

**Decision regarding Assessment of the Agricultural Sciences,  
Forestry and Fisheries Study Programme Group at the level  
of Doctoral Studies  
Estonian University of Life Sciences**

**20/06/2018**

**The Quality Assessment Council for Higher Education at the Estonian Quality Agency for Higher and Vocational Education decided to approve the report by the Assessment Committee and to conduct the next quality assessment of the Agricultural Sciences, Forestry and Fisheries study programme group at the level of doctoral studies at the Estonian University of Life Sciences in seven years**

On the basis of subsection 10 (4) of the Universities Act and point 40.1 of the 'Quality Assessment of Study Programme Groups at the Level of Doctoral Studies', authorised in points 3.7.3 and 3.7.1 of the Statutes of the Estonian Quality Agency for Higher and Vocational Education (hereinafter referred to as 'EKKA'), the EKKA Quality Assessment Council for Higher Education (hereinafter referred to as 'the Council') affirms the following:

1. On 25.04.2017 the Estonian University of Life Sciences and EKKA agreed upon a time frame to conduct a quality assessment of the study programme group.
2. The Director of EKKA, by her order on 24.01.2018, approved the following composition of the quality Assessment Committee for the Veterinary Medicine, Agricultural Sciences, Forestry and Fisheries study programme group at the level of doctoral studies at the Estonian University of Life Sciences (hereinafter referred to as 'the Committee'):

<b>Peter von Fragstein und Niemsdorff</b>	Chairman of the Committee, Professor Emeritus of Organic Vegetable Production, former Dean of the Faculty of Organic Agricultural Sciences, University of Kassel (Germany)
<b>Maria Fredriksson-Ahomaa</b>	Professor (meat inspection and slaughterhouse hygiene), Department of Food Hygiene and Environmental Health, Faculty of Veterinary Medicine, University of Helsinki (Finland)
<b>Rossella Di Palo</b>	Professor, Department of Veterinary Medicine and Animal Production, University of Naples Federico II (Italy)

<b>Bengt Kriström</b>	Department of Forest Economics, Swedish University of Agricultural Sciences; Research Director, Centre for Environmental and Resource Economics (Sweden)
<b>Tiina Köster</b>	External member; senior specialist, Agricultural Research Centre (Estonia)
<b>Brian Danley</b>	Doctoral student, Department of Forest Economics, Swedish University of Agricultural Sciences (Sweden)

3. The Estonian University of Life Sciences submitted the following Doctoral programmes for evaluation under the Agricultural Sciences, Forestry and Fisheries study programme groups:

**Agricultural Sciences  
Forestry**

4. Estonian University of Life Sciences submitted a self-evaluation report to the EKKA Bureau on 9.01.2018, and the assessment coordinator forwarded it to the Committee on 10.01.2018.
5. An assessment visit to Estonian University of Life Sciences took place on 27–28.02.2018.
6. The Committee sent its draft assessment report to the EKKA Bureau on 25.04.2018, and EKKA forwarded it to the Estonian University of Life Sciences for its comments on 30.04.2018 and the University delivered its response on 15.05.2018.
7. The Committee submitted its final assessment report to the EKKA Bureau on 18.05.2018. The assessment report is an integral part of the decision. The report is available on the EKKA website.
8. The Secretary of the Council forwarded the Committee’s final assessment report along with the University’s self-evaluation report to the Council members on 6.06.2018.
9. The Council with 10 members present discussed these received documents in its session on 20.06.2018 and, based on the assessment report, decided to point out the following strengths, areas for improvement, and recommendations regarding the Agricultural Sciences, Forestry and Fisheries study programme group at the level of doctoral studies at the Estonian University of Life Sciences.

**The Committee pointed out the following strengths, areas for improvement and recommendations regarding the programmes within the Veterinary Medicine as well as Agricultural Sciences, Forestry and Fisheries groups of programmes:**

**Strengths**

- 1) A quality control mechanism agreed upon between all parties, requiring the doctoral students to publish three articles, undoubtedly has a long-term impact, provided that the articles are published in distinguished research journals.
- 2) The process of defending doctoral thesis functions well, an external (often international) reviewer is involved.

