

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

# **NATIONAL CAPACITY SELF-ASSESSMENT RELATED TO ENVIRONMENTAL MANAGEMENT OF GLOBAL CONVENTIONS**

**The Thematic Assessment Report of Capacity Development Needs  
for the Convention to Combat Desertification in Those Countries  
Experiencing Serious Droughts and/or Desertification,  
Particularly in Africa**

December 2004

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### ABBREVIATIONS

CAP	Common Agricultural Policy
CBD	Convention on biological diversity
CDI	Capacity Development Initiative
COP	Conference of Parties
EAP	Environmental action program (here 6.EAP EÚ)
EC	European Commission
EEA	European Environmental Agency
EIT	Economies in transition
ESSC	European Society for Soil Conservation
FAO	Food and Agriculture Organization of the United Nations
GEF	Global Environmental Facility
GI	Generic indicator
IACS	Integrated Administrative Control System
MoA	Ministry of Agriculture SR
MoE	Ministry of Environment SR
MoEd	Ministry of Education SR
MoFA	Ministry of Foreign Affairs
NAP	National action program (here to implement the Convention)
NCSA	National Capacity Self- Assessment
NFP	National Focal Point
NGO	Non-government organization
NSSD	National Strategy of Sustainable Development
SAV	Slovenska akadémia vied/ Slovak Academy of Science
SB	State budget
SD	Sustainable development
SPU	Slovenska poľnohospodárska univerzita/ Slovak Agriculture University
STU	Slovak Technical University (Bratislava)
STUŽ	Spoločnosť pre trvalo udržateľný život/ Association for Sustainable Development (NGO)
TU	Technical University (Zvolen)
UK	Univerzita Komenského /Comenius University
UNCCD	United National Convention to Combat Desertification
UNDP	United Nation Development Program
UNFCCC	United National Framework Convention on Climate Change
VTS	Vedecko technická spolupráca/ scientific technical cooperation
VÚPOP	Výskumný ústav pôdozvedectva a ochrany pôdy/ Soil Science and Conservation Research Institute

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# Summary

In the 20<sup>th</sup> century, the degradation and destruction of all components of the environment had reached such intensity and extent that it was manifested in global problems. The international community began to pay attention to seeking solutions and these efforts climaxed at the World summit of the UN on the Environment and Development (Earth Summit) in 1992 in Rio de Janeiro. As a result of negotiations, world wide activities were initiated and global conventions were endorsed. The Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC) and the Convention to Combat Desertification in Those Countries Experiencing Serious Droughts and/or Desertification, Particularly in Africa (UNCCD), often referred to as the Rio Conventions because of their common association with United Nations Conference on the Environment and Development represent major legal instruments for the global environmental management. They feature a high participation rate of developing countries and countries with economies in transition (EITs). However, in many cases the national capacity of these countries to fulfil the commitments embodied in these instruments is limited. Capacity development for global environmental management had therefore become one of the key words within the regimes of all the three Conventions.

In May 1999, the *Capacity Development Initiative* (CDI) was launched as a strategic partnership between the UNDP, a leading entity within the UN system in the area of capacity development, and the Secretariat of the Global Environment Facility, representing a principal global funding mechanism for the environment. In January 2004, a project entitled “*National capacity needs self-assessment related to environmental management of global conventions*” (NCSA Project) was approved for the Slovak Republic by the Chief Executive Officer of the GEF under this new scheme.

The objective of the NCSA project is to determine the priority needs for capacity development in Slovakia in order to extend the country capacity to meet its commitments to global environmental management. The project focuses on capacity related issues that are common across the conventions, assessing the capacities needed to address these in a synergistic fashion, including needs associated with strengthening existing institutional mechanisms and developing networks. This thematic capacity assessment deals with the **Convention to Combat Desertification** (hereinafter the Convention) and provides a base for the National Capacity Self-Assessment (NCSA) Report and a pro-

posal to Action Plan to mobilize and build capacities for Rio conventions.

## Current capacity framework to meet the requirements of the Convention

National activities after the accession to the Convention (January 7, 2002) were focused on the establishment of administrative structures. The National Secretariat to the Convention was established at the Department of Foreign Affairs at the Ministry of Agriculture. It is responsible for the facilitation of the commitments and activities and communication with the Convention Secretariat. The daily technical tasks with respect to the implementation of the Convention are conducted at the VÚPOP. The VÚPOP is acting as the National Focal Point (NFP). Also, the National Advisory Committee was established that provides for political platform and functions in coordination with the National Secretariat and NFP.

Currently, there is no a special strategy documents or a national (action) program in place, which would deal with the Convention. Existing strategy documents with respect to the protection of soil and landscape and the current status and development of the soil in Slovakia envisage adoption and implementation of substantial measures that will involve the principles of the Convention (in particular the Annex V). These measures are essential to address the deterioration status of the soil and landscape, excessive water (and wind) erosion, and compaction of soil, acidification, and soil pollution. The highest priority is the relevant measures at the systemic level to regulate the water regime.

Based upon the assessment of existing capacities by those involved in implementation of the Convention, it could be stated that due to the absence of coordination in preparation of strategies, many of the regulatory documents are not supported by implementation tools and capacities. Financial and information sources are used in isolation and ineffectively.

## Recommendations to the final NCSA report and action plan to strengthen capacities

Chapters 3 and 4 assess the commitments of Slovakia to meet the Convention and related existing capacities to implement the Convention. These commitments are grouped and prioritized according to expert

judgment. Although individual measures deal with independent problems to be solved, the critical problem with respect to the implementation of the Convention is the delay in the adoption of the National Action Program for the Convention. The main outputs of this study are recommendations and proposed measures that should be incorporated into the final NCSA report as follows.

***Preparation and implementation of the National Action Program for the Convention***

The Convention requires the signatory countries to adopt and implement national action programs. A need to develop and adopt the National Action Program (NAP) for the Convention is the most critical outcome of the assessment. The NAP should determine responsible parties, as well as communication and cooperation mechanisms. In order to implement the Convention it is necessary to clearly define mandates, functions, and technical and financial support of the specialized institutions and organizations involved in the implementation of the Convention. The NAP should also address the issue of mobilization of the NGOs as these currently are not actively involved in the problems of desertification and soil degradation.

***Completion of an integrated environmental monitoring and information system according to the EU and Convention requirements***

The Convention calls for an integrated environmental monitoring and information system. This requirement is in line with the EU monitoring and information requirements. The assessment emphasizes the need to include monitoring of droughts and to complete the soil information system with respect to the register of dry and degraded soils. Also, an urban area information system is required. Regarding the use of the information system, it is necessary to determine rules on the shared utilization of the databases among all involved institutions.

***The development and implementation of a strategy of integrated research on soil and land degradation***

In the assessment it was concluded that the existing long-standing academic and sectoral research should

be utilized more effectively. A strategy of integrated research to support drought mitigation and land and soil degradation is not in place. This is also complicated by the fact that specialized institutions are not sufficiently financed. The assessment outlined a need to increase the share of Slovakia in the international cooperation in the area of desertification and soil degradation.

***Support of education and public awareness, access to information on causes and effects of desertification and soil degradation***

Assessment of public awareness and access to information resulted in the following measures:

- modify the education system in order to reflect the principles of sustainable development and the requirements of the Convention
- improve cooperation among expert institutions and the media in order to increase public access to information on causes and effects of desertification and land degradation
- train a sufficient number of trainers for public education.

***Identification of content, forms and mechanisms of Slovak aid to affected countries (mainly developing countries)***

Slovakia as a signatory country to the Convention has not yet defined the form and extent of international aid to developing countries impacted by desertification. Based upon the assessment of background situation it was concluded that it is necessary to develop a proposal for the forms of aid to impacted countries including the financial requirements to provide such aid. In addition, it is necessary to train experts in various specializations in order to flexibly support the aid. Such experts should be familiar with cross – sectoral and international issues.

*EDITORIAL COMMENT: The original NCSA report was developed in Slovak language and translated into the English. The Annexes are not translated.*

# 1. Introduction

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## 2. Methods

### 2.1. Methodological aspects of capacity building and capacity development

In the global context, “capacity” refers to the ability of individuals and institutions to make and implement decisions and perform functions in an effective, efficient and sustainable manner. Capacity needs are dependent on “what” the capacity is needed for and should be defined at three levels: individual, institutional or “entity,” and the overall system in which individuals and entities interact and operate (1, 2). Key guiding questions for assessment can be applied to any particular global environmental objective. To address the capacity needs, the term “capacity building” has been frequently used in the development field. However, a new term “capacity development” has been proposed since this terminology shifts emphasis from a process that is externally driven to one which is self-motivating and takes place gradually from within.

Capacity development at *the individual level* refers to the process of changing attitudes and behaviours, imparting knowledge and developing skills while maximizing the benefits of participation, knowledge exchange and ownership. It aims to investigate “individual” responsibilities and interests on plans and decisions including personal incentives and expertise.

Capacity development at *the institutional level* focuses on the overall organizational performance and functioning capabilities of the single institution, as well as its ability to adapt to change. It aims to develop the institution as a total system, including individuals, groups and the organization itself.

Capacity development at *the systemic level* emphasizes the overall country environment in which individuals and organizations operate and interact with the external environment, as well as the formal and informal relationships of institutions.

Traditionally, interventions at the systemic level were simply termed “institution strengthening.” This reflected a concern with human resource development as well as assisting in the emergence and improvement of organizations.

The thematic assessment of capacities was conducted with the support of the methodological documents of the UNDP/GEF (1, 2, 3, 12, and 13). The UNDP/GEF capacity development indicator framework (2) includes the following strategic areas of support organized according to 5 generic indicators (GI):

- **Capacity to conceptualize and formulate policies, legislations, strategies, and programs**

This category includes analyzing global conditions that may affect country needs and performance in a given area, developing a vision, long-term strategizing, and setting of objectives. It also includes conceptualizing broader sectoral and cross-sectoral policy, legislative and regulatory frameworks, including synergies between global environmental conventions. It further contains prioritization, planning and formulation of programs and projects.

