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IMPLEMENTATION OF THE UNECE STRATEGY FOR EDUCATION FOR SUSTAINABLE DEVELOPMENT

NEEDS FOR THE IMPLEMENTATION OF THE UNECE STRATEGY FOR EDUCATION FOR SUSTAINABLE DEVELOPMENT[1]

Note by the secretariat

INTRODUCTION

1. The UNECE Steering Committee on Education for Sustainable Development (hereinafter the Committee) considered, at its second session (ECE/CEP/AC.13/2006/3), the possibility of developing an assistance programme to enhance implementation of the UNECE Strategy for Education for Sustainable Development (ESD). The Committee welcomed the idea of an assistance programme in principle and agreed that it would present an important opportunity to enhance experiences and provide a "UN Decade of ESD roadmap on cooperation" for the UNECE region. The Committee decided to reflect this idea in the ministerial statement and to link it with the future workplan. It mandated the secretariat to undertake a survey of UNECE Governments' specific needs regarding the implementing ESD, in addition to those already mentioned in the Strategy and those identified by the South-Eastern Europe (SEE) and Eastern Europe, Caucasus and Central Asia (EECCA) subregional workshops[2]. This list would provide a

[1] This document was submitted without an agenda item for the Sixth Ministerial Conference "Environment for Europe", to be held in Belgrade, from 10 to 12 October 2007. The agenda of the meeting was not yet ready at the time of the submission of this document.

[2] For information on the subregional workshops, see http://www.unece.org/env/esd/WorkshSEE.htm and http://www.unece.org/env/esd/WorkshEECCA.htm

basis for a background document to be presented in Belgrade for information and used thereafter as the basis of a workplan for the period beyond 2007. The workplan would be discussed by the Steering Committee at its third session.

2. The present document was prepared after a consultation held by the secretariat on country-specific needs for the implementation of ESD. It presents an initial overview of the responses received before 1 June 2007. Responses were compared and integrated with those provided by countries under Issues 8 and 9 of the national reports[3] on the implementation of the Strategy for ESD. Needs were considered in relation to both the Strategy and the subregional context.

3. The first section of this document refers to the six pillars of the UNECE Strategy for ESD. The following section describes needs for the implementation of the strategy in three subregions: Western and Central Europe and North America, SEE, and EECCA. The annex to this document lists country-specific needs for the implementation of the UNECE Strategy for ESD as submitted to the secretariat along with needs communicated under Issues 8 and 9 of the national implementation reports.

I. OBJECTIVES OF THE UNECE STRATEGY FOR EDUCATION FOR SUSTAINABLE DEVELOPMENT

4. The overall goal of the Strategy is rather ambitious: to encourage countries to incorporate ESD into their formal education systems, in all relevant subjects, and into non-formal and informal education. The Strategy suggests establishing a partnership mechanism involving the various ministries and agencies to coordinate implementation. It supports multi-stakeholder participation, with an important role for non-governmental organizations (NGOs), trade unions and various interested communities, including communities of indigenous people and the media, among others.

5. The UNECE Strategy for ESD[4] aims to:

(a) Ensure that policy, regulatory and operational frameworks support ESD, inter alia, by:
  (i) Including ESD in policy, legislation, operational frameworks and curricula;
  (ii) Integrating sustainable development (SD) principles into study programmes;
  (iii) Improving the provision and management of education facilities towards SD;
  (iv) Strengthening the connection between the natural, economic, political and social sciences;
  (v) Stimulating interdepartmental and multi-stakeholder cooperation.

(b) Promote SD through formal, non-formal and informal learning, inter alia, by:
  (i) Offering SD-related learning opportunities in continuing education for professionals;
  (ii) Encouraging and support community-based SD awareness-raising activities;

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[3] The reports submitted by Governments are available at: http://www.unece.org/env/esd/Implement.Gov.htm
[4] See document CEP/AC.13/2005/3/Rev.1.

(iii) Promoting cooperation with NGOs and among formal educational institutions;
(iv) Encouraging the media to make SD issues accessible to the general public.

(c) Develop the necessary competence in the education sector to engage in ESD, inter alia, by:
(i) Stimulating competence development for staff in the education system;
(ii) Developing criteria for validating professional competence in ESD;
(iii) Introducing and developing management systems for SD in formal educational institutions and non-formal educational settings;
(iv) Including SD-related issues in training and retraining programmes for educators;
(v) Encouraging educators, including those involved in non-formal and informal education, to share experiences.

(d) Ensure that adequate tools and materials for ESD are accessible, inter alia, by:
(i) Stimulating the development and production of materials for educators, learners and researchers;
(ii) Encouraging the development and use of electronic, audio, video and multimedia resources and visual aids;
(iii) Facilitating access by electronic means, including the Internet, to resources and information relevant to ESD;
(iv) Ensuring coherence between materials for formal, non-formal and informal learning;
(v) Developing relevant dissemination strategies.

(e) Promote research on and development of ESD, inter alia, on:
(i) The content of ESD and teaching and learning methods;
(ii) The economic effects of and incentives for ESD;
(iii) Ways of including aspects of SD and their local context in different subjects;
(iv) Indicators and evaluation instruments for ESD;
(v) The results of research and examples of good practices.

