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 & ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΣΤΗΝ  
 ΑΝΩΤΑΤΗ ΕΚΠΑΙΔΕΥΣΗ

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

## EXTERNAL EVALUATION REPORT

THE DEPARTMENT OF FLORICULTURE & LANDSCAPE  
 ARCHITECTURE, TECHNOLOGICAL EDUCATIONAL INSTITUTE OF  
 EPIRUS

January 2012



### **External Evaluation Committee**

The Committee responsible for the External Evaluation of THE DEPARTMENT OF FLORICULTURE & LANDSCAPE ARCHITECTURE, **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. Dr. *Sophia Kathariou*, Professor, Department of Food, Bioprocessing & Nutrition Sciences, North Carolina State University, Raleigh - North Carolina, U.S.A. (**Coordinator**)
2. Dr. *Eleni Maloupa*, Senior Researcher, Agricultural Research Center of Northern Greece, National Agricultural Research Foundation, (NAGREF), Themi, Thessaloniki, Greece
3. Dr. *Thomas Panagopoulos*, Assistant Professor, Research Centre for Spatial and Organizational Dynamics, University of Algarve, Faro, Portugal

*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.*

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*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?

#### **I. The External Evaluation Procedure**

The External Evaluation Committee (hereafter the EEC, or the Committee) visited THE DEPARTMENT OF FLORICULTURE & LANDSCAPE ARCHITECTURE (hereafter the Department), **TECHNOLOGICAL EDUCATIONAL INSTITUTE OF EPIRUS (hereafter TEI Epirus)** during the period January 23<sup>th</sup> – January 25<sup>th</sup>, 2012.

On January 23, 2012, the Committee members were picked up at Athens by Mr. N. Petropoulos of TEI Epirus. En route an informative site visit was made to a family business (ornamental plants and nursery) operated by a current student in the Department. Upon arrival at Arta in the afternoon, the team had an introductory meeting with the Vice-President of Academic Affairs and President of the Unit of Quality Assurance (Monada Diasphalasis Poiotitas, MO.DI.P) of TEI Epirus, Dr. Dimitra Zoaki, the Dean of the Faculty of Agricultural Technology (Dr. I. Skoufos), the Department Head Dr. Grigoris Varras, the School of Agriculture Vice Dean Dr. Anastasios Tsinas (also a member of the institute's MO.DI.P. unit), the departmental self-evaluation committee (O.M.E.A) who had undertaken the drafting of the Internal Evaluation Report, all other faculty of the Department and the student representative. The EEC also met the department's secretariat.

On January 24, 2012, the EEC was given an overview of the Department's Research

program by Dr. Papadopoulos. The EEC subsequently did the following :

1. Visit to the office of the President of the TEI Epirus (Dr. Grigorios Gkikas) who described his assessment and vision for the Department and other programs of the TEI Epirus.
2. Meeting with the undergraduate students as a group; approximately 45 students were present, most of whom were the early stages of their program (first three semesters).
3. Meeting as a group four students from Spain, who were currently attending courses at the Department through Program Erasmus.
4. Meeting as a group with the special research & laboratory teaching personnel, of whom two were still involved in the Department's research and teaching program; all remaining members had been displaced due to reductions in force.
5. Tours of each laboratory and interviews with individual faculty and laboratory staff. Laboratories were not in session as the EEC visit was during the examination period, but the program and coursework of each laboratory was described in detail, equipment was demonstrated, and curriculum materials for the laboratory courses (books, notes, examples of examinations or other assessment outcomes such as plant or insect samples collected or analyzed by students, web-based tools, designs from studio exercises and projects for Landscape Architecture courses) were made freely available to the EEC.
6. Tour of the Hydroponics establishment and associated nursery.