- **Capacity to implement policies, legislations, strategies, and programs**

This category includes process management capacities that are essential in the implementation of any type of policy, legislation, strategy and program. It also includes execution aspects of program and project implementation. It includes mobilizing and managing human, material and financial resources, and selection of technologies and procurement of equipment.

- **Capacity to engage and build consensus among all stakeholders**

This category includes issues such as mobilization and motivation of stakeholders, creation of partnerships, awareness-raising and developing an enabling environment for civil society and the private sector, stakeholder identification and involvement, managing of large group process and discussion, including mediation of divergent interests, as well as the establishment of collaborative mechanisms.

- **Capacity to mobilize information and knowledge**

This category pertains to the mobilization, access and use of information and knowledge. It includes issues such as effectively gathering, analyzing and synthesizing information, identifying problems and potential solutions, as well as consulting experts and peers. It further covers specific technical skills including the capacity to carry out scientific and technical assessments.

- **Capacity to monitor, evaluate, report and learn**

This category pertains to the monitoring of progress, measuring of results, codification of lessons, learning and feedback, and ensuring accountability to ultimate beneficiaries and partners. It also covers aspects such as reporting to donors and global conventions. It naturally links back to policy dialogue, planning and improved management of implementation.

## 2.2. Overview of methods and procedures used

### *Stock-taking, mapping*

The basic starting point in identification of capacities to meet the requirements of the Convention was to make an inventory of the current status. Due to the fact that no assessment report or action program from the past was available to support the stock-taking activities, the mapping and information for the assessment were gathered in the form of a desk review and expert brain storming sessions. Also, relevant strategy documents of the EU, national legal documents and other relevant studies were used.

### *Processing and evaluation of questionnaires*

The questionnaire was developed based upon the guidelines (2). Format of the questionnaire is attached in Annex 1. The questionnaire was completed by 20 respondents (of 64 requested experts). Due to an enormous range of scatter opinions and contradictory answers, it was not possible to evaluate and interpret the results of the questionnaire. However, this finding was also useful. It confirms the hypothesis that there are various opinions of respondents (even working in different areas of desertification and land degradation) with respect to capacities needed to meet and implement the Convention requirements.

### *Interviews*

Individual interviews were carried out with representatives of central authorities from the MoE, MoA and MoEd. Stakeholders representing various interests were approached.

### *Workshops*

During the thematic assessment two workshops were organized in order to exchange information among experts for all three Rio Conventions (June 29, and November 11, 2004) in Bratislava.

### *Email networking with relevant experts and institutions*

In order to ensure prompt and acceptable information, it was agreed that each draft of background document would be disseminated to commenting to relevant experts. Participants confirmed through the discussions that findings as contained in the report represented informed country synthesis of the situation in Slovakia. All partial outputs, findings and background documents were available for comments by all stakeholders and the implementing agency published the results on its web page.

### *Stakeholder analysis*

A stakeholder analysis is an analytical tool to determine who should be involved in a project, activity or a process, and how to involve each stakeholder. A stakeholder is defined as persons, groups, organizations,

systems, etc., that have a "stake" in a change effort (e.g. a development project) and that are either likely to be affected by the change, whose support is needed or who may oppose the change. Stakeholder analysis identifies the stakeholders and maps out their relative power, influence and interests in a given change effort. The information obtained was used fully to determine the needs for capacity building and capacity development.

### *Root Cause analysis*

A Root Cause Analysis is a tool for diagnosing fundamental problems and challenges and defining key interventions to address these issues. It is also useful for understanding the linkages between causes, problems and symptoms. It is a diagram representing all problems, causes, underlying issues and so forth.

### *SWOT analysis*

The SWOT analysis specifies and summarizes information on issues that deal with requirements, needs and areas that call for the improvement. It analyzes strong and weak aspects. Improvements of weaknesses are a subject of strategic planning. The results of the SWOT analysis are summarized in Chapter 4.

## 2.3. Management and organization of NCSA project in Slovakia

Prior to the launching of the NCSA project in February 2004, the following coordination structure was introduced:

- The Ministry of Environment (MoE) acted as the executing agency for the project. In its capacity as executing agency, the MoE is responsible for the supervision of the project, production of outputs and management of UNDP funds.
- The Soil Science and Conservation Research Institute (Slovak abbreviation VÚPOP) was appointed as the implementing agency for the project and takes responsibility for the day to day management of the project.
- The Project Steering Committee was established to oversee the project. The steering committee is a political platform for strategic collaboration among relevant institutions, being responsible for policy input, functional guidance, and overall co-ordination of the project.
- The Project Board was established to oversee the daily operations of the project, discuss actual matters related to the implementation of the project's follow-up, such as the work plan, financial management and other matters.
- Four working groups, climate change, biodiversity, desertification, and cross-cutting issues were established based on existing working group structures for the Conventions and supervised by the National Focal Point.

### 3. Background situation – requirements of the convention and their implementation in Slovakia

The main objective of the Convention is to combat the desertification in countries impacted by drought and land degradation. The Convention should help to improve revitalization, protection and sustainable use of soil, water sources, improve living conditions in impacted areas, especially at the local level. Annex V to the Convention, adopted in 2001, is a program for the countries of the Central and Eastern Europe and it provides for framework to protect the soil and landscape against degradation. This Chapter describes the background situation in Slovak capacities and its effort to fulfill the requirements of the Convention.

According to the statute of the Convention, the Slovak Republic as a signatory country is both developed and, at the same time, an affected country (according to the definition of the Convention). This means, that Slovakia is obliged to address its own problems with desertification, and soil and land degradation and it has also committed to organize expert or other form of aid to those countries that are impacted by desertification and land degradation (mainly developing countries).

National activities after the accession to the Convention (January 7, 2002) were focused on the establishment of administrative structures. The following bodies were designated:

- the National Secretariat to the Convention – the Department of Foreign Affairs at the Ministry of Agriculture (MoA),
- the National Focal Point – VÚPOP Bratislava
- the National Advisory Committee of the Convention, that functions in a coordination with Secretariat and the NFP. It includes representatives of central bodies, scientific and research institutions and academics.

It is an obligation of the signatory country to participate at the Conferences of Parties (COP). Slovakia is represented by the person authorized by the National Secretariat of the Convention. Following the decision of the first session of the COP, affected countries are requested to report on their activities to implement the Convention. Slovakia, as a new signatory country, has not yet submitted the report to the Committee of the Review of the Implementation of the Convention, yet. The intention is to inform the Secretariat of the Convention through the results of this project (NCSA project).

Apart from the establishment of administrative structures for the Convention and the mobilization of regional cooperation among countries of the Central

Europe, no specific or concrete steps have been carried out by Slovakia. Based upon Government Resolution No. 348/2001, the Convention will be implemented by responsible ministries, namely the Ministry of Environment, the Ministry of Agriculture and the Ministry of Foreign Affairs. Requirements of the Convention were not transposed into any strategic document (for example in the form of the National Action Program (NAP)).

There are several national strategies addressing the protection of soil and land that provide for establishing firm measures, which are also in accordance with the requirements of the Convention (particularly the Annex V). In addition, proposed measures in various strategic documents are essential to address unfavorable status of soil and land, excessive water erosion, compaction of soil, acidification, and soil pollution. The most important appear the relevant measures at the system level that regulate water regime.

The value added of the NCSA project is that in addition to the assessment of capacities necessary to meet the Convention, the NCSA project has furnished the analysis of the background situation in desertification and degradation of soil and land in Slovakia. The main outputs of the expert team that contributed to the analysis of the current status of the soil and land degradation are summarized in Annex 3 of this Report. This part is beyond the terms of reference of the NCSA project although it gives important results to be used in the process of the development of the National Action Program for the Convention. Also, the NCSA project supported the establishment of an expert team that will continue to develop this strategic document for the Convention.

The following text describes Convention requirements for Slovakia and assesses existing capacities.

#### 3.1. General requirements

***The parties should adopt an integrated approach addressing the physical, biological and socio-economic aspects of the processes of desertification and drought (Art. 4/2a)***

The Convention defines the obligations of the parties those affected by desertification, and the parties – economically developed countries. According to the Convention, a long-term strategy to combat desertifi-

cation and land degradation should be developed that will involve financial and technical resources, and allow for public participation. Existing bilateral and multilateral financial mechanisms should be accessible in an effective manner. In addition, the developed countries (countries defined in Art. 6 of the Convention) should actively support the efforts of affected developing countries and provide substantial financial resources and other forms of support and technical assistance. Both affected and developed countries will achieve this objective by the adoption of action programs to combat desertification. The action programs are a set of legal, institutional and financial instruments including scientific and technical cooperation, capacity building, education and raising public awareness.

### 3.2. Legal measures

***The parties will provide an enabling environment by strengthening relevant national legislation and, where they do not exist, enacting new laws (Art. 5e, Art. 8)***

In order to meet this requirement, it is necessary to analyze the existing legal framework including the enforcement mechanisms, and amendments as required by the Convention. This requirement is gradually fulfilled as the EU Environmental Directives are transposed into as national legislation.

**At the systemic level**, no framework legislation exists that cross-sectorally address the issues of soil protection against desertification and land degradation. Capacities to formulate the legal framework are sufficient although not yet mobilized. Existing legislation is heavily fragmented. Basic legislation relevant to the Convention is represented by an Act 220/2004 on the protection and use of agriculture soil. The Act regulates conditions on the use of the soil including the measures aimed to mitigate soil sealing and degradation. Although the adoption of the Act was not conditioned by the accession to the Convention, the Act is a response to European and national demands. A coordinated cross-sectoral approach does not exist.

As Slovakia is the EU member, it follows the principles of the Common Agricultural Policy including the support instruments of the Simplified Area Payments Scheme (SAPS). These tools allow granting environmentally friendly agricultural activities. Similarly, the measures of the Agro – environmental program are implemented.

