

Ministry of the Environment of the Slovak Republic
in cooperation with Ministry of Agriculture of the Slovak Republic
and the United Nations Development Programme / Global Environment Facility

CROSS CUTTING REPORT AND STRATEGIC ACTION PLAN PROPOSAL

**National Capacity Self-Assessment
related to environmental management
of global conventions**

June 2005

Implementation Agency:

Soil Science and Conservation Research Institute Bratislava

Project manager:

Ing. Danko J. Thalmeinerová, CSc.

Main Authors-developers:

Doc. RNDr. Mikuláš Huba, CSc., Doc. Ing. Stanislav Košina, CSc.(coordinator), Doc. RNDr. Mária Kozová, CSc., Dr. Tom Owen, PhD., Ing. Danko J. Thalmeinerová, CSc., RNDr. Martina Vagačová

Editor:

RNDr. Martina Vagačová

The results of the Thematic Assessment Reports are used in the Cross Cutting Report:

Authors of the Thematic Assessment Report on Needs of Capacity Development for the United Nations Framework Convention on Climate Change (2004):

Ing. Viera Fecková, PhD., Ing. Oľga Hauskrechtová (coordinator), Ing. Radovan Chrást, CSc., Ing. Zuzana Lieskovská, Doc. RNDr. Jozef Mindáš, PhD., Ing. Helena Princová, CSc. (editor), Ing. Janka Szemesová, PhD., Ing. Viera Šimkovicová, CSc., Ing. Peter Tomlein, CSc., Doc. RNDr. Dušan Závodský, CSc.

Authors of the Thematic Assessment Report on Needs of Capacity Development for the Convention on Biological Diversity (2005):

Mgr. Andrej Bača, Doc. Ing. Ján Brindza, CSc., Ing. Peter Brindza, RNDr. Ema Gojdičová, Ing. Zuzana Guziová (coordinator and editor), Ing. Roman Longauer, CSc., Prof. Ing. Július Novotný, CSc., Mgr. Zuzana Ohrádková, Ing. Július Oszlányi, CSc., RNDr. Ján Šeffer, PhD., RNDr. Peter Straka, PhD., Ing. Danko J. Thalmeinerová, CSc.

Authors of the Thematic Assessment Report on Needs of Capacity Development for the United Nations Convention to Combat Desertification and Soil Degradation (2004):

Ing. Radoslav Bujnovský, CSc. (coordinator and editor), Prof. Ing. Jaroslav Antal, DrSc., RNDr. Juraj Balkovič, CSc., Prof. RNDr. Pavol Bielek, DrSc., Prof. Ing. Eduard Bublinec, CSc., RNDr. Tomáš Cebecauer, CSc., Ing. Emil Fulajtár, CSc., Ing. Zuzana Gergeľová, Prof. Ing. Rudolf Holúbek, DrSc., Doc. RNDr. Mikuláš Huba, CSc., Doc. RNDr. Tatiana Hrnčiarová, CSc., Prof. Ing. Bohdan Juráni, CSc., Doc. Ing. Karol Kováč, CSc., Doc. Ing. Jozef Mindáš, CSc., Ing. Pavol Pavlenda, CSc., RNDr. Jaroslava Sobocká, CSc., Doc. RNDr. Bernard Šiška, CSc., Doc. Ing. Jaroslav Škvarenina, CSc., RNDr. Július Šútor, DrSc., Ing. Danko J. Thalmeinerová, CSc.

Project Director:

Ing. Ľubomír Žiak

Steering Committee:

RNDr. Ladislav Ambróš, DrSc., Mgr. Michal Deraj, Ing. Barbara Hellebrandtová, Ing. Vladimír Hudek, CSc., Doc. Ing. Rudolf Kropil, CSc., Ing. Ivan Mojík, Ing. Katarína Nováková, Doc. RNDr. Katarína Pavlíčková, CSc., Mgr. Daniel Pitoňák, Ing. Ladislav Ronchetti, RNDr. Peter Straka, PhD., Doc. Ing. Dezider Tóth, DrSc., Ing. Richard Vojna, Ing. Ľubomír Žiak

Project Board:

Prof. RNDr. Pavol Bielek, DrSc., Ing. Radoslav Bujnovský, CSc., Mgr. Michal Deraj, Ing. Gabriela Fischerová, Ing. Zuzana Guziová, Ing. Oľga Hauskrechtová, Doc. Ing. Stanislav Košina, CSc., Ing. Ivan Mojík, Mgr. Daniel Pitoňák, RNDr. Peter Straka, PhD, Ing. Danko J. Thalmeinerová, CSc., Ing. Ľubomír Žiak

This Report was issued thanks to a financial grant from the Global Environmental Facility (GEF) to the Ministry of Environment of the Slovak Republic and the Ministry of Agriculture of the Slovak Republic

Content

List of acronyms	5
Executive summary	7
1. Introduction	11
2. Methods	13
2.1. Methods	13
3. Background	17
3.1. National Framework	17
3.2 International Framework	19
3.3 Legal Framework	20
3.4 Summary of Background, Evaluation and Recommendations	22
4. Identification and assessment of capacities for common and cross cutting requirements	23
4.1 Definition of Common and Cross Cutting Rio Conventions Requirements	23
4.2 Identification and Assessment of Common and Cross Cutting Issues	23
4.2.1 Establishment of National Management Organizations	24
4.2.2 Support of Developing Countries	25
4.2.3 Monitoring of Rio Conventions Requirements	25
4.2.4 Exchange of Information	26
4.2.5 Interdisciplinary Science and Research	26
4.2.6 Public Access to Information and Public Awareness	27
4.2.7 Financing	29
5. Recommendations	33
6. The strategic action plan proposal	37
7. References	41

List of acronyms

BAT	Best Available Technique
CA	Civic Association
CBD	Convention on Biological Diversity
COP	Conference of the Parties
ČMS	Ciastkový monitorovací systém/Environmental Monitoring System
EAP	Environmental Action Plan
EC	European Commission
EIA	Environmental Impact Assessment
EU	European Union
FRI	Forest Research Institute in Zvolen
GEF	Global Environmental Facility
GI	Generic Indicator
GIS	Geographical Information System
HSU	Higher Superior Units
IA CE	Integrated Approach to the Country and Environment
IAEA	International Atomic Energy Agency
IPCC	Intergovernmental Panel on Climate Change
IPPC	Integrated Prevention and Pollution Control
IS	Integrated System
MoA SR	Ministry of Agriculture of SR
MoC&RD SR	Ministry of Construction and Regional Development of SR
MoD SR	Ministry of Defense of SR
MoFA SR	Ministry of Foreign Affairs of SR
MoE SR	Ministry of Environment of SR
MoEc SR	Ministry of Economy of SR
MoEd SR	Ministry of Education of SR
MoF SR	Ministry of Finance of SR
MoTPT SR	Ministry of Transport, Posts and Telecommunications of SR
NC SR	National Council of the Slovak republic
NCP	National Climate Program
NCSA	National Capacity-Self Assessment
NEAP	National Environmental Action Program
NEIS	National Emission Information System
NFP	National Focal Point
NGO	Non-governmental organization
NP	National Park
NSBP	National Strategy for Biodiversity Protection
ODA	Official Development Aid
OECD	Organization of Economic Cooperation and Development
OP	Operation Plan
OSCE	Organization for Security and Cooperation in Europe
PriF UK	Prírodovedecká fakulta UK/Faculty of Natural Science, Comenius University
REC	Regional Environmental Center
REZZO	Air Pollution Sources Emission Register
SARIO	Slovak Investment and Trade Development Agency
SAV	Slovenská akadémia vied/Slovak Academy of Sciences
SAŽP	Slovenská agentúra životného prostredia/Slovak Environmental Agency
SCPC	Slovak Cleaner Production Center
SD	Sustainable Development
SEA	Strategic Environmental Assessment
SEI	Slovak Environmental Inspection
SHMI	Slovak Hydrometeorological Institute
SISC	Sector Information System Concept
SOP	Sector Operation Plan

SOP SR	Štátna ochrana prírody SR/State Nature Protection Administration
SPU	Slovak University of Agriculture
SR	Slovak Republic
SSCRI	Soil Science and Conservation Research Institute
STU	Slovak Technical University
TU	Technical University
SWOT	Strengths, weakness, opportunities and threats
TANAP	Tatra National Park
TAR	Thematic Assessment Report
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Program
UNEP	United Nations Environmental Programme
UNFCCC	United Nations Framework Convention on Climate Change
WCP	World Climatic Programme
WMO	World Metrological Organization
WMRI	Water Management Research Institute

Executive summary

The UN Conference on the Environment and Development (UNCED) held in June 1992 in Rio de Janeiro resulted in the adoption of the Rio conventions; the Convention on Biological Diversity (CBD, 1992), the United Nations Framework Convention on Climate Change (UNFCCC, 1992) and the United Nations Convention to Combat Desertification in Those countries Experiencing Serious Droughts and/or Desertification, Particularly in Africa (UNCDD, 1994). These conventions are of great importance to the international global environment. However developing, and in some cases transition countries, have limited national capacity to effectively fulfill all of the obligations included in the Rio conventions.

In May 1999 the United Nations Development Programme (UNDP) and the Global Environmental Facility Council (GEF) launched the **Capacity Development Initiative**. This programme provides for a country based capacity self assessment for the implementation of the Rio conventions. The *National Capacity Self-Assessment (NCSA)* project in Slovakia was approved in January 2004.

The objective of the NCSA project is to determine priorities for additional capacity development in Slovakia in order to extend the current country capacity to meet the commitments of the Rio conventions. The NCSA project consisted of the following interrelated components:

- Thematic assessment of capacities for individual conventions (climate change, biodiversity, and desertification),
- Identification and assessment of cross cutting and common areas for the Rio conventions, with the goal to achieve the highest level of synergy in a capacity development,
- Strategic Action Plan proposal for the strengthening and development of capacities for effective implementation of the Rio conventions with an emphasis on the integrative elements.

The first phase of the NCSA project resulted in Thematic Assessment Reports for climate change, biodiversity and desertification that defined the basic conditions and recommendations for more effective convention implementation. The thematic assessments of the individual Rio conventions were designed to analyze the current status of capacities and abilities using a holistic approach applied to all levels of implementation. The Cross Cutting Report addresses cross cutting and common issues at the systemic, institutional, and individual levels. The Cross Cutting Working Group used the analysis and recommendations

from the thematic reports within a broader strategic analysis to provide an integrative framework for the implementation of the Rio conventions in Slovakia.

It is important to note that the NCSA project for Slovakia is the first opportunity to develop an overview of how global environmental responsibilities stemming from the 1992 Rio de Janeiro' Earth Summit are carried out at the national level. The timing of the project allowed for the recommendations to take advantage of a recent revitalization of the Slovak Government for Sustainable Development which provides an excellent platform for the implementation of the NCSA recommendations. The on-going implementation of the Rio conventions has also benefited from Slovakia's recent membership in the EU since many of the principles are embodied in the EU Directives which Slovakia has implemented.

Slovakia has a mature legislative, policy, programme and institutional framework on which to base the implementation of the Rio conventions. The current legislation is the same legislative framework which is place for all European Union countries that is the *Environmental Acquis*. The core Rio conventions principles are reflected in key government documents including the National Strategy for Sustainable Development. Rio conventions implementation is fully supported by specific strategies and plans including The National Biodiversity Strategy, National Reports on Climate Change, and the Implementation Strategy for the Kyoto Protocol. The only area without specific documentation is the UNCCD. However, there are no national documents specifically addressing the synergies among the Rio conventions. The NCSA analysis has shown that there are capacity gaps in the use of the potential of the academic and research community as well as the private and non-governmental sectors. Although there are many opportunities for international cooperation and there is substantial Slovak experience in the field, these opportunities could be better utilized. The low level of public awareness of the importance of the implementation of the Rio conventions is a particular concern. The analysis suggests that while Slovakia has an excellent existing base for the implementation of the Rio conventions there is the need of more coordinated and focused actions to ensure the effective use of research, improve the knowledge of managers and decision makers, and to provide more information and opportunities for the public to participate in the implementation process.

The Cross Cutting Report refers to the results of the detailed analysis of common and cross cutting issues in the individual thematic reports. Addressing these

issues will result in more effective implementation of the Rio conventions in Slovakia. The Cross Cutting Working Group applied the methodology tools of the UNDP and NCSA within a broadly based integrative approach to the analysis.

The methodology (**Chapter 2**) used in the Cross Cutting Report consists of four steps as follows:

- inputs- definition and analysis of the background situation for the implementation of the Rio conventions,
- identification and analysis of common and cross cutting needs in the Thematic Assessment Reports,
- selection of common and cross cutting priority needs for building and development of capacities for the Rio conventions implementation,
- development of recommendations.

The description of the background situation (**Chapter 3**) was used to highlight the high degree of consistency among the implementation requirements of the Rio conventions and the existing Slovak legislation framework, strategic, planning and programme documents. Gaps were also identified. Improving upon the existing framework could include the following:

- More effective monitoring mechanisms for the implementation of the laws relating to the Rio conventions
- Broader participation of the expert and science community in the implementation and development of the laws related to the requirements of the Rio conventions,
- Immediate implementation of the revitalized Governmental Council for Sustainable Development
- Application of sustainable development principles in the decision making process at all levels,
- Application of key strategic instruments in the decision making process (such as strategic environmental assessment),
- Increase in public awareness and involvement in the decision making process with respect to the requirements of the Rio conventions.

It is clear that providing effective support for implementation of the requirements of the Rio conventions needs to be evaluated within a broader context. The current narrow and specialized action plans although necessary for the individual conventions do not provide for longer term broadly based systemic effects.

