The project proposal "International joint Master degree in Plant Medicine" (acronym IPM), registration number 158875-TEMPUS-IT-TEMPUS-JPCR, has been recommended for funding in the second call EAC/01/2009 of the European Union's Programme TEMPUS IV.

List of partners

Faculty of Agriculture - Project Leader, University of Bari, Italy

Faculty of Plant Protection and Agroecology, Agricultural University of Plovdiv, Bulgaria

Faculty of Crop Sciences, Agricultural University of Athens, Greece

Faculty of Agriculture and Environment, Agricultural University of Tirana, Albania

Faculty of Agriculture, University "Fan S. Noli", Korce, Albania

Faculty of Agriculture, University of Osijek, Croatia

Faculty of Agriculture, University of Zagreb, Croatia

Faculty of Agriculture and Veterinary, University of Prishtina, Kosovo

Faculty of Agricultural Sciences and Food, University of "St. Cyril and Methodius", Skopje, Macedonia

Institute for Environment and Health, South East European University, Tetovo, Macedonia

Faculty of Agriculture, University of Belgrade, Serbia

Faculty of Agriculture, University of Novi Sad, Serbia

Details

The project proposal has been coordinated by the Faculty of Agriculture, University of Bari, and involves also the Department of Informatics of the same University and 11 Universities located on the Balkan and Mediterranean area.

The objectives of the project proposal are the Curriculum restructuring, development and implementation, according to the "Bologna process" requirements, in the West Balkan countries with the interested cooperation of agricultural faculties of the Mediterranean area, in order a) to create a joint Master Degree in Plant Medicine, as a regional network, b) to apply improvement and modernization of teaching by using new web technologies.

The project

The project proposal follows the overall objectives to contribute to institution building in Higher Education (HE) at a Regional level, to sustain University networking partnerships, to enhance

mutual understanding between the academic world of the Western Balkan countries and members of the EU, *i.e.* Bulgaria, Greece and Italy.

The project proposal is aligned with the European Commission priorities on the central role of HE system in developing a European cultural dimension, which is universally acknowledged as paramount to the development and reinforcement of stable, peaceful and democratic societies.

Even though a series of national reforms have been applied or are ongoing, nevertheless the large participation of the Western Balkan countries in previous Tempus projects, the modernization of HE systems, the development of quality education and of life-long learning in the involved areas still need a careful reorganization in the perspective to participate in the process of international competitiveness increase of the European system of HE, and to become EU members.

The project proposal is based on the modernization and harmonization of HE systems (adopting system of degrees, setting up a system of credits, eliminating obstacles to free mobility, favoring updating of training contents and communication methodologies) according to Lisboa Strategy and Bologna process.

A Project Management Committee (PMC) will manage the decision-making processes of the partners, guarantee the correct implementation of each activity, transfer the Best Practices regarding procedures and managements from the EU countries to the other Partner Countries, and strengthen the Best Practices within the consortium members. This Committee will be composed of the Project Leader, the Contact Persons of each member of the consortium and administrative staffs who will be actively involved in activities. This commitment will be established by a specific agreement of cooperation. The first meeting of the PMC will mark the beginning of the project.

To make possible the realization of the project activities, Working Groups with specific tasks and Local Committees at partner level will be constituted. Obviously, attention will be constantly given to the needs of all potential stakeholders and beneficiaries (students, academical boards, enterprises, rural communities, etc.) of these project, making possible all active forms of their involvement by means of steering committees al local level, conferencings, workshops, other forms of dissemination, agreements, etc. according to the guidelines which will be edited.

The first specific objective of the project is to design and develop the International joint Master degree in Plant Medicine (IPM) within the curricula of the Faculties of Agriculture at the Universities of Tirana and Korce (Albania), Osijek and Zagreb (Croatia), Pristhina (Kosovo), Skopje and Tetovo (Macedonia), Belgrade and Novi Sad (Serbia), which will receive the support and the integration of the Universities of Plovdiv (Bulgaria), Athens (Greece) and Bari (Italy). It will be started on the ground of the successful experience of the Master Degree in Plant Medicine at the Faculty of Agriculture of the University of Bari, which respects the EU requirements, and from the existing curricula in Plant Protection or similar degree active in the other Universities of the consortium.

