²⁴, HFSP²⁵, NSF²⁶, Horizon Europe²⁷, NIH³⁶, Wellcome Trust²⁹, EDF³⁰, OP JAK³¹, OP TAK³², NPO³³, GA ČR³⁴, TA ČR³⁵ etc.). Include information on the amount of funding received and whether the HEI were principal investigator or co-investigator in Tables 4.10.3, 4.10.4 and 4.10.5.³⁶

In addition, the HEI will describe in more detail up to five of the most important projects from the list of prestigious individual projects abroad (ERC, MSCA, HHMI, HFSP, NSF, etc.), providing basic information at the HEI's discretion and regardless of the funder: title, field of expertise, agency, amount of funding, other project participants, and other relevant information as appropriate.

A maximum of 500 words plus 200 for each example of a prestigious international individual project given.

²² The European Research Council (ERC) is part of the 'Excellent Science' pillar of Horizon Europe. The ERC funds cutting-edge research by supporting individual Principal Investigators and their research teams.

²³ Marie Skłodowska-Curie Action (MSCA) is part of the "Excellent Science" pillar of Horizon Europe and is also aimed at supporting young researchers, including PhD students.

²⁴ Howard Hughes Medical Institute – a non-profit organization in the USA significantly supporting international biomedical research.

²⁵ Human Frontier Science Program – an international programme to support research, particularly in the natural sciences and computer science.

²⁶ National Science Foundation (USA).

²⁷ Horizon Europe – the EU's 9th Framework Programme for research and innovation, running from 2021–2027.

³⁶ National Institutes of Health (NIH) – an agency under the United States Department of Health and Human Services. NHI is a major player in project support for biomedical research.

²⁹ major UK private foundation supporting mainly biomedical research.

³⁰ European Defence Fund.

³¹ Operational Programme Jan Ámos Komenský – Priority 1 – Research and Development – multiannual programme under the Ministry of Education, Youth and Sports. Within the framework of the OP JAK it is possible to draw financial resources from the European Structural and Investment Funds (ESIF) in the period 2021–2027.

³² Operational Programme Technologies and Applications for Competitiveness. The European Regional Development Fund (ERDF) is available in the period 2021–2027 to co-finance business projects in the areas of research, development and innovation, digitalisation and digital infrastructure, business development, smart and sustainable energy and the circular economy.

³³ National Recovery Plan – under Pillar 5 – Research, Development and Innovation of the National Recovery Plan, the Recovery and Resilience Facility (RRF) is available for the period 2022–2026.

³⁴ Grant Agency of the Czech Republic.

³⁵ Technology Agency of the Czech Republic.

³⁶ The military and the police HEIs, as parts of the organisational unit of the state, are treated specifically in terms of the possibility to participate in the projects.

Self-assessment:

Prestigious Individual International Project

1) Tree Dynamics: Description of Mechanical Response to Loading, (LL1909) ERC CZ, provider: MEYS, duration in years: 2020–2024, role in the project: coordinator, total allocated funds: CZK 37,787,000/EUR 1,490,000 researcher for MENDELU: Ing. Jan Tippner, Ph.D., annotation:

The specific objective was to develop an experimentally validated comprehensive physical model of the dynamic response of a tree in the 1) frequency domain and 2) time domain that fully incorporates the relationships between (a) detailed geometry, (b) material and (c) realistic loading, and that allows for a description of the influence of tree parameters on its response. Another objective of the project is to support “frontier research” projects (i.e. projects pushing the boundaries of knowledge regardless of traditional categorisation) of Czech, internationally recognised researchers that have succeeded in the evaluation carried out by expert panels of the European Research Council and were evaluated in the second round with grade A or B. Links [here](#) and [here](#).

2) Women-led Innovation in Rural Areas (FLIARA), Horizon Europe, provider: European Commission, duration in years: 2023–2025, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 76,048,000/EUR 2,999,914/CZK 2,533,000/EUR 99,938, researcher for MENDELU: Professor Dr. Ing. Milada Šťastná, annotation:

The key objective is to support women as drivers of innovation and to create a community platform that connects women from case studies with key actors in policy and innovation to jointly promote sustainability and cooperation. Within the project, proposals will be developed on how policy and administrative frameworks can effectively support and enhance women’s capacity. FLIARA will combine future, case study methods, network building and policy comparison to identify visions for a sustainable future of agriculture and rural areas and required innovations. The project will establish a network of key stakeholders and conduct a campaign to promote rural innovations led by women. The project with a highly topical and interesting theme has even resonated in Czech media. Links [here](#) and [here](#).

3) The issue of informal care for the elderly is addressed by the Fullbright project **The Consequences of Value Transition for the Provision of Informal Care by Older Adults**, provider Fulbright Scholar Program, duration in years: 2023–2024, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 1,091,000/EUR 43,051/CZK 1,091,000/EUR 43,051, researcher for MENDELU: Mgr. Martin Lakomý, Ph.D., annotation:

The main aim of the research was to determine how changes in values influence the frequency and intensity of informal care provided by elderly people. The investigator addressed this hitherto little-explored topic in an innovative and analytically precise manner, which was detailed in the project proposal, utilising unique data from the LSOG survey. The research also examined the implications of these findings for family behaviour and social policy, with key conclusions being widely disseminated. The project included establishing long-term cooperation, encompassing the preparation of subsequent waves of the established panel survey, follow-up visits, joint projects and publications. The main outputs include two scholarly publications, two presentations and university lectures.

4) EuroXanth: Integrating Science on Xanthomonadaceae for Integrated Plant Disease Management in Europe (EuroXanth) (CA16107), provider: Cost Action, duration in years: 2017–2021, role in the project: partner, funds allocated to MENDELU: CZK 127,000/EUR 5,009 researcher for MENDELU: Associate Professor Mgr. Miroslav Baránek, Ph.D., annotation:

The Faculty of Horticulture is a member of the steering committee and actively participated in the operation of the COST action CA16107 EuroXanth during the monitored period: Integrating Science on Xanthomonadaceae for Integrated Plant Disease Management in Europe (EuroXanth). Its purpose was to study and reduce the economic impact of significant bacterial pathogens from the Xanthomonadaceae family. Employees and particularly doctoral students actively utilised tools

provided by COST actions, such as obtaining financial support for [long-term internships](#) or participation in Training Schools. Through these activities, personal contacts were established with leading experts in the field, through whom it was possible to confront and identify competitive research trends. Furthermore, it enabled the transfer of modern approaches and protocols to home institutions in the field of detection and protection against bacterial pathogens of interest. The culmination of this range of activities increasing international awareness of the Faculty of Horticulture was the organisation of an annual [conference](#), attended by more than 100 experts from 28 countries worldwide, including overseas. During participation in the COST action, a project within the LT-Inter-Excellence programme was also implemented, where the international character of the research is documented by selected outputs linked to this [project](#). The experience and contacts gained continue to be utilised even after the action's completion, as evidenced by both subsequent publications in international author teams and invitations to join other follow-up projects or international networks. <https://euroxanth.eu/>

5) Striving for Excellence in the Forest Ecosystem Research (EXCELLENTIA) Era Chair: EXCELLENTIA, provider: European Commission, duration in years: 2023–2028, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 63,363,000/EUR 2,499,530/ CZK 63,363,000/EUR 2,499,530, principal investigator: Professor Dr. Ing. Libor Jankovský, annotation: The aim of the project is to create an exceptional interdisciplinary research team dedicated to Forest Ecology Research (FER). Researchers of the multidisciplinary team led by Professor Douglas L. Godbold, Ph.D. are examining the impacts of climate change on European forests and strategies for maintaining their sustainability and stability, while assessing the likelihood of tree mortality. The project focuses on the study of Central European forests, using the Masaryk Forest Křtiny – University Forest Enterprise. The aim of the project is to bring about structural changes in the areas of sustainable research and innovation, intellectual property rights and research data management, codification of scientific ethics and career guidance. The project does not involve other partners or other MENDELU units. The multidisciplinary team is led by Professor Douglas L. Godbold, as ERA Chair, has been researching soil-plant interactions in forest ecosystems for more than 30 years, and his expertise and experience in coordinating national and international projects will bring results to the Faculty in the form of publications, new projects, and the aforementioned structural changes. Link [here](#).

4.10.1 Total budget of the HEI

Name of the HEI unit	Total budget in thous. CZK/EUR	Percentage of public funding in the Czech Republic	Share of public funding from abroad in %	Percentage of funding from other sources
Faculty of AgriSciences	1,083,506/42,741,854	96.41%	0.36%	3.23%
Faculty of Forestry and Wood Technology	892,873/35,221,815	95.24%	1.03%	3.73%
Faculty of Business and Economics	202,297/7,980,158	96.56%	2.54%	0.90%
Faculty of Horticulture	241,741/9,536,134	97.73%	0.00%	2.27%
Faculty of Regional Development and International Studies	77,220/3,046,154	97.56%	0.10%	2.34%
Institute of Lifelong Learning	10,365/408,876	96.69%	2.20%	1.11%
Rectorate	118,420/4,671,400	99.88%	0.00%	0.12%

Table 4.10.1 shows budgets broken down by organisational units within project funding, with percentage expression of source composition. The table is based on the total costs of projects included in R&D&I for the period 2020–2024 and is supplemented by Table 4.10.2, which specifies the distribution within research categories. As evident from the table, MENDELU successfully obtains a high percentage of public funds for R&D&I funding. The data are adjusted for non-project construction investments financed from other public and own sources for R&D&I infrastructure development, which are shown in Table 4.9.1.

4.10.2 Share [%] of total costs/outputs by type of R&D&I paid from public and non-public sources

	2020	2021	2022	2023	2024	Total
Basic research	70 %	43 %	72 %	29 %	54 %	53 %
Applied Research	24 %	52 %	23 %	52 %	38 %	38 %
Experimental development and innovation	6 %	5 %	5 %	19 %	8 %	9 %
Total	100	100	100	100	100	100

Note: According to Section 2 of Act No. 130/2002 Coll., basic research is defined as theoretical or experimental work conducted primarily for the purpose of acquiring new knowledge about the fundamental principles of phenomena or observable facts, which is not primarily focused on practical application or use.

Other definitions – see OECD Fields of Research and Development (FRASCATI Manual 2015).

Commentary on Table 4.10.2: The share of costs by type of R&D&I changes year-on-year. Generally, it can be stated that the basic research category predominates in most cases, which can also be seen from the last recapitulation column. On average, expenditure on basic research accounts for more than half of the total. Compared to the previous evaluation (2014–2018), when the ratio between individual fractions was set at 22:65:13 and applied research predominated, there has been a change in distribution.

4.10.3 Projects supported by a foreign provider

In the role of beneficiary							
Provider / Investor	Programme/Grant Scheme	Project name	Support (in thousands CZK/EUR)				
			2020	2021	2022	2023	2024
COST Association	Cost ACTION	Work Inequalities in Later Life Redefined by Digitalisation (DIGI-net)	0/0	0/0	0/0	3,787/149,390	3,774/148,863
European Climate Foundation	European Climate Foundation	Measurement of CBAM Impact on the Czech Republic	0/0	580/22,882	288./11,348	0/0	0/0
EEA and Norway Grants	Bilateral Fund	Extension of Bilateral Cooperation in Driftwood Research (EHP-BFNU-OVNKM-4-107-2023)	0/0	0/0	0/0	379/14960	0/0

EEA and Norway Grants	Bilateral Fund / Research	Bilateral cooperation in driftwood research	0/0	0/0	398/ 15,712	0/0	0/0
EEA and Norway Grants	Education	Learning by Doing – Transfer of Know-How in Monitoring Tree Vitality. Czech-Norwegian cooperation in forestry education	0/0	612/ 24,138	459/ 18,087	531/ 20,929	0
EEA and Norway Grants	Education	Human Capital Development. Mobility for partnership between Mendel University and University of Iceland to strengthen inclusive education, equal treatment and respect to human rights.	0/0	59/ 2,315	244/ 9,624	0/0	0/0
European Union	GIZ, FAO	(Sustainable Resilient Ecosystem and Agriculture Management in Mongolia (STREAM))	0/0	0/0	8,195/ 323,279	7,948/ 313,516	0
European Commission	Horizon 2020	Social and Innovative Platform on Cultural Tourism and Its Potential Towards Deepening Europeanisation (SPOT)	23/895	33/ 1,292	14/557	1/8	0/0
European Commission	Horizon 2020	Adaption Strategies in Forestry Under Global Climate Change Impact (ASFORCLIC)	0/0	5/210	3/120	4/144	0/0
European Commission	Horizon Europe	ERA – Chair: Striving for Excellence in Forest Ecosystem Research (EXCELLENTIA)	0/0	0/0	0/0	3/107	0/0
European Commission	Horizon Europe	Stabilising Crop Yield Under Unfavourable Conditions by Molecular PRIM(E)ing	0/0	0/0	0/0	9/368	0/0
European Regional Development Fund	Interreg AT-CZ	From Linear to Rotary Cutting of Hardwood (ROTCUT)	0/0	1/5	1/103	0/0	1/117
European Regional Development Fund	Interreg AT-CZ	Mechanical Disintegration of Hard Woods (HARDIS)	7/289	4/143	3/1,117	0/0	0/0
European Regional Development Fund	INTERREG AT-CZ	AGRISAN Healthy and Drought-Adapted Soil and Landscape Care	0/0	0/0	1/51	0/0	1/3
European Regional Development Fund	INTERREG AT-CZ	Furcellaran – An Innovative Biopolymer for Bio-based Plastic Film Production (FURPLAST)	0/0	0/0	0/0	0/0	1/5
European Regional Development Fund	INTERREG Central Europe	Supporting the Coexistence and Conservation of Carpathian Large Carnivores / LECA	0/0	0/0	0/0	1,809/ 71,3559	11,087/ 437,374
European Regional Development Fund	INTERREG SK-CZ	Climate Adapt Forest	0/0	0/0	0/0	0/0	0/0

EEA and Norway Grants	Environment	Implementation of Current Forest Ecology Knowledge into Forestry Practice: Support for Adaptation and Mitigation Measures.	0/0	0/0	630/ 24,852	461/ 18,182	0/0
Franklinia Foundation	Franklinia Foundation	Protection of Endangered and Red-Listed Native Species in Preah Monivong National Park, Cambodia	0/0	0/0	0/0	0/0	1,392/ 54,915
Total			30/ 1,184	1,294/ 50,985	10,236/ 404,850	14,932/ 1,231,163	16,256/ 641,277
In the role of another participant							
Provider / Investor	Programme/Grant Scheme	Project name	Support (in thousands CZK/EUR)				
			2020	2021	2022	2023	2024
Cost Association	Cost ACTION	Ocean Governance for Sustainability – Challenges, Options and the Role of Science (OceanGov)	20/771	0/0	0/0	0/0	0/0
European Commission	Horizon Europe	Achieving Remediation And Governing Restoration of contaminated soils Now (ARAGORN)	0/0	0/0	0/0	1/4	2/85
European Commission	Horizon Europe	Plant Pest Prevention Through Technology-Guided Monitoring and Site-Specific Control (PURPEST)	0/0	0/0	0/0	2/93	0/0
European Commission	Horizon Europe	Water4All – Water Security for the Planet	0/0	0/0	0/0	1/35	0/0
European Commission	Horizon Europe	Transforming Advanced Water Skilling Through the Creation of a Network of Extended-Reality Water Emulative Centres (WATERLINE)	0/0	0/0	1/2	1/75	0/0
European Commission	Horizon Europe	AI-Enabled Artistic Solutions for Sustainable Food Systems (Hungry EcoCities)	0/0	0/0	1/3	1/23	1/49
European Commission	Horizon Europe	Female-Led Innovation in Agriculture and Rural Areas (FLIARA)	0/0	0/0	0/0	1/29	0/0
European Commission	Horizon 2020	Holistic Management of Emerging Forest Pests and Diseases (HOMED)	1/36	1/27	1/50	0/0	0/0
European Commission	Horizon 2020	New Geomodels to Explore Deeper for High-Technology Critical Raw Materials in Alkaline Rocks and Carbonatites (HiTech AlkCarb)	0/0	0/0	0/0	0/0	0/0

European Commission	Horizon 2020	Galileo Enhanced Solution for Pest Detection and Control in Greenhouse Fields with Autonomous Service (GREENPATROL)	1/28	0/0	0/0	0/0	0/0
European Commission	Horizon 2020	Developing Sustainable PERmanent Grassland Systems and Policies (SUPER-G)	1/29	1/40	1/38	1/28	0/0
European Commission	Horizon 2020	InteGRated Systems for Effective ENvironmEntal Remediation (GREENER)	2/110	1/42	1/7	1/41	0/0
European Commission	LIFE 2022	Concrete Actions for Maintaining Wolves Wild in Anthropogenic Landscape in Europe	0/0	0/0	0/0	1,794/ 70,776	477/ 18,802
European Regional Development Fund	INTERREG AT-CZ	Added Value from Residuals (Valid)	1/27	1/44	0/0	0/0	3/129
European Regional Development Fund	INTERREG SK-CZ	Increasing the Digital Skills of Teachers and Pupils of 24 Secondary Schools in the Slovak-Czech Border Region	0/0	1/19	2/76	1/46	1/2
European Union	European Parliament European Conservatives and Reformists Group	Expert Study on Increasing Competitiveness of Micro-and-Small Farms in an Environment of Sustainable Development in Comparison to Large Farms	0/0	197/7,785	50/1,992	0/0	0/0
European Regional Development Fund	Interreg V-A Slovak Republic	Action Plan for Geodiversity Protection – Increasing the Attractiveness of Cultural Environment and Natural Heritage for Residents and Visitors of the Cross-border Region	41/1,635	0/0	0/0	0/0	0/0
Federal Ministry Republic of Austria	FFG – COMET MODULE: COMPETENCE CENTRES FOR EXCELLENCE TECHNOLOGIES	I3 Sense – Development of Advanced Sensors for Wood Based Composites	0/0	0/0	0/0	234/9,212	9/338
Franklinia Foundation	Franklinia Foundation	Conservation of the Edangered Endemic Boswellia Trees on Socotra Island (Yemen)	1,736/ 68,484	3,075/ 121,304	2,170/ 85,611	2,951/ 116,394	4,071/ 160,607
International Visegrad Fund	Strategic Grants	Visegrad Group Cooperation within the EU: Challenging the Rise of Euroscepticism	0/0	24/931	142/5,620	0/0	0/0
International Visegrad Fund	Visegrad Grants	Food Quality in Digital Age	0/0	0/0	0/0	88/3,476	23/914
International Visegrad Fund	Visegrad+	Visegrad-Water-Security	0/0	30/1,202	0/0	0/0	0/0

Volkswagen Foundation	Volkswagen Stiftung	Kropotkin's Garden: Networking Beats Competition in the Struggle for Limited Resources (GRIN),	325/ 12,807	197/7,776	154/6,076	0/0	0/0
Total			2,128/ 83,927	3,528/ 139,170	2,523/ 99,475	5,077/ 200,232	4,587/ 180,926

Note: For co-sponsorship projects, please only indicate the amount of funding for the evaluated HEI.

From the perspective of the financial evaluation shown in Table 4.10.3, it can be stated that MENDELU had varying degrees of success in obtaining support from foreign providers and individual programmes in the position of beneficiary, where in total it received financial support in this role amounting to CZK 42,748,000/EUR 1,686,312. However, unlike the 2014–2018 evaluation, in this evaluated period it also participated in project implementation in the role of other participant, which enables deepening cooperation with significant foreign institutions, obtaining noteworthy results and developing internationalisation within research.

4.10.4 Projects supported by the Czech provider

In the role of beneficiary							
Provider / Investor	Programme/Grant Scheme	Project name	Support (in thousands CZK/EUR)				
			2020	2021	2022	2023	2024
GA0	Standard Projects	Projects solved: 19	8,812/ 347,613	8,590/ 338,853	8,186/ 322,920	11,337/ 447,207	14,100/ 556,213
GA0	International Projects	Zinc signaling and metallothioneins sub/isoforms expression in breast cancer: implications for prognostic and therapeutic purposes	1,779/ 70,178	1,797/ 70,888	0/0	0/0	0/0
GA0	International Grant Projects Evaluated on the LEAD Agency Principle	Projects solved: 2	0/0	0/0	0/0	1,253/ 49,428	1,925/ 75,937
GA0	Junior Grants	Multi-scale Hygro-thermo-mechanical Behavior of Modified Wood-based Materials	1,894/ 74,714	1,855/ 73,176	0/0	0/0	0/0
GA0	Junior Star	Hybrid biocompatible nanocatalysts for extracellular bioorthogonal activation of prodrugs	0/0	0/0	0/0	4,675/184,418	4,771/ 188,205
MK0	Programme for the Support of Applied Research and Experimental Development of National and Cultural Identity for 2016–2022 (NAKI II)	Projects solved: 9	24,824/ 979,236	14,458/ 570,354	13,349/ 526,602	0/0	0/0
MK0	NAKI III Programme – Programme for Support of Applied Research in the Field of National and Cultural Identity for the Years 2023–2030	Projects solved: 6	0/0	0/0	0/0	11,881/ 468,679	14,487/ 571,479

MSM	Support for the Mobility of Research Staff within International Cooperation in Research, Development and Innovation	Projects solved: 9	65/2,564	462/ 18,225	453/17,859	346/13,649	268/10,572
MSM	Programme for Funding Multilateral Scientific and Technical Cooperation Projects in the Danube Region	Projects solved: 2	0/0	125/4,931	78/3,093	95/3,736	106/4,185
MSM	Operational Programme Research, Development and Education	Phytophthora Research Centre	24,527/ 967,535	33,654/ 1,327,558	1,727/ 68,110	0/0	0/0
MSM	Operational Programme Research, Development and Education	Research Infrastructure for Young Scientists	10,000/ 394,477	5,469/ 215,740	0/0	0/0	0/0
MSM	Operational Programme Research, Development and Education	Support for Multidisciplinary Research Programmes for Young Scientists	2,700/ 106,509	2,700/ 106,509	1,489/ 58,738	0/0	0/0
MSM	Operational Programme Research, Development and Education	Multidisciplinary Research to Increase Application Potential of Nanomaterials in Agricultural Practice	20,106/ 793,136	17,119/ 675,306	1/39	0/0	0/0
MSM	Operational Programme Research, Development and Education	MENDELU International Development	2,843/ 112,150	1/39	1/39	0/0	0/0
MSM	Operational Programme Research, Development and Education	MENDELU R&D Development	20,100/ 792,899	2,609/ 102,919	1/39	0/0	0/0
MSM	Operational Programme Research, Development and Education	MENDELU international development II	8,097/ 319,421	10,995/ 433,722	2,898/ 114,301	0/0	0/0
MSM	Operational Programme Research, Development and Education	MENDELU R&D development II	11,587/ 457,079	9,800/ 386,588	14,724/ 580,846	0/0	0/0
MSM	Operational Programme Research, Development and Education	Internal Grants of Mendel University in Brno	6,214/ 245,135	5,000/ 197,239	17,572/ 693,176	0/0	0/0
MSM	Operational Programme Jan Amos Komenský	MSCA FELLOWSHIPS CZ MENDELU	0/0	0/0	0/0	0/0	2,464/ 97,216
MSM	Operational Programme Jan Amos Komenský	Development of PhD studies at Mendel University in Brno (MENDELU PhD Infra)	0/0	0/0	0/0	21,800/ 859,961	1,048/ 41,357
MSM	ERC CZ	Tree Dynamics: Understanding of Mechanical Response to Loading	7,027/ 277,185	7,691/ 303,401	7,706/ 303,993	7,706/ 303,993	7,656/ 302,021

MSM	INTER-EXCELLENCE	Projects solved: 8	8,971/ 353,901	7,746/ 305,577	3,551/ 140,079	1,788/70,533	0/0
MSM	INTER-EXCELLENCE II	Projects solved: 2	0/0	0/0	250/9,881	1,258/49,606	3,541/ 139,689
MV0	Security Research of the Czech Republic 2015–2022	Multiplex xMAP technology for a complex detection of pathogenic agents significant for the protection of human and animal health	665/26,233	0/0	0/0	0/0	0/0
MZ0	Programme for Support of Healthcare Applied Research for 2020–2026	Projects solved: 2	1,207/ 47,628	2,315/ 91,339	2,829/ 111,596	2,734/ 107,850	1,673/ 65,996
Ministry of Agriculture	Programme of Applied Research of the Ministry of Agriculture for 2017–2025, ZEMĚ	Projects solved: 17	11,077/ 436,952	11,979/ 472,525	18,136/ 715,424	20,489/ 808,260	15,385/ 606,921
Ministry of Agriculture	Programme for Support of Applied Research of the Ministry of Agriculture for the Period 2024-2032, ZEMĚ II	Projects solved: 4	0/0	0/0	0/0	0/0	5,920/ 233,528
TA0	Programme of Applied Research, Experimental Development and Innovation in the Field of Environment – Environment for Life	Projects solved: 14	3,670/ 144,764	2,600/ 102,564	6,819/ 269,013	11,076/ 436,905	19,300/ 761,353
TA0	Programme for Support of Applied Research and Experimental Development EPSILON	Projects solved: 13	14,886/ 587,210	11,560/ 456,013	8,682/ 342,483	804/31,726	0/0
TA0	Programme of Public Procurement in Applied Research and Innovation for State Administration Needs BETA2	Projects solved: 2	1,628/ 64,240	1,398/ 55,152	703/27,748	0/0	0/0
TA0	Programme for Support of Applied Research ZETA	Projects solved: 16	19,575/ 772,189	12,882/ 508,148	2,994/ 118,116	0/0	0/0
TA0	Programme for Support of Applied Social Sciences and Humanities Research, Experimental Development and Innovation ETA	Projects solved: 8	9,668/ 381,378	9,128/ 360,074	1,239/ 48,888	0/0	0/0
TA0	Programme of Applied Research, Experimental Development and Innovation GAMA 2	MENDELU Proof of Concept 2	1,667/ 65,771	6,155/ 242,802	7,165/ 282,634	0/0	0/0

TA0	Programme for Support of Applied Research and Innovation SIGMA	Projects solved: 7	0/0	0/0	0/0	2,524/99,546	11,491/453,277
TA0	Programme for Support of Applied Research and Innovation THÉTA 2 (2024 – 2031)	Decision support system for achieving climate and energy goals in the Czech Republic	0/0	0/0	0/0	0/0	1,267/49,991
Total			223,589/8,820,097	188,088/7,033,054	120,553/4,413,134	99,766/3,127,237	105,402/4,157,940
In the role of another participant							
Provider / Investor	Programme/Grant Scheme	Project name	Support (in thousands CZK/EUR)				
			2020	2021	2022	2023	2024
GA0	Standard Projects	Projects solved: 12	3,364/132,702	4,375/172,588	3,731/147,176	5,292/208,757	3,291/129,822
GA0	International Grant Projects Evaluated on the LEAD Agency Principle	Physiological, morphological and growth response of fir and beech along the geographical gradient – basis for predicting future development trends	0/0	187/7,377	756/29,822	776/30,611	549/21,657
MK0	Programme for the Support of Applied Research and Experimental Development of National and Cultural Identity for 2016–2022 (NAKI II)	Projects solved: 2	2,747/108,361	1,588/62,643	1,015/40,039	0/0	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Beech Modification	198/7,816	0/0	0/0	0/0	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	ZETORS TRACTORS a.s. - Optimal aggregation within machines and tractor	999/39,404	0/0	0/0	0/0	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Application project TestLine Clinical Diagnostics Ltd.	0/0	2,964/116,932	0/0	0/0	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Multicriterial Text Analysis Software	5,079/200,336	0/0	0/0	0/0	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	SQTrader – Research and Development of Optimisation Solutions for Asset Management	703/27,724	0/0	0/0	0/0	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	MEDIA EFEKT – Research and Development of Machine Just-in-Time Production Controlled by Augmented Reality Technology	1,816/71,626	3,982/157,064	0/0	0/0	0/0