The analysis and assessment of common and cross cutting areas of the Rio conventions (**Chapter 4**) provides for the identification of current needs to define a sustainable framework for future implementation.

The final section provides the identification of recommendations (**Chapter 5**) that:

- Relate to all three conventions being of common and cross cutting nature,
- Originate from the current capacity in Slovakia to ensure ease of implementation;
- Have significant impact on practical Rio conventions implementation.

The previously discussed analysis led to the development of the proposal for the Strategic Action Plan (**Chapter 6**).

The Strategic Action Plan proposal identifies the responsible implementation bodies, necessary tasks, financial resources and success indicators for each recommendation. The implementation of the proposed Strategic Action Plan will contribute to the creation of mechanisms for improvement of the implementation of the Rio conventions in Slovakia. The five following recommendation are contained in the Strategic Action Plan:

- Establishment of the Rio Convention Coordination Committee
- Integrated management training
- Public Awareness Programme
- Integrated Interdisciplinary Scientific Research
- Integration of Rio conventions priorities into the Slovak official development aid programme.

Establishment of the Rio Conventions Coordination Committee

The analysis showed that in spite of many common problems and the potential for synergy among the conventions, each is implemented independently. Also, some of the existing structures, particularly the National Focal Points, work in isolation are not used to their full potential. This suggests that an integrative approach would greatly strengthen the overall implementation of the Rio conventions. It would also provide the implementation of the Rio conventions greater visibility and priority in the Slovak Government system. Therefore, it is recommended that the Rio conventions Coordination Committee be established to clarify and strengthen the priority given to the implementation of the Rio conventions within the Government of Slovakia. It would also serve as a platform for implementation of the proposed Strategic Action Plan and ongoing monitoring of Rio conventions implementation activities and NCSA findings.

The establishment of the coordination committee should be within the revitalized Government Council for Sustainable Development. This will allow the committee to make recommendations and coordinate activities at the intersectoral level across government ministries to take advantage of the opportunities for synergies among the Rio conventions. The proposal for the Strategic Action Plan could be used as the initial agenda for the Committee.

Integrated management training

The analysis clearly identified the need for qualified managers to manage the complexity of the requirements of the Rio conventions. The current managers and supervisors are often appointed to their position on the base of their technical and scientific knowledge with no prior preparation for the management function.

The training focus, content and form need to be tailored to the work loads of the participants. The training should address practical problems of participating managers with the emphasis on the integrative approach. The target groups will include the following groups of managers:

- State environmental administration
- local governments
- Specialized institutions participating on Rio conventions implementation.

The Coordination Committee will take the initial role in facilitating the preparation of training including human and financial resources recommendations.

Public Awareness Programme

Public participation is a key aspect of the implementation of the Rio conventions. The Thematic Assessment Reports referred to the existence of limited access to information as well as the need to increase public awareness. However, while many government organizations and NGOs are active in promoting public awareness, a focal point for integrative programming is missing. The solution would be the development of a targeted programme to increase public awareness about Rio conventions issues. The programme could be implemented through the existing governmental and non-governmental organizations.

The programme should consist of information campaigns for the civic associations, communities, schools and other members of the general public. It should be focused on explanation of Rio conventions issues and the reciprocal interactions among the conventions. The internet should be used as a tool in a creative way to improve programme success.

The coordination committee will initiate the public awareness programme. Regional and local governments will be included. The programme will be structured so that key components can be implemented into the formal educational system.

The Coordination Committee will coordinate work on the programme development including calculation and identification of financial needs.

Integrated Interdisciplinary Scientific Research

The implementation of the Rio conventions requires the support of interdisciplinary research involving both social, and natural sciences. Implementation will have positive impact not only on meeting the requirements of the Rio conventions, but on strengthening interdisciplinary research generally in the Slovak Republic. At the same time, it will open new opportunities for participation of researchers on international projects including EU sponsored projects requiring interdisciplinary approaches. A useful starting point for the development of integrated research could be the outcomes of the *Technology Foresight Project* [10]. The need for integrated research has to be reflected in the update of State Programme for Science and Research.

The Coordination Committee will act as the initial recipient for projects addressing cross cutting research issues of the Rio conventions. The Committee will subsequently submit those as an initiative to the particular committees for science and technology or to international donors as appropriate.

Integration of Rio Conventions priorities into the Slovak Official Development Aid Programme

In ratifying the Rio conventions, Slovakia agreed to support development aid to provide for the transfer of technologies and know how to less developed countries. However, the transfer of knowledge with respect to commitments of the Rio conventions has not been formally reflected in the development of ODA. It is logical for the ODA commitment in the Rio conventions to be reflected in the development Slovak ODA programme and projects. The Coordination Committee will initiate the discussion with Slovak ODA officials the use of the Rio conventions commitments as priority activities to be funded.

1. Introduction

The documents adopted at the United Nations Conference on Environment and Development (June 1992, Rio de Janeiro) is of global importance. Issues relating to the strengthening and development of overall capacities involved in global environmental management have become a concern for all countries and became key concepts in the three Agreements referred to as the **Rio conventions**. They include the **Convention on Biological Diversity** (CBD, 1992), **United Nations Framework Convention on Climate Change** (UNFCCC, 1992), and **United Nations Convention to Combat Desertification in Those countries Experiencing Serious Droughts and/or Desertification, Particularly in Africa** (UNCDD) which was completed in 1994. The principles contained in the documents from the Rio Conference are of great importance to the management of global issues. However, developing countries and in some cases countries in transition have limited national capacity to effectively fulfill all of the obligations.

The Rio conventions address significant global issues of protection of biodiversity, soil, air and water caused by a broad range of interrelated environmental, social, cultural and economic factors. The objective of the Rio conventions is to implement the key principles of sustainable development in all aspects of daily life worldwide. Solutions are therefore not only thematic, sectoral or time limited; they also require actions which are complex continuing over long time periods. An integrated approach including the development of highly qualified system instruments and the introduction of effective and transparent mechanisms involving the broader society are required.

The objective of the **UN Framework Convention on Climate Change** is to achieve stable concentrations of greenhouse gases in the atmosphere at the level which would prevent further deterioration of the climate system from human activities. The Convention came into effect in Slovakia on November 23, 1994. Current values of GHGI reduction were defined in 1997 in the Kyoto protocol to the UN Framework Convention on Climate Change which came into effect in Slovakia on February 16, 2005.

The **Convention on Biological Diversity** is an important step forward in the field of environment and development, because for the first time, it takes a comprehensive rather than sectoral approach to the conservation of biodiversity and the sustainable use of biological resources. The Slovak Government agreed

to access the Convention on Biological Diversity in May 1993 and following ratification became a contracting party of the Convention in November 1994. The Convention goals not only provide protection of biological diversity and sustainable use of the components but also deal with fair use of the benefits resulting from the use of genetic resources. This includes the relevant equitable distribution of advantages arising from the use of genetic resources, transfer of relevant technologies and adequate financing. In 2000, the Protocol to the Convention on Biological Diversity was adopted; The Protocol on Biological Safety (Cartagena Protocol) which came into force on September 11, 2003. The aim of the protocol is to achieve safety in handling, use and transfer of live modified organisms cross state borders. The Protocol entered into force in Slovakia on the February 22, 2004.

The main goal of the **United Nations Convention to Combat Desertification** is to combat desertification of soil in affected countries which are generally, developing countries. The Convention should help in the improvement and better recovery, protection and sustainable use of soil and water resources and the improvement of living conditions in affected areas, particularly at the local level. The Convention was updated in 2001 when the Convention Annex V – a programme for Central and Eastern European countries was adopted. Together with the other changes in content and structure of the Convention this creates the framework for soil and landscape protection against degradation. The Convention came into effect in Slovakia on the April 7, 2002.

There is an international “*Joint Liaison Group*” involving the relevant agreement bodies and committee members which plays an important role in strengthening the cooperation and achieving the synergy¹ between agreements adopted in Rio de Janeiro. The objective is to strengthen coordination between the Conventions (mainly in the area of information exchange, preparation of common work plan focus on e.g. links between climate and biodiversity if appropriate soil degradation) which should contribute to the harmonization of approaches and therefore higher efficiency.

In May 1999 the United Nations Development Programme (UNDP) and the Global Environmental Facility Council (GEF) launched the *Capacity Development Initiative*. The result of this initiative was new opportu-

¹ Synergy refers to cooperation leading to more effective activities in implementation of individual conventions. One of the priorities is to eliminate duplication in solving problems and to insure the effective use of existing resources.

nities for GEF financing for the development of national capacities. One of these initiatives is the *National Capacity Self-Assessment (NCSA)*. From this initiative the Slovak *National Capacity Self-Assessment (NCSA)* was approved in January 2004. The aim of the project is to identify priority needs for development of Slovak capacities to fulfill the Rio conventions requirements.

The specific goals of the NCSA project are to:

- identify the capacity requirements for the Rio conventions,
- identify cross cutting and common issues, and
- determine priority needs for capacity development.

The NCSA project management responsibilities are as follows:

- The Slovak Ministry of Environment as the Executing Agency is responsible for overall control of the project, the main outputs and the management of the financial resources of the UNDP/GEF,
- The Soil Science and Conservation Research Institute in Bratislava is the Implementation Agency responsible for project implementation,
- The Project Steering Committee approves the outputs and provides guidance for the project team,
- The Project Board was established to monitor particular project phases including the preparation of the work plan. The Board consists of the deputies of national focal points for the three conventions and the working group coordinators,
- Four working groups; climate change, biological diversity, desertification and cross cutting were established to provide for the expert work on the project.

The NCSA project consisted of the following interrelated parts:

- Thematic assessment of capacities² for individual conventions (climate change, biodiversity and desertification),
- Identification and assessment of cross cutting and common areas for the Rio conventions with the goal

to achieve the highest synergy in the development and building of capacities,

- Develop a proposal for a Strategic Action Plan for the strengthening and development of capacities for effective implementation of the Rio conventions with an emphasis on the integrative elements.

The thematic assessments of individual Rio conventions were designed to analyze the current status of capacities and abilities using a holistic approach (on all management levels). The Cross Cutting Report addresses cross cutting and common institutional, systemic and individual areas for the effective implementation of the TAR specific recommendations. The Cross Cutting Working Group also conducted independent review and analysis of cross cutting issues which are not addressed in the thematic assessment reports.

It is important to note that the NCSA project is the first opportunity to develop an overview of how global environmental responsibilities stemming from the 1992 at Earth Summit in Rio de Janeiro are carried out at the national level.

The NCSA project is an important step toward effective implementation of the Rio conventions. The NCSA project analyzes the Rio conventions focusing on their interrelationships and thereby contributes to the “**integration**” dimension. This integrative level is part of the world wide effort to implement the principles of sustainable development. The concept of sustainable development through integrative initiatives while internationally widely accepted is more difficult to implement nationally where significant sectoral barriers continue to exist.

The NCSA project brings comprehensive information on the existing capacities, needs for strengthening and missing capacity. The project results contribute to the improvement in the use and allocation of financial, human and physical resources.

² Capacities assessment refers to the complex process from identification of existing capacities, identification of missing or insufficient capacities to the draft of recommendations for their mobilization, strengthening and further development.

2. Methods

The term “capacity building” is used in several contexts. Most often it is understood as the development of human resources and institutions needed to make decisions, perform relevant functions, solve problems and set and fulfill goals. Capacity development includes the activities necessary for an increase in the abilities of individuals, institutions and systems (system procedures and mechanisms) for effective, functional and long term decision making [2, 3]. The framework for “capacity development” is a new term which shifts the emphasis to self evaluation which means the evaluation comes from the evaluated system itself. Capacity building and development is focused on three levels: system, institutional and individual.

The system level of capacity building involves the development of a “favorable” policy, regulatory and financial framework. Traditionally, interventions at the system level were aimed at “strengthening and development of promising mutually effective coordination mechanisms of institution performance with the use of the expert potential at the individual level” [2].

Capacity building on the **institutional level** is aimed at overall administrative performance of institutional operations. Institution capacity building includes the definition of the activities of the institution, responsibilities and financial transparency as well as the use of expert potential at the individual level.

Capacity building at the **individual level** represents the process of changes in approaches and behavior of individuals by providing additional training and the exchange of knowledge in conferences and seminars, study missions and similar mechanisms. At the same time attention is paid to personal involvement in plans and decision making, the motivation for professional growth of the individual and the individual acceptance of the responsibility for the decisions taken.

The following considerations were applied in the NCSA project in Slovakia:

- **The Project has to be supported at the national level.** However, capacity assessment for the fulfillment of the Rio conventions is not explicitly included in the plans of the Government or the responsible ministries. It was initiated from the GEF in “*Capacity Development Initiative*” with the agreement of the responsible ministries.

- **Capacity assessment and operation should be carried out by a group of independent experts.** The assessment of the capacities and existing mechanisms and structures for implementation of the Rio conven-

tions as well as previous activities should be provided by a group of “independent experts” who should not idealize or neglect any critical points. The existing structures and state administration bodies involved in implementation of the Rio conventions should participate in the NCSA project in order to achieve self-reflection and guarantee the formulation of measures which would be useful and viable.

- **Support of participative working methods.** The NCSA project should approach all stakeholders, while their participation is understood not only as “providing the information on results” but also as providing the opportunity for direct input and partner participation in the development of drafts, outputs and thereby accepting responsibility for project outcomes.

- **Use of holistic approach to capacity building** with an emphasis on capacity assessment at all management levels – system, institutional, and individual.

