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ΑΡΧΗ ΔΙΑΣΦΑΛΙΣΗΣ & ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΣΤΗΝ ΑΝΩΤΑΤΗ ΕΚΠΑΙΔΕΥΣΗ

HELLENIC REPUBLIC
H.Q.A.
HELLENIC QUALITY ASSURANCE AND ACCREDITATION AGENCY

EXTERNAL EVALUATION REPORT

DEPARTMENT OF CROP PRODUCTION

TECHNOLOGICAL EDUCATIONAL INSTITUTE OF EPIRUS

December 2011

External Evaluation Committee

The Committee responsible for the External Evaluation of the Department of CROP PRODUCTION of the TECHNOLOGICAL EDUCATIONAL INSTITUTE OF EPIRUS consisted of the following three (3) expert evaluators drawn from the Registry constituted by the HQA in accordance with Law 3374/2005:

1. Professor Andronikos Mauromoustakos (Coordinator)
   University of Arkansas, USA

2. Dr. Dionysia Fasoula
   Agricultural Research Institute, Nicosia, Cyprus

3. Professor Paul Hadley
   University of Reading, UK

N.B. *The structure of the "Template" proposed for the External Evaluation Report mirrors the requirements of Law 3374/2005 and corresponds overall to the structure of the Internal Evaluation Report submitted by the Department.*

The length of text in each box is free. Questions included in each box are not exclusive nor should they always be answered separately; they are meant to provide a general outline of matters that should be addressed by the Committee when formulating its comments.

Introduction

I. The External Evaluation Procedure

- Dates and brief account of the site visit.
- Whom did the Committee meet?
- List of Reports, documents, other data examined by the Committee.
- Groups of teaching and administrative staff and students interviewed
- Facilities visited by the External Evaluation Committee.

II. The Internal Evaluation Procedure

Please comment on:

- Appropriateness of sources and documentation used
- Quality and completeness of evidence reviewed and provided
- To what extent have the objectives of the internal evaluation process been met by the Department?

In the morning of Monday December 12th, the Committee of External Evaluation (hereafter the Committee) met at the HQA Headquarters for an orientation session by Prof. Amourgis. Later, the Committee met with Prof. Malisiovas, Head of the Department of Crop Production (hereafter the Department) of the Technological Educational Institute (T.E.I.) of Epirus, and later travelled to the city of Arta, where we arrived late Monday evening. The Committee visited the Department during the period December 13th – December 14th, 2011.

During the morning of December 13th, the Committee had an introductory meeting with Dr. Gikas (T.E.I. President), Dr. Glavas (T.E.I. Vice-President), Dr. Malisiovas (Department Head), and Dr. Zoaki (T.E.I. Vice President, and head of ΜΟ.ΔΙ.Π. of T.E.I. Epirus), which had undertaken the drafting of the Internal Evaluation Report. Later the same day the Committee met with all the academic staff members, the Departmental secretariat, the special teaching personnel, and the non-permanent scientific personnel and each reported on their duties and activities.

The reports were very positive and each highlighted a significant contribution and impact on the development of the Department. Following that meeting, the Committee visited various departmental teaching and research laboratories, greenhouses, orchards, and other facilities at the teaching/research farm. The Committee was also given a tour of the library, the computer laboratories, the Conference Center, the distant learning room, and the Gym. During the lab tours, the Committee visited a plant pathology laboratory session with 20 second-year

students, was shown the instructional material, and undertook a question and answer session with the students. The students were very positive. Half of the students had selected the Department and the city of Arta as their first choice and expressed their satisfaction both from the perspective of their studies at the Department and student life in the city of Arta. Later in the afternoon, the Committee met with a group of 15 Alumni of the Department. The Alumni ranged from those who had graduated very recently to those who had graduated some years earlier. This was also very productive. They all expressed their satisfaction with the curriculum and the experience acquired during their studies, which they considered essential for their subsequent success in employment and professional advancement. Later the Committee learned that over 60% of graduates from the Department had gained relevant employment in the local area.

