

**REPORT**  
**ON IMPLEMENTATION OF THE UNECE STRATEGY FOR**  
**EDUCATION FOR SUSTAINABLE DEVELOPMENT<sup>1</sup>**

**SUBMITTED BY BULGARIA**

**POLICY, REGULATORY AND OPERATIONAL MEASURES AT SUPPORT ESD**  
**IN REPUBLIC OF BULGARIA**

An important priority of the Government of the Republic of Bulgaria is the development of a truly responsible and positive attitude towards the environment. It is an important aspect of our efforts to achieve sustainable social and economic development. Environmental culture gives people and communities the opportunity to take part in decision-making related to their living environment, thus contributing to a see-through governance. In addition, while helping people to understand the influence their behavior and activities have on environment, this culture supports the development of a socially responsible sustainable society which really does care for environment.

Therefore raising people's awareness of the importance of our attitude and responsibility to environment, considering our and our descendants' future is an important aspect of Bulgarian SD policy. The Bulgarian Government has signed the Convention on environment information access, justice and participation in environment decision-making (Aarhus Convention, 1998). The principles of environmental education (EE) are an integral and inseparable part of the National Environment Protection Strategy and its Action Plan 2000-2006, the National Biodiversity Conservation Plan and the National Climate Change Action Plan. Fully aware of the importance of close coordination of all efforts regarding SD, including information access, the Strategy has been translated and can be found on the MES website. A working body between the Ministry of Environment and Water and the Ministry of Education and Science has been established, chaired by deputy minister Ekaterina Vitkova as well as a joint deputy minister level sustainable development board, which is to develop National Sustainable Development Strategy. One of its chapters will be devoted to the strategic aims and measures to achieve sustainable development and will dwell on steps to strengthening and supporting ESD.

Answering the necessity of equal coverage of social, economic and environmental issues and the need for both students and teachers, as well as adults to get aware of and actively participate in SD, an educational platform including ESD strategy and curriculum was worked out. It reflects also issues of ethics and ethic tolerance in an interactive approach to education, encouraging the development of critical thinking and decision making skills, leading to effective life-long learning.

In 2004 a memorandum for collaboration between the Ministry of Education and Science (MES) and the Ministry of Environment and Water (MoEW) was signed.

As of 2005 an ESD support Program is in effect. It serves as a basis for developing national and regional ESD strategies. *The Program* takes into consideration all national and international documents and agreements concerning environment and ESD. It is meant to

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<sup>1</sup> This document was not formally edited

facilitate the application of the basic guidelines of the ESD Strategy of the European Economic Committee of the UN. *The Program* views ESD in terms of Environmental education (EE) and Nature conservation education (NCE). It allows every interested party to perform activities for ESD development on local, regional and national scale. Its main purpose is to support and encourage ESD in formal, informal, and non-formal education, as a means of creating life-long learning skills, too.

## **MEASURES TO PROMOTE SD THROUGH FORMAL, NON-FORMAL AND INFORMAL LEARNING**

SD issues are part and parcel of Bulgarian textbook contents and school syllabus State Educational Requirements (SER). Environmental Education emphasizes the ecological laws that determine the ecological balance and guarantee man's healthy way of life, as well as one's personal and social responsibilities to abiding by these laws. ESD emphasizes the importance of the relationship between nature and culture. Nature Protection Education focuses on conserving the natural environment. Though not introduced as a separate subject in Bulgarian curricula, SD issues are studied through integrated themes in different relevant subjects on all school levels, which is registered even in the very names of the compulsory subjects: grades 1st to 4th - through Bulgarian Studies, Man and Society, Man and Nature, World Studies; in secondary education ESD issues are differentiated in Biology and *Health Education*, Chemistry and *Environment Protection*, Geography and Economics, Physics and Astronomy, Philosophy and *Democratic Citizenship*. Thus within their compulsory studies students not only acquire knowledge and awareness as to key topics of SD through various approaches but also develop their skills and competences in this sphere through presentations and field-work projects which are part of the teaching methodology of these subjects.

Depending on students' choice and school priorities students have a broad range of optional subjects, among which those treating environmental and social issues take a leading position.

A broad spectrum of opportunities has been ensured as extracurricular and out-of-school activities. Thus, for example, the traditional in Bulgaria Green Schools - an out-of-school week, usually in the country when students, along with their classes get involved in more practical environmental field projects. A flexible framework is provided for each separate school to adapt ESD issues to its priorities, specific needs and circumstances.

In vocational education the opportunities for ESD also have several aspects. Depending on the specific activities in various professions a compulsory content is included, which cultivates knowledge and skills for protecting environment and discusses the ways for reducing the harmful effects of technological processes on air, water, soil, human life and health.

## **SOME EXAMPLES OF JOINT MES - MoEW PROJECTS**

### ***To a Better Environment with Floopy Campaign***

The project aims at raising public awareness as to the importance of environment protection and the formation of environment protection-oriented mentality since early childhood to be developed and enriched all through the educational process.

