

UNDP/GEF project

Development and Implementation of the Lake Peipsi/Chudskoye Basin  
Management Programme

PROGRAMMES FOR THE DEVELOPMENT OF  
ENVIRONMENTAL EDUCATION IN THE REGION

Estonian case study

Editor: Aija Kosk

Peipsi CTC  
Tartu, 2005

## **Table of Contents**

### Introduction

1. Terms, goals and methodology
2. Strategies and legislation supporting environmental education in Estonia
3. An overview of organisations providing environmental education in the Lake Peipsi region
4. Outcomes of the open-room discussion “How to learn everything in nature?”
5. Future activities by the Peipsi CTC, in order to promote education for sustainable development and environmental education

### References

## **Introduction**

Underlying the need to enhance education which would support sustainable development, the United Nation General Assembly, in 2002, proclaimed a 'Decade of Education for Sustainable Development' (2005-2014) [1]. The plan for sustainable development of the Baltic Sea region – Baltic Agenda 21 was adopted in 1998. Aiming at the implementation of Baltic 21, the ministers of the Baltic countries convened in 2000 and signed the so-called Haga Declaration, agreeing that in the promotion of sustainable development, the main emphasis has to be put on education, training and public participation [2].

Three working groups (these of general, higher and non-formal education), created in order to compile the strategy and action plan for the Baltic 21 educational sector, comprised the representatives of all Baltic countries. Work carried out by the committee resulted in the promotion plan of the Baltic Sea Agenda 21 education for sustainable development in 2001 – Baltic Sea Agenda 21E. This document was signed by the minister of education of the Baltic Sea States in 2002. The coordinator of the implementation of the obligations, assumed by way of this document, was the Estonian Ministry of Education and Research, in cooperation with the National Examination and Qualification Centre.

The Estonian Ministry of the Environment, as well as the Estonian Ministry of Education and Research and their representatives in working groups, together with experts, have come to the joint conclusion that besides more general strategies, there is a need to compile a systematic and concrete strategy and development plan for environmental education and education for sustainable development. On March 10<sup>th</sup>, 2005, a memorandum of joint activities was signed by two ministers (Minister of Education and Research and Minister of Environment) to guarantee sustainability of development of

environmental education and environmental awareness in Estonian schools. The memorandum foresees working out the conception for a national curriculum, which supports sustainable development. Now a working group between those two ministries is working on a strategy and action plan in Estonia for environmental education and education supporting sustainable development, planning on including cooperation comprising all levels, i.e. international, national and county level [4].

### **1. Terms, goals and methodology**

Baltic Agenda 21E defines ‘education for sustainable development’ as education which connects and associates the different aspects regarding the development of the economy, natural environment and society (incl. democracy, equality, human rights, etc.). In other words, the aim of ‘education for sustainable development’ is to treat nature, social sciences, economy and culture in an integrated manner, supported by democratic approach; in the case of this education, the utilised study methods and formats are inter-related, directed towards action and enhancing activity. Thus, ‘education for sustainable development’ relies on environmental education which is supplemented by economic and social sciences [5].

In addition to ‘education for sustainable development’, the terms ‘nature education’ (out-door education) and ‘environmental education’ are being used in spoken language and printed matters. ‘Nature education’ (out-door education) is the narrowest of the three above-mentioned terms. ‘Nature education’ has to guarantee the knowledge and understanding of nature and the fact that the human being is a part of a large integral whole. The orientation is targeted towards immediate experiencing of nature. This type of education establishes a basis for cognitive interest and respect for nature and the creation of environmental perception. ‘Environmental education’, however, is a wider notion, used for shaping environmental awareness, behavioural and consumption-related habits, with attention paid to global processes and trends [3].

In connection with the rapid development of society, there is a need to learn constantly and also do this outside the school walls. Out-of-school learning is referred to as non-formal education. On one hand, non-formal education provides an opportunity to obtain knowledge, on the other hand, it is also an instrument to introduce novel methods into educational life. Non-formal education should generate a whole integrity so as to inter-connect what has been studied at school in different subjects [5].

