



agency for science and higher education

**REPORT
OF THE EXPERT PANEL
ON THE
RE-ACCREDITATION OF
THE FACULTY OF AGRICULTURE
UNIVERSITY OF ZAGREB**

Date of site visit:

16th - 18th January 2018

March, 2018

MAMFORCE



The project is co-financed by the European Union from the European Social Fund.

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INTRODUCTION

The Agency for Science and Higher Education (the Agency) is an independent legal entity with public authority, registered in the court register, and a full member of the European Quality Assurance Register for Higher Education (EQAR) and European Association for Quality Assurance in Higher Education (ENQA).

All public and private higher education institutions are subject to re-accreditation, which is conducted in five-year cycles by the Agency, in accordance with the Act on Quality Assurance in Science and Higher Education (Official Gazette 45/09) and subordinate regulations, and by following the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) and the good international practices in quality assurance of higher education and science.

The Agency's Accreditation Council appointed an independent Expert Panel for the evaluation of Faculty of Agriculture, University of Zagreb (thereafter: the Faculty). The members of the Expert Panel were as below:

- Associate Professor Arne Henningen, Department of Food and Resource Economics, University of Copenhagen
- Professor Gustavo Slafer, Department of Crop and Forest Sciences, University of Lleida
- Professor George C. Fthenakis, Veterinary Faculty, University of Thessaly, chair
- Emeritus Professor Hans-Martin Seyfert, Leibniz-Institute für Nutztierbiologie
- Mr Goran Nidogon, Lactalis Group
- Mr Vedran Lederer, University of J. J. Strossmayer in Osijek.

During the site visit, the Expert Panel held meetings with the following people: Management of the Faculty (Dean, Vice-Deans, Secretary - as a group or on their own),

- Working group that compiled the self-evaluation report of the Faculty,
- Heads of Departments of the Faculty,
- Academic personnel of the Faculty,
- Students of the Faculty,
- Directors of undergraduate and postgraduate study programmes of the Faculty,
- Teaching assistants and junior researchers of the Faculty,
- Heads of doctoral programmes and leaders of research projects of the Faculty and
- 3 Representatives of stakeholders.

During the site visit, the Expert Panel members visited a sample of the facilities of the Faculty: lecture rooms, areas in specific Departments and library. Moreover, the Expert Panel examined the available documents and the descriptions of the various study programmes. All documents that have been requested during the site visit, have been provided with no delay.

The members of the Expert Panel have written this Report on the re-accreditation of the Faculty of Agriculture, University of Zagreb, taking into account (a) the self-evaluation report of the Faculty, (b) other relevant documents and (c) the findings during the site visit.

The Report contains the following elements:

- short description of the evaluated higher education institution,
- brief analysis of the institutional advantages and disadvantages,
- examples of good practices,
- detailed analysis of each assessment area, recommendations for improvement and quality grade for each assessment area,
- detailed analysis of each standard, recommendations for improvement and quality grade for each standard,
- summary and
- appendices (quality assessment summary by each assessment area and standard and site visit protocol).

During the above tasks, the Expert Panel, was supported by:

- Irena Petrusic, coordinator, ASHE,
- Mia Đikić, assistant coordinator, ASHE,
- Goran Briski, interpreter at the site visit, ASHE and
- Marko Hrvatin, interpreter at the site visit, ASHE.

All members of the Expert Panel unanimously express their sincere thanks for the excellent support received by above members of the ASHE. Their contribution was invaluable and they should be praised for their continuous and thorough support throughout the visit.

On the basis of the re-accreditation procedure conducted, and with the prior opinion of the Accreditation Council, the Agency issues a following accreditation recommendation to the Minister for Higher Education and Science:

1. **issuance of a confirmation on compliance with the requirements** for performing the activities, or parts of the activities
2. **denial of license** for performing the activities, or parts of the activities
3. **Issuance of a letter of expectation** with the deadline for resolving deficiencies of up to three years. A letter of expectation can include the suspension of student enrolment within a set period.

The accreditation recommendation also includes a quality grade of a higher education institution, and recommendations for quality improvement.

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

NAME OF HIGHER EDUCATION INSTITUTION: University of Zagreb Faculty of Agriculture

ADDRESS: Svetosimunska cesta 25 10000 Zagreb Republic of Croatia

DEAN: Professor Zoran Grgic

ORGANISATIONAL STRUCTURE:

STUDY PROGRAMMES:

1. Undergraduate programmes:
 - Agricultural Economics
 - Agricultural Engineering
 - Agroecology
 - Animal Sciences
 - Horticulture
 - Landscape Architecture
 - Organic Agriculture
 - Plant Protection
 - Plant Sciences
2. Graduate studies:
 - Agribusiness and Rural Development
 - Agricultural Engineering
 - Agroecology
 - Animal Genetics and Breeding
 - Animal Nutrition and Feed Science
 - Fisheries and Game Management

- Horticulture
- Landscape Architecture
- Organic Agriculture with Agrotourism
- Phytomedicine
- Plant Sciences
- Production and Processing of Meat
- Production and Processing of Milk
- Environment, Agriculture and Resource Management (in English)
- DAFM

2.2. Postgraduate specialised studies:

- Animal Husbandry
- Fisheries
- Executive MBA

2.3. Postgraduate doctoral studies:

- Agricultural Sciences.