During the preparation of the external evaluation report, the Committee considered the self-evaluation report, which is extensive and well prepared, and the discussions that occurred during the two-day site visit. In addition, the Committee considered various documents provided by the Department which had been requested by the Committee. The Committee commends the Department for its valuable and honest self-assessment. However, the Committee felt that the report understated the impact and accomplishments of the Department to the development of a number of sectors of the local agricultural community. Some of the information provided gave a poorer impression of the performance of students in the degree courses, the length of their studies, and their graduation rates than was actually the case. Nevertheless, it is clear that the graduation period is excessively long, particularly in relation to the new law that requires graduation within 6 years, and we recommend that the Department pays particular attention to remedy this issue.

Overall, the facilities available for teaching and research were very good. Field and greenhouse training facilities were in close proximity to the main campus. These facilities are used intensively to support the Department's teaching activities and provide hands-on training. Teaching and research laboratories were well equipped and provided good support for teaching and research. However, the Department could also make more to use these facilities to carry out applied research that would benefit current problems in the local industry.

The Committee is very grateful to the staff of the Department for their helpful cooperation and hospitality. Staff provided detailed information on teaching and research activities and delivered efficiently any additional information that was requested.

A. Curriculum

To be filled separately for each undergraduate, graduate and doctoral programme.

APPROACH

- What are the goals and objectives of the Curriculum? What is the plan for achieving them?
- How were the objectives decided? Which factors were taken into account? Were they set against appropriate standards? Did the unit consult other stakeholders?
- Is the curriculum consistent with the objectives of the Curriculum and the requirements of the society?
- How was the curriculum decided? Were all constituents of the Department, including students and other stakeholders, consulted?
- Has the unit set a procedure for the revision of the curriculum?

The objective of the curriculum is to prepare and train students in the theory and practice of applied plant production so that they are competent to serve the needs of Greek agriculture and allied industries. The high employability of the graduates and the ongoing level of cooperation with the industry confirm that the focus is essentially correct, and working. There are 7 semesters dedicated to 40 courses out of a total provision of 58 courses, while the 8th semester is dedicated to thesis writing and an internship. 45% (18) of the 40 required courses are core courses whilst 55% (22) are specialised courses. The curriculum allows the student to choose from a total of 17 courses ranging from those of a general nature (for example English), specialist courses (for example hydroponics and viticulture) and theory courses (for example, Plant enemies). Courses generally include a significant amount of laboratory work to reinforce hands-on abilities. Students are able to comment on teaching through regular staff student meetings and the committee agrees that this is good practice.

Students indicated that they felt that the courses were, on the whole, relevant and up to date. The teaching staff made appropriate use of PowerPoint and other electronic methods of distributing lecture materials. Student attendance appeared to be relatively good, even in theory classes which were often not mandatory.

The committee noted that the pass rate on some courses was particularly low (table 11-5.2, p96-99), for example 'Introduction to Computing (CRP1060, CRP 2040)'. It was also evident that there was a prolonged delay in graduation which appeared to be often related to delays in submitting the final thesis for evaluation and the satisfactory completion of some of the core courses during the first three semesters. We recommend that the Department address these issues especially now that the new law requires graduation within six years.

The committee felt that the curriculum addresses the needs of the student and also the requirements of the Agriculture industry in Greece and more specifically in the Epirus region.

Recommendation A1: At present, full time teaching staff are only able to teach 20% of the total teaching requirement of the curriculum whilst the remainder is taught by temporary teaching staff. Under the present government financial restrictions which are limiting expenditure on temporary teaching staff, this is clearly unsustainable. The department needs to develop a strategy for meeting teaching obligations through greater inter-departmental collaboration and rationalisation of existing course content. The committee understands that discussions are underway into possible consolidation of the TEI onto a single campus, which could address some of these issues. Secondly, a possible merger of the Department with the University of Ioannina may also address some of these issues. In this event, the committee recommends that the autonomy and applied nature of the teaching and research of the Department are preserved.

Recommendation A2: The number of appropriately qualified academic staff in the Department is, at present, at the minimum and this is set to decline further in the near future due to impending retirements of a number of permanent teaching staff. There appears to be a policy not to replace permanent staff in the Department and it appears that no permanent faculty have been hired since the Department was created over 17 years ago. This is not satisfactory and the Committee recommends that the future sustainability of the Department can only be assured through replacing retiring staff with permanent positions or, at least, by retaining more temporary teaching staff.

