„ORGANIC BALKANET" PORTAL – AN INNOVATIVE METHOD OF ON-LINE TRAINING FOR ORGANIC AGRICULTURE IN BALKANS REGION

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Abstract

The paper presents the activities, aims and objectives of "Organic.Balkanet" – a Leonardo da Vinci Project. The overall aim of "Organic.Balkanet" project is to facilitate the transfer of innovative training practices and e-learning content to vocational education of young and unemployed agricultural professionals, as well as to agricultural professionals. This project focuses to develop the skills and competences of VET (Vocational Educational Training) and guidance professionals, including their continuous professional development and their languages learning on topics related to Organic Agriculture (OA) in the Balkans area. The project deploy a multilingual online environment (http://ob.moleportal.eu) that will facilitate end-users' online search, retrieval, access and use of digital training objects in the online learning repository.

Key words: e-learning, innovative training, organic agriculture, Balkans region

Conventional agriculture production has been applied through heavy reliance on non-renewable resources (mechanization, fertilizers, pesticides etc.) resulting in numerous agricultural burdens such as soil degradation, water run-off, pollution, reduced biodiversity and landscape image, escalating production costs. Public awareness of the irreversible damage done to the environment has led to calls for a more responsible attitude towards our natural heritage. In addition, consumers' fears, triggered by food scares and technological developments such as genetic modification and food irradiation, have been translated into serious concern about food safety, ever-increasing demands for quality assurance and for more information about production methods.

Against this background, Organic Agriculture (OA) has come to the fore as an agricultural approach that can not only produce safer products but is environmentally sound too: it combines traditional conservation-minded farming methods with modern farming technologies and relay more on in-farm inputs instead of external inputs excluding completely synthetic pesticides and fertilizers. However, organic farming is still hampered by lack of clarity: both consumers and the agricultural professionals are not always sure what OA is, what are its benefits, which products are covered by OA, and which restrictions OA implies. This is the reason why the European Action Plan for Organic Food and Farming (2004) has identified the need for actions supporting the training and education of all stakeholders related to OA, covering aspects related to production, processing and marketing of OA products and their benefits, and targeting OA products as the preferred option for both producers and consumers.

The European Commission, through its strategic Action Plan and a number of funded initiatives of the 6th FP has aimed at promotion and further understanding of OA concepts and methods, and at the cultivation of a consumer culture that will facilitate the development of the OA products market. In addition, large international organisations such as the United Nations' Food and Agriculture Organisation (FAO) and the International Federation of Organic Agriculture Movements (IFOAM), as well as non-profit associations such as the Soil Association in UK (http://www.soilassociation.org), drive their own awareness and education initiatives for the promotion of OA methods and practices around the world. Furthermore, agricultural universities around the world have included OA-related and Agroecology courses in their educational programs, aiming to prepare agricultural professionals so that they can appropriately support and guide farmers through the selection and adoption of OA methods.

Recent European and national initiatives have increased the production of relevant e-learning content in a digital format. Such initiatives have various goals and are implemented in different socio-cultural and linguistic contexts. For instance, they may aim at promoting OA and educating producers/farmers and consumers about

its benefits, or at training agricultural professionals on the theory, methods and practices of OA. Characteristic examples include the content developed in the context of the eContent project BIOAGRO and eContent*plus* project ORGANIC.EDUNET or the classroom resources for primary and secondary education that the Soil Association has published online (http://www.soilassociation.org).

On the other hand, these constitute dispersed resources that are individually listed in separate sites, and their exploitation in actual training scenarios in European, national, regional, local and/or sectoral training systems and practices remains to be seen.

Existing e-learning content could be appropriately adapted, transferred and validated in order to support lifelong learning of agricultural professionals on OA and sustainable and environmental friendly management of resources.

MATERIAL AND METHOD

„Organic.Balkanet" is an EU project funded under the Leonardo da Vinci Programme that it will help to transfer training methods content that is currently used in the context of secondary and higher education mainly for agronomists (e.g. graduate education of students in agricultural universities, post-graduate training of young agronomists) to (a) support vocational training needs of agronomists that require focused vocational training on OA topics and (b) support lifelong learning needs of farmers that want to acquire new skills and cultivate new products.
The consortium includes partners that have diverse backgrounds and expertises, so that they deal successfully with the complexities of the proposed project: University of Agronomic Sciences and Veterinary Medicine of Bucharest – Faculty of Agriculture (Romania) coordinator, Universidad de Alcalá (Spain), Greek Research & Technology Network (Greece), University of Maribor - Faculty of Agriculture (Slovenia), Rousse University "Angel Kanchev" (Bulgaria), Association for Organic Agriculture Northeast Slovenia (Slovenia), Biomold Association (Romania).