The aim of this paper is to devise a programme that would support the provision of both formal as well as non-formal environmental education in the Lake Peipsi region. The basis for devising this programme comprises documents regarding educational policy in the Republic of Estonia and the currently valid programmes supporting environmental education. In order to get an overview of the problems, opportunities and resources, an “open room discussion” was organised by two NGO-s, Peipsi Center for Transboundary Cooperation (CTC) and the Association of Estonian School Forests, on 11-12<sup>th</sup> December 2004. This discussion has been elaborated further during various thematic seminars and round-table disputes.

## **2. Strategies and legislation supporting environmental education in Estonia**

The promotion of education for sustainable development proceeds from the strategy Sustainable Estonia 21, approved by the Riigikogu (Parliament) on September 14, 2005. Sustainable Estonia 21 focuses on the development of the state and society up until 2030, with an aim to unite the success requirements, proceeding from global competition, with the principles of sustainable development and the preservation of Estonian traditional values. The strategy pays a lot of attention to the role of education in moulding a sustainable society, i.e. to education for sustainable development. Pursuant to this education, curricula have to enable the development of skills in order to notice and predict problems, set objectives and implement solutions, and also to enhance general intelligence. Methodologically, this means education which is inter-disciplinary and

relies on value judgements in the centre of which is respect towards oneself and others, including the future generations [6]. The same principles are also supported by educational strategies “Learning-Estonia” and “Lifelong learning”.

One of the most influential documents, regarding the implementation of the above-mentioned strategies, is the “National curriculum for basic schools and gymnasiums (upper secondary schools)” (2002), in which the environment and sustainable development have been defined as a compulsory and permeating subject matter. In addition, a document was completed in spring 2005, in cooperation with the Ministry of Education and Research and the Ministry of the Environment, listing the prerequisites with regard to formal education for sustainable development, determining the priorities and activity directions for environmental education for the forthcoming years. Pursuant to this document, education for sustainable development has the following goals:

1. Education for sustainable development is valued in society.
2. Estonia organises the possibilities for obtaining education for sustainable development (incl. environmental and nature education) in a manner which is in accordance with assumed international obligations, Estonia’s strategies and legislation.
3. Each age group has an opportunity to obtain necessary information regarding environmental education and to develop skills, attitudes and behavioural norms necessary for establishing a sustainable lifestyle.
4. The environment and sustainable development is a requisite component for all levels of education [4].

Aiming at the achievement of these goals, the following measures have been outlined in this document: (1) compilation of a national programme regarding education for sustainable development, incl. environmental and nature education; (2) development of support centres for environmental education; (3) provision of recommendations for working groups compiling national curricula, in order to ensure education for sustainable development, and for educational institutions in order to implement the principles of the

curriculum and to stipulate environmental goals in the development plan; (4) compilation of a national action plan for education for sustainable development (together with a financial analysis) for the period 2007-2013 [4].

The plan for the promotion of non-formal education for sustainable development was compiled in Estonia in 2005, by REC-Estonia Foundation. According to this document, the aim of non-formal education is to raise the capability of learners to influence their own life arrangement with an objective to participate in the development of society. In order to achieve this aim, it is necessary to create new learning opportunities (time, money) and to guarantee the dissemination of information with regard to learning opportunities; to motivate people to obtain knowledge and increase the professionalism of trainers in passing on their knowledge. In compliance with the plan for the promotion of non-formal education, the action should take place in the following domains: (1) compilation of necessary strategic documents; (2) furthering of knowledge and skills, moulding of competence in the sector of education; (3) organisation of follow-up training; (4) compilation of methodological and study materials; (5) furthering of research and development activities [5].

### **3. An overview of organisations providing environmental education in the Lake Peipsi region**

General education schools in the region have a long-term tradition of high level environmental education. Training on the environment and sustainable development in schools is usually project-based, taking place as extra-curricula work.