Recommendation A3: The committee recommends that the learning objectives of core courses are more clearly articulated. Learning objectives need to set at realistic levels so that course pass rates are brought more into line with international norms. Low pass rates can infer poor teaching approaches as well as poor students and so reflect badly on teaching staff.

Recommendation A4: The project thesis appears to be set at an unrealistically high standard which appears to be an unnecessary burden to both student and staff members often leading to excessive delays in graduation. The committee recommends that the teaching curriculum committee revisits the standards and expectations of the thesis report so that its preparation is less time consuming for both staff and students.

Recommendation A5: The Committee recommends that the Department carries out more frequent re-evaluation of the Curriculum by replacing existing outdated courses when possible rather than limiting changes to minor adjustments depending on the availability of outside teaching staff.

Recommendation A6: The committee recommends that the Department consider

replacing some traditional courses with courses that provide the students with the ability to used modern technologies which have become important to agriculture. For example, precision agriculture, GIS, biotechnology, post-harvest processing, produce safety, and sensory. These courses would provide graduates with a competitive advantage in the job market. New courses should be added as older courses are eliminated so as not to over-burden the curriculum with a larger number of courses.

Recommendation A7: The Committee recommends a reduction in the number of courses in the Curriculum. Instead of requiring 25-28 hours contact time per week the Department should consider reducing the number of contact hours to about 20 hours which is a generally accepted norm for a full course load. The Department should also consider integrating the theoretical section and the laboratory sections of courses into a single course. This will reduce the number of final examinations but will not affect the overall content of the Curriculum. It will also avoid the anomaly of students passing the theory element of a course, but not the practical element and *vice versa*.

B. Teaching

Does the Department have a defined pedagogic policy with regard to teaching approach and methodology?

Please comment on :

- Teaching methods used
- Teaching staff/ student ratio
- Teacher/student collaboration
- Adequacy of means and resources
- Use of information technologies
- Examination system

Although, according to their internal report, the Department does not appear to have a clearly stated pedagogic policy which defines its teaching approach, the course structure and teaching methods are in line with a general policy of developing and transmitting knowledge in the science and technology of crop production through teaching and applied research. The Study Guide for the TEI of Epirus states that Graduates in Crop Production will acquire adequate scientific and technical knowledge, as well as skills to enable them to be able to gain employment in all sectors of their field of knowledge in both the public and private sector and so this appears to be their overall teaching objective. The teaching staff appears to understand their collective role in delivering this objective through a clearly stated course structure which appears to be in line with the course structures of other TEI's.

The teaching staff largely operates as a team, with a friendly and cooperative spirit running throughout the Department.

In conclusion, it would be good practice for the Department to have a clearly stated teaching policy that is communicated throughout the institution, on publications such as their Student Study Guide, and their website. This policy could also be extended to indicate the value, contribution and impact of their teaching to the development of the TEI as a whole. The Department needs to have a clear view of its own teaching expertise which should be promoted within the TEI. For example, within its teaching programme, has the Department introduced and developed certain teaching skills, such as problem-based learning, group assessment, linking research to teaching which could be used as examples of best practice elsewhere in the TEI? This could be of particular value to staff members whose experiences and abilities are more focused on teaching rather than research. Here, a focus on teaching approaches by certain staff members could provide a stimulus for research into university level education and lead to useful publications.

It was evident that many of the teaching staff also teaches in other institutions (Table 11-8 on the internal review) which indicate their strong reputation as teachers outside the TEI. However, with the increasingly difficult financial climate, teaching staff may find external teaching increasingly attractive for financial reasons at the expense of teaching in their own TEI. The senior management of the TEI needs to keep a close watch on the trend in outside teaching activities to ensure that this does not have a detrimental effect on teaching activity in the future.

Teaching methods used

It was clear that most teaching staff followed a relatively conventional teaching approach using PowerPoint presentations. Laboratory exercises were conducted in well-equipped laboratories and were supplemented with practical activities in greenhouses, orchards, the field, and fieldtrips, for example, to selected growers (although the latter was hampered to some extent by a lack of qualified drivers to take students on fieldtrips) . There was evidence that some lecturers placed class-related material on electronic platforms that were available to students. It was clear from discussions with students that laboratory demonstrations were a popular feature of teaching within the Department.