NUMBER OF STUDENTS:

2540 students

NUMBER OF TEACHERS:

192 professorial staff and 28 assisting teaching staff = 220 staff involved in teaching.

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION:

The Faculty has been founded in 1919. After a long period of transformations and changes, the Faculty has been given the current name and started the initial modern study programmes in 1992. The Faculty is an integral part of the University of Zagreb.

The Faculty is located in a separate campus near the centre of Zagreb. Management of the Faculty consists of the Dean, the four Vice-Deans and the Secretary. The Faculty includes 28 academic departments and various support services, as well as six experimental stations. Currently, there are, in total, 2540 students and a total staff of 315 persons in the Faculty.

Previous evaluation of the Faculty had been held in 2013. The evaluation had resulted in various recommendations for changes and improvements in the structure and function of the Faculty.

BRIEF ANALYSIS OF THE INSTITUTIONAL ADVANTAGES AND DISADVANTAGES

ADVANTAGES OF THE INSTITUTION

1. Large variety of study programmes across the board of the general remit of the Faculty.
2. Good relations and close cooperation between teachers and students.
3. Excellent relations and connections with stakeholders.
4. Increased number of young professorial and teaching staff.
5. In general, transparency applied in procedures within the Faculty.
6. Perception of high recognition in Croatia.
7. Good gender balance in management, staff and students.

DISADVANTAGES OF THE INSTITUTION

1. Inappropriate structure, with unduly large number of academic Departments.
2. In part, outdated infrastructure.
3. Lack of a clear and structured quality assurance program.
4. Several research areas not competitive to the average international level.

LIST OF INSTITUTIONAL GOOD PRACTICES

EXAMPLES OF GOOD PRACTICE

1. Practices taking place under transparent procedures and clarity.
2. Particularly informative and user-friendly website.
3. Employment of young graduates for a period of six years to perform teaching duties and complete the degree of PhD during that period.
4. Monitoring and regular updating of study programmes, with input from academic staff, students and stakeholders.
5. Progressively increasing funding from external sources.

ANALYSIS OF EACH ASSESSMENT AREA, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH ASSESSMENT AREA

I. Internal quality assurance and the social role of the higher education institution

Here are summarized only the most important findings regarding internal quality assurance and the social role of the higher education institution. For a detailed analysis of each standard, refer to section *Detailed analysis of each standard, recommendations for improvement and quality grade for each standard* and its subsections.

Analysis

Some parts of this assessment area are under-developed and under-cared for in the Faculty. The internal quality assurance system needs significant improvement. Recommendations from the previous evaluation had not been fully implemented. Nevertheless, the Faculty plays a prominent role in local and regional society and promotes its role in Croatia. The Faculty is well-thought of in the country and this merits commendation.

Recommendations for improvement

The establishment of an internal quality assurance system will further develop and improve the function of the Faculty. Moreover, restructuring of the Faculty is urgently required. A new vice-dean needs to be appointed to supervise all these procedures.

Quality grade

The expert panel has considered that, overall; the level of quality was satisfactory, although as per relevant guidelines minimum level is also noted, because in key standards only minimum level has been achieved.

II. Study programmes

Here are summarized only the most important findings regarding study programmes. For a detailed analysis of each standard, refer to section *Detailed analysis of each standard, recommendations for improvement and quality grade for each standard* and its subsections.

Analysis

Overall, the study programmes are of high quality. The Faculty supports teaching and excels in that assessment area. The large variety of study programmes across the board of the general remit of the Faculty is to be congratulated.

Recommendations for improvement

Various recommendations have been proposed in detail in the detailed standards, but overall the level of the Faculty's study programmes is of high quality.

Quality grade

The expert panel has considered that, overall; the level of quality was high.

III. Teaching process and student support

Here are summarized only the most important findings regarding teaching process and student support. For a detailed analysis of each standard, refer to section *Detailed analysis of each standard, recommendations for improvement and quality grade for each standard* and its subsections.

Analysis

Overall, the teaching process and the student support are of high standards. The good relations and close cooperation between teachers and students are to be commended.

Recommendations for improvement

Various recommendations have been proposed in detail in the detailed standards, but overall the level of the Faculty is of high quality.

Quality grade

The expert panel has considered that, overall; the level of quality was high.

IV. Teaching and institutional capacities

Here are summarized only the most important findings regarding teaching and institutional capacities. For a detailed analysis of each standard, refer to section *Detailed analysis of each standard, recommendations for improvement and quality grade for each standard* and its subsections.

Analysis

Whilst numbers of teaching staff are adequate, wide international experience of academics is limited. Further, equipment is outdated and resources (e.g., access to international scientific journals) are limited.

Recommendations for improvement

Various recommendations have been proposed in detail in the detailed standards, as significant improvements need to be undertaken.

Quality grade

The expert panel has considered that, overall; the level of quality was satisfactory, although as per relevant guidelines minimum level is also noted, because in key standards only minimum level has been achieved.

V. Scientific/artistic activity

Here are summarized only the most important findings regarding scientific/artistic activity. For a detailed analysis of each standard, refer to section *Detailed analysis of each standard, recommendations for improvement and quality grade for each standard* and its subsections.