- 3) The Doctoral School encourages contact with other areas of specialisation as well as Universities both from Estonia and abroad.
- 4) The University has a good working environment. Critical infrastructure for high-level research (laboratories, auditoriums, fieldwork stations, and other) meets and even exceeds the requirements of international standards.
- 5) All teaching staff is evaluated.
- 6) The teaching staff is highly motivated and research focused.
- 7) Supervisors are selected through a competition.
- 8) Doctoral students are very motivated.

### **Areas for improvement and recommendations**

- 1) The long term impact of the University strategy “Knowledge-based bioeconomy” on the development of doctoral studies, remains unclear. We recommend aligning the development of doctoral programmes with the goals of the strategy for bioeconomy more closely.
- 2) The duration of studies tends to be too long. The minimum criterion of three published peer-reviewed scientific papers (a prerequisite for the defence of a doctoral thesis) is advisable to review.
- 3) The competition to doctoral studies in general and the share of (good level) international applicants are low. In order to improve both, the criteria, as well as the process for PhD admissions, should be formalised in a way that the admission for each doctoral place is (nationally and internationally) announced with sufficient term/deadline, with explicit admission conditions, and that all top candidates undergo a uniform and documented evaluation.
- 4) The number of full-time doctoral students shall be increased.
- 5) The compulsory 60 credit points could be distributed between the semesters more flexibly.
- 6) A greater focus on applied research topics would attract more support to PhD students from enterprises.
- 7) The teaching staff should be able to benefit from engaging and innovative ways to develop their supervising and teaching skills.
- 8) The number and visibility of (attractive) research projects must be increased.
- 9) The international mobility of the teaching staff should be increased.
- 10) Cooperation with other (foreign) universities needs to be invested in.
- 11) The doctoral allowance should match the actual cost of living.

### **General strengths, areas for improvement, and recommendations regarding the Agricultural Sciences, Forestry and Fisheries study programme group**

#### **Strengths**

- 1) Research is of excellent quality and sufficient volume, considering the number of PhD students.
- 2) Many Institutes (supervisors) find opportunities to offer doctoral students part-time work with their research projects or as faculty assistants.
- 3) Each Institute has its own laboratories, which are mostly well equipped. Supervisors and PhD students are satisfied with the quality of laboratories and working conditions. Students can use laboratories of other universities (e.g. University of Tartu).
- 4) Doctoral students have excellent opportunities to attend conferences and courses abroad.

- 5) Successful supervising of a doctoral thesis is associated with research funding and career advancement in the University. Competitions for supervisors where, among other factors, academic activity is considered, ensure high quality of supervision, which in turn has a positive influence on completing a doctoral thesis. The system of assigning junior co-supervisors helps them to develop supervising skills. Should there be any problems between doctoral students and supervisors, the Evaluation Committee gives recommendations or helps to rearrange supervision.
- 6) Supervisors continuously monitor the progress of doctoral students according to their study plan and an efficient “early warning system” is in place. The doctoral students’ overall satisfaction with supervision is very high.
- 7) Doctoral students highly value the study programme design, its content and duration, which shows high motivation.
- 8) The students also appreciate annual evaluation seminars, since these allow them to present their research in English to a wider audience and hear about the work of other PhD students.
- 9) Motivating PhD students to spend a period of study abroad is emphasised. This is why the international mobility of doctoral students is incredibly high. Also, while writing their doctoral thesis, students can often benefit from the help of foreign professors.