In the realization of project, planning and development of the joint Master Degree Course, the consortium will have full respect of the diversity of cultures, languages, national education systems, University autonomy and strategy, experiences of all involved countries. During the three-year long life cycle of the project the members of the consortium will create a strong partnership in order to build an educational network between EU and Western Balkan Universities aimed at the international recognition of the degree, at meeting the needs of the territory in terms of competence and employment for public and entrepreneurial system in the market labor of phytosanitary scope, at allowing admittance to further educational programmes even in foreign countries.

Concerning the academic content, the IPM Course aims at providing advanced knowledge and at creating professional skills adequate to carry out complex research activities, experimentation, planning, management and control in the activities related to crop protection either for private and professional or public tasks. These activities must be constantly addressed at improving produce quality and safety, also through the use of innovative environment-, grower- and consumer-friendly methodologies that reduce energy input and waste reduction, and improve sustainability by coupling economics and ethics all through the production-marketing chain.

At the end of the project, the Agriculture Faculties participating to the consortium will offer regularly the IPM Master Degree Course among their curricula, with adequate and harmonized didactic and teaching organization, qualified teaching human (permanently trained) and communication resources, and with a planned strategy for knowledge dissemination and sustainability.

In order to realize all these activities, some factual and interrelated outcomes and outputs have been identified.

Planning, development and organization of the IPM Course - A Didactic Working Group (DWG) will be established and it will be composed of teaching and administrative staffs of each consortium member with specific competence regarding the didactic organization. The DWG will be aimed at editing and setting up a shared version of Guidelines for planning the IPM Course in the foreseen education network, with particular care on decisional and procedural criteria regarding stakeholder and student involvement, planning and management of the Master Degree Course, staff and equipment requirements, regulations, didactic and administrative aspects, student and staff mobility. The DWG will be also involved in defining the general framework of teaching activities and the syllabus. The DWG will be locally assisted by the Local Committee of each Consortium member. These activities will regard mainly the first fifteen months of the project.

Teaching content harmonization - A Scientific Working Group (SWG) will be made up of delegate professors of each consortium member. It will be entrusted with establishing the Guidelines for teaching content harmonization which are devoted to evaluate the core of teaching activities and disciplines in the foreseen education network aimed at allowing a joint Academic Content Standard within the consortium and respecting the specificity of each country. The SWG will be involved also in planning and managing the production and exchange of harmonized didactic materials, with the involvement of the teaching staff of each Consortium members. In the new European educative system, in accordance with the Bologna process, the work of the teaching staff is fundamentally to transmit knowledge but also it must organize tasks, seminaries, continuous assessments and examinations to promote in the students acquisition of knowledge, capacities and skills that allow responding them suitably to the demands of their professional duties. The SWG will be locally assisted by the Local Committee of each Consortium member. These activities will be performed from the half of the first year of the project up to its end.

Permanent training of teachers - A Training Working Group (TWG) will be constituted among delegate professors of each consortium member. The TWG will be involved in developing and setting up a shared version of Guidelines for the permanent training of teachers which will be addressed to the teaching staff for updating and upgrading specific cultural and scientific content related to the IPM Course. Particular care will be given to the criteria for assessing needs for the development of specialized competence in specific teaching sectors and disciplines within the consortium, for the development and management of strategies devoted to update the contents of groups of discipline within the consortium. The TWG will plan, organize and manage events in form of seminars, workshops, meetings, short visits, web conferencing which must be aimed at

updating knowledge in groups of disciplines within the Consortium members. The TWG will be locally assisted by the Local Committee of each Consortium member. These activities will regard mainly the second and third years of the project.

Quality evaluation of the project and the IPM Course - An Evaluation Working Group (EWG) will be appointed and made up of 5 experts in quality control and monitoring. The experts must not be involved neither in any other Working Group nor in any other activity of the project. It will be involved in establishing specific performance indicators for evaluating the progress and the results of the specific activities during the realization of the project. Moreover, it will provide to the analysis and evaluation of all possible incoming problems and their impact, proposing all possible corrections to the PMC. To ensure a routinely quality control and monitoring of the project (which could perform after the end of the project), the EWG will set up Guidelines for control quality and procedure monitoring which are devoted to the introduction of methodologies, criteria and performance indicators for a permanent quality assessment of the IPM teaching programme, for a constant analysis of customer satisfaction and for a the stable control of procedures and general processes. These activities will involve also the PMC, an inter-Tempus coaching expert, the Local Committees and will be performed during the whole project life.