(f) Strengthen cooperation on ESD at all levels within the UNECE region, inter alia, by:
(i) Strengthening regional and subregional alliances and networks;
(ii) Encouraging twinning programmes, bilateral cooperation and partnerships;
(iii) Using existing international legally binding instruments;
(iv) Encouraging participation by NGOs and other major groups;
(v) Encouraging and coordinating international events for awareness-raising of and sharing experience on SD;
(vi) Using the “Environment for Europe” process as a partnership platform;
(vii) Using the Committee on Environmental Policy as a body to review progress in the Strategy’s implementation.

II. SUBREGIONAL SPECIFIC NEEDS FOR THE IMPLEMENTATION OF EDUCATION FOR SUSTAINABLE DEVELOPMENT

A. Western and Central Europe and North America

6. The secretariat received responses from the following countries: Canada, the Czech Republic, Denmark, Estonia, Hungary, Latvia, Lithuania, Malta, the Netherlands, Norway, Slovakia, Slovenia and Sweden. Most countries had already taken significant steps towards the implementation of the UNECE Strategy for ESD, but some reported that including ESD into existing structures and plans required longer than initially planned. Unlike other countries, Malta needed to focus on other educational priorities and would require financial assistance to implement the Strategy. After the initial implementation of the Strategy, countries experienced difficulties in coordinating ESD activities among responsible institutions. Canada, for example, needed to raise the priority level of ESD among other programmes and themes. In the Netherlands, lack of coordination hampered further implementation of the Strategy.

7. The promotion of ESD through formal, informal and non-formal education required, in many cases, that key ESD themes be further clarified to avoid overlapping. The inclusion of ESD into formal education was more difficult in countries were the educational system was decentralized; promoting ESD in these countries required additional coordination between central and decentralized institutions and schools or higher education institutions.

8. Sweden reported a number of obstacles and challenges in the integration of ESD and SD into formal higher education, among others, there was no clear definition of SD and there was a debate about if and to what extent SD should be addressed through thematic courses rather than through the promotion of new approaches and attitude. Overall, it was taking a long time to get acceptance for integration of SD and the interest for ESD among teachers and students varied. Sweden, after having introduced ESD in formal higher education curricula, needed to develop methodologies to evaluate the effectiveness of chosen methods. For some countries, it was essential to develop a holistic approach to teaching models. Hungary needed to implement a "whole school-whole community" approach, one that supported the holistic base of ESD, integrating learning in school and in informal and non-formal learning as a key theme. Lithuania needed to develop guidance on the integration of sustainable development education into informal adult education. Most countries needed to raise awareness to create a sense of urgency and priority of SD and ESD issues among policymakers and other stakeholders, incl. business leaders and the media. Raising awareness of decision makers on the importance of institutional or financial promotion of ESD was key in Slovakia.

9. In order to equip educators with the competence to include SD in their teaching, needs ranged from the introduction of in-service training for teachers, the creation of educational programmes and didactical tools for ESD in primary and secondary schools, to development of methods to evaluate students' knowledge of SD. To improve access to ESD existing tools countries needed to establish networks for sharing experience and good practice in ESD. Canada needed to establish means for the identification and sharing of existing ESD resources, materials and tools for professionals in different sectors (e.g., education, public service, the media). Latvia needed to create a core set of training materials on ESD available for formal, non-formal and informal educational activities. Slovenia needed scientific and educational publications

specifically on ESD. Sweden decided to request public research funders to provide further support to interdisciplinary research, particularly on SD and ESD. Also, it would modify criteria for science centre grants, so that the centres could improve their ability to support learning for SD.

10. International cooperation was mainly needed to share good practices and develop research in ESD related fields: the Czech Republic expressed the need for, inter alia, broader international and regional cooperation – exchanges of experiences; regional conferences; exchanges of international good practice; twinning programmes, etc. – on key ESD topics. The Czech Republic suggested further promoting ESD among relevant European Commission directorates (e.g. DG Environment, DG Education and Culture) and underlined the importance of improving synergies with parallel key educational processes in the EU, such as the "Bologna process" for higher education and the "lifelong learning programme". Sweden would consider establishing a country-based institute to act as a node in an international network for ESD.

11. Challenges and obstacles in many countries (e.g. Norway) were the lack of research in ESD issues and the lack of competencies in teacher's education along with the difficulty of establishing interdisciplinary cooperation among teachers and professors. The Netherlands was facing challenges in embedding ESD into national formal study curricula.

B. South-Eastern Europe

12. The secretariat received inputs from the following countries: Bulgaria[5], Croatia, Romania[5], Serbia and The former Yugoslav Republic of Macedonia. These countries had already introduced or are introducing the UNECE Strategy for ESD. In this regard, they needed to improve the organizational capacity of national steering committees or stakeholder forums responsible for the translation of the strategy into national implementation plans. After the introduction of the Strategy, all countries needed to raise the awareness of civil society, the public and teachers. Other common reported needs were the development of educational programmes and educational materials and tools for various sectors including central/local authorities, government officials and professionals in relevant sectors (environment, agriculture, health, small and medium-sized enterprises, etc.). In the majority these countries, the development of "train-the-trainers" programmes on ESD was key for the successful introduction of ESD into formal and informal education. Also, countries needed to enhance capacity so that relevant educational materials would become available on the Internet, including interactive programmes. In Bulgaria, a holistic school approach to ESD themes should be developed; nevertheless, schools should adapt their own programmes on SD according to local needs. Outdoor ESD programmes and service centres for children's extracurricular time should be built. The priority for The former Yugoslav Republic of Macedonia was to develop administrative capacity in the education sector and a culture for the respect of law.

