



Faculty of Tropical AgriSciences (FTZ)
Czech University of Life Sciences Prague
Strategy 2021+

Mission and Vision

The mission of the FTZ

FTZ is committed to recruit promising students and present them with high-performing higher education in the fields of tropical agriculture, rural development and sustainable management of natural and energy resources with a focus on the (sub)tropics (keywords: plant and animal (agro)biodiversity, conservation,...) that is at par with universally accepted international quality standards. An integral part of our mission is to foster Research and Development (R&D) in the field of tropical life sciences and the application of R&D results to the specific conditions of tropical and/or developing countries to improve life for individuals and societies worldwide.

The vision of the FTZ

The aspiration of FTZ is to be a reference institution and centre of excellence in 'all things tropical agriculture' first of all for the Czech Republic, especially when it comes to developing, presenting and sharing the latest knowledge and technology on tropical agriculture *sensu lato* between the Czech Republic, EU and tropical regions with respect for the traditional and socio-economic values of local communities of the developing world as well as of their technological development level. We strive to be the first-choice and reference institution for (1) those students who seek high-quality training to engage with the globally competitive workforce; (2) researchers and lecturers who seek the best opportunity to achieve significant global impact whilst at the same time sharing their knowledge with others; (3) businesses that seek partners with innovative and creative approaches; and (4) (inter)national (non-)governmental organisations that want technical and policy support.

Background to the strategic plan

FTZ's 2021+ Strategy is a conceptual document defining strategic priorities for the near future. FTZ's strategic plan draws on CZU's Strategic Plan 2021+, which in turn reflects the priorities of the strategic plan of the Ministry of Education and Science for the period starting 2021.

In accordance with CZU's procedures, FTZ will develop an annual strategic plan. It will formulate specific priority measures/activities leading to the fulfilment of the faculty's longer-term strategic objectives. The implementation plans will be submitted to the Dean's Council and the FTZ Academic Senate for approval, and will be discussed at FTZ's Scientific Council. Evaluation of the enactment of FTZ's implementation plan will be carried out the following year.

The objectives presented in this plan will be financially secured through FTZ's Strategic Management Support Programme; Operational Programmes will be co-financed from European Structural and Investment Funds, from national resources available from individual Czech ministry funds, and from FTZ's own resources.

Structure

The strategic plan is structured in accordance with CZU's 2021+ Strategic Plan

Strategic Area 1: High-quality and competent graduates actively contributing to sustainability and experience for the 21st century

Strategic Area 2: Available and flexible education for the different sustainability dimensions

Strategic Area 3: Effective, very high-quality, international, and responsible PhD studies

Strategic Area 4: Strategically managed research and development activities effectively using capacities

Strategic Area 5: Sustainable strategic management at all levels of the FTZ reducing administrative burden

Strategic Area 6: High quality, international and sustainable environment for the implementation of strategic measures at FTZ

Strategic Area 1: High-quality and competent graduates actively contributing to sustainability and experience for the 21st century

Specific objectives of SA1:

- prepare high-quality and competent graduates
- strengthen the pedagogical competences of teachers
- improve methods of quality assurance of pedagogical activities
- reflect the requirements of the labour market and social challenges in study programmes
- deepen the international dimension of education

High-quality and innovative study programmes. The programmes taught at the FTZ should be at par with, and reflect and use modern and innovative approaches to higher education. All programmes and course curricula will be continuously reviewed in order to take on board the latest developments in the field, and the needs and expectations of society and labour market demands.

Accreditation of new study programmes in English. In the long-term, new curricula and (professional) study programmes will be developed for B.Sc. and M.Sc. study levels where deemed necessary, and which will be accredited and guaranteed by high-quality teachers. Teaching will be more based on a participatory approach and modern methodologies to education with higher involvement of ICT, building on practical examples and tutorials. Some study programmes will be prepared in a double-degree format, whereas we will develop at least one fully online programme for self-paid students.

High-quality theses and defences in all programmes. Priority is to produce high-quality theses at all levels, that are based on original experimental/research work. Involvement of external tutors/supervisors will be promoted where possible. Especially in the follow-up of MSc programmes, and at the level of final state examinations and thesis defences we will involve more academics from renowned foreign universities. This principle is already in place and is appreciated by both students and experts from abroad. The aim will be to also include foreign experts in the defence of doctoral theses, so as to maintain high standards.

