

## **REPORT BY SERBIA**

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With respect to the outcomes of the Sixth Ministerial Conference “Environment for Europe”, held in Belgrade in October 2007, Ministry of Environmental Protection, in cooperation with the Ministry of Education and other relevant stakeholders, has initiated preparation of the First Framework Action Plan related to Education for Sustainable Development.

As stated in the UNECE Strategy on ESD, education for sustainable development has been developed by broadening the concept of environmental education, which has increasingly addressed a wide range of development subjects. Also, education for sustainable development, as a process, has just recently been initiated in developing countries, while environmental education was still not implemented in a satisfactory level. This has been recognized in the Joint Ministerial Statement on Education for Sustainable Development, as well as in the Regional Ministerial Statement of the SEE Ministers on Education for Sustainable Development, both adopted in Belgrade in October 2007.

With this respect, Minister of Environmental Protection has established Task Force for preparation of the First Framework Action Plan for Environmental Education for Sustainable Development. Content of the document refers to both, environmental and sustainable development education, while at the same time, emphasizing environment as essential component of sustainable development (especially taking into account crucial role of sustainable use and protection of natural resources).

Basis for preparation of the Action Plan are reflected in the following international agreements and documents:

- Proceedings of the Johannesburg summit on SD;
- “Education for All”, Dakar Framework of Action, 2002;
- Declaration from the Fifth Ministerial Conference held in Kiev “EfE-2003”;
- Declaration from the Sixth Ministerial Conference held in Belgrade “EfE 2007”;
- “Joint Ministerial Statement on Education for Sustainable Development” adopted in Belgrade “EfE 2007”;

National legal and strategic framework:

- Law on Environmental Protection (Official Gazette of the RS no. 135/04);
- National Strategy for Sustainable Development (draft);
- National Environmental Strategy (draft);

- National Strategy for Sustainable Use of Natural Resources and Goods (draft);
- National Education Development Strategy;
- Other sectoral strategic documents (energy, waste, agriculture, etc.);
- Strategy for Economic Development;

Environmental Education for Sustainable Development (EESD) is an imperative of our times. It is a prerequisite for the achievement of sustainable development. It is an important tool for efficient management, democratic and quality decision-making. EESD enables individuals, groups and communities to judge in favor of environment and sustainable development based on their critical thinking. This kind of education requires integration of knowledge from all relevant sectors (environment, economy, society) with a special emphasis on applying this knowledge in order to provide all citizens with better quality of living. Hence its other name is „Education for Life and Survival“.

AP can neither include nor replace all activities of numerous stakeholders, from the national to the local level, from state authorities to the local government, professional associations and other organizations, formal, informal, extracurricular education, economy, private sector, NGO, mass media, etc.

#### Basic goal of the Action Plan

In accordance with the above mentioned starting ground, the main objective of AP is to create better living conditions for today and future generations by preparing the society in general to accept new philosophies of living, ecological ethics, as well as the concept of sustainable development and its integration into all aspects of life and work, that is, the adoption of sustainable lifestyles, values, building of social capital, creation of social and cultural identities, and reaching the necessary level of economic development.

#### Specific goals of the Action Plan

- Effective implementation of EESD with regulatory, operational and political support both on the national and the local level.
- Educated Serbian population on the issue of sustainable development through formal and non-formal education, personal and professional improvement and lifelong learning.
- The administrative capacities built for the purpose of EESD implementation (an educational system and competent state authorities).
- Creating professional and technical conditions for the implementation of EESD through raising the teaching staff competence for introducing EESD into school and extracurricular activities as well as providing the necessary and adequate teaching tools and resources.

- Institutionally strengthened local self-government and greater competence of their employees and entities designated for environmental protection and sustainable development in local governments.
- Competence and unity of civil sector in their involvement in EESD.
- Improved cooperation in the field of EESD at all levels, and the collaboration with all stakeholders of the UNECE region.

There is a set of concrete activities proposed by the Action Plan. Activities are divided into 5 chapters:

#### 1. Performance review

Referring to preparation of review analytical documents on the state of affairs, as well as to inclusion of EESD into national education reforms.

#### 2. Capacity Building

Considering development of institutional capacities of relevant state and local administration, as well as raising awareness and improving professional skills among decision makers at all levels of the government.