Analysis

Members of the Faculty clearly strive for achieving high quality in their activities. Nevertheless, whilst their excellent approach in teaching has become very clear, this has not been always the case regarding research efforts and dissemination of those outcomes. This was not always their fault, as deficiencies in organisation of the Faculty, in the institutional capacities, as well as traditional approaches set limits in the well-purposed efforts of staff. In any case, it has become obvious that recognition of the activities of the Faculty are well- recognised at national level and the Faculty must be commended about this. International recognition however is limited, and this is the result of the adverse issues described in previous assessment areas. In any case, the few individuals with international recognition, who have been identified in the Faculty, indicate that international recognition can be achieved.

Recommendations for improvement

The Faculty should set high and stringent criteria for promotion of personnel. Publications in high-impact factor journals should be sought. International relations must be nurtured. Visits to Faculties abroad must be encouraged. Associations with international research groups should become a priority. Invitations to international scientists will further contribute. Finally, improvements of points raised in other assessment areas will be of the utmost importance. Lastly, e.g. editorial activities demonstrate that faculty members' research activities are valued by the scientific community. Moreover, interaction between research and teaching activities is guaranteed by several institutional measures.

Quality grade

The expert panel has considered that, overall; the level of quality was satisfactory, although as per relevant guidelines minimum level is also noted, because in key standards only minimum level has been achieved.

DETAILED ANALYSIS OF EACH STANDARD, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH STANDARD

I. Internal quality assurance and the social role of the higher education institution

1.1. The higher education institution has established a functional internal quality assurance system.

Analysis

The Faculty has in place a quality assurance system. A relevant committee is in place. No in depth meeting with this committee was performed; information was also gathered from the self-evaluation report, as well as during other meetings. Whilst the system was in place and enforced, it became evident that the system was not fully functional, e.g., no presentation of chairperson for the relevant committee, duplications in curriculum, lack of examples where the QA loop had been closed. Moreover, measurable targets for strategic objectives of the Faculty and for procedures and follow-up of actions have not been established.

Recommendations for improvement

The quality assurance committee must be headed by a vice-dean to be specifically appointed for this task and to be entirely independent from Faculty management. Members of the quality assurance committee need to undergo specific training in quality assurance. The system needs to embrace all aspects of function of the Faculty. The Faculty should summarise results from data analysis, in order to establish more quantitative (numeric) KPI, that way following easily and regularly the main strategic activities and ultimately meet the goals.

Quality grade

Minimum level of quality.

1.2. The higher education institution implements recommendations for quality improvement from previous evaluations.

Analysis

All but one of the recommendations of the previous evaluation had been implemented, at least to some extent. Nevertheless, the number of Departments has not been

reduced, despite an initial effort having been made. Only partial merging of some administration offices has taken place. It became obvious that the increased number of Departments does not provide added value to the Faculty and creates problems in the function of the Faculty, including teaching.

Recommendations for improvement

There is an urgent need to reduce number of Departments in the Faculty. This recommendation has been made during the previous evaluation and the current panel strongly reiterates this necessity, in fact as an urgent matter. The Faculty may wish to consider the merging of Departments with related scientific fields or the establishment of service units or the organisation of research clusters to encompass many Departments.

Quality grade

Satisfactory level of quality.

1.3. The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.

Analysis

The Faculty has established a committee that is responsible for monitoring ethics matters. The Faculty is engaged in disseminating role of ethics in science to all members of the Faculty, staff and students, as well as in campaigning to maintain high ethics standard in the Faculty.

Recommendations for improvement

Possibly, the Faculty may wish to include in the ethics committee, two members from other Faculties of the University to act as external reviewers in any matter referred to that committee (including report of eventual conflicts and resolved irregularities in functionality / activities at all levels of function of the Faculty).

Quality grade

High level of quality

1.4. The higher education institution ensures the availability of information on important aspects of its activities (teaching, scientific/artistic and social).

Analysis

The website of the Faculty is very clear and must be commended, as it provides extensive and updated information regarding a variety of matters. During the visit, the Panel was provided within a short period with information and documents that had been asked for; moreover, the Panel asked for some unscheduled visits to Departments, requests which were taken into account within the same day. The Faculty has supported (partly voluntarily) activities in the local community, which promote and support programmes initiated by the local community / stakeholders and related to Faculty activities.

Recommendations for improvement

The Faculty, despite the excellent cooperation with external stakeholders, should consider to regularly work together (in existing committees or alumni organisations) with stakeholders for evaluation of scientific and/or professional research projects outputs, possibilities and results, as well as on transfer of knowledge and technology based on expected future needs, in order to ensure stable employment of future experts.

Quality grade

High level of quality.

1.5. The higher education institution understands and encourages the development of its social role.

Analysis

The Faculty offers a variety of study programmes at undergraduate and postgraduate level, which provide many training opportunities for young people. The Faculty accepts visits from schools, agricultural organisations etc., in order to associate itself with society and relevant stakeholder. The Faculty also provides work opportunities for scientists.

Recommendations for improvement

Possibly, the Faculty may wish to establish a committee with a defined regular and scheduled frequency of meetings and reporting, which will include stakeholders, in

order to promote its presence in Croatian matters and to receive ideas regarding future developments in the profession and the society.

Quality grade

High level of quality.

II. Study programmes

2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the needs of the society.