More active use of feedback from student and alumni evaluations of teaching. Introduction of a permanent (i.e. regular) quality control mechanism of the teaching provided, mainly through continuous questionnaire surveys and course evaluations by both students and teachers (self-evaluation). We will improve feedback mechanisms and increase evaluation impact and evidence-based decision-making to improve teaching effect.

Reducing drop-out rate of students. Particularly in the first years of BSc. and M.Sc. course programmes, drop-out rates of students will be addressed through selecting higher-quality and more motivated applicants. However, drop-out rate reduction should not negatively affect the quality of the study programmes.

International students and teachers. FTZ will continue to build on a significant proportion of students from abroad. It will create and maintain optimal study conditions for foreign students, especially in the form of providing teaching and day-to-day operational communication in English. The faculty will support the participation of foreign experts and teachers in teaching at all three levels (B.Sc., M.Sc. and Ph.D.), and involve more foreign academics in supervising student work.

Mobility of students and teachers. FTZ will continue to foster projects supporting student and teacher mobility (e.g. Erasmus+) in order to ensure sufficient financial support for incoming/outgoing students and the departments that will receive them. It will also support short-term exchanges of Czech and foreign students (summer schools, short-term courses), thus promoting the international character of teaching. Support will be implemented, *inter alia*, in the form of travel grants that will be dispensed in the frame of international cooperation agreements.

Increased number of qualified academic staff. FTZ will focus on supporting habilitation procedures and procedures for the appointment of professors for young and promising academic staff, with the aim of increasing the number of these categories in the teaching staff and improving the quality of the teaching provided.

Personal security and safety rules and courses. FTZ will improve internal security and safety rules for staff and students and support the organisation of personal security and safety courses designed primarily for students and teachers, but also other interested professionals who are going to stay in countries or areas with different cultures, unstable political and security situations, insufficient health care facilities or areas with risk of dangerous diseases.

Indicators for the five-year period

- *Updating of FTZ curricula; innovation in at least 30% of courses.*
- *Accreditation of at least one double (multiple) degree study programme by 2022.*
- *Accreditation of at least one full-online study programme by 2023.*
- *Once a year, a seminar with supervisors of courses and heads of departments on the quality of teaching will be organised; at least 70% of the compulsory courses taught are evaluated by means of a questionnaire survey and 2 courses per semester from each programme are evaluated through in-person evaluation.*
- *On the total number of students at the faculty, at least 40% are from abroad.*
- *The number of visiting academics from renowned foreign institutions involved in teaching will increase by 20%.*

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- *30% of FTZ staff and 30% of students participate in international mobility programmes each year.*
- *More foreign academics are part of the academic staff.*
- *Six new associate professors and three new professors at FTZ - funds permitting – by 2025.*
- *Organisation of an academic English language course on a continuous basis.*
- *FTZ co-organizes at least two summer schools each year funds permitting.*
- *Personal security and safety guidelines developed, and courses organized each year.*



Strategic Area 2: Available and flexible education for the different sustainability dimensions

Specific objectives of SA2:

- expand flexible forms of education for students from both the Czech Republic and abroad
- respond to current needs of society through an appropriate form of educational activities
- promote accessibility of education to all, including students with disadvantaged experiences
- support lifelong learning

Forms of education reflect current needs. FTZ will continue to build a resilient education system through the combination of face-to-face and distance teaching methods (blended learning), the use of ICT and digitalization in teaching. At least once a year, training will be provided to increase teachers' competences in these forms of teaching.

Maintain the diversity and accessibility of the different degree programmes offered at a high level. FTZ will offer diversified degree programmes covering a wide range of disciplines within tropical agriculture and the so-called life sciences. The programmes will be offered to all prospective students regardless of their status, age, nationality, or socio-economic background. For better accessibility on a global scale, classes are and will continue to be taught in English.

Support for gifted students. The FTZ system will support talented students, through specific scholarship programs or fee waivers for studying in a foreign language.

Support for students with special needs, socially disadvantaged students, and otherwise disadvantaged students. FTZ's study system will continue to support students with special needs, socially disadvantaged students, and otherwise disadvantaged students from both the Czech Republic and abroad through specific mentoring and peer-advisors.

Supporting the orientation of foreign students. Support especially for accepted and newly arrived foreign students through practically oriented courses helping orientation within FTZ, CZU, as well as in everyday life in the Czech Republic, through student ambassadors and extra-curricular activities of FTZ (such as organizing *Welcome courses* for foreign students).