On January 25, 2012, the EEC did the following:

1. Short site visit (organized by Dr. Ghizas) to Lake Zeros, which offers unique opportunities for field trips and research projects with focus on biodiversity, conservation, native plants, ecotourism, perception of nature and natural landscapes.
  2. Meeting with Ms. Anastasia Carras, who manages Program Erasmus for student and faculty exchanges, currently with Universities in Spain and Turkey.
  3. Meeting with Mr. Papavasileiou, former Director of the Geotechnical Chamber of Greece (Geotechniko Epimelitirio) and currently serving in the City Council of Arta.
  4. Meeting with the vice-mayor (Mr. Gkouvas) who visited the Department and explained his views of the Department's key role in the vitality and restoration of the city.
  5. Meeting with the two full professors of the Department and a separate meeting with associate and assistant professors.
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6. Meeting as a group with five alumni currently working in the private and public sector.
7. Meeting as a group four students nearing the completion of their program at the Department, and ready to start their Diploma work (Ptihiaki ergasia).
8. Meeting as a group four individuals (Foreis) who currently operate businesses or work in the public sector and are in a position to employ graduates from the Department, as well as to offer opportunities for the Practical Exercise (Praktiki Exaskisi), a semester-long professional involvement required of all students.
9. Tour of the Library (including demonstrations of access to books, journals, seminar reports and collection of Theses) and associated electronic equipment and facilities (computers, video conference auditorium)
10. Tour of the Floriculture nurseries and the Garden operated for student training.
11. Lastly, a Meeting s a group with the Department faculty, TEI Vice-president (Dr. Zoaki) and the student representative to present the EEC's assessment and major recommendations for the Department.

## II. The Internal Evaluation Procedure

The EEC read the self-evaluation report, which is detailed, informative and well prepared. All documents associated with the self-evaluation report were deemed appropriate and useful. In addition, the EEC considered several documents provided by the Department during the site visit.

The site visit took place in an atmosphere of professionalism and collegiality. We are grateful to all staff, faculty and students of the Department as well as to staff associated with the infrastructure (e.g. Library) and Administration of the TEI Epirus for their hospitality and assistance in all aspects of the site visit associated with this evaluation.

The present report is structured according to the template headings required by HQAA. In each section there is an analysis of the current situation and recommendations by the EEC.

### ***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 Department is part of the Faculty of Agricultural Technology of the Technological Educational Institute (TEI) of Epirus at Arta. The Department offers a single undergraduate program. The department is also collaborating with other institutions in the training of students for two postgraduate programs.

The mission statement of the Department is “to train technological agronomists who are specialized in ornamental plant production on the one hand, and in garden design and Landscape Architecture on the other hand. In particular, Floriculture includes the production, handling and postharvest distribution of cut flowers and foliage, the production and distribution of potted ornamental plants and the production and distribution of propagating material for ornamental plants. Landscape Architecture includes the design, construction and maintenance of green space and landscape layout in general.”

The stated goals and objectives of the curriculum are to provide the highest level of education in the area of production of ornamental plants, and in design, construction and maintenance of gardens and green spaces. The goals reflect the needs of society for small and medium size enterprises in the area of urban green space construction and maintenance, and also reflect the current and projected employment needs for green infrastructure management for both the private and the public sectors.

The curriculum of the Department covers the application of the technical, biological, physical and social sciences in production of ornamental plants, sustainable management, maintenance and enhancement of the landscaped environment, and improvement of urban and suburban landscapes.

As part of its above-stated mission, the Department:

- Monitors international developments in science, education and vocational training;
- Collaborates with relevant organizations and institutions such as higher education institutions, production units and local authorities in Greece and abroad;
- Protects and enhances the natural, suburban and urban environment;
- Develops students’ abilities and skills to ensure that they are competent and

competitive at national and international levels and that they can raise awareness on issues related to ornamental plant use and to and design needs of suburban, and urban environments.