RESULTS AND DISCUSSIONS

The access to information technology is vital for the harmonious development of each country in the region, and for the region as a whole. The common element of the approaches to the various areas of development is represented by the new technologies, more exactly by a more active presence of the Internet in the rural area. Information Technology allows widely access to information and knowledge for all citizens. A large

use of information technology in all activities of human existence marks a new stage of human civilization, called "Information Society". Information Society means changes in all domains: in administration (e-government), in business (electronic commerce), in education (long-distance education), in culture (multimedia centers and virtual libraries) and in the manner of working (long-distance work). All these transformations are the product of the large use of the Internet. The Internet influences the way we live, the way we do business, the manner of working, the way we study and communicate, and even the way we spend our spare time. The technological support of this new society is done by the convergence of three sectors: Information technology, communications and e-content development.

Currently, there is an increasing production of OA-related information in an electronic format. This content aims to support the goals of each initiative, either through promoting OA and educating producers/farmers and consumers about its benefits, or through the education of agricultural experts about the theory, methods and practices of OA. On the other hand, these constitute dispersed resources that are individually listed in separate sites, and with no clear plan for their educational exploitation.

The overall aim of "Organic.Balkanet" project is to facilitate the transfer of innovative training practices and e-learning content to vocational education of young and unemployed agricultural professionals, as well as to agricultural professionals.

The need for initiatives that is focus on the education of all OA stakeholders has been identified on an EU level. The issues that "Organic.Balkanet" addresses need a European-level and not a regional approach. The collaboration of partners among countries with (i) different experience in applying OA methods and (ii) different expertise on the topics of the OA training curriculum, illustrates the benefits from this transnational approach that aims to transfer knowledge and experience among partners. Furthermore, the organisation of the valorisation activities (European Workshop and network of affiliated partners) targets to the effective generalisation of the results to other organisations and countries as well. The option of allowing candidate advisors to specialize the generic "Organic.Balkanet" training curriculum according to the particular needs of the farmers in their regions shows that linguistic and cultural preferences was be also considered.
Also, "Organic.Balkanet" categorizes and publishes in an online learning repository the

transferred content from previous initiatives in the form of digital training objects.

The main objectives of this project are: to deploy a multilingual online environment (http//:ob.moleportal.eu) that facilitated end-users' online search, retrieval, access and use of digital training objects in the online learning repository; to design a number of training scenarios that introduce the use of the transferred e-learning content to support training of agricultural professionals in the participating user organizations; to carry out a set of focused pilot trials to validate the proposed training scenarios and the transferred e-learning content; to promote the cooperation of stakeholders in this particular content area and support the sustainability of project results.
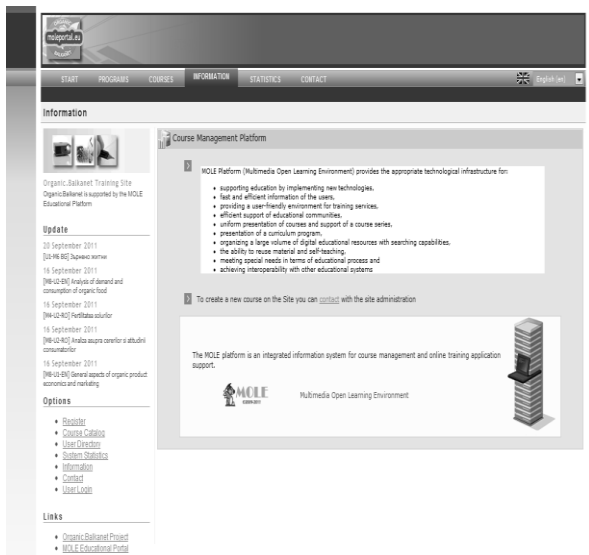

Figure 1 **A screenshot of Organic.Balkanet portal**

Several outcomes of the Organic.Balkanet project are expected to retain their educational usefulness and value, supporting vocational training programs for agricultural professionals around Europe in the years to follow:
• The high-quality training resources on how to apply OA methods and practices;
• The Organic.Balkanet training program (as a whole, or some of its components such as the targeted competences, the curriculum topics, or the training session) for young and unemployed agricultural professionals;
• Overall, about fifteen trained experts will remain in the participating countries and regions, and continue training farmers on OA methods and practices, marketing efforts, and access to certification processes.