#### 3. Information and Communication System Development

Including creation of a web portal on EESD with the involvement of all relevant stakeholders. This chapter also refers to recommendations for the integration of EESD principles into the work of existent education centers.

#### 4. Incentives and Promotional Activities and Measures

Containing information about support to education, awareness raising and promotion activities undertaken by NGOs, Universities, Business and other interested counterparts. There are also references regarding support to high school and university students with respect to their professional improvement in environment and SD issues. References are also made with respect to support for preparation of relevant didactic material as well as for EESD related activities of NGOs and businesses.

#### 5. Development of Program Activities and Recommendations

Setting up standards for teachers, students, curricula, education material and advanced training programs. This chapter deals with support to establishment of different networks of thematic education centers, eco-schools and professional improvement of journalists and various other professions. Special attention has been given to education in the field of climate change and environment & health.



## ANNEX II<sup>1</sup>

### **State of affairs in regular schooling system with respect to environmental education and education for sustainable development**

#### *Primary schools*

The curricula and textbooks, from the first to the sixth grade of the reformed primary school, contain some objectives and principles of environment education and sustainable development education. EE approach /goals and contents/, has been adopted through the school subjects “The world around us” und “Nature and society”, as well as Civic and Health education. From the fifth grade environmental education approach is present in “Technology and informatics”, /goals and contents/, arts/goals/ and Civic education/ goals and contents/.<sup>2[1]</sup>

Starting with the school year 2003/4., **optional subject has been implemented** for the first five grades of elementary schools, and it is also planned for this subject to exist in the sixth grade, as well.

7th and 8th classes of primary schools are not reformed. At 7th class biology curriculum consists two parts: ecology- first semester and environmental protection- second semester.

During the training of primary school teacher, organized by Institute of nature protection, (Belgrade, 2003), has done an inquiry concerning EE. The results are:

66,6 % of participants consider that they have much more possibilities to realize EE during extra-curriculum activities than within class room programs.

#### *Secondary schools*

The results of research of the high-school education very clearly indicate the fact that the subject matter on the protection of the environment is insufficiently incorporated into the teaching contents of a number of the high-school education subjects.

Environmental protection related issues have been incorporated into the school subjects such as biology, chemistry, ecology and environmental protection, disinfection and pest/ rodent control, etc.<sup>3[2]</sup>

By analysis of curricula and syllabuses it has been found out that all the professions at the 3rd level, i.e. form (grade), in the area of protection and improvement of the environment have the subject “Ecology and protection of the environment” with two thematic entities, which are:

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<sup>1</sup> Based on the „Research on environmental and sustainable development education in the Republic of Serbia“, Ms. Gordana Brun, expert on the project „Preparation of the Action Plan for EESD“.

<sup>2[1]</sup> Unfortunately, in the subjects such as native language, mathematics, history there are no such contents or EE approach. It should be pointed out, that native language and mathematics are represented by a significant number of lecture hours, so that it would not be difficult to include environmentally relevant texts or numerical examples.

<sup>3[2]</sup> Current secondary schools (more than 300 000 students).

- the fundamental notions and principles of ecology, and
- protection and improvement of the environment.

In the general educational curriculum of grammar schools, environment is taught within the subjects of biology, chemistry, geography, physics (all four years) and in the subjects such as philosophy, sociology, constitution and civil rights etc. There are also other, more complex approaches in secondary professional schools.

Within the general education subjects (15 in total) it is presented through the subject 'biology with environmental science', and inter-disciplinary environmental contents studying production technologies and standards in environmental protection and management of by-products and waste are introduced into programs of other subjects.

Apart from the vocational profile of environmental sanitary technician, which has been introduced in the nursing schools, there **is a new profile titled environmental technician** in the schools providing education in the field of chemistry, non-metals and graphic industry.

In higher professional schools with experimental classes, that started their work according to new innovated programs, subjects on ecology have gained very important place. Besides that, these subjects have been updated in accordance with the same subjects thought in previous period. For example, in the ecology program for bank officer profile, among other there are following goals:

- learning about biodiversity and ecological and economic relevance of biodiversity protection;
- obtaining knowledge for understanding, formulating, analyzing and solving ecological problems;
- development of competences for simple researches of ecological processes and phenomena;

In the manual for program implementation, it has been recommended to, among other things, use the internet, organize educational workshops, find case studies, obtain data from environmental monitoring institutions etc.