The curriculum meets many of the needs associated with the Department's mission. The curriculum of the Department was first established in 1994 with the Ministerial Edit establishing the Department and put into effect starting with academic year 1995-1996, the first year that students were admitted into the Department. The first major revision of the curriculum was decided after one year of deliberations among faculty and students and put into effect in the 2001-2002 academic year. This was the time that the Department adopted the ECTS credit system. A revised version of the curriculum to meet the needs of the Ministerial Directive of 2006 was approved in 2011. It is suggested that the curriculum be reviewed and, if needed, revised more often, ideally every 3-4 years, in an effort to follow current scientific developments and social trends and demands.

The duration of the basic studies is eight semesters including six months of practical training (Praktiki Ergasia). The new course program offers 14 electives divided into four groups, with students required to take one course from each group. A graduating thesis is required. Many courses, especially among those offered in the last two years, involve critical thinking and problem solving. This is a one-stream curriculum and does not allow specialization in areas of high demand such as ornamental plants or landscape design.

The curriculum is considered to be reasonable and corresponding to the overall scope and objectives of the Department. According to some members of the Department, the new curriculum will improve many areas. Although the Department is willing to introduce curriculum modifications and follow new scientific trends, the EEC understands that current institutional rules may delay this. We would greatly support changes to allow such modifications.

#### **RECOMMENDATIONS:**

**Recommendation A1:** Although the coursework covers several aspects of Landscape Architecture it can be enriched with additional core and advanced courses and more field training. At the same time, certain courses currently required can be removed; specifically, Mathematics, Physics or Chemistry courses should be re-designed so as to best address the needs of the current curriculum, and redundant courses in these subjects should be removed as requirements. A change (Ministry level) in the procedure for student selection of departments so that students can be admitted from fields 2 and 3 (instead of 2 and 4, as currently done) would greatly facilitate reductions in the introductory courses while also allowing students with stronger science backgrounds to enter the Department. Other suggestions by the EEC:

**Recommendation A2:** The Department is strongly encouraged to continue its efforts towards the establishment of a curriculum for postgraduate programs.

**Recommendation A3:** A course entitled "History and Practice of Landscape Architecture" should be included in the first semester. This course would provide an overview of the profession of landscape architects and familiarize the students with the artistic, technical, social and biological aspects of the profession. Key elements of the history and practice of floriculture should be included in this course.

**Recommendation A4:** The course “Informatics” can be developed as “Computer-Assisted Design”. For students coming with little knowledge of informatics a remedial module / tutorial should be included at the beginning of the course so that these students can be brought up to speed.

**Recommendation A5:** Inclusion of a course on “Meteorology & Climatology”.

**Recommendation A6:** The “Free Design” course should be taught before any of the “Studios”.

**Recommendation A7:** Curriculum should include “Introduction to Economics” and “Business Management”. Courses among the group 4 electives (e.g. Introduction to Accounting; Agricultural Economics/ Entrepreneurship) can address this need.

**Recommendation A8:** “Soil Science” and “Plant Nutrition” should be combined into one course.

**Recommendation A9:** “Irrigation and Drainage” can be included in the group of “studios” as “Studio II”, thus preparing the students for projects.

**Recommendation A10:** Further emphasis on teamwork in courses and course assignments.

**Recommendation A11:** Some of the courses offered by another Department at TEI Epirus (Folkloric and Traditional Music) could be included as electives to enrich the Department’s curriculum, once regulations allow students to take courses from other departments. This would enhance appreciation of the socio-cultural components of Floriculture and Landscape Architecture.

The curriculum appears to have been decided following organized discussions among all faculty, with inclusion of the student representative. Alumni and a network of potential employers (Foreis) can also be included in assessment of trends and needs for adequate student preparation for the workplace. It would be good if the Department regularly schedules forums that would include these stakeholders.

A major hurdle is that students often take repeated examinations for one or more failed courses; this increases the length of studies and results in courses being taken out of sequence. This problem may be somewhat addressed with the application of the new law for Higher Education.