Dissemination and sustainability of the IPM Course - The dissemination will regard the diffusion of the project process and results, and the promotion of the IPM Course. The PMC will be, firstly, involved in establishing strategies for favoring links between beneficiaries, academic studies and professions through on-going relations with businesses, economic agents, labor organizations, Western Balkan and European enterprises, local authorities and potential undergraduate and graduate students, businesses, economic agents, labor organizations and rural communities in order to bring the IPM Course into closer contact with the society in the attempt to satisfy the requirements of the labor market and corporate culture. It will deal with public communication forms (local and international conferences, informative materials, advertisement campaign, etc.) in order to encourage a constant dissemination of information and progress of the IPM Course development and cultural growth. Finally, a strategy will be drawn to guarantee the maintaining of the University network and IPM Degree after the end of the project. The application of web technologies will support dissemination to the project and its results within the WGs, PMC and Local Committees, and towards the variety of public and private stakeholders. The establishing of a strict cooperation between the partners appears to be crucial in ensuring the success of the project and in sustaining the Master Degree Course. Therefore, the institutional recognition of the Master Degree Course at national and international level will be promoted with the support of the partner Universities and their academic boards, and the agreements with all potential stakeholders. These activities will involve all the Consortium members at each level and it will be performed during the whole duration of the project.

Implementation of the IPM Course - This phase consists of the approval and implementation of the Master Degree Course in each involved University as the result of the application of the previously planned and joined activities devoted to the Guideline development. This phase will be performed with the full respect of the University autonomy, strategies and Rules for each Faculty involved in the project. It is expected to start at the third year of the project. Obviously, the procedures for the acknowledgement of the Joint Master Degree from the local national institutions will be performed.

Developing of innovative communication methodologies - The second specific objective is the improvement and modernization of traditional teaching contests by applying new communication technologies (internet-teaching/learning). This will assure multiple benefits such as: reduce the need for professors for each site, reduce physical spaces and resources for classrooms and instrumentation in each site, and spread knowledge efficiently. As so, traditional lessons will be

supported and integrated by technical digital tools able to offer an innovative approach. Moreover, the project intends organizing the courses in two ways: synchronous teaching and asynchronous teaching moments. The first will be enacted through a virtual world platform, such as Second Life. For completeness, it is worth defining that a virtual world is a computer-based simulated environment that users can inhabit and in which they interact with others either as themselves or though software agents or graphical representations called avatars. A virtual world can have anything one might encounter in the real world as well as objects and phenomena with no real-life counterparts. Such virtual contests are also referred to as Meta-universe or metaverses, i.e. fully immersive virtual spaces. In this specific case, the metaverse will be used for distance learning though a 3D context and will grant access to the students of the course and to their professors. The metaverse will be made up of a classroom with avatars representing the professor and each student. As so, the students will be able to "virtually" attend the course and actively participate to each class. The asynchronous moment will be enacted through an e-learning platform which will contain the course material. As for the synchronous moment, only authorized users, students of the course, will have access. The platform will contain all of the lessons (in video and/or audio files), along with the course material (slides, tests, exercises and examples, further reading material, and so on). The synchronous system will largely assist Working Groups and Project Management activities reducing costs of the project and making faster communications, debates and decisions.

The consortium will draw advantages from the experience gained at the University of Bari which has been working for years on i-teaching/learning platform for the implementation of long-distance lectures/seminars/meetings, so that working users and users living far away, who cannot be physically present, can attend the event through the internet.

A I-learning Working Group (I-LWG) of the Master program will be made up of teaching and administrative staffs of all Consortium members with expertise and competences in informatics. It will be involved in establishing the Guidelines for developing innovative teaching/learning methodologies and techniques within the Consortium for activities related to the current project (web conferencing assistance for Working Groups and Project Management Committee) and for the implementation of the Master Course in a Teaching at Distance task. The I-LWG will be devoted to encouraging the acquisition and use of teaching instruments that can be used with the help of communication and information technology. Moreover, it will be involved in training activity addressed to technician and teaching staffs. A part of the training will be focused on the application of internet-learning (i-learning) subjects and technology as own learning-teaching methodology and integrated with traditional teaching. The I-LWG will be locally assisted by the Local Committee of each Consortium member. These activities will regard all periods of the project.

Final remark - Actually, the role of the all identified Working Groups will consist in a coaching presence for the Western Balkan country staffs, testing common and standard procedures and methods that, afterwards, the Western Balkan staffs will apply autonomously, guaranteeing successful results in a sustained HE system.