13. International cooperation was needed to implement pilot projects on ESD and to maintain networks of expertise and for sharing ESD good practices. Major reported obstacles were the

[5] Bulgaria and Romania joined the European Union in January 2007.

lack of financial resources, the lack of training for professionals in the education sector, and the lack of internal coordination among authorities dealing with ESD.

C. Eastern Europe, Caucasus and Central Asia

14. The secretariat received information from the following countries: Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Moldova and Uzbekistan. As with the SEE subregion, these countries had already introduced or were introducing the UNECE Strategy for ESD. In this regard, their needs ranged from preparing a national strategy for ESD (Moldova) to introducing ESD into educational plans and curricula (Kazakhstan). Common reported needs were: the promotion of education for SD for the different groups of stakeholders (e.g. civil servants, state officials, teachers, lecturers, the media, lawyers) through information campaigns targeted to key groups, including schools, universities, NGOs, decision-makers, etc. In order to equip educators with the competence to include SD into their teaching, most countries needed training and re-training of trainers along with upgrading the skills of specialists in sustainable development. To this end, Kazakhstan would, for example, promote grants in the field of ESD to allow wider access to education and re-education. To ensure that adequate tools and materials for ESD were accessible, countries needed to develop specific educational programmes, tools and materials for professionals in different sectors. In particular, they envisaged developing communication and information-sharing tools. Kazakhstan needed to improve material and technical resources for higher education institutions and the introduction of modern educational technologies. The translation of training materials and tools on ESD into national languages was a widely reported need.

15. International cooperation was necessary to promote research on ESD, to develop international train-the-trainers programmes, to implement new result-oriented projects on ESD and to exchange experience among regional expert networks. Kazakhstan would develop international cooperation to establish regional scientific research projects/facilities on ESD as well as to organize regional scientific and practical conferences. Kyrgyzstan needed technical and financial support to create a system of quality evaluation/improvement for its education system.

Annex

COUNTRY SPECIFIC NEEDS FOR THE IMPLEMENTATION OF THE UNECE STRATEGY FOR EDUCATION FOR SUSTAINABLE DEVELOPMENT

AZERBAIJAN

Challenges and obstacles in the implementation of the strategy

The main challenges in the realization of the Strategy are the lack of experienced specialists and personnel, the lack of suitable literature in the national language, and the lack of knowledgeable specialists with international experience.

Assistance needed to improve implementation

It will be useful for us to be involved with the international training program, to meet with international trainers and them participate in the training program which will be organized in our country. Other needs are to translate foreign literatures to our language and to disseminate these literatures among students and citizens, to become familiar with international experience. For these as well as research in this field we need to attract finance support from Governments and NGOs.

BULGARIA

Challenges and obstacles in the implementation of the strategy

The opportunities for developing Nature Conservation Education (NCE) and Environmental Education (EE) under a decentralized educational system depend a great deal upon schools' educational policy and priorities, as well as the motivation of the institutions in charge at the local and regional levels. Organizing extracurricular EE depends on the interests and needs of students, the level of professional qualification and skills of teachers, as well as on the availability of information and technical materials in schools.

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 long-term practice and experience in this field. Special emphasis must be given to 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 face with are:

1. Insufficient training of teachers, including for work with disabled people;
2. Insufficient educational materials for effective ESD in Bulgarian;
3. Insufficient competence of the school management bodies for developing their own policy, including policy for improving the school environment;
4. Lack of a free market in the field of teacher training;
5. Frequent staff changes in the field of education;

6. Limited funding for educational projects;
7. Slow changes in public attitudes and consumer models;

Assistance is needed to improve implementation:

1. Development of ESD school programs based on the interdisciplinary approach;
2. Methodology for developing programmes for lifelong learning;
3. Development of educational materials on ESD based on the use of interactive methods and ICT;
4. Supporting schools for developing their own programmes and projects in the field of SD, according to the local specifics;
5. Broader promotion of activities related to development and implementation of SD projects;
6. Development of outdoor ESD programmes (e.g. during field trips, Green Schools, etc.);
7. Setting up networks for ESD information exchange;
8. Encouraging the public to participate in the decision-making process for development of ESD programmes and projects on local scale;
9. Support for educational service centres for children's spare time.

Bulgaria reported priority needs are:

1. As detailed as possible information on international ESD good practices in the following areas:

(a) Within life-long learning process, particularly for non-formal education and adults, aimed at establishing a truly stable civic society:

(i) Development of school, local, regional, national and international ESD projects and their promotion;

(ii) Development of outdoor ESD programmes and service centers for children's extracurricular time.

(b) Application of holistic school approach in discussing ESD topics and planning activities for the development and improvement of specific competences in all the members of school communities.

2. Development of didactic materials based on the interdisciplinary approach, implementing interactive technologies, and modern computer and communication technologies for:

(a) Formal education;
(b) Non-formal education;
(c) Education for children with special educational needs.

CANADA

Canada submitted the following two priority needs:

1. Establishing means for the identification and sharing of existing ESD resources, materials and tools for professionals in different sectors (e.g. teachers, public servants, the media);

2. Prioritization of ESD at all levels of government and sectors of society (private, public and civil society) through policy, operational frameworks, curriculum and a more focused and more explicit emphasis on teacher professional development related to ESD.

These have been identified through consultations with ministries of education, ministries of the environment, and networks of civil society.

CROATIA

Challenges and obstacles in the implementation of the strategy
There is no one national strategy document or regulation related to ESD, but this issue is covered by a number of sectoral strategy documents (see issue 1.2.1. in the national implementation report submitted by Croatia)[6]; coordination between institutions and government sectors is still a challenge, however; the initial steps have been taken; not enough knowledge and skills among educators.

