



## **RE-ACCREDITATION OF KRIŽEVCI COLLEGE OF AGRICULTURE**

**Date of the site visit:**

**22<sup>nd</sup> April 2013**

April 2013

## COMPOSITION OF THE EXPERT PANEL

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- Prof. Charlotte Poschenrieder, PhD, Universidad Autònoma de Barcelona, Spain
- Prof. Tito Žimbrek, Faculty of Agriculture, University of Zagreb, Croatia
- Prof. Mohácsiné Farkas Csilla, PhD, Corvinus University of Budapest, Hungary
- Nives Kalit, student, Faculty of Agriculture, University of Zagreb, Croatia

Expert panel was supported by:

- Emita Blagdan, coordinator, Agency for Science and Higher Education
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- Lida Lamza, interpreter at site visit and report translator, Agency for Science and Higher Education

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# INTRODUCTION

## *Short description of the evaluated institution*

NAME OF HIGHER EDUCATION INSTITUTION: Križevci College of Agriculture

ADDRESS: Milislava Domerca 1, 48260 Križevci

NAME OF THE HEAD OF HIGHER EDUCATION INSTITUTION: dr. sc. Marijana Ivanek-Martinčić, senior lecturer

### ORGANISATIONAL STRUCTURE:

Bodies of the Križevci College of Agriculture are: Governing council, Dean, Dean's board, Vice dean for teaching activity and students, Teaching staff council, Quality assurance unit.

Administration services of the Križevci College of Agriculture carries out legal-administrative, technical, accounting and general activities, and its work is managed by the College secretary.

### LIST OF STUDY PROGRAMMES:

The College of Agriculture in Križevci delivers professional study programmes which are organized in two cycles:

1. a three-year professional study programme Agriculture – six semesters (180 ECTS credits) – biotechnical scientific area, the field of agronomy is delivered as full-time and part-time study and has three programme orientations:

- plant production
- zootechnique
- management in agriculture.

2. Two-year specialist graduate professional study programmes – four semesters (120 ECTS credits) – the College delivers two studies at specialist graduate professional study programme level:

- specialist graduate professional study programme Agriculture – biotechnical scientific area, the field of agronomy with one orientation Sustainable and organic agriculture
- specialist graduate professional study programme Management in agriculture – social sciences area, the field of economics

NUMBER OF STUDENTS: 653 (292 full-time students, 361 part-time students)

NUMBER OF TEACHERS: 32 full-time, 9 external associates

NUMBER OF SCIENTISTS: 16

TOTAL BUDGET (BALANCE): in calendar year 2011. – 12.479.891,00 kn

MSES FUNDING: 69%

OWN FUNDING: 31%

#### SHORT DESCRIPTION OF HIGHER EDUCATION INSTITUTION:

Križevci College of Agriculture was established in 1998 by Decree of the Government of Republic of Croatia (OG. 40/98) as an independent public college. The foundation of the College of agriculture represent a continuity of agricultural education which has in various forms existed in Križevci since 1860, when on November, 19 the Royal College of Forestry and Agriculture was founded, the oldest college of forestry and agriculture in Southeast Europe. In 1998 Križevci College of Agriculture developed new study programmes and transferred from two-year professional study programme to three year professional study programme.

Already in 2005 the College joined the efforts to develop higher education in the Republic of Croatia in line with the principles of Bologna declaration and thus become a part of the unique European higher education area, so it developed new study programmes in line with Bologna declaration. Besides the bachelor professional study programme, the college also developed a specialist graduate professional study programme and enabled studying in two cycles (3+2). The system of ECTS credits was introduced and the college started with the implementation of the quality assurance system. The College obtained accreditation for: Professional study programme Agriculture (three years, 180 ECTS credits) with specific fields of study Plant production, Zootechnics and Farm management and Specialist graduate professional study programme Agriculture (two years, 120 ECTS credits) with one specific field of study Sustainable and organic agriculture.

