

Agribusiness higher education development – ahead: the project results at a glance

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Summary: This booklet that has caught your attention contains basic information about the AHEAD project sponsored by the EU's TEMPUS grant. This project was carried out between University of Zagreb (and other Croatian partners) and four EU-based universities. The project was very ambitious and it is my pleasure to state that the great majority of the objectives were carried out with high quality during the 3 years project time span. The main results of the AHEAD project can be found in this booklet, and I would like to mention just a few of them:

- A new MBA training started in Zagreb with international recognition
- 61 subjects of 3 BSc/MSc trainings were reviewed and modified,
- a study was created in order to determine the short – and long – term expert demand of the Croatian national economy,
- computers, equipment and modern textbooks were purchased from European grant and
- finally a personal note: it was spectacular to see the rapid development of University of Zagreb and generally the whole Croatia during the last 3 years. If our project contributed just a little bit to it, the effort certainly was worthwhile.

Introduction

Agribusiness as well as food safety and quality are among the most important issues in higher education and science all over the Europe and the world today. With the Croatian succession to the EU these issues are getting only more and more importance. Since the Bologna declaration has been adopted in Croatia, new possibilities occurred for enhancement of agricultural education and introduction of new training programmes. The new two stage system of bachelor and master trainings has given the opportunity to University of Zagreb Faculties of Agriculture and Food Science to redesign their trainings. To better use the opportunity and to support the reform, the first Tempus project was introduced at the Faculty in 2003. The first project emphasised more on general agricultural knowledge, but specific studies, like agribusiness studies and food studies did not get special attention.

In view of the fact that business management as well as food quality and safety topics are increasing in importance rapidly, another Tempus project was applied and approved in 2005. The Agribusiness Higher Education Development Tempus CD JEP project ends in 2008, but it's results will have a long term impact on the project partners and their future cooperation.

Consortium members

1. Grant holder: University of Debrecen
2. Coordinator: University of Zagreb
 - Faculty of Agriculture
 - Faculty of Food Technology and Biotechnology

EU partners

3. Wageningen University
4. University of Stuttgart
5. Scottish Agricultural College

Croatian partners

6. Ministry of Agriculture, Fishery and Rural Development
7. Institute for Adriatic Crops and Karst Reclamation – Split
8. Institute of Agriculture and Tourism – Poreč
9. Croatian Agricultural Extension Institute
10. Agrokor d.d.
11. Croatian Chamber of Economy
12. Croatian Employers Association
13. Croatian Society of Agricultural Economists

Tempus AHEAD Project Activities

Work on the project has been conducted in frame of ten activities that can be divided in two groups: (1) basic and (2) general activities. The basic activities are targeted directly to achievement of the projects' goal, which is development of education in agribusiness and food quality and safety. The general activities cover work on the project management, dissemination of information, sustainability, etc. The list of all the activities is as follows:

Basic activities

1. New Agribusiness and Rural Development Bachelor Programme
2. New Food Safety and Quality Management Programme

3. Agribusiness and Rural Development Pilot Master Programme
4. MBA training
5. Food Safety and Quality Management Retraining
6. Training Needs Analysis
 1. General activities
 7. Dissemination
 8. Sustainability
 9. Quality Control and Monitoring
 10. Management of the Project

Additional activities

1. Procurement of equipment
2. Budget overview

New Study Programmes – Development and Supervision

It was a challenge as well as pleasure for University of Zagreb teachers to work on development of study programmes in cooperation with distinguished partners from Debrecen, Wageningen, Hohenheim and Aberdeen. In the focus of development and supervision activities there were three study programmes:

- Agricultural Economics (BSc.), Food Safety and Quality (BSc.) and Agribusiness and Rural Development (MSc.). Suggestions for improvement of particular modules were discussed and agreed among partners with mutual understanding and enthusiasm.
- The improvement of the modules encompassed module content, way of teaching, recommended literature, examination methods etc. We strongly believe that the project partners have managed to improve the quality of modules and the study programmes of the University of Zagreb Faculty of Agriculture and University of Zagreb Faculty of Food Technology and Biotechnology.

Development and supervision activity did enable partners to meet or even visit each other, giving them a chance for establishment of long-term cooperation. This kind of cooperation among institutions is completely in compliance with the spirit of unified European higher education network. It is for sure that the contacts established during the project implementation will result in fruitful and successful cooperation and maybe in framework of some new projects as well.

It has to be stressed that these activities have involved numerous partners from all the collaborating institutions in 5 countries. Therefore, it was not an easy job to manage and coordinate the activities. However, such a big number of partners ensured higher objectivity and professionalism of the work. Thanks to the results of these activities it is expected that University of Zagreb Faculty of Agriculture and University of Zagreb Faculty of Food Technology and Biotechnology will make a strong basis for further adjustment and reforms of Croatian higher education system.