### Areas for improvement and recommendations

- 1) Study programmes are very academic, focusing mainly on the University needs and writing high-level research papers, while not necessarily meeting the needs of enterprises that expect solutions for practical problems. It would be advisable to engage in more constructive and mutually beneficial cooperation with enterprises, e.g. in choosing the topics for doctoral theses. Developing transferable competencies (such as management skills) should also be more expressed in doctoral programmes.
- 2) General modules of the study programme should be redesigned in order for them to better correspond to the needs of the labour market. Statistical methods used for research should include more biometric and other components of modern statistics. Some of the compulsory subject modules should be offered as elective modules.
- 3) It is advisable to shorten some of the subject courses in the study programme (e.g. speaking at international conferences) and extend others (e.g. mathematical statistics and modelling).
- 4) Due to seasonality, four years is not a long enough period to complete a doctoral thesis about crops, if the aim is to cover the results of three seasons. Providing a full allowance for those PhD students for five to six years would increase both the number of theses completed as well as publications, and reduce dropping out.
- 5) Doctoral students should be taught how to write applications for post-doctoral researcher positions.
- 6) In light of the plan to align study programmes more with the needs of the labour market, the compulsory volume of teaching conducted by PhD students should be reviewed, whereas less teaching work would help shorten the duration of doctoral studies.
- 7) Depreciation of laboratories is a potential risk, means for maintaining the current situation shall be found on a state level.
- 8) Employing innovative teaching methods in daily teaching is an area for improvement.
- 9) Conflict seems to exist between regular theoretical courses and the need to conduct laboratory tests or scientific fieldwork which rely heavily on climate conditions and should thus be prioritised. We recommend considering the possibility to conduct subject courses as more intensive blocks during the low season of fieldwork for crops researchers. More flexible setup of exams would be another way to minimise the conflict between research and teaching obligation of PhD students.

- 10) The process of giving feedback to the feedback by doctoral students should be more transparent.
- 11) Drop-out rates are sometimes high.

## **AGRICULTURAL SCIENCES**

### **Strengths**

- 1) The quality of research and teaching in the Estonian University of Life Sciences has clearly improved over the past decade, as indicated by investments made into University facilities and equipment, and the updated requirements for teaching and its evaluation.
- 2) The study programme is being redesigned to meet the real-life needs and future working conditions better.
- 3) A positive fact is that the study programme includes subjects taught in English.
- 4) Supervisors receive specialised courses for developing supervising skills and feedback for the courses has been positive.
- 5) According to doctoral students, the opportunity to study abroad and conduct some of their research there is much appreciated.
- 6) Means exist to support international mobility of teaching staff.

### **Areas for improvement and recommendations**

- 1) In the long term, experts from other relevant fields, such as plant nutrition and plant breeding, who are currently missing, should be employed by the Institute, substituting some of the numerous entomologists and arable crop experts.
- 2) Some supervisors are so overloaded with teaching and other tasks that they have to make time to meet with PhD students on weekends. A few doctoral students mentioned that the supervisors are sometimes very busy, so there is no time for discussions or giving feedback about their written works. One recommendation is to use modern tools for regular communication between doctoral students and supervisors, e.g. web-based platforms.
- 3) Some of the lecturers said they would like to have PhD students, but there is neither sufficient financing nor enough projects. The share of successful research applications must be increased to ensure adequate financing for PhD students; also, the topics of doctoral theses should be considered as part of the externally funded projects.
- 4) The University information flow is mostly in Estonian and thus difficult to understand for international students.
- 5) Hiring doctoral students to work with research project not related to the subject matter of their doctoral thesis is highly questionable in terms of their studies and potentially prolongs the duration of their studies with no meaningful reason. This is why the compulsory additional funding scheme should be reviewed and redesigned, if possible.