Assistance needed to improve implementation
Consultation in producing National ESD strategy and implementation plans; educator/teacher training; education materials.

Croatia reported the following priorities:

1. Education on the SD for the different groups of stakeholders (civil servants and State officials, teachers, media etc.);
2. Development of specific education programmes and education tools and materials for professionals in different sectors;
3. Development of communication and information sharing tools;
4. Organization of programmes and seminars for media representatives;
5. Establishment of a multi-stakeholder forum.

[6] http://www.unece.org/env/esd/Implementation/reportsGov/pilot/Croatia.pdf

CYPRUS

Cyprus reported the following needs:

1. Development of specific educational programmes and tools as well as materials for teachers, administrators, and other stakeholders.
2. Introduction of ESD into the curriculum and development of new teaching approaches that should link formal and informal learning about ESD.
3. Dissemination of information and communication at the national and international levels.
4. Creation of communication channels amongst various professional groups in order to be confronted with various issues of sustainable development in a holistic way.
5. Development of research on ESD in various fields of education (e.g. students, programmes, teachers, tools).
6. Making funds and financial support available for implementing ESD at various levels of formal education – from pre-primary to vocational and tertiary – as well as informal and non-formal education.

CZECH REPUBLIC

The Czech Republic reported the following needs:

1. Promotion of the acceptance of ESD by European Union (EU) official bodies (DG Environment, DG Education and Culture) and promotion of approximation of ESD with parallel key educational processes in the EU, such as the Bologna process and the process of lifelong learning, etc.

2. Broad international (regional) cooperation – exchanges of experiences, regional conferences, exchanges of international good practice, twinning programmes, etc. – on the topics concerning:
   (a) Proper implementation of social and economic pillars into the ESD concept and programmes for different kind of target groups;
   (b) An ESD-like tool for an interdepartmental approach (cross-cutting issues) in tertiary education and in research work;
   (c) Getting ESD onto the political agenda, and searching for interconnections with the process of Local Agenda 21.

DENMARK

Denmark reported that its country-specific needs are:

1. Development of specific education programmes, didactic methods, and education tools and materials;
2. Development of a holistic approach of didactic models for teacher education and in-service training for teachers;

3. Improvement of the awareness of ESD in the mass media and at the political level as well nationally and in the EU;
4. Sharing experiences with other countries, e.g. via a common UNECE website with "best practice".

ESTONIA

Challenges and obstacles in the implementation of the strategy
In Estonia, the national conception for ESD is ready, but it hasn't been approved by the Government yet. We are now in a situation where the conception is ready, but has brought up several new issues in the society, such as the role in educational and environmental politics, financing mechanisms, impact on other fields of life, etc.

GEORGIA

Georgia's specific needs in respect to implementation of ESD are:

1. Education on SD for the different groups of stakeholders (e.g. civil servants, state officials, teachers, lecturers, media, lawyers);
2. Training of trainers to develop specific educational programmes and materials;
3. Development of specific education programmes and education tools and materials for professionals in different sectors;
4. Development of communication and information-sharing tools.

HUNGARY

Hungarian needs for implementation of ESD are:

1. Development and adoption of a strategy of ESD as part of or under the umbrella of the SD strategy of the country;
2. Creation of a sense of urgency, and priority, of SD and ESD issues among policymakers and other stakeholders, including business leaders;
3. Establishment of a coordinating body and/or mechanism for the ongoing, separately run programmes and for development of SD-related education tools and materials for professionals in different sectors;
4. Development of a "whole school-whole community' approach project that supports the holistic base of ESD, and integrating learning in school and in informal and non-formal learning as a key theme;
5. Raising the public awareness of SD and ESD, including their better communication in media.

KAZAKHSTAN

The situation analysis concerning ESD in the Republic of Kazakhstan has provided data from some officials about ESD, its aims and objectives, and information on the educational aspects of SD. The emerged needs are:

1. There is a need to promote educational materials for SD among those in education and the media, in particular to publish literature and posters, to organize seminars in regions, and to train teachers.

2. Practical scientific and research conferences at the regional level are necessary to solve this problem.

3. The lack of the necessary resources is holding back the process of integrating SD into educational system, especially in remote regions of the Republic.

4. Active branches are necessary to communicate with teaching staff, taking into account the territory of the State. These branches are needed to advance and examine educational issues for SD.

5. Accordingly, resources are necessary to implement these measures.

Challenges and obstacles in the implementation of the strategy

There is a certain amount of experience with the introduction of ecological education in the Republic of Kazakhstan; as a result of interaction between the various interested parties, development formation has taken root in an educational system. But additional financing is necessary. For informing the public and for education and training of the population, certain things are necessary: the preparation and retraining of teachers concerning SD; the publication of special literature, printed editions, posters, etc. by the media; regional seminars, workshops and in-service training for teachers; supplying educational institutions with the necessary quantity of textbooks; and grants for the wide propagation of ESD.

Assistance needed to improve implementation

Consultations with foreign and domestic experts are necessary for introduction of ESD into the education system of the Republic of Kazakhstan; as are additional financing for improving the technical base of high schools, introducing modern technologies, and supporting new projects aimed towards achieving concrete results. Priorities are:

1. Training, re-training and upgrading of specialists' skills in SD;
2. Introduction of SD issues in the education plans and curricula;
3. Encouragement for issuing and reproducing textbooks and methodological and educational materials on ESD;
4. Organization of conferences, workshops and training sessions for different target groups (members of parliament, civil servants, teachers, NGOs);
5. Consultations by foreign experts;

6. Improvement of the material and technical resources of the institutions of higher education; introduction of modern educational technologies; and introduction of new result-oriented projects on ESD;
7. Revitalization and introduction of national traditions in education at all levels.