For the provision of non-formal education, there a number of different training centres, operating on course-based principles. These centres are, for instance, folk universities, open universities, e-universities and different study circles at libraries, associations and community centres. The most popular courses are the ones for studying languages, art

and culture, and also entrepreneurship and computer skills. Environmental education is being supported by the national network of non-formal education, comprising nature houses, nature schools/centres, museums, botanical gardens, the zoo and animal parks and also the movement of school forests. Likewise, the role of the media, in the provision of non-formal education, should not be underestimated.

Besides the network of general education schools, the more important providers of non-formal education for sustainable development and environmental education, in the vicinity of Lake Peipsi, are the following state organisations: National Examination and Qualification Centre (REKK); State Forest Management Centre (RMK); network of protected areas; Environmental Information Centre (ITK) at the Ministry of the Environment; Estonian Youth Work Centre; Tartu Environmental Education Centre; Tartu Nature House; Botanical Garden of the University of Tartu; Elistvere Animal Park; Estonian Museum of Natural History; Museum of Zoology of the University of Tartu and other museums. This list is definitely not exhaustive.

In addition to the above-mentioned centres which co-ordinate national and international environmental projects for schoolchildren, there are abundant non-profit associations and foundations organising projects and events supporting environmental education and education for sustainable development. Non-governmental associations are one of the groups of such organisations, the more well-known of these being the Union of Biology and Geography Teachers; Association of Estonian Biology Teachers; Estonian School Forest Association; Estonian Green Movement; Keep the Estonian Sea Tidy; Association of the Forest Youth; Studio Viridis Nature Education; NGO Ökokratt; Peipsi Center for Transboundary Cooperation; Estonian Fund for Nature; REC-Estonia and Tiger Leap. The majority of these non-governmental organisations have been operating for more than 10 years [3].

Thus, it is possible to conclude that the number of actors dealing with the education for sustainable development (incl. nature and environmental education), within the system of formal as well as non-formal education, is relatively large, however, only a few of them deal with the subject matter on a regular basis.



#### **4. Outcomes of the open-room discussion “How to learn everything in nature?”**

The seminar “How to learn everything in nature?” was convened with an aim to obtain information, from the specialists who provide environmental education, as to the situation regarding the education for sustainable development, about the possibilities and the need for resources in order to get rid of the current bottlenecks. Topics for discussion were raised by the participants. The most important issues were as follows:

1. The situation in environmental education through the eyes of teachers./ Are local, national and international environmental (nature) projects simply the teachers' private business?/ How to elaborate project-based learning into a systematic one?
2. What kind of assistance do teachers need from outside the school, in order to implement nature education?
3. Cooperation partners for schools – museums, the zoo, botanical gardens, centres of protected areas.
4. The environment and the Estonian media – journalism as the provider of nature education.

Regarding the subject matter “The situation in environmental education through the eyes of the teacher”, the following problems were highlighted: up until today, environmental education is still project-based and a “private business” for the teacher as there is no state support, neither financial nor moral. There is yet no training system for teachers with necessary education. As a solution, the participants suggested that money, in the form of targeted financing, could be allocated from the 2006 budget for the promotion of nature and environmental education, training and acknowledgement of teachers and the creation of the system of support centres (in order to enhance study-work).

Regarding the topic “What kind of help do teachers need...”, the following ideas were pointed out: today's children need assistance in understanding the environment as an

ethical value and they should be taught this by way of using the means that the children do understand. Currently, teaching is not pertinent and up-to-date for the students. According to teachers, the efficacy of study work would increase if the classes were smaller and the teacher had an assistant teacher to help him or her. It is also necessary to review the curriculum and the methodology for the evaluation of teachers. Teachers do need time and assistance in devising a new teaching methodology.