The College continued to develop and propose new study programmes and at the end of 2008 it obtained accreditation for Specialist graduate professional study programme Management in Agriculture (two years, 120 ECTS credits), social sciences, field of economics, and procedure for obtaining the accreditation for professional study programme Civil engineering (three years, 180 ECTS credits), technical sciences, field of civil engineering is in its final phase. The College also prepared Professional study programme Management of small and medium entrepreneurship (three years, 180 ECTS credits) social sciences, field of economics.

Mission of the College is to educate professionals in biotechnical sciences (field of agriculture) and social sciences (field of economics) through administration of professional and specialist graduate professional study programmes. Through acquired knowledge, competences and skills

future experts – engineering practitioners and managers - entrepreneurs should have the capacity to be competitive on the labour market and ready to enter the EU knowledge society.

College vision is to be a leading HE institution for professional education in the field of agriculture and respective areas of education (biotechnical, social and technical sciences) within modern multidisciplinary Križevci Polytechnic.

Structure of students enrolled:

Enrolled students primarily completed vocational schools, and a small number completed grammar school (gymnasiums). At full-time study programme the number of students that completed grammar school is higher (from 8.7 to 12.5%) compared to their number at part-time study programme (from 3.3 to 4.5%). Average grade from secondary school of the enrolled students varies from 3.5 to 4.0.

## ***The work of the Expert Panel***

For its work the Panel drew upon the Self-Evaluation Report, prepared by the Križevci College of Agriculture. A site visit was carried out on 22<sup>nd</sup> April 2013. During the visit to the Institution the Expert Panel held meetings with the representatives of the following groups:

- the Management,
- the Working group that compiled the Self-Evaluation,
- representatives of the Board for quality improvement,
- the students, i.e., a self-selected set of students present at the interview,
- teachers,
- teaching assistants,
- Vice-Dean for teaching and representative of Committee for international cooperation.

The Expert Panel also had a tour of the library, IT rooms and the classrooms at the Križevci College of Agriculture, where they held a brief question and answer session with the students who were present.

## **DETAILED ANALYSIS BASED ON STANDARDS AND CRITERIA FOR RE-ACCREDITATION**

### ***1. Institutional management and quality assurance***

1.1. The institution has systematic strategic planning for the period 2011 to 2016. The mission of the institution should be revised in order to emphasize the importance in this mission of some relevant activities such as professional and research activities as well as life long education for influencing the development of modern and sustainable agriculture.

1.2. The panel noticed that the institution has developed effective organization structures and has performed all the legal documents related to this.

1.3. All the study programmes of the institutions are in line with the mission.

1.4. The institution has a quality policy and has built up committees and boards for developing and evaluating quality assurance procedures at the different activity levels. Unit of the quality assurance and improvement at KCA, a board for monitoring and improvement of studying, and a board for student relations. Moreover, a teaching staff council and a team for self assessment are also involved in quality assurance. Yearly plans for quality assurance are performed in which terms and financial needs for its fulfilment are included. Monitoring of the accomplishment is done. The tasks are divided among different responsible and boards: This may lead to overlapping and/or excessive workload for the implied persons; the creation of a single Quality Assurance Unit with one responsible, as planned but still not implemented, will help to overcome this problem and make the planning more systematic.

1.5. Although the institution collects and analyses relevant information in order to efficiently manage all activities, students frequently are not really satisfied about the feedback they get from the analysis of this collected information. We recommend to improve this feedback to students and to try, when possible, to further implicate students in the analysis and the consequent actions derived from this information.

1.6.\* The research quality improvement is a major objective of the Center and a manual of quality assurance has been presented. The research activities of the members of the



institution is recopilated. Nonetheless, formal mechanisms to improve the research quality are only implemented in part and need to be further developed. Taking into account the strong teaching load of most of the staff members, the necessary improvement of both research competence and research activities of the teachers would much benefit from a closer research cooperation among the KCA colleague from different fields.

1.7. Effective mechanisms for highest level of ethical behaviour in both teaching and research activities are fully implemented and both students and staff are informed.

