ECO LEARN

INTEGRATED MANAGEMENT OF RURAL-BASED ENVIRONMENTAL EDUCATION
BACKGROUND

This brochure concerns the central results of the Eco Learn project. The project was carried out in 2002-2005 and its aim was the development of rural-based environmental educational action models for the school system. The project has focused on the interaction between the environment, food chain and sustainable development in order to equip pupils with the skills to identify the origins of food and make conscious food choices. The main financing came from the LIFE Environment program of the EU. http://europa.eu.int/comm/environment/life/home.htm.

Fewer and fewer children have links with the countryside or with agriculture, and inadequate knowledge about food production has become increasingly common. In order to be able to become environmentally conscious consumers, it is more and more important that children and young people learn more about the whole food chain and understand the impact of production on the environment.

It is already possible to find different kinds of outdoor activity and experience services that do not, however, necessarily meet educational or pedagogic needs. Therefore we wanted to develop specific action models that encourage agricultural and nature-based entrepreneurs to develop high-quality environmental education service products and networks. Teachers also need comprehensive high-quality packages that can easily be integrated into teaching plans.

These are the facts that Eco Learn was based on. The project combined multi-scientific expertise to put rural-based environmental education into practise.

ECO LEARN OBJECTIVES

1. Demonstrating the food chain and sustainable agriculture for children
2. Developing and designing a concept of rural-based environmental education
3. Supplementary training for teachers and the collection of innovative educational entities
4. Creating a network of environmentally responsible rural entrepreneurs, embedding it within the national framework and auditing the system.
Environmental education promotes sustainable development by raising children to become active, motivated, participative and influential citizens

The means of production and consumption created by man have led to many serious environmental problems; the reasons for and solutions to these are fairly well known by now. So far, actions have not been effective enough to prevent pollution of the environment. Sustainable development requires a profound change in lifestyles as well as in consumption and production. The responsibility for improving the environment belongs to us all.

The dimensions of sustainable development are ecological, economic, cultural and social. In addition to these basic dimensions, environmental education can also be viewed from esthetic and ethical points of view. Environmental education changes values and attitudes and it is a way in which schools can take responsibility for building a sustainable future.

Rural-based environmental education is about developing agricultural and rural awareness, understanding food as a natural resource and international food service. Rural-based environmental education increases the awareness of nature-based and rural entrepreneurship and improves their image and competitiveness. Rural-based environmental education is best achieved with seamless cooperation between camp schools in farm environments and normal teaching. It is important that environmental education is not just a single visit to farms or camp schools but is taken into consideration in all education concerning the environment and school actions.

perhaps the best known model to describe environmental education is the “Palmer tree”, which shows that the roots and basis of environmental education are always in personal experience. According to the tree model, environmental education is most successful when it combines knowledge, attitudes, action and experience into whole.

ECO LEARN RESULTS

1. Thematic action models
2. The concept of rural-based camp schools
3. Trained entrepreneurs
4. Supplementary education for teachers
5. Handbook of Rural-based Environmental Education
6. Internet-portal
7. Demonstration sites for sustainable agriculture
The basis for the action model of Eco Learn is camp schools arranged in farm environment, where children get to learn about the food chain through personal experience. Five different educational themes have been developed for Eco Learn camp schools, which will be audited. Models consist of pre- and post-exercises to be done at school as well as an operative part, taking place on the farm, and they are aimed at basic levels of education. The models have been developed by agricultural and educational experts.

The thematic action models and the operation of entrepreneur network was tested in twelve different pilot camp schools, in which 250 pupils participated. Both urban and rural schools participated in these pilots, and special needs' groups were also involved. The action models were tested on farms and the Agricultural Exhibition Park Elonkierto, founded by MTT Agrifood Research Finland (MTT).

### ACTION MODELS ARE EDUCATIONAL ENTITIES OF ENVIRONMENTAL EDUCATION

The thematic action models and the operation of entrepreneur network was tested in twelve different pilot camp schools, in which 250 pupils participated. Both urban and rural schools participated in these pilots, and special needs' groups were also involved. The action models were tested on farms and the Agricultural Exhibition Park Elonkierto, founded by MTT Agrifood Research Finland (MTT).