2.1 Methods

Stock-taking

Stock taking of the present status provided the background for problem identification for capacity building and development. Three thematic assessment reports describe the detailed requirement of the conventions (in case of the UNFCCC the Kyoto Protocol was also included and in the case of the CBD the Cartagena Protocol was included) as follows:

- obligation/responsibility of convention
- existing capacities at system, institutional and individual levels
- linkage with EU policies.

In addition to the specific requirements of the individual Rio conventions which were analyzed and evaluated in detail in the Thematic Assessment Reports (TAR) [12, 13, 14] the requirements of a cross cutting nature were analyzed independently by a separate expert group. The Cross Cutting Working Group focused on the identification of common and cross cutting requirements at the national and international level for all three conventions considered together.

Survey

A questionnaire was developed to identify priority areas for detailed analysis and proposals for additional or improved capacities. The questionnaire also elicited comments with respect to the selection of appro-



Participants at stakeholder workshop, VUPOP, April 2005

appropriate instruments for reform of the capacity framework. The questionnaire format was adopted from a UNDP/GEF study [3]. Questionnaires were developed for the three thematic areas and were distributed to the members of all working groups and other stakeholders from academic and research institutes, universities, interest groups, NGOs, and private sector organizations. The survey focused on an integrated approach to the planning and management of the environment in Slovakia.

Generally, the effort to identify priority areas regarding capacity development using the survey method was not useful. For example, for the respondents to the topics on biodiversity and desertification it was impossible to evaluate results due to the dispersion and contradiction in responses. Some additional reasons for the lack of success include the large scope of the issues, broad range of professional backgrounds of respondents and also the low number of respondents. The formats and results of the survey are presented in individual thematic reports [12, 13, 14]. The results of questionnaire for integrated approaches to the landscape and environment are presented in Annex 1.

Individual interviews and consultations

Consultations were focused on expert institutions in the sectors related to the ministries of agriculture, education and environment. Also, experts representing various interest groups were interviewed.

Working seminars

There were three working seminars held during the development of the report in Bratislava – on June 28, 2004, November 11, 2004, and April 29, 2005. The seminars built upon the previously gathered information and provided feedback and analysis as well as additional information. Experts for all three Rio conventions took part in the seminars. In addition to the seminars, brainstorming was used in meetings of the working groups.

E-mail networking with relevant institutions and experts

The Cross Cutting Working Group distributed all draft background documents by e-mail in order to ensure timely dissemination and feedback.. This provided for virtually continuing contact with stakeholders (*E-networking*). All drafts were published on the web-page of the implementation agency SSCRI Bratislava (www.vupu.sk). In this way project participants including stakeholders had an opportunity to contribute to the work on background documents, comment on drafts and discuss the main results. The feedback has been incorporated into the final report of the Cross Cutting Working Group.

Stakeholder analysis

Stakeholder analysis is an instrument to identify the key subject regarding the position, responsibilities and interests within relevant problems as well as to ensure the participation of key parties in the project.

SWOT analysis

SWOT analysis is an instrument for assessment and planning. In addition to analysis of strong and weak aspects it includes also external factors – opportunities and threats which can influence final implementation of proposed measures and strategic goals. Improvement of weak aspects should then be addressed in strategic planning. SWOT analysis was used in the thematic evaluations of the Rio conventions. The SWOT analysis was grouped into 5 basic topics according to generic indicators [3, 5].

SWOT analysis was also conducted for the cross cutting report and the results (Annex 2) were used in the identification and evaluation of cross cutting areas of the Rio conventions.

Identification of common and cross cutting needs

The NCSA project followed the UNDP methodology consisting of the following steps:

1. Detailed analysis of the requirements of the Rio conventions as identified in individual thematic assessment reports (TAR),

2. Assessment of the capacity development needs for fulfillment of the requirements of the individual Rio conventions and the level of synergy among the conventions,

3. Preparation of the proposal for the Strategic Action Plan for capacity development.

The following diagram provides an overview of the steps taken in preparing the of cross cutting report.

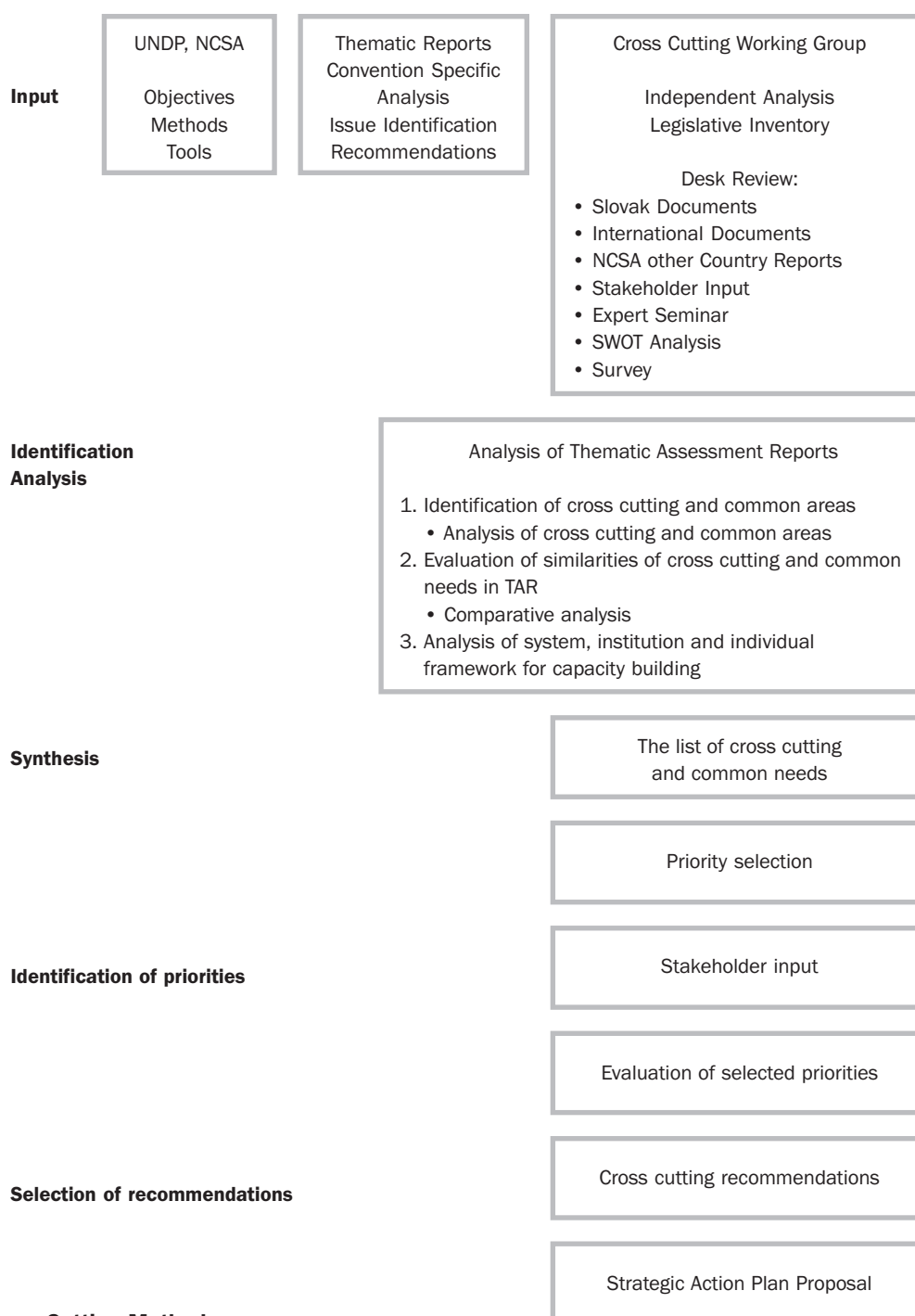


Diagram 1: Cross Cutting Methods.

3. Background

One of the goals of cross cutting report was to identify and evaluate current international and national support for the fulfillment of the Rio conventions. The following were evaluated:

- a) Existing documents which cover selected requirements of the Rio conventions including legally binding documents,
- b) Draft documents which are related to the support of the implementation of the Rio conventions.

On the basis the evaluation, both legally binding and other requirements of the common and cross cutting areas of the Rio conventions were identified.

3.1 National Framework

Slovakia has been a member of the OECD since 2002 and joined the EU in 2004. It is a member of other important international organizations including the UN, OSCE and the Council of Europe. Slovakia is a party to the majority of important global environmental conventions and prior to EU accession its legal framework largely complied with EU legislation. Generally, it can be said however, that the preparation of Slovakia for EU membership strengthened the capacities in several areas related to the Rio conventions. This is mentioned to highlight the fact that the main driving force for capacity development in the field of the environment is not only Slovakia's membership in the conventions themselves but other factors including the long term commitment of Slovakia to the protection and enhancement of the environment.

Problems of climate change, biodiversity protection and sustainable use of soil and landscape protection are documented priorities of the Slovak Government. These priorities are reflected in the important concept documents of the relevant sectors. There are also many strategic documents which deal with the international obligations of Slovakia presenting specific recommendations and projects for the implementation of the Rio conventions.

The Strategy, Principles and Priorities of the State Environmental Policy (1993) is the major environmental background document in Slovakia. The Strategy identifies five general priorities among which are those tasks primarily connected to the implementation of the Rio conventions. These priorities relate to air protection and global environmental safety, protection against soil degradation and assurance of healthy food, preservation of the biological diversity, rational use of

natural resources, and optimization of the use of landscape. The National Council of Slovakia asked the Government to use the Strategy in sectoral policies, strategies, programmes and relevant legislation (Government Resolution No. 339/1993).

The basic national documents are supplemented by many other strategic plans, concepts and programs. Other relevant strategic documents are shown below.

Box 1: Selected Documents Related to the Rio conventions

Cross cutting:

- *The Strategy, Principles and Priorities of the State Environmental Policy* (1993)
- *National Environmental Action Programme I* (1996), *II* (1999), *III* (2003) – in January 2004 the draft on NEA-PIII was not accepted by the Slovak Government
- *National Strategy of Sustainable Development* (2001)
- *Territorial Development Policy for Slovakia* (1994, 1997, 2001)
- *National Development Programme of the Slovak Republic* (2003)
- *Rural Development Programme for the period of 2004-2006* (2003)
- *Policy (Concept) for Environmental Monitoring System for Slovakia* (1992)
- *Mid-Term Concept for Official Development Assistance for the period of 2003-2008* (2003)
- *Concept of State Science and Technical Policy until the year 2005* (2001)
- *Concept of Environmental Education and Training* (1997)

Draft national cross cutting documents:

- *Lisbon Strategy for Slovakia, Strategy of Economic and Social Development of the Slovak Republic by the year 2010* (MoF, draft submitted for comment in December 2004)
- *Strategy of Competitive Slovakia by the year 2010 – Action Plans* (MoF, 2005)
- *National Action Plan for the Strategy of Sustainable Development of Slovakia for 2005-2010* (Government Office of the SR)
- *National Strategic Reference Framework for Programming the period of 2007-2013* (MoC&RD)
- *Action Plan for Environmental Technologies in the Slovak Republic* (Government Office of the SR)
- *Macroeconomic Strategy System Structure of the SR for 2005-2013* (MoEc, 2005)

Climate change

- *National Climate Programme of the Czechoslovak Federal Republic* (1991), has continued as the *National Climate Programme of Slovakia* from 1993

- *National Report on Climate Change I., II. III. (1995, 1997, 2001)*

Biodiversity

- *National Biodiversity Strategy (1997)*
- *Action Plan for Implementation of the National Biodiversity Strategy in Slovakia for 1998-2010 (1998)*
- *Update of the Action Plan for Implementation of National Biodiversity Strategy in Slovakia for 2001-2010 (2001)*
- *Update of Action Plan for Implementation of National Biodiversity Strategy in Slovakia for 2003-2010 (2003)*
- *National Programme for Plants Genetic Resources Protection for Food and Agriculture for 2005 - 2010 (2005)*

Soil desertification/degradation

- *Concept for the Protection and Use of Agricultural Land in Slovakia (2000), MoA*
- *Proposal for Adaptation Measures in Agriculture for Climate Change (2000)*
- *Principles of the State Soil Policy (2001), MoA*
- *Mid-term Concept of Soil Management Policy for 2004-2006 (2004), MoA*

Other sectors

- *Concept of Water Management Policy of the Slovakia until the year 2005 (2001) MoA*
- *Energy Policy of Slovakia (2000), MoEc*
- *Concept of the Use of Renewable Energy Resources (2003) MoEc*
- *Concept of Forestry Policy until the year 2005 (2001) MoA*

From the list above it can be seen that a favorable political framework for development of strategies and programmes for environment protection and development exists in Slovakia. However, one weakness is the inability to transfer the multinational framework to the national and lower levels, complicated by insufficient coordination of activities related to meeting the requirements of the Rio conventions at both the horizontal and vertical levels.

A crucial issue is the strong sectoral approach to the preparation of conceptual instruments and the „inflation” of strategic documents which do not always have the expected impact on subsequent decisions and programmes. One example involves the adoption of the National Environmental Action Plans (NEAP I iv 1996 and NEAP II in 1999) which identify the list of investment and non- investment actions. These lists (especially NEAP I) were developed based upon proposals from the district and regional levels and grouped according to “sectors” or environmental components. The analysis of the implementation of these documents was limited to the “percentage of fulfilled actions” without a more complete evaluation of impacts on the state of environmental quality. NEAP III (pre-

pared in 2003) has not yet been approved by the Government.

The National Biodiversity Strategy (July 1997) requires the Government to reflect this strategy in sectoral policies, strategies, concepts and programmes and relevant legislation in compliance with the Biological Diversity Convention. After 8 years, the Resolution of National Council of the SR has not been fully met. In addition the National Biodiversity Strategy does not contain indicators to measure progress.