The Committee believes that alternative lecture formats could be included which allow more student engagement during courses such as student seminars and group discussions. This could improve the student experience, increase attendance on certain courses and offer a more efficient use of time by teaching staff.

The current budget crisis has reduced the number of non-permanent teaching staff used to deliver the course. It is clear that this will have a deleterious effect on the quality of teaching within the Department unless there is clear strategy of measures to address this issue.

It appears that staff from abroad does not teach in the Department. The committee recommends that the Department should make efforts to invite overseas lecturers to participate in the teaching program, especially those with whom they participate in joint research projects.

Teaching staff/ student ratio

Staff/student ratios are not always easy to comment on objectively, as they depend on how they are estimated. However, according to the internal evaluation report it appeared that the average staff student ratio in the Department was approximately 1 staff member to 15 students.

One way to attract students is through Erasmus links. The TEI has Erasmus links with three Universities in Germany and three Universities in Italy. During the review period three Erasmus students were following courses in the Department. In order to meet the requirements of these Erasmus students, staff taught three courses in English (phytopathology, principles of biology and lettuce production). The committee recommends that the Department continues, and if possible, makes efforts to extend its Erasmus programme. One way the Department can do this is through delivering more courses through the medium of English and involving Erasmus students in research activities.

Teacher/student collaboration

Students indicated that staff was approachable and dealt with both academic and personal issues on an *ad hoc* basis. However, no formal tutorial system was in place and the Committee recommends that small groups of students are allocated to individual staff members as personal tutors to oversee their academic and personal development. This could greatly improve the student experience.

Staff/student committees provided a forum for student comment on all aspects of the courses. Students also had formal representation at high levels within the TEI.

Administrative staff was also available to students as necessary.

The continued involvement of Alumni with the Department, particularly in providing assistance in teaching, is also a positive sign of the health of staff/student collaboration.

Use of information technologies

The computer laboratories were well-equipped and fit for purpose. There was evidence of investment in new computers in a new updated computer room in the library building. All students were issued with university e-mail addresses. The posting of teaching material on-line as a teaching resource, as well as computer access for students at home is clear evidence of good practice.

PowerPoint appeared to be available in most lecture rooms and teaching laboratories and appeared to be used routinely by teaching staff.

Adequacy of means and resources

The Department has declined in recent years to 8 full-time staff members. The last permanent staff member was appointed in 1997. In addition, several key members of staff are expected to retire over the next five years. Already, expertise required to teach some courses is no longer available within the existing staff members. These deficiencies are addressed by hiring part-time teaching staff that may or may not have an adequate depth of knowledge. The Greek Ministry of Education must address this issue promptly if the Department's teaching program is to remain viable.

Laboratories were generally well equipped, organised and functioned appropriately. There did not appear to be any significant lack of laboratory resources. However, the lack of technical staff to support laboratory teaching exercises has forced teaching staff to spend a significant amount of their time performing these technical duties. Inevitably, this diverts staff from their work on teaching development, industrial networking and applied research and puts the continuing quality of the student experience at risk.

The library is located in the main campus and is well maintained. It is attractive area that was clearly in use by students at the time of the visit. It provides reference material, books, computer rooms, a large conference room and a distance learning room equipped for video delivery.

Use of Information Technologies

All students and staff members are issued with university e-mail addresses. All buildings in the Department appear to be well equipped with wireless connections.

Examination System

Most theoretical courses were examined through a single final written examination. Mid-term exams are optional and apparently not widely used. Additional options for assessments during lectures via "clickers" may promote student participation and

attendance.

Laboratory elements of each course are mostly assessed through laboratory exercises. The Department uses a 10-point grading scale and the student has to earn at least a grade of 5 to pass the course. Data provided in the Self Evaluation Report (Table 11-6.1) indicate that most graduating students pass courses with an average grade of 6.51-6.81. The Committee noted that, in common with other TEI's, no student graduated with a grade "A" (excellent performance) and this should be a point of concern in comparison with graduates from foreign higher education institutes. This may create difficulties when graduates from the Department decide to continue their education abroad and would like to qualify for assistantships.