## ***2. Study programmes***

2.1. The procedures for proposal, approvement, implementation and monitoring of development, as well as analysis of needs for innovation are fully implemented. Stakeholders are included in the analysis of study programs. The institution has done annually from 2009/10 academic improvements of the study programs influenced by the TEMPUS project. A larger number of elective modules offered to the students is an aim for the next periode. However, until now, the institution has only little feedback about the effects of these changes in the study programs.

2.2. The enrollment quotas for the professional studies are justified by the needs of the society. Indicator for this is that only a low proportion of the students that have finished their education are working in unrelated fields. A negative tendency of the enrolment quotas in the graduate studies (Agriculture and Management in Agriculture) during the last year can be attributed mainly to high costs of these studies. The fact that the diploma is not recognized may also contribute in a strong manner to the low enrolment quota. Improved advertisement can contribute to attract students.

2.3. In general, the enrolment quotas are in line with the institutional resources for quality teaching and the pass rates. Some inbalance can be detected in the first year of the professional study in Agriculture where the ratio students/teacher in the lectures is high and the pass rate is, somewhat lower. The lower pass rate is not a consequence of the higher students/teacher ratio but rather caused by the fact that some students seem to be enroled in first year to achieve students' rights.

2.4. Students learning outcomes clearly describing knowledge and skills of the graduates are fully implemented.

2.5. A rigorous assessment of all learning outcomes is assured in all courses and fully implemented.

2.6. In general, allocation of ECTS reflects a realistic estimate of the students' workload. However from the start of the Bologna process till now the exact allocation of ECTS with realistic assessment of student workload is not fully harmonized. This full assessment of students' workload in some modules needs some further analysis for optimal adjustment. This harmonization has to be one of the general goals for the Institute in the future.

2.7. Programme contents and quality according to international standards are fully implemented. The participation in EU programme TEMPUS gave a most powerful impulse to this achievement.

2.8. Didactical approaches by teachers to transmit the knowledge to the students are adapted to the diversity of student's background knowledge and to the nature of the study subjects.

2.9. Supplemental resources for knowledge acquisition are mostly implemented. Further resources could be made available at low cost by providing more virtual tools (didactic material on institutional website; e-learning).

2.10. As a professional college, a main objective is practical competence. Besides practical work on campus, external practices are fully implemented.

### ***3. Students***

3.1. The competencies of applicants evaluated upon admission are clearly defined and regularly analyzed. The institution keeps track of the success achieved in the studies and the average grade of students in order to produce better enrollment criteria.

3.2. Excepting football competitions, the other extra-curricular activities offered by the institution are poorly known by the students. Students expressed the need and interest in

increasing the number of activities. Support for students in extracurricular activities should be improved, and it should increase the number of extracurricular activities. Students in the committee interview expressed interest in activities such as literary and debate section, dance lessons and other sports and recreational activities. They also would like to have better facilities and that students can be informed easily through the website and/or through their representatives on the boards.

3.3. Mentorship and professional orientation are fully implemented. Students have declared about the good work of mentorship that helps them to solve problems in their work. In higher grades professional orientation is provided by selecting a variety of professional courses.

3.4. University is working on improvement of student standards, but it does not have provided accommodation in the campus, nor the ability to use the space for food. We believe that these facts have a large impact on student's standard.

The construction of the campus to accommodate students and the canteen should be set for priority goal of the institution especially if the institution aims to attract foreign visiting students. We suggest better cooperation with town authorities in regard to this subject.

3.5. Methods and procedures for student's assessment are highly qualified. Students are satisfied with objectivity of professors, grading system, examining the test results and the possibility of improving knowledge.

3.6. Within institution there is a student club "Alumni klub". The institution is in close relationship with the club and receives informal information about former students as well as statistics on their employment.

3.7. Students are involved in the work of the institution through its student representatives and thus can directly influence on decision-making and problem-solving ability.

3.8. All relevant and important information such as study programs, learning outcomes, employment opportunities etc. are available on institutional website and advertisement board.

3.9. Students have their representatives in the Council through which they can express their opinions and suggestions to improve the work of the institution.

3.10. The students are informed about the measures implemented on the basis of their suggestions and opinions by their colleagues who are council members.