MIT	Operational Programme Enterprise and Innovation for Competitiveness	Data Processing Software	0/0	3,098/ 122,211	3,407/ 134,391	5,304/ 209,241	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Development of a Unique Door System	0/0	0/0	705/27,818	934/36,852	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Applications TP EUROokna	0/0	1,735/ 68,425	0/0	265/10,470	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Ergonomic Furniture for the 21st Century, Built on Ergonomic Optimisation of the Relations and Interaction Between Man, Furniture, and Technology.	0/0	269/ 10,607	410/16,179	302/11,918	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Development of Equipment for Production of Carbonised Wood Surfaces	0/0	697/ 27,486	541/21,324	1,068/42,124	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Research and Development of a Software Platform with Artificial Intelligence Elements for a Digital Office	0/0	0/0	1,900/ 74,960	2,671/ 105,369	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Research and Development of Furniture Components with Reduced Flammability in the company Jan Ficek Dřevovýroba s.r.o.	0/0	534/ 21,047	631/24,889	1,898/ 74,853	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Research and Development of LED Grow lights with Dynamic Spectrum Control	0/0	0/0	1,543/ 60,885	1,193/ 47,077	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Optimisation of Treatment and Processing of Sludge from Wastewater Treatment Plants in the Production of Growing Substrate	0/0	0/0	2,290/ 90,319	4,441/ 175,180	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	SKYMAPS – Research Project	0/0	0/0	0/0	469/18,490	0/0
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Development of a new product based on umbilical cord tissue for regeneration of the Achilles tendon after rupture	0/0	0/0	306/12,051	0/0	366/14,426

MIT	Operational Programme Enterprise and Innovation for Competitiveness	Development of Unique, Rare Bioactive Complexes Consisting of Unicellular Microorganisms and Native Extracts from Selected Synergizing Herbs Obtained by a New Innovative Method of Subcritical Extraction Method	0/0	0/0	0/0	2,146/84,657	3,027/119,389
MIT	Operational Programme Enterprise and Innovation for Competitiveness	Location Insights For Business Intelligence	0/0	0/0	376,634/14,857	2,151,149/84,858	0/0
MIT	TRIO	The Multi-purpose Modular System for Excavation of Stumps and Other Commodities	1,037/40,907	1,324/52,239	1,182/46,618	0/0	0/0
MSM	Operational Programme Research, Development and Education	Centre for Experimental Plant Biology	5,601/220,947	5,779/227,968	5,622/221,775	3,204/126,391	0/0
MSM	Operational Programme Research, Development and Education	Sustainable Production of Healthy Fish in Various Aquaculture System – PROFISH	7,492/295,542	7,331/289,191	10,270/405,128	0/0	0/0
MSM	National Sustainability Programme II	CEITEC 2020	13,508/532,857	0/0	0/0	0/0	0/0
MSM	INTER-EXCELLENCE	Projects solved: 3	995/39,250	944/37,239	944/37,239	944/37,239	589/23,235
MV0	VI – Security Research of the Czech Republic 2015–2022	Projects solved: 2	0/0	3,333/131,480	5,257/207,362	0/0	0/0
MV0	VI – Security Research of the Czech Republic 2015–2022	Determination of Methods for Urban Climate Assessment, in Particular the Urban Heat Island, and Proposition of Measures to Mitigate the Negative Impacts of Meteorological Extremes on Population and the Environment, Particularly in Large Urban Areas.	1,013/39,960	1,367/53,916	0/0	0/0	0/0
MZ0	Programme for Support of Healthcare Applied Research for 2020–2026 (2020–2026)	Smart biocompatible nanotools for a selective delivery of drug-siRNA cocktails for combination therapy of breast cancer	1,457/57,475	1,510/59,566	1,510/59,566	1,530/60,355	0/0
Ministry of Agriculture	Programme of Applied Research of the Ministry of Agriculture for 2017–2025, ZEMĚ	Projects solved: 48	18,562/732,229	23,995/946,534	27,343/1,078,609	23,419/923,819	15,472/610,348

Ministry of Agriculture	Programme for Support of Applied Research of the Ministry of Agriculture for the Period 2024-2032, ZEMĚ II	Projects solved: 13	0/0	0/0	0/0	0/0	10,923/ 430,875
TA0	Programme for Support of Applied Research and Innovation in Transport – TRANSPORT 2030	Determination and optimization of vegetation belts of natural woody composition serving to traffic noise attenuation	0/0	0/0	0/0	0/0	543/21,420
TA0	FW – TREND	Projects solved: 18	15,133/ 596,973	22,972/ 906,178	23,369/ 921,853	27,407/ 1,081,164	28,567/ 1,126,886
TA0	Programme of Applied Research, Experimental Development and Innovation in the Field of Environment – Environment for Life	Projects solved: 17	1,343/ 52,959	5,250/ 207,116	10,336/ 407,739	11,695/ 461,333	15,650/ 617,374
TA0	Programme for Support of Applied Research and Experimental Development EPSILON	Projects solved: 12	12,360/ 487,563	6,560/ 258,779	949/37,426	0/0	0/0
TA0	Programme for Support of Applied Research ZETA	Projects solved: 4	2,166/ 85,442	1,294/ 51,044	247/9,744	0/0	0/0
TA0	Programme for Support of Applied Social Sciences and Humanities Research, Experimental Development and Innovation ETA	Projects solved: 5	2,395/ 94,458	2,063/ 81,379	1,749/ 68,990	209/8,229	0/0
TA0	Programme for Support of Applied Research, Experimental Development and Innovation – National Centres of Competence	Projects solved: 2	1,444/ 56,954	722/ 28,477	722/28,477	3,000/ 118,343	7,125/ 281,065
TA0	Programme for Support of Applied Research, Experimental Development and Innovation KAPPA	Forest functions in the Past, Present and Future- What can Society expect from Forests under Climate Change?	0/0	1,436/ 56,631	1,093/ 43,103	1,093/43,107	205/8,092
TA0	Programme for Support of Applied Research and Innovation SIGMA	Projects solved: 4	0/0	0/0	0/0	549/21,652	4,148/ 163,623
TA0	Programme for Support of Applied Research and Innovation THÉTA 2	Using the silage made of “beet cuttings and grain straw” at critical shortage of maize silage	0/0	0/0	0/0	0/0	743/29,295
Total			99,412/ 3,684,631	105,309/ 4,154,117	108,205/ 4,268,339	101,960/ 4,022,089	91,198/ 3,597,507

Note: Please summary list GA CR, TA CR and other departmental projects. For co-sponsor projects, please indicate the financial volumes for the HEI. Projects financed from EU structural funds and focused exclusively on R&D&I (e.g. OP JAK, OP TAK, NPO) and projects financed from regional sources focused exclusively on R&D&I list individually. For co-sponsoring projects, please indicate the financial volumes for the evaluated HEI only.

Comment on Table 4.10.4: During the period under review, with regard to obtaining financial resources in the role of beneficiary, there is a noticeable declining tendency, which was mainly caused by the ending programming period (2014–2020) of OP projects from the Ministry of Education, Youth and Sports provider. A continuous trend of success in submission and implementation can be observed in applied research projects from the Ministry of Agriculture, Ministry of Culture and Technology Agency of the Czech Republic. In the past period, MENDELU was very successful in the role of additional participant, where the volume of obtained financial resources in the position of partner increased multiple times compared to the previous evaluation.

4.10.5 Projects supported from non-public sources

In the role of beneficiary						
Provider / Investor	Project name	Support (in thousands CZK/EUR)				
		2020	2021	2022	2023	2024
POLABSKÉ MLÉKÁRNÝ a.s.	Goat Programme	193/8	0/0	0/0	0/0	0/0
R and D Cannabinoid CZ, s.r.o.	Propagation and Stabilisation of CBD Genotypes of Cannabis	207/8	0/0	0/0	0/0	0/0
Ing. Václav Kozák	Cloning of Garlic Varieties by <i>in Vitro</i> Techniques	60/2	0/0	0/0	0/0	0/0
JUKKA, s.r.o.	Protocol of Derivation and Multiplication of Different Fruit Trees	90/4	0/0	0/0	0/0	0/0
VITROTREE BY BATTISTINI s.r.o.	Protocol of Derivation and Multiplication of Different Fruit Trees	93/4	0/0	0/0	0/0	0/0
BURDOVA FARMA s.r.o.	Multiplication of Nettle Plants by <i>in vitro</i> Methods	25/1	0/0	0/0	0/0	0/0
MoE	Preparation of Documents for the Ministry of Environment Crisis Plan 2020 (1)	901/36	0/0	0/0	0/0	0/0
Crop Research Institute (CRI), R&D&I	Determination of Humus Quality.	40/2	0/0	0/0	0/0	0/0
Zemagro, spol. s r.o.	Reducing the Environmental Burden of Pesticides and Fertilisers through Variable Rate Applications	1,815/72	0/0	0/0	0/0	0/0
BAYER s.r.o.	Evaluation of Locally Targeted Herbicide Application Using Remote Sensing	451/18	0/0	0/0	0/0	0/0
Agrinova Services, s.r.o.	Evaluation of Heterogeneity of Vegetation on Agricultural Land in the Area of Interest	427/17	0/0	0/0	0/0	0/0
AGRICOLE TECH, s.r.o.	Evaluation of the Effect of Organic Fertilisers on the Yield of Selected Crops	148/6	0/0	0/0	0/0	0/0
Agritec Plant Research s.r.o.	Insect Pest Susceptibility Testing	50/2	0/0	0/0	0/0	0/0
BioAktiv CZ s.r.o.	Effect of Spring Barley Nutrition on Yield and Quality Parameters	18/1	0/0	0/0	0/0	0/0
VP AGRO, spol. s r.o.	Effect of Laser Seed Stimulation on Sugar Beet Yield	18/1	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Expert Determination of Structure	29/1	0/0	0/0	0/0	0/0

Crop Research Institute (CRI), R&D&I	Determination of Humus Quality.	67/3	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Analysis of Soil Samples	42/2	0/0	0/0	0/0	0/0
VUCHT, a.s. Bratislava	Study of the Effect of Liquid Fertiliser Application with IN on Yield and Grain Quality of Maize.	29/1	0/0	0/0	0/0	0/0
Escube Agro, s.r.o.	Study of the Effect of Superabsorbent Polymers Applied in Combination with Fertilisers on the Development and Growth of Maize and Dogwood Under Different Levels of Irrigation	46/2	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Collection and Analysis of Intact Samples.	45/2	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Field Trial Sampling and Analysis	45/2	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Collection and Analysis of Soil Samples	46/2	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Expert Determination of Structure	45/2	0/0	0/0	0/0	0/0
VUCHT, a.s. Bratislava	Study of the Effect of Granular Fertiliser Application with IN on Yield and Grain Quality of Maize.	45/2	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Analysis of Intact Samples	50/2	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Excavation and Description of Probes, Analysis of Soil Samples	120/5	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Collection and Analysis of Intact Samples	45/2	0/0	0/0	0/0	0/0
ROLANA s.r.o.	Description of 3 Soil Profiles with Agronomic Interpretation, Basic Analysis of Intact Soil Samples, Determination of Nutrient Content, Grain Size, POH Content, and pH	36/1	0/0	0/0	0/0	0/0
Crop Research Institute (CRI), R&D&I	Determination of Humus Quality	35/1	0/0	0/0	0/0	0/0
Brno University of Technology	Analysis of Soil Samples	30/1	0/0	0/0	0/0	0/0

Lovochemie, a.s.	Potential of Agricultural Production in the Czech Republic in the Production of Organic Fertilisers and the Use of Zeolites Under Organic Farming Conditions	30/1	0/0	0/0	0/0	0/0
VUCHT, a.s. Bratislava	Study of the Effect of Extra-Root Application of Humates on Yield and Grain Quality of Maize	47/2	0/0	0/0	0/0	0/0
VUCHT, a.s. Bratislava	Study of the Effect of Extra-Root Application of Humates on Yield and Quality of Sunflower Seedlings	44/2	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Collection and Analysis of Intact Samples	45/2	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Expert Determination of Structure	29/1	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Analysis of Intact Samples	22/1	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Determination of Cox and HA:FA	39/2	0/0	0/0	0/0	0/0
Masaryk University, RECETOX	Microbiological Analysis of Water Filter Samples	10/0	0/0	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Soil Sampling from the Soil Test	23/1	0/0	0/0	0/0	0/0
POMONA Těšetice a.s.	Cooperation in the Introduction of New Technology in Cattle Breeding	747/29	0/0	0/0	0/0	0/0
SPV Pelhřimov, a.s.	Modernisation of Pig Breeding Technologies with Higher Integration of ICT and Development of Comparable Calculation Methodologies	566/22	0/0	0/0	0/0	0/0
University of Chemistry and Technology in Prague	Support for the Development of New Products, Processes, and Technologies in the Processing of Agricultural Products and Their Marketing (The Specific Subject of the Contract is a Business Secret of the Client)	375/15	0/0	0/0	0/0	0/0
Biomin GmbH	Effects of the Use of a ZENzyme® Under Practice Conditions	55/2	0/0	0/0	0/0	0/0
Research Institute of Potato Growing Havlíčkův Brod, s.r.o.	Comparison of the Specific Metabolic Spectrum Between Cultivation Variants With and Without Organic Matter in the Orchid Genus Dactylorhiza	72/3	0/0	0/0	0/0	0/0
Ministry of Agriculture	Potential Use of Wastewater from Production Facilities for Irrigation of Agricultural Crops and the Risks for Food Safety Issues	200/8	0/0	0/0	0/0	0/0
Chr. Hansen Czech Republic, s.r.o.	Testing Biogas Production from Biomass	150/6	0/0	0/0	0/0	0/0

Institute of Agricultural Economics and Information, s.p.o.	Evaluation of Model Recipes (Milk Chocolate, Pralines, Egg Pasta)	123/5	0/0	0/0	0/0	0/0
YARA Agri Czech Republic, s.r.o.	Experiment with Yara Mila, Yara Vita and Yara Bela Fertilisers in Barley and Wheat, Evaluation of Yield and Grain Quality	67/3	0/0	0/0	0/0	0/0
Delacon PNRC s.r.o.	Determination and Evaluation of Strength Characteristics of Biological Material of Poultry Slaughter	24/1	0/0	0/0	0/0	0/0
MORAVOSEED CZ a.s.	Contract Research to Extend the Internal Methodology for Varietal Identification of Cabbage (<i>Brassica oleracea convar. Capitata</i>) Using Other Variable Microsatellite Loci	150/6	0/0	0/0	0/0	0/0
University of Pardubice, CEMNAT	Performing an Antimicrobial Test on 9 Samples of Fibrous Materials	54/2	0/0	0/0	0/0	0/0
POLABSKÉ MLÉKÁRNÝ a.s.	Goat Programme	411/16	0/0	0/0	0/0	0/0
JUKKA, s.r.o.	Growing Plants	0/0	90/4	0/0	0/0	0/0
MoE	Preparation of Documents for the Ministry of Environment Crisis Plan 2021 (1)	0/0	968/38	0/0	0/0	0/0
Research Institute of Plant Production, R&D&I	Analysis of 45 Soil Samples from the Ap Horizon and Comparison and Evaluation of Changes in Climatic Characteristics at Selected Locations in the Czech Republic	0/0	48/2	0/0	0/0	0/0
Agritec Plant Research s.r.o.	Area Monitoring of Resistance of Selected Harmful Organisms to Pesticide Active Substances	0/0	60/2	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Field Experiments in Domanínk	0/0	189/7	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Excavation and Description of Pedological Probes and Determination of Grain Size Composition	0/0	327/13	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Field Experiments in Domanínk Using Biochar	0/0	148/6	0/0	0/0	0/0
NAFIGATE Corporation a.s.	Determination of the Effect of Coated Fertiliser Application on Maize Development and Growth – Dynamics of N Volatilisation in Soil and Soil Microbiology in the Form of a Container Experiment under Controlled Conditions – Greenhouse, Growing House	0/0	48/2	0/0	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Analysis of Soil Samples – Soil Reaction, Field Experiments with Drought in Domanínk	0/0	87/3	0/0	0/0	0/0

Crop Research Institute (CRI), R&D&I	Analysis of 45 Soil Samples from the Ap Horizon and Comparison and Evaluation of Changes in Climatic Characteristics at Selected Locations in the Czech Republic	0/0	75/3	0/0	0/0	0/0
Masaryk University, RECETOX	Expert Activity	0/0	61/2	0/0	0/0	0/0
NutriVet, s.r.o.	Determination of the Number of Moulds, Yeasts and Lactic Acid Bacteria in 24 Samples of Maize Silage	0/0	8/0	0/0	0/0	0/0
Statutory City of Brno	Creating a Vermicomposter for Gastro Waste	0/0	666/26	0/0	0/0	0/0
Research Institute of Potato Growing Havlíčkův Brod, s.r.o.	Soil Analysis – Expertise	0/0	1,815/72	0/0	0/0	0/0
Lovochemie, a.s.	Container Trials of an Organomineral Fertiliser Based on Granulated Carcass Blood and Zeolite.	0/0	38/1	0/0	0/0	0/0
Agra SH	Demonstration of the Fertilising Effect of Cu in the Foliar Fertiliser Chevy Cu-Combi in Wheat and Maize as a Basis for the Registration of Central Institute for Supervising and Testing in Agriculture	0/0	42/2	0/0	0/0	0/0
EG.D. a.s.	Assessment of Grassland	0/0	242/10	0/0	0/0	0/0
SPV Pelhřimov, a.s.	Modernisation of Pig Breeding Technologies with Higher Integration of ICT and Development of Comparable Calculation Methodologies	0/0	566/22	0/0	0/0	0/0
MORAVOSEED CZ a.s.	Development of a Methodology for the Detection of Important Resistances in Cucumber	0/0	250/10	0/0	0/0	0/0
Ecological Centre Orlov o.p.s.	Development of Methodology and Species Determination of Samples Based on the Genetic Sequence of the Mitochondrial Gene Fragment COI	0/0	48/2	0/0	0/0	0/0
Ecological Centre Orlov o.p.s.	Development of Methodology and Species Determination of Samples Based on the Genetic Sequence of the Mitochondrial COI Gene	0/0	102/4	0/0	0/0	0/0
Biomin GmbH	Effects of the Use of a ZENzyme® Under Practice Conditions	0/0	164/6	0/0	0/0	0/0
Rybářství Doksy spol. s r.o.	Monitoring of the Chmelaře Pond in the 2021 Growing Season (Physico-Chemical Parameters of the Pond Water)	0/0	66/3	0/0	0/0	0/0
Research Institute of Potato Growing Havlíčkův Brod, s.r.o.	Determination of the Presence of Dihydrophenanthrenes in Two Hybrids of the Orchid Genus Dactylorhiza. Comparison of Hormone Composition in Pisum Aclis (DI and PR)	0/0	63/2	0/0	0/0	0/0
Moravoseed CZ a.s.	Conduct Contract Research to Develop an In-House Methodology for the Detection of Important Resistances in Cucumber (Cucumis sativus) Using Molecular Genetic Methods	0/0	207/8	0/0	0/0	0/0

Ecological Centre Orlov o.p.s.	Contract Research for the Development of Methodology and Species Determination of Samples Based on the Genetic Sequence of the Mitochondrial Gene Fragment COI	0/0	40/2	0/0	0/0	0/0
Ecological Centre Orlov o.p.s.	Contract Research to Develop Methodology and Species Determination of Samples Based on the Genetic Sequence of the Mitochondrial Gene Fragment COI in 210 Lichen Samples	0/0	84/3	0/0	0/0	0/0
Ministry of Agriculture	Reference Document on Best Available Techniques for the Slaughterhouse and Animal By-Products Sector, Chapter 5 Conclusions on BAT	0/0	200/8	0/0	0/0	0/0
Research Institute of Plant Production, R&D&I	Analysis of 45 Soil Samples from the Ap Horizon and Comparison and Evaluation of Changes in Climatic Characteristics at Selected Locations in the Czech Republic	0/0	44/2	0/0	0/0	0/0
A. PÖTTINGER, spol. s r.o.	Aggregation Tests of the Pöttinger Servo 650	0/0	61/2	0/0	0/0	0/0
LOWEMAT s.r.o.	Research and Development of a Prototype Positive Displacement Pump	0/0	541/21	0/0	0/0	0/0
YARA Agri Czech Republic, s.r.o.	Experiments with Yara Mila and Yara Vera Fertilisers in a Wheat Crop, Evaluation of Yield and Grain Quality	0/0	41/2	0/0	0/0	0/0
PhosAgro Polska Sp. z o.o.	Performing a Fertiliser Experiment with the Company in the Barley Crop According to the Approved Methodology, Evaluating the Yield and Quality of the Grain	0/0	112/4	0/0	0/0	0/0
Neveklov a.s.	New Technical Equipment for the Introduction of ASŘ – Processes in the Stable	0/0	726/29	0/0	0/0	0/0
Department of Food Chemistry and Biotechnology – FCH BUT	Sample Analysis	0/0	12/0	0/0	0/0	0/0
Workpress Aviation s.r.o.	Sample Analysis	0/0	48/2	0/0	0/0	0/0
Lithos Crop Protect GmBH	Effect of Pheromone Application on Maize Protection	0/0	0/0	124/5	0/0	0/0
Agritec Plant Research s.r.o.	Insect Pest Susceptibility Testing to Insecticides	0/0	0/0	78/3	0/0	0/0
Statutory City of Brno	Creating a Vermicomposter for Gastro Waste	0/0	0/0	665/26	0/0	0/0
SALIX Moravia	Description of the Soil Profile of the 3 Probes, Soil Sampling and Analysis to Characterise Soil Properties	0/0	0/0	40/2	0/0	0/0
ASIO TECH, spol. s r.o.	Hygiene Tests – Determination of E. coli, Enterococci, Salmonella spp.	0/0	0/0	27/1	0/0	0/0
Faculty of Science MUNI	Microbiological Analysis of Water Samples	0/0	0/0	69/3	0/0	0/0
Brno University of Technology	Ensuring the Analysis of Microbiological Indicators Between 3/2022 and 12/2022	0/0	0/0	45,672	0/0	0/0

CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Analysis of Soil Samples – Soil Reactions, Field Experiments with Drought in Domanínk	0/0	0/0	87/3	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Analysis of Soil Samples – Soil Reactions, Field Experiments with Drought	0/0	0/0	189/7	0/0	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Analysis of Soil Samples – Soil Reactions, Field Experiments with Drought	0/0	0/0	327/13	0/0	0/0
SPV Pelhřimov, a.s.	Contract Under the Rural Development Programme	0/0	0/0	2,831/112	0/0	0/0
EG.D. a.s.	Biodiversity Development – Careful Maintenance and Controlled Planting in the Protection Zones of Distribution Lines of EG.D, a.s., a Member of the E.ON Group	0/0	0/0	242/10	0/0	0/0
Moravoseed CZ a.s.	Modification and Extension of Internal Methodology for Identification of Head Cabbage (<i>Brassica Oleracea</i> Convar. <i>Capitata</i>), Based on the Addition of Two Additional Highly Variable Microsatellites to Other Chromosomes	0/0	0/0	141/6	0/0	0/0
Rybářství Doksy spol. s r.o.	Ensuring Monitoring of the Chmelař Pond in the 2022 Growing Season	0/0	0/0	65/3	0/0	0/0
Dr. Rahul Kumar (University of Hyderabad, India)	Proteomic Analysis of Plant Material, University of India	0/0	0/0	24/1	0/0	0/0
Ministry of Agriculture	Creation of New Recipes and Verification of Sensory Properties of Beer Types Using Unconsumed Pastry as Secondary Raw Material to Reduce Food Waste	0/0	0/0	200/8	0/0	0/0
VIA ALTA, a.s.	Analysis of Composts	0/0	0/0	98/4	0/0	0/0
The Society for Nature and Hunting.	Research on the Revitalisation of Damaged Environmental Sites	0/0	0/0	496/20	0/0	0/0
Agrikomp Bohemia	Collaboration in the Design of Mixing, Heating and Desulphurisation of the Micro BPS Fermenter	0/0	0/0	258/10	0/0	0/0
Chr. Hansen Czech Republic, s.r.o.	Biogas Production from Maize Silage Samples Affected by Aerobic Stress	0/0	0/0	258/10	0/0	0/0
Via Alta a.s.	Laboratory Analysis	0/0	0/0	98/4	0/0	0/0
LOWEMAT s.r.o.	Research and Development of a Prototype Positive Displacement Pump	0/0	0/0	38/1	0/0	0/0
YARA Agri Czech Republic, s.r.o.	Conducting a Trial with Yara Mila and Yara Vera Fertilisers in a Wheat Crop, Evaluating Yield and Grain Quality	0/0	0/0	48/2	0/0	0/0
Institute of Agricultural Economics and Information State Contributory Organisation	Evaluation of Model Recipes	0/0	0/0	275/11	0/0	0/0
DM Drogerie	1st Year of the DM Academy	0/0	0/0	8/0	0/0	0/0

ATU Kazakhstan	Calculation of the Costs of Internship for PhD Students from Kazakhstan	0/0	0/0	40/2	0/0	0/0
DOMINANT GENETICS s.r.o.	Effect of Iron Level in the Feed Mixture on Shell Colour Stability	0/0	0/0	130/5	0/0	0/0
ADW FEED, a.s.	Fibre in Fattening Chickens	0/0	0/0	69/3	0/0	0/0
Brno University of Technology	Course – Experiments in Pilot Plants of the Institute of Food Technology	0/0	0/0	0/0	45/2	0/0
Wrap Up s.r.o.	Verification of the Effect of Storing Bread and Baked Goods Made According to a Precisely Known Recipe in a Functional Wrap-Up	0/0	0/0	0/0	48/2	0/0
Yara Agri	Conducting a Fertiliser Experiment in a Spring Barley Crop	0/0	0/0	0/0	58/2	0/0
AGRO CS a.s.	Comparison of Efficiency and Economic Evaluation of Harvesting Technologies	0/0	0/0	0/0	61/2	0/0
Ministry of Agriculture	Creation of New Recipes and Verification of Sensory Properties of Beer Types Using Unconsumed Pastry as Secondary Raw Material to Reduce Food Waste	0/0	0/0	0/0	200/8	0/0
ENLINO, a.s.	Analysis of the Impact of Game Preserve Farming on the Forest and Agricultural Ecosystem, Including the Proposal of Possible Compensatory Measures, Based on the Client's Request and Proposal (Hereinafter Referred to as "The Work") in the Matter of the Proposal for the Construction and Recognition of a Preserve for the Backup Breeding of White Deer in the Cadastre of Litošice	0/0	0/0	0/0	87/3	0/0
University Inde	Identification of Proteins in Samples.	0/0	0/0	0/0	48/2	0/0
University of Poznan	Fattening of Broiler Chickens	0/0	0/0	0/0	211/8	0/0
SPV Pelhřimov, a.s.	Modernisation of Pig Breeding Technologies with Higher Integration of ICT and Development of Comparable Calculation Methodologies	0/0	0/0	0/0	566/22	0/0
Addicoo	Analysis of Meat Quality Parameters of Broiler Chickens	0/0	0/0	0/0	46/2	0/0
Rapotín Agro Research	Verification and Testing of Soil Environment Reactions	0/0	0/0	0/0	302/12	0/0
VUCHT, a.s. Bratislava	Plant and Soil Analysis to Evaluate the Effectiveness of Organomineral Fertilisers	0/0	0/0	0/0	39/2	0/0
VUCHT, a.s. Bratislava	Analysis of Plant Matter, Soil and Microbiological Analysis of Soil for Evaluation	0/0	0/0	0/0	42/2	0/0
VUCHT, a.s. Bratislava	Implementation of a Vessel Experiment to Determine the Efficiency	0/0	0/0	0/0	59/2	0/0
GROOWN s.r.o.	Verification and Testing of Soil Environment Reactions	0/0	0/0	0/0	242/10	0/0
Brno University of Technology	Provision of Selected Pedological Analyses	0/0	0/0	0/0	24/1	0/0
Agritec Plant Research s.r.o.	Area Monitoring of Resistance of Selected Harmful Organisms	0/0	0/0	0/0	78/3	0/0