In the course of the discussion “Cooperation partners for schools”, the following problems, regarding the development of out-of-school study work, were highlighted: the curriculum is too tight, making it impossible to cancel lessons and, instead of this, visit a museum, protected area, etc. Teachers lack information as to where and what kind of exhibitions, related to their work, are currently available. Paying for bus rentals and museum tickets is also a problem. As a solution, suggestions were made to organise mobile exhibitions in schools, to develop protected areas so that they would help the teachers; in addition, a proposal was made that within the curricula, one day should be foreseen for study trips.

The media as one of the potential cooperation partners for schools has currently focused its attention on finding out the political issues and the coverage of shocking topics. Quality Internet sites, newspapers and journals, dealing with the environmental issues do indeed exist at the present moment, however, the media has a great role in promoting the ideology of sustainable development – thematic information could be included in commercials and advertisements, news and also children’s programmes.

Altogether, the discussion involved 17 subject matters, in the course of which, problems were raised and possible solutions were offered, aiming at the enhancement of education for sustainable development both in formal and non-formal education systems. In conclusion, the participants were of the opinion that the main problem in this field are as follows: lack of qualified teachers and assistant teachers, lack of appropriate and up-to-date study methodology and materials on education for sustainable development (incl. nature and environmental education), the weakness of support centres for out-of-

school/extra-curricula learning and the project-based nature regarding the development of study work, as this does not guarantee efficiency. The most important conclusion referred to the fact that the ideas of sustainable development as well as environmental education in general are not valued in Estonia. A great potential, in order to improve the situation, would be the enhancement of professional, co-ordinated cooperation between different support centres, (e.g. protected areas, national parks, museums, animal parks and botanical gardens, etc.) and educational institutions. While reviewing the curricula, attention should be paid to the fact that out-of-school learning pre-necessitates both time and money.

#### **5. Future activities by the Peipsi CTC, in order to promote education for sustainable development and environmental education**

On the basis of the above-mentioned problems and conclusions, Peipsi Center for Transboundary Cooperation has made a decision to continue with the development of its activities in promoting and enhancing education for sustainable development (incl. nature and the environment). In the near future, plans have been made to apply for resources from the EU and other funds in order to further elaborate education for sustainable development. As for the present moment, applications have been submitted to funds, aiming at supporting the following:

1. provision of study materials necessary for the work of support centres, incl. the protected areas;
2. provision of professional and pedagogical in-service training for nature education employees of protected areas;
3. training for tour-guides and tourism managers (incl. trip managers);
4. acquisition of equipment, necessary for the promotion of nature education, enabling the pupils to stay in nature and participate in several-days-long programmes of practical nature education;
5. raising the competence of journalists in dealing with nature-related issues.

Regarding the future, plans have been made to apply for finances in order to create a system of support centres regarding education for sustainable development; to organise mobile exhibitions in schools and to contribute to the elaboration of a new teaching methodology.

## References

1. Educational Policies and Plans [http://portal.unesco.org/education/en/ev.php-URL\\_ID=8369&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/education/en/ev.php-URL_ID=8369&URL_DO=DO_TOPIC&URL_SECTION=201.html) 13.08.2005
2. Haga Declaration <http://www.baltic21.org/?a,219> 25.09.2005
3. Kristian, R. (2005) EESTI SÄÄSTVAT ARENGUT TOETAVA HARIDUSE (SH LOODUSHARIDUSE JA KESKKONNAHARIDUSE) KONTSEPTSIOONI TAUSTAINFO ANALÜÜS. Tallinn, (in the press)?
4. Puura, I. (koostaja) (2005) EV säästvat arengut toetava hariduse kontseptsioon. Eesti Vabariigi Haridus- ja Teadusministeerium, Eesti Vabariigi Keskkonnaministeerium, Tartu
5. REC-Estonia (2005) Säästvat arengut toetava mitteformaalhariduse edendamise kava Eestis. Tallinn, REC-Estonia
6. Säästva arengu strateegia – Säästev Eesti 21. <http://www.envir.ee/2847> 10.10.2005