The Country Profile of Slovakia has been prepared within a broader international initiative coordinated by the UN. It provides another opportunity to review how Slovakia is fulfilling the requirements of the Rio Conference generally, as well as the tasks specifically related to the three Rio conventions.

Generally, it is clear that implementation capacity in the relevant sectors continuously falls behind the formulation of the strategies. The situation is further complicated by the fact that Slovak policy making similar to other countries involves a wide range of considerations not only international commitments. In recent years the Slovak policy and legislative agenda has focused almost exclusively on meeting the EU requirements, some of which are still in the process of being implemented.

There are however several important policies in the SR which are entirely consistent with the Rio Conference conclusions. The most important recent document is the National Sustainable Development Strategy of SR (2001)³. The state of implementation of the measures in the National Sustainable Development Strategy of SR is evaluated annually on a sectoral basis and the results are submitted to the National Council of Slovakia. There was a detailed evaluation of tasks performed and impacts in 2003⁴. The evaluation resulted in the requirement to prepare an Action Plan of Sustainable Development for Slovakia. The background for the Sustainable Development Action Plan for 2005-2010 was approved by the Government on March 16, 2005. At the same time the Government called for the revitalization and reform of the Council of Sustainable Development. This establishes an independent expert platform for sustainable development reporting to the Deputy Chairman of the Government for European Integration, Human Rights and Minorities.

Representatives of the scientific and academic communities, NGOs and other experts were involved in the preparation of the background for the Action Plan for Sustainable Development. The Action Plan for Sustainable Development for 2005-2010 will be completed in June 2005. The strengthening of local and regional

³ More than 200 members participated in the preparation in 1998-2000 in coordination with the REC, facilitator MOE and financial support of the UNDP.

⁴ Report on sectoral implementation of the National Strategy of Sustainable Development in 2003, April, 2004, www.government.gov.sk.

community involvement in sustainable development is also a priority of the Sustainable Development Action Plan.

Another positive example of progress toward meeting the requirements of the Rio conventions is the draft Act on Landscape Planning. The draft was prepared by the Ministry of Environment and the Ministry of Construction and Regional Development. The objective of the Act on Landscape Planning includes integrated management of natural heritage and landscape and the preservation of environmental quality. It also provides for integrated surveys, for the regulation of territorial planning, landscape management plans, forestry management plans and other sectoral plans. The goal is to support landscape diversity and the implementation of priority ecological uses of the landscape.

3.2 International Framework

The requirements of the Rio conventions are closely related to the Rio Declaration and AGENDA 21, which is the global base for sustainable development, adopted by the Conference on the Environment and Development in Rio de Janeiro. Also, other strategic documents of cross cutting character adopted in the UN, OECD, and EU support the implementation of the requirements of the Rio Declaration and the Rio conventions.

The **integration** of environmental interest into sectoral policies is a key requirement in virtually all documents. Examples of important international strategic documents of a cross cutting nature which support the implementation of the Rio conventions are presented below.

Box 2: International Strategic Documents (2000 – 2004)

- *Millennium Development Goals (UN, 2000)*
- *Lisbon Strategy (EC, 2000)*
- *Environmental Strategy for the 1st Decade of the 21st Century (OECD, 2001)*
- *6th Environmental Action Plan of the EU for 2001-2010 (EC, 2001)*
- *European Strategy of Sustainable Development (EC, 2001)*
- *Johannesburg Declaration and Implementation Plan (UN, 2002)*
- *Environmental Technologies Action Plan (EC, 2004)*

The “Millennium Development Goals” (2000)⁵ is aimed specifically at global poverty reduction. The development objectives also support the implementation of the Rio conventions including the requirement to assure environmental sustainability, integration of the

principles of sustainable development into national programmes and prevention of losses in environmental resources. This document also includes mechanisms for better measurement, monitoring and management of the development goals.

Currently the **Lisbon Strategy** which sets a very ambitious goal: that the EU became the most competitive and dynamically developing knowledge oriented economy of the world⁶ by the year 2010 is an important EU strategic document. From the point of view of support for the implementation of the Rio conventions it is important to note that the European Council adopted the **European Strategy of Sustainable Development** (2001) and included an environmental dimension in the Lisbon Strategy.

The European Strategy of Sustainable Development (2001)⁷ arises from the relationship of the principles of economic growth, environmental protection and social inclusion. It is a very important document regarding all three Rio conventions. It deals with concrete implementation of measures to address serious issues or irreversible threats which dominate climate change, management of natural resources, reduction in biodiversity, soil degradation, and use of the landscape. This material also stresses the need for improvement of the implementation of existing environmental legislation, strengthening of integration of environmental interests into all sectoral policies and better citizens involvement in decision making. This document is currently being revised.

A basic document of EU environmental policy is the **6th Environmental Action Programme “Our future, our choice” (6. EAP EU)**, adopted for the period of 2001-2010 which interlocks the European Sustainable Development Strategy. It continues with the approach contained in environmental action programmes adopted by the EU since 1973, the objective of which is to integrate the requirements of environmental protection and sustainable development into particular sectoral policies. Also the 6th EAP is important in supporting the implementation of the requirements of the Rio conventions because it includes climate change, nature and biodiversity protection and natural resource management as priorities. The strategic approach includes the emphasis on improvement of implementation of environmental legislation at the national and regional levels, integration of environmental interests into other policies and cooperation of private sector firms with consumers. It also requires improvement of the access to information on the environment and the use of a participatory approach to urban and regional planning. The problems of desertification and landscape degradation are not key issues in the 6th EAP, however, following the 6th EAP EU, the EC Soil Protection Strategy was adopted.

⁵ <http://www.developmentgoals.org> (October, 2004).

⁶ Mid term Assessment of the Lisbon Strategy: contribution of SR for the high level group Government Office of SR, 2004, 20p.

⁷ Communication from the Commission: A Sustainable Europe for a better world: A European Union strategy for sustainable development, Brussels, 15 May 2001, COM (2001) 264 final, 17 p.

The EU Framework Science Programmes are especially important regarding scientific research support relating to the implementation of the requirement of the Rio conventions within the EU. Currently this is provided for in the **6th EU Framework Science Programme** (2002-2006) and the 7th Framework Programme is now being prepared. An important thematic priority in this program is sustainable development, global change and ecosystems.

Research, development and new technologies are supported by the “**Environmental Technologies for Sustainable Development**” (2002) and the **Action Plan for Environmental Technologies** adopted in 2004. The Action Plan alone can bring important progress in the fulfillment of the requirements of the Rio conventions due to the focus on identification of available technologies for addressing major environmental issues. The importance of the integration of climate change and soil protection into developing policies is also emphasized. The document recommends the preparation of a soil protection thematic strategy.

The above mentioned documents are supplemented by **Environmental Strategy for 1st Decade of 21 Century**, adopted in 2001 by ministers of the environment in OECD countries. The objective of this document is to have the principle of sustainable development guide the environmental policies of OECD countries. This strategy also supports fulfillment of the requirements of the Rio conventions because it addresses the reversal of the trend in ecosystem degradation, climate change and drinking water resource contamination. It also deals with the assurance of ecosystems integrity through effective natural resources management, reduction of the environmental burden of economic activities and improvement of information in the decision making process.

The World Summit on Sustainable Development was a critical worldwide event which took place in Johannesburg in 2002. Significant documents which are important regarding the Rio conventions were adopted at this summit, most importantly the **Johannesburg Declaration** which directly endorsed the outputs of the Conference in Rio de Janeiro (1992) and the **Implementation Plan** which includes practical proposals dealing with the implementation of measures to improve the state of the environment.

The **Protocol on Strategic Environmental Assessment** to the Convention on Transborder Environmental Impact Assessment (Espoo Convention) was adopted at the fifth ministry Conference “Environment for Europe” which took place in May 2003 in Kiev. Under this protocol environmental integration requirements are extended to the area of health, preparation and approval of plans, programmes, policies and legislation. In article 2 of the Protocol there are specific re-

quirements to assess the impacts on climate, biodiversity and soil⁸.

Council Directive No. 2001/42/EC on the environmental assessment of impact of certain plans and programs requires issues such as biodiversity, human health, animals, plants, soil, air, climate and other factors to be taken into consideration in preparation of environmental impact assessment reports.

The integration of environmental criteria into all developing policies and implementation consistent with the sustainable development concept has become a strategic and political imperative in EU countries. In all documents of the EU and OECD the requirements of the Rio conventions are fully respected. International agreements are legally binding for the Slovak Republic as a member of these organizations. The most important activities from the NCSA point of view are GEF initiatives directly aimed at capacity building⁹. A selection of Conventions and Protocols which SR accessed is presented in Annex 3.

3.3 Legal Framework

Act No. 17/1992 Coll. On the Environment defines the basic terms, environmental protection principles and general obligations in protection and improvement of the state of the environment including the use of natural resources. The adoption of the Act filled the need for integration of previously very fragmented and sector based legislation. However, a lot of the provisions are not practically applied due to the fact that the Act is a framework act.

Act No. 127/1994 Coll. on Environmental Impact Assessment is cross cutting in nature as amended by Act No. 391/2000 Coll. The Act applies the principal of prevention and minimization of adverse effects of human activities on the environment. A new draft Act on Environmental Impact Assessment reflecting the requirement of the Strategic Environmental Assessment Protocol as well as Directive 2001/42/EC was submitted to the Government in May 2004. The draft Act contains the requirements of Directive 2003/35/EC which ensures public participation in the proposal stage of selected plans and programmes concerning the environment and Council Directives No. 85/337/EEC, 97/11/EC, and 2003/4/EC on Access of the Public to Environmental Information (Aarhus Agreement). The draft Act introduces new components concerning the protected areas system NATURA 2000. This draft Act MOE SR was not approved by the Government and has not been resubmitted.

Integrated Prevention and Pollution Prevention and Control (IPPC) of the environment is the aim of the **Act No. 245/2003 Coll.** the objective of which is to devel-

⁸ In the Resolution of the Government of the SR of July 2003, the Government approved the signature of the Protocol on Strategic Environmental Assessment (further on Protocol SEA) to the Convention from Espoo and SR signed the SEA Protocol in December 2003.

⁹ In projects Capacity Development Initiative.

op a system of integrated permitting and control measures to deal with the pollution from specific operations. IPPC permits include a set of measures for air, water and soil emission reduction and control of waste generation targeted to achieve the highest comprehensive level of environmental protection. All forms of pollution are evaluated in relationship to each other a single permit is issued. The Act provides timetables for permitting new and existing facilities. The Act requires the installation of technologies fulfilling the criteria of the best available techniques (BAT).

Effective public participation and the right to information are significant challenges of the Rio conventions. An irony in this area is that although the Slovak Republic was the first in Central and Eastern Europe to adopt an Act on the Access to Environmental Information in 1998, it is now one of the last European countries to access the Aarhus Agreement on access to information, public participation in decision making processes and legal access in environmental affairs.

Direct legal support for the fulfillment of the Rio conventions exists in the area of the biodiversity protection (Act No. 543/2002 Coll. on the nature and landscape protection, Act No. 151/2002 Coll. on the use of genetic technologies and genetically modified organisms). The field of climate change and protection of the soil against degradation is not covered by specific legislation. Some regulations dealing with specific areas exist. Selected legislation regarding the fulfillment of the Rio conventions is presented in Box 3.

A coordinated intersectoral approach is lacking for the preparation of legislation. The institution of environment-legal responsibility (within the criminal, administrative and civil areas of responsibility) is not adequately applied in the legal system of the SR. For example, there is no legal requirement for insurance to cover damage to the environment from various accidents. There is also no effective natural resource valuation system. Another weak aspect is the relatively low level of enforcement of the Acts and frequent legislative changes.

Box 3: Selected Legislation (as of 1 May 2005)

Biodiversity

- Act No. 543/2002 Coll. on the nature and landscape protection and related regulations
- Act No. 217/2004 Coll. on forest reproduction material
- Act No. 151/2002 Coll. on the use of genetic technologies and genetically modified organisms
- Act No. 251/2001 Coll. on genetic resources of plants for food and agriculture
- Act No. 472/2002 Coll. on species and seeds and related regulations
- Act No. 215/2001 Coll. on protection of genetic resources of plants for food and agriculture

- Act No. 468/2003 Coll. on origin product labeling and geographical product labeling
- Act No. 61/1977 Coll. on forests in wording of the latter provisions
- Act No. 15/2005 Coll. on protection of free living animal species and free living plants by regulation of the business with them and on change and supplement of some Acts

Climate Change

- Act No. 76/1998 Coll. on protection of the ozone layer and on supplement of the Act No. 455/1991 Coll. on small business enterprise and related regulations
- Act No. 478/2002 Coll. on air protection and which supplements the Act No. 401/1998 Coll. on charges for air pollution and related regulations
- Act No. 572/2004 Coll. on emission limits trading and on the change and supplement of certain Acts and related regulations
- Regulation No. 711/2004 which contains certain provisions of Act No. 572/2004

Soil Desertification and Degradation

- Act No. 220/2004 Coll. on protection and use of agricultural soil
- Act No. 61/1977 Coll. on forests in wording of latter provisions (new Act on forests was approved in May 2005)
- Act No. 188/2003 Coll. on the application of sludge and bed sediments on agricultural soil

Other sectoral Act regarding the Conventions

- Act No. 408/2004 which is the supplement to the Act No. 100/1977 Coll. on forest management and related regulations
- Act No. 364/2004 Coll. on waters and on the change of the Act No. 372/1990 Coll. on trespassing and related regulations (Water Act)
- Act No. 223/2001 Coll. on the waste and on the change and supplement of certain Acts and related regulations
- Act No. 50/1976 Coll. on territorial planning and construction code and related regulations
- Act No. 666/2004 Coll. on protection against floods
- Act No. 656/2004 Coll. on energy sector and on change of certain Acts
- Act No. 657/2004 Coll. on thermal energy
- Act No. 261/2002 Coll. on prevention of serious industrial accidents and on the change of certain Acts in wording of the Act No. 525/2003 Coll.