Limagrain	Biological Assessment of the Agroecosystem	0/0	0/0	0/0	142/6	0/0
Four Leaves Agro, Amsterdam	Experiment with Biostimulants in Winter Wheat	0/0	0/0	0/0	22/1	0/0
AGRO 2000 s.r.o.	Creation of a Mass of Production Zones for the Evaluation of the Area Variability of Agricultural Land in the Area of Interest.	0/0	0/0	0/0	125/5	0/0
MJM agro, a. s.	Production of Maps of Production Zones for the Evaluation of Area Variability of Agricultural Land in the Area of Interest of the Client	0/0	0/0	0/0	234/9	0/0
RAGT Czech s.r.o.	Qualitative Analyses of Grain Samples of 57 Varieties and Lines of Winter Wheat	0/0	0/0	0/0	93/4	0/0
EG.D. a.s.	Development of Biodiversity – Careful Maintenance and Controlled Planting in the Protection Zones of HV Distribution Lines in the Hodonín Region of EG.D, a.s., a Member of the E.ON Group.	0/0	0/0	0/0	674/27	0/0
The Jan Evangelista Purkyně University in Ústí nad Labem	Innovative Formulations and Intensification Processes to Improve the Biodegradability of Biodegradable Plastics	0/0	0/0	0/0	400/16	0/0
Ecological Centre Orlov o.p.s.	Optimisation of Methodology for Insect Species Determination Using the COI Gene	0/0	0/0	0/0	166/7	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Collection and Analysis of Intact Soil Samples from the Field Trial	0/0	0/0	0/0	36/1	0/0
InTec Agro Trials, s.r.o.	Evaluation of the Effect of Biostimulants on Grain Yield in Maize	0/0	0/0	0/0	106/4	0/0
KWS OSIVA s.r.o.	Determination of Grain Moisture Changes in Different Maize Hybrids	0/0	0/0	0/0	430/17	0/0
CzechGlobe, Global Change Research Institute of the CAS, R&D&I	Soil Sampling from the Field Trial	0/0	0/0	0/0	89/4	0/0
ADDICOO Group	Analysis of Meat Quality Parameters of Broiler Chickens	0/0	0/0	0/0	0/0	47/1,854
Research Institute of Chemical Technology	Testing the Effect of Granulated Fertilisers with Nitrification Inhibitors in the Nutrition of Wheat, Oilseed Rape and Maize Under Field Conditions	0/0	0/0	0/0	0/0	178/7,022
Pilsner Urquell	Cooperation Agreement on “For Barley” Project and Provision of Services No. 2023.011181	0/0	0/0	0/0	0/0	572/22,564
SOUFLET AGRO	New Generation Wetting Agent	0/0	0/0	0/0	0/0	52/2,051
YARA Agro Czech Republic	Testing Biostimulants in Field Conditions	0/0	0/0	0/0	0/0	26/1,026
Union of Sugar Beet Growers	Implementation of Small-Plot Field Trials for the List of Recommended Sugar Beet Varieties	0/0	0/0	0/0	0/0	50/1,972
Czech Republic – Ministry of Agriculture	Expert Activities Within the Scope of Act No. 76/2002 Coll., on Integrated Pollution Prevention and Control...	0/0	0/0	0/0	0/0	200/7,890

Lovochemie	Small-Plot Field Trials with Winter Wheat and Winter Oilseed Rape, Maize, Sunflower and Soybean, Using Various Fertilisers and Fertilisation Technologies at Two Locations	0/0	0/0	0/0	0/0	424/1,6726
Moravian-Silesian Sugar Refineries	Implementation of Varietal Field Trials with Sugar Beet	0/0	0/0	0/0	0/0	109/4,300
LITHOS 2	Field Trials Focused on Verification of Biological Efficacy of Pheromone Preparation Against the Pest Diabrotica Virgifera	0/0	0/0	0/0	0/0	163/6,430
ÚKZÚZ (Central Institute for Supervising and Testing in Agriculture)	Partial Testing Procedures – Small-Plot Trials According to ÚKZÚZ Methodology	0/0	0/0	0/0	0/0	109/4,300
BIOCONT LABORATORY	Verification of Biological Efficacy of the Parasitic Wasp (<i>Trichogramma brassicae</i>) Against the European Corn Borer Pest (<i>Ostrinia nubilalis</i>) Within the Innovation Voucher No. CZ.01.01.01/05/23_009/0003887	0/0	0/0	0/0	0/0	431/17,002
PRO-BIO Association of Organic Farmers	Professional Activities for the List of Recommended Varieties of Winter Wheat, Spring Wheat and Spring Barley	0/0	0/0	0/0	0/0	88/3,471
ADW FEED	Experimental Verification of Feeding Dry TMR to Production Dairy Cows	0/0	0/0	0/0	0/0	101/3,984
Rostěnice a.s.	Soil Analyses Including Photographic Documentation	0/0	0/0	0/0	0/0	57/2,249
ČR – Ministry of Agriculture of the Czech Republic II.	Examples of Good Practice in Ensuring Effective Management for the Regulation and Eradication of Selected Invasive Non-native Fish Species in Pond Fishery	0/0	0/0	0/0	0/0	303/11,953
VUCHT	Testing the Effect of Humates Used in Corn Nutrition in a Pot Experiment	0/0	0/0	0/0	0/0	67/2,643
BASF	Small-Plot Field Trials with Winter Wheat and Spring Barley	0/0	0/0	0/0	0/0	55/2,170
CZECH CHAMBER OF AGRICULTURE	Small-Plot Field Trials with Winter Wheat, Winter Triticale and Spring Barley	0/0	0/0	0/0	0/0	327/12,899
Maize Research Institute	Establishment of a Breeding Nursery with 104 Maize Lines	0/0	0/0	0/0	0/0	52/2,051
EUROFARMS AGRO-B	Pedological Survey and Basic Description of Individual Soil Probes	0/0	0/0	0/0	0/0	43/1,696
RAGT	Small-Plot Field Trial with 55 Winter Wheat Varieties	0/0	0/0	0/0	0/0	90/3,550
MANATECH	Fermentation Tests of Probio K2 and LAIVEN-Ekobakter Preparations	0/0	0/0	0/0	0/0	28/1,105
Municipality of Moravské Knínice	Preparation of a Verification Study of Management, Review of the Current Management Methods of the Forest Management Unit Moravské Knínice	0/0	0/0	0/0	0/0	67/2,643
YARA Agri CZ	Implementation of Trials with Selected YARA Fertilisers and Products in Spring Barley Crop, Vegetation Monitoring, Evaluation of Grain Yield and Quality	0/0	0/0	0/0	0/0	68/2,682
Lidea Czechia	Implementation of Small-Plot Variety Trials with Sunflower and Soybean	0/0	0/0	0/0	0/0	36/1,420

Research Institute of Agricultural Economics (UZEI)	Basic Agrotechnical Principles of Crop Sequence and Crops for Biomass Production	0/0	0/0	0/0	0/0	10/394
SYNGENTA	Verification of Efficacy of Tested Preparations, Economic Characteristics of Varieties and Testing of Effects on Qualitative and Quantitative Parameters of Field Crops	0/0	0/0	0/0	0/0	205/8,087
Koroprojekta Brno	Calculation, Balance and Preparation of Experimental Feed Mixtures	0/0	0/0	0/0	0/0	104/4,103
Crop Research Institute (CRI), R&D&I	Analysis of 45 Soil Samples from AP HORIZON (0–30 cm)	0/0	0/0	0/0	0/0	72/2,840
Soufflet Agro	Small-plot Trials with a Set of Winter Wheat and Spring Barley Varieties and Breeding Lines	0/0	0/0	0/0	0/0	195/7,692
Ekolive	Small-Plot Field Trials with Biostimulants in Spring Barley and Soybean	0/0	0/0	0/0	0/0	38/1,499
SEED Service	Small-Plot Variety Trial with Sorghum Grown for Silage	0/0	0/0	0/0	0/0	15/592
AZOTER	Small-plot Trial in Maize with the Application of AZOTER F	0/0	0/0	0/0	0/0	56/2,209
Home pond	Small-Plot Trials with Spring Barley, Winter Wheat and Maize	0/0	0/0	0/0	0/0	74/2,919
Agricultural research	Determination of Microbial Parameters in Soil Samples from a Pot Experiment	0/0	0/0	0/0	0/0	42/1,657
Agritec	Areal Monitoring of Resistance of Selected Harmful Organisms to Active Substances of Pesticides in the Czech Republic	0/0	0/0	0/0	0/0	78/3,077
BAYER	Evaluation of Locally Targeted Herbicide Application Using Remote Sensing	0/0	0/0	0/0	0/0	460/18,146
FUSION FOR LIFE	Microbiological Analysis of Food Samples During Storage	0/0	0/0	0/0	0/0	20/789
SYNGENTA	Field Crop Trial Protocols (Autumn 2024 – Spring 2025) – Sunflower, Maize, Winter Barley	0/0	0/0	0/0	0/0	219/8,639
LIDEA FRANCE	Breeding of Hybrid and Line Varieties	0/0	0/0	0/0	0/0	180/7,101
ECOCOAL	Small-Plot Field Trials with Biostimulants in Maize	0/0	0/0	0/0	0/0	60/2,367
FYTOLASER	Small-plot Field Trials in Sugar Beet (14 Variants, 4 Repetitions)	0/0	0/0	0/0	0/0	49/1,933
AGRIMACHINES	Determination of Soil Load by Tractor Unit with Tank or Applicator – Impact of Slurry Applicator Wheel Load on Specific Pressure and Mechanical-Physical Properties of Soil	0/0	0/0	0/0	0/0	124/4,892
Třeboň Fisheries	Performance of an Audit of the Authorisation to Use the Sustainable Fish Farming Trademark	0/0	0/0	0/0	0/0	21/828
Mariánské Lázně Fisheries	Performance of an Audit of the Authorisation to Use the Sustainable Fish Farming Trademark	0/0	0/0	0/0	0/0	23/907

NutriVet	Determination of the Occurrence of Selected Groups of Microorganisms in Soil Plant Matter	0/0	0/0	0/0	0/0	8/316
Brno University of Technology	Pedological Analyses	0/0	0/0	0/0	0/0	19/750
VUKOZ	Development and Verification of Local Measures for Long-term Support of Soil Organisms and Desirable Groups of Invertebrates in Intensively Farmed Agricultural Areas	0/0	0/0	0/0	0/0	660/26,036
BASF	Execution of a Field Fungicide Trial in Sunflower	0/0	0/0	0/0	0/0	61/2,406
BioAktiv	Small-Plot Field Trial with Winter Barley (Plant Nutrition Experiment)	0/0	0/0	0/0	0/0	22/868
Lesy ČR	Stump Management of the Křivoklát Forest Park	399/15,740	632/24,931	0/0	0/0	0/0
Lesy ČR	Elimination of Unproductive Seeds in the Seed Section Using the IDS Method	462/18,225	303/11,953	250/9,862	0/0	0/0
Czech University of Life Sciences Prague	The Economics and Cultivation of Birch Stands as an Alternative to the Regeneration of Declining Spruce Stands in the Czech Republic	115/4,536	40/1,578	0/0	0/0	0/0
Lesy ČR	Options for Remediation of Harvested Bark Beetle Wood and Standing Infested Trees With Electricity	61/2,406	0/0	0/0	0/0	0/0
Vysočina Region	A Model for the Design of Modifications of the Tree Species Composition of Stand Mixtures With Regard to Ecological Stability and Economics of Forest Management in the Natural Conditions of the Highlands	35/1,381	0/0	0/0	0/0	0/0
Lesy ČR	Defensive Measures Against the Northern Bark Beetle	230/9,073	474/18,698	0/0	0/0	0/0
Landfill Bystřice	Landfill Imaging for the Purpose of Calculating Cubic Capacities	2/79	0/0	0/0	0/0	0/0
EUROFARMS JIHLAVA s.r.o.	Analysis of Soil Samples	0/0	0/0	0/0	0/0	0/0
ÚAPP Brno	C/N Analyses of 25 Selected Samples from the Research Brno-Trnitá: Vlněna, CDE stage	5/197	2/79	0/0	0/0	0/0
Ministry of Agriculture of the Czech Republic	Elaboration of the Opposition to the Documents for the Newly Prepared Tax Tables and Submission	49/1,933	0/0	0/0	0/0	0/0
Archaeological Centre Olomouc	Analysis of TOC, TS, and TN from Well Fillings in Ostrov for 29 Samples	8/316	0/0	0/0	0/0	0/0
CARE ČR z.s.	Livelihood Stabilisation and Development in Response to Climate Change, Southern Province, Zambia	216/8,521	334/13,176	0/0	0/0	0/0
UNDP Istanbul Regional Hub (Turkey)	Production of Innovative Solar Dryers in Cambodia	26/1,026	791/31,203	0/0	0/0	0/0
DUHA movement Olomouc	Monitoring of a Large Predator	18/710	0/0	0/0	0/0	0/0
SAFETY PRO s.r.o.	Technical Assistance in the Implementation of Wooden Structures on the Project "D1 Motorway 0137 – D 131 SSÚD Přerov"	113/4,458	438/17,278	0/0	0/0	0/0

Regional Police Directorate of the Zlín Region	Expert Report No. 142/2020	3/118	0/0	0/0	0/0	0/0
Nature and Landscape Protection Agency	Microclimate of the Macocha Abyss and Monitoring of the Population Dynamics of the Endemic Matthioli's Moravian Crustacean	56/2,209	19/750	17/671	92/3,629	0/0
Czech University of Life Sciences Prague	Analysis of Sedimentary Samples	0/0	17/671	0/0	0/0	0/0
Charles University	Genetics of the Wolf Population	0/0	3/118	4/158	84/3,314	0/0
Village Srnojedy	Preparation of a Pedological Survey for the Exclusion from the Agricultural Land Fund in the Cadastre Area Srnojedy	0/0	55/2,170	0/0	0/0	0/0
Silva Tarouca Research Institute	Hydropedological Analysis of 24 Soil Profiles	0/0	66/2,604	0/0	0/0	0/0
Global Change Research Institute of the Czech Academy of Sciences, Public Research Institute	Soil Analysis Station Rájec	0/0	2/79	20/789	0/0	0/0
Global Change Research Institute of the Czech Academy of Sciences, Public Research Institute	Adaptation Strategies for the Sustainability of Ecosystem Services and Food Security Under Adverse Natural Conditions	0/0	5/197	67/2,643	0/0	0/0
National Heritage Institute Kroměříž	Expert Opinion on the Impact of Forest Harvesting Consequences on the Condition of the Ruins of Šaumburk Castle	0/0	8/316	0/0	0/0	0/0
Lesy ČR	Traditional and Contemporary Forest Management in the Křivoklátsko Forest Enterprise	35/1,381	323/12,742	1,377/ 54,320	0/0	0/0
DUHA movement Olomouc	Monitoring of a Large Predator	0/0	231/9,112	55/2,170	0/0	0/0
CARE ČR	Implementation of Agroforestry Research and Activities in Zambia within the Project "Livelihood Stabilisation and Development....."	0/0	524/20,671	0/0	0/0	0/0
Caritas Czech Republic	Implementation of Agricultural Production Analysis and Potential for Integrated Farming Implementation in the Mayukwayukwa Refugee Area within the Project "Support for Education (Lusaka) and Livelihoods of Refugees and Host Communities in Zambia	0/0	176/6,943	0/0	0/0	0/0
Lesy ČR	The Effect of Stratification Time and the Use of Thermotherapy in the Pre-Sowing Preparation of Beech Nuts	0/0	405/15,976	250/9,862	664/26,193	0/0
Lesy ČR	Monitoring of Biodiversity and Ecological Changes in Floodplain Forests and Meadows in the Area of the Confluence of the Rivers Dyje and Morava	0/0	678/26,746	1,217/ 48,008	2,642/ 104,221	0/0

Military Forests and Farms	Independent Assessment of Changes in Property Relations of the State Enterprises Lesy ČR and Vojenské lesy a statky ČR	0/0	80/3,156	0/0	0/0	0/0
Institute for Christian-Democratic Politics	Expert Research and Elaboration of Identification of Impacts on Forestry and Forest Management of the "Fit for 55 – EU Green Transformation Plan" Package in Key Documents	0/0	18/710	0/0	0/0	0/0
Atregia	Research Activities in the Field of Forest Hydrology	0/0	184/7,258	0/0	0/0	0/0
Water Supply and Sewerage Břeclav	Vegetation Restoration of the Catchment Area in Nová Ves near Pohořelice	0/0	120/7,434	0/0	0/0	0/0
CEMEX Sand	Eco-Monitoring of the Spytihnev – South Area	0/0	94/3,708	0/0	0/0	0/0
ASITIS	Study of the Water Regime of the Štěpánka Forest Park	0/0	75/2,959	0/0	0/0	0/0
Forestry and Game Management Research Institute (FGMRI)	Restoration of Calamitous Areas	0/0	245/9,665	321/12,663	34/1,341	0/0
Landfill Bystrice	Landfill Imaging for the Purpose of Calculating Cubic Capacities	0/0	17/671	0/0	0/0	0/0
Ostrava Museum	Dendrochronological Analysis of 2 Samples	0/0	2/79	0/0	0/0	0/0
Museum of East Bohemia in Pardubice	Dendrochronological Dating of Wooden Structures	0/0	7/276	0/0	0/0	0/0
Museum of the Podblanicko Region	Dendrochronological Dating and Anatomical Identification of Archaeological Wooden Samples (Skalkov)	0/0	6/237	0/0	0/0	0/0
TIC Brno	Tree Stability Assessment	0/0	20/789	0/0	0/0	0/0
City of Kroměříž	Assessment of the Condition of the Spruce Tree for Its Installation as a Christmas Tree in the Great Square in Kroměříž	0/0	17/671	0/0	0/0	0/0
Technologies of the Capital City of Prague	Assessment of the Operational Safety of the Tree Before Its Installation on the Old Town Square in Prague	0/0	32/1,262	0/0	0/0	0/0
Municipal District of Prague 4	Expert Opinion-Assessment of Operational Safety of 2 Acacia Trees	0/0	14/552	0/0	0/0	0/0
Czech Environmental Inspection	Expert Opinion on the Assessment of Tree Trimming in Hradec Králové	0/0	14/552	0/0	0/0	0/0
PLAN 5 s.r.o.	Carrying Out and Evaluation of the Tensile Test and Drawing Up an Expert Opinion on the Condition of the Tree (Uherský Brod)	0/0	18/710	0/0	0/0	0/0
Statutory City of Hradec Králové	Assessment of the Condition of Trees-Beech.	0/0	40/1,578	0/0	0/0	0/0
Municipal District of Prague Kunratice	Preparation of an Expert Opinion-Assessment of the Operational Safety of 2 Acacia Trees	0/0	15/592	0/0	0/0	0/0
Šumava National Park Administration	Revision Expert Opinion to Determine the Condition and Prospects of the Memorial Tree in the Village of Strážný	0/0	33/1,302	0/0	0/0	0/0

National Heritage Institute	Expert Opinion (Oak, Lysice Chateau)	0/0	8/316	0/0	0/0	0/0
DEZA a.s.	Impregnation Tests with DEZA Creosote Oil and Oil from Another Manufacturer	0/0	68/2,682	0/0	0/0	0/0
Masaryk University Brno	Manufacture and Testing of Plates for Complex Physical and Mechanical Property Tests	0/0	8/316	0/0	0/0	0/0
ORLIMEX (1)	Test of Mechanical Properties of Birch Plywood	0/0	23/907	0/0	0/0	0/0
ORLIMEX (2)	Cooperation in the Innovation of Plywood Edge Finishing	0/0	83/3,274	177/6,982	0/0	0/0
Danzer Bohemia Dýhána	Test of Physical and Mechanical Bonding Properties	0/0	50/1,972	0/0	0/0	0/0
egoe kovo a.s.	Carrying Out a Laboratory Test to Determine the Resistance of Thermally Modified Pine and Ash Wood to Wood-Destroying Fungi	0/0	77/3,037	0/0	0/0	0/0
REFORK SE	Species Identification of Wood Shavings Samples	0/0	12/473	0/0	0/0	0/0
Statutory City of Brno	Expert opinion (Impact of the Construction on the Tree Line)	0/0	2/79	11/434	0/0	0/0
VYDONA s.r.o.	Development of Three New Generations of Multi-Cutting Section Machines with Regard to Research on Process Effects in Machining	0/0	49/1,933	236/9,310	0/0	0/0
Jihlava Municipal Forest Administration	Analytical Study of the Management of the Company Municipal Forests Management Jihlava and the Revitalisation of the Company Premises	0/0	0/0	149/5,878	0/0	0/0
Nature and Landscape Protection Agency of the Czech Republic	Assessment of the Influence of Interventions in the Knee Stands of the Jeseníky Mountains on the Parameters of Their Hydric and Soil Protection Capacity	0/0	0/0	124/4,892	0/0	0/0
ALFA Blades a.s.	Testing of Blades Installed in a Ring Sprayer for Use in the Disintegration of Native and Recycled Wood	0/0	0/0	153/6,036	0/0	0/0
ARCHAIA Praha z.ú. 1	Dendrochronological and Anatomical Analysis of Wood Samples	0/0	0/0	4/158	0/0	0/0
ARCHAIA Praha z.ú. 2	Dendrochronological and Anatomical Analysis of Wood Samples	0/0	0/0	9/355	0/0	0/0
Bibracte CPCC (France)	The Implementation of Pedological Survey	0/0	0/0	354/13,964	14/552	0/0
Caritas Czech Republic	Livelihood Stabilisation and Development in Response to Climate Change, Southern Province, Zambia	0/0	0/0	387/15,266	0/0	0/0
Caritas Czech Republic	Implementation of Agricultural Production Analysis and Potential for Integrated Farming Implementation in the Mantapala/Meheba Refugee Area within the Project "Support for Education (Lusaka) and Livelihoods of Refugees and Host Communities in Zambia"	0/0	0/0	300/11,834	0/0	0/0
Cemex	Eco-Monitoring of the Spytihněv – South Area	0/0	0/0	105/4,142	0/0	0/0

Českomoravský štěrk a.s.	Botanical, Arachnological, and Carabidological Research of the Koproška Site in the Mining Area	0/0	0/0	702/27,692	0/0	0/0
ČZU Praha	Preparation of the Expert Report	0/0	0/0	64/2,525	0/0	0/0
Danzer Bohemia Dýhářna s.r.o.	Test of Physical and Mechanical Bonding Properties for Veneers with the Same Moisture Content	0/0	0/0	40/1,578	2/79	0/0
Danzer Bohemia Dýhářna s.r.o.	Test of Physical and Mechanical Bonding Properties for Veneers with Different Moisture Content	0/0	0/0	36/1,420	2/79	0/0
Danzer Bohemia Dýhářna s.r.o.	Testing the Physical Bonding Properties of Samples Taken from Production	0/0	0/0	9/355	0/0	0/0
Danzer Bohemia Dýhářna s.r.o.	Test of Physical and Mechanical Properties of Bonding for Different Moisture Contents of Veneers – OAK	0/0	0/0	43/1,696	0/0	0/0
Danzer Bohemia Dýhářna s.r.o.	Test of Physical and Mechanical Bonding Properties for Veneers with Different Moisture Content	0/0	0/0	43/1,696	0/0	0/0
City of Mikulov	Geotechnical Assessment of Rock Outcrops and Slopes in Kozí hrádek, Mikulov	0/0	0/0	9/355	0/0	0/0
Sedlčany City Museum	Dendrochronological and Anatomical Analysis of Samples from House no. 23 in Sedlčany	0/0	0/0	2/79	0/0	0/0
Mistra	Operational Tests Of Planting Success Rate Of Transplants Moved To Calamity Clearings Of Forest Stands Using The Tree Seedling (Transplant) Lifter	0/0	0/0	32/1,262	0/0	0/0
Municipal Authority of Jeseník	Expert Opinion – Norway Maple	0/0	0/0	17/671	0/0	0/0
Museum of the Podblanicko Region	Dendrochronological Dating and Anatomical Identification of 2 Archaeological Wooden Samples from the Excavations of the Pýchovec Pond	0/0	0/0	2/79	0/0	0/0
National Heritage Institute	Dendrochronological and Anatomical Analysis of 4 Wood Samples from the Research	0/0	0/0	3/118	0/0	0/0
Ostrava Museum	Conducting Dendrochronological Analysis of Samples	0/0	0/0	4/158	0/0	0/0
Sedlčany City Museum	Dendrochronological and Anatomical Analysis of Photographs of Cross-Sections of Subfossil Wood from the Kostomlátky Gravel Pit	0/0	0/0	2/79	0/0	0/0
Secupack	Manufacture and Testing of Disposable Plates Made from Brewery Malt and Other Additives	0/0	0/0	24/947	116/4,576	0/0
Trosky State Castle	Survey of the Condition of the Gallery in the Baba Tower of Trosky Castle	0/0	0/0	20/789	0/0	0/0
Statutory City of Ostrava	Expert Opinion on the Horse Chestnut Tree on Plot No. 2620/20 Cadastral Area of Moravská Ostrava	0/0	0/0	10/394	0/0	0/0
STU in Bratislava (Slovakia)	Pedological Analyses	0/0	0/0	25/986	0/0	0/0
Technická správa komunikací hl. m. Prahy, a.s.	Performing Tensile Tests on Selected Trees Managed by TSK, a.s.	0/0	0/0	126/4,970	0/0	0/0