Overall the EEC was impressed by the sincere effort from the Department to develop a comprehensive undergraduate program that meets the needs of modern Floriculture and Landscape Architecture. The EEC strongly encourages the Department to continue its efforts towards the strengthening of the curriculum, resulting in an increasing competitive program.

## ***B. Teaching***

### **APPROACH:**

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

General comments: The teaching program has a well defined teaching philosophy aiming at enhancing student learning and preparation for post-graduate education or employment. Faculty and teaching staff appeared enthusiastic about teaching, serious and dedicated. An evaluation form is manually completed by students for all courses at the completion of the course.

#### *Teaching Methods Used*

Teaching methods include lectures and laboratory demonstrations and exercises, as well as field trips. Faculty have started to place class-related materials on electronic platforms (e-classroom), and certain courses are already fully operational at e-classroom. A few courses involve student participation and evaluation during the course, but the majority rely on a single final examination for student evaluation and class grades. Alternative lecture formats with participatory components (presentations by students, group discussions) would further student engagement and attendance, and can be included as components for class grade. The EEC also agrees with the comment articulated by students that more hands-on involvement to supplement the theory would be useful.

#### *Teaching staff/ student ratio*

Student-teaching staff ratio for lecture and laboratory classes was deemed acceptable. However, smaller classes (hence more teaching staff) would enhance student attendance and participation.

#### *Teacher/Student Collaboration*

It was evident from discussions with a number of undergraduate students that the faculty are accessible and responsive to student needs. It was also clear from

discussions with faculty that dedication to teaching was a priority and that morale related to reaching teaching objectives was high. The students indicated that they were overall very satisfied with instructor accessibility, teaching approaches and course content.

*Adequacy of Means And Resources*

Faculty and staff: The Department currently has ten faculty. Two faculty have left in the past six years (Dr. Konstantinou in summer 2005 and Dr. Savvas in September 2006), accepting positions at other institutions; in neither case was the position refilled. Two more retirements are expected over the next three years. **Continued**

**attrition at this rate jeopardizes the teaching mission of the Department.**

**Allocation of the six faculty positions pending since 2006 is critically needed, along with administrative and technical support staff; it is regrettable that the section of Landscape Architecture currently has no support staff.**

A major concern has been the recent termination of non-permanent faculty who were responsible for the teaching of several courses, in several cases for a number of consecutive years. These were individuals with advanced degrees (commonly PhDs) and extensive research and teaching experience. Their loss resulted in faculty assuming teaching responsibilities for courses that earlier were taught by non-permanent faculty and that in certain cases were somewhat outside of the area of faculty expertise. Although it was clear that faculty rose to the occasion and assumed the additional responsibilities conscientiously, it is also clear that this solution is far from satisfactory. Nonetheless, overall students expressed satisfaction with the quality of the teaching.

Classrooms, laboratories and lab equipment: Many courses have a wet laboratory component (Landscape Architecture courses have studios). However, duration of certain laboratories is short, making it difficult for certain students to adequately process the material, especially if they have deficiencies in their academic preparation and need special attention by the laboratory instructors. The recent massive reductions in the number of non-permanent teaching staff has resulted in the loss of highly trained lab preparators and personnel.

The EEC was impressed by the excellent classrooms and laboratories, which were not only well designed but also well maintained. Equipment in the laboratories was also well maintained and adequate for the laboratory courses. State-of-the art equipment was available in certain laboratories dedicated to chemical analysis and molecular biology. Staff were clearly familiar with equipment use and maintenance. Equipment was actively in use and there are many plans for further use by scientists at the Department and others from the TEI Epirus.

Library: Students have adequate access to a well maintained library adjacent to the building that houses the Department. Library was staffed by two full-time, experienced librarians and library hours were adequate during the week (8:00 am-8:00 pm). However, the library was closed in the week end. Library was well designed and contained books, journals, theses, and published student “Seminars”. A list of all books at the library on basic agricultural sciences, floriculture and landscape architecture revealed that these areas are adequately represented at the library. New books are being ordered promptly, but Greek bidding law often creates long delays in their acquisition. Journals were up to date and included all those that students would be expected to use in their studies or thesis work. Students could access the Library databases and electronic journals through the internet, via computers at the library or elsewhere at the Department; access from home or elsewhere outside of campus was not feasible. However, faculty have off-campus access to journals.