In that way, the faculties will also serve as a fertile ground for development of future experts for up to date agribusiness sector.

Executive MBA Training in Agribusiness and Commerce

With respect to the plan of activities in project application, but also as answer to the results of Training Needs Analysis (activity no. 6.), one of the important goals of the project was the development and establishment of MBA course. The plan was to make attractive, internationally recognized study in English language, with lecturers from different universities, for the professionals of different profiles who intended studying in order to improve themselves for management positions in the field of agribusiness.

The programme is developed according to principles of International MBA Network in Agribusiness and Commerce AGRIMBA, and subjects are, by most part, developed and managed by lecturers from project's partner institutions (Debrecen, Wageningen, Hohenheim and Aberdeen). The first, so called "pilot generation" of students, included considerable number of young teaching staff from University of Zagreb, which is, by entering this study, preparing to become lecturers of specific modules for next generations. At first, the study was conceived as graduate but according to the changes in legislation a need occurred to redesign it into the so-called post graduate "specialist" study programme. At the end, the study consisted of 16 subjects, 14 of them were lectured by international lecturers in English language.

More than 200 applications were registered for the MBA training, 32 of them were selected according to the results based on preliminary exams and interviews with the AGRIMBA representatives. 19 out of 32 attendants were from the University of Zagreb, and 13 from the private and public sector. Major part of the students participated already had higher degree in agriculture or economics, and what's interesting, there were also attendants with degrees from other fields of professions, like linguistic or medicine. The costs of lecturers, literature and exam materials for University of Zagreb attendants were financed by means of Tempus AHEAD project, ensuring this study especially attractive.

Regarding the changes in the degree status from graduate to "specialist post-graduate", the application of Executive MBA training is in the procedure of accreditation at the University of Zagreb, at the moment of writing this booklet. The study permission is expected after the summer 2008.

Students' impressions

Branka Šakić Bobić: "Lectures at MBA training were useful and interesting. I would like to point out that practical examples, up-to-date literature and professor's experiences made this course very attractive and modern."

Zvonimir Šatalić: “The MBA training provided me new knowledge and new perspective on agribusiness. It was hard to incorporate MBA activities into daily schedule, but manageable and it was interesting to work with people from different areas of professional interest. I’ve benefited attending the lectures of professors coming from different cultures and using different approaches and methods.”

Lari Hadelan: “The MBA training offered us new educational approach with much more practical knowledge than in other programmes. Lecturers gave us excellent study cases which demanded high quality solutions. Team work has shown us how to cope with the difficulty of expressing your individual solution as well as objectively evaluate others contribution.”

Igor Gomezelj: “As a regional manager and agronomist I find extremely important to provide a quality education to colleagues from agribusiness sector. This training is a unique course in the field of agribusiness in Croatia. Case studies, business plans and other situations that we acquired are very real and applicable on “day to day” basis. Acquaintances I made during the course expanded my experiences in other business sectors and until today we kept contact as friends or colleagues.”

Food Safety and Quality Management Retraining

Retraining of University of Zagreb staff, from both of the faculties involved, has provided them with up to date knowledge in specific topics related to food safety and quality. Retraining was carried out in Zagreb, during two semesters period and was provided by prominent members of the University of Debrecen, Wageningen University and Scottish Agricultural College. The retraining was conducted in two very critical areas by three topics in each area.

The topics in first area included were:

- modern food bio-analytical methods,
- present and future of GMOs and
- advanced toxicology.

The topics in second area included were:

- in the fields of EU food regulation,
- quality assurance and
- traceability.

In addition to knowledge transfer, for each of the fields included in the retraining contemporary literature has been bought under the activity (total – 20 editions).

Training Needs Analysis

Croatian system of higher education experienced comprehensive changes to adjust to the economy in transition in last decades. In the agribusiness sector demand for highly educated experts is rising, while the higher education institutions are losing students. However, there is no available quantified information about real needs for

educated persons of different agribusiness professions. In addition, it is not known exactly what specific skills and knowledge are needed by present-day professionals in agribusiness and related public administration system. To fill the gap, in frame of the AHEAD project comprehensive training needs analysis have been carried out.