In the second year of the project has been organized by partners a pilot training seminar of one week with the selection of about fifteen candidate advisors from three different countries (i.e. Slovenia, Bulgaria and Romania) using the above results. Also, the pilot Organic.Balkanet advisors offered an appropriately developed training session for farmers in their regions a series of at least three validation seminars (one in each user country).
The various languages in which project results provide, making them more accessible, usable and exploitable in the different countries and cultures covered by the project, are English, Romanian Bulgarian, and Slovenian.
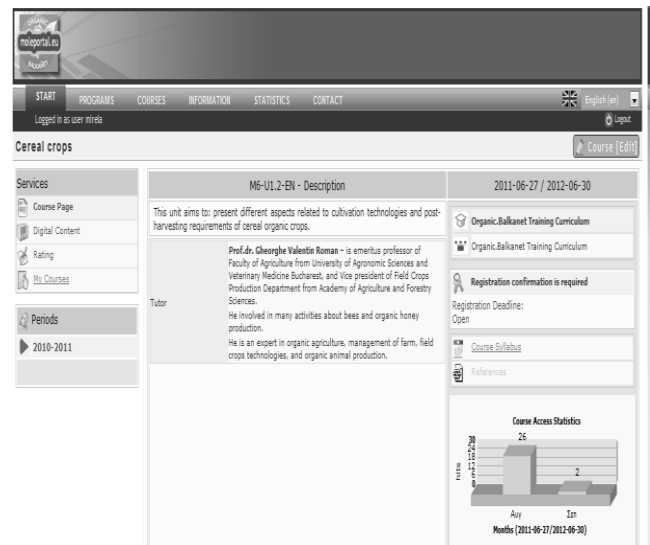

Figure 2 **A screenshot of Organic.Balkanet Courses for e-learning program**

The following solutions have been adopted by Organic.Balkanet in order to respect multicultural/multilingual aspects of the OA content, making it thus more accessible, usable and exploitable in the different countries and cultures covered by the project:

• Content that already exists in several languages populates the learning repositories of the project. More specifically, the repositories include content contributed by the participating content producers' four languages (i.e. English, Romanian, Bulgarian and Slovenian).

• To support the creation and population of learning repositories by content producers in their own language, the software suite of tools for repositories has been also provided in four different language versions.

• To offer to end-users a multilingual environment for searching, retrieving and accessing content from the learning repositories, the Organic.Balkanet Web portal has been developed in the four main languages of the project's educational institutions.
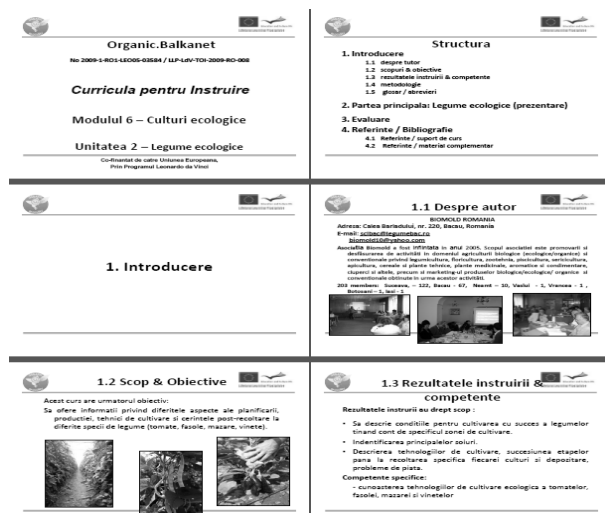
Figure 3 **A screenshot of Organic.Balkanet Course Module in Romanian**

• To support the description of the content with appropriate metadata; the metadata schema developed by the project has been produced in the four different languages identified above. Thus, it is possible to develop metadata records describing the content resources in any of these four languages.
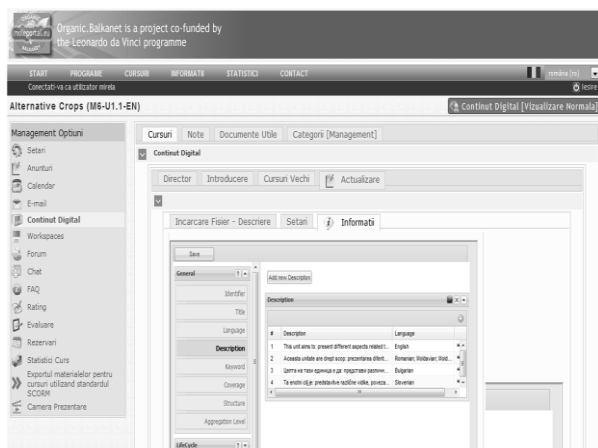

Figure 4 **A screenshot of metadata description of Organic.Balkanet Course Module**

• The educational scenarios to be studied and proposed focused both on the national particularities of the educational systems in pilot user organisations, as well as on educational programs that are offered on a cross-border level. In this way, the cases of different national educational systems has been considered and in addition, cross-cultural cases has been also studied.

CONCLUSIONS

The access to information technology is vital for the harmonious development of each country in the region, and for the region as a whole.

Currently, there is an increasing production of OA-related information in an electronic format.

This content aims to support the goals of each initiative, either through promoting OA and educating producers/farmers and consumers about its benefits, or through the education of agricultural experts about the theory, methods and practices of OA.

This project focused to develop the skills and competences of Vocational Educational Training (VET) and guidance professionals, including their continuous professional development and their learning of languages on topics related to Organic Agriculture (OA) in the Balkan area.

The project deployed a multilingual online environment (*(http://ob.moleportal.eu)*) that facilitate end-users' online search, retrieval, access and use of digital training objects in the online learning repository.

ACKNOWLEGMENTS

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