A state-of-the-art video-conference room / auditorium was available, but appeared rather under-utilized. The entire library, though spacious, comfortable and attractive, was sparsely populated by students during the EEC visit. It was brought to the EEC’s attention that utilization of the library was low as the EEC visit was during examination week. Several administrative meetings requiring participation of faculty from remote sites are expected to be held at the video-conference room each year; current law requires participation of faculty from abroad and from other institutes of higher education in Greece in hiring and promotion committees, and several promotion committees are already scheduled .

#### *Use of Information Technologies*

All students and faculty have been issued university e-mail addresses and the building housing the Department was equipped with wireless connections. Several computers were available at the library and additional ones were expected. The current computers appeared quite new. A computer specialist position for TEI Epirus was currently vacant, but plans were for this position to be filled.

#### *Examination System*

Grades for most theoretical sections were assigned mostly by a single final written examination. Midterm exams or other assignments aimed at student evaluation are optional and apparently not widely used. Additional options for grading may promote participation and attendance for students and may reduce the number of students that have to take the same course multiple times, thus requiring > four years for graduation.

#### *Mobility of Academic Staff and Students*

The Department respects the Bologna process and transfers credits for courses that students earn while studying abroad. Currently TEI Epirus has agreements for Erasmus Program exchanges with Spain and Turkey. The EEC's meeting with Ms. A. Carras, one of the Erasmus Program staff at TEI Epirus, indicated that Erasmus is a program with great vitality and potential for TEI Epirus; in just the previous year, 40 students from TEI Epirus participated in Erasmus. The Erasmus Program staff at TEI Epirus appeared eager to promote mobility for students and faculty.

Currently four students from Spain are studying at the Department with support by Erasmus. Interviews with these students indicated that they were satisfied. The English skills of the students were limited, but it was clear that faculty made special efforts to accommodate their needs through classes in English and one-to-one mentoring. Erasmus is also supporting students from the Department in their studies in Spain and Turkey.

Faculty members take advantage of international opportunities for research and academic advancement with support from various sources, including through Erasmus. Furthermore, the Department hosts visiting scientists from Spain or Turkey for short visits (1-2 weeks at a time) with Erasmus support. However, during the last five years only two faculty took a sabbatical, and only one outside of Greece. The EEC encourages faculty members to make use of sabbaticals, especially abroad; several faculty have not been outside of Greece, and participation in international conferences appears to be severely limited for most faculty.

*Evaluation by the Students of the Teaching and the Course Content and Study Material/Resources*

The OM.E.A. provided student evaluations of instruction for courses taught in the Department. The questionnaires were appropriate and included questions on teaching, course content and materials. Student course evaluations are done for every course each time it is offered. Discussions with faculty and students indicated that the evaluations are manually completed and returned by someone (other than the instructor) to the secretariat. The EEC considers the evaluation process appropriate and adequate. However, it is important that evaluations are given at a time that would ensure maximal student participation; this can be the examination for lecture classes, or appropriately selected times for studios and other classes.

**RECOMMENDATIONS:**

**Recommendation B1:** Critical teaching faculty positions need to be replaced in order to maintain vitality and critical mass for the Department. A new faculty position in Landscape Architecture is especially needed to assure maintenance of the unique identity and role of the Department.

**Recommendation B2:** Grading systems that include assessments during the semester will enhance student participation and attendance. They can also enhance the ability of students to process information and thus reduce the likelihood that the student would need to take the class multiple times.

**Recommendation B3:** More emphasis on hands-on activities in the classroom and in laboratories will enhance relevance of coursework and contribute to better student preparation for subsequent employment.