Cross cutting legislation (horizontal legislation)

- Act No. 127/1994 on environmental impact assessment and related regulations
- Act No. 468/2002 Coll. on system of environmentally oriented management and audit
- Act No. 469/2002 Coll. on environmental product labelling and related regulations
- Act No. 221/2000 Coll. on free access to the information and on change and supplement of certain acts
- Act No. 205/2004 Coll. on gathering, maintenance and dissemination of information on environment on change and supplement of certain Acts
- Act No. 245/2003 Coll. on integrated prevention and pollution control on change and supplement of certain acts
- Act No. 587/2004 Coll. on Environmental Fund on change and supplement of certain acts

3.4 Summary of Background; Evaluation and Recommendations

The existing situation for meeting the requirements of the Rio conventions includes a generally favourable framework although the analysis also identified weak features. Slovakia has adopted many supporting acts, programmes, conceptual and strategic documents. However, the analysis in the thematic assessment reports and the cross cutting report indicate that fulfillment of the tasks regarding the implementation of the requirements of the Rio conventions needs to be improved. The general findings are as follows:

- a) Implementation of the Rio conventions needs to be carried out in connection with global sustainable development principles. This requirement is considered as of particular importance because the Slovak Republic has very broad responsibilities regarding international cooperation and compliance with the current obligations of the conventions.
- b) Implementation of the Rio conventions will require effective coordination targeted at minimizing additional requirements on capacities at the national, regional and local levels with the aim to reduce total costs and improve efficiency. This can be done in part by ensuring that there is no duplication of effort and a fully integrated approach is adopted for the implementation of common and cross cutting issues.
- c) Integration of the relevant environmental aspects into the national cross-cutting and sectoral policies, strategies, concepts and programmes and into relevant legislation is the preferred approach to implementing the Rio conventions. This requirement can be achieved by a more strategic approach to the implementation of the Rio conventions.
- d) An improvement of the effectiveness of implementation of the existing environmental legislation plays a special role. It can be accomplished by strengthening cooperation of the sectors involved, strengthening of preventive measures and application of the integrated approach at all levels of the planning and decision making process.
- e) The Slovak Republic as a member of OECD and EU is obliged to support developing countries. Specific obligations for development arise from the Rio conventions and therefore it is necessary to reflect

these requirements in the National Programme of Official Development Aid of the Slovak Republic.

- f) The Slovak Republic is part of European Science Space and participates in other opportunities for international science cooperation. Because of the capacity and financial limitations it is especially important to effectively coordinate all interrelated science and research tasks. This applies to the research on climate change, soil degradation and biodiversity protection covered by the Rio conventions. A common science and technical strategy and the development of new technology innovations and environmental technologies should be encouraged.
- g) Fulfillment of these requirements is not possible without strengthening the legal and environmental awareness of society at all levels. It is necessary to create favourable incentive conditions for the development of partnerships and to increase civic involvement in public affairs at the regional and local level to meet the requirements of the conventions. All forms of education in Rio conventions issues need to be used more effectively.
- h) Fulfillment of the tasks resulting from the Rio conventions needs to be continuously monitored.
- i) It is necessary to develop adequate financial resources and properly apply economic instruments.

Other ideas for improving the quality of the existing framework include the following:

- Develop more effective monitoring mechanisms of enforcement of the laws,
- Broader participation of the expert and science community in the implementation and development of the laws of Slovakia related to fulfillment of the requirements of the Rio conventions,
- The application of sustainable development principles in the decision making process at all levels,
- Application of key strategic instruments in the decision making process (such as strategic environmental assessment),
- Increase public awareness and involvement in the decision making process.

It is clear that providing effective support for implementation of the requirements of the Rio conventions needs to be evaluated in a broader context. The existing narrow and specialized action plans do not have long term effect and therefore system changes are needed.

4. Identification and assessment of capacities for common and cross cutting requirements

Assessment of the common and cross cutting requirements of the Rio conventions is the first step to determine effective environmental and economic actions for capacity development.

4.1 Definition of Common and Cross Cutting Rio Conventions Requirements

The following scheme refers to the difference between common and cross cutting issues.

Cross cutting areas include requirements that imply the same solution for the issue in each of the three conventions (e.g. development of a single integrated information exchange system).

Common areas include requirements that while similar require a different specific solution for each convention (e.g. development of the convention implementation Action Plan).

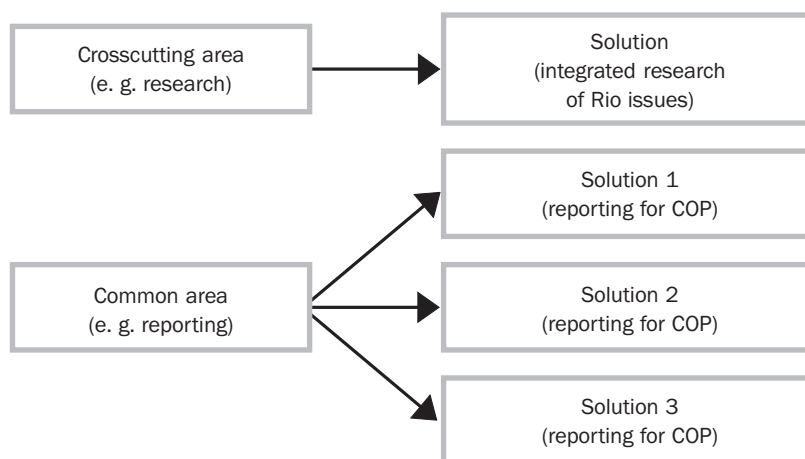
This chapter is devoted to the identification and assessment of common and cross cutting areas to de-

velop a sustainable framework for capacity development. The details are discussed in Chapter 5- Recommendations.

4.2 Identification and assessment of Common and Cross Cutting Issues

The thematic assessment reports show significant similarities for the requirements of the Rio conventions. The requirement to support synergies among the conventions and provide harmonized communication and awareness has been noted extensively at the international level.¹⁰ The requirement for education and public awareness also appears in all Rio conventions. Identification of the basic reasons for the reduction of biological diversity and decrease in soil productivity requires mutual skills and knowledge. Similarly the resistance to climate change and desertification requires the implementation of common measures.

Identification of common and cross cutting areas in the convention texts is provided in the following table 4.1.



Scheme 2: Cross cutting and common area- definitions.

¹⁰ One of the first steps was the establishment of the internet webpage. The aim is to contribute to active information exchange and discussion (www.unep.org).

Tabuľka 4.1: Požiadavky, ktoré sa objavujú vo viac ako jednom dohovore

	Biological diversity	Climate change	Desertification and land degradation
Appointment of national steering bodies (NFP)		Article 4	Annex V, Article 4(a), 8/1 (a)
Support for developing countries and technology transfer	Article 16, 20, 5	Article 4	Article 6
National inventories, monitoring, data collection	Article (7a,b)	Article 4 (b)	Article 16
Information exchange	Article 17	Article 7	Article 16
Support for research	Article 12 (b), 15 (6)	Article 5	Article 17,19(b), Annex V Article 6, 7(b)
Support for public education	Article 13	Article 6	Article 5 (d), 19
Support and training of management	Article 12 (a), 13	Article 6	Article 19
National action plans (NAP)	Article 6 (a), (b)	Article 4 (b)	Article 9, 10
Reporting for COP	Article 26	Article 12	Article 26

The development of the NAP was analyzed in detail in TAR [12, 13, 14]. In addition to the Action Plan for the UN Convention to Combat Desertification there is a tradition of regular action plan preparation in other areas. A similar situation exists with respect to the reporting for Conference of the Parties.

Analysis and assessment of the common and cross cutting requirements allowed for the identification of current needs which, when fulfilled, will create a sustainable framework for the implementation of the Rio conventions. The output of the analysis was used in the following section to identify priority requirements.

4.2.1 Establishment of National Management Organizations

Meeting the requirements of the Rio conventions is primarily the responsibility of the Ministry of the Environment and the Ministry of Agriculture. The national secretariats of the conventions are based at the ministries¹¹. The main responsibility for information flow and coordination within the convention lies with the National Focal Points (NFP) appointed by each ministry:

- NFP for the implementation of the UNFCCC and Kyoto Protocol at the Ministry of Environment,
- NFP for the CBD and Cartagena protocol at the Ministry of Environment¹²,
- The National Focal Point for the UNCDD is at VÚPOP Bratislava.

The framework for the functioning of the national focal points is described in detail in the thematic assessment reports [12, 13, 14]. The existing minimum staffing capacity at all National Focal Points leads to

insufficient flow of information from the international to national level. There is also a lack of clarity and effectiveness of institutional assignment of responsibility for effective information flow from the international to the national, regional and local levels.

The Thematic Assessment Reports [12, 13, 14] stated that performance of the individual institutions is limited by both financial and human resources. This assessment of performance is based upon an examination of tasks completed according to the annual plan and the effectiveness of use of resources. Currently, only one person of the National Focal Point for each convention is responsible for all administration. Another general problem exists in the division of responsibilities among participating institutions. There is no clear division of responsibilities among institutions and organizations related to the responsible ministries. There is also a lack of communication which results in the lack of a shared knowledge base. Among other impacts this limits the effective enforcement of legislation relating to the Rio conventions.

Special intersectoral panels and working groups have been established; however the results have often not met expectations. To date no joint working or other mechanism has been established to focus on issues common to all three Rio conventions. There is a general lack of attention devoted to mutual cooperation with respect to the Rio conventions requirements. Prior to the NCSA Project no analysis had been made of similar or common issues among the three conventions. This leaves a situation where unproductive duplication is possible and cost effective synergies may go unrealized. The stakeholder analysis revealed that in spite of the high number of participating experts and organizations, the institutional framework remains weak.

¹¹ The secretariat for the Convention on Biological Diversity ended in 2000 and National secretariat for the UN Framework Convention on Climate Change was not appointed.

¹² In November 2004 Slovakia identified 3 additional National Focal Points: one for the clearing house function carried on by SPU in Nitra, another NFP for invasion species run by ŠOP SR, and a third NFP for global taxonomic initiative carried on by Botanical institute of SAV.

Another weakness is the fact that institutional planning is not connected with strategic planning. This means that financial allocations at the institutional level do not reflect strategic priorities. Programme and project initiatives to support these priorities do not make it through the budget allocation process. Rather than being based upon the strategic priorities of Rio conventions implementation in Slovakia activities are often donor driven rather than following identified priorities.

In Slovakia regional and local institutions are becoming more important in the field of environment. Currently Rio conventions implementation does not involve the institutions at the level of districts, counties or local governments. These institutions are not provided with even basic information concerning Rio conventions implementation.

Participation in international organizations and meetings is important. Prior May 2004 participation of Slovak representatives in the Conventions Secretariats was limited only to negotiation meetings, COP meetings and the provision of the required national reports. Since entering the EU, Slovak representatives have been participating directly in the negotiations of working groups and committees of the European Council and the European Commission on International Affairs. There were a lot of expectations with respect to the establishment of the Government Council for Sustainable Development. In 1999, the Council was established with ambitious tasks and high political representation. However, the Council is not functioning since 2001¹³. In addition, the mandate and activities of the Council are formal, without significant competencies.

4.2.2 Support of Developing Countries

The Rio conventions rely upon strengthening the co-operation of all participating parties in the technical, scientific and financial areas. The Ministry of International Affairs is responsible for the coordination of Slo-

vak Official Development Aid (ODA). In 2003, the Slovak Government approved the strategic document, "Medium-term concept for ODA for the period of 2003-2008" [20]. It also approved 12 priority countries for Slovak ODA¹⁴. In 2003 the Slovak Government approved a Memorandum of Understanding between the Slovak Government and the UN Development Programme (UNDP), creating the legal framework for ODA. The government subsequently created the Trust Fund and Bratislava – Belgrade Fund and established it as a mechanism to provide ODA for Serbia Montenegro. The aid focus is continuously reviewed and updated. Currently the following areas are included: creation of infrastructure (including social), landscape formation, the environment, soil management, food safety and use of natural resources.

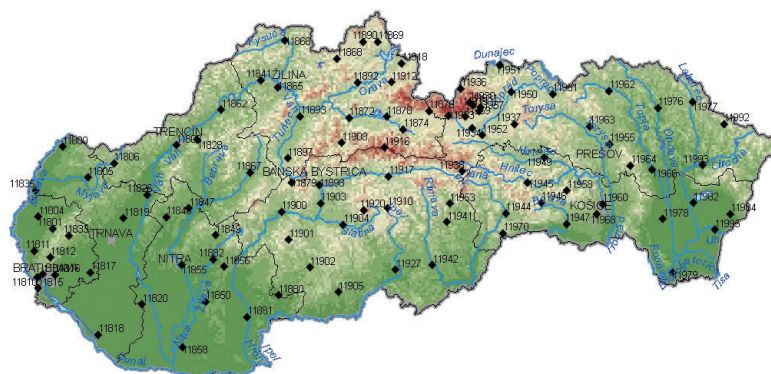
It is assumed that the ODA will use Slovak skills and experience in reforestation, building of irrigation systems, selected agriculture activities and geological research. The Rio conventions are not specifically referenced in the ODA priorities.

4.2.3 Monitoring

The Slovak Government (Resolution No. 7/2000) adopted the concept of a complex environmental monitoring and information system. This was intended to improve the previous situation when several narrow or partial data bases existed.