#### ***4. Teachers***

4.1. Qualifications of teachers, number and ratio between full time and part time teachers are in line with the strategic goals of the institution. However, workload of full time teacher's is very high causing a negative feedback on the research activities.

4.2. Due to inability of employment of new, young teaching staff the institution is not able to fulfill the requirements for development of human resources.

4.3. Number and ratio between full time and part time teachers is adequate for fulfilling the study programme and to assure its quality.

4.4. The number and ratio between full time and part time teachers is taken into account by the institution and an optimal ratio is maintained.

4.5. Professional development of teacher's is satisfactory and facilitated by financial support of tuition fees and research activities.

4.6. Assessment of qualifications and expertise of the teaching staff is performed according to the institutional workbook and the national criteria for employment and promotion.

4.7. The policies governing teacher's workload are still not fully implemented leading in some cases to unequal distribution among teachers.

4.8. The institution ensures the adequate commitment to teaching and research.

## **5. Scientific and professional activity**

5.1. To achieve the strategic goal of increasing the scope and quality of professional and research activity the institution has established a strategic plan for research for the next five years. The plan specifies monitoring and defines success indicators.

5.2. Some cooperation is already well established in Croatia, future extension beyond the national area has to be promoted.

5.3. Research is acknowledged at the institution, but development of human resources by employing new young researchers is essential for further scientific and research development.

5.4. The institution supports its young researchers both with financial support (for conferences and participation for PhD courses) and non-financial support (usage of laboratories, equipments, flexible work time). The high number of PhD degrees obtained in the last years indicates the success of this policy.

5.5. The research excellence is promoted at the institution and preparation of a manual for awarding teachers is in progress.

5.6. Academic publishing is demonstrated, but development and implementation of policy in this regard is not shown. Clear policy has to be developed and implemented for encouraging academic publishing.

5.7. Scientific productivity of KCA (such as publications in international journals, citations etc.) is very low and must be improved with special attention to publications in internationally recognized journals. One employee is co-inventor of a registered patent.

5.8. The institution must ensure conditions for knowledge and technology transfer in a larger extent.

## ***6. International cooperation and mobility***

- 6.1. The institution supports and promotes mobility of students from other HE institutions by enabling a transfer for students who graduated from similar study programmes.  
However, there is not a lot of interest for such mobility.
- 6.2. Students have many opportunities to complete a part of their programme abroad and they have used it especially the practical training. The students also participate in Erasmus student mobility for placements.
- 6.3. KCA encourages international cooperation and mobility of its teachers through Erasmus mobility under the LLL Programme, study visits and staff exchange.
- 6.4. KCA is involved in the following international institutions:
- European Association of Agricultural Schools and Universities J.T.P.
  - European Association of Institutions of Higher Education (EURASHE)
  - Association for European Life Science Universities (ICA)
  - European Network AFANet
  - European Council for the Village and Small Town (ECOVAST)
  - European Association of Agricultural Economists (EAAE).
- The representatives of the institution actively work in associations, attending meetings and presenting the results of their research.
- 6.5. Ensuring conditions for attracting students from abroad is in starting phase of implementation. KCA doesn't have any module in foreign languages and there is no accommodation for foreign students. Only few teachers are able to teach in foreign language. It should be recommended to organize foreign language course for teachers enabling them to teach in foreign language. The plans based on the survey should be made in order to find out which modules could be interesting for foreign students. It is necessary to solve the problem of accommodation for future foreign students. KCA should also make web page in English (or other languages) to promote its activities.
- 6.6. KCA has developed different forms of interinstitutional cooperation. KCA participate in different projects (Erasmus, Interreg IIIA, TEMPUS; SEEDNet project, INVEST\_PRO). KCA has also signed 11 bilateral agreements.