Analysis

The Faculty offers a variety of undergraduate study programmes (in total nine), which cover all aspects of the science of agriculture. Further, the Faculty offers many postgraduate study programmes, which allow further, in depth, studies of graduates into various topics. In view of that, the Faculty clearly fulfils the general mission in providing trained scientists. All levels of the study programmes are described in detail at the website of the Faculty, with detailed descriptions of the learning objectives, teaching instruments and expected learning outcomes presented therein.

Recommendations for improvement

It is desirable that the detailed descriptions of the individual courses are also coupled with description of teaching objectives and goals. There is a noticeable mismatch between program names (at both levels of study) and their content, i.e. subjects that are being taught. If there is a difference between individual programs and the student orientation, then it is minimal and insufficient.

Quality grade

High level of quality.

2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.

Analysis

The study programmes clearly reflect the specialisation necessary to developing individual specific expertise after completing the studies. The undergraduate study programmes offer the opportunity to gain a broader overview over the various fields

of agricultural sciences. The postgraduate programmes contribute to gaining more specialised expertise in the various fields, in order to eventually enabling the successful graduates to finding adequate jobs in the private sector. The undergraduate and postgraduate study programmes have an appropriate level and profile for preparing students for the current national work market; however, they do not provide to students good preparation for future challenges, for the international work market and for continuing education at average (or better) international universities (e.g., a postgraduate programme after an undergraduate programme or a PhD programme after a postgraduate programme).

Recommendations for improvement

While the practical courses are already providing students first opportunities to learning practical experimentation, it is recommended that the infrastructure for those courses be improved to include more and state-of-the-art instrumentation (e.g., PCR equipment for use by students, fluorescence activated cell sorter). The Faculty, in collaboration with stakeholders, should make sure that their study programmes have appropriate levels and profiles for preparing students for the current and the future national work market. The Faculty could discuss, and then clearly communicate, to which extent their study programmes should also aim at qualifying their students for the international work market and for continuing their education at international universities. The name of the undergraduate programme 'Agricultural Economics' can be changed to 'Farm and Agribusiness Management' (or something similar), because the current name is misleading, as the profile of this study programme largely differs from the profiles of agricultural economics programmes at many other universities.

Quality grade

High level of quality.

2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.

Analysis

The Faculty meets the standard. The courses lay out evaluation methods and criteria of the learning outcome clearly, so that the students are unambiguously informed about what they may achieve and how that is being evaluated.

Recommendations for improvement

None.

Quality grade

High level of quality

2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.

Analysis

The Faculty fulfils these tasks at all levels. Feedback from students is regularly provided, through their evaluation of teachers' performance at the end of each course. Student representatives are regular members of the curriculum committee of each study programme. Various stakeholder representatives, in the session with members of the Expert Panel (approx. 40 representatives from industry, public sector, societies etc.), indicated that they had contributed to development of the curricula of the study programmes and that they would be willing to hire successful graduates from the Faculty.

Recommendations for improvement

None.

Quality grade

High level of quality

2.5. The higher education institution ensures that ECTS allocation is adequate.

Analysis

The Faculty has recently performed changes in the ECTS allocation, bringing them in line with the actual workload of the various modules across the study programmes.

Recommendations for improvement

Re-examination of ECTS allocation should be performed at regular intervals (possibly every two years), in order to take into account changes necessary due to changes in module content and teacher responsible for each module.

Quality grade

High level of quality.

2.6. Student practice is an integral part of study programmes (where applicable).

Analysis

The students have confirmed that teaching includes a significant amount of practical work and have reported this as an advantage of teaching programme. Nevertheless, differences between departments became obvious and this is a further argument supporting re-organisation of the Faculty as mentioned in 1.2.

Recommendations for improvement

Hopefully, re-organisation of the Faculty (see 1.2.) will further strengthen student practice by minimising differences between departments. Moreover, the Faculty should consider, in cooperation with interested stakeholders, the possibilities that some practical training activities (weekly / monthly schedules) take place in private sector companies, which have staff of academic standards to participate in the training.

Quality grade

High level of quality.

2.7. Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.

Analysis

The Faculty strives to raise interest in and provide competence for life-long learning of individuals, to keeping them fit for coping with ever faster developing challenges of society and knowledge. For over 10 years now, the Faculty has developed several programmes in diverse areas (e.g., fisheries, animal sciences, and agribusiness) to furthering the expertise of graduates and professionals. Moreover, summer school programmes have been developed, e.g. 'Organic agriculture: from field to fork', for providing training opportunities for non-Faculty members from the public sector, various industries or partner universities. Continuous development of such courses is an ongoing interest of the Faculty.

Recommendations for improvement

The topic is of increased importance in contemporary Europe; hence the Faculty should continue the efforts, which add value to Croatian society and agricultural professionals.

Quality grade

High level of quality.

III. Teaching process and student support

3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clearly defined, published and consistently applied.

Analysis

The Faculty respects the national system for admission of undergraduate students. Progression of undergraduate students in their studies also follows the nationally set procedures. For doctoral studies, the Faculty sets its own criteria, which are made clear in advance and are communicated to potential candidates. Discussion with doctoral students revealed that a system of hiring on merit was in place.

Recommendations for improvement

There is little that can be done for admission of undergraduate students, as this is controlled at national level. In relation to postgraduate studies, the Faculty must continue to adhere to high-class standards for admission of postgraduate students and recruitment of doctoral candidates (and teaching assistants), which will contribute to the high quality of undergraduate studies in the Faculty.