TIC Brno	Tree Stability Assessment	0/0	0/0	20/789	0/0	0/0
UNDP Istanbul Regional Hub (Turkey)	Use of Mango Pits as a Source of Valuable Fats and Renewable Energy	0/0	0/0	19/750	893/35,227	0/0
Nature Conservation Agency of the Czech Republic	Implementation of Measures Within the One Nature Project	0/0	0/0	42/1,657	0/0	0/0
Global Change Research Institute of the Czech Academy of Sciences	Analysis of 24 Soil Samples for Carbon, Nitrogen and pH Including Sample Grinding	0/0	0/0	10/394	0/0	0/0
Global Change Research Institute of the Czech Academy of Sciences	Laboratory Determination of Mechanical and Hydrophysical Properties from Qualitatively Collected Soil Samples in Kopecký Rollers, Including Determination of the Skeleton Mass Fraction	0/0	0/0	10/394	0/0	0/0
Global Change Research Institute of the Czech Academy of Sciences	Soil Survey for TA ČR NIVA	0/0	0/0	33/1,302	0/0	0/0
Silva Tarouca Research Institute for Landscape	Analysis (Thermal Fractionation of Carbon)	0/0	0/0	50/1,972	0/0	0/0
Silva Tarouca Research Institute for Landscape	Analysis (Thermal Fractionation of Carbon)	0/0	0/0	16/631	0/0	0/0
Brno University of Technology	Pedological Investigation	0/0	0/0	46/1,815	0/0	0/0
Brno University of Technology	Analysis and Prediction of the Development of Raw Timber Stocks in Forest Stands and the Development of the Available Raw Material Base of Forest Dendromass for Technological and Energy Purposes in the Pelhřimovka Region	0/0	0/0	55/2,170	0/0	0/0
Brno University of Technology	Analysis and Prediction of the Development of Raw Timber Stocks in Forest Stands and the Development of the Available Raw Material Base of Forest Dendromass for Technological and Energy Purposes in the Vsetín Region	0/0	0/0	82/3,235	0/0	0/0
Wienberger	Creation of a Biodiversity Action Plan for the Hranice and Jezernice Sites	0/0	0/0	100/3,945	0/0	0/0
VYDONA	Development of 3 new Generations of Multi-Blade Sectional Tools with Regard to Research on Process Effects in Machining	0/0	0/0	129/5,089	0/0	0/0
MISTRA	Operational Tests Of Planting Success Rate Of Transplants Moved To Calamity Clearings Of Forest Stands Using The Tree Seedling (Transplant) Lifter	0/0	0/0	0/0	175/6,903	0/0
Archaeological Centre Olomouc	Dendrochronological Dating of the Well from Opatovec	0/0	0/0	0/0	7/276	0/0
City of Holešov	Determination of Species in Two Plywood Samples from the "Green Roof on the Funeral Hall Building" Construction	0/0	0/0	0/0	8/316	0/0

Česká zbrojovka a.s.	Analysis of the Mechanical Properties of Walnut Wood and the Effect of Defects on the Dynamic Response of Walnut Cross-Sections	0/0	0/0	0/0	38/1,499	0/0
Česká zbrojovka a.s.	Analysis of Method and Equipment Design Options for Post-Carriage Quality of Cross-Sections for the Production of Gunstocks	0/0	0/0	0/0	39/1,538	0/0
Česká zbrojovka a.s.	Modal Analysis of Gunstock Cross-Section	0/0	0/0	0/0	37/1,460	0/0
Česká zbrojovka a.s.	Testing of Non-Destructive Methods for Assessing the Quality of Billets for Gunstock Production	0/0	0/0	0/0	39/1,538	0/0
Mejzlík Propellers s.r.o.	Design of Material and Technological Process for the Production of a Wooden Core from Modified Wood Using Adhesives	0/0	0/0	0/0	204/8,047	0/0
Danzer Bohemia Dýhárna s.r.o.	Testing the Physical Bonding Properties of Samples Taken from Production.	0/0	0/0	0/0	9/355	0/0
Museum of the Podblanicko Region	Dendrochronological Dating and Anatomical Identification of Wood from the Rescue Archaeological Excavation "Reconstruction of the Family House in Právnín"	0/0	0/0	0/0	5/197	0/0
National Heritage Institute, Ostrava Office	Dendrochronological Analysis of the Species Identification of the Tree Species	0/0	0/0	0/0	2/79	0/0
National Heritage Institute, Ostrava Office	Dendrochronological and Anatomical Analysis of Wood Samples from Ostrava Research	0/0	0/0	0/0	6/237	0/0
National Heritage Institute, Ostrava Office	Dendrochronological Analysis – Dating from Archaeological Research	0/0	0/0	0/0	1/36	0/0
Academy of Fine Arts in Prague	Identification of Wood Samples	0/0	0/0	0/0	4/158	0/0
Slovak Museum in Uherské Hradiště	Dendrochronological Analysis of the Sample (Hluk Fortress)	0/0	0/0	0/0	5/197	0/0
Unilin Flooring Romania S.R.L. (Romania)	Dendrological Assessment of Tree Species According to Samples	0/0	0/0	0/0	8/316	0/0
Mejzlík Propellers s.r.o.	Test of Supplied Wooden Cores	0/0	0/0	0/0	39/1,538	0/0
Česká zbrojovka a.s.	Determination of Physical and Mechanical Properties of Walnut Wood for the Production of Gunstocks	0/0	0/0	0/0	204/8,047	0/0
Roman Catholic Parish Uherský Ostroh	Assessment of the Condition and Extent of Damage to the Wooden Spindle Staircase in the Church Tower of St. Ondřej (Uherský Ostroh)	0/0	0/0	0/0	9/355	0/0
Mejzlík Propellers s.r.o.	Design of the Material and Technological Process for the Production of a Wooden Core from Modified Wood Using Different Types of Adhesives, Together with its Production and Verification of its Properties	0/0	0/0	0/0	5/197	0/0

Danzer Bohemia Dýhářna s.r.o.	Testing of Physical and Mechanical Bonding Properties for Different Moisture Contents of Veneers – OAK	0/0	0/0	0/0	2/79	0/0
Danzer Bohemia Dýhářna s.r.o.	Test Production for Linea – Creating the Ideal Beam – Moisture Measurement	0/0	0/0	0/0	6/237	0/0
Martin Petera	Dendrochronological Analysis	0/0	0/0	0/0	1/39	0/0
ESPAMO LAND s.r.o.	Assessment of the Condition of the Arch Roofing of the Hanesův Mlýn Leisure Complex	0/0	0/0	0/0	4/458	0/0
Ostrava Museum	Dendrochronological Analysis	0/0	0/0	0/0	5/197	0/0
FF servis spol. s r.o.	Measurement of Bending Characteristics, Processing of the Measured Data Set and Their Evaluation	0/0	0/0	0/0	8/316	0/0
Lesy ČR, s.p.	Creation of a Working Procedure and Methodology for the Application of the Forest Management Method Based on Operational Inventory in the Conditions of the State Forests of the Czech Republic	0/0	0/0	0/0	39/1,538	0/0
Lesy ČR, s.p.	Determining the Trapping Capacity of Poisoned Logs During Spruce Bark Beetle Swarming, With a Focus on Peak Swarming	0/0	0/0	0/0	50/1,972	0/0
Cemex	Study of Eco-Monitoring of the Sptihněv – South Area	0/0	0/0	0/0	6/237	0/0
Forestry and Woodworking Chamber of the Czech Republic	Analysis and Prediction of Raw Wood Stocks in Forest Stands of the Czech Republic and Development of the Available Raw Material Base of Forest Dendromass for Technological and Energy Purposes in the Czech Republic	0/0	0/0	0/0	98/3,866	0/0
Ministry of Agriculture of the Czech Republic	A Study of the Trade and GVA Balance of Trade and GVA for Individual Production Segments within the Wood Processing Industry	0/0	0/0	0/0	2/79	0/0
CARE Česká republika z.s.	Implementation of Subcontracting Activities for the Project “Livelihood Stabilisation and Development in Response to Climate Change, Southern Province, Zambia”	0/0	0/0	0/0	2/79	0/0
Caritas Czech Republic	Implementation of an Analysis of Agricultural Production and Potential for the Implementation of Integrated Farming in the Mantapala/Mehepa Refugee Area in Zambia	0/0	0/0	0/0	7/276	0/0
Nature and Landscape Protection Agency of the Czech Republic	Implementation of Measures Within the Framework of the “One Nature” Project (LIFE Project)	0/0	0/0	0/0	12/473	0/0
Caritas Czech Republic	Activities related to the implementation of the project “Green Solutions for Sustainable Development and Growth in Monze District” in Zambia.	0/0	0/0	0/0	4/158	0/0

Lesy České republiky, s.p.	Evaluation of the Growth and Prosperity of Plantings of Introduced Tree Species at the Vítkov Forest Management	0/0	0/0	0/0	495/19,527	0/0
Masaryk University – Faculty of Arts	Thermal Differentiation Analyses of Carbon	0/0	0/0	0/0	6/237	0/0
Global Change Research Institute of the Czech Academy of Sciences	Laboratory Determination of Hydrolimits	0/0	0/0	0/0	50/1,972	0/0
Geological Institute of the CAS	TOC Analyses	0/0	0/0	0/0	17/671	0/0
University of South Bohemia in České Budějovice	Pedological Analyses of Eight Sedimentary Materials from Extinct Villages	0/0	0/0	0/0	66/2,604	0/0
Wienerberger s.r.o.	Creation of a Biodiversity Action Plan for Wienerberger Sites	0/0	0/0	0/0	40/1,578	0/0
Bibracte EPCC (France)	The Implementation of Pedological Survey	0/0	0/0	0/0	397/15,661	0/0
Association of Forestry and Wood Processing Enterprises	Analysis of Coniferous Timber Price Indexation Under Forestry Contracts with Timber Sales for the Period 2022+	0/0	0/0	0/0	55/2,170	0/0
Lesy ČR	Restoration of Coppice with Standards Management in Special-Purpose Forest Category	0/0	0/0	0/0	0/0	1,279/ 50,454
Lesy ČR	Cultivation of Coppice with Standards and Proposal of Forest Management	0/0	0/0	0/0	0/0	109/4,300
Egoe kovo	Professional Measurement of Wood Samples Water Absorption (70 Samples) Including Evaluation of Measured Data	0/0	0/0	0/0	0/0	13/513
GRUPO ANTOLIN OSTRAVA	Proposal for Material and Technological Procedure for Comprehensive Waste Disintegration, Board Manufacturing and Analysis of Physical and Mechanical Properties of Materials	0/0	0/0	0/0	0/0	94/3,708
Petr Junek	Dendrochronological Dating of Six Samples from Wooden Structures of a Half-Timbered Building in the Village of Koloděje nad Lužnicí	0/0	0/0	0/0	0/0	4/158
FORESTS OF THE CZECH REPUBLIC Židlochovice	Soil Analysis And Soil Testing For The Víšňové Forest Nursery	0/0	0/0	0/0	0/0	11/434
MZ ENGINEERS	Preparation Of An Expert Opinion For The Update Of The Land-Use Plan In Loučná Pod Klínovcem And For The Exemption Of Land From Forest Land Resources For The Subject Areas Of The Cadastral Territory Loučná pod Klínovcem	0/0	0/0	0/0	0/0	48/1,893
BEDNÁŘ INTERIOR	Innovation of Storage Furniture Production Programme (CZ.01.01.01/05/23_009/0002334)	0/0	0/0	0/0	0/0	532/20,986
Ing. Pavel Keller	Assessment Of The Impact Of The Log Building Construction In The Cadastral Area Of Dolní Falknov On The Soil Environment	0/0	0/0	0/0	0/0	25/986

CEMEX Sand	Development Of The Eco-Monitoring Study For The Spytihněv – South Area	0/0	0/0	0/0	0/0	142/5,602
EMBRE s.r.o.	Optimisation of Furniture Manufacturing Processes	0/0	0/0	0/0	0/0	599/23,629
Museum of the Podblanicko Region	Dendrochronological Analysis of Two Wood Samples from the “Louňov Pond Desludging” Research	0/0	0/0	0/0	0/0	2/79
Wienerberger s. r. o.	Implementation of BAP at Wienerberger Eurostroj Sites in České Budějovice, Teplice and Pipelife in Otrokovice	0/0	0/0	0/0	0/0	79/3,116
Bakof group	Measurement and Analysis of Bending Characteristics of Materials Manufactured from Beech Sawdust and Fungal Mycelium	0/0	0/0	0/0	0/0	603/23,787
Inmapy s.r.o.	Services Within the Project “Initial Analysis of Data Environment in Zambia in the Context of Integrated Landscape Management”	0/0	0/0	0/0	0/0	280/1,1045
Nature Conservation Agency of the Czech Republic – Wolf Monitoring	Intensive Monitoring Focused on the Occurrence Area of Grey Wolf Individuals in the Jablunkov and Trinec Region	0/0	0/0	0/0	0/0	244/9,625
Grupo Antolín Ostrava II	Presentation Of Results From Board Production And Analysis Of Physical And Mechanical Properties Of Materials	0/0	0/0	0/0	0/0	11/434
Caritas	Activities Related to the Implementation of the Project “Green Solutions for Sustainable Development and Growth in Monze District” in Zambia	0/0	0/0	0/0	0/0	785/3,0966
The Town of Bystřice nad Pernštejnem	Study of Off-road Cycling Trails	0/0	0/0	0/0	0/0	50/1,972
GAS NET	Research Work – Study “Optimisation of GAS NET Product Pipeline Protection Zone Corridors” – Adamov – Blansko Locality	0/0	0/0	0/0	0/0	1,150/ 45,365
HABITUS ARBOR Ltd.	Performance of Resistograph and Tomograph Testing	0/0	0/0	0/0	0/0	101/3,984
The City of Jevíčko	Dendrochronological Assessment of the Condition of Timber Beams of the Cultural Monument Granary Jevíčko and Wooden Water Pipeline in the Cadastral Area Jevíčko	0/0	0/0	0/0	0/0	4/158
Dřevotvar	Timber Drying Optimisation	0/0	0/0	0/0	0/0	593/23,393
(Beautification Society) Stříbrná Skalice	Dendrochronological Dating of Samples from Stříbrná Skalice	0/0	0/0	0/0	0/0	6/237
University of South Bohemia České Budějovice	Comprehensive Pedological Survey of 2 Profiles in Deserted Village Fields	0/0	0/0	0/0	0/0	29/1,144
National Heritage Institute in Ostrava	Dendrochronological and Anatomical Analysis of Wood Samples from 73/22 Ostrava Research	0/0	0/0	0/0	0/0	6/237

ESPAMO LAND	Site Inspection To Assess The Condition Of Load-Bearing Logs Of Experience Accommodation Cottages At The Hanes Mill Leisure Complex	0/0	0/0	0/0	0/0	8/316
CEMEX SAND	Development of the "Biodiversity Management Plan" for Náklo and Spytihněv operations	0/0	0/0	0/0	0/0	249/9,822
MZ ENGINEERS	Preparation Of An Amendment To The Expert Assessment Report For The Update Of The Land-Use Plan In Loučná Pod Klínovcem	0/0	0/0	0/0	0/0	39/1,538
Nature Conservation Agency – One Nature	One Nature – Management of NATURA 2000 Network Sites	0/0	0/0	0/0	0/0	52/2,051
FF Servis	Tests of Physical and Mechanical Properties of Composite Boards	0/0	0/0	0/0	0/0	575/22,682
Brno University of Technology Faculty of Civil Engineering	Measurement Of DVS On Clay Samples	0/0	0/0	0/0	0/0	21/828
Geological Institute of the CAS	Elementary Analysis of C, N, S and Thermal Analysis (Fractionation) of Carbon	0/0	0/0	0/0	0/0	15/592
Ivo Tomášek	Dendrochronological Dating of 4 Samples from the Wooden Ceiling of the "Na Herostké" Inn in the Village of Hoštice-Heroltice	0/0	0/0	0/0	0/0	3/118
Grupo Antolin Ostrava 2.	Complex Waste Disintegration With Wood, Network Analysis, Board Manufacturing And Analysis Of Physical And Mechanical Properties Of Materials	0/0	0/0	0/0	0/0	158/6,233
Diocese of Hradec Králové	Analytical Study – Assessment of Suitability for Construction/Purchase of a Sawmill Operation within the Jurisdiction of the Diocese of Hradec Králové	0/0	0/0	0/0	0/0	236/9,310
MZ ENGINEERS	Assessment of the Intent to Build a Ski Slope and Cable Car on the Klínovec – Fuchsloch Route and an Observation Tower within the "Ore Mountains at Your Fingertips" Project as a Basis for Temporary Exemption from Forest Land Resources	0/0	0/0	0/0	0/0	305/12,032
Brno University of Technology Faculty of Chemistry	Wood as a Material	0/0	0/0	0/0	0/0	3/118
Museum of Podblanicko Region 2	Dendrochronological Analysis Of 2 Wood Samples From The Děkanovice Research – Reconstruction Of A Small Water Reservoir In Lestvy	0/0	0/0	0/0	0/0	2/79
Market Town of Lomnice	Professional Tomographic Measurement of 8 Trees	0/0	0/0	0/0	0/0	35/1,381
Regional Museum in Vysoké Mýto	Dendrochronological Dating of Samples from the Rescue Archaeological Research in Ústí nad Orlicí	0/0	0/0	0/0	0/0	1/39
NPÚ Olomouc	Dendrochronological Analysis of 10 Wood Samples from Archaeological Research in Olomouc – Prior Department Store	0/0	0/0	0/0	0/0	13/513

Dřevojas	Development of Bathroom Furniture Design for Bathroom Reconstruction	0/0	0/0	0/0	0/0	603/23,787
MP-Ekowood	Dendrochronological Dating of 6 Samples from Wooden Ceiling Beams of a Granary in the Village of Chýnov	0/0	0/0	0/0	0/0	5/197
ASIO TECH	Determination of Selected Groups of Microorganisms in Water Samples	0/0	0/0	0/0	0/0	15/592
Archaia Olomouc	Dendrochronological Dating of 6 Samples from the Zlatý Potok Site	0/0	0/0	0/0	0/0	8/316
Danzer BOHEMIA	Classification of Samples Into Oak Species	0/0	0/0	0/0	0/0	18/710
MYCO	Assessment of Toxicity and Biodegradability of Mycelium-Based Material VZ.01.01.01./05/23_009/0003320	0/0	0/0	0/0	0/0	593/2,3393
BaF Projection	Reduction of Hazardous Substances in Wastewater Treatment Plant Sludge Using Biotechnologies VZ.01.01.01./05/23_009/0004498	0/0	0/0	0/0	0/0	593/2,3393
ČEZ a.s.	Pruning Under Electrical Power Lines	0/0	0/0	0/0	0/0	3/118
European Climate Foundation	Measurement of CABM Impact on the Czech Republic	0/0	580/22,882	288/11,347	0/0	0/0
European Parliament European Conservatives and Reformists Group	Expert Study on Increasing Competitiveness of Micro-and-Small Farms in an Environment of Sustainable Development in Comparison to Large Farms	0/0	195/7,693	53/2,083	0/0	0/0
Council of Europe	Integrity in Higher Education	110/4,352	0/0	0/0	0/0	0/0
QI GROUP	Mobile application	0/0	0/0	0/0	0/0	431/17,002
BeVi AIFlexCo	Exhibit Eye-Tracking and Measurements	0/0	0/0	0/0	0/0	17/671
CleverMaps	Comprehensive Testing and Analysis of the Existing Software of CleverMaps, a.s., with Regard to Identifying Performance Issues	0/0	0/0	0/0	0/0	105/4,142
SIMPLE	Processing of Economic Impact Analysis	0/0	0/0	0/0	0/0	43/1,696
Ministry of Agriculture	Additional activities	195/7,692	0/0	0/0	0/0	0/0
NEA biotek s.r.o.	Additional Activity –SV – Verifying the Possibility of Using the Lalitha Preparation on Selected Horticultural Crops	19/750	72/2,840	0/0	0/0	0/0
KERA GREEN s.r.o.	Additional Activity – SV – Verifying the Possibility of Using a Natural Substance-Based Preparation on Selected Horticultural Crops	60/2,367	105/4,142	0/0	105/4,142	0/0
Petr Divácký Šardice	Additional Activity – SV – Verifying the Possibilities of Using Vermicompost on Selected Horticultural Crops	0/0	0/0	0/0	25/986	0/0
Silesian University in Opava	Concept of a Joint Study Programme – Educational Activities of the Eden Silesia Project – Educational and Research Park	0/0	0/0	390/15,385	0/0	0/0

Municipality Mikulčice	Břízky Park in Mikulčice – Study and Expert Assessment for Greenery Implementation After the Tornado of 24/ 06/ 2021	0/0	0/0	0/0	160/6,312	0/0
David Smetana, Svobodné Dvory	Support for the Development of New Procedures	0/0	0/0	0/0	0/0	0/0
LIPINA Agro, Hrubá Vrbka	Support for the Development of New Products, Processes, and Technologies in Agricultural Primary Production	4/158	0/0	0/0	0/0	0/0
VYKRUT, garden services	Preparation for the Development of New Sector Standards for Landscape Architecture through Contract Research.	0/0	5/197	102/4,024	0/0	0/0
Envi Product, s.r.o.	Implementation of a Field Experiment with HUMANIC Agro Preparations on Selected Vegetable Species	0/0	70/2,761	0/0	0/0	0/0
MK OBCHOD	Implementation of a Field Experiment with Samples of Selected Organic Fertilisers on Selected Crop Species	0/0	230/9,072	0/0	0/0	0/0
Institute of Archaeology of the Czech Academy of Sciences, Brno, public research institution	Contract Research – Prospecting of Protohistoric Sites – Acquisition, Processing, and Interpretation of Aerial Multispectral Drone Images.	43/1,696	37/1,460	0/0	0/0	0/0
Brickyard, a.s., Olomouc	Study of Brickworks Olomouc	0/0	0/0	0/0	93/3,669	0/0
SEVA – FLORA s.r.o.	Testing Fruit Tree Varieties for the Presence of Viruses	489/19,260	408/16,095	268/10,572	243/9,586	0/0
OVOČNÁ A OKRASNÁ ŠKŮLKA BIELE KARPATY s. r. o. (SK)	Testing Plant Material for the Presence of Phytoplasms	0/0	0/0	0/0	24/947	0/0
Landesverband der Absolventen landwirtschaftlicher Lehranstalten in NÖ (D)	Testing Plant Material for the Presence of Phytoplasms, Seed Collection	0/0	0/0	0/0	75/2,959	0/0
CEZEA Šlechtitelská stanice, a.s.	Yield Trials of Silage Maize	47/1,854	55/2,170	56/2,209	0/0	0/0
Nature Conservation Agency of the Czech Republic	Preventive Assessment of Landscape Character of the Protected Landscape Area Soutok	0/0	0/0	0/0	0/0	177/6,982
SEVA-FLORA	Testing Of Fruit Tree Varieties – Mother Trees Of The Genus Prunus For The Presence Of Viruses In A Spatial Isolator In Valtice	0/0	0/0	0/0	0/0	572/22,564
Mattoni	Architectural Study of Outdoor Areas of the Mattoni Company Premises in the Municipality of Malacky	0/0	0/0	0/0	0/0	263/10,375
STROMMY COMPANY	Research and Development of an Intelligent Blue-Green Insulation and Cooling System for Building Envelopes	0/0	0/0	106/4,181	164/6,469	0/0
Lovochemie, a.s.	Establishment of an Experiment and Implementation of Experimental Measurements to Verify the Effect of Mineral Fertiliser Coated with a Polymer Layer	0/0	75/2,959	54/2,130	82/3,235	0/0

City of Milovice	Development of Specific Documentation for Nature-Based Approaches to Urban Greenery Restoration, Respecting Species Diversity and the Current Needs of Urban Development, through Contract Research.	222/8,757	123/4,852	0/0	0/0	0/0
City of Břeclav	Development of Specific Project Documentation for the Built-Up Area of the City, Comprising Three Cadastral Areas: Břeclav, Charvátská Nová Ves and Poštorná in the Form of Contract Research.	361/14,241	87/3,432	0/0	0/0	0/0
Municipality Stražisko	In-depth Audit of the Management of the Municipality of Stražisko for the Period 2011–2018	0/0	0/0	0/0	0/0	0/0
Institute of Agricultural Economics and Information	Impact of FTA EU – Mercosur on Czech Agriculture and Food Sectors	200/7,889	0/0	0/0	0/0	0/0
Institute of Agricultural Economics and Information	Impact of FTA EU – Japan on Czech Agriculture and Food Sectors	200/7,889	0/0	0/0	0/0	0/0
The city of Tišnov	Local Climate Change Adaptation Strategy and Mitigation Measures of the City of Tišnov	0/0	302/11,932	0/0	0/0	0/0
Porta Microregion	Walking Routes in the Porta Microregion	0/0	0/0	0/0	30/1,183	0/0
Nature and Landscape Conservation Agency of the Czech Republic Regional Office South Bohemia	Preparation of documents for the management plan for the Zlatý potok National Nature Monument – FOREST PART	0/0	0/0	0/0	97/3,842	0/0
ATELIER FONTES, s. r. o.	Study of the Use of the Kozinec Subsidence Area in the Municipality of Doubrava	0/0	0/0	0/0	260/10,262	0/0
City of Mikulov	Evaluation of the Socio-Economic Impact of the Mikulov Art Symposium “Workshop” 30th Year and the Benefits of Building the Municipal Collection of Contemporary Art for the Development of Mikulov	0/0	0/0	0/0	72/2,863	0/0
Institute of Technology and Business in České Budějovice	Strategy and Concept of Joint Research Objectives, Professional Consultations, Functional Cooperation and Participation.	0/0	0/0	0/0	0/0	163/6,430
Municipality of Nová Lhota	Development Programme of the Municipality of Nová Lhota	0/0	0/0	0/0	0/0	4/158
Nature Conservation Agency of the Czech Republic – Protected Landscape Area Jeseníky	Preparation of a Conceptual Study of Nature Trails in the Area of Praděd, Rejvíz and Keprník (Protected Landscape Area Jeseníky)	0/0	0/0	0/0	0/0	230/9,073
Povodí Moravy	The Vlára River and Watercourses of the White Carpathians – Analysis and Unification of Source Materials, Requirements of National Legislations and Methodologies	0/0	0/0	0/0	0/0	279/11,006

St. Anne's University Hospital Brno (FNUSA)	Analysis of Educational Needs and Creation of a System of Education of Technical-Economic Employees of the St. Anne's University Hospital Brno (2023–2024)	0/0	0/0	0/0	55/2,170	0/0
Age management, z. s.	Mapping Work Capabilities in Selected Organisations (2022–2025)	0/0	0/0	30/1,183	30/1,183	0/0
Total		12,324/ 486,167	17,588/ 3,635,962	15,698/ 619,268	12,730/ 509,592	19,194/ 757,160
In the role of another participant						
Provider / Investor	Project name	Support (in thousands CZK/EUR)				
		2020	2021	2022	2023	2024
-	-	-	-	-	-	-
Total						

Note: Indicate, for example, sponsorship donations, resources generated from other own economic activities, foreign subsidy programmes of private entities.

Table 4.10.5 provides a complete overview of projects financed from non-public sources during the period under review. During the period under review, cooperation with industry through contractual research was conducted with nearly 500 entities. The total volume of funds for these activities exceeded CZK 77,534,000/EUR 3,058,540. The projects were implemented based on demand and funding from research and scientific institutions, public administration bodies, private and commercial investors, and others from various fields. This demonstrates the multidisciplinary nature of R&D&I at MENDELU whilst contributing to the development of important cooperation and transfer of basic research results into practice. MENDELU acted as the principal participant in all projects.

4.11 Rules for the use of institutional support for the LCDRO

The HEI will describe the strategy and rules for the use of institutional support for the LCDRO in the management of institutionally supported research activities (e.g., prioritisation of research topics by the HEI according to individual needs, internal grant agencies, incentive tools, support for excellent science) and the method for distribution of institutional support to individual departments/research teams for the period of 2020–2024. The impact on the management of institutionally supported research activities will be described by the HEI using specific examples (e.g. distribution of institutional support in the period of 2020–2024 depending on the evaluation results, examples of supported excellent science projects, etc.).

