Romanian e-learning experience in ecological agriculture

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Abstract: Ecolearning is the first research project to test the methodology for e-learning training to organic producers in Romania. Given the necessary equipment (computer + software properly) and opportunities for farmers in Romania, Ecolearning address to:
• Farmers practicing conventional systems and want to switch to organic farming;
• Farmers practicing organic farming and would like to improve knowledge;
• Farmers enrolled in agricultural faculties have courses with reduced frequency (which in the analytical educational courses Ecological Agriculture);
• Consultants (trainers) in organic agriculture.

Keywords: e-learning, ecological agriculture, training courses

1 Introduction
ECOLEARNING is the first research project to test the methodology for e-learning training to organic producers in Romania. Given the necessary equipment (computer + software properly) and opportunities for farmers in Romania, ECOLEARNING address to:
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2 Partners
1. Research Institute for Social and Vocational Training - IFES Madrid (Spain)
2. Association for Sustainable Environmental Solutions - AGROLINK Sofia (Bulgaria)
3. Competence Center Europe - BFW Heidelberg (Germany)
4. FORMACIÓN 2020 S.A. Madrid (Spain)
5. Union of Small Farmers from Animal husbandry and Agriculture - UPA Madrid (Spain)
6. Association for Ecological Agriculture in Hungary - MOGERT Budapest (Hungary)
7. Association BIOCERT Napoli (Italy)
8. Agricultural High School Ponte de Lima (Polytechnic Institute of Viana do Castelo - ESAPL-IPVC Ponte de Lima (Portugal)

3. What is ecolearning
ECOLEARNING consists in presenting a set of knowledge / information properly structured on a computer "server" connected to the Internet, to which each individual user has access to a computer locally, in their own language (Romanian), in their own pace (tempo), when they have time available in an appropriate sequence in terms of teaching in a dialogue with, and helped led the system in a participatory co-active (course, questions / answers, checking / testing etc)

ECOLEARNING COURSES
ECOLEARNING courses will be held assisted by computer ("e-learning"), under the guidance of an ARAD (Romanian Association for Sustainable Agriculture) experts team in on-line (with access to a computer via the Internet its own).

Participants in this course must be professionals already working in the agricultural sector, mainly small farmers.

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Ecolearning courses will be held assisted by computer ("e-learning"), under the guidance of an ARAD (Romanian Association for Sustainable Agriculture) experts team in on-line (with access to a computer via the Internet its own). Six pilot training courses in organic farming are free available and this are: organic production of cereals, organic production of vines and winery, organic production of cattle for milk, organic production of cattle for meat, organic breeding of pigs and consultant guide in ecological agriculture.

Six pilot training / improvement courses in organic farming are available free:

- **ORGANIC PRODUCTION OF CEREALS**
- **ORGANIC PRODUCTION OF VINES AND WINERY**
- **ORGANIC PRODUCTION OF CATTLE FOR MILK**
- **ORGANIC PRODUCTION OF CATTLE FOR MEAT**
- **ORGANIC BREEDING OF PIGS**
- **CONSULTANT GUIDE IN ECOLOGICAL AGRICULTURE.**

4. Results

This chapter contains an example of pilot courses “ORGANIC BREEDING OF PIGS”

This course is a retraining and constant training. The course has 3 modules:

- Module I “MANAGEMENT OF AN ORGANIC FARM” contains aspects of farm conversion to organic certification according to EU standards IFOAM and the tasks of inspection bodies and certification tools and support (financing) of organic farms. Due to the particularities of production organic agriculture planning, this module also contains the history of land cultivation and assessment requirements of cultivated plants, including the presentation of the incidence of pests and diseases and the necessary nutrients.

- Module II "COMMERCIALISATION OF ORGANIC PRODUCTS", contains information on selecting suppliers of organic inputs (considering that all inputs are produced under the organic farming) and choice of distribution channels. It also covers the basic concepts of training in marketing agricultural products and organic food, with reference to the selection of clients and a few ideas for selling organic products.

- Module III "ORGANIC BREEDING OF PIGS" refers to facilities and stables for pigs, including the movement for animal feeding in general and feeding sows during gestation and lactation, on hygiene and health, breeding and the conditions transport and slaughter. Also presented methods for treatment of waste residues.

In conclusion of this course are given in short, the computer. This presentation will be used for basic training in using computer and information technologies and communication, as well as the potential for use in organic farming.

Each module has more teaching units, as follows:

**Module I**

**Management of an organic farm**

I.1. Supervision and control of the application of current regulations

- 1.1.a Conversion to an organic farm
- 1.1.b Organic certification (following E.U. and I.F.O.A.M. standards)
- 1.1.c Official forms in relation with the certification Body
- 1.1.d Support to organic farming

I.2. Production planning, monitoring and control

- 1.2.a Selection of breeds and stocks
- 1.2.b Design of a feeding program
- 1.2.c Planning of health and hygiene controls

**References**

**Questions**

**Module II**

**Commercialization of organic products**

II.1. Planning and management purchases

- II.1.a Selection of suppliers
- II.1.b Choice of distribution channels

II.2. Commercialization of farm products

- II.2.a Costumer selection
- II.2.b How to sell organic

**References**

**Questions**
Module III
Organic breeding of pigs

III.1. Housing/habitation
III.2. Areas of free movement
III.3. Feeding
III.4. Hygiene and sanitation
III.5. Reproduction
III.6. Transport and slaughter
III.7. Residue treatment systems

References
Questions

5. Conclusions
- ECOLEARNING is the first research project to test the methodology for e-learning training to organic producers in Romania.
- Participants in this course must be professionals already working in the agricultural sector, mainly small farmers.
- ECOLEARNING courses will be held assisted by computer ("e-learning"), under the guidance of an ARAD (Romanian Association for Sustainable Agriculture) experts team in on-line (with access to a computer via the Internet its own). Six pilot training courses in organic farming are free available.

References
[1] FORECOLOGIA project, number of reference - ES/03/B/F/PP-149080