KYRGYZSTAN

Challenges and obstacles in the implementation of the strategy

A coordination council on ESD has been created. It consists of heads and experts of the Ministries of Education and Environment and representatives of science, education and NGOs. A National Coordinator on ESD was appointed. With the National Conference "Education for Sustainable Development in Kyrgyzstan: estimation of the existing potential, prospect to the future" (18–19 October 2005), the process of work on the National Plan on ESD was started. The Strategy of public initiatives on eco-education for SD and the action plan for realization of the given strategy were developed by NGOs. Currently, work on integration of ESD ideas into the Law on Education of Kyrgyz Republic and Strategy of Country Development is being conducted.

In October 2006, Kyrgyzstan has acted as the host for the Fifth Anniversary Regional Environmental Centre for Central Asia Subregional Conference on ESD (Bishkek, 24–25 October). The text of the UNECE Strategy on ESD is at the stage of translation into the national language.

In November 2006, representatives from Kyrgyz Republic took part in seminar for the EECCA countries on ESD in Moscow. In 2006, Kyrgyzstan also applied to the United Nations University in Japan to create the Regional Center on ESD Expertise, and in December 2006 the application was approved. The pilot initiatives on integration of ESD principles into national educational programmes were started, including the joint Kyrgyz-British project aimed at developing an educational module on ESD and integrating it into curriculum of three high schools in the Kyrgyz Republic. It is also necessary to note the positive impact of the project on eco-education supported by the Ozone Center of the Kyrgyz Republic.

Since 2005, the network "Schools of Kyrgyzstan for biodiversity conservation and SD" has been functioning.

Assistance needed to improve implementation

Kyrgyzstan needs support for the preparation process of National Programme on ESD, in particular the implementation of an information campaign on ESD for interested parties, including decision-makers. Technical and financial support is also needed to create a system of evaluation/enhancement of the quality of education, which includes criteria concerning ESD, support of projects of governmental and public organizations in the field of ESD, support of scientific researches in the field of ESD and financial support for issuing teaching manuals on ESD developed in Kyrgyzstan. Exchange programmes of and the strengthening of interaction in the field of ESD with other regions and the countries are necessary. Consultations with foreign

specialists and experts with successful experience in the techniques of ESD teaching are also necessary.

Priorities in Kyrgyzstan are:

1. Preparing the National Strategy on ESD;
2. Finding support for issuing teaching manuals on ESD, developed in Kyrgyzstan;
3. Carrying out of information campaign on ESD for all key groups – including schools, universities, NGOs, decision-makers, etc.;
4. Providing institutional support of existing networks of schools and NGOs working on ESD, to strengthen their potential to realize ESD programmes.

LATVIA

Needs reported by Latvia are to:

1. Create a core set of training materials of ESD available for formal, non formal and informal educational activities;
2. Prioritize ESD issues in national and international policies;
3. Promote co-operation on ESD issues among various stakeholders: state institutions, municipalities, academic, public, private sectors and civil society;
4. Clarify ESD themes to avoid overlapping with such relevant issues as Environmental Education and Education for Sustainable Consumption;
5. Focus on ethical and philosophical values for ESD;
6. Continue an integration of ESD issues in the other sectors of education.

LITHUANIA

Lithuania reported the following needs regarding the implementation of ESD:

1. Good practice examples of how to integrate sustainable development topics into primary, secondary, vocational, and higher education curricula.
2. Guidance on the integration of sustainable development education into informal adult education.

MALTA

Challenges and obstacles in the implementation of the strategy

Although ESD is gradually but surely gaining importance in Malta, other priorities (including implementation of the EU *acquis communautaire*) result in ESD having to compete for scarce human and financial resources.

Assistance needed to improve implementation
Strong political commitment across the board, a greater stimulus at the EU level, and financial assistance would improve implementation.

MOLDOVA

Moldova reported the following needs:

1. Development of the National Strategy on ESD;
2. Elaboration of the Action Plan for implementation of the ESD National Strategy.

NETHERLANDS

Challenges and obstacles in the implementation of the strategy
1. Because the Dutch system provides schools with lots of individual choices to choose their own topics, top-down guidance is difficult. Although most schools do underline the importance of ESD, embedding it in the national curriculum is a challenge.
2. Coordination and overview of all the small initiatives is a weak point. A strategy is needed to bundle the different small initiatives.
3. Social criteria are hard to describe or translate into lessons or project plans. Technological and financial projects are easier and get priority, also because they are easier to measure and monitor. Planet and Profit issues overshadow the People-issues.

Assistance needed to improve implementation
International good practices, especially on the topics concerning:
1. Getting ESD on the political agenda, especially in the EU;
2. Creating a sense of urgency, especially for social (people) and economical (profit/prosperity) aspects of sustainability;
3. The move to a “whole-school approach” development of didactical models that support the holistic base of ESD and integrating learning in school and informal learning as key theme;
4. A structure of decision making in the EU that is more based on systematic thinking and on the integration of topics.