**At the institutional level**, there is sufficient expert capacity to develop legislation relevant to the Convention. The main gap is that various institutions dealing with issues of desertification and land degradation are unconnected. These institutions deal with partial problems according to the agenda of their founding cen-

tral bodies (for example agriculture, forestry, water management) and this manifests itself in non-effective utilization of their potential. State administration with respect to soil protection consists of regional and county soil offices. These are decision makers with respect to change in use of agricultural soil and dispossession of agricultural soil. According to the Act 220/2004 on the Protection and Use of Agricultural Soil, the Soil Conservation Service was established, as an individual body at the VÚPOP. The Service carries out activities aiming to protect agricultural soil and its use. This institutional strengthening is based upon the adoption of new legislation on the protection and utilization of agricultural soil<sup>1</sup>. The Soil Conservation Service will supervise, in cooperation with other relevant state administration bodies, the following activities:

- survey and monitoring of agricultural soil
- keeping record and information databases on agricultural soil
- elaboration of proposal to mitigate soil damage
- analysis, assessment and quantification of the status and development of soil degradation
- development of proposals for procedures and projects aiming to protect and sustainable use of agriculture soil in specific localities.

**At the individual level**, there is sufficient capacity to meet this requirement. The employees of the VÚPOP are skilled in the preparation of background documentation for legal measures. In addition, the employees of the Soil Conservation Service (established in May 2004) are responsible for the development of measures to remove the threat of damage and degradation of agricultural soil.

***Parties are obliged to establish strategies and priorities, within the framework of sustainable development plans and/or policies to combat desertification and mitigate the effects of drought (Art. 5)***

The National Strategy of Sustainable Development (NSSD) includes issues of desertification indirectly, mainly with respect to the mitigation of negative impacts of climate change. It should be noted, that the NSSD was adopted before the accession of Slovakia to the Convention. The NSSD includes the issue of soil and land degradation. The main shortcoming of the national strategic documents is their weak implementation and lack of enforcement of existing legislation. This is due to the absence of coordination of legal, financial and in part institutional systems. An overview of relevant documents with respect to the Convention is in Annex 2. Slovakia, as an EU member state, is obliged to implement strategies and policies of the EU, such as:

- Recommendation No. R(92)8 of the Committee of Ministers to Member states on soil protection (5)
- Strategy of the EC for the soil protection<sup>2</sup> adopted as implementing tool to the 6<sup>th</sup> EAP of the EU, so

<sup>1</sup> Act 220/2004 on Protection and Use of Agricultural Soil came into the force in May 2004

<sup>2</sup> Issue of desertification and land degradation are not a key objective in the 6<sup>th</sup> EAP (in contrast with other global conventions on climate change and biodiversity).



called Towards a Thematic Strategy for Soil Protection (8) and technical documents published within this strategy<sup>3</sup>

- Revised European Charter for the Protection and Sustainable Management of Soil (6)
- reform of the Common Agricultural Policy – AGEN-DA 2000.

**At the systemic level**, the NSSD includes only parts of the legal and institutional proposals relevant to the Convention. Currently, a revision of the NSSD is being developed, and this will create the basic conditions to fully introduce the issues of the Convention into the NSSD.

**At the institutional level** sufficient technical and professional capacity exists to meet the requirement, although these are not fully used. The mechanism to coordinate and cooperate among specialized institutions is missing. This same observation is valid for the non-coordinated allocation of finances.

At the individual level there is sufficient capacity to develop relevant strategies and policies. However, the experts are not sufficiently mobilized to develop legal documents related to the Convention.

***National action programs shall be an integral part of the policy framework for sustainable development and address in an appropriate manner the various forms of land degradation, desertification and drought affecting the parties of the region (Central and Eastern Europe) (Annex V, Art. 3/1)***

This requirement of the Convention requires adopting a National Action Program that would represent a set of legal, institutional, and economic instruments in order to address demands of the individual country within the existing political framework of sustainable development. Generally, in Slovakia, there is a positive political attitude towards the declaration of the necessity to develop an action program; however, currently no concrete steps have been taken. This is due to weak coordination in the creation of strategy documents.

**At the systemic level**, the basic conditions are present, as Slovakia has endorsed the accession to the Convention at the Government level. The Government resolution No. 348/2001 obliged three ministries to implement the Convention. The responsibility to develop the NAP is under the MoA within two years of the accession to the Convention.

**At the institutional level**, sufficient capacity exists, especially the capacity to prepare legal and technical documents related to the Convention and the NAP. The mechanism to coordinate and cooperate among specialized institutions does not exist. Under the MoA, there are several research institutions in place, how-

ever, these are focused on a specialized theme or sector (for example the VUPOP, Hydromeliorácie – state owned company, Research Institute of Plant Production, Forestry Research Institute). All of them are capable of contributing to the development of the NAP.

**At the individual level** there is sufficient capacity to develop a NAP.

### 3.3. Institutional measures

***The parties will determine institutional mechanisms and activities keeping in mind the need to avoid duplication (Art. 4/2g)***

This requirement leads to effective use of existing capacities as an integral element of implementation of national strategies with respect to protection of soil and land against desertification and degradation keeping in mind the common requirements of all Rio conventions.

**At the systemic level**, a reliable mechanism that would avoid duplication is not in place. An advisory, initiating and coordination body of the Government was established (the National Committee for SD). The Committee consists of ministers, scientists, and representatives of other interested groups including NGOs. Although the Committee is supposed to meet at least twice a year, it is currently not active. In addition, its mandate, functions and activities are highly formal without significant competencies (in the last three years, the Committee did not met).

**At the institutional level**, the duplication of activities of various institutions is not significant. Partial overlapping exists in the area of scientific and technical projects at academic institutions. The text below provides an overview of stakeholders including their functions and activities related to the Convention.

**At the individual level**, the duplication of individual skills is desired; the implementation of the Convention is highly multidisciplinary and complex oriented and requires team work.

As a part of assessment (particularly the Article 4/2g of the Convention), a stakeholder analysis was conducted. The analysis gives a starting point to identify key players, identify their interests, and identify their relevance to achieve the objectives of the Convention. Based upon Government Resolution 348/2001, the responsibility to implement principles and measures with respect to accession to the Convention is under the MoA, MoE and MoFA. These central bodies supervise regional and local state administration and administer supporting institutions. The main stakeholders are summarized as follows.

<sup>3</sup> Reports of the technical working groups established under the thematic strategy for soil protection ([http://eurosoils.jrc.it/ESDB\\_Archive/eurosoils\\_docs/doc.html#OtherReports](http://eurosoils.jrc.it/ESDB_Archive/eurosoils_docs/doc.html#OtherReports))

**Ministry of Agriculture**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– National Secretariat of the Convention</li> <li>– monitoring of the Convention implementation</li> <li>– reporting to the Convention Secretariat</li> <li>– responsibility in the area of use and protection of agricultural and forestry soils</li> <li>– creation, implementation and upgrading of legislation with respect to protection and use of soil</li> <li>– use and protection of water sources for irrigation systems</li> <li>– management, administration and exploitation of drainage systems</li> <li>– creation and implementation of forestry legislation</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– development of legal framework</li> <li>– leader for capacity building and capacity development</li> <li>– proposal of mitigation measures in agricultural sector as a result of climate changes</li> <li>– administration and management of financial sources</li> <li>– generation of benefits</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– primary responsibility to meet the requirements of the Convention</li> <li>– initiative function to amend legislation related to the Convention</li> <li>– participation and creation of cross</li> <li>– cutting legal documents related to use and protection of soil, water and landscape against desertification and degradation</li> <li>– initiation of technical measures and education activities related to the Convention</li> <li>– establishing of financial mechanisms and support of activities with respect to the Convention</li> <li>– participation at cross cutting financial mechanisms to protect soil and landscape</li> </ul>

**Regional and District Land (Soil) and Forestry Offices**

Competencies, importance with respect to implementation the Convention	– administration, supervision and decision making in area of soil protection, land layouts in agricultural sector
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	– enforcement of legislation on soil protection and land administration- participation in education and training in the agricultural sector

**Agricultural Payment Agency**

Competencies, importance with respect to implementation the Convention	– implementation of legislation on subsidies from European and national funds
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	<ul style="list-style-type: none"> <li>– supervision and control of allocation of financial sources</li> <li>– control that environmental standards are kept when financial sources are allocated to farmers</li> </ul>

**Research Institute of Plant Production, Piešťany**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– research in the area cropping technologies for arable crops, farming on arable land including ecological and alternative systems of crop production</li> <li>– center of Gene bank</li> </ul>
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	– development of specialized guidelines, advisory activities

### Soil Science and Conservation Research Institute, Bratislava

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– National Focal Point to the Convention</li> <li>– Partial monitoring system SOIL administration</li> <li>– center of soil monitoring to meet the Agreement between Slovakia and Hungary (Water dam Gabčíkovo)</li> <li>– center of information system on agricultural soils and land registry of Slovakia</li> <li>– research activities on protection and use of agricultural soil and mitigation measures to avoid negative externalities</li> <li>– creation of specialized documents (guidelines, codices) for a good agricultural practice</li> <li>– activities of Soil Conservation Service</li> </ul>
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	<ul style="list-style-type: none"> <li>– provision of NFP tasks</li> <li>– analysis of needs in the area of legislative initiatives, use and protection of soils</li> <li>– development of implementing guidelines for decision makers</li> <li>– development of specialized documents to increase professional skills of employers, soil users, and the public; release of publications on soil protection and degradation</li> <li>– participation in the development of legal documents with respect to soil protection</li> <li>– regular assessment of the status of soil degradation</li> <li>– initiatives of technical measures and education training</li> <li>– raise new knowledge and research on the development of soil degradation in Slovakia using a monitoring and research projects</li> </ul>

### Forestry Research Institute, Zvolen

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– partial monitoring system FORESTS administration</li> <li>– creation of specialized documents (guidelines, procedures) for good forestry practice in order to ensure multi-function use of forestry</li> <li>– cooperation on National reporting for Climate Changes Convention in the area of agriculture and forestry</li> </ul>
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	<ul style="list-style-type: none"> <li>– analysis of needs in the area of legislative initiatives, use and protection of forests</li> <li>– development of implementing guidelines for decision makers</li> <li>– development of specialized documents to increase professional skills of employers, forest users, and the public; release of publications on forests and soil protection and degradation</li> <li>– participation in the development of legal documents with respect to soil protection</li> <li>– raise new knowledge and research on the development of soil degradation of forests in Slovakia using a monitoring and research projects</li> </ul>