Quality of Teaching Procedures

Most staff members are dedicated and enthusiastic about their teaching, but some theory courses have very low numbers of students participating in examinations leading occasionally to very low numbers of students passing basic courses. Data provided in the Self Evaluation Report (Table 11-5.2) indicate that some courses in the first few semesters had less than 10% of the students participating in examinations, resulting in less than 5% passing basic courses. Current legislation does not allow the instructor to introduce compulsory attendance. However, instructors can implement measures that could encourage and reward attendance to make sure that a significantly higher percentage of students pass examinations on time, enabling more students to graduate in six years in line with new policy demands.

Quality and Adequacy of Teaching Materials and Resources

During interviews with the Committee, students commented favourably on access to appropriate materials in class and online. The Committee examined selected class resources and found them to be excellent and in effective formats. Books are also available to students at no cost and additional material is distributed in digital format, such as PDFs. Equipment used in teaching laboratories was adequate and well maintained but also appeared to have not been purchased recently.

Mobility of Academic Staff and Students

Seven staff members have participated as visiting scientist in programs outside the Department to upgrade their skills. However, there was no information that any staff members have taken sabbaticals. The Committee considers it very important that staff members make use of sabbaticals to update their skills.

Very few students made use of student mobility programs such as Erasmus. However, the Department participates in the Bologna process and incorporates credits from courses that its students earn while studying abroad. As stated earlier, small numbers of students from other European countries visited the Department and

staff has taught courses in English for these students as well as involving them in research activities.

Evaluation by the Students of (a) the Teaching and (b) the Course Content and Study Material/Resources

Student evaluation of courses taught in the Department (summary graphs in Section 4.2.2 in the Self Evaluation Report) shows that over 60% of students rate both the lecture and laboratory exercises as satisfactory to excellent. The questionnaire was appropriate and included questions on teaching, course content and material used. The Self Evaluation Report (Table 11-5.2) indicates that student evaluation has been used in almost all courses. The Committee acknowledges that the course evaluation process is in its infancy but makes the following specific suggestions for improving the course evaluation process:

- Discuss the importance of the evaluation process with the students and assure them that it will be used to improve the teaching program (see suggestions about informational seminar).
- Review the evaluation form with someone who specializes in creating surveys to ensure that the evaluation instrument provides the necessary data.
- Ensure that the evaluation forms are distributed during class periods near the end of the semester so that students who participate in the course are the ones completing the evaluation.

Recommendation B1: Critical staff teaching positions should be replaced promptly as key positions become vacant over the next five years.

Recommendation B2: There is a need to adopt course assessments where the student grades include combinations of mid-term examinations, multiple choice quizzes, assignments, group discussions or presentations, laboratory exercises and a final examination. This may provide a greater incentive for students to succeed especially in those theory and general knowledge courses such as computers, mathematics, and statistics which currently have very low pass rates.

Recommendation B3: Course pre-requisites should be enforced.

Recommendation B4: New instructional media digital books and technologies could also be used in the future to engage students in those courses which currently have low pass rates. These technologies include audience response systems (commonly referred to as "clickers"), for multiple choice quizzes and tests which can be graded instantly and electronically. This strategy has been proven to increase student engagement particularly in large class sizes.

Recommendation B5: Student teaching evaluation should be further utilized to support excellence in teaching. Teaching Excellence Awards (or equivalent tools for recognition of excellence) could be used to recognize individuals who excel in

teaching. Where possible, the awards should be accompanied by a one-off allocation of TEI funds to improve the teaching laboratory/methods of the awardee.

Recommendation B6: The Committee recommends that the Department encourage staff members to take sabbaticals at other institutions.

Recommendation B7: The Committee recommends that the Department takes action to increase student participation and to increase retention and graduation rates.

C. Research

For each particular matter, please distinguish between under- and post-graduate levels, if necessary.

APPROACH

- What is the Department's policy and main objective in research?
- Has the Department set internal standards for assessing research?