Maximum 500 words plus 200 words for each example given (max. five examples).

Self-assessment:

The institutional support for Long-term Conceptual Development of Research Organisation (LCDRO) at MENDELU is used to ensure strategic research development and to strengthen scientific excellence. The support is distributed transparently according to the [Rules for LCDRO Distribution](#), which emphasises the quality of outputs, success in international projects, contractual research and applicability of results. The distribution system ensures that 73% of funds are directed towards innovation activities, 15% towards international projects, 8% towards national grants and 4% towards contractual research. This way, the University motivates its constituent parts and research teams towards excellence. Discussions with representatives of University constituents and incorporation of their feedback furthermore enable flexible response to their needs and maximise support effectiveness.

The University has a strong science support tool – the Gregor Johann Mendel Grant Agency (GA GJM). The Agency supports excellent research through categories focused on interdisciplinarity (category A), MENDELU Research Chair Advanced Grant (category B), return of top scientists (category C) or transfer to practice (category D). Category A – interdisciplinary research projects – in particular enables the formation of innovative teams and topics that interconnect various fields and ensure unique results. The MENDELU Internal Grant Agency (IGA) is another key pillar. In the period 2020–2024, it supported 646 specific research projects focused on students and their research activities. Since 2021, the University has also been supporting doctoral students through the MENDELU Ph.D. Talent competition, which has already rewarded 16 students and provided funding for excellent projects totalling CZK 1,500,000/EUR 59,172.

MENDELU is dynamically involved in national programmes such as the National Agency for Agricultural Research, Technology Agency of the Czech Republic and Czech Science Foundation, whilst emphasising international projects. It actively participates in programmes such as Horizon Europe, European Research Council (ERC), Teaming for Excellence and Marie Skłodowska-Curie Actions (MSCA). This engagement enables not only the expansion of research capacities but also strengthens cooperation with leading global institutions, through which MENDELU contributes to addressing global challenges and enhances its prestige at the international level.

MENDELU offers comprehensive support to doctoral study programme students through MENDELU Ph.D. Talent, MENDELU Internal Grant Agency, international internships, motivational scholarships and awards such as the Rector's Award. Ph.D. Talent recognises excellent student projects, whilst IGA annually funds hundreds of research activities. The Ph.D. School organises workshops focused on scientific writing and technology transfer. Students are rewarded for their publication activities and exceptional achievements, through which the university supports their growth and integration into the scientific community.

Example

The University's institutional support is provided based on four key criteria (described above) that reflect the quality of research outputs, benefits from national and international research projects and contractual research. The support is particularly based on scientific excellence through publications in prestigious impact factor journals in the highest quartiles and deciles of Web of Science, including the creation of international patents and other significant results with excellent scientific value. In international research projects, the highest weight is given to participation in programmes such as Horizon Europe, COST or EEA/Norway Grants. The allocation of support is also significantly influenced by income from contractual research carried out for third parties.

Examples of excellent science projects supported by the Internal Grant Agency (IGA)

Individual university departments with doctoral study programmes annually host conferences for doctoral students, which are organised with IGA support. Students present the results of supported projects here. Faculty of AgriSciences organises the conference [MendelNet](#). Examples of awarded contributions in 2024: Evaluation for Spot spraying of Herbicides in Precision Agriculture (Kateřina Kuchaříková, IGA24-AF-IP-044), Optimising Herbicide Application Using UAV-Base Weed Detection: A Comparison of Classification Techniques (Vojtěch Slezák, IGA24-AF-IP-043), Molecular imprinting particles as solution for estradiol water contamination, (Eliška Birgusová, IGA24-AF-IP-036). The student was also among those awarded within MENDELU Ph.D. talent in 2023. The Faculty of Forestry and Wood Technology organises the conference [SilvaNet-WoodNet](#). Examples of awarded contributions: Xylem plasticity in larch, spruce and beech growing in different mixture sites: relations between wood anatomical features and environmental conditions (Viktória Pipířková, IGA24-FFWT-IP-013), Comparison of chemical wood modification processes of carboxylic acid anhydrides and esters in gas and liquid phase (Štěpán Beránek, IGA24- FFWT-IP-033), Does silviculture practice affect the climate-growth relationship in scots pine stands? (Petra Jablonická, IGA24-FFWT-IP-008). Furthermore, the Faculty of Business and Economics organises the conference [PEFnet](#), the Faculty of Regional Development and International Studies organises the conference IGA FRRMS MENDELU and the Faculty of AgriSciences also organises a [student conference](#).

Example

The result of excellent science is a patent that was developed at MENDELU and has been transferred into practice. This is a technology for liquid sample identification using UV radiation exposure with subsequent detection of changes in the optical behaviour of the substance in real time. In 2023, this innovation was licensed (non-exclusive licence; CZK 25,000/year/EUR 986/year) to the startup company Lightly Technologies s.r.o., which is now working on its market launch. The technology is already being tested by major bodies such as the Police Presidium of the Czech Republic, Interpol and other international institutions, especially for the detection of drugs (fentanyl). The application is universal, e.g. rapid detection of adulterated food or analysis of diseases from urine. The technology has also been patented by the European Patent Office, which increases its attractiveness on the international market. The success of the start-up is confirmed by the 2nd place in the final of the EIT Jumpstarter competition (2023). The technology has real commercial potential and can contribute to societal development. The commercialisation of this technology also responds to the recommendations of the evaluators of the previous evaluation. In 2024, the startup received grants totalling EUR 131,731, won prestigious European-level programmes EIT Post-Jumpstarter and EIT InnoStars, and its CEO established key contacts in the USA through the YTILI programme. The startup has also created a new prototype and improved its AI. In 2025, it will focus on preparing serial production, obtaining investment, entering the US market and combating fentanyl.

Example

The most significant achievement in technology transfer was the utility model A Mixture of Purified Fermentation Gases from Grape Must, a Filtration System for Purification, and a Carbonated Beverage Enriched with These Gases". The utility model licence was sold for CZK 4,247,000/EUR 167,535.

The Institute of Viticulture and Enology at the Faculty of Horticulture received the “Achievement of the Year 2021” award for the implementation of an innovative project focused on the reuse of fermentation gases. License agreements for the sale of apricot varieties developed by the institute are concluded through a German distributor Artevos and The Holovousy Fruit Growers Research and Breeding Institute.

Example

Use of a Mixture of Medium-Chain Fatty Acids to Reduce the Content of Carbonyl Compounds in Wine. The innovation (Patent, Document No. 309771) improves the quality of wine and reduces the content of undesirable substances. The research results are licensed to winemaking companies, allowing the implementation of this technology directly in the production process. The innovation has been licensed so far with only one license in 2024, in the amount of CZK 49,000/EUR 1,933). The licence agreement was concluded with the company Vinný dům, spol. s r. o.

NATIONAL AND INTERNATIONAL COOPERATION

4.12 Important collaborations in R&D&I

The HEI will describe specific cases of R&D&I collaboration at the national level (maximum five examples) and the international level (maximum five examples), including examples of concrete results and impacts in the field of R&D&I beneficial for the HEI during the period of 2020–2024.

Maximum 300 words per example.

Self-assessment:

Most national and international collaborations are implemented through research projects that connect the university with leading national and international institutions. These projects support the sharing of know-how, scientific mobility and interdisciplinary approach, which contributes to the development of excellent research and strengthens the university's position in the international scientific community.

R&D&I Collaboration at International Level

1) Plant Pest Prevention Through Technology-Guided Monitoring and Site-Specific Control (PIURPEST), provider: European Commission, duration in years: 2023–2026, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 164,071,000/EUR 6,472,231/ CZK 11,946,000/EUR 471,302, researcher for MENDELU: Dr. Thomas Jung, annotation:

In the context of climate change, pest invasions are expected to increase. This also poses a major threat to the food industry. Early detection and prevention are thus a top priority for Europe in this regard. The PURPEST project will develop and demonstrate an innovative sensor platform that quickly detects 5 key pests when applied in the field, but also when plants are imported, to stop their spread and help reduce pesticide use by at least 50%. The functioning of the sensor platform is based on the detection of pest-specific volatile organic compounds (VOCs) or host plants that are infested by pests. Using this sensor platform, the project will determine the VOC signature of pest-infested plants under different abiotic stress conditions. The project is coordinated from Norway by the research organisation NIBIO. A total of 15 partners are involved in the implementation of the project. The team at the Faculty of Forestry and Wood Technology focuses on pathogens from the genus *Phytophthora*, specifically on *Phytophthora ramorum*. Link [here](#).

2) Sustainable resilient ecosystem and agriculture management in Mongolia (STREAM), provider: European Commission, duration in years: 2021–2024, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 115,343,000/EUR 4,550,000/ CZK 19,013,000/EUR 750,000, researcher for MENDELU: Ing. Jan Šebesta, Ph.D., annotation:

The project represents a pilot European forestry project implemented in Mongolia. Its aim was to contribute to the implementation of innovative and sustainable principles of landscape management by 2024, responding to climate change and food system challenges. MENDELU, as the main coordinator of a consortium of 11 universities, led the practical implementation of measures at six pilot sites in the Selenge and Khentii provinces. These measures included forest stand restoration, afforestation and the application of environmentally and socio-economically appropriate procedures. The project also supported research and educational activities related to sustainable forest management and contributed to the development of local community capacities. STREAM serves as a testing model for future larger-scale projects, whilst emphasising the importance of partnership cooperation in addressing global environmental and social challenges. By doing so, MENDELU significantly strengthens its role in the international research environment. In 2023, the project received the *House for International Cooperation Award* for the best project in the Sustainability category. Link [here](#).

3) SPOT Social and Innovative Platform On Cultural Tourism and Its Potential Towards Deepening Europeanisation (Grant agreement ID: 870644), provider: European Commission, duration in years: 2020–2022, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 76,050,000/EUR 3,000,000/CZK 10,129,000/EUR 399,568, researcher for MENDELU: Professor Dr. Ing. Milada Šťastná, annotation:

The project was implemented under the H2020 scheme: Societal Challenges – Europe In A Changing World – Inclusive, Innovative And Reflective Societies A total of 15 universities and research institutions from Europe, Israel and the UK were involved. The project funded by the Horizon 2020 programme connects academic institutions, regional stakeholders and policy makers. It brought a new perspective on cultural tourism in the 21st century. A significant outcome of the project was the creation of the SPOT-IT platform, which analyses the potential of cultural tourism in various regions. This platform supported local development and helped formulate strategies for sustainable tourism. Thanks to the project, MENDELU actively participated in shaping policies at both European and regional levels and contributed to the formulation of recommendations, such as the “8 Golden Rules” for cultural tourism management. The project also emphasised the importance of sustainability and effective management in this sector. The project benefits include sharing of know-how between partners, development of interdisciplinary research and strengthening MENDELU’s position as a significant player in the international R&D&I environment. Link [here](#).

4) GREENER Integrated systems for effective environmental remediation (Grant agreement ID: 826312), European Commission, duration in years: 2019–2023, role in the project: partner, total allocated funds/funds allocated to MENDELU: CZK 140,714,000/CZK 6,860,000/EUR 5,558,061/EUR 270,600 researcher for MENDELU: Ing. Dalibor Húska, Ph.D., annotation:

The aim of the project was to develop innovative and low-cost solutions for chemical contamination removal, combining bioremediation technologies with bioelectrochemical systems (BES), such as microbial fuel cells. These systems utilise electroactive bacteria to decompose organic matter whilst simultaneously generating electrical energy. The project examined synergistic effects of various bioremediation strategies, their effectiveness in removing contaminants from water and soil, and the possibility of producing useful by-products such as bioelectricity. Emphasis was placed on laboratory research, field testing and the development of a decision-making tool for implementing effective and sustainable solutions. Link [here](#).

5) Work inequalities in later life redefined by digitalisation (DIGI-net), (CA21107), provider: COST Association, duration 2022–2026, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 20,280,000/EUR 800,000/CZK 63,378,000/EUR 250,000 researcher for MENDELU: Associate Professor PhDr. Martina Rašticová, Ph.D., annotation:

The aim is to bridge knowledge gaps regarding the impact of digitalization on work inequalities among older persons and to connect research with policy practice. The outputs include the creation of a web platform that will serve as an international hub for knowledge sharing, connecting researchers, experts and activists, whilst also providing tools and information for assessing inequalities and good practices. The event also includes the organisation of scientific missions, training schools, conferences and workshops focused on both research and policies. Publications such as reports, academic articles and recommendations that will help improve the connection between research and decision-making processes shall constitute an important component. Researchers, experts, politicians, non-governmental organisations and older workers themselves shall be involved in the activities to jointly seek solutions for improving working conditions in the age of digitalisation. Link [here](#).

Significant Cooperation in R&D&I on the National Level

1) National Centre for Biotechnology in Veterinary Medicine (NaCeBiVet), (TN02000017), provider: TA ČR, duration in years: 2023–2028, role in the project: partner, total allocated funds/funds allocated

to MENDELU: CZK 361,719,000/EUR 14,268,986/CZK 37,500,000/EUR 1,479,290, researcher for MENDELU: Professor Dr. Ing. Jan Mareš, annotation:

One of the significant national projects in which MENDELU participates is an initiative aimed at establishing a stable foundation for applied research in biotechnology in veterinary medicine, animal production and related fields. The project interconnects the capacities of seven research organisations with the aim of contributing to sustainable production of high-quality and safe food of animal origin, in accordance with the policy of reducing antibiotic consumption, promoting animal welfare, maintaining biodiversity and the principles of circular economy. The research generates new products and services that not only enhance the competitiveness of participating enterprises but also contribute to addressing current challenges in agriculture and food industry. Through its participation, MENDELU confirms its role as a key player in applied research with real impact on sustainability and innovation in both national and international contexts. Link [here](#).

2) Utilising New Fruit Species for the Long-Term Maintenance of the Production Potential of Fruit Plantations in the Context of Climate Change, (QK1910137), provider: Ministry of Agriculture (MZe), duration: 2019–2023, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 18,970,000/EUR 748,323/CZK 7,384,000/EUR 291,282, researcher for MENDELU: Ing. Tomáš Nečas, Ph.D., annotation:

The aim of the project in general terms was to expand the species and especially the varietal composition of cultivated fruit and thus strengthen the competitiveness of the Czech fruit industry through a comprehensive project solution with the following defined solution areas: For promising cultivars, the level of susceptibility to common pathogens damaging fruit plantations was determined, along with phenological data, growth and nursery characteristics, pomological traits, and economic properties. Furthermore, the nutritional properties, shelf life and potential for processing of food product from this fruit were verified. Based on the findings, suitable varieties for the current climatic conditions of the Czech Republic were selected and recommended. The project contributed to the fulfilment of the Faculty's vision by promoting innovation in fruit growing, expanding the range of fruit species and varieties grown and enhancing the adaptability of fruit plantations to changing climatic conditions. This increased the competitiveness of the Czech fruit industry and supported the sustainability of fruit production in the Czech Republic. Link [here](#).

3) Smart Migration in the Czech Republic, (TL01000468), provider TA ČR, duration in years: 2018–2022, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 6,135,000/EUR 242,012/ CZK 5,248,000/EUR 207,022, researcher for MENDELU: Associate Professor Mgr. et Mgr. Robert Stojanov, Ph.D., annotation:

The first goal of the project was to offer direct and personalised support in the form of a new mobile application for immigrants in the Czech Republic who are dealing with real problems in everyday life or for Ukrainian residents (about 40% of immigrants from non-EU countries) considering migration to the Czech Republic. A user-friendly application would facilitate their integration, while also providing feedback to the application guarantors, ensuring that their services and integration tools are properly configured. The second objective of the project was to analyse three key socio-demographic challenges (migration risks and challenges; coherence of migration and development policies; active migration policy model), the results of which will be used by the application guarantors to develop public policies, strategic materials and appropriate tools for their application. Link [here](#).

4) Secondary Vocational School in Socialist Czechoslovakia Through the Eyes of the History of Everyday Life. Oral History Interviews with Teachers (GA ČR, reg. no. 19-24776S), provider: GA ČR, duration in years: 2019–2022, role in the project: principal investigator, total allocated funds: CZK 1,891,000/EUR 74,615, researcher for MENDELU: Mgr. et Mgr. Michal Šimáně, Ph.D., annotation: The project Secondary Vocational School in Socialist Czechoslovakia Through the Eyes of the History of Everyday Life represents a significant national research initiative, with Mendel University in Brno as the principal investigator. The project examined the daily life of secondary technical schools in socialist

Czechoslovakia through oral history interviews with teachers-witnesses who worked at these schools before 1989. The research combined oral history methods with the study of archival sources and brought valuable insights into educational processes, work experiences and life stories of teachers. The project significantly contributed to fulfilling the mission of the Institute of Lifelong Learning, supported historical understanding of education and provided inspiration for the development of educational programmes. The results, summarised in a scholarly monograph, interconnect historiography, pedagogy and sociology, and have interdisciplinary overlap. It also supports intergenerational learning, connecting the experiences of past generations with today's educational needs and contributing to a broader reflection on vocational education. Link [here](#).

5) Small farms and short food supply chains during economic crisis – lessons from the COVID-19 pandemic, (GF23-04055L), provider (GA ČR; International grant projects evaluated on the LEAD Agency principle), duration in years: 2023–2025, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 3,140,000/EUR 123,865/CZK 3,140,000/EUR 123,865, researcher for MENDELU: Professor Dr. Ing. Libor Grega, annotation:

The project aims to investigate how small farms and short food chains respond to economic challenges during the COVID-19 pandemic. The project focuses on identifying key factors that influence their resilience and ability to adapt to a crisis situation. It reveals that small farms and short food chains demonstrate high levels of adaptability and resilience in times of pandemics. These entities play a key role in securing local food resources at a time when global supply chains are facing significant disruptions. The results of the project show that supporting small farms and short food chains can be a key factor in ensuring the resilience of food systems in future crises. The Project Contributes to Fulfilling the Mission of the Faculty of Regional Development and International Studies by Supporting Sustainable Development and Connecting Research with Practice. It also strengthens the Faculty's role as a centre of excellence in agricultural and economic research with practical impact on society. The project is interdisciplinary as it combines agricultural sciences, economics and social sciences, allowing a comprehensive analysis of the impact of the pandemic on food chains and their capacity to adapt to crisis conditions. Faculty Staff Contribute to the Project Equally with Colleagues from the Cooperating University in Poznań (Poznań University of Economics and Business, Poland) Link [here](#).

STUDIES

4.13 Doctoral studies

The HEI will briefly describe the organisation of the doctoral studies (if there are any doctoral study programmes³⁷). HEI will comment on:

- Structure and organization of studies.
- A system of cooperation between PhD students and their supervisors.
- Basic statistics (including drop-out rate, student workload, etc.).
- Information on promotion and recruitment schemes.
- Cooperation within doctoral studies (e.g., Czech Academy of Sciences, application sphere, building open study programmes for foreign nationals and creating international networks of study programmes, "joint degree", "cotutelle", etc.).
- Student care system (e.g. counselling, wellbeing care, career guidance).
- A system for tracking the future careers of graduates³⁸.
- Other relevant data, such as the existence of a doctoral school, basic soft skills courses, etc. at the discretion of the HEI.

The HEI shall support this with appropriate examples (e.g. a model example of doctoral student cooperation with their supervisor, statistics on collaboration within doctoral studies, specific examples within doctoral studies, statistics on the use of student care systems, etc.).

Maximum 300 words per point.

Self-assessment:

The University recognises the importance of investing in the development of doctoral studies. In accordance with the Strategy of the Ministry of Education, Youth and Sports 2021+, one of the priority objectives of the University's strategic plan since 2021 has been to increase the efficiency and quality of doctoral studies. The University aims to strengthen the competencies of postgraduate students through the University-wide MENDELU PhD School, and additionally focuses on involving students in research projects with an emphasis on international projects. **MENDELU PhD School** focuses on developing presentation skills, the ability to prepare high-quality scientific research outputs, development of technology transfer prerequisites, etc. The strategic objectives in doctoral studies development take into account not only addressing national challenges but also the evolution of European standards in science, as reflected for instance in the updated European Charter for Researchers.

Doctoral study programmes prepare students for scientific careers and independent creative activities, with doctoral students being the main investment in the future of the research environment. The University has committed to ensuring sufficient financial conditions for quality research through financial instruments and competitions supporting excellence in postgraduate studies (establishment of the **MENDELU Ph.D. Talent** competition, described in Chapter 4.2). A key element was also the internationalisation of the research environment, which included support for long-term internships at prestigious foreign institutions (detailed in Chapter 4.8), development of specific competencies of doctoral students and their involvement in international projects. For competency development, a platform is available in the form of a gateway where students obtain current information about mobility opportunities, competitions and courses.

³⁷ If the HEI does not organise any doctoral programme, it will explicitly state this information in the self-evaluation report.

³⁸ The HEI will list the top five highest ranked graduates in academia, the private sector, and public administration over the past five years.

Structure and Organisation of Studies

Doctoral studies at MENDELU are either full-time or part-time. Full-time students regularly attend the training workplace, whilst part-time students fulfil the study plan through consultations and according to the supervisor's instructions. During their studies, they receive a monthly scholarship – in 2024 this was at least CZK 11,000/ EUR 434, to be increased to CZK 14,000/EUR 522 from 2025.

The content of doctoral study programmes consists of compulsory, compulsory elective and optional courses. Individual subjects focus on professional knowledge, research activities, international activities, project work, pedagogical activities and the dissertation thesis at various stages of its development. Studies are organised by years. A credit system is usually implemented here. The student enrolls in courses in order to fulfill all requirements specified by the study programme and their individual study plan. In order to successfully complete the study plan, it is necessary to fulfil the obligations set out in the Study and Examination Regulations of Mendel University in Brno. Studies are duly completed after fulfilling all study requirements, including successful completion of the state doctoral examination and defence of the dissertation thesis.

From the perspective of study organisation and structure, the key bodies are the Field Board and the student's supervisor. The central element of doctoral studies is the **Individual Study Plan**, which is prepared by the supervisor together with the student at the beginning of studies and is usually evaluated once a year. This plan determines the tasks and duties of the student within their studies and also serves as a guideline for the Field Board, which annually evaluates and approves either the student's progression to the next year (or determines tasks that need to be fulfilled) or proposes their expulsion, based on the supervisor's report on the progress of doctoral studies together with information from the study records.

During the period under review, 34 [doctoral study programmes](#) received accreditation, of which 13 were in [English](#). In addition to traditional programmes focused on agriculture, forestry, horticulture and economics, a range of study opportunities in applied fields and environmental areas was created. Examples include study programmes in *Waste Technology and Risk Prevention*, *Applied Statistics and Operations Research*, *Applied Bioclimatology*, etc. The accreditation of the joint degree programme *European Horticulture* demonstrates the connection with the European area and international networking of scientific teams.

During the period under review, attention was paid to optimising the organisation of studies, which was reflected in the amendment to the [Study and Examination Regulations](#) from 1 September 2023, where doctoral study management processes were specified. A mandatory part of the study is a one-month internship at a foreign research institution. In 2024, doctoral study programmes became one of the areas of annual thematic quality controls. The evaluation focused on analysing the processes of the state doctoral examination and dissertation defence. The output was a proposal for a unified format of protocols from dissertation defences and state examinations.

System of Cooperation between Doctoral Students and Supervisors

The supervisor is a key person within doctoral studies. The basic parameters of cooperation between the supervisor and doctoral student are defined by the Study and Examination Regulations. Persons who may supervise are approved by the Scientific Board of the Faculty, which should guarantee their sufficient expertise. Supervisors have a fundamental influence on the student's progress in their studies, their ability to complete study requirements, and also whether and how long it takes for the student to complete their studies. The supervisor provides consultations to the student during the preparation of their dissertation thesis, ensures their involvement in creative, pedagogical and project activities, and comments on student requests concerning their studies. During the monitored period, an analysis of data related to doctoral study programmes was conducted, followed by a revision of supervisor records and setting rules for appointing supervisors, taking into account not only their

creative activities but primarily their active involvement in communication with students.

Basic statistics (incl. drop-out rate, student learning load, etc.) Graphs for drop-out.

Graduates of accredited doctoral studies – MENDELU

	2020		2021		2022		2023		2024	
Field of study	FT	C	FT	C	FT	C	FT	C	FT	C
Commerce, Administration and Law	4	15	9	12	2	12	4	5	19	27
Natural Sciences, Mathematics and Statistics	13	3	10	5	8	2	32	7	24	5
Engineering, Manufacturing and Construction	3	3	2	2	2	0	7	4	9	3
Agriculture, Forestry, Fisheries and Veterinary Medicine	6	6	11	12	5	6	45	10	16	12
Total	26	27	32	31	17	20	88	26	68	47
of which women	15	9	20	6	10	5	53	5	30	19
of which number of foreigners	11	15	8	14	7	11	19	7	21	28

FT – full-time study; C – combined/part-time study

In 2024, 115 students successfully completed their studies in doctoral study programmes, representing 5% of the total number of graduates. In 2023 and 2024, there was a significant increase in the number of doctoral study programme graduates compared to previous years. These are the highest numbers in at least the past 10 years. This fact is due to the legislative environment, as pursuant to law, some of the so-called old degree programmes ceased to exist at the end of 2024, which also led to increased pressure on students to complete their studies. The percentage distribution of students across different levels of study, forms of study and university units has not changed significantly in the long term. In 31/ 12/ 2024, a total of 404 (4%) students were enrolled in doctoral study programmes. Of these, 315 in full-time and 89 in combined form of study. In terms of student distribution across university units, the highest number was at the Faculty of AgriSciences (44%), followed by the Faculty of Forestry and Wood Technology (31%), the Faculty of Business and Economics (16%), and the Faculty of Horticulture (9%). The representation of women among doctoral study programme students in 2020–2024 averaged 43% and students with foreign citizenship averaged 37%.

First-year dropout rate – doctoral studies (data source: Annual reports on MENDELU activities)

	2020	2021	2022	2023	2024
Faculty of AgriSciences	16.4%	6.3%	4.1%	12.3%	20.0%
Faculty of Forestry and Wood Technology	16.3%	1.9%	20.0%	8.8%	6.9%
Faculty of Business and Economics	7.7%	11.3%	17.5%	19.1%	33.3%
Faculty of Horticulture	15.8%	8.7%	18.2%	15.4%	25.0%
UNIVERSITY IN TOTAL	14.4%	7.8%	13.8%	12.6%	17.9%

Information on promotion and recruitment schemes

The recruitment concept is based on publishing a list of topics and supervisors on the website and motivational interviews conducted by supervisors with talented students in their final years of follow-up Master's degree programmes. Entrance examinations for doctoral study programmes are usually conducted in the form of an oral interview during which the applicant demonstrates professional knowledge, aptitude for scientific and creative work, and foreign language proficiency.

Cooperation in doctoral studies (e.g. with the Czech Academy of Sciences, application sphere, development of open study programmes for foreign nationals and creation of international networks of study programmes, joint degree, “cotutelle”, etc.)

Within doctoral study programmes, various collaborations have been established with the Czech Academy of Sciences, research institutes and directly with industry partners. However, here the approach is significantly individualised at the level of individual students. The benefit of cooperation is always assessed with regard to the topic of the doctoral dissertation. The aim is for a typical doctoral dissertation outcome to be developed for practical application or for an application guarantor who can further work with it. In addition, some study programmes also involve cooperation with the Czech Academy of Sciences in the field of teaching, typically in the form of the Course in Fundamentals of Scientific Work for doctoral students.