**Recommendation B4:** More field trips in the Arta region and other sites will enhance, complement and expand the impact of information delivered in the classroom or in the labs.

**Recommendation B5:** The EEC encourages faculty to expand the use of web-based formats for placement of class materials.

**Recommendation B6:** The EEC encourages faculty to expand the involvement of guest speakers from industry, architectural firms and other sectors in classes. This will enhance real-life relevance and interest in the material and help students make professional connections.

**Recommendation B7:** Excellence in teaching should be recognized (e.g. through an Award for Excellence in Teaching). Such awards can include nominations by students and faculty and can also be based on metrics from student evaluations.

**Recommendation B8:** The EEC recommends that the Department encourages faculty to take advantage of the opportunity for sabbaticals at other institutions, especially abroad.

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### **C. Research**

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

#### APPROACH

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

The School's stated mission is to develop applied research programs in areas of relevance to Floriculture and Landscape Architecture in the greater Arta region as well as nationwide in Greece. As stated in the Internal Report, the mission relates to the following subjects: Floriculture and Landscape Architecture, both in open air systems and in greenhouses; Ornamental Plant Production and Protection in conventional, hydroponic and organic horticultural systems in greenhouses and in the field; Natural Resources and Landscape Architecture. The EEC appreciates that the primary mission of the T.E.I.s in Greece is teaching and has taken this into account in the evaluation of the research program. Even though a succession of laws in the last 11 years has functionally added research into the mission of TEIs in Greece, the necessary modicum of funds has not been secured. Currently, decisions on hiring and promotion are based on teaching as well as research qualifications and performance. The EEC noted the strong focus on applied research in the Department.

Applied research programs at the Department attempt to acquire new knowledge and promote agricultural applications and research training of students. There is clear understanding of the importance of research, more in Horticulture / Floriculture and less so in Landscape Architecture.

The Department needs to develop a well defined policy on assessing research output among the different laboratories and faculty members. Nonetheless, documentation in the internal evaluation report showed that there is important research productivity. The EEC considers this as a positive step and strongly encourages enhancement of research efforts through a strategic plan that would adapt research to the specific mission and unique attributes of the Department.

#### IMPLEMENTATION

How does the Department promote and support research?

The Department is aware of the importance of the research component in Agriculture. Current research facilities in the laboratories, greenhouses and main campus are considered suitable for a modern research environment. The new equipment in the biochemistry laboratory and its successful operation will further promote and develop research.

Research infrastructure is impressive, including very good greenhouse and hydroponic culture facilities for flower production, a modern laboratory and extensive garden facilities, very good Biochemistry, Plant Pathology and

Entomology laboratories, a well-equipped laboratory of Agricultural Engineering and Irrigation, and good studios for Landscape Architecture.

Even though laboratories and equipment were well maintained, there seems to be little consistent financial support for maintenance of research laboratories, for research space renovations or for the set-up of new facilities. This means that the Department must support equipment maintenance by its own budget or by research grants. The amount of funds provided to each member for student research training is completely inadequate, and for the past five years has been practically non-existent.

The Department ranks high in research productivity (based on both publications and grants). There have been 107 research publications in scientific journals and conference proceedings since 1995, representing 0.83 (107/124) scientific publications annually per faculty member. Additionally, for the same period, student thesis research projects were well represented in scientific journal papers and congress proceedings. Publication productivity varies among faculty members; certain faculty members are highly productive in peer review scientific journals, and to be commended. The total number of citations is quite high (5.67/ publication). This ratio is comparable with research-oriented institutions of higher education. It was also noted that research results have been disseminated in journals that are highly regarded in the horticultural field. Faculty members serve as editorial board members and as ad hoc reviewers for several journals.