NORWAY

Challenges and obstacles in the implementation of the strategy
A strong policy framework exists in Norway calling for interdisciplinary values- and action-oriented ESD for all children. The Norwegian national curriculum guidelines for primary, lower and upper secondary schools contains a separate chapter on the environmentally aware human being, which stresses that the principles for ESD should be implemented in all Norwegian schools. However, insufficient annual financial support from central authorities is an obstacle to implementation.

Lack of research into ESD issues, lack of competencies in teacher education and interdisciplinary cooperation are challenges and obstacles related to the implementation of ESD in Norway.

ROMANIA

Romania's priority needs in respect to implementation of ESD are:

1. Public awareness programmes on key themes of SD in order to provide a better understanding of the links between social, economic and environmental issues in local and global contexts, including a time perspective (by involving the media, NGOs, etc);
2. Establishing a national coordination mechanism for implementing the National Strategy for Education for Sustainable Development;
3. Design and implementation of sustainable development education programmes, tools and materials for students, initial and in-service training for teachers and managers from educational sector (heads of schools, representatives of county school inspectorates, of training teachers house, of universities, of the Ministry of Education, Research and Youth);
4. Education on SD for civil servants from central/local authorities, State officials and professionals in different sectors (e.g. environment, agriculture, labour, health, construction, transport, tourism, small and medium-sized enterprises);
5. National/international networks to promote education for sustainable development and dissemination of good practices.

SERBIA

Priority needs for education for sustainable development in Serbia are:

1. Creation of critical mass-training of trainers;
2. Development and preparation of education materials for different target groups;
3. Development of twining programmes regarding ESD.

Challenges and obstacles in the implementation of the strategy

The number of activities for youth and citizens related to problems of environmental protection has been enhanced. Certain activities and events related to pollution, environmental protection, etc. have been increasingly covered by the media. There are a large number of school activities related to environmental protection. Ecological NGOs show a readiness and willingness to participate in environmental protection projects to be implemented in schools and to cooperate with teachers. Obstacles are the slow process of problems' solution because of complicated administrative procedures and the lack of financial sources.

Assistance needed to improve implementation

Financial support is needed for realization and implementation of various projects.

SLOVAKIA

Slovakia reported the following challenges and obstacles in the implementation of ESD:

Challenges and obstacles in the implementation of the strategy

1. Non-existence of instruments for implementation of ambitious theories and plans;
2. Low decision maker awareness of the importance of institutional or financial promotion of ESD;
3. Insufficiently applied partnership in the process;
4. Insufficient human resources at the governmental level designated to ESD;
5. Debate between the Ministry of Education and Ministry of Environment about the appointing the national focal point;
6. A certain formality in the process.

Assistance is needed regarding methodologies and best practice in areas of:

1. Securing political commitment, real support from authorities (politicians should show direction);
2. Securing access to financial resources for both the coordinating body as well as implementation, creating efficient, multi-sourced and transparent grant mechanisms fair to all applicants, which could promote particular points of ESD Action Plan;
3. Mapping existing practice in education in respect to key themes and learning outcomes;
4. Effective stakeholder involvement, especially at the local level;
5. Institutional performance (SD and ESD performance of learning institutions);
6. Reorienting education to ESD key themes and learning outcomes;
7. Creating of systematic instruments for implementation of Action Plan for ESD;
8. Legislation shouldn’t be against SD principles;
9. Sufficiently efficient and incorruptible control mechanisms.

SLOVENIA

Slovenia reported the following needs:

1. Sharing good practices between difference countries:
2. Creating international base for good practices of ESD project;
3. Creating opportunities for cooperation difference countries;
4. Creating education programmes and didactical tools for ESD in primary and secondary schools.

Challenges and obstacles in the implementation of the strategy
Since ESD was not very developed in Slovenia and was mainly connected to environmental issues, Slovenia is facing many challenges in implementing ESD. We are working on different projects that need to be linked up more successfully.

ESD is in Slovenia understood very broadly, more socially, ethnically and ethically. So issues like human rights, corporate social responsibility, urban development and environmental are addressed on all International Standard Classification of Education levels.

What do we have to do?
1. We have not finished the implementation plan and action plan for ESD yet.
2. We have to focus on the formal education system and we still have to work on non-formal and informal education.
3. We have to work on quality criteria and quality guidelines for ESD and for ESD-related teaching tools and materials (in addition, we have to work on mechanism for dissemination of ESD tools and materials).
4. Lack of evaluation of outcome with the UNECE Strategy: we have no information about postgraduate programmes and ESD.
5. We need scientific and educational publications specifically on ESD.

Assistance needed to improve implementation
We would like to cooperate in more international networks at governmental and research level, and share good practices.

SWEDEN

Challenges and obstacles in the implementation of the strategy
When it comes to financial aspects, there is no central money earmarked for ESD and the authorities, universities, etc. have their own budgets, sometimes with money that could be used for ESD. This money may be accessible to NGOs, school networks etc., and can be national or regional, sometimes fully open and sometimes available for a more selected audience. This creates several parallel and dynamic processes, but could probably be strengthened and more efficiently coordinated to create more synergies if a national coordination of some sort could be developed.

Sweden has taken an active part in international work in this area and has formulated a cohesive policy for just and sustainable global development and a national strategy for SD. Education has a prominent role in the national strategy and is a theme in the main features of global policy, social development and security. This engagement was, inter alia, manifested in the conference “Learning to change our world: International consultation on education for sustainable development, Gothenburg 2004”.