### Lesoprojekt, Zvolen

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– processing and development of forest economic use plans</li> <li>– information forestry center</li> </ul>
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	– projection of sustainable use of forests

**Hydromeliorácie, state enterprise, Bratislava**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– administration of irrigation and drainage operations</li> <li>– advisory in regulation of wet/dry regime of agricultural soils</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– support of initiatives</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– participation in the creation of legal documents with respect to the Convention</li> <li>– participation in the development of specialized training documents for improvement of professional skills and training programs in the area of irrigation and drainage schemes</li> </ul>

**Ministry of Environment**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– National Focal Point for related Conventions (UN FCCC, CBD)</li> <li>– creation, implementation and upgrade of relevant environmental legislation including development of policies with respect to landscape engineering, integrated nature protection</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– cooperation on legal framework to the Convention</li> <li>– co-participation on capacity building</li> <li>– allocation of financial resources for environmental protection</li> <li>– generation of benefits</li> <li>– support of initiatives</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– initiator of amendments to existing legislation</li> <li>– participation and creation of cross-cutting legal documents related to the use and protection of landscape, air, water, biota against degradation</li> <li>– initiation of technical measures and education activities related to the Convention</li> <li>– participation in the creation of financial mechanisms and support of activities with respect to the Convention</li> <li>– participation at cross cutting financial mechanisms to protect landscape</li> </ul>

**Regional and District Environmental Offices**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– administration, supervision and decision making in competencies of the MoE</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– support of initiatives</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– implementation of environmental legislation- participation in education and training in environmental management</li> </ul>

**Slovak Hydrometeorological Institute, Bratislava**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– responsible for the partial monitoring systems: WATER, AIR, METEOROLOGY, CLIMATOLOGY</li> <li>– long term measurements and observation the development of climate parameters</li> <li>– coordination of the POVAPSYS (flood early warning and forecast system)</li> <li>– active participation in the UN FCCC implementation</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– support of initiatives</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– provision of access to information</li> </ul>



### Water Research Institute, Bratislava

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– preparation of background documents for amendments of existing legislation in water management</li> <li>– development of strategic and specialized documents for use and protection of water sources</li> <li>– initiation of technical measures in area of flood control</li> <li>– development and delivery of training course in water management</li> </ul>
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	– creation of policies and coordination of measures mitigating impacts of floods and droughts

### Slovak Environmental Agency, Banská Bystrica

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– support of environmental education and organization of training courses</li> <li>– National Focal Point for EEA reporting</li> <li>– administration of national internet centre (CIRCA – Communication and Information Resource Centre Administrator)</li> <li>– education activities</li> </ul>
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	<ul style="list-style-type: none"> <li>– administration of environmental monitoring</li> <li>– initiator to the change, extent, upgrade of monitoring</li> <li>– support of environmental education</li> <li>– control and assessment of the status of land degradation</li> </ul>

### State Nature Protection Administration, Banská Bystrica

Competencies, importance with respect to implementation the Convention	– administering of partial monitoring system BIOTA
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	– participation on the control and assessment of status of soil and land degradation

### Slovak Water Management Enterprise, state enterprise, Banská Štiavnica and its basin branches

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– river basin management including flood control</li> <li>– development of integrated river basin plans</li> </ul>
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	<ul style="list-style-type: none"> <li>– coordination of water management to ensure ecological stability</li> <li>– coordination of measures to mitigate impacts of floods and droughts</li> </ul>

### Ministry of Education

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– cooperation on the education of the public</li> <li>– responsible for the development of research programs in area of Rio conventions in general</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– support of initiatives</li> <li>– cooperation on capacity building</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– implementation of issues related to desertification and soil degradation into curricula of basic and advanced secondary schools</li> <li>– preparation and implementation of research programs</li> </ul>

**Universities (namely SPU Nitra, UK Bratislava, TU Zvolen, STU Bratislava)**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– research and education in relevant areas on use and degradation of soil and land</li> <li>– development of specialized documents (methodologies, procedures)</li> <li>– support to assess monitoring results</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– support of initiatives</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– development of specialized documents to support decision makers</li> <li>– development and support of strategies, education documents related to land degradation</li> </ul>

**Slovak Academy of Sciences**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– research on methodologies relevant to land degradation</li> <li>– participation in the assessment of soil degradation</li> <li>– participation in research and education projects related to soil and land degradation</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– support of initiatives</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– gain new knowledge on soil and land degradation in Slovakia based upon innovative approaches</li> <li>– support to the development of strategies and education documents related to land degradation</li> </ul>

**Ministry of Construction and Regional Development**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– administration in the area of urban planning and construction regulation</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– cooperation in development of legal framework</li> <li>– co-participation in capacity building</li> <li>– allocation of the state budget for related activities</li> <li>– generation of benefits</li> <li>– support of initiatives</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– provision of up-to-date information on regional urban development</li> </ul>

**Ministry of Foreign Affairs**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– coordination of the representation of Slovakia at COP</li> <li>– vyčlenenie dostatočných finančných zdrojov na zabezpečenie potrieb allocation of financial resources to implement foreign aid related to the Convention</li> <li>– establishment of contacts with developing countries with respect to potential aid</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– support of initiatives</li> <li>– co-participation in capacity building</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– co-participation in development of financial mechanism for capacity development</li> </ul>

**Ministry of Finance**

Competencies, importance with respect to implementation the Convention	<ul style="list-style-type: none"> <li>– administration of financial resources related to implementation of the Convention</li> </ul>
Reason to be involved as stakeholder	<ul style="list-style-type: none"> <li>– generation of benefits</li> <li>– support of initiatives</li> </ul>
Role of stakeholder	<ul style="list-style-type: none"> <li>– co-participation in creation of a cross-cutting financial mechanism to develop implementing capacities</li> </ul>

**Agricultural and forestry farmers /agro-companies/agro-cooperatives**

Competencies, importance with respect to implementation the Convention	– direct impact of soil quality, soil and land use
Reason to be involved as stakeholder	– support/oppose initiatives depending on compensation – direct generation of benefits – direct and indirect benefit from soil and land protected against degradation
Role of stakeholder	– respect to environmental principles transposed in guidelines and preventive measures

**Self-Governments (towns and villages)**

Competencies, importance with respect to implementation the Convention	– responsible for status and protection of the local environment
Reason to be involved as stakeholder	– support of initiatives – generation of benefits – direct and indirect benefit from soil and land protected against degradation
Role of stakeholder	– co-participation in public awareness raising activities, and public education initiatives related to desertification, degradation and impact on soil and land use – financial support to mitigation projects

**Non-governmental organizations**

Competencies, importance with respect to implementation the Convention	– initiatives, education activities, monitoring and informal influence of government activities
Reason to be involved as stakeholder	– support of initiatives – alternative methods of thinking
Role of stakeholder	– participation in legal processes – participation in education and public awareness raising campaigns – proposals of alternative solutions and approaches

**Media**

Competencies, importance with respect to implementation the Convention	– dissemination of information
Reason to be involved as stakeholder	– support of initiatives
Role of stakeholder	– participation on education and public awareness raising campaigns

**Each affected party (In Central and Eastern Europe) to the Convention will designate appropriate bodies responsible for the preparation, coordination and implementation of its action program (Annex V, Art 4a; Annex V, Art. 8/1a)**

Slovakia has designated basic administrative bodies (National Secretariat to the Convention, National Focal Point and National Steering Committee). Capacities of these bodies are not sufficient. This is particularly a problem at the NFP, as the all agenda with respect to the Convention is carried out by one senior employee.

**A consultative and participatory process, involving appropriate levels of government, local communities and non-governmental organization, shall be undertaken to provide guidance on a strategy with flexible planning and implementation of action program (Annex V, Art. 3/2; Annex V, Art. 4b)**

The requirement is not implemented as the national action program has not yet been adopted. In the course of the development of the NCSA project, it was agreed among the experts of working group, that the exercise to conduct self assessment of capacities is appropriate tool to ensure consultative and participatory process.

### 3.4. Financial mechanisms

***Parties to the Convention will prepare technical and financial programs incorporated in the action programs (Annex V, Art. 4e; Annex V, Art. 7a)***

The requirement currently has not been implemented as the national action program has not been adopted.

The requirement is not implemented as the national action program has not been yet adopted.

***The parties will recognize the significance of capacity building by strengthening trainings and research, fostering public access to information on effect of desertification and soil and land degradation (Art. 5d; Art. 19)***

This is a supporting requirement in order to improve the efficiency of measures related to the Convention and the National Action Program.

### 3.5. Information collection, analysis and exchange

***Parties agreed to establish integrated and coordinated collection, analysis and exchange of relevant data and information to ensure systematic observation of land degradation and to understand better and assess the processes and effects of drought and desertification (Annex V, Art. 4c; Art. 16)***

This requirement means that parties will facilitate and strengthen their information network and make full use of the expertise to identify priority areas of actions.

**At the systemic level**, the basic conditions are in place in the area of education. Strategy documents<sup>4</sup> and study courses provide partial information on components of the environment and negative impacts of environmental degradation. The problem is that the issue of the Convention is not in curricula of study courses at universities.

Access to information is legally assigned by the Act on public access to information<sup>5</sup>.

**At the systemic level**, accession of Slovakia to the Convention creates the basic conditions to meet this requirement. However, a system analysis that would prioritize actions was not conducted. The monitoring system is based upon the components of the environment. It is a highly sectoral approach and partial results of monitoring are not integrated and assessed. Also, there is no monitoring of drought. An important step forward would be an adoption of the Act on Landscape Planning (Land Management). This Act should also include integrated system on landscape. In 2003, an Advisory Committee on Integrated Landscape Management was established under the MoE. However, pedologists or scientists (from VÚPOP) are not directly involved in this Committee.

Slovakia has also adopted specialized guidelines for good agricultural practice and environmental protection (4, 9, 10). These are used in decision making processes and in the agricultural sector in general.

**At the institutional level**, there is sufficient expertise, skilled experts and equipped institutions. The appropriate institutional capacities are in the agriculture sector. New capacities will be necessary for the area of urban and industrial (those used for economic activities) soils (lands). Strengthening of financial and technical capacities of individual institutions, improvement of institutional management (technical, financial and personal setting and administration) is necessary.