The research activities of the Department have been compared to international standards for teaching-intensive institutions in Europe and the EEC finds that the overall research activities are very satisfactory. Currently the Department participates in various research programs supported by local, state and European Union funds. Over 800.000€ in competitive grants were awarded to Department faculty for projects that have been completed by December 2008; no grant awards were made since then. However, subsequent to the site visit the EEC was informed of two new Archimedes III awards (totalling 170.000€, with one of these grants ranking #1 in its section) as well as an award of 150.000€ by the Region of Epirus. From 1997 to 2011 faculty members of the Department have led numerous research programs, including 5 funded from the private sector through the Research Committee of the Faculty, 5 Archimedes I, II and III research programs, 2 INTERREG III Regional Co-operation projects, 2 European Frame funded projects for research support and 2 from National Funds. Moreover, the Department has developed significant consulting activities. The EEC was impressed by the competitiveness and productivity of several of the research programs.

The EEC also noted that there are excellent opportunities for the Department to focus on sustainable use of plant genetic resources and thus promote biodiversity and conservation in Greece. Examples include the use of native Greek flora in applications in various research fields relevant to the Department's mission.

The EEC is impressed by the fact that Department's faculty and staff are engaged in numerous collaborations within the Department as well as with other research units (5 Universities, 3 TEIs, 8 Universities or Research institutions outside of Greece, 6 Municipalities and 2 Prefectures) . Such initiatives have been actively endorsed by the Department's administration. Faculty members have also developed successful

collaborations with industries that focus on agricultural or Landscape Architecture commodities in the region, as well as other areas in Greece. This was especially evident from the EEC's meeting with representatives from the private sector. It is clear that the Department's research has strong connections with the local, regional and national economy.

## RESULTS

Generally, the research objectives of the Department are successfully implemented. The variety of the activities and the outward-looking, open mentality of the faculty members and staff are commendable. Furthermore, and despite the fact that the Department is not allowed to develop autonomous graduate programs, it has developed Master degree programs in cooperation with research universities at Ioannina (still active ) and, through 2009, with the University of the Aegean, Department of Environmental Studies, Post-graduate Program on Agriculture and the Environment.

During the last 5 years, several students used the Department's facilities for their thesis research. In our interview with students it was made abundantly clear that students were eager to participate in research, even without monetary compensation. Funded programs that would support research involvement for a larger number of T.E.I. students are needed.

## IMPROVEMENT

The EEC recommends the establishment of an internal system to organize annual floricultural and garden design expositions with awards for the best and most sustainable use of resources; such awards can be sponsored by the municipality in cooperation with the private sector. The EEC also encourages the maintenance and improvement of the existing thematic garden for educational and community outreach purposes.

## RECOMMENDATIONS

**Recommendation C1:** The Committee urges faculty and staff to maintain the present high quality of research and outreach, despite obstacles posed by the current crisis in the Greek economy.

**Recommendation C2:** Improve the visibility of work stemming from the Department, especially applied research both in Floriculture and in Landscape Architecture.

**Recommendation C3:** Further align the Department's research with the strategic needs of Agriculture and related industries in Greece as well as with sustainable utilization of plant genetic resources. The latter can take place in cooperation with research institutes, conservation programs and Botanic Gardens.

**Recommendation C4:** Explore the possibility to join forces with the Department of Plant Production to further enhance the already existing synergism and collaboration

between the two Departments.

**Recommendation C5:** Identify novel areas for research (with accompanying training) to address current needs and emerging trends. Examples include utilization of native plants; sustainable production systems; safety of produce, whether conventional or organic; and niche markets for agricultural commodities and value-added products.

#### ***D. All Other Services***

*For each particular matter, please distinguish between under- and post-graduate level, 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 has a positive view of services to the academic community. Faculty and staff were dedicated and clearly did their best to accommodate student needs.

Electronic submission of grades directly by the faculty would avoid duplication of the work first by the professors and then by the secretaries copying the grades into computers. It would be also useful if students can access scientific journals from remote sites, without the need to use campus computers. Faculty do have off-campus access to journals.