### NETWORK OF ENTRE-

#### IS THE THEME ABOUT TRADITIONAL FOOD NECESSARY? WHAT DID YOU LEARN

"Yes, it is for young people to know at least a little about how one lived in the old days and youth should learn to appreciate their food. I have learned how to make cheeses, soups and traditional bread"

Petteri 15 yrs

"Yes! Because it is good that the culture of Finnish traditional food is not forgotten, so that one doesn't think ‘did they put hamburgers in salt before the fridge’ ten years from now"

Jenni 15 yrs

"I thought it was good that we got to make traditional foods, because today’s youth should know about them. Traditional foods should be passed on from one generation to the other. I have learned to make cheese from beestings (colostrum), and that other cheese, soup and other stuff."

Noora 15 yrs

#### WHAT WAS BEST?

"When we got to give names to the sheep and hold them in our lap"

Viljami 9 yrs

"We didn’t just stand around watching others do all the work. Animals bring joy to life and the people were nice"

Saija 15 yrs

"I heard a sheep give birth and I saw it. I also heard new words I didn’t know"

Viljami 9 yrs

#### WHAT WAS NEW, WHAT DID YOU LEARN?

"One would learn better at a camp school than just from books or the internet" Juhani 12 yrs

"All kinds of stuff about animals, like how a pig can be so big"

Sanni 12 yrs
PRENEURS TO OFFER CAMP SCHOOLS

During the project a network of entrepreneurs who already offer or are interested in offering environmental education services to schools, and want to develop their services according to the Eco Learn criteria was formed. The network consists of 50 farms already. These are farms offering accommodation services, domestic animal farms and ordinary production farms.

Three training courses were arranged for entrepreneurs and rural advisors, with emphasis on the safe and environmentally responsible arrangement of camp schools using Eco Learn action models. Courses were arranged using “learning by doing” methods in addition to theoretical teaching. 35 entrepreneurs and 14 rural advisors participated in the courses, and now their task is to train new participants.

CRITERIA TO ASSURE QUALITY

An auditing system to assure the quality of agri-environmental education has been created, based on the following criteria:

- The enterprise is committed to carrying out Eco Learn action models
- The enterprise has good coope-rational practices
- The enterprise is environmentally responsible
- The enterprise has proper facilities and operational environment
- The enterprise has taken care of safety issues
- The farm is eligible for environmental subsidies
- The enterprises in the cooperating network are safe and environmentally responsible

The criteria were piloted in camp schools, where they were verified as reasonable for the entrepreneur, as well. Enterprises fitting the criteria are granted an Eco Learn-certificate, based on the Uniquely Finnish certificate based on the ISO 9001/2000 quality system. Camp schools with Eco Learn -certificates can be identified as safe, environmentally friendly and using tested camp school models. The criteria and certificate have been developed using a participative planning method involving experts from different fields. The Eco Learn certificate is granted by Agropolis Ltd.

PRODUCTIFICATION MODEL ACTS AS A TOOL FOR RURAL ENTREPRENEURS

A thesis research on how to develop camp schools into profitable products for enterprises was carried out in Åbo Akademi. The research showed that

- Eco Learn camp schools should differ enough from the vast supply of environmentally oriented services.
- Camp schools are best suited for urban schools, situated within a maximum of 3-4 hours drive from the camp school.
- For rural schools situated nearby, theme days with a focus on environmental education are the best alternative. This way the same class can visit the farm several times over a longer period of time.
- In addition to the educational contents, strengthening the social skills of the children is an important part of the camp schools.

The M.Sc. thesis (in Swedish) can be found on the project Internet page http://www.agronet.fi/leirikoulu/ecolearn.

HANDBOOK SUPPORTS
THE PLANNING OF CAMP SCHOOLS

The Handbook of Rural-Based Environmental Education (Maalle oppimaa! -käsikirja) displays the concept of camp schools. It is designed for teachers, parents and entrepreneurs, who are planning a camp school. The handbook presents the thematic action models, the quality criteria and the basics of rural-based environmental education. There are also practical tips for organizing camp schools. The handbook has been mailed to every comprehensive school in Finland. Additional copies can be printed from the Internet portal.