The first stage of the campaign involved kindergarten children and 1<sup>st</sup> form pupils. More than 250 kindergartens and 200 schools from the capital and the country took part and 1200 educational toolkits were given out teaching correct attitude to the surrounding world.

The second stage was aimed at 8 to 13-year-old students, including two types of educational toolkits, correspondingly for 2<sup>nd</sup> to 4<sup>th</sup> form and for 5<sup>th</sup> to 6<sup>th</sup> form students. Over 400 sets were distributed among schools.

### **“Green Packs”**

The project aims to develop an educational manual of 34 lesson plans, CD-ROM on 22 environment protection and development topics, ‘Find the Best Solution’ – an interactive game with 22 SD case studies, a 3-hour videotape with 32 video films and clips.

All materials are structured into 22 educational topics, grouped in 5 main groups: environment components, environment dangers, human activity and natural environment, global environment challenges, values and natural environment.

The manual was distributed among about 1000 schools and about 1200 teachers were trained.

### ***Some joint projects of MES, MoEW and civic organizations***

Among the most active organizations with which national and regional scale projects are carried out are: Bulgarian Union for Bird Protection, Bulgarian Biodiversity Foundation, Regional Ecological Center – Sofia, Open Education Center Foundation, Center 21 Foundation – Varna, Central Balkans National Park, Rila National Park etc.

In 2004-2005 MES and MoEW, together with ‘Priroda nazaem’ society and ‘TIME – ecoprojects’ Foundation:

- organized and financed 26 school ESD projects on competition bases;
- organized two teacher training seminars for ESD program development and implementation;
- developed a teacher training program for ESD program implementation;
- carried out three teacher training seminars for the Program and supporting material trial;
- developed toolkit materials for 1<sup>st</sup> to 4<sup>th</sup> form teachers and students;
- two National conferences on ESD issues and ways of promoting good teacher and school practices.

### ***“Environmental Portable Classroom”***

The overall objective of the project is to promote the EU environmental principles, policy and values in Bulgaria.

The specific objectives are:

- To compile an innovative, interactive environmental education toolkit with information on the EU environmental principles, policies, values and requirements to the children and youth in Bulgaria;
- To raise the awareness of at least 10,000 children and young people (school age) in

Bulgaria on environment and sustainable development issues and the importance of environmental protection for the wellbeing of Bulgaria's citizens as part of an enlarged EU;

- To promote the EU accession idea and the cultural diversity of the EU member and candidate states among the general public in at least 9 cities.

The Target groups of the project are:

- Schoolchildren aged 10-16 years in at least 9 Bulgarian towns
- Teachers in at least 9 Bulgarian towns
- School councils in at least 20 schools
- The general public through involving both teachers and parents in various activities to challenge their competitiveness, creativity and initiative. The experience will educate them in new ethical norms, values and attitudes towards the protection of environment and finding ways for sustainable economic development in harmony with nature: alternative tourism, ecological agriculture, environment-friendly production, etc.

The project is devised also to touch and affect parents and teachers too. Through engaging the children in different activities requiring also the participation of their teachers and parents and through the large publicity of the activities in this project we hope to reach the adult population in the country as well.

***“Environmental education (EE) and Education for sustainable development (ESD) in primary schools in Bulgaria” project***

The project aims:

- to raise the national capacity for ESD to such an extent that the Bulgarian teaching community will be able to spread knowledge and experience gained in pilot activities. The broadband aim of this project is to create a sustainable capacity for efficient initial ESD on primary school level in the Bulgarian formal school system. During their primary education, children develop their most important personal criteria and values, which are a basis for their further school education;
- to elaborate a National EE Strategy, corresponding to the educational reform, the national policy and the provisions of the UNECE Strategy for Education in Sustainable Development;
- to create a capacity for providing primary school teachers qualification in order to allow them to develop personal skills in EE and ESD;

Project results:

- *“Program to support the education for sustainable development in Bulgaria”* an overall framework on environmental education and education for sustainable development;
- *“Time for a new world”* (Infopack for primary school teacher training; poster);
- *“From concept to context”* (Training pack for educators);
- *“The world around us”* (Educational classroom materials for module “Environment” for 1st to 4th grades);
- Interactive web site on [www.ekoobrazovanie.net](http://www.ekoobrazovanie.net) with opportunities for exchange of information, ideas and lesson plans among teaching professionals;

- Small school grants program – 25 financed school initiatives aiming to stimulate teachers and schools to develop innovative and creative teaching approaches to and methods for ESD.

### ***Improving the access to environmental education of children with disabilities***

Within sustainability education, apart from the content of what is taught important, just as important is the way it is learnt, or the process.

Throughout the EU and the accession countries, environmental education centers have been the leaders in developing innovative approaches to, providing effective education for sustainability. Centers turn out to provide learning that encourages personal development more easily than schools, and, most importantly, they can focus on practical environmental projects with local communities and work outside the classroom. These experiences are not always available in school context.

However, access by young people with disabilities to such centers is restricted for two reasons:

Most Centers lack appropriate education facilities and resources designed for young people with disabilities, like, for example, Braille learning materials for visually impaired young people. Few centers have teachers who are experienced with working with young people with disabilities.