Quality grade

High level of quality.

3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.

Analysis

The Faculty applies a tutor-tutee system, which helps close monitoring of students during the studies. Further, the Faculty monitors grades, especially in groups of weaker students, and provides support and counselling, in order to minimise drop-outs and help students complete their studies.

Recommendations for improvement

The Faculty may wish to establish an annual system for appraisal of pass rates for the various modules of all study programmes. That way, it will be easy to identify significant deviations from Faculty average in fail rates and it will be possible to take

corrective action. Further, it may be useful to establish data related to periods for graduation, so that students taking longer time can be identified and supported in finishing their studies.

Quality grade

High level of quality.

3.3. The higher education institution ensures student-centred learning.

Analysis

The Faculty provides increased practical training to students. Nevertheless, differences do occur between Departments, which hampers an across the Faculty increased student-centred learning. The requirement for a dissertation based on practical work contributes to minimising any differences, as during the work, students receive increased monitoring and input from teaching staff.

Recommendations for improvement

Restructuring of Departments, as recommended above, will also contribute to improving teaching, especially practicals.

Quality grade

Satisfactory level of quality.

3.4. The higher education institution ensures adequate student support.

Analysis

The Faculty provides a student restaurant for lunches supports student employment in research projects and has implemented a system for monitoring progress. Moreover, the Faculty encourages international mobility of students.

Recommendations for improvement

There is a significant need for improving research equipment in many Departments, as well as in improving access to bibliographical sources in the library and access to other resources (e.g., articles in scientific journals) necessary for high- quality studying. Further, there is a need for increasing the number of IT rooms and/or of site licenses or student licenses for software packages that students can use on their own computers for course exercises and dissertations.

Quality grade

Satisfactory level of quality.

3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.

Analysis

The Faculty has taken measures for students with disabilities hampering studying and has set up a service for counselling by a professional psychologist.

Recommendations for improvement

The Faculty needs to set up a service for examining under specific rules students with learning disabilities (e.g., oral examination in students with dyslexia).

Quality grade

High level of quality.

3.6. The higher education institution allows students to gain international experience.

Analysis

An increased number of students have taken international exchange visits to other faculties in Europe. The Faculty has mechanisms and clearly supports student mobility. Moreover, many students from other European universities have visited the Faculty, that way contributing to the international experience of students.

Recommendations for improvement

Teaching staff should increasingly use international textbooks (even for courses taught in Croatian), because, in addition to giving better access to up-to-date scientific knowledge, this will also prepare students for stays in foreign universities.

Quality grade

High level of quality.

3.7. The higher education institution ensures adequate study conditions for foreign students.

Analysis

The Faculty has an office for international students, which supports incoming mobility and monitors during the stay in Zagreb. Further, there is an international postgraduate

study programme ('INTER-EnAgro') taught in English, in which foreign students are also registered and attend. There is also the possibility for foreign students to attend various lectures and modules in English language and in fact their number has been increased recently.

Recommendations for improvement

The Faculty could consider offering more postgraduate programmes in English (whereas Croatian language can still be used if no international students attend a course). This strategy has been successfully implemented in many 'small' countries, with the aim to facilitate the (international) mobility of students.

Quality grade

High level of quality.

3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.

Analysis

The Faculty has a guide for examinations. Students reported that they were provided with transparent and clear details regarding examinations well in advance of these. The formation of a committee to examine students with repeated fails in examinations is also supporting objective marking. The Faculty also has in place disciplinary measures for students violating regulations regarding examinations.

Recommendations for improvement

It is recommended that the committee examining students with repeated fails, does not include the teacher of that module (at least when other members of the committee have a sufficient knowledge of the content of the module).

Quality grade

High level of quality.

3.9. The higher education institution guarantees the issuance of Diploma Supplements and adequate qualification information.

Analysis

Diploma supplements in Croatian and English languages are issued by the Faculty and have been shown to the Expert Panel.

Recommendations for improvement

None.

Quality grade

High level of quality.

3.10. The higher education institution is responsible for the employability of graduates.

Analysis

The high quality teaching provided by the Faculty and the excellent views of the stakeholders are really the most significant factors to support employability of graduates. Further actions, e.g., career office, career support, only act as ancillary actions.

Recommendations for improvement

The career office of the Faculty should be keeping track of workabouts of graduates for a period of 10 years after graduation. Survey taking among graduates will identify weak points of relationship between teaching and work, with results leading to implementation of changes in teaching curricula.

Quality grade

High level of quality.

IV. Teaching and institutional capacities

4.1. The higher education institution ensures adequate teaching capacities.

Analysis

Overall, number and qualifications of teachers are adequate, but only in few exceptional cases they excel in science (in quality terms), despite the Faculty being convinced at all levels of the positive relationship between science and teaching excellence (see 5.5). The imbalances in teaching loads are rightly considered in the allocation of teaching assistants. The relationship between academic staff in charge of teaching and students seems very good with high levels of satisfaction. Some heads of departments spend excessive time in administration duties, which has an impact in their teaching and research activities.

Recommendations for improvement

The Faculty is recommended to maintain current levels of student: teacher ratio (whilst correcting imbalances with teaching assistant allocation) and interactions between teachers and students. The proposed reorganisation of the Faculty (see 1.2) will have a positive impact in releasing personnel resources for teaching and research work.

Quality grade

Satisfactory level of quality.