#### *Strategy for the development of vocational education and training in Serbia*

The government of the Republic of Serbia has adopted the "Strategy for the development of vocational education and training in Serbia" in December 2006. This document stems from the reform goals defined in following strategic documents: National Strategy for EU Accession, Poverty Reduction Strategy, National Employment Strategy, National Action Plan for Children etc.).

In this Strategy it has been stated that further reform process of vocational education and training should include definition of educational profiles and occupations in order to adjust them to economic reality and the principles of sustainable development

Mission and vision of vocational education is directed towards the achievement of sustainable development. According to this document, organization of education, teaching and learning in vocational education and training should be in accordance with the concept of sustainable development. Also, it is envisaged that establishment of the national nomenclature of occupations must be based, among other criteria, on its orientation towards sustainable development.

The key knowledge, skills and competences leading young people as well as adults to employment include, among other things, the awareness of the need for environmental protection and for achieving sustainable development.

This strategy envisages the existence of Social-economic Council of the Republic of Serbia, as a competent organizational framework/ including government members, representative employers' associations and representative unions/, as well as the existence of Council for vocational education and training, which, among other assignments, takes part in the implementation of the sustainable development concept into education.

### *University*

At the faculties and colleges of higher education there is a large diversity of curricula and syllabuses, however, based upon insight into the pedagogic documentation of a number of faculties, the environmental contents are only partly represented.

Therefore it is necessary, in addition to the introduction of the environmental principle into the process of education and upbringing, from the pre- school to the university, also to introduce new subjects at the faculties where there are no contents in the areas of ecology and protection of the environment.

Teacher training faculties in Serbia were founded in 1993.( Belgrade, Sombor, Jagodina, Uzice, Vranje). The sciences like biology, physics and chemistry are studied within the frameworks of the interdisciplinary seminar Nature and Society during one year study program (one semester nature sciences and the other humane sciences). It depends of the professors point of view whether environmental protection approach would be presented.

Out of the other faculties of the Belgrade University, at 24 faculties, in the new syllabuses of the undergraduate studies, ten have included special subjects in this area, viz. the subjects in which these contents are significantly represented. There is a total of 17 such subjects, out of which 12 compulsory ones and 5 at a student's choice. A great number of faculties (mainly nature sciences) have introduced environmental and sustainable development issues in programs of graduate studies.

## ANNEX III

### *The Green Pack - Serbia*

The Green Pack, a multi-medium environmental education curriculum kit to teach children about environmental protection and sustainable development, has been initiated for the Republic of Serbia. It is primarily intended for primary school teachers and their students. Overall project is initiated for the period 2007-2009 and it will include development and production of 1300 Green Packs. Ministry of Environmental Protection has provided full legal, strategic and expert support to the REC<sup>4</sup> activities related to preparation of the Green Pack. Donor of the project is the Ministry of Development Cooperation of The Kingdom of Netherlands. Donor support will enable extension of production and distribution of 2.200 Green Packs as well as training for 3.500 teachers. The Green Pack's interactive and multi-media presentation makes it a lively source of information for anyone interested in environmental challenges.

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<sup>4</sup> REC – Regional Environmental Center for Central and Eastern Europe.

## *ANNEX IV – Proposed activities*

### *Reaffirming the outcomes of the Sixth Ministerial Conference „Environment for Europe“*

#### *Joint SEE Ministerial Statement on Education for Sustainable Development*

In light of implementation of the decisions and recommendations made in the Statement certain regional scale activities should be developed. One of the initial steps at regional level might be establishment of a communication-information and experience sharing tool such as web portal or similar. This tool could serve as a resource center where teachers, decision makers, students, businesses, NGOs etc. might find useful information and share experiences on ESD and environmental education issues. One of the activities might be initiation of cross-border education programs related to certain, already on-going, common cooperation activities between countries (namely joint management of a protected area etc.). There should also be a comprehensive training program on sustainable development for decision makers from SEE region (such as the Course for Sustainable Development for state officials, organized by the REC). This course represents very practical teaching and motivation tool for developing good governance on SD in the region.

Countries should also make additional efforts to further implement decisions made at the Conference and initiate activities with respect to the Joint SEE Ministerial Statement.

All of these activities require financial resources (which should be raised on both, national and international level) and, moreover, engagement, motivation and commitment of state officials from entire region.