## **FORESTRY**

### **Strengths**

- 1) Meticulous attention is given to the quality of doctoral theses. Graduates are competitive in the academic labour market because of the requirement to publish a considerable number of papers in scientific journals already before graduation.
- 2) Both doctoral students and lecturers are devoted and enthusiastic and work closely together.
- 3) Teaching staff participates very actively in Estonian as well as international projects.
- 4) More than half of doctoral students enrolled on the Forestry study programme, graduate. A large share of international doctoral students shows the sustainability of this study programme.
- 5) Doctoral students receive credit points for taking part in international conferences and are therefore motivated to communicate the results of their research.
- 6) Doctoral students take additional courses at the University of Tartu and Universities abroad, creating contacts that benefit their future career as well as the Estonian University of Life Sciences.
- 7) A multi-level counselling system has been set up.
- 8) Plenty of opportunities to communicate with international researchers have been created for doctoral students.
- 9) International collaboration is encouraged – international courses for the teaching staff and opportunities for professional development at foreign universities accompanied by adequate funding.
- 10) The composition of committees for defending the theses becomes more and more international.
- 11) A specific strength for the Forestry study programme is cooperating with external groups whose representatives (incl. alumni and employers) are actively involved in teaching and research. Research activity is aligned with the needs of society, e.g. the theses cover topics relevant for both the private as well as the public sector.

### **Areas for improvement and recommendations**

- 1) The link between the key strategic topics of bioeconomy and all subject courses should be revisited. It is recommended to analyse whether the share of social sciences in the study programme corresponds to the University strategy of bioeconomy. It should be examined whether the Doctoral School and international liaisons could be used to increase the volume of social sciences in the study programme.
- 2) Considering how tightly the study programmes of Forestry are interconnected at all levels of study, a comprehensive approach shall be taken while amending them in any way.
- 3) It is advisable to consider creating a seminar where an internal reviewer gives feedback about the doctoral thesis.
- 4) It is advisable to make the system of granting a bonus for defending the PhD thesis more transparent. Also, it should be considered whether it is reasonable to pay a bonus to supervisor while financial difficulties of PhD students are the main reason for delayed graduation.
- 5) Many doctoral students still carry out non-academic tasks in order to make an income, and this interferes with their studies. It is advisable to monitor the work-load of doctoral students officially and to use the results for applying for additional funding from the government.
- 6) It is recommended to make the timeline more flexible, so the doctoral students would be able to spend longer time learning and doing research abroad.
- 7) Doctoral students find that the precondition of having the supervisor's approval for the subject of the doctoral thesis could be more flexible, allowing the supervisor to suggest research topics; currently, the subject must be approved already by the time supervisors can apply for this position.

10. Point 40 of the 'Quality Assessment of Study Programme Groups at the Level of Doctoral Studies' establishes that the Quality Assessment Council shall approve an assessment report within three months after receipt of the report. The Council shall weigh the strengths, areas for improvement, and recommendations outlined in the assessment report, and decide whether to conduct the next quality assessment of that study programme group in seven, five or three years.
11. The Council weighed the strengths, areas for improvement, and recommendations presented in point 9 of this document and found that the study programme, the teaching conducted under these programmes, and development activities regarding teaching and learning conform to the requirements, and

#### **DECIDED**

**to approve the assessment report and to conduct the next quality assessment of the Agricultural Sciences, Forestry and Fisheries study programme group at the level of doctoral studies at the Estonian University of Life Sciences in seven years.**

The decision was adopted by ten votes in favour and 0 against.

12. The Council proposes that the Estonian University of Life Sciences submit an action plan to EKKA concerning the areas for improvement and recommendations pointed out in the report no later than 20.06.2019.
13. A person who finds that his or her rights have been violated or his or her freedoms restricted by this decision may file a challenge with the EKKA Quality Assessment Council within 30 days after the person filing the challenge became or should have become aware of the contested finding.

The Council shall forward the challenge to its Appeals Committee who shall provide an unbiased opinion in writing regarding the validity of the challenge to the Council, within five days after receipt of the challenge. The Council shall resolve the challenge within ten days of its receipt, taking into account the reasoned opinion of the Appeals Committee. If the challenge needs to be investigated further, the deadline for its review by the Council may be extended by a maximum of thirty days.

A legal challenge to this decision is possible within 30 days after its delivery, by filing an action with the Tallinn courthouse of the Tallinn Administrative Court under the procedure provided for in the Code of Administrative Court Procedure.

**Eve Eisenschmidt**  
**Chair of the Council**

**Hillar Bauman**  
**Secretary of the Council**