TRAINING FOR TEACHERS

Teacher interest in supplementary environmental education was mapped using a questionnaire. The results indicated that both training and educational material were necessary. During the project three pilot training courses were arranged, involving 21 participants, as well as two supplementary sessions, involving 20 participants. The purpose was to clarify the principles of sustainable development, increase environmental awareness and facilitate solutions to environmental issues in everyday life and school matters. The training emphasized themes of agri-rural environmental education, such as the vitality of the countryside and the food chain.

EASYLY AVAILABLE ON THE NET

Eco Learn portal http://www.agronet.fi/leirikoulu includes all handbook material plus additional background information on different topics, educational games and a large link collection. The portal also includes a search engine for camp schools, which is an effective tool in marketing camp schools. Products and services are more easily available on the portal, and the customer can compare different options.

ELONKIERTO DEMONSTRATES SUSTAINABLE AGRICULTURE

Elonkieto is an agricultural exhibition park built by Agrifood Research Finland (MTT) in Jokioinen, which lies in the southwestern part of Finland. The park is designed for consumers as well as agricultural professionals, researchers, students, teachers and tourists. During the Eco Learn project, five new exhibition sites were built, demonstrating

1) soil, 
2) use of material and energy, 
3) protection of water and climate, 
4) well-being of animals and 
5) food chain quality and safety

The sites have been built based on the research of MTT. The sites are complemented by a brochure in English, which can be printed from the net from the MTT webpages http://www.mtt.fi/elonkierto/EK_GUIDE.pdf. The park is open from mid-May till mid-September; during the winter the park can be accessed via the internet http://www.mtt.fi/elonkieto.
HOW DOES ONE GET TO LEARN IN THE COUNTRYSIDE?

**TEACHER** → **PORTAL, HANDBOOK**
- read the handbook
- choose the action model to be applied
- find suitable enterprises

**MEETING FOR PUPILS AND PARENTS**
- introduce options to the class and parents
- choose a suitable enterprise together
- plan for financing and set schedule for the camp school

**PORTAL, HANDBOOK**
- contact the entrepreneur; plan for detailed program together
- familiarise pupils with camp school procedures and instructions, as well as equipment list
- get to know background material, do the pre-exercises

**ECO LEARN CAMP SCHOOL**
- do the post-exercises
- give feedback to the entrepreneur

**FARM, ELONKIERTO**
- participate in Eco Learn training for entrepreneurs
- get to know the indicators of sustainable agriculture demonstrated in Elonkierro
- arrange for your farm to be audited

**AFTER THE CAMP SCHOOL**
- do the invoicing
- analyse feedback and do correctional measures
- do aftersales marketing

HOW DOES ONE GET TO BECOME AN ECO LEARN ENTREPRENEUR?

**ENTREPRENEUR** → **PORTAL, HANDBOOK**
- familiarise with portal, handbook and thematic action models

**FARM, ELONKIERTO**
- participate in Eco Learn training for entrepreneurs
- get to know the indicators of sustainable agriculture demonstrated in Elonkierro
- arrange for your farm to be audited

**PORTAL**
- write a company introduction to the portal
- plan for detailed program together with the teacher
- agree on scheduling and other arrangements

**ECO LEARN CAMP SCHOOL**
- do the invoicing
- analyse feedback and do correctional measures
- do aftersales marketing
WHAT DO ECO LEARN CAMP SCHOOLS OFFER?

FOR PUPILS:
- information
- alternative learning methods
- experiences of a social and positive learning environment
- personal contact with the environment and food chain
- learning in environments where action really takes place
- models of environmentally responsible behaviour

FOR TEACHERS:
- thematic action models that fit into the curricula
- supplementary training
- new teaching environments
- exercises
- background material
- hints for camp school planning

FOR ENTREPRENEURS:
- marketing channel
- high-quality camp school programs
- supplementary training
- product development model
- network support
IMPAcTS OF ECO LEARN

New tools for rural-based environmental education were created in the Eco Learn project, and they were received well among teachers, pupils and entrepreneurs. The starting point for rural-based environmental education in Eco Learn was the pupils’ own living environment, which the project strived to make familiar, meaningful and important. The reason for this local approach was the objective of helping the pupils in understanding the ecological and social relations of food production from his own living environment by using practical examples.