The information system, including the catalogue of resources, is available for both expert users and the general public on the web pages of both the Ministry of Environment and the Slovak Environmental Agency (SAŽP).

The structure of the information system originates in the structure based in KRIS (Concept of Sectoral Information System 1995). The independent information system was established to support the implementation of those acts and activities that are carried out by more than one institution:



Network of stations with climatic observation program (source: SHMU)

¹³ In the past three years, there was only one session of the Council (in January 2005).

¹⁴ Afghanistan, Albania, Bosnia a Herzegovina, Kazakhstan, Republic of Kenya, Kyrgyzstan, Macedonia, Mongolia, Mozambique, Sudan, Tajikistan, Uzbekistan. Programme country of ODA in Slovakia became Serbia and Montenegro.

Table 4.2: Selected Guarantors and Centers for the components of monitoring system (ČMS)

Information System Component	Guarantor	Centre
Air	MOE SR	SHMI Bratislava
Meteorology and climatologic	MOE SR	SHMI Bratislava
Water	MOE SR	SHMI Bratislava
Soil	MOA SR	SSCRI Bratislava
Biota (consist of three subsystems: animals, plants and biotopes)	MOE SR	SNP SR Banská Bystrica
Forests	MOA SR	FRI Zvolen

Resource: [6, 7 and 8]

- EIA,
- prevention of serious industrial crashes,
- integrated prevention and control of environmental pollution,
- support of project management and financing in environment,
- implementation of Water Directive Framework,
- NEIS for the emission of basic pollutants releasing to the air.

In addition, the Ministry of Environment will have an information system for landscape planning. This will become a part of the environmental information system later¹⁵.

The Coordination Council for Environmental Monitoring is an advisory body to the Minister of Environment for issues of coordination and harmonization of the environmental monitoring system. The Council consists of environmental specialists and managers who represent different sectors as guarantors of the quality for the Environmental Monitoring System (ČMS). ČMS is not fully functioning. Table 4.2. refers to ČMS guarantors and responsible centres relevant to Rio conventions.

Monitoring and national inventories in relation to the Rio conventions are described in detail in the Thematic Assessment Reports [12, 13, 14].

4.2.4 Exchange of Information

The information flow is in general divided into horizontal (among institutions or other participants at the same level of the hierarchy) and vertical (between the institutions/subjects on different levels). In both cases it is clear that in spite of technical progress, the information flow, exchange and provision of information needs to be improved. However, in certain areas the movement is in the other direction. For example, the reduction of some reported parameters, limited

access to information due to business or other reasons, lack of clarity in responsibilities and the introduction of information fees, actually reduce the information which is available. The lack of cooperation between sources as well as within the reporting units is a major barrier to information flow in relation to Rio conventions issues. The situation is further complicated through the lack of cooperation and information flow between central government organizations and those at the regional and municipal levels and as well as other stakeholders. The cooperation between universities, scientific and research institutions, specialized institutions in individual sectors and the private sector could also be improved. There is also problem with sharing information within the particular institutions.

4.2.5 Interdisciplinary Science and Research

There is a solid base of researchers in spite of the reduction of more than 20 000 people working in science and research including at universities within the last few years. There is a network of universities, and institutions of the Slovak Academy of Science (SAV), and sector based research and development institutions. Private research and development is also expanding.

The Concept of the State Scientific and Technical Policy until 2005 provides the direction of scientific and technical development.¹⁶ Specific scientific and research issues in relation to the Rio conventions are well developed. The universities and the Slovak Academy of Science institutes are running their research projects (particularly in biodiversity and soil protection and degradation) which are narrowly focused and run independently. There are no projects or programmes that deal with Rio conventions cross cutting or common issues. One of the reasons for this situation is that current research interests and support funding focuses on relatively narrow single discipline projects rather than more broadly based cross cutting scientific

¹⁵ The requirement comes from the proposal of the Act on Landscape Planning in accordance with the change of some directives (MOE SR, May, 2005). This Act should become an important implementation tool of the European Convention on Landscape that Slovakia signed on May 30, 2005.

¹⁶ Act n. 132/2002 Coll. on Science and Technology, Act n. 133/2002 Coll. on SAV and Act n. 203/2001 Coll. on Science and Technology Support Agency. From July 1, 2005 new act n. 172/2005 will become valid. The act n. 172/2005 is on Management of the State Support of Research and Development and also an addition to Act n.575/2001 Coll. about the Management of Government Activities and Management of Central State Administration and related regulations.

ic and technical projects. Existing funded researchers fear the loss of their specialized research activities by the development of the integrated research concept. The research in the area of negative impacts of climate change on health, society and economy as well as the influence of desertification and land degradation is very limited. The fields of biodiversity and land degradation are lacking specialists focused on the economic aspects of these issues. This means that the economic importance of these issues is not adequately recognized in broader government planning. The National Climate Programme during the 1990's provided for research on climate change impact on fragility, mitigation and adaptation of the environment, water management and soil and forestry management. However, there is no longer any funding for this programme.

The project *Technology Foresight* [10], coordinated by the Prognostic Institute of the Slovak Academy of Sciences (2002-2004), developed a proposal for key research projects in the environmental field. (Box 4). According to the authors of this report the main significant deficiency is that soil protection was not included to the field of the environment but rather in agriculture.

The project results show the significant importance of issues related to the Rio conventions. However, the results of the project has not been subsequently reflected in any strategy or programme of the government.

The current structure and staffing of the specialized institutions provides a solid base for the active participation of Slovakia in international projects dealing with implementation of the Rio conventions. However activities are not well coordinated or funded and there is a lack of information available.

There is also a lack of trained and experienced managers. For the younger generation work in the scientific and research sphere is less attractive than the business sector in large part due to the difference in salaries and opportunities for advancement. Scientific specialists are increasingly going abroad for better opportunities. The state research and development sector has already has a deficit in certain professions for example informatics. In the past, the language barrier was a problem; however the situation rapidly improved particularly among the younger generation.

There are several kinds of scientific preparation and different forms of education. Access to the information of scientists and researchers is generally good. However, current activities are impacted with the typical problem of lack of own financial resources. Internationally financed projects tend to be better funded.

4.2.6 Public Access to Information and Public Awareness

The Slovak Constitution ¹⁷ includes „the right of protection of the environment and cultural heritage. “Arti-

Box 4: Key Research Priorities (relevant to Rio conventions)

Protection of the atmosphere and climate change

- research on climate change and preparation of scenarios
- research on vulnerability and climate change including socio-economic impacts
- The development of new technologies in area of monitoring, processing and modeling as well as in the area of gas and aerosol emission reduction and adaptation measures

Water for the 21. century

- research on the influence of climate change on the hydrology cycle including regional aspects
- the development of integrative and adaptive flood and desertification forecasts
- research of erosion and transport processes in river basins
- hydrological and soil analysis of the processes under the soil management with the minimal transfer of nutrient, heavy metals and micropollutants to surface and ground water
- research on the relation between water management systems and marshes – quantity and quality monitoring of all water resources
- quantification of surface outflow in slope areas- quantification of water balance in system of atmosphere – vegetation cover – soil aeration zone – underground water in spatial demonstration

Landscape Biodiversity

- Multidisciplinary research on nature, biological diversity, the research of processes and phenomena with negative impact on biodiversity
- Preservation and reproduction of forestry genofond, including genetic and ecosystem variability
- Research and definition of nonproductive functions of ecosystems including economic valuation
- Research of vulnerability and ecological capacity of land use
- Research of genetic diversity of biological resources

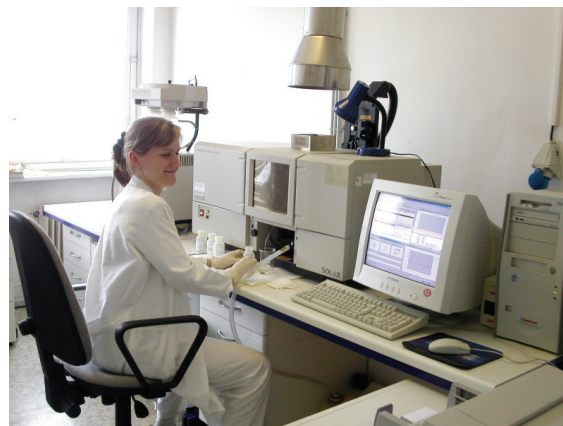
Preservation, management and planning of sustainable landscape development

- Planning and valuation of sustainable landscape development
- Sustainable forest development in Slovakia
- Integrated landscape management and balanced development of problem areas, underdeveloped and marginal regions
- Methods and indicators for environmental monitoring
- Research focused on strengthening and support of environmental and legal awareness and value orientation change

Economic aspects of the environment

- Research focused on the relationships among economic, social, technical and environmental changes
- Research on systems and system changes related to economic globalization and global environmental changes
- Research on economic valuation of the environment

¹⁷ Act of SNC n. 462/2002 Coll.



Accredited laboratories of SSCRI (Source: SSCRI)

cle 45 declares that *“every citizen has the right on timely and complete information on the state of environment and about the origin and impacts of this state”*. The basic legislative framework is described in Box 3. Public participations procedures are based on the EIA Act.¹⁸ Participation processes are also legally required in other acts, for example, the Integrated Prevention and Pollution Control Act.

The sectoral acts also include provisions for access to information¹⁹. However, the process of information access in the areas of climate change, biological diversity and desertification is not institutionalized. The National Focal Points handle the responsibility for information transfer. Data collection is carried out by several sectoral based specialized agencies (SHMI, SSCRI, SOP SR) and other institutions depending upon the sector. National and international NGOs play a significant role in the broader dissemination and analysis of information.

The information from individual institutions is not coordinated. Much of the information is available on the Internet²⁰. However, the capacities for increased public information are still insufficient. There is a lack of internet portals, for example, those explaining the impacts of desertification and soil degradation, climate change and reduction of biological diversity.

The lack of public awareness concerning the Rio conventions is directly related to the lack of information and analysis. The ability to obtain information from official sources has improved following the Act on Free Access to Information (No. 211/2000 coll). However, a more proactive approach is still missing.

The Concept on Environmental Education was approved in 1997. The concept is based upon life long education in the environment. It is focused on education for different levels of school system, public education and education for environmental specialists²¹.

There are many supporting educational documents including environmental curricula for primary and secondary schools. The National Programme for Education – Millennium, notes in a general way the principles of sustainable development providing a basis for inclusion in the life long education process.

The Council for Environmental Education at the Ministry of Environment functions as an advisory and coordinating body for the Minister. However, the functioning of the Council should be enhanced. The Ministry of Education cooperates with the Ministry of Environment in the development of environmental education. The NGOs are also active in environmental. There is an NGO umbrella environmental education organization “Špirála”.

There is good potential for professional environmental education provided by universities. At the institutional level education focused on climate change, biological diversity and desertification is provided by faculties in the following universities: The Comenius University in Bratislava, Slovak Technical University in Bratislava, Slovak Agriculture University in Nitra and The Technical University in Zvolen, The Technical University in Košice and other faculties in Prešov, Banská Bystrica and Košice. Longer term improvement requires financial resources and updating of the technical equipment of these institutions.

¹⁸ The Act contains public rights on EIA as well as duties of stakeholders in relation to public participation.

¹⁹ For example in compliance with § 29 of the Act on the Air, the duty of the MOE SR is to provide information about air quality and amount of contribution of individual pollutant resources within the responsible organization.

²⁰ The information as well as selected publications on climate change, biological diversity and soil protection can be accessed by public on the webpage of the MOE SR (www.enviro.gov.sk), SHMI (www.shmu.sk), SAŽP (www.sazp.sk) and SEA (www.sea.gov.sk), SNP SR (www.soprs.sk), SSCRI (www.vupu.sk), FRI (www.fris.sk).

²¹ As the participants of the 4th. National Conference on The Slovak Environmental Education (Nitra, 15.-17.12.2004) declared this concept needs principal update.



School in Nature, activities of SAŽP (Source: SAŽP)

There is an increase in mandatory subjects and textbooks available focusing on protection and rational use of biological diversity, agrobiodiversity and soil protection at the faculties of natural science and agriculture²².

The Slovak Environmental Agency actively participates in environmental education, and implements its own programmes particularly in the area of life long education for state administration. However, these are not focused on the Rio conventions issues.

The overview of selected institutions other than schools is shown in table 4.3. Education and public awareness related to Rio conventions issues is limited by the specialized legislation and lack of institutional support. NGOs are also listed but none of them systematically addresses of desertification and land degradation.

4.2.7 Financing

In 2000 a new Concept for Financing of the Environment was accepted by the Government (Resolution No. 664/2000). The goal of the concept was to develop a conceptual approach to financial strategy and policy in the environment area. The focus is on the structure of resources for environmental measures, based upon the current state of Slovak environment and EU requirements and opportunities for the enlargement of financial resources for environmental measures in Slovakia. Measures are divided into four categories:

- Measures arising from approved governmental regulations and legislation
- Measures that require implementation in the current year
- Measures that implementation is arising from draft policy and legislation

- Measures arising from the system of environmental economic tools and tax reform.

Measures are not developed directly in relation to the issues of the Rio conventions, *per se*. However, the first group of measures includes funding for tasks arising from the implementation of some of Rio conventions requirements. Specifically, the ...“*implementation of the Action plan for the National Strategy of Biological Diversity*” as a priority of the Ministry of Environment with a requirement of 46,7 mil. SK for years 2000 – 2010 is directly related. Also other measures will have impact on meeting the requirements of the Rio conventions for example, in the area of monitoring, implementation of as well as introduction of environmental aspects into the tax system. The Ministry of the Environment regularly presents information with respect to the evaluation of measures of implementation (governmental meetings on July 3, 2002 and June 30, 2004), however these are very formal presentations and data are not updated.

