

# **PTLE: eSupport for Ecological Farming**

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## Abstract

Goal of this paper is to inform about the results of educational project with EU support from Leonardo da Vinci - Community Vocational Training Action Programme. Ecology and applied ecological disciplines (production, processing, behaviour in economic, social and competitive environments) are highly developing branches of the national and world economy. Background of applied ecology which is expected to not substantially change in the future. Modules on CDs as fundamental information for their own decision making support. Up-to-date information or news on the web-sites which give the users a better orientation to the immediate situation on the market. The new aspect and added value of the project is not only the support of ecological behaviour on the market but also in impact and influence on the thinking and the life-style of the young population. The final aim is to demonstrate and prove the logical equation: Producing, thinking and living ecologically is equal to producing, thinking and living economically; and this is satisfying for both individuals and society.

## Key words

Ecological farming, organic farming, education module, sustainable development, young farmer, information and communication technology

## Introduction

Ecological farming and processing of goods in an environmentally conscious manner are the two main priorities of the EU agricultural policy. This revolutionary approach of working with the environment is the core element of the ecological processing industry, as well as a prerequisite for sustainable development in the future. Concurrent with the increasing population of this industry will be an increased number of jobs on the market. Young farmers and workers in countryside regions - graduates from high agri-schools and agri-training institutions - are the future countryside population of the united Europe. The project named "PTLE: Young Farmers Produce, Think and Live Ecologically" will help them to better understand ecological problems, understand the EU agrarian policy, improve or change their qualifications, and fill free places on the labour market.

The EU is annually allocating billions of EUR to support innovations in agriculture. The direct support of secondary schools concerning ecology and sustainable development is not markedly noticeable. Innovative character of the project thus gives new value to already existing courses via "tailor made" methodology not merely by transposing the university study sources.

## Methodology

There are three main activities in the project:

- 1) Making "CDs" with education modules in ecological farming and sustainable development for young farmers and workers in the agrarian sector and related businesses;

- 2) Creating "web-sites" associating young countryside people who are involved in ecological problems and want to produce and live ecologically;
- 3) Providing of certification courses for groups of participants in ecological farming, production and processing to maintain and improve the position of young farmers in the competitive market and have feedback for activity 1.

The main idea behind the methodology of each module is: Producing, thinking and living ecologically is equal to producing, thinking and living economically.

Modules will be adapted from the university bachelor and master courses to fit both the needs and comprehension of young graduates from secondary school level education. The CDs will contain more pictures, figures, video and audio with less text. Partners will prepare scenarios of the modules and collectively participate in the preparation of study materials and their design. All modules will be elaborated in English, and partners will translate national editions if necessary.

There is a large target group of potential users. The project outcomes will have an impact on the entrepreneurship of the young countryside population while improving life style.

## Results and discussion

According to 3 activities mentioned above, there are three main kinds of results – CDs with modules, project web site and courses.

### ***Activity 1***

Activity 1 will result in the system of education modules covering all key ecological problems: techniques and technologies of ecological production and processing, the ecological policy of EU, fundamentals of sustainable development as well as economic and managerial aspects of ecological behaviour in the market. 13 CDs with special oriented modules:

- 1) Ecology
- 2) Sustainable development
- 3) Ecological policy of EU
- 4) Economic spreadsheet and balances in ecological production of farms
- 4) Management and marketing of ecological farming, production and processing of ecological goods
- 5) Ecological behaviour on the market in competitive and risky environment
- 6) Basic technologies in ecological farming and processing
- 7) Quality and certification of commodities
- 8) System of national and EU support and subsidies for ecological farming and processing
- 9) Policy of protection
- 10) Basic EU relevant databases, lines to information
- 11) Information technologies and information systems supporting ecological production, thinking and living

12) Ecological leisure and hospitality management

13) How to complete, document and propose projects to grant and subsidising agencies

## Activity 2


The web-sites originated in the activity 2 will connect all of the people involved in the project. From the beginning, the web-sites should associate all partners and co-workers, and step by step, it will involve young countryside people and offering them instructions, information about recent events, interesting papers, lines to other relevant internet sources, chat rooms and propositions of certification courses. The web-sites will prolong the activities also after the project is finished.