The campus would greatly benefit from new student facilities on campus. The Department is located several kilometres from the student cafeteria and the limited student housing, which are in the city of Arta. Thus, students come to campus primarily to take classes and exams and there appeared to be a lack of vitality on campus, as also evidenced by the somewhat deserted library. However, this could be largely due to the fact that this was examinations week. Records made available to the EEC subsequent to the site visit revealed that the library was well attended during the regular semester periods, with books being borrowed by students regularly and in large numbers.

During the visit, the Department's building was very cold; it was the middle of winter, but petroleum apparently could not be pre-paid. It is critical that a basic level of comfort is available to students in classrooms; TEI Administration must tend to this, as it is not under the control of the Department. However, it is to the Department's credit that classrooms and labs were nicely designed and well

maintained.

The Department's secretariat appeared well organized and conscientious. There were immediate and more than adequate responses regarding all documents requested by the Committee; this was just one example of the secretariat's efficiency and organization.

Outreach of the Department to the community can be greatly strengthened. A "Garden Day" took place in 2009 and was extremely successful, but the event has not been repeated. Such events can be done more regularly, enhancing student-faculty-staff interactions and engagement, as well as promoting links to the community. Another excellent example of outreach was the development of software that allowed prediction and management of irrigation schedules for specific crops and locations. The software was freely available to growers. Such community outreach should be expanded in other applications and areas. Other examples for promising outreach can involve student engagement in volunteer Landscape Architecture activities, including those involving urban or ecotourism-related design. There is a lot of potential in Arta and the surrounding region with its abundance of natural beauty and historical sites.

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

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

Establishment of an Alumni Council Advisory Board would be beneficial to the Department: it would promote links between the Department and its graduates, contribute to publicity of the Department, and create new opportunities for student internships and employment, sharing of experiences and program improvement.

There is clear need to strengthen the faculty, especially regarding Landscape Architecture: additional permanent faculty positions are needed. This will strengthen the faculty, enhance research and curriculum, and promote the eventual development of a post-graduate program (Masters program).

The Department should become a member of international networks related to Landscape Architecture such as the European Council of Landscape Architecture Schools (ECLAS; [www.eclas.org](http://www.eclas.org)), the Network of Universities especially dedicated to the implementation of the European Landscape Convention (UNISCAPE; <http://www.uniscape.eu>) and the European Federation for Landscape Architecture (EFLA; <http://europe.iflaonline.org>). The EEC strongly encourages the Department to apply to EFLA for recognition of its curriculum. Once the Department's

Landscape Architecture program achieves recognition as equivalent to other European Landscape Architecture programs, the students of this Department will have undisputed rights to work and practice in any European country.

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***F. Final Conclusions and recommendations of the EEC***

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

1. The strength of the Department is the unique combination of training and research on plants, especially ornamentals, as well as in Landscape Architecture. It is critical that the Department maintains this dual mission and strength.
2. The Department should try to identify novel areas for research (with accompanying training) to address current needs and emerging trends, e.g. in Floriculture and Landscape Architecture uses and applications of Greek native plants, in sustainable production systems and safety of produce, whether conventional or organic, and in promotion of niche markets for plant commodities and value-added products.
3. There is need to strengthen the faculty with additional permanent faculty positions, especially in Landscape Architecture. This will also pave the path for more research at the Department and will increase the Department's competitiveness towards the creation of post-graduate (Masters) program. The suggested joining of forces with the Department of Plant Production will also be critical for enhancing critical mass and enhancing the feasibility of Masters degree programs. The Department clearly has excellent human potential, scientific expertise and equipment, and these need to be utilized in Masters degree programs for maximum benefit to the Greek society and to the European community.

The EEC has made a number of detailed recommendations earlier in this evaluation for the different efforts of the Department (Curriculum, Teaching, Research). The EEC trusts and hopes that its recommendations and remarks will be useful to this very worthy Department as it develops and grows further in the pursuit of its unique mission. The EEC members thank ADIP and the Department for the opportunity to serve in this evaluation effort.

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