**At the institutional level**, particularly at universities, there are sufficient professional capacities to manage the education processes. The protection of the environment is included in the study programs, however, the desertification and impact of drought and soil degradation are not fully explored in the study programs. Key leaders in education with respect to soil and land degradation are Slovak Agricultural University in Nitra (Faculty of Agro-biology and Food Resources, Faculty of Gardening and Landscapes Engineering, Faculty of European Studies and Regional Development), Comenius University in Bratislava (Faculty of Natural Sciences), Technical University in Zvolen (Faculty of Forestry). In addition, there are research and scientific institutes of the Slovak Academy of Science active in applied research. A gap exists in the identification of social and economic impacts of desertification and degradation of soil and land.

**At the individual level**, it is not possible to assess the capacities, due to the fact that there is no an integrated information system. Partial information systems have sufficiently qualified experts.

The financial resources and technical equipment of universities are not sufficient to attain sustainable development.

Regular education of soil users in the area of agriculture and forestry is only marginally focused on environmental protection<sup>6</sup>.

***Each party will develop and utilize procedures and benchmarks for monitoring and evaluation the implementation of the action program (Annex V, Art. 4f)***

Specialized institutes, in cooperation with the media, organize film festivals that support the improvement of environmental awareness. The capacities with re-

<sup>4</sup> Strategy of Environmental Education was endorsed in 1996, sub-programs Ecological Academy, Ecological minimum are applied at secondary schools and universities from 1991, Strategy of Ecological Research was introduced from 1991

<sup>5</sup> Act 211/2000 on Free Access to Information

<sup>6</sup> For example Agroinštitút Nitra provides regular training for soil users, although these are mostly technically oriented. Currently, all trainings are aimed to prepare farmers to absorb EU funds (SAPARD).

spect to fostering public access to information are not sufficient, mainly due to low financial support.

In Slovakia, there are many NGOs, however, none of them is specialized in soil and land protection with respect to principles and objectives of the Convention. Some NGOs are active in associated issues (water protection, climate change, sustainable development principles, and environmental education) that marginally include objectives of the Convention<sup>7</sup>.

**At the individual level**, there is sufficient capacity to support education. However, these capacities are the result of individual efforts rather than systemic support.

### 3.6. Technical and scientific cooperation and technology transfer

*Parties to the Convention, in cooperation with international organizations, will identify requirements for international scientific and technical cooperation using integrated approach to combat desertification (Annex V, Art. 4/2f; Annex V, Art. 6, 7b, and 17)*

*Parties to the Convention will consider mechanisms to strengthen regional cooperation as appropriate (Annex V, Art. 8/1a)*

**At the systemic level**, requirements are not formulated for international scientific and technical cooperation according to the Convention. Relevant ministries and their support institutions did not initiate discussions or proposals with respect to international or regional cooperation. Slovakia is a regular member of the FAO, UNCCD, UNEP, and OECD. In addition, Slovakia has signed many bilateral agreements at the level of Ministry of Agriculture. The Convention was not a subject of accession to the EU, therefore, activities are limited.

**At the institutional level**, there is low efficiency in the use of existing capacities, particularly insufficient information flows, absence of cooperation among individual ministries and their institutes. Some bilateral projects are conducted with the EU countries focused on scientific and technical cooperation. These are

managed by the Ministry of Education and the Slovak Academy of Sciences. The scientific and technical cooperation related to the Convention and the EU is carried out by the VÚPOP<sup>8</sup>. The Hydromeliorácie (state enterprise) in cooperation of the Hydrology Institute of SAV and the SPU Nitra conducted research on the issues of drought. The research was focused on irrigation schemes. The limited research with respect to desertification, soil and land degradation is caused mainly by limited financial resources.

There is an urgent need to develop a proposal for a cross cutting research project that would be based on an integrated approach. However, such a project would need also to improve cooperation with individual institutions. In 1997, the international project on *Agricultural Research in Slovakia* was conducted. The project was focused on the audit for the organizing and future orientation of agricultural research in Slovakia (11). Unfortunately, the recommendations of the audit with respect to integration of scientific projects were not taken into account.

In Slovakia, the main policy documents related to the scientific programs are the Strategy of the State Research and the Strategy of Agricultural Research. These documents aim to deal with research projects with respect to the EU integration (participation at the 6<sup>th</sup> Framework Program). The issue of desertification, soil and land degradation is not addressed<sup>9</sup>.

**At the individual level**, there are basic conditions in place to meet this requirement of the Convention. The experts at the VÚPOP are fully involved in research and technical cooperation of the *European Society for Soil Conservation*. Also, the VÚPOP is represented in the Committee for Science and Technology of the Convention<sup>10</sup>. In addition, employees of the VÚPOP are in international bodies and working groups under FAO, OECD, ESSC and other. Capacities at individual level need to be carefully assessed due to a generation problem (retirement of senior researchers and lack in preparation of junior researchers).

**Slovakia as a developed country, should organize expert or financial aid to affected countries, particularly from developing world (Art. 6 of the Convention).**

<sup>7</sup> F.e. NGO Water and People, Forestry protection association VLK, Daphne – Institute of applied ecology, Association for sustainable life – STUŽ

<sup>8</sup> Protection and effective use of natural source of soil (MoA, 1999-2002), Urban soils as environmental factor of life quality in cities – case of Bratislava (MoEd, 2002-2005), Impact of climate change on the environment and its vulnerability to agricultural production (MoEd, 2004-2005), Detection and regulation of potentials of climate change in soils (MoA, 2004), Experience with the impact of subsoil compaction on soil, crop growth and environment and ways to prevent subsoil compaction (EU 5. FP- INCO Copernicus, 1999-2002), Long-term risks from improper cultivation on the sustainable development of agricultural soils (EU 5. FP- INCO Copernicus, 1999-2002), Integrated sink enhancement assessment (6. FP, 2004-2006), Aspects of the erosion by water in Austria, Hungary and Slovakia (MoFA, 2000 – 2002), Mapping of soil and terrain vulnerability in Eastern and Central Europe (FAO UN, 1997-1999), Floods and other weather-driven natural hazards – prediction and mitigation (EU-JRC, 2003-2005), European soil atlas (EU – JRC Ispra, 2003-2004), Soil Protection (Slovak – German project, 2001-2003), Soil erosion and global change (EU COST Action 623, 2001-2003), On- and off-site environmental impacts of runoff and erosion (EU COST Action 634, 2003-2008)

<sup>9</sup> The MoA administers two state scientific program: Ecologization and economic rationalization of primary agricultural production, and Food – quality and safety (14)

<sup>10</sup> Vice-president of the UNCCD Committee of Science and Technology for 2004-2006

This commitment was not discussed and approached at the systemic and/or institutional levels. However, it is true, that Slovakia has signed the Convention only recently (in 2002).

**At the systemic level,** there is no strategy available that would outline expertise or financial aid to developing countries. The Ministry of the Foreign Affairs, in 2002, developed the indicative list of priority countries for developing aid in general: Afghanistan, Albania, Bosnia and Herzegovina, Kazakhstan, Kenya, Kyrgyzstan, Macedonia, Mongolia, Mozambique, Sudan, Tajikistan, and Uzbekistan (from 2004 also Ukraine and Moldova included). There is a potential that Slovakia could develop feasible projects in the area of environmental protection, land and soil protection and nature protection (7). All international activities are coordinated by the MoFA in cooperation with other ministries.

**At the institutional level,** there are general conditions in place to provide support to developing countries. Proposals for concrete activities have not yet been developed. It is assumed that aid will be oriented to technical assistance projects, transfer of technologies and know-how.

**At the individual level,** there is limited capacity to provide expertise. This is often due to high specialization of individual experts who are not able to flexibly react to international and cross – sectoral problems of developing countries. Also, only a few teams have experience with full cooperation at international projects. There is an absence of opportunity to use individual knowledge to analyze international dimensions. Some specialists lack language skills.

### **3.7. Strengthening of common cooperation to meet requirements of Rio convention on climate change, biodiversity and desertification**

Mutual links of the three Rio conventions (on biological diversity, climate change and desertification) concern mainly cross thematic areas and activities, including the transfer of technologies, education and public awareness, research and systemic observation, capacity strengthening reporting, assessment of impacts and mitigation measures. These conventions (and other global conventions, such as the Ramsar Wetland Convention) must be mutually coordinated. The main coordination should be with respect to mutual exchange of information and experience. A significant role to

strengthen cooperation and reaching synergies<sup>11</sup> is played by the “Joint Liaison Group”, consisted of the members of appropriate bodies of conventions and representatives of their Secretariats. The objective of the group is to improve coordination between Conventions (particularly in area of information exchange, preparation of common work plans) that contribute to harmonization of approaches.

At the systemic level, vital roles to implement the Conventions have:

- NFP for the implementation of the framework convention on climate change and Kyoto protocol at the MoE,
- NFP for the Convention of biological diversity, NFP for the Cartagena Protocol, and the Ramsar Committee at the MoE,
- NFP for the Convention to combat desertification at the VÚPOP Bratislava.

In general, cross-cutting issues are covered and discussed at ad-hoc inter-governmental panels, or working groups. Efficiency is not very high. A common working or expert group that would cover the issues of the three Rio conventions has not been established in Slovakia. Insufficient attention has been paid to coordination of activities with respect to meeting the Rio Convention requirements. Also, no detailed analysis of common or cross-cutting issues exist, therefore, there is no independent control of projects (ranging from research, education, monitoring, to capacity building and policy formulation) to ensure that they are not overlapping or duplicating one another. The same is valid for allocation of financial resources. Cooperation of representatives of Slovakia with the Secretariat of the Convention to Combat Desertification and other relevant international organizations is limited and consists of the attendance at the COP and required reporting. Participation of national experts at international seminars or directly at sessions of bodies of the Convention are not supported and coordinated.

**At the institutional level,** the structure of specialized institutions with highly specialized experts exist, although these are not actively involved in international projects to implement the Rio conventions. A lack of coordination of human and financial resources result in low information flows and a lack of appropriate representation of Slovakia at international forum.