Student care system (e.g. counselling, well-being care, career guidance)

The provision of counselling services and other activities is ensured by the *Counselling and Career Centre*, which is part of the Institute of Lifelong Learning. Activities include seminars and courses focused on personal development support, prevention of academic failure, development of competencies to increase readiness for entering the labour market, and workshops on mental health protection. Lectures focused on students with specific needs are organised for doctoral students and employees.

Mobility Day is an event that focuses on providing information about opportunities for foreign studies and internships. It includes presentations that inform about travel opportunities, mobility conditions, financial support and other aspects of foreign study and work stays. Mobility Day participants have a unique opportunity to meet with fellow students who have already completed a stay abroad and obtain practical advice and answers to their questions regarding stays abroad.

Graduate Career Tracking System

The career tracking system for doctoral graduates at MENDELU takes place within the framework of the [alumni club](#). The University views this club as a means through which it maintains contact with its graduates, provides them with information about current events at the university, and conversely expects feedback from them about real-world practice. Contact and communication on social networks is also active, where the alumni community already has 5,500 members.

Financial Mechanisms

The basic financial instrument is the doctoral study support scholarship, which currently amounts to CZK 11,000/EUR 434 monthly for full-time students studying in the Czech language who are enrolled in their first degree programme within its standard duration. This income is intended to at least partially compensate for students' non-participation in the labour market and provide them with basic means for personal expenses. The scholarship amount has historically been linked to the volume of funding provided by the Ministry of Education, Youth and Sports for doctoral students. Currently, an amendment that transforms the entire system and significantly increases the income of doctoral students is in the legislative process.

Specific University research at MENDELU is funded through resources from the Ministry of Education, Youth and Sports, which the University redistributes through the [Internal Grant Agency](#) of MENDELU. It supports students in solving individual projects, engaging in science and promoting results through internal grants. The competition rules are governed by the [Rector's Order 15/2020](#) Principles of Student Grant Competition and Specific University Research at Mendel University in Brno.

During the monitored period, the Internal Grant Agency involved 1,931 students, which is slightly less than in the previous monitored period, but approximately CZK 20 million/EUR 788,955 more was distributed. In total, CZK 170,150,000/EUR 6,712,032 was allocated. Successful investigators receive funding both for their own creative activities and personal funds (in the form of scholarships or wages

when entering into employment contracts for project implementation) – beyond the basic scholarship. In the previous monitored period 2014–2018, 2,278 students were involved in IGA MENDELU and a total of CZK 152,950,000/EUR 6,033,530 was allocated.

Scholarship Programmes at Faculties and Rector's Awards

MENDELU offers extensive motivation programmes for doctoral study programme students at all of its faculties. Incentive programmes include, for example, rewards for publications in renowned scientific journals; furthermore, activities leading to obtaining external projects are supported. Following these programmes, the Rector's Award of Mendel University in Brno for Outstanding Doctoral Students is also awarded at the University. It is awarded for outstanding research achievements accomplished during the last two calendar years prior to the award.

Students with exceptional results are awarded scholarships in various forms. At the same time, the University endeavours to continuously increase the volume of these resources. In 2019, the volume of funds distributed in this way was approximately CZK 55 million/EUR 2,169,625; today it is CZK 10 million/EUR 4,339,250 more. Currently, a sum of approximately CZK 65 million/EUR 2,564,103 is being distributed as remuneration in connection with results related to research, development and innovation activities and scholarships for outstanding scientific, research, development, artistic and other creative achievements. The system of motivational elements/scholarships is enshrined in the Faculty internal regulations. At the Faculty of AgriSciences, *Dean's Order 2/2023 Extraordinary Motivational Scholarship for Doctoral Students of the Faculty of AgriSciences at Mendel University in Brno* was issued, which modified the rule for granting extraordinary motivational scholarships to students of doctoral study programmes. The Faculty of Forestry and Wood Technology established in 2020 the position of research assistant at a specialised department pursuant to the *Dean's Order 11/2019 on the support of talented students at the Faculty of Forestry and Wood Technology of MENDELU*. The Faculty of Business and Economics has issued for the academic year 2024/2025 a *Dean's Decree No. 1/2024 On Specification of Conditions for Granting Scholarships for the Academic Year 2024/2025*, which further specifies the rules for providing scholarships to students. At the Faculty of Horticulture, pursuant to *Dean's Order No. 3/2020 Motivation Programme of the Faculty of Horticulture MENDELU for 2020*, a Faculty Motivation Programme has been established for the purposes of supporting research, development and innovation.

Example

Project Support for Multidisciplinarity of Research Programmes for Young Scientists, (EF16_018/0002333), provider: MEYS, duration in years: 2017–2022, role in the project: coordinator, total allocated funds: CZK 14,389,000/EUR 567,613, researcher for MENDELU: Professor Ing. Cyril Klimeš, CSc.

The project addressed the improvement of conditions for research-linked teaching at the Faculty of Business and Economics and the Faculty of Horticulture, enhancement of quality in research-focused doctoral study programmes, motivation of talented students towards faster professional and career growth, development of human resources for research and development, and thus retention of promising academic staff for work at the University during their most productive phase. The project primarily addressed the establishment of 2 new doctoral study programmes and the development of 3 existing ones, support for the most talented students and professional development of academic staff.

Example

Internal Grant Schemes Project of Mendel University in Brno (EF19_073/0016670), provider: MEYS, duration in years: 2020–2023, role in the project: coordinator, total allocated funds: CZK 28,786,000/EUR 1,135,549, researcher for MENDELU: Professor RNDr. Vojtěch Adam, Ph.D.

The project targeted doctoral students in connection with the development of transversal skills necessary for successful professional careers in science and research. 50 students from research-oriented study programmes and doctoral study programmes participated in the internship.

Example

Project Development of Research-Oriented Study Programmes at Mendel University in Brno (MENDELU PhD Infra; CZ.02.01.01/00/22_012/0004847), provider: MEYS, duration in years: 2023–2026, role in the project: coordinator, total allocated funds: CZK 73,283,000/EUR 2,890,837, researcher for MENDELU: Mgr. Ondřej Mocek, Ph.D.

The project's primary objective is to enhance the quality of research-focused programmes at Mendel University in Brno. This objective will be achieved through the development of infrastructure facilities for doctoral study programmes to increase the quality and competitiveness of future researchers. Simultaneously, the project aims to motivate talented students towards faster professional and career growth and also to retain promising academic staff for university work during their most productive life phase, thereby ensuring teaching quality. The modernisation of infrastructure thus provides a complementary solution for study and teaching by ensuring essential tools for achieving excellence in scientific research activities. Within the project, infrastructure utilised by 180 doctoral study programme students has already been modernised. Furthermore, 9 laboratories and teaching spaces for doctoral study programmes have been reconstructed. Through this project, at least 20 doctoral study programmes have also been innovated.

Example

During the 2023/2024 academic year, a block of the 3rd annual MENDELU PhD School took place. Twenty-two students participated in the week-long block of workshops and lectures. The list of topics included the following areas: Science and research popularisation and presentation of science and research results, Fundamentals of scientific work, Scientific writing and publishing: How to teach and present, Doctoral student as an employee. In addition to the seminar, the lesson was also conducted as a practical workshop concerning the popularisation of science and research, which was led by a professional journalist.

This was followed by two seminars on publication ethics and research ethics with human participants, attended by a total of 38 persons. In the spring term of the 2023/2024 academic year, a series of workshops with a data steward focused on Data Management Plan was also held. Students from all faculties participated in this series of 4 workshops. A total of 17 students attended. In the summer term, a series of workshops on scientific writing entitled Unlocking the Secrets of Effective Scientific Writing took place. The workshops were led by leading international researchers working at the University. Students were provided with space for mutual acquaintance, interaction with lecturers and, among other things, discussion about their concerns and obstacles in the academic writing process.

The Rector's Awards of Mendel University in Brno are granted for significant and extraordinary achievements or contributions of students and University employees in the fields of science, education, sports, arts and for merits in the development of civil society. "I greatly appreciate the awarded recognition, which represents not only a personal honour for me but, above all, acknowledgement of the joint efforts of the entire team at the Mendeum Institute. This success is the result of long-term cooperation, expertise and dedication of all colleagues, without whom this achievement would not have been possible. I perceive this award as confirmation of our joint effort to achieve excellence in scientific research and as motivation for further development and innovation in our work", said Milan Špetík, who received the Rector's Award for exceptional results in his scientific work

Example of doctoral students' international engagement and subsequent creative outputs

Peter Albrecht: At the University of Crete, during the International Conference on Macroeconomic Analysis and International Finance, he presented a paper on volatility transmission in currency markets

and, through discussion, established collaboration with Professor Kočenda, which resulted in a joint article published in the International Review of Financial Analysis. In 2023, he completed an internship at Zeppelin University, where he collaborated with Professor Fidrmuc. The outcome was an article focused on commodity markets. Furthermore, within the UNIGOU programme, he collaborated with intern de Oliveira on the topic of neural networks. The collaboration resulted in a published article in Finance Research Letters and two additional articles currently under peer review.

Petr Zálešák: Won the 2023 ArcGIS StoryMaps Competition, an international competition organised by Esri in cooperation with IUCN. The ceremonial award presentation took place at the world's largest GIS conference – Esri User Conference 2024. His StoryMap Wind Erosion can be found here <https://storymaps.arcgis.com/stories/c3bdb3174746476780d4547e5eea4ebd>.

IMPLEMENTATION OF RECOMMENDATIONS

4.14 Implementation of the recommendations in Module 4

The HEI will briefly describe how it has implemented the recommendations for Module 4 from the previous evaluation period, if applicable.

Maximum 1000 words

Self-assessment:

During the period under review, MENDELU addressed all recommendations arising from the previous Evaluation Report.

Project activities

MENDELU has consistently achieved strong results in securing national (e.g. GA CR, TA CR) and international projects (Horizon Europe, MSCA, ERC) Between 2020–2024, the number of submitted proposals increased, aligning with both the University's scientific focus and the demand for application of results and research needs in society. In 2024, the University received projects under the OP JAK programme: MSCA FELLOWSHIPS CZ MENDELU amounting to CZK 8,215,000/ EUR 324,052 and Development of Competencies of Relevant Actors in Undergraduate Teacher Training for Secondary Vocational Education amounting to CZK 12,198,000/EUR 481,183. Furthermore, MENDELU also secured CZK 485,000,000/ EUR 19,132,000 from structural funds to support research and education infrastructure - modernising facilities, ensuring accessibility, supporting students with special needs, and fostering new programs and links to the application sphere, which will further strengthen the position of an excellent University with a real impact on society. A project's outcome is creation of the **MENDELU Innovation Hub**, a new space combining education, research, and student innovation.

During the monitored period, MENDELU adopted its **Open Access and Open Science Strategy for 2023–2030**, focusing on: (1) support for open access publishing, (2) establishment of a support centre, and (3) development of open science infrastructure. Since 2021, the **Open Access Support Fund** (CZK 1 million/EUR 39,448 / year) has funded over 115 articles. MENDELU also offers a journal verification to prevent predatory publishing. The **Open Repository of Science and Research Results** provides free access to full texts of publications by MENDELU authors and is indexed in OpenDOAR, ROAR, and OpenAIRE. As of 2024, it holds 700 publications.

Human Resources Management

In 2021, MENDELU developed a **Concept** of Education and Development of Academic and Research Staff, which supports career growth through individual development plans, which managers create in cooperation with employees and regularly update, covering goals, educational opportunities, career advancement, and skills. A similar **concept** was developed in 2023 for technical and administrative positions. Based on these, since 2021, a comprehensive **course offerings** training programme for both regular and management staff and counselling for management staff has been in operation. Special focus is given to early-stage researchers(e.g. Ph.D. Week) and to staff balancing their career with **parenthood** family life. The University offers model career paths and supports mobility and employees at all stages of career development.

A unified employee evaluation system, including technical staff, which takes into account examples of good practice from other universities and unifies evaluation across the University with emphasis on transparency and comparability of criteria is being developed under, is being addressed within the project: Programme for Support of Higher Education Development – Preparation for the Implementation of Doctoral Programmes Reform and Human Resources Management Strategy

for 2024–2025.

A number of key measures have been adopted to strengthen HR management and align with European standards. Particularly through the adoption of [Guidelines 4/2021](#) Human Resources Management, which is in compliance with the European Charter for Researchers, [Code of Ethics](#) of University employees, students and graduates and through the revision of [Rules of Selection Procedures](#) Mendel University in Brno, which has contributed to greater transparency in employee recruitment.

Since 2021, young researchers have been regularly updated on HR topics through the “PhD School” and specialised lectures. They enhance their skills via courses on teamwork, scientific growth, project planning, scientific writing, science popularisation, open access and data management. They are actively involved in projects connecting various fields and generations, which supports knowledge transfer from experienced colleagues. Young researchers are supported in forming research teams and applying for habilitation procedure and professorship, strengthening scientific excellence and community sustainability.

One of the mechanisms supporting the establishment of research teams was, for example, the project *Internal Grant Schemes of Mendel University in Brno*, (EF19_073/0016670), provider: Ministry of Education, Youth and Sports, financial resources: CZK 28,786,000/EUR 1,135,550, where 10 teams consisting of a mentor and 5 doctoral students were supported. Each project received support of CZK 2,492,000/98,289 EUR with the aim of developing transversal skills necessary for successful professional career in science and research. Another tool supporting interdisciplinary research teams is the Internal Grant Agency.

Foreign Employees

MENDELU supports foreign employees through a bilingual website, including [career and personal development](#) sections, job postings, internal regulations, and the [Welcome Office](#) with an [employee guide](#). News and event invitations are shared via the website and My MENDELU application. Feedback is gathered through surveys, round tables and a focus group as part of the Gender Equality Plan audit. MENDELU promotes internationalisation by implementing Open, Transparent, and Merit-Based Recruitment policy, publishing job offers internationally, building LinkedIn brand through English -written posts, conducting interviews in English and online when needed, and translating key materials.

The Welcome Office assists with, visa, housing, adaptation and integration into the University environment. For visiting academics orientation programmes, language courses and access to University resources are provided. Internationalisation is further supported through the translation of relevant materials, such as guidelines, forms, websites, and informational emails, into English and through the organisation of English language courses for employees.

Additional funding for foreign academic staff is provided through individual financial grants according to the financial capabilities of each University unit, and through GAGJM grants.

Mobility

Mobility remains a key pillar at MENDELU returning to pre-Covid-19 levels in 2024, with further growth through Erasmus+ and other international mobility projects. Academic, research and administrative staff are all supported. Following the recommendation of the International Evaluation Panel 2020 4.10-4.13, MENDELU responded by developing the European Universities project [HEROES](#), which received funding in 2024 and where MENDELU is a coordinator of the mobility work package. The project strengthens staff mobility, including employees of support departments, improves facilities for international academics and provides funding for mobility and hosting of international experts. The project also fosters international research teams, joint projects

submission, and lifelong learning, with focus on sustainability, digitalisation and inclusion, while supporting practice -oriented education and research.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 4

Document name	No. criteria	Location (link in HTML)
Rector's Guidelines 4/2023 Grant Agency of Gregor Johann Mendel of Mendel University in Brno	4.2, 4.4	Click here .
RECTOR'S DIRECTIVE 2/2020 The Grant agency of Gregor Johann Mendel of Mendel University in Brno	4.2	Click here .
RECTOR'S ORDER 15/2020 The Principles of Student Grant Competitions and Specific University Research Conducted at Mendel University in Brno	4.2, 4.13	Click here .
Rules for Distribution of Institutional Support for Long-Term Conceptual Development of a Research Organisation	4.3	Click here .
Rector's Order No. 12/2019 on Protection and Commercialisation of Industrial Property at Mendel University in Brno (Available only in Czech language)	4.3, 4.4	Click here .
Code of Ethics for Employees, Students and Alumni of Mendel University in Brno	4.3, 4.7, 4.14	Click here .
Declaration of the Research Integrity Assurance Policy at Mendel University in Brno	4.3	Click here .
Rector's Guidelines 5/2023 Statutes and Rules of Procedure of Ethics Committees for the Treatment of Animals, which are expert committees for ensuring the welfare of experimental animals at Mendel University in Brno	4.3	Click here .
Sustainability Strategy of Mendel University in Brno for 2025–2030	4.4	Click here .
Sustainability Report 2023 Mendel University in Brno	4.4	Click here .
Rector's Decision No. 26/2014 on Remuneration of Inventors, Utility Model Authors and Other Industrial Property Rights Holders and Management of Commercialisation Income (in Czech language only)	4.4	Click here .
Rector's Methodological Instruction No. 1/2021: Records of Charges for Publishing in Open Access	4.4	Click here .
Rector's Methodological Instruction 2/2022: Open Repository of Science and Research Results (Czech language only)	4.4	Click here .
RECTOR'S DECISION 12/2019 On protection and commercialization of industrial property at Mendel University in Brno	4.4	Click here .
The Selection Procedure Rules of Mendel University in Brno	4.6, 4.7	Click here .
Open, Transparent and Merit-based Recruitment at Mendel University in Brno	4.6, 4.14	Click here .
Rector's Guidelines 4/2021: Human Resources Management	4.6, 4.14	Click here .
Training and development policy for technical and economic personnel of MENDEL	4.6, 4.14	Click here .
A Concept of the Training and Development of MENDEL Academic Staff	4.6, 4.14	Click here .
The Gender Equality Plan of Mendel University in Brno for 2022 to 2024	4.7	Click here .

The Gender Equality Plan of Mendel University in Brno for the period 2025–2028	4.7	Click here .
Statutes of Mendel University in Brno	4.7	Click here .
Human Resources Management Strategy HRS4R – Action Plan 2024–2026	4.7	Click here .
Code of Ethics	4.7, 4.14	Click here .
Rector's Directive No. 4/2020: Employment Code	4.7	Click here .
Internationalisation Strategy of Mendel University in Brno	4.8	Click here .
Study and Examination Regulations of Mendel University in Brno Dated 3 June 2024	4.13	Click here .
Rector's Order 15/2020 The Principles of Student Grant Competitions and Specific University Research Conducted at Mendel University in Brno	4.2, 4.13	Click here .
Your guide to MENDEL	4.14	Click here .
Regulations on the Selection Procedure of Mendel University in Brno	4.14	Click here .

MODULE 5 – STRATEGY AND POLICIES

5.1 Mission and vision of the evaluated institution in R&D&I

The HEI will briefly describe its mission and vision with emphasis on R&D&I in general and its R&D&I capacities in the implemented R&D&I fields³⁹ (Tables 5.1.1 and 5.1.2). In particular, the HEI's vision covers the following five-year period and must relate to the strategic objectives of the Provider, the National Policy on Research, Development, and Innovation of the Czech Republic 2021+, the Gender Equality Strategy 2021-2030, and other higher national and supranational strategic documents in the field of R&D&I (Table 5.1.3). The HEI shall complement the description with active references to its Strategic plan for the teaching, scholarly, scientific, research, development, artistic, and other creative activities of the higher education institution (regarding the results and recommendations from the previous evaluation period, if the evaluated HEI participated in it). The HEI shall describe how the vision and mission were implemented during the period of 2020–2024.

Maximum 2000 words.

Self-assessment:

MISSION OF MENDEL UNIVERSITY IN BRNO

Mendel University in Brno – University for life. The mission of Mendel University in Brno (MENDELU) is to be an open institution offering flexible education reflecting the needs of the 21st century, contributing to critical thinking and addressing global challenges in science, research and innovation relevant to society, whilst being a dynamic multicultural institution shaping broader social development, which through its actions inspires the fulfilment of principles of sustainability and social responsibility.

From the perspective of science and research, the University's mission is to acquire and project the results of basic and applied research in natural, biological, technical, economic, socio-political, environmental, agricultural, forestry and food sciences into educational programmes of European quality. Quality and comprehensiveness are among the University's core values. MENDELU aims to become a recognised centre of interdisciplinary research whose results will find application in the real world – from practice in the private sector to supporting public administration in creating new policies and strategies. These results will simultaneously contribute to addressing global challenges and inspire sustainable and innovative approaches in all areas of human activity.

VISION OF MENDEL UNIVERSITY IN BRNO

With its broad scientific/subject-oriented scope, MENDELU aims to be an internationally recognised University providing a unique combination of educational, scientific research, creative and professionally-oriented activities in conjunction with extensive opportunities for practical training at University farms, experimental facilities and areas for educating high-quality and well-employable graduates prepared to respond to 21st century challenges in their subsequent career paths.

In the context of a rapidly changing world, characterised by revolutionary discoveries and fundamental changes, including climate-related ones, MENDELU focuses on key research areas. The main priorities include:

³⁹ For so-called R&D&I capacities, see Definition of Terms in Methodology HEI2025+.

- **Landscape management**, which is conceived as an interdisciplinary field connecting economic, ecological and social aspects of sustainable development with the aim of ensuring long-term balance between the use of natural resources and ecosystem protection. The economic dimension includes optimisation of production systems, increasing land use efficiency and promoting innovation, including precision farming and process digitalisation. The ecological dimension focuses on preserving biodiversity, restoring degraded ecosystems, sustainable management of water resources and reducing the carbon footprint. The social aspect encompasses the education of future professionals, strengthening environmental literacy of the public and their engagement, and rural area development.
- **Study of climate changes**, their impacts on ecosystems and the development of adaptation strategies through an interdisciplinary approach, along with responding to challenges such as increasing landscape drought, soil degradation, biodiversity loss and the production of safe and quality food.
- **The use of modern genome editing**, discovered in 2012, in agriculture, forestry and horticulture with the aim of increasing productivity and sustainability of production.
- **Protection against pathogens**, addressing antibiotic resistance and developing new tools, procedures and materials as replacements for existing antibiotics, developing good breeding practices, optimising environment and nutrition.
- **Digitalisation and robotisation**, the implementation of which finds application in all areas including agriculture, forestry and other environmental fields.

The University also builds on strategic visions that stem from its mission:

- to build comprehensive excellence in all roles that the University intends to fulfil;
- to conduct innovative research with global distribution of findings and knowledge transfer;
- to provide quality education with emphasis on critical thinking and creativity of graduates;
- to seek cooperation with relevant partners in addressing local and global problems;
- to create a multicultural environment with the participation of international students and staff;
- to be a high-quality and responsible employer;
- to participate in shaping cultural heritage and implementing the concept of social responsibility;
- to strive for environmental, social and governance sustainability of the entire institution;
- to build a comprehensive brand with international impact.

FOUNDATIONS OF THE UNIVERSITY'S STRATEGIC PLAN

The [Strategic Plan of Mendel University in Brno for the period 2025–2030](#) (hereinafter referred to as the “Strategic Plan”) is a fundamental conceptual document that builds upon the previous [MENDELU Strategic Plan 2021+](#). The Strategic Plan is elaborated annually for the given calendar year in the form of an Implementation Plan. The foundations of the Strategic Plan include, in particular, the [Strategic Plan of the Ministry for Higher Education for the Period from 2021](#) and [Strategy for Internationalisation of Higher Education for the Period from 2021](#) of the Ministry of Education, Youth and Sports of the Czech Republic, and Act No. 111/1998 Coll., on Higher Education Institutions and on Amendments and Supplements to Other Acts, as amended.

The Strategic Plan further takes into account and reflects other documents at both national and international levels. The national ones primarily include the [Strategy for the Education Policy of the Czech Republic until 2030+](#), which, through two strategic objectives, aims to focus education more on acquiring competencies needed for active civic, professional and personal life, as well as to reduce inequalities in access to quality education and enable maximum development of the potential of children, pupils and students. Furthermore, there is the *Innovation Strategy of the Czech Republic 2019–2030: The Country for the Future* and, last but not least, the Strategic Plan

is linked to the *Regional Innovation Strategy of the South Moravian Region 2021–2027* and *Brno 2050 Strategy*. The last two mentioned documents address a number of horizontal themes that are monitored from the perspective of various roles of the University in the region and in cooperation with local government. The University thus periodically participates in the discussion and updates of these documents and links their objectives with the objectives of its Strategic Plan, as is currently happening in cooperation on the *JIC Strategic Framework for 2025–2030*. Regarding the international level, the Strategic Plan builds upon the principles of the *European Higher Education Area*, which includes the Bologna Declaration of 1999 and subsequent communiqués.

As MENDELU profiles itself as a “green” University and a “University for life”, key documents related to sustainability and social responsibility cannot be overlooked. These include primarily the [Sustainability Strategy of Mendel University in Brno for the period 2025–2030](#), [Internationalisation Strategy of Mendel University in Brno](#), from international documents Agenda 2030, which defines the Sustainable Development Goals of the UN, the so-called “SDGs” (Sustainable Development Goals), as well as the often discussed European Green Deal and also the European Climate Pact.

In the area of gender equality, in connection with the Gender Equality Strategy for 2021 to 2030, the key document is the [Gender Equality Plan 2022–2024](#) and the subsequent [Gender Equality Plan 2025–2028](#). Implementation of the Gender Equality Plan is also part of the Human Resources Management Strategy HRS4R – [Action Plan 2024–2026](#). Emphasis on systematic support for equal opportunities for women and men at MENDELU is placed from research and development to human resource management, i.e. recruitment, career growth, or remuneration. Recommendation 5.1 to support strategic indicators, including research trends, human resources and performance-based remuneration, is reflected in the MENDELU Strategic Plan 2021+. Effective strategic human resources management is a necessary prerequisite for implementing the University’s strategy in developing internal mechanisms for the allocation of financial resources and remuneration of academic staff and supporting the development of the institution in designated priority areas. The continuous development in the area of human resources and research activities is further reflected in the Strategic Plan of MENDELU 2025+, including proposed measures and success indicators. The obtained and continuously maintained HR Award is evidence of continuous human resources development in the field of science and research.

Fulfilment of the University’s vision and mission in the period under review

During the previous period, MENDELU fully focused on meeting its objectives in the areas of R&D&I, HR Award and increasing visibility both nationally and internationally. In accordance with the objectives set out in the *Long-term Plan for Educational and Scientific, Research, Development and Innovation, Artistic and Other Creative Activities of Mendel University in Brno 2016–2020* and *MENDELU Strategic Plan 2021+ the University particularly focused on developing the following four areas:*

support for excellent research in defined areas

The University has been successful in obtaining projects funded by the European Commission, which it implements together with international partners. Particularly significant are projects where MENDELU acts as a coordinator, such as *ERA-Chair: Striving for excellence in forest ecosystem research (EXCELLENTIA)*, provider: European Commission, duration in years: 2023–2028, role in the project: coordinator, total allocated funds/funds allocated to MENDELU: CZK 63,363,000/EUR 2,499,530/ CZK 63,363,000/EUR 2,499,530, principal investigator: Professor Dr. Ing. Libor Jankovský. The implementation of projects within the Operational Programme Jan Amos Komenský (OP JAK), which focuses on infrastructure and education investments, modernisation of University premises and equipment, including enhancement of pedagogical competencies, will undoubtedly be reflected in the quality of research and

development activities and international competitiveness. Membership in the HEROES alliance, development of the HR Award initiative, and modernisation of the University environment with emphasis on sustainability, modern technologies, and well-being of employees and students are intended to increase the University's attractiveness for talented students and scientists from around the world. The aforementioned activities fulfil the objective of increasing international visibility and supporting excellence and research trends (primarily through participation in international projects) see Recommendations 5.1, 5.2 and 5.5.

development of technology transfer at MENDELU

The Technology Transfer Department (TTD) has become a key and supportive workplace in the creation of applied results. During the monitored period 2020–2024, more than 16 patent applications, 17 industrial designs, 1 European industrial design and 98 utility models were filed through TTD. In 2024, important external funding was secured for the commercialisation of results from the project TA ČR SIGMA Proof of Concept. Thanks to this project, the knowledge transfer into practice at MENDELU has a solid foundation and can fulfil its important task, i.e. to transfer scientific research results into the commercial sphere where they can benefit the public.