The overall aim of the project is to increase the quality of environmental education for young people with disabilities to allow them to play an active part as citizens. The specific objectives of the project are to:

- increase the access opportunities of young people with disabilities to effective education for sustainability;
- develop innovative teaching and learning approaches to sustainability education appropriate for young people with disabilities;
- build the capacity of teachers in environmental education centers to work with young people with disabilities;
- raise the awareness and understanding of those without disabilities of the potential of people with disabilities as active citizens;
- enhance the integration of young people with disabilities into mainstream education;
- enhance the vocational training opportunities in education and conservation or resource management for young people with disabilities. In each country the project partners are well networked with environmental education organisations and centers able to take the resources and ideas and implement them. This is one of the strengths of the project.

### ***“Supporting the development of nature conservation education in Bulgaria”***

This project aims to develop Strategy for NCE; program for teachers training; teaching and educational materials for NCE; and a NCE network.

The project will be managed by “TIME”. The educational materials will be tested in pilot schools in the North-East of Bulgaria.

The main goals of the Project are to support and improve the quality of NCE in Bulgaria. These goals will contribute for the protection of the environment and biodiversity in Bulgaria.

The specific goals of the project are:

- to develop a good understanding and perception for NCE in the context of sustainable development in Bulgaria;
- to create opportunities for all stakeholders and decision makers, lecturers and teachers to improve the quality of NCE;
- to develop teaching materials and intellectual basis for effective NCE in the schools;
- the project envisages NCE as a cross curriculum subject integrated in a number of school subjects.

The project team worked in 4 groups:

- group 1- the development of a Framework NCE document, which will be presented for approval of MoES and MoEW in Bulgaria.
- group 2- development of a module for teachers training on NCE and for organization of trainings for teachers.
- 3.group 3- development of NCE educational materials for schools.
- group 4- development of a network for NCE and support of the informational knot for environmental education of the Bulgarian

#### **MEASURES TAKEN TO EQUIP EDUCATORS WITH THE COMPETENCE TO INCLUDE SD IN THEIR TEACHING**

Depending on the specific activities in various professions and specializations, a compulsory content is included, which:

- cultivates knowledge and skills for environment protection;
- discusses the possibilities for reducing the harmful effects of technological processes on air, water, soil, human life and health, such as: radiation, vibrations, noise etc.

There is a special course “Ecology and Environment Protection”, which is part of the “Ecology” profession. In a five- or six-year course of study, students acquire professional competencies, i.e. knowledge, skills and personal skills, which ensure a successful realization in a number of professional fields. At their job positions, they use these skills for analysis of air, water and soil, as well as for controlling waste materials and stages of production processes.

Opportunities for career in ESD – there are three DIQTs, providing teacher courses on various aspects of environment, as well as for acquiring a qualification degree;

A newly set up National Training Institute for School Principals and Directors

#### **MEASURES TAKEN TO PROMOTE RESEARCH ON AND DEVELOPMENT OF ESD**

Seminars, conferences, workshops

Just one example: ‘Natural Sciences and the Challenges of the 21<sup>st</sup> Century’, Yambol, October 2006, with the participation of MES and Regional Inspectorates of Education experts, school and university teachers, observatory and planetarium centers

## **CHALLENGES AND OBSTACLES IN THE IMPLEMENTATION OF THE STRATEGY**

The opportunities for developing NCE and EE under a decentralized educational system depends strongly upon school's educational policy and priorities, as well as the motivation of the institutions in charge on local and regional scale.

Organizing extracurricular EE depends on the interests and needs of students, the level of professional qualification and skills of teachers, as well as information and technical materials availability in schools.

The analysis of Bulgarian experience shows that the opportunities of expanding NCE and EE through freely selected courses are limited. Exceptions are the schools where there is a long-term practice and experience in this field. Special emphasis has to be put on subjects involving demographic stress on resource use, new technologies for energy production, global ecological problems, industrial accidents, biological monitoring, ecological conflicts etc.

Major challenges to deal with are:

- Insufficient training of teachers, including for work with disabled people;
- Insufficient educational materials for effective ESD in Bulgarian;
- Insufficient competence of the school management bodies for developing their own policy, including policy for improving the school environment;
- Lack of free market in the field of teacher training;
- Frequent staff changes in the field of education;
- Limited funding for educational projects;
- Slow changes in public attitudes and consumer models.

Assistance needed to improve implementation mainly to support:

- Development of ESD school programs based on the interdisciplinary approach.
- methodology for developing programs for life-long learning
- Development of educational materials on ESD based on the use of interactive methods and ICT.
- Supporting schools for developing their own programs and projects in the field of SD, according to the local specifics.
- Broader promotion of activities related to development and implementation of SD projects.
- Development of outdoor ESD programs (e.g. during field trips, Green Schools etc.).
- Setting up networks for ESD information exchange.
- Encouraging the public to participate in the decision-making process for development of ESD programs and projects on local scale.
- Support for educational service centers for children's spare time.