The department's founding mission, as stated in the Self Evaluation Report, relates to the following subjects: General Agriculture, Crop Production, and Dendrokomia.

The Committee understands that the primary mission of the TEIs in Greece, as defined by the relevant legislation, is teaching and not research, although TEI academic staff are allowed to conduct research. Consequently, there is no national or institutional rules, guidelines, or expectations of research productivity for the TEI. We have taken this into account in our evaluation of the research program.

After considering that the Department under evaluation is within a teaching-intensive institution, the research activities of the Department have been compared to those of teaching-intensive institutions in Europe and the United States. The Committee finds that the overall research activities, although satisfactory and generally targeted towards local needs, need upgrading and improving.

The Committee noted that the academic staff members in the Department were very receptive to our suggestions that their research requires rather more focus on local needs including a more active role in problem solving in research and mentoring. Some academic staff is currently co-supervising postgraduate research students from other institutions that are conducting their research within the Department.

Research Productivity

Measuring and documenting research productivity is always a difficult task and more so when it relates to Institutions with no clearly defined research mission where

academic staff has a full teaching load of approximately 16 hour of weekly. Some of the measures of research productivity typically used are publications in peer-reviewed journals, presentations at conferences, and impact on stakeholders. The Committee has used these to gauge the Department's research productivity.

Academic staff members in the Department have a satisfactory representation in national and international conferences, but a rather low number of peer-reviewed journal publications in subjects related to the mission of the Department.

Recognizing the financial constraints under which the Department operates and the excessively high cost of attending international conferences, we find that the Department's permanent staff members compare very favourably to academic staff from equivalent institutions in this category.

Table 1 summarizes data presented in the self-evaluation report (Table 11-9).

Table 1. Journal and peer-reviewed presentations at conferences by permanent staff members during 2005 to 2009.

Year	Journal Publications	Peer-Reviewed Presentations
2005	6	10
2006	4	10
2007	3	14
2008	1	9
2009	4	9
Total	18	42

Permanent staff members of the Department have presented at conferences at a rate of one presentation per staff member per year but published less than 0.5 peer reviewed Journal publications per staff member per year. This ratio is rather low, and could be improved.

As with any academic institution, the level of productivity as measured by publications varies significantly among scientists. This assessment is further complicated by the fact that in some sectors of agricultural science, data from which publications are created can be collected rapidly while in others, several years data are required before publications can be created. Nevertheless, the data in Table 2 are indicative of individual productivity.

Table 2. Number of peer reviewed publications of permanent academic staff from 2005 to 2009.

Range of Publications	Number of staff
0-3	3
4-6	0
7-9	0

>10	1

In the lowest performing category, there are 3 permanent staff members, one at the rank of Professor, 1 at the rank of Associate Professor and one at the rank of Assistant Professor. Several academic staff has no peer-reviewed Journal articles over the review period but almost all have made presentations in conferences. Under any standard even with limited levels of funding, less than one peer-reviewed publication in 6 years can only be characterized as poor and needs improvement and attention. Our opinion is that factors such large teaching commitments and administrative roles reduce the time available for research and are responsible for the poor publication rates since we witnessed active research programs mostly related to student research projects. One member has published 11 peer-reviewed papers since 2005 but these are not directly related to the mission of the Department. The Department participates in a number of research programs supported by local, state and European Union funds but none are considered significant in terms of the total proportion of the monetary research support. Several research projects are being conducted with partners at other Greek and foreign universities and other TEI's.

Overall, the Committee feels that this Department has the potential to improve its performance in the area of publications in peer reviewed international journals and has the academic credentials, support facilities, greenhouses, and sufficient field facilities for research to support a research-based post-graduate program.
The Department needs to be more outward facing in its research. It's considerable expertise and laboratory facilities could be usefully engaged in applied research aimed at solving problems confronting local industry. Staff members need to engage with grower organizations, learning more about problems limiting industry development and adapting their research to solving these problems. By doing this, the department may be able to obtain industry funding for such projects.

The department may also be able to offer analytical services using its excellent laboratory facilities. The Committee understands that, whilst it has previously not been possible to charge for such services, rules have recently been approved which now enable a more entrepreneurial approach by TEI's to charge for services. A step towards this would be to make sure that its laboratories are appropriately certified to recognized standards.