The results of the survey carried out among 434 agribusiness professionals can be summarised as follows:

1. Most of the professionals are employed in private firms and then public institutions. Mainly, they work as managers or consultants and their educational background are agriculture or economics in most of the cases.
2. Asked what knowledge or skill a professional has to have, the most usually they mentioned knowledge of organisation and management, and foreign language and computer skills. High on the list are some other knowledge as well: legislation, communication, marketing, human resource management and production technology.
3. When they have had to rank hypothetical study programs in field of economics and agribusiness, the most popular titles were: “Agrifood Technology”, “Trade and Marketing”, “Management”, “Environmental and Natural Resource Management”, and “Food Quality and Safety”.
4. Estimate of needed graduates per year differs significantly among the study programs. It is the highest for the “Food Quality and Safety” program among the agribusiness programs, and for the “International Economy” program among the economic programs. All together, the research shows that Croatia will probably need 800 to 900 graduates from all the programs annually. This is 250 more than number of graduates Croatia has in biotechnological sciences today.
5. In connection with final part of the research, it is obvious that Croatian agribusiness sector is looking for highly educated professionals. Therefore, there is an opportunity for higher education to widen the market and to answer the need.

In order to utilise the opportunity the higher education for agribusiness should have in mind key recommendations taken out from the results:

1. High education business is a business with specific market that has to be monitored, planed and nourished if it is to be preserved.
2. In addition to knowledge and skills traditionally associated to agriculture, up to date higher education for agribusiness have to pay more attention to organisation, management, and foreign language and computer skills.
3. Collection of study programs or curricula at higher institutions has to be modern and flexible to keep the institution attractive to students.
4. Education institutions can not provide successful and attractive programs if they do not consult the industry.

Forecasted demand and existing number of graduates in biotechnical field

Dissemination

The purpose of the dissemination strategy of the project was to distribute information about the project and its results to those who are not directly involved in implementation of the project itself. The principal venue of the dissemination activities was Croatia.

In the first phase of implementation an internet based information and communication platform has been established as one of the most important ways of dissemination. Over the three years period, more than 19.000 visitors were recorded at this Internet portal. The portal is operational at the address: <http://agrinf.agr.unideb.hu/ahead/index.php>.

In addition to it, more active forms of dissemination were executed in Croatian language, the most important of which are: Web information in Croatian language at http://www.agr.hr/cro/ustrojstvo/umo/eu_programi/tempus.htm

- 4 press conferences in Zagreb, Poreč and Split
- Public announcement of the MBA programme
- Participation in workshops, roundtables and conferences in Croatia and Hungary
- Distribution of information through the consortium members
- Participation in AGRIMBA Management Board meetings
- Printing and distribution of Training Needs Analysis Reports (in Croatian and English)
- Printing and distribution of The Project Results at a Glance booklet

The combination of the so-called “traditional” and “modern” (Internet-based) information technologies and the two languages approach has resulted in the effective information dissemination for target audience.

Sustainability

The long-term sustainability of the project results can be guaranteed by the fact that all the study programmes and trainings covered by the project fulfil an existing educational gap in Croatia. New study programmes are accepted by the faculties involved and they fully correspond with the university development efforts. The project and the programmes will contribute to internationalisation of teaching at both of the faculties, while the first results show that interest is high among the students for the programmes under development and supervision. Financial sustainability is ensured by official acceptance of the programmes from both: the faculties and the university. According to interest showed, the executive MBA training will have sustainability with no transfer payments from the budget. Sustainability of the project results is in a great deal due to constant support of the project from the university and all the Croatian partners.

Quality Control

Monitoring activities were carried out firstly through an Internet-based management information system. Constant tracking of the project was guaranteed throughout all three years. External evaluation of the project performance was done by different bodies:

- The MBA training was supervised by AGRIMBA representatives.
- The study programmes were revised and accredited by the project consortium members, the faculties, the University of Zagreb and Croatian authorities.
- The professional content of the subjects developed were supervised by members of the EU partners.
- The practical usefulness of the subjects was evaluated by the Croatian consortium members.

All together brought the project to its goal of development of contemporary teaching programmes at the University of Zagreb in the field of agribusiness.

Project Management

The project management has taken place at 5 levels in total. University of Debrecen has been responsible for general and financial management. Management activities in Croatia have been carried out by University of Zagreb on behalf of the other Croatian Consortium Members. In case of the other EU universities the contact persons have taken the responsibility for the local project management activities.

The project Council, as the main decision making body of the project, has had its meetings at the beginning of the project, and after every year of the project implementation. The operational tasks between two Council meetings were carried out by the Executive Committee comprising of the most responsible persons of the project: the grant holder, the coordinator, the financial manager and the project secretary. The Executive Committee did quite a job to make certain that the project is running smoothly. A numerous meetings and mutual visits were organised to ensure that all the project activities and all the project partners fulfil their assignments.