The local focus and familiarity strengthen the pupils’ positive outlook on future and also their confidence in making an impact on the state of the environment through one’s own actions. Several schools in the nearby area have made rural-based environmental education a part of their educational plan and operating processes – learning by doing has inspired both pupils and teachers.

Rural-based environmental education has opened up new possibilities for rural entrepreneurs in utilising the uniqueness of their company and networks to meet the demand for services. When planning and organising camp schools, aspects to be taken into consideration are for instance whether the school is urban or rural and whether there are special needs’ groups involved. In any case co-operation between local authorities, teachers, parents and entrepreneurs is a crucial factor for success.

The alienation of children and youth from the food chain and agri-rural environment is not only a Finnish phenomenon, but concerns the whole EU area. The ecological, economic and socio-cultural consequences of consumption are yet to be realised. The sixth environment action programme of the European Community, “Environment 2010: Our future, Our choice” emphasizes environmental education, knowledge and improving our level of awareness when it comes to improving citizens’ possibilities of influencing decisions affecting them made by the authorities. Consumers should be offered practical information to be able to make environmentally sustainable decisions. The action program also emphasizes environmentally friendly actions in agriculture and brings up the development of other operations besides agriculture for farms.

The action models and camp school concepts of Eco Learn are simple and clear-cut, so they can be applied in other EU member states, as well. Since the models have been developed according to Finnish educational programs, they should be tailored into each country’s national educational plans and according to entrepreneurs premises. Eco Learn has raised international interest, and co-operation with other EU member states is beginning via interregional projects and research framework program. Local and regional cooperation has expanded into national and international co-operation.
The Central Union of Agricultural Producers and Forest Owners (MTK) was responsible for a part of public relations of the project. Tel. +358-20-4131 http://www.mtk.fi, http://www.maaseuduntulevaisuus.fi

LIFE Environment was the main financier of EcoLearn http://europa.eu.int/comm/environment/life/home.htm http://www.ymparisto.fi

Development Centre of Forssa Region Ltd (FSKK) was a co-finer of the project. Tel. +358-3-414 1720 http://www.fskk.fi

MTT Agrifood Research Finland was responsible for the development of camp school action models, testing and productification, planning and construction of sustainable development sites for the agricultural exhibition park Elonkierro as well as the technological aspects of the internet portal. Tel. +358-3-4188 188 http://www.mtt.fi

Agropolis Ltd was responsible for project management, administration and public relations. http://www.agropolis.fi

HAMK University of Applied Sciences produced background material necessary in the project, planned and realized the Internet game and took part in planning the camp school portal. Tel. +358-3-6461 http://www.hamk.fi.

The Department of Applied Sciences of Education in the University of Helsinki took part in the project by mapping the need for teachers’ supplementary training and planned and arranged supplementary training for them. Tel. +358-9-1911 http://www.helsinki.fi/yliopisto http://www.helsinki.fi/sokla

Finfood - Finnish Food Information Association edited and published the camp school handbook and gathered educational material for the Internet portal. Tel. +358-9-6155 400, http://www.finfood.fi

Together with the Rural Women’s Advisory Organisation, ProAgria (ARAC) gathered together the network of agricultural entrepreneurs, arranged training and was responsible for developing quality criteria and the auditing system. Tel. +358-2-7472 400 http://www.proagria.fi

Finfood - Finnish Food Information Association edited and published the camp school handbook and gathered educational material for the Internet portal. Tel. +358-9-6155 400, http://www.finfood.fi

Publications and thesis:

Maalle oppimaan! Handbook of Rural-based Environmental Education Publisher: Finfood – Suomen ruokatietoy, Editor: Johanna Häkkinen, Layout: Pia Gardberg http://www.agronet.fi/leirikoulu


Annika Miemois: M.Sc. thesis (Åbo Akademi), Receipe from the marker’s cookbook: ingredients and preparation for an appealing camp school http://agronet.fi/leirikoulu/ecolearn

Irina Salminen: B.Sc. thesis (HAMK), The use of IT-portal in the marketing of camp school products http://agronet.fi/leirikoulu/ecolearn