In order to enable the Department to engage more with industry, the committee recommends the establishment of an advisory board consisting of leading members of local industry and key Department staff to act as an interface between the Department and industry.

The committee believe that, once these recommendations are implemented, the

Department will be able to increase its ability to carry out industry relevant research, enabling it to show greater research leadership than it has in the past. This could also lead to more fruitful collaboration with other institutions and increased potential for government research income and greater outputs in terms of research papers.

Recommendation C1: The Committee urges the Department and staff to find ways to establish higher levels of research productivity despite the obstacles posed by the current crisis in the Greek economy. For example, the Department could establish an Excellence in Research Award given yearly to a faculty leading the highest impact research project completed within that period of time.

Recommendation C2: All academic staff should be further encouraged to participate and present at conferences and then attempt to publish their most significant research in peer-reviewed journal articles.

Recommendation C3: The Department needs to improve the visibility of its work, especially the significant quantity of applied research and the many relatively small projects regularly undertaken for individual local growers and producers that are usually involved in undergraduate thesis research work. The internet, local and national publications, media and informative seminars could provide avenues for exposing this sort of work.

Recommendation C4: The Department's research needs to further align with the strategic needs of Local Agriculture. Encourage the development of an advisory board made up of key stakeholders for solving local and national problems and for gaining possible financial support for research.

Recommendation C5: The Department needs to develop strategic links with other Departments to further enhance existing collaboration between Departments and Institutions.

Recommendation C6: The Department needs to promote new training in key areas for research to address current needs and trends, for example, in organic production, safety of produce, unique minor crops, and niche markets for agricultural commodities.

D. All Other Services

For each particular matter, please distinguish between under- and post-graduate levels, if necessary.

APPROACH

- How does the Department view the various services provided to the members of the academic community (teaching staff, students).
- Does the Department have a policy to simplify administrative procedures? Are

most procedures processed electronically?

- Does the Department have a policy to increase student presence on Campus?

The Department provides students and staff with very good computer and web access facilities, as well as good facilities for distant learning, above those typically found in many TEIs or Universities. All these are strategically placed close to the Department's library. Library provision is also very good, in terms of design, technology, and availability of books and journals. The library is built according to the traditional renowned architecture of the Epirus region with local stone material as is the building housing the Department's administrative facility. This contributes to the excellent working environment for both students and staff, with positive links to the wider community which is truly commendable. Athletic and catering facilities are also in place elsewhere.

The committee noted that the personnel in the administrative office are helpful and enthusiastic. Based on the information provided, discussions and visits, the Committee considers the functionality of the Department's administrative services to be very effective. For further improvements in efficiency, the committee recommends that a system is provided to enable academic staff members to enter student examination grades directly , thus avoiding duplication of the work done when secretaries copy student's grades into computers.

Academic staff was engaged enthusiastically in assisting students with future career options. This is commendable as the committee considers this to be essential for students' professional development. The committee recommends that an official job placement service is developed for students, helping the Department's mission to better serve stakeholder needs.

Recommendation D1: The committee recommends the development of an organized mentoring system for junior academic staff and staff in non-permanent positions in the Department, to assist them in the development of their teaching and scholarly activities. This process could also involve also academic staff outside the institution.

Recommendation D2. The committee recommends the development of an institutional policy on staff retention, promotion, and tenure which will serve as a guide to academic staff members.

Collaboration with social, cultural and production organizations

The Department's initiatives are mainly oriented towards maintaining active outreach programs with the community, the local agricultural sectors and industry.

Recommendation D3: The committee recommends that more efforts are placed in soliciting funding by interested grower cooperatives and other stakeholders to support students' research projects and other research activities.

Recommendation D4: Along related lines, the committee recommends that systematic procedures are developed for showcasing and advertising the value of the work done by the Department in the various production sectors. These could include, but would not be limited to, open field days for growers, regular seminars to the wider community (one or two per semester), sending regularly departmental news (perhaps in a form of a newsletter; there are free platforms for newsletter development available on the web) to Alumni and other stakeholders, and other networking and extension activities.