The Integrated Approximation Strategy [6] was developed to harmonize national legislation with EU Directives. Within the next 35 years, this strategy projects that the yearly expenditure in the environmental sector will be 11, 6 billion SK. While the measures for the EU legislation were identified with financial requirements linked to the sources, financial needs of the Rio conventions were not specified.

No financial impact analysis was completed before the conventions were ratified and the lack of specific financial resources limits the implementation of the conventions. So far there has not been analysis of past expenditures and no projections are made by the National Focal Points or National Secretariats of the financial requirements and potential sources²³.

²² For example the edition Biological diversity protection on SPU in Nitra has been already issued 90 textbooks in printing more than 27 thousand issues in cooperation with other faculties, working places and specialists in Slovakia.

²³ The exception is the area of biological diversity where the update Action Plan for the implementation of NSBP identifies financial needs of individual tasks.

Tab.4.3: Overview of Selected Education and Public Awareness Institutions

Subject	Institution
Slovak Environmental Agency (SAŽP)	<ul style="list-style-type: none"> – Centres for environmental education (Teplý Vrch, Žilina, Košice, Banská Štiavnica, Drieňov, Regetovka, Modra); – Centers for environmental education and training
Slovak Energy Agency (SEA)	<ul style="list-style-type: none"> – “Stodola” center (consultations, public education and information in the area of energy saving, science and technology and permanent exhibition concerning the environment) – Slovak center for energy management and educational network based in regional SEA branches
State nature protection (SOP SR)	– within the organization there are 13 units located functioning as information centers for nature protection and also a School on Nature Protection in Varín
SHMÚ	– Seminars on World Meteorology Day and World Day of Water
Energy consultation and information centres	– Consultation and information services in area of energy saving
The association of environmental education organizations – Špirála	– Association of 12 NGOs (CEEV Živica, CEA Trenčín, CMOP SZOPK, Daphne, Kon-Tiki Club, OZ Ekoenergy, OZ Tatry, The Animal Freedom, Sosna, SEV Dub, The Life Tree, The Green Line)
Nongovernmental organizations	<ul style="list-style-type: none"> – NGO People and Water, – LZ VLK, – A – project, – CEPA, – Ecosofia, – Greenpeace, – RIO 21 Centrum, – BROZ, – Daphne, – SOVS, – Energy 2000, – Vydra, – ZO SZOPK Miniopiterus, – STUŽ/SR, – ECB, – ZMZ, – The Predator Protection in Slovakia, – REC Slovakia and some others.

In general, Rio conventions finances can be categorized as follows:

- state financial contributions for administration (personnel costs of administrative structures, participation on international meetings),
- state financial contributions for technical issues of the Rio conventions (monitoring, information systems, research, education, dissemination and access to the information) and
- state financial contributions for accomplishment of individual tasks in specific conventions.

The first two contributions come solely from the state budget. The financing of individual tasks is divided among the state and the private sector with a significant role played by international donors.

Since 2004, **the direct financing from the state budget** is provided in a programme structure according the methodology of the Ministry of Finance. The Ministry of Environment receives financing from two programmes:

- programme 075 –Management of the Environment
- Programme 076 –Policy Development and Implementation²⁴.

The programme 075 (Management of the Environment) consists of programmes that are related to the accomplishment of Rio conventions (e.g. Programme for protection of species, Programme for protection of territories, Programme for air protection and Programme for protection against floods). At the same time the programmes identify items for co financing from EU funds.

The budget of the Ministry of Agriculture is allocated in the following programmes:

- 050 –Policy Development and Implementation
- 07N- Rural Development
- 07O-Agriculture and food processing industry.

In the Rural Development programme the finances are allocated for agro-environmental provisions. The creation of an agriculture information system is a component of the programme of Policy Development and Implementation. Soil degradation is not specifically identified in any programme.

In addition to the state budget, the another source for the direct financing of Rio conventions activities is the newly established Environmental Fund. Finances from this source may be used for the following:

²⁴ On <http://www.enviro.gov.sk/servlets/files/8875> a <http://www.rokovania.sk> (governmental meetings of October 14. 2003 and October 13, 2004) include data about the programme titles and finances for the 2004, 2005-2007.

- support of activities focused on the accomplishment of the state environmental policy goals at the national, regional and local levels,
- support of exploration, research and development focused on improvement of the state of environment,
- support of environmental training, education, and promotion,
- support for arrangements to solve extraordinary important environmental issues,
- support for environment accidents and extraordinary water deterioration threatening or damaging the environment.

These broad conditions for support do not address the Rio conventions requirements specifically but could include activities which support implementation.

In the period of 2001 – 2004 financial resources were distributed directly from the Environmental Project Implementation Division of the Ministry of Environment.²⁵

Some financial mechanisms has been developed under the UNFCCC. For example, for the area of efficient use of energy and renewable energy, financing from the Ministry of Economy is available through the *“The Scheme for the support of energy saving and use of renewable resources of energy, DM-003/03”*. Another example is the requirement to liberalize the electricity, gas and heat market and eliminate all kinds of subsidies. Finances for the reduction and reuse of methane in waste management are available from the Recycling Fund.

An allocation of 0.5 mil.SK has been made for the institutional support for the Government Council for Sustainable Development including the development of an action plan and other activities. These financial means are intended to be used for sustainable development with the emphasis on cooperation of the experts and the public, know how transfer from other countries with better results in this field. This will involve seminars and workshops, participation in research and other similar activities. To a large degree this financial package should secure the institutional support for sustainable development. The activities should be integrative in nature focusing on identification of intersectoral issues among others.

Indirect financing exists for the CBD and UNCDD. For example, the Act on Landscape and Nature Protection includes provisions with respect to the compensation for limiting uses due to nature protection and also for

financial contributions to support species and biotopes. In spite of these measures the existing compensation for farmers' loss is insufficient. The loss of field crops as a result of desertification is higher than the loss caused by the other soil degradation processes (water and wind erosion, compact, etc.)

International sources of finance are available with the largest being the EU, primarily through the structural and cohesion funds. These funds are a supplementary source of finance for development activities, based upon agreed upon programme implementation²⁶ and are tied to reaching specific goals.

The National Development Plan is the basic programme document for the implementation of structural and regional policy for the period of 2004 – 2006. It provides a complex view of the current state of the Slovak regions and barriers to development. The National Development Plan defines development priorities measures to accomplish them. It includes goals, strategies and the necessary financial implementation framework.

In general, the programme structure is contained in the **structural fund** programme schemes. For the Rio conventions the following are relevant:

- Basic Infrastructure, priority measures 2 (Environmental infrastructure)
- Agriculture, priority measures 2 (Support of productivity and rural sustainable development).
- Human resources (Support of training)
- Industry and service (Support of energy saving).

Opportunities for project financing exist also in Basic Infrastructure, measure 1 (modernization and development of rail and road transport), measure 3 (building and development of school infrastructure and information society for the public sector). The Annex 4 consists of the table that describes particular provisions and activities of OP and SOP in relation to the implementation of the requirements of the Rio conventions.

In addition to the structural fund and cohesion funds, previous financial support was implemented through PHARE, bilateral or multilateral projects. The important projects of international aid related to the implementation of the Rio conventions or focused on strengthening the capacities are described in Annex n. 5.

Among the other important financial resources belong resources and programmes of GEF (www.gefweb.org) and World Bank (www.worldbank.org).

²⁵ On www.enviro.gov.sk information on grant awarded in 2001-2004, that directly contribute to the Rio implementation (particularly finances obtained for the implementation of the Biological Diversity Convention).

²⁶ National Development Plan (March 2003) implemented through operational programmes.

5. Recommendations

The Thematic Assessment Reports analyzed capacities for implementation of the individual conventions and identified selected common areas. The Cross Cutting Working Group examined in detail the research in the area of common issues in the individual Rio conventions, the connection of the conventions to the international framework and the existing institutional structure and legislation process in the Slovak Republic. The recommendations are of a cross cutting nature in that they are recommendations which address mutual issues in all three of the Rio conventions. The recommendations of the Thematic Assessment Reports [12, 13, 14] are clearly defined for each of the individual conventions. The cross cutting recommendations are strategic in nature and are complementary to more specific recommendations of each of the Thematic Assessment Reports. Application of the cross cutting recommendations is therefore just the first step to improve the implementation of the Rio conventions which must be fully completed also by applying the specific recommendation of the Thematic Assessment Reports.

The cross cutting recommendations are addressed at the national level, but will also have an impact on all

levels of the system. The proposal of the Strategic Action Plan for the implementation of the cross cutting recommendations was developed as the base to identify priorities, finances, and indicators in relation to the recommendations.

Common and cross cutting issues were prioritized using the following criteria:

- number of conventions impacted
- national priority as identified in the Thematic Assessment Reports,
- priority in relation to EU requirements and policies,
- linkage to existing Slovak legislation, directives, strategic documents and institutions.

The final selection resulted in recommendations that:

- relate to all three conventions,
- originate in the current Slovak capacity framework ensuring ease of implementation,
- have potential for substantial impact on the implementation of the Rio conventions.

Tables 5.1 -5.3 provide a list of common and cross cutting issues.

Table 5.1: Systemic common and cross cutting issues

Need	Justification
COMMON Integrate the Rio conventions issues to the programmes, strategies and plans of the other sectors	This need is regularly recognized in all strategic documents. However systemic tools such as Strategic Environmental Assessment are not applied.
CROSS CUTTING Develop the integrative research programme (An update of state programme for science and research within the years 2006-2010)	Research tasks, tied to Rio conventions issues, are currently assigned to individual sectors (e.g. research development concepts in agriculture and environment sectors). This leads to research focused on specific problems by very specialized experts. It results in fragmentation and the absence of integrative research in the area of global environmental management. There is an absence of the assessment of negative health, economic and social impact of climate change, impact of desertification and land degradation and impact of the reduction of biological diversity. The synergistic opportunities provided for in the UNFCCC/CBD/UNCCD are not provided for in research due to the absence of systemic support and limited human and financial resources. Therefore, it is necessary to develop an integrated research strategy in the field of global environmental management in the framework of the State Programme for Science and Research 2006-2010. It will optimize project financial allowances and prevent duplication of research.

Table 5.1: Continued

Need	Justification
CROSS CUTTING Prepare a complex strategy of training and education for all levels of bodies decision making	While the educational institutions provide a large range of training, there is an absence of regular training within decision making bodies at all levels (from central, regional, district to local). The managers have to manage their duties based upon self-study and knowledge gained through their own individual experiences. However, these are insufficient to manage the complex implementation of the Rio conventions. Higher specialization is sometimes detrimental to understanding integrative approaches. These serious deficiencies can be overcome in some international projects which involve training activities (e.g. training for environmental inspectors for the implementation of new IPPC act is a good example). However, the systemic support of such activities does not exist and financial and time constraints do not allow for the participation of decision makers in training courses. Therefore the systemic support for the regular training on global environmental management (including Rio conventions) is necessary. Examples of the type of training can be found in related fields (training on health protection at the work place, fire training, accounting courses, bank top-managers training).
CROSS CUTTING and COMMON Rio conventions priorities be considered as a factor in prioritization of official development aid (An update of ODA Strategy for (2003-2008)	The Slovak ODA concept [15] includes a sectoral focus of aid in the area of the environment and landscape, however it is defined in a general way as: ... "know-how a capacity of Slovak subjects in reforestation, construction of irrigation systems, in selected agriculture activities and geological exploration"... [15]. In spite of the fact that Slovakia agreed to support development aid, transfer of technologies and know how by Rio conventions accession, it was not reflected either in the concept of ODA nor on the level of individual secretariats of the Rio conventions. At the same time it was stated that experts and institutions with ability to provide consultancy and expert services for development countries are available.

Table 5.2: Institutional common and cross cutting issues

Need	Justification
CROSS CUTTING Establish intersectoral working group and coordination of activities on an intersectoral level in the area of policy implementation	The Thematic Assessment Reports [12, 13, 14] identified the need for the establishment of an intersectoral coordination committee for particular conventions (in other words three coordination intersectoral units). Rio conventions requirements are provided through the same national bodies (MOE SR, MOA SR, MTPT SR, MOEC SR, MOED SR, MF SR, MCRD SR, MFA SR), supporting organizations (SHMI, SAŽP, SiŽP, SEA, SNP SR), scientific and university institutions (SAV, SPU Nitra, PriF UK Bratislava, STU Bratislava a TU Zvolen), as well as specialized sectoral institutions (SSCRI, WMRI, VURV, FRI). In addition, the NGOs participate in Rio conventions implementation. It is reasonable therefore, to think of the establishment of a Coordination Committee that will be able to address not only activities of one convention, but all three Rio conventions.
COMMON Form a national working team for the processing of national reports, institutional support of NFP (and establish additional NFPs)	The Thematic Assessment Reports [12, 13, 14] stated the need the strengthening the National Focal Points in all 3 conventions as well as the creation of new ones for other specific areas (e.g. NFP for flexible mechanisms for the Kyoto protocol, NFP for the access to genetic resources). The institutional framework for the development of national information for reporting purposes as well and creation of action plans is insufficient. Therefore it is reasonable to suggest that specific ministries will authorize responsible institutions and specialists to create „permanent“ working groups coordinated by the National Focal Points. The common approach of all Secretariats of conventions will have a higher probability of successful implementation.
COMMON Establish rules for sharing information from information and monitoring systems and linkage of thematic information systems	The sectoral information systems, ČMS as well as specific inventories according Rio conventions requirements are in place (e.g. control of greenhouse gas emissions, control of forest and no forestry biotopes). However information sharing among the institutions of different sectors is problematic. Therefore it is necessary to develop clear rules for providing, use and sharing of databases. At the same time the identification of missing or incomplete information from current statistical survey for the purpose of the implementation of the Rio conventions should be identified. This kind of recommendation applies not only to the Rio conventions but also for other global environmental agreements.