4.2. The higher education institution has an objective, transparent and excellence-based procedure of teacher recruitment.

Analysis

Clearly, the Faculty has objective and transparent procedures for teacher recruitment, which take into consideration performance in teaching and research. The methods for selecting best candidates that emerged in the interviews seemed appropriate. Nevertheless, standards do not always match those internationally prevailing.

Recommendations for improvement

There is a need at all levels to increase standards regarding scientific output for all personnel recruited, at the same time maintaining procedures as they are.

Quality grade

Satisfactory level of quality.

4.3. Teacher advancement and re-appointment is based on objective and transparent procedures.

Analysis

The procedures are objective and transparent, though the level of excellence for minimum requirements is lower than expected for a prestigious Faculty (see 4.2 and area V).

Recommendations for improvement

There is a need at all levels to increase standards regarding scientific output for all personnel recruited, at the same time maintaining procedures as they are.

Quality grade

Satisfactory level of quality.

4.4. The higher education institution provides support to teachers in their professional development.

Analysis

The Faculty offers seminars and workshops, in which teachers can learn new pædagogical methods. These are performed in association with relevant Faculties of the University of Zagreb.

Recommendations for improvement

The Faculty should introduce a set and well-defined pædagogical training programme for newly-employed teachers (e.g., with workshops and feedback from experienced and/or highly pedagogically qualified teachers), given that recruitment of teaching assistants takes place yearly to cover teaching needs with six-year contracts. Further, teaching staff should have to attend scientific and professional conferences and meetings at least once yearly, with international meetings given priority. Staff exchanges with other agricultural or related discipline faculties around Europe.

Quality grade

Satisfactory level of quality.

4.5. The space, equipment and the entire infrastructure (laboratories, IT services, work facilities etc.) are appropriate for the delivery of study programmes, ensuring the achievement of the intended learning outcomes and the implementation of scientific/artistic activity.

Analysis

Visits to laboratories revealed clear differences between units. Space appeared adequate, but equipment was not always updated and instrumentation that could be used to apply modern technologies was not always evident. As a result, work carried in practical teaching classes, as well as researches performed are not always of the highest possible level.

Recommendations for improvement

There is an urgent need to update equipment. This will help to improve quality teaching in practical classes and will also be useful in carrying out high class research. Moreover, students and workers will become familiar with scientific developments in the technology in the field and will be able to employ relevant equipment and material in their professional careers.

Quality grade

Minimum level of quality.

4.6. The library and library equipment, including the access to additional resources, ensure the availability of literature and other resources necessary for a high-quality study, research and teaching.

Analysis

Whilst there is adequate staff in the library and a large reading room, unfortunately, there is no access to all international databases of international journals relevant to the field of agriculture. The restricted access to these resources acts as a serious limiting factor to development of research and to improving publication quality by Faculty staff.

Recommendations for improvement

The Faculty should improve access of staff and students to articles published in international scientific journals.

Quality grade

Minimum level of quality.

4.7. The higher education institution rationally manages its financial resources.

Analysis

Despite the decrease in public funding, the Faculty has managed to maintain its level of function. Recent data indicate that in 2017, for the first time in the last three years, the Faculty has managed to balance the expenses from the State funded budget. However, reduction in income from own resources does not contribute to fulfilling all necessary functions of the Faculty.

Recommendations for improvement

The Faculty should increase revenues from own resources: courses, fees, services, research projects. This will be the best way to improve financial stability of the Faculty, given that, as everywhere in Europe, the State, likely, will be gradually reducing financial support to tertiary education establishments.

Quality grade

Satisfactory level of quality.

V. Scientific/artistic activity

5.1. Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of scientific research.

Analysis

The teachers and associated personnel of the Faculty are well committed to do their best to achieve high productivity (quantity) of scientific research. The commitment is less clear regarding quality. There are exceptional individual cases, in which the commitment with quality is beyond questioning, but, on average, standards established for appointment and promotion of academic staff do not pursue excellence.

Recommendations for improvement

The Faculty should raise standards for appointment and promotion of personnel, make the commitment to quality (and quantity) of scientific research more clear and use high performing staff members as benchmarks for 'excellence'. These standards must recognise the general quality of publications (A1-A3), as well as quartiles within A1 and the standard must address this explicitly. Nevertheless, minimum standards must be different for the various disciplinary fields, mimicking average standards in the international arena. The Faculty should discontinue the requirement for promotion regarding publications in its own (low-quality) journals, a practice understandable, but not promoting excellence.the candidates themselves.

Quality grade

Minimum level of quality.

5.2. The higher education institution provides evidence for the social relevance of its scientific / artistic / professional research and transfer of knowledge.

Analysis

The Faculty has provided evidence of the value given to the social relevance of the research produced and transferred. In addition, stakeholders expressed their clear satisfaction with this aspect.

Recommendations for improvement

The Faculty should maintain this level of commitment for social relevance of the research and transfer of knowledge. Staff must maintain this social relevance whilst increasing the international quality of the research outcomes.

Quality grade

High level of quality.

5.3. Scientific/artistic and professional achievements of the higher education institution are recognized in the regional, national and international context.