A success story is, for example, the sale of a non-exclusive licence for the reuse of fermentation gases – these are direct outputs of the sub-projects *Capture and Reuse of Fermentation Gas Mixture* and *Carbonation of Non-alcoholic Beverages with Fermentation Gases*. With our partner Vinný dům Bzenec, we have successfully launched the first products, see <https://eshop.vinnydum.cz/nebeska-voda>. The originators continue to develop the technology under the second non-exclusive licence within their start-up. Wines carbonated with fermentation gas are also included in the University's own wine production. Another success is the sale of outputs from the sub-project *SuperTree – tree condition analyser*, which the “competing” Brno University of Technology was interested in.

TTD also has an educational function. It organises seminars for researchers, academic staff and doctoral students, and promotes new challenges such as the inter-university MUNISS competition, which offers active students the opportunity to become involved in the development of the City of Brno. For start-ups established in cooperation with MENDELU, TTD participated in the preparation of a project application for the [Technology Incubation](#) programme within the CzechInvest agency. The development of TTD and the reflection of Recommendation 5.3, including other specific successful examples, are presented in Section 5.4.

increasing MENDELU's project absorption capacity

The increase in project absorption capacity was achieved mainly through setting the competencies of the Rectorate's Project Office (PO REK), individual managers (project manager, financial manager and assistant) and simultaneously dividing the scope of activities into external national, external international projects and University-wide projects. The coordination of University project preparations is linked to the identification of main research directions and areas where the University will establish itself in the following period. During the monitored period, the Head of PO REK organised regular meetings and seminars with project offices of University units and ensured the transfer of information from providers to investigators. PO REK prepares methodological guidelines for investigators and regularly publishes project calls via newsletter and on its [website](#). Participation in key research and innovation programme projects both as the principal investigator and as a project partner, and the formation of interdisciplinary teams with international impact enhance the University's prestige at national and international levels (see Recommendation 5.4). The following graph (Fig.1) shows the volume of financial resources by main providers, representative for the year 2023.

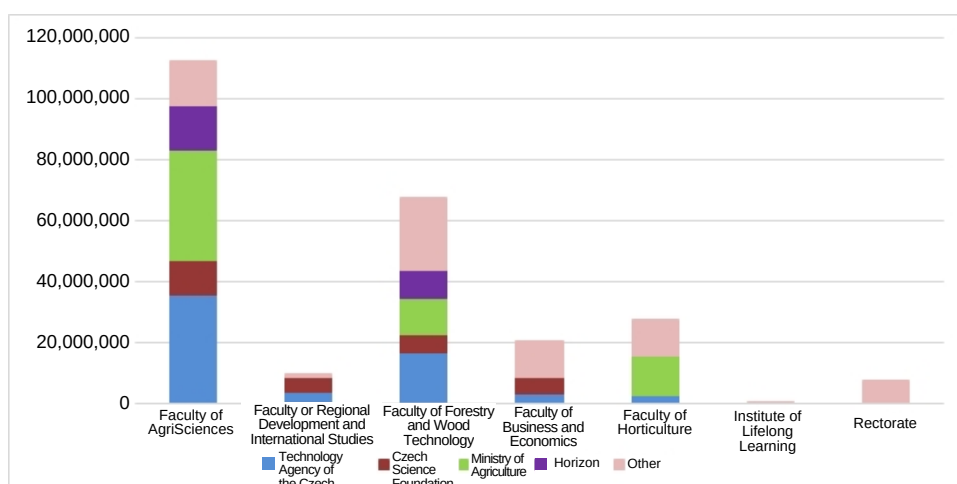


Figure 1: Research project funds distributed by main providers for 2023

increased involvement in international networks, platforms and projects

MENDELU actively cooperates with [Czech Development Agency](#) focusing on the implementation of development projects in predetermined areas, which are Ethiopia, Zambia, Georgia and Cambodia. The University has successfully completed several projects in Zambia, including a project focused on silvopastoral systems. There are plans to continue work in this country. This initiative is part of MENDELU's broader efforts to support sustainable development and strengthen international cooperation.

MENDELU became part of the international [BIOEAST](#) initiative, which brings together institutions from Central and Eastern Europe. MENDELU signed a memorandum of cooperation in 2022. The main role of the University is to coordinate cooperation within the international university network. The aim of this initiative is to support environmental sustainability, create new jobs especially in rural regions, and promote the circular bioeconomy. The activity in the Czech Republic is supported by the Ministry of Agriculture and the Ministry of Education, Youth and Sports.

5.1.1 R&D&I capacities of HEI in the year 2025

Field of Research	FORD	FORD share [%]	Predominant type of research	Total share of field of reaserch [%]
1. Natural Sciences	1.1 Mathematics		Select an item.	41
	1.2 Computer and information sciences	1	Applied research	
	1.3 Physical sciences		Select an item.	
	1.4 Chemical sciences	7	Basic research	
	1.5 Earth and related environmental sciences	13	Basic research	
	1.6 Biological sciences	20	Basic research	
	1.7 Other natural sciences		Select an item.	
2. Engineering and Technology	2.1 Civil engineering		Select an item.	10
	2.2 Electrical engineering, Electronic engineering, Information engineering		Select an item.	
	2.3 Mechanical engineering		Select an item.	
	2.4 Chemical engineering		Select an item.	
	2.5 Materials engineering	5	Balanced basic and applied research	

	2.6 Medical engineering		Select an item.	
	2.7 Environmental engineering	5	Balanced basic and applied research	
	2.8 Environmental biotechnology		Select an item.	
	2.9 Industrial biotechnology		Select an item.	
	2.10 Nanotechnology		Select an item.	
	2.11 Other engineering and technologies		Select an item.	
3. Medical and Health Sciences	3.1 Basic medicine		Select an item.	
	3.2 Clinical medicine		Select an item.	
	3.3 Health sciences		Select an item.	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	25	Basic research	38
	4.2 Animal and Dairy science	8	Basic research	
	4.3 Veterinary science	5	Basic research	
	4.4 Other agricultural sciences		Select an item.	
5. Social Sciences	5.1 Psychology and cognitive sciences		Select an item.	9
	5.2 Economics and Business	7	Basic research	
	5.3 Education		Select an item.	
	5.4 Sociology		Select an item.	
	5.5 Law		Select an item.	
	5.6 Political science	1	Basic research	
	5.7 Social and economic geography	1	Basic research	
	5.8 Media and communications		Select an item.	
	5.9 Other social sciences		Select an item.	
6. Humanities and the Arts	6.1 History and Archaeology	1	Balanced basic and applied research	2
	6.2 Languages and Literature		Select an item.	
	6.3 Philosophy, Ethics and Religion		Select an item.	
	6.4 Arts (arts, history of arts, performing arts, music)		Select an item.	
	6.5 Other Humanities and the Arts	1	Balanced basic and applied research	
Total		100 %	-	100 %

5.1.2 Target R&D&I capacities of HEI for the next five-year period

Field of Research	FORD	FORD share [%]	Predominant type of research	Total share of field of research [%]
1. Natural Sciences	1.1 Mathematics		Select an item.	34
	1.2 Computer and information sciences	1	Applied research	
	1.3 Physical sciences		Select an item.	
	1.4 Chemical sciences	5	Basic research	
	1.5 Earth and related environmental sciences	8	Basic research	
	1.6 Biological sciences	20	Basic research	
	1.7 Other natural sciences		Select an item.	
2. Engineering and Technology	2.1 Civil engineering		Select an item.	11
	2.2 Electrical engineering, Electronic engineering, Information engineering		Select an item.	

	2.3 Mechanical engineering		Select an item.	
	2.4 Chemical engineering		Select an item.	
	2.5 Materials engineering	5	Balanced basic and applied research	
	2.6 Medical engineering		Select an item.	
	2.7 Environmental engineering	3	Balanced basic and applied research	
	2.8 Environmental biotechnology		Select an item.	
	2.9 Industrial biotechnology		Select an item.	
	2.10 Nanotechnology		Select an item.	
	2.11 Other engineering and technologies	3	Balanced basic and applied research	
3. Medical and Health Sciences	3.1 Basic medicine		Select an item.	
	3.2 Clinical medicine		Select an item.	
	3.3 Health sciences		Select an item.	
4. Agricultural and veterinary sciences	4.1 Agriculture, Forestry, and Fisheries	30	Basic research	40
	4.2 Animal and Dairy science	5	Basic research	
	4.3 Veterinary science	5	Basic research	
	4.4 Other agricultural sciences		Select an item.	
5. Social Sciences	5.1 Psychology and cognitive sciences		Select an item.	13
	5.2 Economics and Business	9	Basic research	
	5.3 Education		Select an item.	
	5.4 Sociology		Select an item.	
	5.5 Law		Select an item.	
	5.6 Political science	2	Basic research	
	5.7 Social and economic geography	2	Basic research	
	5.8 Media and communications		Select an item.	
	5.9 Other social sciences		Select an item.	
6. Humanities and the Arts	6.1 History and Archaeology	1	Balanced basic and applied research	2
	6.2 Languages and Literature		Select an item.	
	6.3 Philosophy, Ethics and Religion		Select an item.	
	6.4 Arts (arts, history of arts, performing arts, music)		Select an item.	
	6.5 Other Humanities and the Arts	1	Balanced basic and applied research	
Total		100 %	-	100 %

5.1.3 Relation to the strategic objectives of the provider and strategic documents in the field of R&D&I

Strategic document	Follow-up
National Research, Development and Innovation Policy of the Czech Republic 2021+	Strategic Plan of Mendel University in Brno for 2025–2030
National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021–2027	Strategic Plan of Mendel University in Brno for 2025–2030 Sustainability Strategy of Mendel University in Brno for 2025–2030

Strategic Plan of the Ministry for Higher Education for the Period from 2021	Strategic plan of the Mendel University in Brno for the Period from 2021 Strategic Plan of Mendel University in Brno for 2025–2030 Sustainability Strategy of Mendel University in Brno for 2025–2030 Long-term Plan for Educational, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Mendel University in Brno 2016–2020 Strategy for Internationalisation of Mendel University in Brno
Strategy for Internationalisation of Higher Education for the Period from 2021	Strategy for Internationalisation of Mendel University in Brno Strategic Plan of Mendel University in Brno for 2025–2030
Act No. 111/1998 Coll., on Higher Education Institutions and on Amendments and Supplements to Other Acts, as amended	Strategic Plan of Mendel University in Brno for 2025–2030
guidelines of the Ministry of Education, Youth and Sports (hereinafter referred to as the “Ministry”) regarding the rules for providing specific-purpose support for University-specific research for the given calendar year	Rector’s Decision No. 15/2020 Principles of Student Grant Competition and University-Specific Research at Mendel University in Brno
rules for providing specific-purpose support for University-specific research, approved by Resolution of the Government of the Czech Republic dated 30th September 2019 No. 697	Rector’s Decision No. 15/2020 Principles of Student Grant Competition and University-Specific Research at Mendel University in Brno
Act No. 130/2002 Coll. on Support of Research, Experimental Development and Innovation from Public Funds and on Amendments to Some Related Acts	Rector’s Decision No. 15/2020 Principles of Student Grant Competition and University-Specific Research at Mendel University in Brno Rector’s Guidelines 4/2023 Grant Agency of Gregor Johann Mendel of Mendel University in Brno
Strategy for Education Policy of the Czech Republic until 2030+	Strategic Plan of Mendel University in Brno for 2025–2030
Innovation Strategy of the Czech Republic 2019–2030: The Country for the Future	Strategic Plan of Mendel University in Brno for 2025–2030
Regional Innovation Strategy of the South Moravian Region 2021–2027 and Brno Strategy 2050	Strategic Plan of Mendel University in Brno for 2025–2030 Sustainability Strategy of Mendel University in Brno for 2025–2030
Strategy for International Cooperation in Research and Development	Strategic Plan of Mendel University in Brno for 2025–2030
Gender Equality Strategy 2021–2030	Code of Conduct for Employees, Students and Alumni of Mendel University in Brno Selection Procedure Rules of Mendel University in Brno Gender Equality Plan 2022–2024 Human Resources Management Strategy HRS4R – Action Plan 2024–2026
European Higher Education Area, which includes the Bologna Declaration of 1999 and subsequent communiqués.	Strategic Plan of Mendel University in Brno for 2025–2030
2030 Agenda for Sustainable Development (UN)	Strategic Plan of Mendel University in Brno for 2025–2030
The European Green Deal	Strategic Plan of Mendel University in Brno for 2025–2030 Sustainability Strategy of Mendel University in Brno for 2025–2030
European Climate Pact	Strategic Plan of Mendel University in Brno for 2025–2030 Sustainability Strategy of Mendel University in Brno for 2025–2030

5.2 Research and development objectives

The HEI will describe its intentions and goals for the next five-year period. The objectives in the field of research development, innovation, and knowledge transfer as well as the objectives in the field of cooperation with public administration, entrepreneurs, and non-profit organisations will be described in relation to the mission, vision and disciplinary capacities of the HEI. Furthermore, the objectives for the development of the HEI as a research organisation will be described, in the areas of human potential development, institutional resilience, the implementation of open science and adherence to the principles of ethics, scientific integrity, and good practice, and their interrelationship with R&D&I objectives. The objectives described must be consistent with the Strategic plan for the teaching, scholarly, scientific, research, development, artistic and other creative activities of the higher education institution.

Maximum 2000 words.

Self-assessment:

In line with MENDELU's R&D&I objectives, the University supports excellent research focused on global challenges such as climate change, biodiversity loss, soil degradation and sustainable management of natural resources. Significant attention is paid to the transfer of technologies and knowledge into practice, which is crucial for increasing the social relevance of scientific results. The University also strengthens international cooperation and involvement in research networks, which ensures the global impact of its scientific activities and raises awareness. For instance, within the HEROES alliance, which brings together 9 dynamic and regionally anchored institutions, MENDELU contributes with its highly specialised fields such as landscape engineering and management, wood materials engineering and European forestry. Furthermore, it provides unique green facilities – forests, gardens, farm and vineyards. Through the **Institute of Lifelong Learning**, MENDELU also offers extensive opportunities for **cooperation in developing short-term educational programmes**.

Objectives in Research, Development and Innovation

The development of strategic international cooperation aims to utilise MENDELU's potential in science and education. The development of partnerships focuses on the University's membership in the HEROES European University Alliance and the fulfilment of the Alliance's objectives. Further geographical orientation stems from MENDELU's Internationalisation Strategy itself and is directed both towards major world universities developing research and education through the application of life sciences knowledge, and towards international development cooperation, through which MENDELU fulfils the third role of universities – service to society. In this context, the University's partners also include diplomatic missions of the Czech Republic abroad, non-profit organisations and international organisations such as the UN, FAO, UNESCO and NATO.

The development of MENDELU in the next five-year period will be largely influenced by the successful acquisition of projects within the Operational Programme Jan Amos Komenský (OP JAK) with a total amount of CZK 484,999,000/EUR 19,132,117. Although these are primarily investments in infrastructure and education, the modernisation of the University campus and equipment, including the enhancement of pedagogical competencies, will undoubtedly be reflected in the quality of research and development activities and international competitiveness.

The first project focuses on improving the University's infrastructure facilities, increasing the efficiency and quality of teaching, as well as enhancing the attractiveness, safety and comfort of study. Simultaneously, the project will focus on the renewal, expansion and particularly the enhancement of instrumental and laboratory equipment. The second project, which focuses on

equality, inclusion and barrier-free access at Mendel University in Brno, includes modifications to spaces to ensure barrier-free access, improved orientation within the campus, provision of special equipment for students with specific needs, aids for counselling services, and structural and technical modifications to enhance the comfort of the target group. The third project focuses on a sustainable and modern academic environment and aims to develop pedagogical and didactic competencies of academic staff, improve the quality of education provided, enhance internal quality assessment processes, review the structure of studies and address study failure rates. New study programmes will be created whilst some existing ones will be modified with an emphasis on addressing global challenges. New promotional materials and methodologies for working with students with specific needs will be developed.

Knowledge Transfer Objectives

In the area of technology and knowledge transfer, the Strategy of Inter-sectoral Cooperation will be implemented through building and developing cooperation with relevant partners (South Moravian Innovation Centre, ministries, providers of financial support). Emphasis will be placed on cooperation with industrial partners. For this purpose, the University intends to create communication platforms for industrial partners and regional institutions, and cooperation agreements will also be concluded with local governments, non-profit organisations and business entities focused primarily on sustainability. The University will focus primarily on this area, although attention will also be paid to other fields and research areas at MENDELU. Regional cooperation is further strengthened through participation in clusters that connect companies with research organisations, thereby creating an environment for synergy, acceleration of innovations and exchange of know-how.

The development of technology and knowledge transfer will take place at the University-wide level through process setting and updates of strategic documents. Support for student entrepreneurship will continue to be implemented through [taught courses](#) StartUp MENDELU and Podnikni to! Successful examples of technology transfer will be regularly presented with the aim of increasing public awareness of the social relevance of research at MENDELU. Inventors of patents and licensed applied results from among MENDELU employees will be more effectively rewarded through a revised and updated remuneration system.

Objectives in the area of cooperation with public administration, businesses and non-profit organisations in relation to the mission, vision and professional capacities of the University

Objectives in the area of cooperation with public administration (particularly ministries) began to be implemented in 2024 thanks to the new position of Rector's Advisor for Development and Commercialisation, aimed at increasing the social relevance of research and research for state needs. These activities are already functioning successfully and will be developed primarily in the following period. In 2023, memoranda were signed with, for example, Lesy ČR, s.p., Partnership Foundation, Moravian Science Centre Brno, and in 2024, memoranda were signed with, for example, the Ministry of Agriculture, the Ministry of Environment, and the University of South Bohemia in České Budějovice.

MENDELU objectives in human potential development

In the area of human potential development, the University has defined objectives for the next period in its Strategic Plan 2025–2030. Emphasis is placed on modernising personnel management, supporting employees and creating an inclusive and stimulating work environment. A key objective is to develop a human resources management system that will respect the Gender Equality Plan and the European Charter for Researchers. In the area of career system setup, the objective is to implement career planning including clearly defined career paths for academic, research and non-academic staff. Part of this effort is the development of talent management, which includes

mapping and supporting talented employees through educational programmes focused on their professional growth. Emphasis is also placed on implementing an internal employee evaluation system, where a key activity will be the development of an equal remuneration strategy (including defining rules for uniform setting of both performance-based and motivational wage components). The University will continue to focus on supporting work-life balance and ensuring a safe and supportive working environment. This includes developing the [Safe MENDELU](#) platform with emphasis on prevention and education, supporting the adaptation of employees returning from parental leave or care for a close person, and implementing rules to support well-being, such as home office policies or organisation of work meetings.

MENDELU Development Objectives in the Area of Institutional Resilience

In the following period, MENDELU shall focus on ensuring cybersecurity in accordance with the requirements of NIS2 and the National Cyber and Information Security Agency, whilst emphasising regular training and testing of key employees. A significant objective shall be the creation and implementation of business continuity plans and disaster recovery plans. The University's critical infrastructure geographical redundancy shall be established, and fully redundant power supply to server rooms shall be implemented. The information systems shall ensure digitalisation of study records and the implementation of artificial intelligence for process automation, which shall contribute to overall academic resilience and efficiency of the University environment.

Implementation of Open Science

Support for open science includes the introduction of Open Access and Open Science strategies and research data management in accordance with FAIR principles (Findable, Accessible, Interoperable, Reusable). The University has established an Open repository of research and development results and plans to create an infrastructure base for research data management, which shall be connected to the European Open Science Cloud (EOSC). The objective is to ensure that research results are accessible and usable for a broad spectrum of users, thereby supporting their practical application.

The Open Science strategy and emphasis on scientific integrity contribute to increasing the quality and transparency of research at the University whilst supporting human potential development through educational and research activities focused on future generations of scientists.

Adherence to principles of ethics, scientific integrity and good practice

In the field of ethics, scientific integrity and good practice, the University emphasises creating a concept of ethical principles that are systematically implemented into all scientific and research activities. Thematic training sessions will be available to both the academic community and students. In accordance with international standards, such as the Coalition for Advancing Research Assessment (CoARA), the University develops principles for responsible evaluation of scientific activities. Updates to rules and internal regulations ensure that the University maintains high standards of scientific integrity and accountability.

5.3 Institutional tools and measures for the implementation of the research and development strategy

The HEI will describe its institutional and strategic tools (e.g., strategic management tools, tools created to support the implementation of research objectives, legal and organisational norms in relation to R&D&I support, etc.) that are designed to fulfil the research and development objectives for the next five-year period (Table 5.3.1), with an emphasis on:

- Supporting quality R&D&I.
- Excellent science.
- Innovative environment and increasing the international or disciplinary competitiveness of the HEI's research activities.
- Development of human potential.
- Institutional resilience.
- Adherence to ethical principles, scientific integrity and good practice in R&D&I.

Maximum 2000 words.

Self-assessment:

Support for high-quality R&D&I

Research and development activities at MENDELU are based on the following pillars:

- a) evaluation of research outputs,
- b) external national projects,
- c) external international projects,
- d) contract research,
- e) Gregor Johann Mendel Grant Agency.

Grants for Long-term Conceptual Development of Research Organisations are distributed with emphasis on supporting quality over quantity, e.g. high-quality scientific and research outcomes including publications in the first deciles and quartiles, and applied research results. The distribution of motivational budget components and remuneration for patent originators and licensed applied results will proceed according to newly revised and updated rules, with new qualitative elements such as peer review evaluation being used to assess R&D&I activities of departments.

MENDELU has long established itself as a research University that emphasises an optimal balance between basic and applied research. The Gregor Johann Mendel Grant Agency and the Internal Grant Agency play a significant role in supporting research and creative activities of employees. It focuses on supporting specific University research, particularly individual projects of doctoral programme students, their active involvement in science and promotion of research results.

MENDELU's success in obtaining external national and international projects is constantly increasing, with key national grant providers including the Technology Agency of the Czech Republic (TA ČR), the Czech Science Foundation (GA ČR), the National Agency for Agricultural Research (NAZV) and the Ministry of Education, Youth and Sports (MEYS), and at the international level HORIZON, VISEGRAD FUND, COST or Marie Curie. To ensure the current trend continues, the Project Office, which consistently provides methodological support to proposers and investigators of national and international projects, will be strengthened. Project management shall be professionalised with emphasis on support for the EU's 9th Framework Programme for Research and Innovation Horizon Europe (2021–2027) and other international grant schemes (e.g. COST, Marie Curie, etc.). The Project Office shall continue to offer a wide range of seminars, training sessions or workshops on project preparation, administration of project applications, including

the identification of new opportunities. The activities of the Project Office shall be supported by the establishment of new University-wide software that will digitalise project management agenda and research data management throughout the entire project lifecycle.

Considerable attention will continue to be devoted to supporting early-career researchers from doctoral study programmes. This is supported, for example, by the two-round competition for supplementary talent scholarships MENDELU Ph.D. Talent or MENDELU PhD Week, which focuses on current topics such as project management, publishing, science popularisation and employment matters.

The School Agricultural Enterprise Žabčice, the School Forest Enterprise Masaryk Forest Křtiny, and the MENDELU Botanical Garden and Arboretum will be utilised for practical teaching, research tasks and verification of scientific findings in practice. The main activities of these enterprises include practical training of students in accredited programmes, scientific research activities of staff, students and doctoral candidates, professional consultancy and demonstration activities.

Students and staff have access to an extensive library, periodicals reading room and a modern Information Centre with a wealth of electronic information resources. The Audiovisual Centre provides video recordings for teaching and research purposes and maintains the University's film and video library. MENDELU's archival wealth is preserved in an accredited University Archive, which serves not only to document history but also to make it accessible to researchers. In cooperation with the CARDS project, the University will ensure high-quality searchability and accessibility of electronic, digitised and printed information resources for science and research, including research data, through a new library system, new meta-search engine, and a central Next Generation Platform as a shared space for efficient information resource management.

Legal and organisational standards in relation to R&D&I support

- [Rector's Order No. 22/2019 Criteria Applied in Habilitation Proceedings and Proceedings for Appointment of Professors at Mendel University in Brno of October 3, 2019](#)
- [The rules for Habilitation Proceedings and Proceedings for Appointment of Professors at Mendel University in Brno of 5 December 2019](#)
- Rector's Decision No. 17/2010 *Methodology for Preparation and Implementation of Projects Co-financed from European Union Sources*
- Rector's Decision No. 16/2016 *Preparation of Applications for Support from the Operational Programme Research, Development and Education*
- Rector's Decision No. 12/2017 *Implementation of Projects Funded from the Operational Programme Research, Development and Education*
- Rector's Order No. 15/2020 *Principles of Student Grant Competition and Specific University Research at Mendel University in Brno*
- Rector's Decision No. 7/2003 *Rules for the Use of Financial Support for Research and Development from Public Funds*
- Rector's Decision No. 20/2003 *Rules for Joint Research pursuant to Section 2(3)(b) of Government Regulation No. 462/2003 Coll.*
- Rector's Decision No. 26/2014 *Remuneration of Inventors of Inventions, Utility Models and Other Industrial Property Objects and Management of Income from Commercialisation*
- Rector's Order No. 12/2019 *Protection and Commercialisation of Industrial Property of Mendel University in Brno*

Innovative Environment and Enhancement of International or Field-specific Competitiveness of MENDELU Research Activities and Scientific Excellence

MENDELU has become a member of the European Universities Alliance HEROES, where it will contribute to shaping a sustainable and resilient Europe and building Europe as a leading centre for

research and innovation as part of implementing the European Strategy for Universities. Membership in the HEROES alliance, further implementation of the HR Award, and modernisation of the University environment focused not only on sustainability and modern technologies but also supporting overall well-being for staff and students, aims to increase the number of talented students and scientists from around the world. An innovative environment is created by people who can freely explore, share their findings with the international community and have facilities in the form of a modern and open campus. Support for free research will strengthen the University's position not only in Life Sciences but also in circular economy and sciences focused on the development of Smart Technologies used in agriculture and forestry. The focus on agriculture and forestry and research aimed at using "space technologies" in these areas will increase the professional competitiveness of the University's research activities. Greater interconnection between research conducted at the University campus and school enterprises will lead to faster implementation of research results into practice. In cooperation with other universities in the alliance and strategic partners, the prestige of Mendel University in Brno in the international environment will increase. The University will strive to apply for the continuation of the HEROES alliance.

International competitiveness continues to deepen thanks to successful, active participation in solving international projects and creating research platforms and consortia supporting the emergence of excellent results. Even greater emphasis will be placed on identifying and connecting research teams with foreign platforms in the following period. Professional support provided by project managers aims to increase the proportion of implemented projects and the volume of financial resources obtained from international projects (HORIZON, ERC). Not only students and academic staff but also non-academic staff of MENDELU will be involved. Excellent basic and applied research is based on offering outstanding study programmes that represent key pillars in guiding the University towards becoming a leader in developing innovative approaches and technologies for landscape protection and sustainable use. The University will thus significantly contribute to addressing global challenges such as climate change, soil degradation and biodiversity loss.