Table 5.2: Continued

Need	Justification
CROSS CUTTING Support the development of cooperation of the institutions with the goal to increase public awareness on Rio conventions issues	This need is supported in all directives and regulations of environmental legislation. The Concept of Environmental Education and other supportive educational documents exist at the systemic level. There is no institutional support for mobilization existing capacities (specialized institutions and NGOs) and for targeted public awareness. It is reasonable to improve the system of permanent information flow towards the public through the media, specialized materials and through the internet. The increase of awareness has to be focused on climate change impact, impact of desertification and land degradation and drop of biological diversity on everyday life of people including health, social and economic impact of global environmental problems. At the institutional level there is a need to assess the amount of financial resources used for this purpose and to mobilization additional resources from international funds.
COMMON Follow the NCSA cycle in regular periods to monitor performance of NCSA recommendations and update it at regular intervals	This is the first NCSA project for the Rio conventions in Slovakia. The process and methodology provided by UNDP/GEF were very useful. Specific recommendation of TAR [12, 13, 14] and cross cutting report provide a significant contribution for responsible resource use for of Rio conventions implementation. The methodology of the UNDP is universal therefore it is possible to use it for other national and global agreements. Up dating the NCSA project will allow for the definition of the necessary capacities for global conventions or approved concepts and strategies on the national level.

Table 5.3: Individual common and cross cutting issues

Need	Justification
CROSS CUTTING AND COMMON Support for education of specialists, researchers and public administration	The outflow of specialists, researchers and public administration officials to other professions both domestically and abroad is due in large part to the lack of financial rewards. The support of personal career growth can overcome a temporary unfavorable economic situation. The improvement of qualification level and flexibility of the individuals will have a positive influence on following systemic and institutional measures by ensuring the continuing supply of educated and experienced personnel.

The information discussed in the above tables led to the development of five cross cutting recommendations focused on coordination, training, and increased public awareness, integrated research, and official development aid. Specifically the recommendations are as follows:

- Establishment of the Rio conventions Coordination Committee
- Integrated Management Training
- Public Awareness Programme
- Integrated Interdisciplinary Scientific Research
- Integration of Rio conventions Priorities into the Slovak Official Development Aid Programme

Establishment of the Rio Conventions Coordination Committee

The analysis showed that in spite of many common problems and the potential for synergy among the conventions each is implemented independently. Also, some of the existing structures, particularly the National Focal Points, are not used to their full potential. This suggests that an integrative approach would greatly strengthen the overall implementation of the Rio conventions. It would also provide the implementation of the Rio conventions greater visibility and priority in

the Slovak Government system. Therefore, it is recommended that the Rio Conventions Coordination Committee be established to clarify and strengthen the priority given to the implementation of the Rio conventions within the Government of Slovakia. It would also serve as a platform for implementation of the proposed Strategic Action Plan and ongoing monitoring of Rio conventions implementation activities.

The establishment of the coordination committee should be within the revitalized Government Council for Sustainable Development. This will allow the committee to make recommendations and coordinate activities at the intersectoral level across government ministries to take advantage of the opportunities for synergies among the Rio conventions. The proposal for the Strategic Action plan could be used as the initial agenda for the Committee.

Integrated Management Training

The analysis clearly identified the need for qualified managers to manage the complexity of the requirements of the Rio conventions. The current managers and supervisors are often appointed to their position on the base of their technical and scientific knowledge

with no prior preparation for the management function.

The training focus, content and form need to be tailored to the work loads of the participants. The training should address practical problems of participating managers with the emphasis on the integrative approach. The target groups will include the following groups of managers:

- State environmental administration
- local governments,
- Specialized institutions participating on Rio conventions implementation.

The Coordinating Committee will take the initial role in facilitating the preparation of training including human and financial resources recommendations.

Public Awareness Programme

Public participation is a key aspect of the implementation of the Rio conventions. The Thematic Assessment Reports referred to the existence of limited access to information as well as the need to increase public awareness. However, while many government organizations and NGOs are active in promoting public awareness, a focal point for integrative programming is missing. The solution would be the development of a targeted programme to increase public awareness about Rio conventions issues. The programme could be implemented through the existing governmental and non-governmental organizations.

The programme should consist of information campaigns for the civic associations, communities, schools and other members of the general public. It should be focused on explanation of Rio conventions issues and the reciprocal interactions among the conventions. The internet should be used as a tool in a creative way to improve programme success.

The coordination committee will initiate the public awareness programme. Regional and local governments will be included. The programme will be structured so that key components can be implemented into the formal educational system. It will be focused on simple changes of people's everyday behavior.

The Coordination Committee will coordinate work on the programme development including calculation and identification of financial needs.

Integrated Interdisciplinary Scientific Research

The implementation of the Rio conventions requires the support of interdisciplinary research involving both social, and natural sciences. Implementation will have positive impact not only on meeting the requirements of the Rio conventions, but on strengthening interdisciplinary research generally in the Slovak Republic. At the same time it will open new opportunities for participation of researchers on international projects including EU sponsored projects requiring interdisciplinary approaches. A useful starting point for the development of integrated research could be the outcomes of the *Technology Foresight* project [10]. The need for integrated research has to be reflected in the update of State Programme for Science and Research.

The Coordination Committee will act as the initial recipient for projects addressing cross cutting research issues of the Rio conventions. The Committee will subsequently submit those as an initiative to the particular committees for science and technology or to international donors as appropriate.

The proposed measure requires additional financial and human resources. These will be defined when concrete projects will be developed.

Integration of Rio Conventions Priorities into the Slovak Official Development Aid Programme

In ratifying the Rio conventions, Slovakia agreed to support development aid to provide for the transfer of technologies and know how to less developed countries. However the transfer of knowledge with respect to commitments of the Rio conventions has not been formally reflected in the development of ODA. It is logical for the ODA commitment in the Rio conventions to be reflected in the development Slovak ODA programme and projects. The Coordination Committee will initiate the discussion with Slovak ODA officials the use of the Rio conventions commitments as priority activities to be funded.

6. The strategic action plan proposal

The proposal of the Strategic Action Plan has been developed to improve the implementation of the commitments of the Rio conventions and to provide the framework to facilitate the recommendations outlined in the Thematic Assessment Reports.

The Strategic Action Plan proposal for improving the Slovak capacity to implement the requirements of the Rio conventions was developed in full recognition of the complexity of the issues outlined in the Thematic Assessment Reports and the current structural changes occurring in the Slovak Government in relation to the implementation of sustainable development.

The goal of the Strategic Action Plan is to further Rio conventions implementation in Slovakia on the basis

of the NCSA findings. The main characteristics of the Strategic Plan are described in table 6.1.

In deciding on the nature of the action plan to be developed the Cross Cutting Working Group considered both operational and strategic approaches. A brief comparative summary of the two approaches appears below.

The integrated cross cutting recommendations are provided in Table 6.2. The basic recommendations for development and building of capacities concerning individual conventions are described in detail in the Thematic Assessment Reports and summarized in Annex 6.

Table 6.1: Comparative Action Plan Approaches

Strategic action plan	Operational action plan
Complex issues	Specific issues
Development and acceptance of strategies, plans	Implementation of plans, projects
Multiple organizational involvements	Single or limited number of organizations involved
Impact: national and international	Impact: national and local
Outcomes: strategic, systemic	Outcomes: practical, specific

Table 6.2: The Strategic Action Plan Proposal

Recommendation	Responsible subject	Measures to be taken	Tasks	Financial resources (national, international, private)	Indicator of Success
Establish the Rio Conventions Coordination Committee	Council of Government for Sustainable Development in cooperation with Environment and Agriculture ministries	<ul style="list-style-type: none"> • Create Terms of Reference • Appoint Members • Confirm the Committee • Develop and approve the Committee Work Plan 	<ul style="list-style-type: none"> • Coordinate cross cutting and common activities for the Rio conventions • Initiate and develop the Proposal for Integrated Training • Initiate and Develop the Proposal for Integrated Research • Advise the Government on issues related to the implementation of the Rio conventions • Support the mechanisms to improve Rio conventions capacities for implementation of common and cross cutting issues • Support the mutual cooperation of National Focal Points • develop monitoring system for regular assessment of capacities and NCSA findings 	State budget for the Council of Government	<ul style="list-style-type: none"> • Existing and functioning Committee with political acceptance • Number of proposals generated • Number of proposals implemented
Integrated management training	Coordination Committee, MoEd in cooperation with the MoE and MoA	<ul style="list-style-type: none"> • Identify content and form of training • Identify trainer's profile • Select the institution responsible for training development and implementation 	<ul style="list-style-type: none"> • Develop and approve the training material • Recruitment and training of trainers • Recruitment of Participants • Organize training sessions • regularly evaluate training • update training documents 	State budget: defined in programmes 075,050, European Social Fund (SOP Human Resource)	<ul style="list-style-type: none"> • Course developed • Trainers trained • Managers trained

Table 6.2: Continued

Recommendation	Responsible subject	Measures to be taken	Tasks	Financial resources (national, international, private)	Indicator of Success
Public Awareness Programme	Coordination Committee in cooperation with the MoE and MoA	<ul style="list-style-type: none"> Develop and approve the programme content Select organization(s) for programme implementation 	<ul style="list-style-type: none"> Prepare and organize campaigns Prepare public education materials 	State budget, European Social Fund (SOP Human Resource), Nongovernmental grant organizations (Slovak and international), Private Sector	<ul style="list-style-type: none"> Number of implemented targeted Campaigns Number of Public Education Materials Number of broadcasts Number of participants involved in campaign
Integrated Interdisciplinary Scientific Research	Coordination Committee, MoEd in cooperation with MoE and MoA	<ul style="list-style-type: none"> Develop integrated research area Update State Programme of Science and Research for the period 2006-2010 	<ul style="list-style-type: none"> Develop project proposals for integrated research Implement research projects 	State budget, the budget of the MoEd, Grant schemes of 6. (7.) EU Framework Programme for Science	<ul style="list-style-type: none"> Number of developed and implemented projects with a focus on integration Number of institutions involved
Integration of Rio conventions priorities into the Slovak Official Development Aid Programme	Coordinating Committee, the MoFA in cooperation with MoE and MoA	<ul style="list-style-type: none"> Develop of proposal for the use of Rio conventions priorities in Slovak ODA 	<ul style="list-style-type: none"> Integration of aid related to the Rio conventions requirements to programme areas of ODA 	State budget 075, 050 and budget of the MoFA	<ul style="list-style-type: none"> ODA Programme areas including Rio conventions priorities Number of project proposals for Rio conventions issues Number of approved and implemented projects supporting the Rio conventions

7. References

1. Košičiarová, S. et al.: Právo životného prostredia, The general part, part 1 ,HEUREKA, 375, 2001
2. UNDP/GEF: A guide for self-assessment of country capacity needs for global environmental management. Washington, D.C., 2001, 44 s.
3. UNDP/GEF: Capacity development indicators, Resource Kit No 4., 2003, 37 s.
4. UNDP: Capacity Building for Environmental Management: A Best Practice Guide. New York.1999
5. UNDP/GEF: National Capacity Self-Assessment, Resource Kit No.3, 2003, 44 s.
6. Integrated Approximation Strategy, Environment Sector MoE SR, 2003.
7. Správa o stave životného prostredia v SR za rok 2001, MOE SR, 2003;
8. Trulíková, A.: Informačný systém monitoringu životného prostredia sa stal nevyhnutnosťou, Enviromagazín, 9/ 2004, s. 8-9.
9. Kobza, J., ČMS Pôda – ďalší vývoj pôd predmetom európskeho záujmu, Enviromagazín, 9/2004, s. 12-13.
10. Prognóza rozvoja a využívania vedy a techniky do r. 2015 (Technology Foresight), 2. etapa: Identifikácia trendov rozvoja vedy a techniky v SR v podmienkach Európskeho výskumného priestoru, Prognostický ústav SAV Bratislava, Správa, 2004, 106 s.
11. Lisabonská stratégia pre Slovensko. Stratégia ekonomického a sociálneho rozvoja Slovenskej republiky do r. 2010. Ministerstvo financií SR. November 2004.
12. NCSA (UNDP/GEF/VUPOP): Thematic Assessment Report Climate Change, Princová H., et al., December 2004.
13. NCSA (UNDP/GEF/VUPOP): Thematic Assessment Report Desertification, Bujnovský R., et al. December 2004.
14. NCSA (UNDP/GEF/VUPOP): Thematic Assessment Report Biodiversity, Guziová Z. et al. March 2005.
15. Strednodobá koncepcia oficiálnej rozvojovej pomoci na roky 2003 – 2006, MZV SR, 2003.
16. Commission of the EC: The sixth environmental action programme of the European Community "Environment 2010: Our future, Our choice", COM (2001) 31 Final. 2001/0029 (COD. 81 pp.
17. G. Dittelová-Sabelová: Životné prostredie. Slovensko a Európska únia. Úrad vlády SR. Bratislava. 2003, 21 pp.
18. Report from the Commission: Environmental technology for sustainable development. Commission of the EC, Brussels,13.03.2002, COM (2002) 122 final.
19. Communication from the Commission: Developing an action plan for environmental technology, Brussels, 03.04.2003, COM (2003) 131 final.
20. National Programme of Official Development Aid for 2004, MoFA, 2003.