Analysis

Although this committee did not have access to any objective indicator, its discussions with the Faculty members, students and stakeholders clearly indicated that the scientific and professional achievements of the Faculty were well recognised at regional / national context and level. Seemingly, recognition at international level is rather low, as judged by the impact actually achieved by papers published by Faculty staff, as well as by the overall relatively low h -indexes. A few healthy exceptions must be highlighted, which in fact proves that international recognition and impact are achievable by members of the Faculty.

Recommendations for improvement

The Faculty must increase the international recognition of their work, mainly through increasing their participation in international conferences and publications in leading, high impact-factor international journals (as few exceptional examples in the Faculty have shown, this is not impossible). This should be achieved without losing social relevance of the outcomes for the regional / national context.

Quality grade:

High level of quality for regional / national context - Minimum level of quality for international context.

5.4. The scientific / artistic / professional activity of the higher education institution is both sustainable and developmental.

Analysis

The activity seems to be sustainable in that young generations are being trained in the same approach as the current generation of Faculty members, so that young generations can sustain the same level of achievement that has been reached by the current generation of Faculty members. Hence, it is envisaged that, without improvements, weaknesses identified above will be maintained and carried over (unless recommendations or other actions are taken and changes are implemented), which does not provide a strong positive analysis of the developmental aspects of this activity.

Recommendations for improvement

The Faculty must ensure (or even make mandatory) that young generations (e.g., teaching assistants and PhD students) spend significant amounts of research time in best scientific environments within their fields. Further, the Faculty must be proactive in bringing in external talent for significant amounts of time to create school around them; for example, contracting for periods covering a research period for the research group benefiting from the external talent brought in does lean the subliminal elements that are behind the difference in quality between research outcomes.

Quality grade

Satisfactory level of quality.

5.5. Scientific / artistic / professional activities and achievements of the higher education institution improve the teaching process.

Analysis

There were clear indications that there has been a positive relationship indicating that research activities have improved the teaching process. This was based on attitudes and knowledge of researchers when acting as teachers, but also because research funding has been used to equip laboratories with instruments that have been used for teaching as well. This level of interaction between both activities has been recognised by all members of the Faculty.

Recommendations for improvement

It is suggested to maintain current levels of interactions between research and teaching. Improving the quality outcomes of research will reinforce quantitatively and qualitatively this interaction.

Quality grade

High level of quality

APPENDIX I - Quality assessment summary

Quality grade by assessment area				
Assessment area	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
I. Internal quality assurance and the social role of the higher education institution		× ¹	× ¹	
II. Study programmes				×
III. Teaching process and student support				×
IV. Teaching and institutional capacities		× ¹	× ¹	
V. Scientific/artistic activity		× ¹	× ¹	

1: The panel has considered that for assessment areas I, IV and V, overall level of quality is satisfactory, although as per relevant guidelines minimum level is also noted, because in key standards only minimum level has been achieved.

Quality grade by standard				
I. Internal quality assurance and the social role of the higher education institution	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
1.1. The higher education institution has established a functional internal quality		×		

assurance system.				
1.2. The higher education institution implements recommendations for quality improvement from previous evaluations.			×	
1.3. The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.				×
1.4. The higher education institution ensures the availability of information on important aspects of its activities (teaching, scientific/artistic and social).				×
1.5. The higher education institution understands and encourages the development of its social role.				×
Quality grade by standard				
II. Study programmes	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the needs of the society.				×

2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.				×
2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.				×
2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.				×
2.5. The higher education institution ensures that ECTS allocation is adequate.				×
2.6. Student practice is an integral part of study programmes (where applicable).				×
2.7. Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.				×

Quality grade by standard				
III. Teaching process and student support	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clearly defined, published and consistently applied.				×
3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.				×
3.3. The higher education institution ensures student-centred learning.			×	
3.4. The higher education institution ensures adequate student support.			×	
3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.				×
3.6. The higher education institution allows students to gain international experience.				×
3.7. The higher education institution ensures adequate study conditions for foreign				×

students.				
3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.				×
3.9. The higher education institution guarantees the issuance of Diploma Supplements and adequate qualification information.				×
3.10. The higher education institution is responsible for the employability of graduates.				×

Quality grade by standard

IV. Teaching and institutional capacities	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
4.1. The higher education institution ensures adequate teaching capacities.			×	
4.2. The higher education institution has an objective, transparent and excellence-based procedure of teacher recruitment.			×	
4.3. Teacher advancement and re-appointment is based on objective and transparent procedures.			×	
4.4. The higher education institution provides support to teachers in their professional			×	

development.				
4.5. The space, equipment and the entire infrastructure (laboratories, IT services, work facilities etc.) are appropriate for the delivery of study programmes, ensuring the achievement of the intended learning outcomes and the implementation of scientific/artistic activity.		×		
4.6. The library and library equipment, including the access to additional resources, ensure the availability of literature and other resources necessary for a high-quality study, research and teaching.		×		
4.7. The higher education institution rationally manages its financial resources.			×	
Quality grade by standard				
V. Scientific/artistic activity	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
5.1. Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of scientific research.		×		

5.2. The higher education institution provides evidence for the social relevance of its scientific / artistic / professional research and transfer of knowledge.				×
5.3. Scientific/artistic and professional achievements of the higher education institution are recognized in the regional, national and international context.		× ¹		× ²
5.4. The scientific / artistic activity of the higher education institution is both sustainable and developmental.			×	
5.5. Scientific/artistic and professional activities and achievements of the higher education institution improve the teaching process.				×

1: international context – 2: regional / national context.