**At the individual level,** there is insufficient experience in information exchange that would ensure effective use of available information on activities that comprise all Rio conventions.

<sup>11</sup> Synergy in this context means effective cooperation leading to effective implementing activities. One of the priorities is to eliminate potential duplicities and secure maximum use of existing sources.



## 4. Identification of key assets and needs of capacities to meet objectives of the UN Convention to combat desertification

The current situation in implementing the requirements of the Convention was assessed in the previous chapter. Based upon expert judgment the following priority areas and grouped requirements were selected:

1. Development of a National Action Program (NAP) for the Convention that will formulate systemic measures to mitigate impacts of droughts and soil degradation
2. Completion of an integrated environmental monitoring and information system to be compatible with the EU and Convention requirements including early warning system
3. Development of strategy of integrated research on the soil and land degradation and the gradual implementation of this strategy

4. Support of education and raising public awareness, access to information on causes and effects of desertification and soil degradation
5. Identification of content, forms and mechanisms of Slovak aid to directly affected countries

Identification of available capacities in the country on which one could further build for the implementation of the Convention requirements (key assets), and identification of key demands (key needs) and problem areas of the capacity building and capacity development (barriers, limitations) was a critical part of the thematic assessment.

The objectives prioritized according to expert judgment represent the base to assess available capacities in

**Table 1: Development of National Action Program (NAP) for the Convention that will formulate systemic measures to mitigate impacts of droughts and soil degradation**

	Systemic level
<b>Key Assets (strengths)</b>	<p>Government and all stakeholders have a positive attitude to respect international standards related to the environmental protection. (GI 1)</p> <p>Membership of Slovakia in the EU is a basic condition to harmonize legal measures relevant to soil and landscape protection against desertification and degradation. (GI 1)</p> <p>Existing national strategies relevant to the Convention and existing legal framework to protect agricultural soils are basic conditions to meet objectives of the Convention. (GI 1)</p> <p>(National strategies, legal documents are listed in the Annex 2 of this Report)</p> <p>In 2004, Act on protection and use of agricultural soil was adopted, which supports some requirements of the Convention. (G2)</p> <p>Basic conditions are in place to incorporate issues of the Convention into the NSSD. (G 1)</p> <p>At the national level, there are appropriate capacities to formulate strategic documents with respect to the Convention, including identification of measures. (GI 1)</p> <p>Economic instruments emerging from EU Agenda 2000 support implementation of the legal framework including those relevant to the Convention. (GI 2)</p>
<b>Key Needs (weakness)</b>	<p>Need to clearly define responsible authorities to implement the NAP to the Convention including specification of competencies. (GI 1,2,3)</p> <p>In order to implement the NAP, there is a need to analyze current legal framework and amend existing legislation to meet the requirements of the Convention. (GI 1,2)</p> <p>Need to develop and adopt financial mechanisms to implement the Convention. (GI 2)</p> <p>Need to strengthen number of managers of administrative structures to the Convention, namely, NFP and Secretariat. (GI 2)</p> <p>Need to carry out self assessment of capacities in regular intervals. (GI 4,5)</p>
<b>Barriers (threats)</b>	<p>Transformation of the society and accession of Slovakia to the EU bring many heavy investment demanding commitments that must be met in the short term. This resulted in the prioritization of objectives that do not include the Convention.</p>

**Table 1: Continue**

	<b>Institutional level</b>
<b>Key Assets (strengths)</b>	<p>Administrative structures are in place (National Secretariat, NFP, National Advisory Committee). (GI 1)</p> <p>Administrative mechanisms to prepare, process, and adopt policies, legal documents, and other guidelines are in place. The procedures involve active participation of stakeholders and the public. (GI 1, 3)</p> <p>Long-standing knowledge, skills and expertise exist including data and information systems. (GI 1)</p> <p>Administration to carry out the EU structural policy is gradually being established. (GI 2)</p> <p>The Soil Conservation Service was established to implement the Act 220/2004 on the protection and use of agricultural soil. The Service provides expertise to ensure protection against degradation. (GI 2)</p> <p>Long-standing system of environmental inspection is in place and it is accepted. (GI 2)</p> <p>Public hearing is included in legal framework. (GI 3)</p>
<b>Key Needs (weakness)</b>	<p>Need to create and coordinate financial and human resources with respect to use of soil and land in urban areas. (GI 2)</p> <p>Need to analyze mandate, functions, technical and financial resources of specialized organizations. (GI 2)</p> <p>Need to improve communication and cooperation among stakeholders ranging from central bodies to specialized institutions in the area of preparation of legal documents. (GI3)</p> <p>Need to establish clear mechanisms on involvement of NGO and the public in approaching problems of soil desertification and degradation. (GI 3)</p>
<b>Barriers (threats)</b>	<p>Insufficient cooperation among individual organizations is a result of competition at the market of expertise, skills and know-how.</p> <p>Excessive preference of sectoral, group and property relationships (liberalism) and absence of cooperation avoid access to sources and information to all.</p> <p>Low interest of media and a low public awareness.</p>
	<b>Individual level</b>
<b>Key Assets (strengths)</b>	<p>Experts are fully familiar with the legal documents of the EU. (GI 1)</p> <p>Experts have full knowledge on the status of soil and land degradation in Slovakia. (GI1)</p> <p>Working groups to develop strategies and legal documents exist and include experts for partial problems. (GI 3)</p>
<b>Key Needs (weakness)</b>	<p>Need to clearly define managerial and competence functions of individuals at all levels of state administration. (GI 1,2)</p> <p>Need to strengthen and mobilize experts in the form of opportunities to enhance professional skills and organization of specialized trainings. (GI 4)</p>
<b>Barriers (Threats)</b>	<p>Junior employees do not have enough skills and opportunities to participate in the preparation of strategy documents. Senior employees often have problem to upgrade (change) traditional thinking.</p> <p>Financial incentives for junior employees are not sufficient to keep them in the state sector. There is an increase of risk of leaving for private companies.</p>

Slovakia taking into account five generic indicators (GI, see the chapter 2). Assessment of each priority area is outlined in table form.

Some additional issues should be emphasized. In Slovakia, systemic activities to implement the Convention have not been yet formulated. This means that there was not an open a real discussion on the preparation of the National Action Program for the Convention. At

the systemic level, there is a complex (and fragmented) legal system to protect agricultural soils<sup>12</sup>, forest soils<sup>13</sup>, nature and landscape protection<sup>14</sup>, but legislation that would address the protection of soil and land to combat desertification and degradation does not exist. Therefore, it is necessary to consider changes in current legislation in order to address desertification and soil degradation. In addition, there is a need to develop mechanism and tools to monetize damage

<sup>12</sup> Act 220/2004 on Protection and Use of Agricultural Soil

<sup>13</sup> Act 61/1977 on Forest amended by 229/1991 and 183/1993; currently, the draft of a new Act is in a review and commenting process

<sup>14</sup> Act 543/2002 on Nature and Landscape Protection as amended by 525/2003, 205/2004, 364/2004 a 587/2004



**Table 2: Completion of an integrated environmental monitoring and information system to be compatible with the EU and Convention requirements**

	<b>Systemic level</b>
<b>Key Assets (strengths)</b>	Monitoring of components of the environment and building information system is covered in national legislation. (GI 1) Monitoring and integrated administrative control system in the agriculture sector– IACS exists and this is a key asset to implement the requirement of the Convention. (GI 2,5) Gradual building of an integrated GIS in agriculture sector brings benefits to solve problems of desertification and soil and land degradation. (GI 2,5) Building of the GIS supports decisions on use of soil and landscape. (GI 2,5) There is an increasing interest to create and process information. (GI 4) Slovakia participates in the building of information databases of soil in the EU. (GI 5)
<b>Key Needs (weakness)</b>	Need to develop strategy, legal and financial instruments to monitor soil droughts. (GI1,2) After preparation and adoption of the EU Directive on soil monitoring, there will be a need to harmonize national monitoring system. (GI 4) Need to upgrade information system on soils with respect to register of dry and degraded soils. (GI 4) Need to define rules and procedures to provide and share databases and information sources by various state and other institutions. (GI 4) Need to coordinate the Information System on Land Management (under preparation) in compliance with Convention requirements. (GI 4) Need to develop information system on urban localities (areas) in order to plan and implement preventive and regulatory measures designed to mitigate degradation of the urban environment. (GI 5)
<b>Barriers</b>	No significant barriers are identified.
	<b>Institutional level</b>
<b>Key Assets (strengths)</b>	Institutional capacities to implement monitoring system are in place. Databases and information system on the development of agricultural and forest soils exist. Databases surface and ground waters exist, including scenarios with respect to climate change and the impacts on the environment. (GI 5) There is a tradition of creating maps of degradation and endangered soils. (GI 5) GIS hardware and software in Slovakia (GIS) are sufficient. (GI 4)
<b>Key Needs (weakness)</b>	Need to improve institutional capacities to monitor soil drought and impact. (GI1,2) Need to improve mutual cooperation of specialized institutions and conditions to provide and use (share) databases and information sources by various institutions. (GI 4) Need to improve absorption capacities of financial support of the EU and other governmental donors in area of monitoring of desertification, soil and land degradation. (GI 5)
<b>Barriers (threats)</b>	After the implementation of key needs at systemic level, no significant barriers exist Key problem remains with respect to financial and staff stabilization at specialized institutions (state budget allocation).
	<b>Individual level</b>
<b>Key Assets (strengths)</b>	Staff involved in monitoring activities is sufficiently skilled. This includes reporting and assessment activities as required by the Convention. (GI 5)
<b>Key Needs (weakness)</b>	Need to stabilize staff in a long – term (increase in salaries and possibilities to professional career). (GI 4)
<b>Barriers</b>	No significant barriers are identified.

caused by economic activities on soil and land including reform of the tax system for environmental issues. There is a need to enforce current legislation in order to avoid changes in use of agriculture and forest soils to industrial use.

Effective use of information and knowledge is dependent on the cooperation of stakeholders within the sector and among different institutions. A general prob-

lem is that there is a discrepancy between the allocation of the financial resources that should be devoted to priority actions (declared at approximation strategy to join the EU), social and strategic aspects (sector of education, health care, agriculture, science and research) and the effort to minimize the budgetary deficit. In addition, there is, in practice, a lack of political willingness to enforce legislation and international commitments.