## ***7. Resources: administration, space, equipment and finances***

- 7.1. College buildings, laboratories and practicums are high quality and well-equipped. Library resources and computers meet the needs of students. It should be emphasised that KCA owns 90 hectares of land on which agricultural production is organized enabling students to participate actively performing exercises and practical work.
- 7.2. KCA has 54 employees and 34 of them are teachers. The rest is technical, administrative and support staff. It could be concluded that the ratio between the teaching and non-teaching staff is favourable.
- 7.3. KCA had well-developed policies for non-teaching staff enabling them to attend seminars and workshops regularly in order to develop themselves.
- 7.4. Laboratory equipment and protocols used are in line with international standards.
- 7.5. KCA has all necessary equipment and provides technical support for its use in order to be efficiently used and to meet the needs of students.
- 7.6. Library has a total area of 50 m<sup>2</sup> and it is opened every day to students, teachers and associates. Since there is no librarian (one of the college teachers is also a librarian) it is recommended to hire one. There is also a reading room near the library which is small and it could be recommended to extend it or to find another bigger room in order to create place for quality student work.
- 7.7. Financial stability is harmonised with its mission and sources of finance are transparent. Finances don't limit institutional autonomy.
- 7.8. Institution's own funds are used to raise the quality of teaching and scientific activity.

## **FINAL REPORT AND RECOMMENDATIONS BY THE EXPERT PANEL FOR THE ACCREDITATION COUNCIL**

### ***ADVANTAGES (STRONG POINTS)***

1. The institution has a large and recognized tradition in the formation of professionals in the field of agriculture.
2. Most of the experienced teaching staff has full time dedication and has made notably efforts to innovate teaching methods and tools to adapt to competence learning in the frame of the Bologna process.
3. The institution has excellent facilities for field practice and provides competent practical teaching.
4. Methods and procedures for student's assessment are highly qualified. Students are satisfied with the objectivity of professors, grading system, examining the test results, and the possibility of improving knowledge.
5. The Institution has a well-developed system for organizing external practices for their students to achieve professional competence.

### ***DISADVANTAGES (WEAK POINTS)***

1. A low proportion of young teachers and difficulties to attract and contract young staff.
2. High number of teaching hours per teacher.
3. Decreasing interest of student for the specialist studies.
4. No on campus facilities for restoration and housing for students.
5. Low number of research projects leaded by scientists of the institution.
6. Low research activity outcomes.



# **RECOMMENDATIONS FOR IMPROVEMENT OF QUALITY**

## **1. Management of the Higher Education Institution and Quality Assurance**

- As already planned by the institution, a single quality assurance unit should be implemented.
- Implication of students in the analysis of institutional activities should be further fomented and the feedback to the students should be improved.
- Further mechanisms to improve research activities should be implemented and cooperation in research among the members of KCA should be stimulated.

## **2. Study Programmes**

- Improvement of availability of virtual tools is recommended.

## **3. Students**

- Improvement of information about extra-curricular activities through website.
- Increase of extra-curricular activities.
- The construction of the campus to accommodate students and the canteen should be set for priority goal of the institution. In the meantime the conditioning of a dining room with microwave oven facility is recommended.

## **4. Teachers**

- Plans for improvement of teaching workload distribution must be further developed.
- Teaching workload distribution should be a factor for incentivaion of teachers' research activities.

## **5. Research and professional activity**

- Clear policy has to be developed and implemented for encouraging academic publishing.
- Scientific productivity must be improved, with special attention to publications in internationally recognized journals.
- The institution should ensure conditions for knowledge and technology transfer in a larger extent.
- Development of human resources by employing new young scientists is essential for further scientific and research development.

## **6. International Cooperation and Mobility**

- Interest of students in exchange should be further promoted by activities that improve awareness of students on the advantages for their personal development and professional competence to go abroad.
- Attraction of foreign students requires action especially on:
  - improvement of English language competence of teachers by easy access to specific English courses;
  - plans based on the survey should be made in order to find out which modules could be interesting for foreign students;
  - publicity of the institutional activities on the website should be made in English and if possible in other languages;
  - implementation of on campus housing and food facilities.

## **7. Resources, Administration, Space, Equipment and Finance**

- Space and equipment for students' housing and food facilities is a priority for stimulation of specialized studies and exchange with foreign student.
- Since KCA has no librarian it would be recommended to hire one.
- Library and reading room are too small and it could be recommended to extend it or to find another bigger room.
- Financial support from administration for attracting young staff should be provided.