E. Strategic Planning, Perspectives for Improvement and Dealing with Potential Inhibiting Factors

For each particular matter, please distinguish between under- and post-graduate levels, if necessary.

Please, comment on the Department's:

- Potential inhibiting factors at State, Institutional and Departmental level, and proposals on ways to overcome them.
- Short-, medium- and long-term goals.
- Plan and actions for improvement by the Department/Academic Unit
- Long-term actions proposed by the Department.

The School of the TEI of Epirus and the Department has developed a well-documented proposal for the future. The Committee was impressed by this important forward-thinking activity which is particularly important when considering the current difficult situation in Greek economy and the need to exploit resources in the most efficient and productive manner. The proposal considers three alternative scenarios, based on the article 7 of the law N.2009/2011 and the current trends in higher education in Greece which could effectively form the basis for positive future developments that will make good use of the academic and infrastructure resources, while benefiting the students, local communities, and stakeholders.

Since current Greek legislation only permits AEIs (i.e., universities) to grant postgraduate degrees, TEI departments across Greece have been requesting a change in the law to enable them to acquire the right to grant postgraduate degrees according to standards that are decided by the Ministry. Based on this, the Department under evaluation suggests, as a first scenario, the ability to develop a postgraduate program. The Committee believes that the Department has valuable assets, including

infrastructure, staff, and location (being in the middle of a productive agricultural area) that could contribute positively to such a development.

The second scenario foresees a merger of all four agriculturally-oriented Epirus TEI departments with the University of Ioannina. These departments are Plant Production, Animal Production, Fisheries, and Floriculture-Landscape Architecture. This could be the basis of a substantial initiative to establish a Department of Agriculture within the University of Ioannina. Since the University of Ioannina has no department related to Agriculture, there would be no duplication of resources. On the contrary, a complementary entity will be developed, that would make efficient use of both material and human resources for the benefit of the local economy.

In the third scenario, the Department proposes that all the departments of the Epirus TEI (i.e., not only those related to agriculture, but also those related to music, informatics, accountancy, foreign language etc) would concentrate in two cities (Arta and Ioannina), instead of four as at present. This option is also oriented towards more efficient use of resources.

All the above scenarios have their place and are worth serious consideration in order to safeguard the future of the Department, which could be endangered under the current economic crisis. Further, they could add value to the programs offered by the University of Ioannina.

F. Final Conclusions and recommendations of the EEC

For each particular matter, please distinguish between under- and post-graduate levels, if necessary.

Conclusions and recommendations of the EEC on:

- the development of the Department to this date and its present situation, including explicit comments on good practices and weaknesses identified through the External Evaluation process and recommendations for improvement
- the Department's readiness and capability to change/improve
- the Department's quality assurance.

The most important conclusions reached by the Committee are assembled here. The detailed recommendations in each area, that can be found at the end of the corresponding sections, numbered accordingly, are not repeated here.

General

The External Evaluation Committee (EEC) is grateful to the academic staff and the administration for their helpful cooperation and hospitality and the tours of the local agriculture production relevant to the department mission activities and goals.
During the evaluation, the Committee were impressed by the overall good quality of teaching and research and positive relationship among the academic staff and how this transferred to the student (this as an additional very positive sign for the Department).

The School of the TEI of Epirus and the Department has developed a well-considered proposal for the future. The Committee was impressed by this important forward looking activity, which is particularly valuable considering the current difficult situation of the Greek economy and the need to exploit resources in the most efficient and productive manner.

The Committee is of the opinion that the Department needs continued support by the Greek State to further upgrade its mission and services to students and stakeholders. The Department is extremely well-placed to develop its reputation as an industry-facing knowledge center by improving its external promotion at local, regional and national levels.

The committee also recommends that the academic staff of the Department should seek external research funding for the Department's programs, after presenting the value of the services provided by the Department to the community. It would be useful to create comprehensive documentation that can be incorporated in the Department webpage that would present the Department's achievements and research projects, and which would be updated regularly and used to inform and initiate discussions with potential sponsors.

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TECHNOLOGICAL EDUCATIONAL INSTITUTE OF EPIRUS

DEPARTMENT OF CROP PRODUCTION

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