Indicators for the five-year period

- 80% of FTZ courses focusing on tropical agriculture and the "life sciences" sensu lato are widely available through English language teaching.

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- *Organisation of a "Welcome course at FTZ" at least once a year.*
- *A functional group of student ambassadors.*
- *Provision of social scholarships to students.*



Strategic Area 3: Effective, high-quality, international and responsible PhD studies

Specific objectives of SA3:

- be attractive to high-quality applicants for doctoral studies at FTZ through the provision of high-level study programmes
- motivate students to complete their studies on time with maximum publication output
- upon completion, graduates are capable to continue an independent scientific career with competitive CVs also for applying for post-doc positions.

Improvement of the quality of doctoral degree programmes. The faculty will increase/maintain high-quality research standards through its academic mentoring that will yield high-quality outputs in the form of articles (in impact factor journals) and dissertations. Articles will be the basis of final PhD thesis texts. The PhD study programmes are research-oriented leading the majority of student activities and outputs with research work rather than studying theoretical courses.

Improvement of doctoral scholarships. In line with the upcoming reform of postgraduate doctoral studies in the Czech Republic, it is necessary to focus on increasing the number of doctoral scholarships. Financial sources should be sought not only in the FTZ budget, but also from external research projects.

Encouraging students' publishing activities. Especially for doctoral students, FTZ will encourage the presentation of theses in the form of a collection of scientific articles in peer-reviewed journals as opposed to the traditional dissertation format. This will, among other things, accelerate the process of professionalisation of graduates and potential young academics.

Motivational programmes for students. Emphasis will be placed on providing specific, well-targeted scholarships to students to help them with their research and other activities for FTZ and/or CZU. Related to this is the awarding of the FTZ prize for best achievement in scientific research and other public activities.

International studies. International mobility (of both incoming and outgoing students) within doctoral study programmes will continue to be supported, with the possibility of at least three months internship abroad.

Popularization of scientific activities and outputs of students in doctoral programs. The PR department of FTZ will strive to structurally and regularly promote and communicate both

externally and internally the scientific activities and outputs of doctoral students. In order to do so, the faculty will develop a PR policy that will be continuously revised and improved.

Organization of student interactive workshops. Support for student interactive workshops will provide MSc and PhD students with extra opportunities to present their research results. At the same time, PhD students should and will be encouraged to participate in international scientific conferences and congresses, where they have unique opportunities to personally meet top-scientists in their research field and match themselves with their peers.

Indicators for the five-year period

- *All supervisors have adequate publication activity, and produce at least one high-quality publication in a peer-reviewed journal of the Web of Science database with IF annually (rolling average calculated over the last 3 years).*
- *Each PhD student defends his/her thesis with at least 1 publication in a Web of Science journal with IF (bottomline: quality over numbers, and no 'slicing up' of results to increase output numbers).*
- *At least 50% of dissertation theses defended are in the form of a collection of scientific articles.*
- *At least three PR products focusing on scientific activities and outputs of PhD students will be presented each year.*
- *75% of PhD students will complete at least one semester-internship abroad during their studies.*

Strategic Area 4: Strategically managed research and development activities effectively using capacities

Specific objectives of SA4:

- move towards excellent science by motivating the FTZ academic and research population,
- popularise FTZ R&D activities and outputs both internally and towards the broad outside community.

Promoting fundamental and applied research. Promoting fundamental and applied research in individual departments and its harmonization with the needs of society, the Czech Republic's policy priorities, the EU and the needs of the developing world. In the field of development projects, this would translate into a bigger orientation towards "Research-for-Development" projects.

Promoting research, development and innovation (RDI) contributing to sustainability. The focus of RDI activities and outputs to reflect relevant strategic documents of the Czech Republic and the EU, e.g. to build on the National RIS3 Strategy 2021-2027 and to support interdisciplinary and transdisciplinary approaches in RDI.

Increase the number of projects with a research focus. Search for new partners to form research consortia and teams both in the Czech Republic and abroad. An example of this is active participation in associations such as AGRINATURA, where CZU, thanks to FTZ, has been a member of the "Board of Directors" since 2012 (since 2021 holding the position of Vice-President) and has hosted the organization's secretariat since 2004. The share of actively implemented MoUs with foreign partners will be increased.

Strengthening of the FTZ Project Centre to administer mainly international grant schemes. Strengthening of FTZ's Project Centre staff both quantitatively (increase in number of fe/male staff) and qualitatively (continuous improvement of the competencies of FTZ's PC members).