**Table 3: Development of strategy of an integrated research on the soil and land degradation and its gradual implementation**

	Systemic level
<b>Key Assets (strengths)</b>	There is a traditional academic and sectoral research. (GI 5)
<b>Key Needs (weakness)</b>	Need to improve financing of institutions responsible for research projects (at SAV, universities and research institutes. (GI 3) Need to develop strategy and support for an integrated research in the area of desertification and degradation of soils <sup>15</sup> . (GI 4)
<b>Barriers (threats)</b>	Insufficient interest of central bodies to formulate cross cutting (integrated) research projects including allocation of financial resources.
	Institutional level
<b>Key Assets</b> <b>Key Needs</b>	Key institutions participate in research and technical projects within the EU. (GI 5) Need to increase participation of Slovakia in international cooperation with respect to research projects at European level. (GI 3) Need to improve financial support of the institutions dealing with research projects. (GI 4) Need to improve cooperation among institutions, which participate in common projects. (GI 4)
<b>Barriers (threats)</b>	Weak interest to develop a strategy of the integrated research due to a fear to lose partial research projects. Absence of the assessment of capacities at research institutions with respect to research projects. Recommendations of audit conducted in 1997 (11) dealing with research in agriculture were not implemented. Advocacy of sectoral interests prevail.
	Individual level
<b>Key Assets</b>	Individual experts are enthusiastic to participate in research projects. (GI 4)
<b>Key Needs</b>	Need to increase qualification of experts in order to improve flexibility to participate in cross sectoral and international projects. (GI 3) Need to increase support from the site of institutions to motivate experts. (GI 3)
<b>Barriers (threats)</b>	Insufficient information flow on opportunities to collaborate in international projects (especially of the Framework program of the EU).

**Table 4: Support of education and raising public awareness, access to information on causes and effects of desertification and soil degradation**

	Systemic level
<b>Key Assets</b>	Existence of education system in area of soil and land protection. (GI 5) Strategy documents and education courses create the basis to incorporate principles of SD and the Convention, as they already provide information on components of the environment. (GI 5) Public access to information is established by law. This can be improved after the accession of Slovakia to the Aarhus Convention. (GI 1) Information of partial monitoring systems are available to the public. (GI 5) Principles of good practice in agricultural and forestry sectors are in place and they serve as information sources for soil users. (GI 5)
<b>Key Needs</b>	Need to adjust public education system to address the SD and the Convention. (GI 1) Need to adjust the structure of universities to reflect the real needs in Slovakia and the EU. (GI 1,2)
<b>Barriers (threats)</b>	Slovakia is required to meet many commitments in a short term due to the accession to the EU. Actual financial resources to finance all measures are limited.

<sup>15</sup> According to the Convention, the term „drought“ is defined as the ratio between annual rain volume to evapo-transpiration. The ratio is 0,05 – 0,65. This approach is not representative for Slovakia. The European Soil Bureau (in Ispra, Italy) has established the European database of soils (EU25) including maps of humidity availability for permanent grasslands as well as for other crops. Based upon these documents, Slovakia belongs to „dry“ areas in Europe. The integrated research should be focused and tailored to specific conditions valid in Europe to mitigate desertification and soil degradation.

**Table 4: Continue**

	<b>Institutional level</b>
<b>Key Assets</b>	Use and protection of the environment came to be popular and attractive in university studies. (GI 5) Regular education of soil and land users in agricultural (and forestry) sector includes aspects of environmental protection. (GI 5) Institutions (usually those responsible for monitoring) are legally obliged to allow access to information. (GI 4) Specialized institutions in cooperation with mass media organize promotion activities (Agrofilm, Ekotop film) that increase public awareness. (GI 4)
<b>Key Needs</b>	Need to enhance information to the public on causes and impacts of desertification and soil degradation. (GI 4) Need to create and/or adjust specialize manuals for soil users with respect to soil (and environmental) protection. (GI 4) Need to analyze possibilities to use EU funds for agro education . (GI 4) Need to focus education courses for farmers towards environmentally friendly methods of soil use. (GI 4) Need to enforce preventive and regulatory measures against draught and soil and land Degradation.
<b>Barriers (threats)</b>	The education sector does not have adequate financial resources. In the area of desertification and soil degradation, there is an absence of knowledge or limited information base. As education of junior researchers falls behind, mass media policy does not react to attract the public interest to the issue of desertification and soil degradation. Low understanding of stakeholders with respect to significance of issues of desertification. Mass media leaders in the development of public awareness do not provide information on the impacts of desertification and soil degradation. Existing information is fragmented or presented in a contradictory manner.
	<b>Individual level</b>
<b>Key Assets</b>	Individual capacities in education sector respond to existing conditions. (GI 5)
<b>Key Needs</b>	Need to train sufficient number of trainers to support education activities in the area of soil degradation and desertification. (GI 5)
<b>Barriers</b>	Lack of understanding of the importance of the issue of desertification and degradation.

The issues of desertification and soil and land degradation are only gradually being brought to the attention of the public. This is due to the fact that in Slovakia, the occasions of droughts has not been a significant problem (see the Annex 3). The impact of drought in the agricultural sector was moderated by irrigations. Until recently, soil degradation and land degradation were assessed in a fragmented way. A lack of interest of the public, media and most of the so-called “large

social groups” (according to Agenda 21) is obvious and does not support real implementation of the Convention.

Only recently, the issue of the Convention has been the focus of attention due to an increased interest in climate change. In order improve individual and institutional effectiveness as well as improve cooperation systematic cross-cutting information and data is necessary.

**Table 5: Identification of content, forms and mechanisms of Slovak aid to directly affected countries**

	<b>Systemic level</b>
<b>Key Assets</b>	Basic conditions to formulate scope, content and forms of the aid from Slovakia to contribute to international projects to directly affected countries are in place. There are real opportunities for Slovakia to support international projects in the area of agriculture and environmental protection within the Slovak strategy of development aid for 12 priority countries. (GI 1) Slovakia makes an effort to participate at regional cooperation in area of soil protection against degradation. (GI 1,4)
<b>Key Needs</b>	Need to formulate a proposal of scope, content and forms of Slovak aid to affected countries including allocation of financial resources. (GI 1) Need to increase involvement of Slovakia in regional cooperation in the long term. (GI 2)

**Table 5: Continue**

	<b>Institutional level</b>
<b>Barriers (threats)</b>	The implementation of the requirement might be threatened, if financial resources would be allocated only from budgetary resources of the MoA. Currently, there is not an incentive or willingness to combine financial resources.
<b>Key Assets</b>	Organizing of cross-sectoral activities provides a solid knowledge base to determine basic approaches with respect to the forms and content of Slovak aid to affected countries. (GI 1). International contacts of specialized institutions support capabilities to formulate needs and mutual cooperation. (GI 4) In regional cooperation of the V4 countries, a proposal for a research project was developed (so-called project: "Increase of mobility to improve soil and land protection in countries of the Central Europe"). (GI 4) Slovakia has "hands-on" experience in the area of forestation of land abroad. (GI 4)
<b>Key Needs</b>	Need to balance real capacities of institutions (and financial capacities) with respect to Slovak aid. (GI 2,3)
<b>Barriers (threats)</b>	There are not sufficient institutional capacities to approach cross-cutting themes. This is due to insufficient cooperation among institutions. (GI 2,3)
	<b>Individual level</b>
<b>Key Assets</b>	Slovak experts participate at international (research) projects. (GI 4)
<b>Key Needs</b>	Need to mobilize experts, to provide a flexible approach to projects in an integrated and cross-sectoral manner. (GI 4,5)
<b>Barriers (threats)</b>	Insufficient financial incentives to conduct projects in developing countries. In some cases, unstable political or security situation in affected countries might affect the interest in international projects.

## 5. Recommendations

Recommendations and proposed measures to build and develop capacities are divided into phases (short-term 1-3 years, mid-term 4-9 years and long-term 10 years and more). These are shown in the following tables. Implementation of some recommendations and

measures are listed in all time-categories, as they support long-term validity. The tables include indicators of capacity to be created (“building”) and capacities to be mobilized and/or improved (“development”).

**Table 6: Short-term measures**

Recommendation/ proposal	Strategic importance for the EU	National priority <sup>16</sup>	Priority based on NCSA Results <sup>17</sup>	Cross-cutting and integrated character	Potential financial sources	Building, development of capacities
Develop NAP including responsible parties to implement the NAP	+	-	+++	+++	SB	building
Develop and adopt financial mechanism to meet commitments of the Convention (part of the NAP)	-	-	+++	++	SB	building
Strengthen number of people at NFP	-	-	+++	+	SB	development
Establish cross-sectoral working group for desertification and soil degradation	+	+	+++	+++	SB	building
Analyze mandate, functions, technical and financial resources of specialized institutions	-	-	++	+	SB	development
Establish clear mechanisms for NGO involvement on problems of degradation	++	+	+++	+++	SB	building
Clearly define management and responsibility of persons at all levels of state administration	-	-	++	++	SB	development
Develop strategy, legal and financial mechanisms to monitor the impact of drought	-	-	++	++	SB	building
Institutional capacity building to monitor drought and its impact	-	-	++	++	SB	building development
Adjust national monitoring system of soils to EU procedures	+++	+	++	++	SB EU sources	development
Complete information system on soils with register of dry and degraded soils	+	-	++	++	SB	development
Establish rules to provide shared and use databases by state and other institutions	+	-	++	+++	SB	development
Develop an information system for urban areas (as a part of an Integrated System of Land Management)	-	-	++	+++	SB municipality	building

<sup>16</sup> „national priority“ means, that recommendation and or proposal is present in current strategy documents, or legal acts

<sup>17</sup> „priority based upon the NCSA results“ means importance of the recommendation based upon the results of the assessment of experts in the working group for this project