The continuous support of excellent research topics at MENDELU will be maintained through the Gregor Johann Mendel Internal Grant Agency (GaGJM), which has been operating very successfully since 2020. The interconnection of research with contemporary trends will be ensured through annually updated internal competition regulations according to project calls. The aim of establishing GAGJM was to strengthen the quality and prestige of research work at MENDELU, increase the University's success in obtaining prestigious international grants, and stimulate interdisciplinary innovative research with high added value. Research support is implemented in several ways. The predominant selection criterion in all types of support is the research excellence of the project proposer(s), or the proposer's potential to achieve excellent results, and the quality of the submitted project proposal or project that was not supported by ERC but was evaluated in the second round.

Human Potential Development

Human potential development at Mendel University in Brno is a key priority and is anchored in several strategic documents including the **Strategic Plan for 2025–2030**, **Gender Equality Plan** and **Human Resources Management Strategy**. The University has long strived to create a supportive environment that enables staff and students to fully develop their professional and personal potential. In the area of human potential development, the University has clearly defined objectives for 2025–2030, which are embedded in the strategic plan. The main emphasis is placed on modernising personnel management, supporting employees and creating an inclusive and inspiring work environment. A key priority is the development of a human resources management system

based on the principles of the Gender Equality Plan and the European Charter for Researchers. One of the main objectives is the implementation of career planning, including clearly defined career paths for academic, research and non-academic staff. Simultaneously, the implementation of an internal staff assessment system is being prepared, which includes the development of an equal pay strategy with emphasis on uniform performance-based and incentive wage components. Emphasis is also placed on the development of managers through seminars or individual coaching. Another important measure is supporting work-life balance and ensuring a safe and supportive working environment. The University plans to develop the **Safe MENDELU** platform, which focuses on preventing inappropriate behaviour, education and strengthening social security, as well as training counsellors, workshops and educational activities aimed at preventing and addressing inappropriate behaviour. These initiatives support an inclusive and respectful working environment. Emphasis will also be placed on supporting employees returning from parental leave or care for relatives, and on implementing rules promoting **well-being**. These measures include, for example, rules for working from home or organising meetings with regard to work-life balance. These steps are aimed at creating a modern and supportive environment that increases the University's attractiveness as an employer. The University places great emphasis on **equal opportunities** and gender equality. The Gender Equality Plan defines specific steps to ensure equal access to career opportunities and promote diversity in the workplace. The measures include regular round tables, employee satisfaction surveys and discussions on topics such as support for international staff, equal remuneration and prevention of discrimination.

Institutional and Strategic Tools for Achieving Objectives

To achieve institutional resilience objectives, MENDELU will utilise tools such as the implementation of comprehensive cybersecurity systems for information classification, risk identification and assessment, and supplier relationship management. Geographic redundancy technology for critical systems will be implemented, and locations will be interconnected via proprietary optical infrastructure. Investment and technical renewal of critical infrastructure and application of standardised procedures for deploying new infrastructure will serve as the hardware tool for change. In terms of academic resilience, digitalisation will be implemented in the educational process, along with a new Enterprise Resource Planning (ERP) software system to support economic efficiency and more effective strategic management of financial flows.

Adherence to Ethical Principles, Scientific Integrity and Good Practice in R&D&I

MENDELU will continue to develop infrastructure services to support creative activities, Data Management Plan development, and pursue the implementation of Open Access and Open Science Strategy at MENDELU through a network of coordinators within individual University units. In accordance with FAIR principles, University research data infrastructure connected to the national EOSC infrastructure will be established.

MENDELU considers adherence to ethical principles as a fundamental pillar of research and creative activities. Activities are conducted in accordance with the highest standards of academic integrity, transparency and accountability. Ethical principles are embedded not only in the internal environment but also stem from international recommendations and commitments in the field of science and research. Ethical principles shall be developed in the Concept of Ethical Principles in Creative Activity and shall be based on the Code of Ethics containing comprehensive mechanisms and methods for preventing misconduct in research integrity and academic freedoms. Training of the academic community, students and members of ethics committees shall be ensured through a cycle of training sessions with annual periodicity.

Joint meetings of committee chairs and the Vice-Rector for Research, Development and Innovation continue to take place. The meetings serve to build professional relationships and share good practice in the field of ethical standards across various disciplines.

To ensure high-quality awareness of the academic community in the field of ethics, a centralised web platform operates, providing clear and up-to-date information about control mechanisms and activities of individual ethics committees at the University. The Ethics Committee for Research and Innovation Integrity continues to operate, being appointed ad hoc with respect to field-specific research, development and artistic activities, thereby ensuring oversight of ethical integrity across all areas of research and innovation at the University.

5.3.1 Institutional tools and measures for the implementation of the research and development strategy

Name of instrument/measure	Description of the tool/measure	Implementation status	Year
Development of technology and knowledge transfer	Updated internal regulations governing the distribution of commercialisation income	Not implemented	2026
Development of technology and knowledge transfer	Update of the strategy for developing knowledge transfer into practice.	Not implemented	2026
Open Access and Open Science Strategy at MENDELU	Strategy implementation including recommendations for research data management	Partially implemented	2026–2030
Ensure high-quality searchability and accessibility of electronic, digitised and printed information resources for science and research, including research data, in cooperation with the CARDS project	New library system, new meta-search engine, next-generation Central Platform	Partially implemented	2026
Update of rules for the distribution of LCDRO (Long-term Conceptual Development of Research Organisations) and motivational components of the budget	Rules for the distribution of the incentive component shall be adopted.	Not implemented	2026
Internal grant schemes, GAGJM competition	Annually Updated Internal Competition Regulations of GAGJM According to Project Calls	Implemented	2025–2030
Concept of Ethical Principles in R&D&I Activities	The indicator is an annually conducted cycle of training sessions and webinars for the academic community and students, training of ethics committee members.	Implemented	2024–2030
Strategy of Cross-sectoral Cooperation	Building and Developing Cooperation with Relevant Partners	Not implemented	2025–2030
Financial Instruments to Support Talented Postgraduate Students	Implementation of an internal competition promoting excellence in doctoral study programmes, organisation of seminars and workshops, increased proportion of publications with doctoral programme students	Partially implemented	2025–2030
Safe MENDELU Platform	Development of the Safe MENDELU Platform – emphasis on prevention, counsellor training, education of students and employed population	Partially implemented	2025–2030
Sustainability Strategy 2025+	Support for sustainability research	Partially implemented	2025–2030
MENDELU's involvement in higher education alliances and European universities	The success indicator is participation in the European universities alliance.	Implemented	2025
Methodology for Supporting Talented Students	Development of methodology and subsequent implementation of support	Not implemented	2025–2030

System of education for academic staff to achieve the competency framework	Determination of competency area priorities, setting up implementation plan, implementation of MENDELU competency framework	Not implemented	2025–2030
Implementation of the University's personnel strategy	Organisation of round tables and surveys reflecting the Gender Equality Plan and the European Charter for Researchers	Not implemented	2025–2030
Implementation of strategy for the development and delivery of study programmes at faculties	Development of University strategy for study programmes with regard to the University's professional focus Development of Faculty strategies for study programmes in accordance with the University strategy	Not implemented	2028
Development of conditions for doctoral students' involvement in international networks	Database of external international experts for reviews and consultations within doctoral study programmes Updated incentive systems to support publishing with international institutions	Not implemented	2025–2027
Rules for mobility and international activities of doctoral programme students	Definition and creation of internationalisation rules for doctoral programme studies	Not implemented	2025–2026
Development of cooperation with regional institutions in the field of sustainability	Concluding cooperation agreements with local authorities, non-profit organisations and business entities focused on sustainability	Not implemented	2025–2030

5.4 Implementation of the recommendations in Module 5

The HEI will briefly describe how it has implemented the recommendations for Module 5 from the previous evaluation period, if applicable.

Maximum 1000 words

Self-assessment:

Implementation of recommendations

Further support of strategic indicators including research trends, HR and merit-based remuneration

In 2023, the University substantially revised its internal quality assessment system and implemented a number of new processes that support the view of quality through study programmes. The University has introduced transparent and performance-oriented remuneration that will promote excellence in research, education and public engagement. These measures will be closely linked to the updated University strategic plan and regularly evaluated.

The University's strategy in educational activities and quality focuses on comprehensive improvement of the educational environment and student support at all levels of their academic life. Specific University research is supported and ensured through the Internal Grant Agency of MENDEL. In addition, research and creative activities of University staff are supported by the internal Gregor Johann Mendel Grant Agency of Mendel University in Brno. Through these instruments, MENDEL has the ability to respond flexibly to current research trends.

The main emphasis should be on international visibility

MENDEL primarily positions itself as a University producing applied results with the ambition to implement them in the international arena. After more than two years of negotiations, we have succeeded in signing a global exclusive licence with Oro Agri, which is a significant global player in the field of organic agriculture. The subject matter of the contract comprises the outputs of the project "Saccharothrix Bacteria for Effective GTD Biocontrol". The licensing partner has assumed both the protection costs and the registration of the active substance in the US and EU. This represents an investment of EUR 3–5 million. These costs are currently unattainable for MENDEL.

To support transfer of technology (a success story)

At the end of the period under review, two projects are heading towards developing outputs in start-ups established at MENDEL. A promising player is Lightly Technologies s.r.o., which, based on a licence, is developing outputs from the project *Fluorescent profiling of samples using controlled photolysis* into a commercial product. Among other achievements, it was successful in the *Prototype and Verify* competition. The success of the start-up is confirmed by the 2nd place in the final of the EIT Jumpstarter competition (2023). In 2025, it will focus on preparing serial production, securing investment, entering the US market and combating fentanyl.

A know-how sale agreement with Nanteo company is prepared for the utilisation of outputs from the project *Protocol for magnetic isolation of nucleic acids from biological samples*. The company has successfully obtained initial investment from a private investor.

To continue as an active player at the national level

In the annual national-level assessment according to Methodology 17+, the University recorded an improvement in Module M1 – selected results for the period 2019–2023. Out of the total number of 161 submitted results, there was a gradual increase in grades 1, 2 and 3. Chairman of Expert Panel 4. Agricultural and Veterinary Sciences Professor Dr. Ing. Luboš Borůvka commented

on the noticeable improvement, particularly in the last year, when the number of grade 2 evaluations increased (5 compared to 2 in the previous year) and conversely, the number of grade 3 evaluations decreased (from 9 to 4, which is a decrease from 75.0 to 30.8%), moreover, one result was evaluated with grade 1. The situation is demonstrated by figures showing both overall results (Fig. 2, Fig. 3) and results for field 4. Agricultural and Veterinary Sciences (Fig. 4). In the field reports for field 4. Agricultural and Veterinary Sciences, it is stated that MENDELU is a significant research organisation with productivity of bibliometrically measurable results in this scientific field.

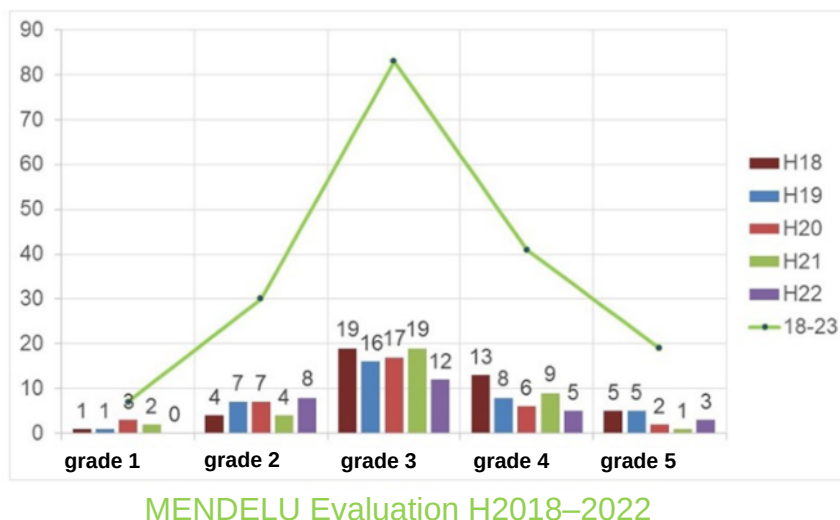


Figure 2: Evaluation of results in module M1 – comparison of years 2018–2022 based on grades awarded by MENDELU

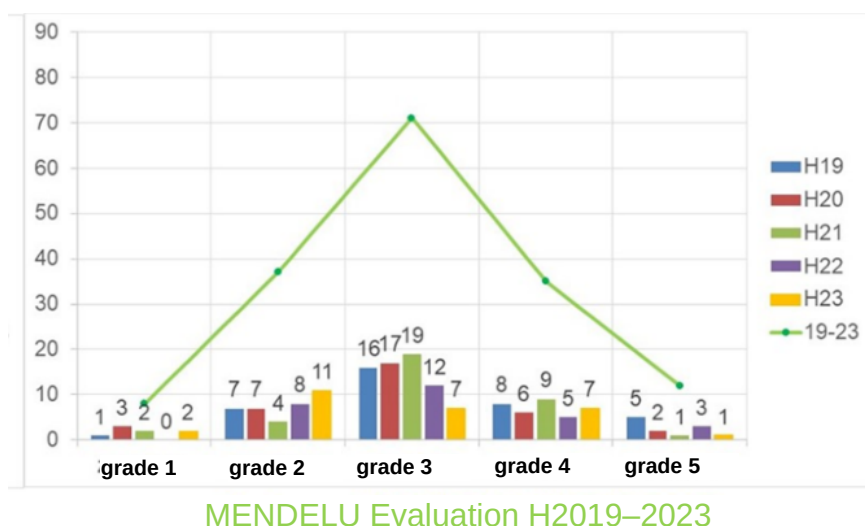


Figure 3: Evaluation of results in module M1 – comparison of years 2019–2023 based on grades awarded by MENDELU

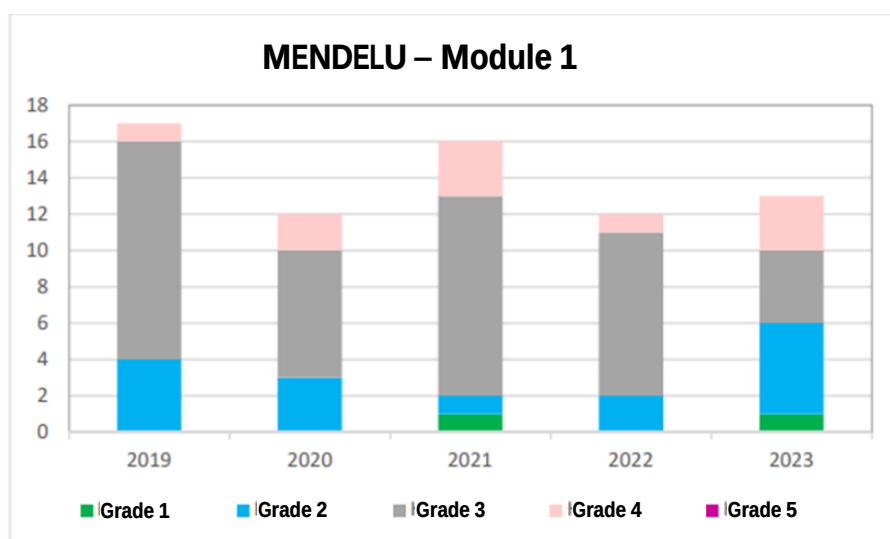


Figure 4: Module M1 Assessment of results for area 4. Agricultural and Veterinary Sciences

To continue to support excellence (Q1 publications)

During the monitored period, there was a decline in conference proceedings contributions at the University, accompanied by a significant increase in D1 and Q1 journal publications. The University's citation rate and H-index increased, and the proportion of self-citations has been continuously decreasing, as demonstrated by the graphs below (Fig. 5, Fig. 6).

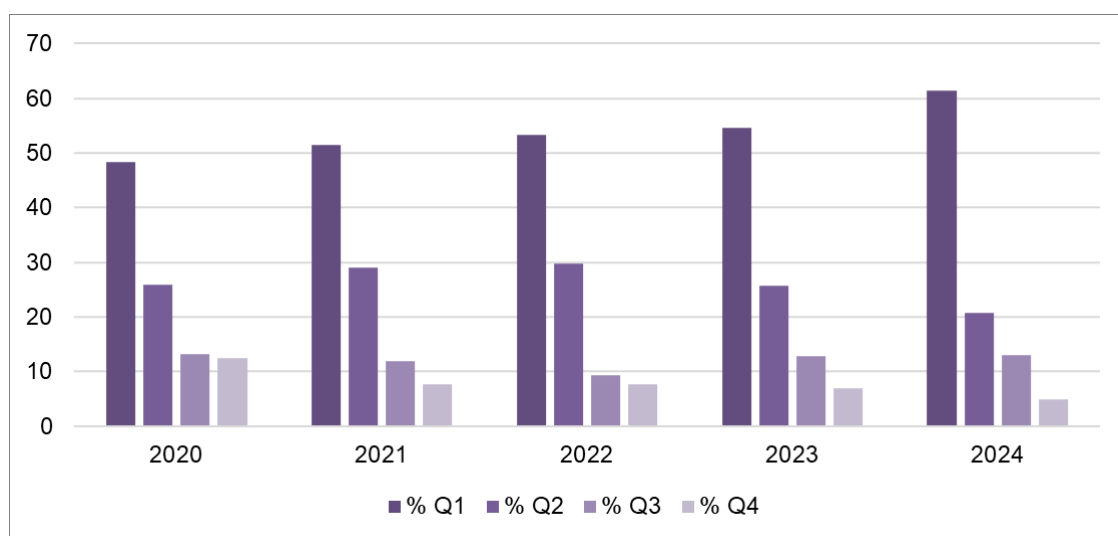


Figure 5: Percentage distribution of articles in quartiles according to Impact Factor (IF) in 2020–2024

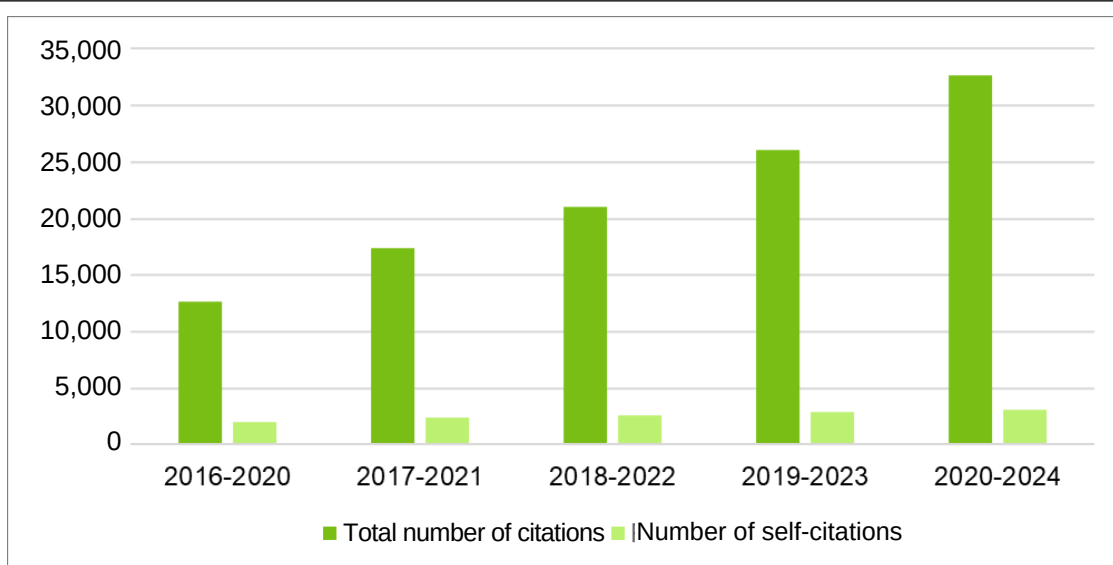


Figure 6: Development of citation impact of MENDELU authors' publications in WoS Core Collection in five-year periods

Table 1: Comparison of h-index and % of cited publications of selected Czech universities for the periods 2019–2023 and 2020–2024

Indicative scaling	Name of University/higher education institution	Average citations per publication		h-index	
		2019–2023	2020–2024	2019–2023	2020–2024
A	Palacký University Olomouc	9.76	10.74	98	101
A	University of Chemistry and Technology, Prague	9.58	10.45	67	71
A	University of South Bohemia in České Budějovice	9.03	10.25	65	75
B	Brno University of Technology	7.84	9.35	74	85
B	Czech University of Life Sciences Prague	9.38	11.55	75	88
B	University of Ostrava	4.91	5.9	39	47
C	Mendel University in Brno	8.31	10.62	59	68
C	University of Veterinary and Pharmaceutical Sciences Brno	7.71	7.32	39	35
C	University of Pardubice	4.96	6.25	33	39
C	Tomas Bata University in Zlín	7.29	8.7	49	49

Citation analysis using the InCites tool shows that MENDELU's percentage of Q1 articles compared to selected universities in the Czech Republic is above average (Fig. 7).

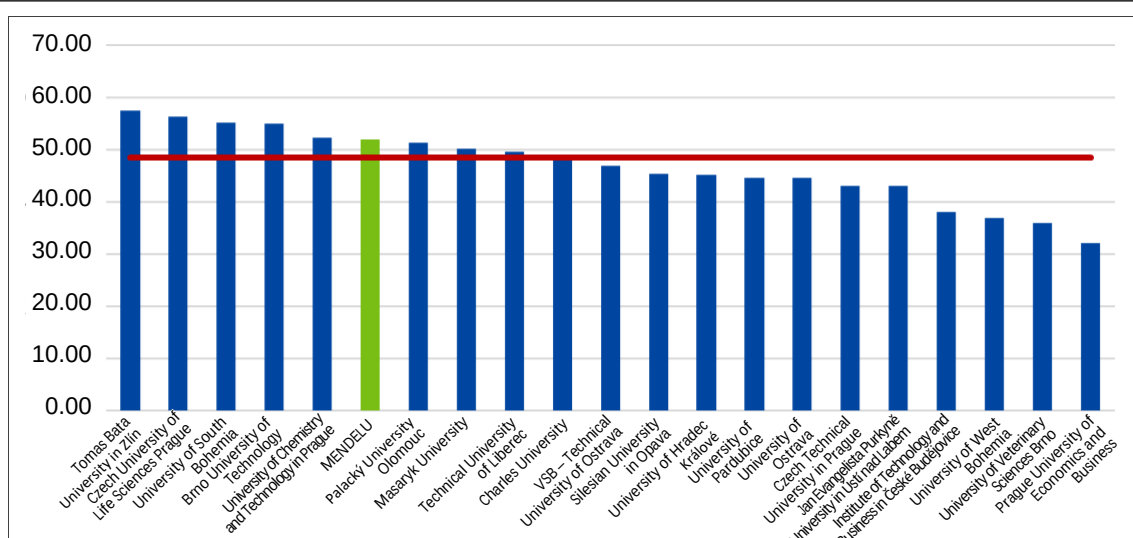


Figure 7: Percentage of Q1 articles by IF, comparison of selected Czech universities in 2020–2023*

(Source: InCites. Web of Science content indexed to InCites through 31 Dec 2024)

* Metrics for 2024 were not yet known at the time of graph processing.

To enhance the support of the international visibility

MENDELU participates in several international rankings. For the fifth time, MENDELU has participated in the global QS (Quacquarelli Symonds) ranking, and in [QS World University Rankings 2024: Top Global Universities](#). According to the currently published results, the University ranked between 851st and 900th position out of a total of 1,503 higher education institutions. Within the Czech Republic, 16 higher education institutions participated in this evaluation. In the national scale, MENDELU ranked 8th. This year, for the sixth consecutive year, the University participated in the [THE World University Rankings 2025](#). Among 17 evaluated Czech universities, MENDELU appeared in 9th place. On a global scale, it ranked between 1,201 and 1,500 out of a total of 2,092 evaluated institutions from 104 countries worldwide.

Since 2019, Times Higher Education has also been publishing [THE Impact Rankings](#) (THE IR), which aims to map the implementation of UN Sustainable Development Goals (SDGs) by higher education institutions. In the current 2024 edition, MENDELU participated for the very first time, engaging in 7 goals out of the total 17 SDGs (SDG2 – Zero Hunger, SDG4 – Quality Education, SDG5 – Gender Equality, SDG6 – Clean Water and Sanitation, SDG13 – Climate Action, SDG15 – Life on Land, SDG17 – Partnerships for the Goals). In the overall assessment, our University ranked between 1,001st and 1,500th position out of 1,963 participating higher education institutions (including 10 Czech universities). Within SDG2 and SDG13 goals, MENDELU ranked 1st among participating Czech universities.

The final ranking in which the University actively participated for the fourth time in 2024 is the so-called “green” university ranking [UI GreenMetric](#). In 2023 (the most recent results available), 1,183 institutions were evaluated in this ranking, including 6 domestic ones, with MENDELU placing 361st, thus improving its position by 74 places year-on-year.

A LIST OF SUPPORTING DOCUMENTS/LINKS FOR MODULE 5

Document name	No. criteria	Location (link in HTML)
Strategic Plan of MENDELU 2021+	5.1	Click here .
MENDELU Strategic Plan for 2025–2030	5.1, 5.2, 5.3, 5.4	Click here .
Strategic plan of the Ministry for Higher Education for the period from 2021	5.1	Click here .
Strategy for the Internationalisation of Higher Education for the period from 2021	5.1	Click here .
Strategy for the Education policy of the Czech Republic up to 2030+	5.1	Click here .
Strategy for Internationalisation of Mendel University in Brno	5.1, 5.2	Click here .
Sustainability Strategy of Mendel University in Brno for 2025–2030	5.1, 5.2, 5.3, 5.4	Click here .
Code of Ethics	5.1, 5.2, 5.3	Click here .
Statement on the Policy of Ensuring Research Integrity at Mendel University in Brno	5.2, 5.3	Click here .
Rector's Order No. 12/2019 on Protection and Commercialisation of Industrial Property at Mendel University in Brno	5.2	Click here .
Rector's Order 4/2020 Work Rules	5.3	Click here .
Selection Procedure Rules of Mendel University in Brno	5.3	Click here .
Gender Equality Plan 2022–2024	5.1, 5.2, 5.3	Click here .
Open and Transparent Recruitment and Selection of Employees at Mendel University in Brno	5.2, 5.3	Click here .
Human Resources Management Strategy HRS4R – Action Plan 2024–2026	5.1, 5.2, 5.3	Click here .
Rector's Guidelines 4/2023 Grant Agency of Gregor Johann Mendel of Mendel University in Brno	5.3, 5.4	Click here .
Rector's Order 15/2020 Principles of Student Grant Competition and Specific University Research at Mendel University in Brno	5.3, 5.4	Click here .
Rector's Decree 22/2019 Criteria applied for Habilitation Proceedings and Proceedings for nominating professors at Mendel University in Brno	5.3	Click here .
The Rules for Habilitation Proceedings and Proceedings for Nominating Professors at Mendel University in Brno of December 5 2019	5.3	Click here .
Sustainability Report of Mendel University in Brno for 2023	5.1, 5.2, 5.3	Click here .