Support for students' publishing activities. Not only for PhD students but also for MSc students, FTZ will support the publication of final theses in the form of scientific articles in peer-reviewed journals instead of traditional theses, which will contribute to the professionalisation of young graduates and will increase visibility.

Excellent scientific publications by all academic staff of FTZ.

Encouraging collaboration with the application sphere. Active search for partners in both the Czech and foreign environment. FTZ will maintain and further strengthen cooperation with partner institutions in the EU and worldwide.

Increase awareness of ethics in the scientific, research and innovation sphere of FTZ. Each year, a series of training sessions will be organised focusing on a given topic.

International research. The benefits of existing international cooperation of FTZ will be increased through the implementation of joint, international research projects.

Support for student research abroad. FTZ will support student stays abroad, especially in tropical and subtropical areas or developing countries, to help them deepen their thesis and dissertation research work. For these purposes, the broad network of partner organisations established as a result of many years of foreign development cooperation projects of the Czech Republic in various parts of the world and the activities of non-profit organisations operating in accordance with the objectives of FTZ can be used.

Support of formation of interdisciplinary and inter-institutional research teams. To increase the capacities of FTZ in needs-based research in tropics and subtropics, FTZ will support the creation of inter-disciplinary research teams able to address complex issues via cross-disciplinary and cross-border cooperation.

Strengthening post-doctoral positions. FTZ will strengthen research teams by creating new post-doctoral positions, coming with the acquisition of external funds, as key faculty members in research activities. The aim will be to bring in more candidates from abroad.

Strengthening specialist and technical staff. FTZ will create needed specialist and technical positions enabling researchers and PhD candidates to be fully dedicated to research.

Upgrading of existing laboratory and teaching facilities through continuous investments in modern laboratory equipment that will further doctoral, master's and bachelor's degree programmes.

Popularization of research and other activities. Popularization of the excellent research carried out at the faculty so that it becomes known to the public.

Indicators for the five-year period

- *The number of external research projects will increase by 20%.*
- *The number of interdisciplinary and inter-institutional research teams constitute at least 30% of all faculty research teams.*
- *All academic staff publish annually in peer-reviewed journals indexed in the Web of Science database with IF.*
- *Reinforcement of the FTZ Project Centre by 3 full-time positions.*
- *Increase participation in EU, international and Czech research projects (Horizon Europe) by 20% by 2025 compared to 2020.*
- *FTZ has a member in the management of AGRINATURA.*
- *The number of MoUs will increase by 30% in 2025 compared to 2020.*
- *Creation of post-doctoral positions at FTZ, funds permitting.*
- *Creation of specialist and technical positions at FTZ, funds permitting.*
- *At least three PR products focusing on the scientific activities and outputs of FTZ research teams will be created annually.*

Strategic area 5: Sustainable strategic management at all levels of the FTZ reducing administrative burden

Specific objectives of SA5:

- Improves strategic management at FTZ through regular monitoring and evaluation of its activities and through incentive schemes for the faculty's employees

Internal evaluation of the implementation of the FTZ Strategic Plan 2021+. Each year, an internal evaluation of the fulfilment of the indicators set out in the FTZ Strategic Plan will be carried out. The results of the evaluation will be incorporated into the FTZ Strategic Plan for the following year.

Motivational programmes for academic staff. Personal evaluation of academic staff at FTZ is directly linked to performance in publishing and teaching activities. This is also linked to the awarding of an FTZ Prize for the best achievement in scientific, research and other activities.

A friendly and creative working environment. Promotion of team-building events within FTZ and departments with the aim of strengthening participative management and sharing the vision and mission of FTZ.

Ensuring equal opportunities in accordance with the CZU Gender Equality Plan (GEP) for FTZ staff and students. In personnel matters, it is an explicit objective of FTZ to comply with the principles of equal opportunities in terms of gender, nationalities and ethnicities, religion, socially disadvantaged and otherwise disadvantaged groups.

English language as a common tool of communication. The international environment of FTZ at the level of students, teachers and management will continue to be supported by using English as a common inclusive communication tool. FTZ materials, handouts and strategic documents will be available in English, as will internal communication with staff and students. Therefore, FTZ will organise regular language courses for the faculty's staff to help increase their competence in this regard.