**Table 6: Continue**

Recommendation/ proposal	Strategic importance for the EU	National priority <sup>16</sup>	Priority based on NCSA Results <sup>17</sup>	Cross-cutting and integrated character	Potential financial sources	Building, development of capacities
Improve financing of research projects dealing with soil degradation	+	+	++	++	SB EU sources	development
Develop a strategy on integrated research in the field of soil and land degradation and desertification	+	-	+++	+++	SB	development
Adjust the public education system to SD and the Convention	-	-	++	+++	SB IFIs	development
Improve cooperation of specialized institutions, media and the public to increase information on causes and impacts of soil degradation and desertification	+	-	++	+++	SB EU sources UNDP	development
Train sufficient number of trainers for public education	++	+	++	+++	SB EU sources	building development
Propose scope, forms and content of Slovak aid to affected countries including financial requirements	+	+	++	+	SB	building
Enhance involvement of Slovakia in regional cooperation	+	+	++	+++	SB EU sources FAO, UNDP	building development

**Table 7: Mid-term measures**

Recommendation/proposal	Strategic importance for the EU	National priority <sup>16</sup>	Priority Based on NCSA Results <sup>17</sup>	Cross-cutting and integrated character	Potential financial sources	Building, development of capacities
Strengthen and mobilize experts via sufficient opportunities for professional carrier and trainings	-	-	++	+++	SB	development
Build and maintain information system on urban areas (part of an Integrated System on Land Management)	-	-	++	+++	SB municipality	development
Improve financing of research projects	+	+	++	++	SB EU sources	development
Apply the strategy of integrated research in the area of mitigation of desertification and soil degradation	+	-	+++	+++	SB	development
Improve cooperation of institutions, media and the public to increase information on the causes and impacts of soil degradation and desertification	+	-	++	+++	SB EU sources UNDP	development
Increase the share of Slovak international cooperation in the area of desertification and soil degradation	+	+	++	++	SB EU sources	development
Implement Slovak aid to affected countries	+	+	++	+	SB	development

**Table 7: Continue**

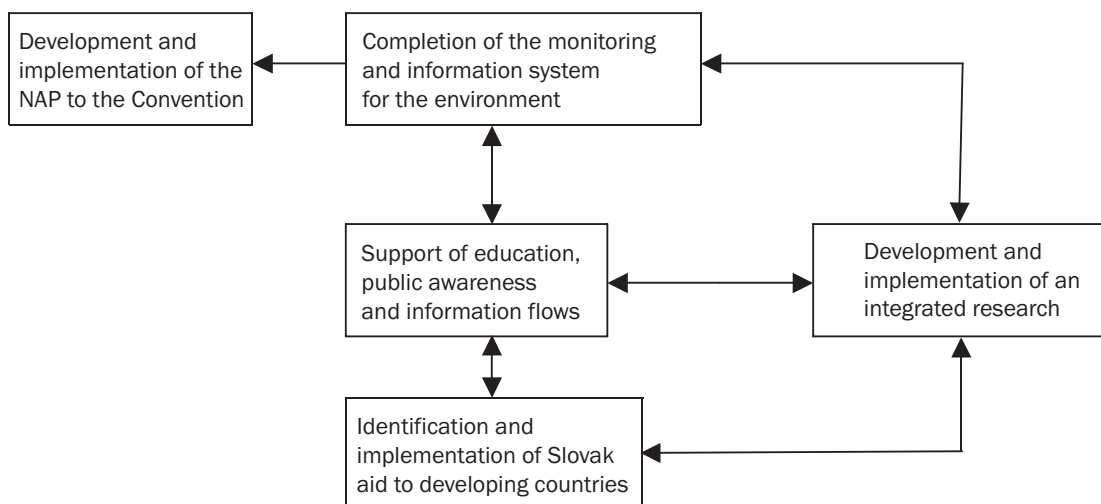
Recommendation/proposal	Strategic importance for the EU	National priority <sup>16</sup>	Priority Based on NCSA Results <sup>17</sup>	Cross-cutting and integrated character	Potential financial sources	Building, development of capacities
Enhance involvement of Slovakia in regional cooperation	+	+	++	+++	SB EU sources FAO, UNDP	building development
Train experts in cross-sectoral issues to flexibly address cross-cutting problems	+	-	++	+++	SB IFIs	development
Carry out revision of NCSA	-	-	+++	+++	UNDP	development

**Table 8: Long-term measures**

Recommendation/proposal	Strategic importance for the EU	National priority	Priority Based on NCSA Results	Cross-cutting and integrated character	Potential financial sources	Building, development of capacities
Strengthen and mobilize experts via sufficient opportunities of professional career and training	+	+	+	+++	SB	development
Improve financing of research projects on issues of soil degradation	+	+	++	++	SB EU sources	development
Maintain cooperation among institutions, media and the public to increase information on the causes and impacts of soil degradation and desertification	+	-	++	+++	SB EU sources UNDP	development
Maintain the involvement of Slovakia in regional cooperation	+	+	++	+++	SB EU sources FAO, UNDP	development
Maintain training of experts in cross-sectoral issues to flexibly address cross-cutting problems in international projects	+	-	++	+++	SB EU sources IFIs	development

Five earmarked commitments of Slovakia were analyzed in chapter 4 to provide a background to formulate priorities. Individual needs represent partial priorities arranged with respect to implementation mechanisms. Although individual commitments are seen as

individual issues or problems, the critical momentum is the development and implementation of the National Action Program for the Convention. Inter-links between commitments are shown in following scheme:



### ***Preparation and implementation of the National Action Program for the Convention***

1. Determine responsible bodies to develop and implement the NAP for the Convention including
  - a) establishment of a cross-sectoral working group for desertification and soil degradation in order to ensure communication and cooperation among responsible ministries and specialized institutions with respect to the preparation of legal documents. This cross-sectoral working group might serve for all Rio conventions.
  - b) analysis of mandates, functions, technical and financial support of expert institutions related to the implementation of the Convention
  - c) clear definition of responsibilities of individuals and institutions at all levels of state administration
  - d) enhance and mobilize employees at specialized institutions by providing sufficient opportunities for personal career development including training opportunities
  - e) establish clear mechanisms to involve NGOs and the public.
2. Strengthen the number of people working at the NFP for the Convention.
3. Develop and endorse financial mechanisms to implement the Convention

### ***Completion of integrated environmental monitoring and information system according to the EU and Convention requirements***

1. Develop concept, legal, institutional and financial support to monitor drought (aridity)
2. Adapt the national monitoring system to the EU procedures

3. Complete the soil information system with respect to the register of dry and degraded soils
4. Develop an information system for urban areas (as a part of Integrated System of Land Management)
5. Build institutional capacities for early warning system against unfavorable development of desertification and soil degradation.
6. Determine clear rules to provide and use (share) databases and information sources among all institutions

### ***Development of a strategy of integrated research on the soil and land degradation and the implementation of this strategy***

1. Develop a strategy of integrated research to support drought mitigation and land degradation
2. Improve financing of expert institutions
3. Increase the Slovak share in international cooperation in the area of desertification and degradation of soil and land.

### ***Support of education and raising public awareness, access to information on causes and effects of desertification and soil degradation***

1. Modify (adjust) the education system in order to reflect the principles of sustainable development and the requirements of the Convention
2. Improve cooperation of expert institutions and the media in order to increase information public access information with respect to on causes and effects of desertification and land degradation
3. Train a sufficient number of trainers for public education in this field.



**Identification of content (scope), forms and mechanisms of Slovak aid to affected countries**

1. Develop a proposal for the scope and forms of aid to affected countries including the financial requirements to provide such aid
2. Train experts in various specializations in order to flexibly provide the aid as requested
3. Enhance the regional cooperation of Slovakia

The implementation of the NSSD requires that natural resources will be used effectively; allocation of

sources will allow the material and cultural needs of humans to be satisfied. Changes in formulas of production and consumption and creation of an open society are well known aspects of sustainable development. Measures to mitigate the impacts of desertification and soil degradation must be built in at the systemic level. They should be approached from bottom – up. On the other hand, the success of implementation of these measures depends on the acceptance of all stakeholders from the top- down.

## 6. References

1. UNDP/GEF: A Guide for Self-assessment of Country Capacity Needs for Global Environmental Management, Washington, D.C., 2001, 44 p.
2. UNDP/GEF: Capacity Development Indicators, Resource Kit No 4., 2003, 37 p.
3. UNDP/GEF: National Capacity Self-Assessments, Resource Kit No. 3., 2003, 44 p.
4. Ministry of Environment: Water protection against nitrates from agricultural sources, Code of good agricultural practice in the Slovak Republic (in Slovak), 2001, 56 p.
5. Council of Europe: Recommendation No. R (92) 8 of the Committee of Ministers to Member states on soil protection, 1992
6. Council of Europe: Revised European Charter for the Protection and Sustainable Management of Soil adopted by the Committee of Ministers of the Council of Europe at its 840th meeting on 28 May 2003 (<http://forum.europa.eu.int/Public/irc/env/soil/library?l=/erosion/erosion&vm=detailed&sb=Title>)
7. Ministry of Foreign Affairs: Mid-term strategy of aid to developing countries for 2003-2008, (in Slovak) 2003. (<http://www.slovakaid.mfa.sk/index.php/article/articleview/36/1/2>)
8. European Council: Towards a thematic strategy for soil protection. COM(2002)179 final, EC Brussels, 2002 (<http://europa.eu.int/comm/environment/soil>)
9. Bielek, P.: Soil protection, Code of Good agricultural practice in the Slovak republic (in Slovak), Ministry of Agriculture and VÚPÚ Bratislava, 1996, 68 s.
10. Bujnovský, R.: Principles of good use of manures, Code of good agricultural practice in the Slovak Republic, (in Slovak), Ministry of Agriculture and VÚPÚ Bratislava, 1996, 58 s.
11. Eerkens, C., Fecenko, I.: Agricultural research in Slovakia. An audit for its organization and future orientation. Berenschot EuroManagement, 1997
12. Fenton, D., García-Costas, A.: National capacity self-assessment: A companion implementation manual and resource kit. UNDP, Bratislava, 2003, 85 p.
13. Guziová, Z., Maroušek, J., Neronov, V.: Country capacity development needs and priorities. Regional Report for Eastern Europe and Central Asia. UNDP/GEF, 2000, 156 p.
14. Green report of the Ministry of Agriculture, 2004, p. 94