Some reports have been done in this area and among the results, one could particularly mention “Learning to Change our World” SOU 2004:104:

The overall assessment of pre-school, school and adult education shows that there is a great diversity of working methods and much variation between the different sectors. There are, however, indications that there is scope for broader implementation of the working methods we have highlighted as being key in ESD, that is to say working methods characterized by a high level of pupil participation and a democratic approach.

The reality-based learning demanded by education for sustainable development appears to be inadequate. Contacts with the local community have been few and far between, although it would appear that the reform of adult education in recent years has resulted in the strengthening of such contacts. Many Swedish schools have formed international connections, but these international efforts are, to a great extent, dependent on committed enthusiasts. International cooperation takes place largely within the EU and the Organisation for Economic Co-operation and Development (OECD) and only to a lesser degree with developing countries. However, exceptions do exit: within the non-formal and informal education, for example, most international cooperation is mainly with Africa and Latin America.

There appears to be scope for greater interdisciplinary cooperation. Interdisciplinary working methods appear to be most common in pre-school and the earlier years of compulsory school. In the higher levels of compulsory school and at the upper secondary school level, interdisciplinary cooperation is not so common. Many institutions have begun to focus on environmental issues and this has meant that important steps have been taken in ESD. However, the integration of the economic, social and environmental dimensions considered necessary has still not made itself felt on any wider front. Teachers are expressing uncertainty about how the SD perspective could be made more concrete in educational activities and teaching situations, and are seeking relevant in-service training.

The report shows that the systems of governance within the education sector provide good support for ESD in certain respects, but do not send sufficiently clear signals in others. For the most part, education sector provisions contain a potentially large scope for those who teach and for those who study in the different education systems to take an active part in the choice of content and working methods. The elements of these provisions that can be described as basic values highlight the values that are essential for SD, such as democracy, gender equality, respect for other people, and respect for the natural environment. The concept of SD is not highlighted in any of the provisions in the higher education sector. This is not the case in the sector of non-formal and informal education, where it explicitly focused on SD, not just on environment. When SD is addressed in statements of objectives for the school sector, it is from an environmental perspective. The necessary integration of economic, social and environmental dimensions is missing. A surfeit of objectives at many different levels creates problems in interpretation and priority-setting, and this appears to be one of the reasons that the leadership provided by documents such as curricula and syllabuses is often weak.

The resource distribution systems in the field of education are complicated. According to the report, it is essential to focus further studies on the opportunities they provide for ESD. It is particularly interesting to consider how quality enhancement can be more clearly linked to the distribution of resources, and which combinations of qualitative and quantitative criteria best support ESD

Phase II: please provide the updated information to indicate changes over time.
Higher Education:
National level

The concept of SD has generally focused on the ecological sustainability, but it is being widened to also include social, economic and even cultural dimensions. It is apparent that the revision of the Higher Education Act and the seminars have resulted in discussion about the possibilities and problems of integrating SD in higher education, and if and how it could be evaluated.
At the university level

The survey indicated that of the 28 universities that replied to the survey, 27 were aware of the revision of the Higher Education Act, 13 were aware of the UNECE strategy and 22 stated that they had started working with ESD. Even though the "vagueness" of the concepts of SD and ESD causes certain problems, the revision of the Higher Education Act, together with the national and university level activities, has started a process that is now starting to reach university administrations and courses and lectures where it had not previously been involved. It is finding its place on the agenda of universities and it is being acknowledged that the work for ESD needs to be a priority. Due to the complexity of the very concept of SD, it needs to be recognized that various approaches may be needed to allow different disciplinary perspectives and that it is bound to take some time. The centres that have been established provide inspiration, competence – and in some cases opportunities and legitimacy – for ESD, even in disciplinary faculties and courses outside the university hierarchy.

Surprises reported by universities

The universities reported that the policy for SD has mostly been received in a positive way, and some universities, especially those educating teachers and engineers, have taken the policy that all students must have SD in their education. According to the universities, students appreciate the courses of SD and realize the need of it when they get to analyse their own lifestyles. It is also noted that students are often more farsighted than lecturers.

Resources have been made available for the integration of SD and the classification of courses appear to have started an individual process for integration of SD among lecturers. SD is being included in learning objectives for all students. Discussion about SD has stimulated cooperation between education and research and across faculty boundaries.

Disappointments reported by universities

The universities brought up several different disappointments or challenges. They reported that the number of students registering for educational programmes, especially in engineering and natural sciences, is reducing, which causes economic constraints and fewer resources for development activities. It is also difficult to recruit students for interdisciplinary courses.
It takes a long time to gain acceptance for the integration of SD and interest for ESD among teachers and students varies at the same time as there is a lack of support from the management

and resources for ESD. Finally, there is a lack of interest among faculty in integrating SD, and the enthusiasm of the pioneers is not always appreciated amongst the old ideas and structures.

Problems and needs as expressed by universities

There is no clear definition of SD and there is debate about if and to what degree the content can/should be replaced by approach and attitude. This highlights the different traditions and approaches in different disciplines. It creates also a need to cooperate both within and outside the university and to exchange ideas and experiences between lecturers, which increases the requirements on individual lecturers. Another problem is that of assessing the students in an examination regarding their competence of SD. Future teachers are expected to have good knowledge and understanding of SD, since they will have to be able to teach it further to their students. The requirement to integrate several perspectives, for example equality and internationalization in university education is now including SD is also a problem. But the possibility of including different perspectives under the SD umbrella was also brought up. While the work with environmental management systems provides structure for the ESD, there is a risk of the work becoming mechanical and the requirement for a connection and consequences increases. It is difficult to make decisions about future activities for ESD due to lack of information about previous efforts. SD is seen especially by many representing the social sciences as a political buzzword and ESD as a political decision without any real life bearing. There is also an idea that the content of education as well as that of research must not be regulated by political decisions, and that they must be assessed within science.