Indicators for the five-year period

- *Each year an internal evaluation report on the fulfilment of the indicators of the FTZ Strategic Plan elaborated.*
- *Once a year team building organized for FTZ staff.*
- *100% of academic staff evaluated on performance.*
- *Equal opportunities from a gender perspective are considered in the evaluation of male and female academic staff, in the filling of leadership positions, and in organizational and other FTZ activities.*
- *Regular annual English language courses for the staff population.*

Strategic area 6: High quality, international and sustainable environment for the implementation of strategic measures at FTZ

Specific objectives of SA6:

- support the activities of FTZ with a dimension of sustainability
- strengthen the awareness of sustainable activities of FTZ through internal and external communication

Support student and staff activities with a sustainable dimension. Continue long-term support of the student association focused on fairtrade principles. At the same time, also support one-off activities of students and academics reflecting the UN Sustainable Development Goals.

Strengthen internal and external communication about sustainable topics and specific activities of FTZ. FTZ will present the offer of study programmes at partner universities and adapt the offer to current societal expectations and requirements. It will participate in national and international fairs and exhibitions and prepare high-quality promotional materials. It will regularly reach out to high school students and systematically recruit quality applicants. The FTZ website will be regularly updated, whereas we will use communication on social networks, and other internet-based media to promote FTZ activities.

Support educational activities for the general public. FTZ will actively support and organise professional courses, lectures or lecture series for the professional and general public, agricultural organisations and schools of primary and secondary education. These will include lifelong learning activities, vocational courses or lectures on issues related to the tropics and the developing world.

Open science. Wherever possible, FTZ will make the results of teaching and research activities available to the greatest extent possible, thereby providing better information about FTZ's achievements in the wider public domain.

Supporting workplaces of wider public interest. FTZ will support the operation and, where appropriate, initiate the establishment of new departments that have a wider public impact. Within the Faculty, this includes the Botanical Garden of FTZ, registered by the "Union of Botanical Gardens of the Czech Republic", which houses one of the largest publicly accessible collections of tropical and subtropical plants and more specifically crops in the Czech Republic. Furthermore, the experimental farms of FTZ include unique collections of eland antelope (*Taurotragus oryx*) and guanaco llama (*Lama guanicoe*), which are located at the University

Farm in Lány. The breeding herds of 50 eland antelope and 25 guanaco llamas are unique as alternative farming species and offer an interesting “wild-but-tame” species example for training students.

Reconstruction of the Botanical Garden of the FTZ. A very important part of FTZ is its botanical garden, which is also of importance for the whole CZU, as it contains the most extensive collection of tropical useful crops in the Central Europe. Priority will be given to reconstruct FTZ’s BG and finding structural funds to do this.

Farm breeding of antelopes, llamas and potentially tropical deer. The farm breeding of African eland antelope in Lány is unique in its kind in Central Europe. Therefore, it is one of the investment priorities of FTZ. This will require the completion of experimental and social facilities at the farm’s site, and the expansion of its housing capacity. More specifically, for llama breeding, this will involve the completion of handling and fixation facilities to enable sampling and veterinary procedures. We also envision to establish an experimental farm unit for endangered Asian species, i.e. Visayan spotted deer (*Rusa alfredi*), which has high farming and research potential. This plan for a new breeding facility can be started only if there would be adequate external investment support, however.

The offer of services of FTZ. FTZ will thoroughly elaborate the offer of services to the public. The offer will include a wide range of services related to the focus of FTZ, such as specific laboratory analyses, expert consultancy services for developing countries and tropical regions, project activities, data analysis and processing.

Creation and use of a database of FTZ alumni as a networking tool. FTZ will deepen and systematise communication with alumni after graduation - "Alumni" support - through active direct communication, providing an FTZ Newsletter at least twice a year and involving alumni in FTZ activities.

Indicators for the five-year period

- *The rate of investment in sites such as FTZ’s BG or the antelope farm in Lány increased, funds permitting.*
- *FTZ websites and social media increased by 30%.*
- *Participation in fairs and exhibitions at least twice a year.*
- *Published articles and reports in the professional press and public and private media increased by 50%.*
- *A project for the renovation of FTZ’s BG developed.*
- *Improvement of the working and research conditions in antelope and llama breeding the CZU Farm in Lány.*
- *FTZ Annual Report published once a year.*
- *A menu of services provided by FTZ.*
- *Existing and operational database of FTZ alumni.*
- *FTZ Newsletter published two times a year.*