There are many pictures, notes, and links in the texts. For the self-control of the users, there are questions with answers. 2<sup>nd</sup> level of the text is used for detailed tables, pictures enlargement etc.

[<< 1 Ecology](#)[1.2 Spheres of the Earth >>](#)




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### 1.1 Definition

**Ecology is the study of the relationships of organisms to their environment and to one another ([Haeckel 1870](#) ).** The key word is relationships. Ecology is the study of interactions.

...Krebs defined the term Ecology much more informatively and less vaguely.

**Ecology is the scientific study of the interaction that determine the distribution and abundance of organisms (Krebs 1972).**



The term Ecology is based on the Greek words "**OIKOS**" = "home" and "**LOGOS**" = "science". Ecology deals with a wide specter of issues. We can **divide** the discipline by many ways.

- **by the character of the environment:** soil ecology, forest ecology, backwater ecology,.....
- **by the group of organisms studied:** mammal ecology, fish ecology, ecology of the trout, ecology of microorganisms

Fig 1: Example of e-text

## System of multimedia electronic publication

Application environment SMEP (see fig. 2) makes available books, magazines, annual reports etc. to readers in a modern electronic form. The client-server technology is used and so the number of users, which work with system in real time, is unbounded. No client side installation is required; the system is fully installed at the provider's server. It leads to decreasing of the costs for publishing.

Reader gets growing range of e-publications, right to his/her job/home. It is easy and well-ordered to search in all publications, it is easy to copy a text for using in citations or in bibliographic search. Access to the e-library is from every Internet connected computer.

Publishers and authors can publish their work, which can be difficult to publish by another way. Main barriers can be limited finance resources or limited number of issues. Writings published through SMEP system are promptly accessible to the public. It is possible limit the

number of readers for registered users. Entering of works to system is easy, administration is simple and demands to users are basic practice PC work.

It is used version 3.1, platform and technologies: Linux You, Apache, PHP, MySQL, minimal configuration: PHP 4+, MySQL 3.23+. Now is the project web-site placed on <http://etext.czu.cz>, but it will be moved.