APPENDIX II – Site visit protocol

Reakreditacija Agronomskog fakulteta, Sveučilište u Zagrebu/Re-accréditation of Faculty of Agriculture, University of Zagreb

PROTOKOL POSJETA / VISIT PROTOCOL

**Ponedjeljak, 15. siječnja 2018./
Monday, 15th January 2018**

Hotel International, Miramarska, 24, Zagreb

14:30 – 16:00 Ručak Stručnog povjerenstva / Lunch (**Hotel restaurant**)

16:00 – 17:00 (**Kornati Salon**) Training for the expert panel members – short presentation of ASHE, introduction to the higher education system in Croatia, introduction to the re-accréditation procedure, standards for the evaluation of quality and writing the final report

17:00 – 20:00 (**Kornati Salon**) Priprema povjerenstva za posjet Agronomskom fakultetu (rad na Samoanalizi)/Preparation of the expert panel members for the site visit (working on the Self-evaluation report)

**Utorak, 16. siječnja 2018. /
Tuesday, January 16th, 2018**

**Agronomski fakultet, Sveučilište u Zagrebu/ Faculty of Agriculture, University of Zagreb
Adresa/Address: Svetošimunska cesta 25, Zagreb**

9:00 – 10:45 Sastanak s dekanom, prodekanima i tajnikom (*bez prezentacija*) i s radnom grupom koja je izradila Samoanalizu / Meeting with the dean, vice deans and secretary (*no presentations*) and with the working group that compiled the Self-Evaluation

10:45 – 11:15 Sastanak članova Stručnog povjerenstva (*Analiza dokumenata*)/*Internal meeting of the panel members (Document analysis)*

11:15 – 12:00 Sastanak s predstojnicima zavoda / Meeting with Heads of Units

12:00 - 13:15 Sastanak s nastavnicima (u stalnom radnom odnosu, nisu na rukovodećem položaju)/Meeting with full-time employed teachers (open meeting)

13:15 - 15:00 *Radni ručak Stručnog povjerenstva/Working lunch*

15:00 - 16:15 Sastanak sa studentima (otvoren sastanak za sve studente)/Meeting with students (open meeting)

**Srijeda, 17. siječnja 2018./
Wednesday, January 17th, 2018**

09:00 - 09:45 Sastanak s prodekanom za nastavu / Meeting with vice dean for teaching

09:45 - 10:30 Sastanak s voditeljima studija / Meeting with Heads of study programmes

10:30 - 11:00 *Sastanak članova Stručnog povjerenstva /internal meeting of the panel members*

11:00 - 12:00 Sastanak s asistentima i znanstvenim novacima /Meeting with teaching assistants and novices

12:00 - 13:15 Pristupovanje nastavi, obilazak knjižnice, informatičke učionice, i sl./ Tour of Library, IT Classrom, etc.

13:15 - 14:30 *Radni ručak Stručnog povjerenstva/Working lunch*

14:30 - 15:10 Sastanak s prodekanom za znanost / Meeting with vice dean for research

15:10 - 16:10 Sastanak s voditeljima znanstvenih projekata / Meeting with research projects leaders

16:10 - 16:30 *Sastanak članova Stručnog povjerenstva (Analiza dokumenata)/Internal meeting of the panel members (Document analysis)*

16:30 - 17:30 Sastanak s vanjskim dionicima - predstavnicima strukovnih i profesionalnih udruženja, poslovna zajednica/poslodavci, stručnjaci iz prakse, organizacijama civilnog društva, vanjski predavači/Meeting with external stakeholders -representatives of professional organisations, business sector/industry sector, professional experts, non-governmental organisations, external lecturers

Četvrtak, 18. siječnja 2018./
Thursday, January 18th, 2018

09:00 – 13:30 *Izrada nacrtu završnog izvješća / Drafting the final report*

13:30 – 14:30 *Radni ručak Stručnog povjerenstva i izrada nacrtu završnog izvješća/Working lunch and drafting the final report*

14:30 – 15:00 *Završni sastanak s upravom Fakulteta / Final meeting with the Management*

SUMMARY

The expert panel has undertaken the site visit of the Faculty of Agriculture of University of Zagreb during the period 16-18 January 2018. The Faculty runs 9 / 15 / 4 courses at undergraduate / postgraduate / doctoral level, with totally 2540 students. There is 220 teaching staff in the Faculty.

The following have been considered as advantages of the Faculty: (a) large variety of study programmes across the board of the general remit of the Faculty, (b) good relations and close cooperation between teachers and students, (c) excellent relations and connections with stakeholders, (d) increased number of young professorial and teaching staff, (e) in general, transparency applied in procedures within the Faculty, (f) perception of high recognition in Croatia and (g) good gender balance in management, staff and students of the Faculty.

The following have been considered as disadvantages of the Faculty: (a) inappropriate structure of the Faculty, with unduly large number of academic Departments, (b) in part, outdated infrastructure, (c) lack of a clear and structured quality assurance programme and (d) several research areas not competitive to the average international level.

The expert panel has considered the level of quality to be (a) satisfactory for internal quality assurance and the social role of the Faculty, (b) high for the study programmes, (b) high for teaching processes and student support, (d) satisfactory for teaching and institutional capacities and (e) satisfactory for scientific / artistic / professional activity.