Assistance needed to improve implementation

1. Instructions to agencies in field of education should be amended so that their activities promote ESD.
2. Dialogue on ESD between stakeholders within as well as outside the field of education needs to be developed and deepened.
3. Inquiries should be conducted to shed light on the importance of informal and non-formal learning for SD.
4. Public research funders should be asked to provide further support to interdisciplinary research, particularly on SD and ESD.
5. Basic training and in-service training for those engaged in teaching activities in the field of education should aim to strengthen active knowledge of SD and how education can promote SD.
6. The Education Act (1983:5500) will be amended to specify that education will promote socially, economically and environmentally SD. This means development to guarantee present and future generations a good environment, good health, economic and social welfare, and justice.
7. The Higher Education Act (1992:5434) will be amended to specify that activities will promote socially, economically and environmentally SD. This means development to guarantee present and future generations a good environment, good health, economic and social welfare, and justice.
8. The Decree on Government Subsidy for Liberal Adult Education (1993: 999), will be clarified so as to ensure that activities promote socially, economically and environmentally SD,

which means that present and future generations are guaranteed a good environment, good health, economic and social welfare and justice.
9. School curricula need to be reviewed so that they provide better support for ESD.
10. Appendix 2 to the Higher Education Ordinance (1993:100), the Degree Ordinance, should be reviewed with regard to SD knowledge becoming a requirement for the issue of a degree certificate.
11. The criteria for science centre grants should be reviewed so that the centres are better able to support learning of SD.
12. UNESCO should be invited to establish an institute in Sweden to act as a node in an international network for education for SD.
13. A long- term strategy action plan for work on ESD over the next 10 years should be established.
14. A pilot scheme should be established to provide opportunities for stakeholders in the school sector, the higher education sector, and liberal adult education to produce methods to permeate the education system with an SD perspective.

The Government should consider whether there is a need to set up a special proactive coordination body during he United Nations Decade of ESD.

This list was identified in the report “Learning to Change Our World” as assessments and proposals that need to be addressed. While some of them havealready been – for example, the Higher Education Act was amended in 2006 so that higher education institutions would promote SD in theirs activities in ways that ensures present and future generations a healthy and good environment, economic and social welfare, and justice – others remain to be further investigated and addressed.

Phase II: please provide the updated information to indicate changes over time.

Sweden has, even in an international perspective, been a driving force in defining and pushing the “environmental agenda” and development for a number of years. The 1992 Rio conference, with launch of the Agenda 21, meant a lot for the development of the concept of sustainable development. During the period 2002–2005, education was for the first time integrated in a more systematic way, and the Swedish Government was very active in the field of ESD, both nationally as internationally. This has resulted in a number of national and international processes and results. Since this past fall, we have had a new government, and they are currently in the process of defining its priorities.

THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Challenges and obstacles in the implementation of the strategy
Certain educational circumstances in The former Yugoslav Republic of Macedonia have entailed that ESD be delayed for “later”. The country is facing problems with enrolment at the primary school level, although education at this level is constitutionally compulsory. Another aspect is poor performance in certain internationally organized assessment activities, such as the OECD

testing for literacy, where students in The former Yugoslav Republic of Macedonia have shown a very low level of achievement.

Other weaknesses are the inadequacy of human as well as financial resources. The economic situation of the country is challenging and this is reflected widely in different areas, including the educational sphere.

Phase II: please provide the updated information to indicate changes over time

Two years ago, the Government started to identify the process of identifying priorities/ challenges for their annual activities. This, as well as the start for complex planning at the institutional level, can be identified as a step towards gradually overcoming the current unpleasant situation.

Phase III: Please provide the updated information to indicate changes over time.

Although there were some unsuccessful attempts, due to the inevitable processes for achieving the Millennium Development Goals in this area, and basically within the United Nations Decade of ESD in the forthcoming period, we expect that some improvements will be made.

Assistance needed to improve implementation
The Ministry of Education and Science each year receives serious assistance in the form of both financing and expertise, which generally goes to the educational area,. However, a lot of problems can be identified. Underdeveloped capacities of the employees in the Ministry, and some illegal activities, are some of these urgent issues. Developing administrative capacities and the respect for law are priorities for the forthcoming period.

Phase II: Please provide the updated information to indicate changes over time.

The processes for developing administrative capacities through the organization a training process was begun last year, but was unfortunately delayed due to disagreement on the priority issues and the lack of financing.

Assistance is needed also in the following areas:
1. Support for organization of the work of the National Steering Committee;
2. Promotion of public awareness of activities planned for ESD, especially through website development (this could be part of the official site of the Ministry of Education), and in this connection, making the most important documents available in public in Macedonian.

UZBEKISTAN

Uzbekistan reported the following needs for the implementation of ESD:

1. General luck of financial resources;
2. Information and educational campaign for general public;

3. Training and re-training of teachers;
4. Development and reproduction of the educational materials;
5. Organization of workshops and trainings at sub-national level;
6. Research, in particular in development of textbooks and visual educational means;
7. Development of education standards, plans and programmes;
8. Ensuring adequate quantity of textbooks, methodological and education materials in national languages, in particular in schools;
9. Consultations by foreign experts.

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