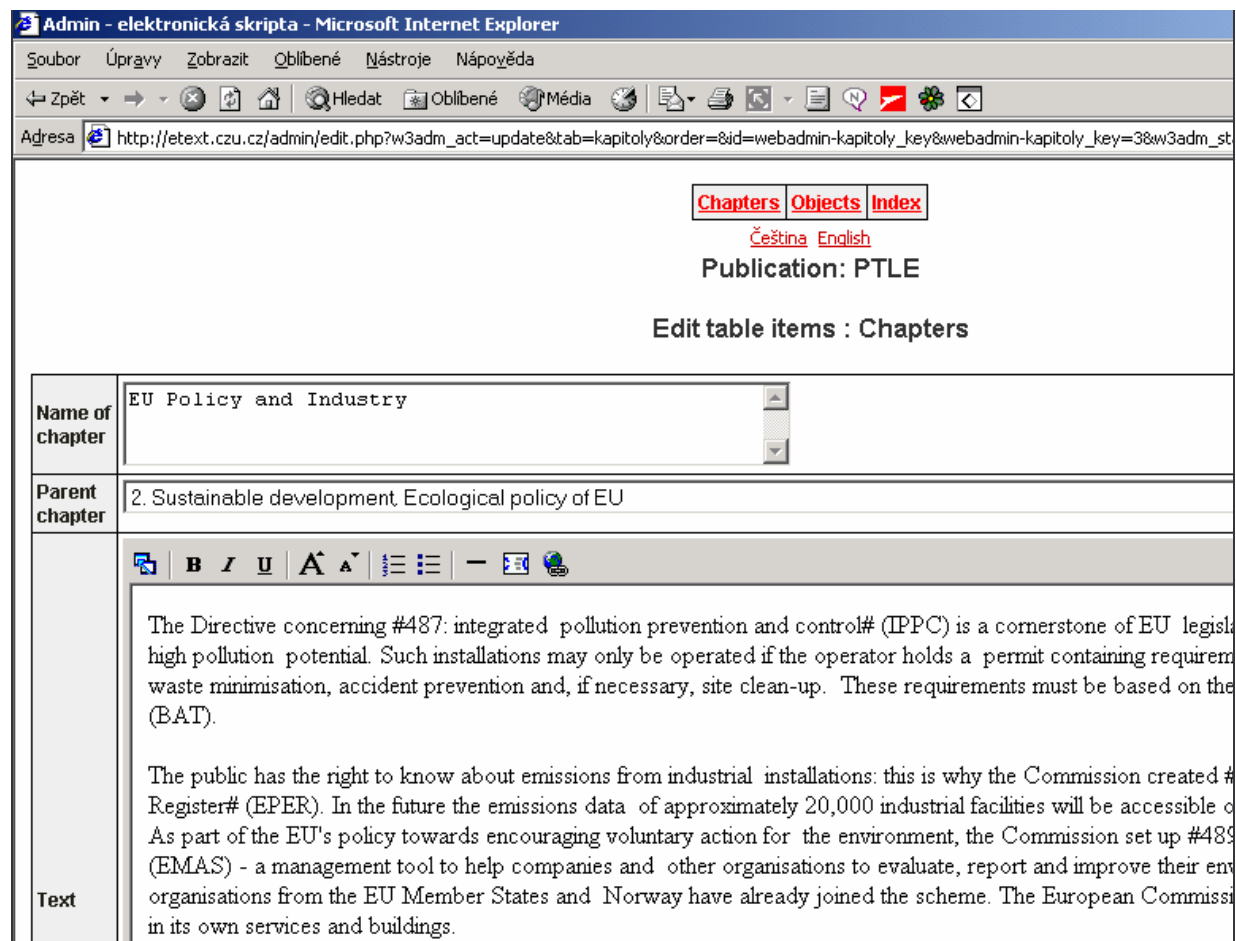


Fig. 2: It is easy to work with SMEP environment

### Activity 3

Certification courses organised in the activity 3 will offer the applicants the combination of local and long-distance study. Project partners will organise recruitment of the participants and will provide both schooling and administration. The certification courses will use modules developed in 1, and at the same time will give useful feedback for their further upgrading. The web-sites, developed in the activity 2, ensure the "on-line" and "two-way" intercommunication and "One Stop" administration among instructors and applicants.

### Conclusions

It is necessary to mention the non-visible results of the project:

1. Improvement in the ability to enter the market.
2. More clearly realizing the problems of future societal development.
3. Understanding the problems of sustainable development.

4. Understanding the effort of “green” initiatives.
5. Calm evaluation and assessment of revolutionist and messianic opinions and sentiments.
6. Ability to enter the process of life-long education.
7. Enrichment of their own life with new elements.

Ecological production and processing offers special opportunities to small enterprises and businesses as well as individual producers. Demand for ecological food and goods are increasing. Also ecological leisure and hospitality management offers new work opportunities for the first time to countryside people. It gives special social groups chances to enter the work force and succeed in today's competitive market.

There is an increasing ratio of women using the Internet. More and more women are ready to learn. This project helps the women gain a better knowledge of ecological agriculture technologies and improve the technology level of the family enterprises, or get a job in enterprises using new technology. In addition, CDs and web-sites make it possible for the women to study while at home, if caring for young children. Thus the project can contribute to improvement of the family environment.

## References

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[http://europa.eu.int/information\\_society/eeurope/benchmarking/list](http://europa.eu.int/information_society/eeurope/benchmarking/list)

<http://www.pro-bio.cz>

Internal project materials

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