



*Ministry of Local Administration and Environment
General Commission for Environmental Affairs
United Nations Development programme
Global Environment Facility*

**Self Assessment of National Capacity Building Needs in Syria
To Manage Global Environmental Issues**

(NCSA/SYR /O5/012)

**The NCSA Strategy and Action Plan to Implement the
UN Environmental Conventions in Syria**

**October
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Foreword

Syria has signed and ratified the three UN Conventions on Conserving Biological Diversity, Combating Desertification and Climate Change in very early stages, and committed itself to the success of the global environmental management system. Since then, many stakeholders and thousands of Syrians were engaged in hands-on initiatives, policy-dialogues, and enabling activities to meet their obligations and ethical commitments to the Conventions. Remarkable successes have been achieved in many cases. However, some results were below expectations.

A process of national prioritization to place the high emphasis on direct and stressing constraints facing the national capacity at individual, organizational and systematic levels to respond to the challenges and opportunities embedded in the proper implementation of the three UN Conventions.

The National Capacity Self Assessment (NCSA) process was a perfect occasion for re-thinking our priorities and taking a solid assessment of achievements and options for improvement. The NCSA process conducted in a participatory way and facilitated a national dialogue that resulted in a robust package of suggested Strategic capacity building activities in the form of the NCSA capacity building Action Plan.

In a Strategic, planning methodology based on early prioritization of national needs, and relying in a backbone of synergies among the three Conventions, the NCSA Action Plan was designed in actions responding to the integrated needs of the three Conventions with clear local identity of priorities.

The NCSA Action Plan is composed of 17 suggested projects based on seven Strategic programs, namely sustainable coordination mechanisms, integration of the concepts of the three Conventions into the national policies and legislations, resource mobilization, knowledge management and networking, infrastructure and technical training, technology transfer, and empowerment of local communities.

The Environment Law No.50 for the year 2002 established the Council for Environmental Protection and Sustainable Development headed by the Prim Minister with 17 member Ministries. The CEPD is the umbrella for the development of environmental policies, and the agreement on all legislative and directions of environmental protection and Sustainable development. Moreover, CEPD raise all Strategies and Action Plans of environmental affairs to be included into the national socio economic plans.

The Ministry of Local Administration and Environment (the General Commission for Environmental Affairs) is the focal point for the three UN Environmental Conventions and will be committed to the proper implementation of this Action Plan. However, such

implementation should be based on effective partnership with the environmental community in Syria representing public, civil, private sectors and research centers associated with the three Conventions. Such an effective national implementation mechanism should be energized by global partnership.

I hope that NCSA Action Plan will provide a practical guide for the harmonization of the implementation of the three UN Conventions within the conceptual system of synergies that was developed in the project. This will assist in identifying common priorities between the three Conventions and better utilize the available resources for a more holistic approach in linking global environmental principles with national and local priorities.

The Ministry of Local Administration and Environment would like to express thanks for the National Project Director and the Project Management Unit; all the experts who conducted the project studies, and developed the Strategy Action Plan; as well as partners in the State Planning Commission, UNDP and all stakeholders that were positive in their support of the project. Special thanks are due to all experts and representatives of stakeholders who participated in the meetings and workshops held by NCSA and contributed to the success of the project.

Engineer Helal Al Atrash

Minister of Local Administration & Environment

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Thanks are due to all national consultants who participated in conducting the baseline and broad assessment studies of the stakeholders' activities in the fields of biodiversity, desertification control and climate change; and the study on Synergies among the three UN Conventions.

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Acronyms

CBD	Convention on Biological Diversity (UN).
CBO	Community Based Organizations.
CDM	Clean Development Mechanism.
CEPSD	Council for Environmental Protection and Sustainable Development.
CHF	Clearing House Facility.
CIC	Conventions Implementation Committee.
COP	Conference of the Parties.
CST	Committee for Science and Technology.
EFDB	Emission Factors Data Base.
EIA	Environmental Impact Assessment.
EWS	Early Warning System.
FAO	Food and Agricultural Organization of the UN.
FTA	Free Trade Agreement.
GCEA	General Commission for Environmental Affairs.
GCSAR	General Commission for Scientific Agricultural Research.
GDP	Gross Domestic Product.
GEF	Global Environmental Facility.
GHG	Green House Gases.
GM	Global Mechanism.
GMO	Genetically Modified Organisms.
GOF	Government of Syria.
GSP	Global Support Program.
GTI	Global Taxonomy Initiative.
HCC	Higher Coordination Committee.
ICARDA	The International Center for Agricultural Research in Dry Areas.
IPCC	Intergovernmental Panel for Climate Change.
IUCN	International Union for Conservation of Nature (World Conservation Union).
KM	Knowledge Management.
LFA	Logical Framework Analysis.
MAAR	Ministry of Agriculture and Agrarian Reform.
MDGs	Millennium Development Goals.
MLAE	Ministry of Local Administration and Environment.
NAP	National Action Plan.
NBSAP	National Biodiversity Strategy and Action Plan.
NCSA	National Capacity Self-Assessment.
NGGIP	National Greenhouse Gases Inventory Program.
NGOs	Non-Governmental Organizations.
PDD	Project Design Document.
PES	Payments for Environmental Services.
RAF	Resource Allocation Framework.
SAC	Scientific Advisory Committee.
SBI	Subsidiary Body for Implementation.
SBSTA	Subsidiary Body for Scientific and Technological Advice.

SEA	Strategic Environmental Assessment.
SCCF	Special Climate Change Fund.
SPS	Sanitary and Phytosanitary Measures.
SRAP	Sub-Regional Program.
SGP	(GEF) Small Grants Program.
TCC	Thematic Coordination Committee.
TFB	Task Force Bureau, which is connected to NGGIP.
TRIPS	Trade-Related Aspects of Intellectual Property Rights.
TOR	Terms of Reference.
UNCBD	United Nations Framework Convention on Biological Convention.
UNCCD	United Nations Convention on Combating Desertification.
UNFCCC	United Nations Framework Convention on Climate Change.
UNDP	United Nations Development Program.
UNEP	United Nations Environmental Program.
WB	The World Bank.
WTO	World Trade Organization.

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1 Executive Summary

The Ministry of Local Administration and Environment/the General Commission for Environmental Affairs (GCEA) has implemented the project of Self Assessment of the National Needs for Capacity Building in Syria for Management of Global Environmental Issues (NCSA) which is funded by the Global Environmental Facility (GEF) and administered by the UNDP country office in Syria.

The NCSA is a GEF initiative that aims at assessing the capacity constraints and potentials for implementing the three UN Conventions on Biological Diversity, Desertification Control and Climate Change.

NCSA focuses on crosscutting issues within the three UN Conventions to complement and enhance linkages and integration as well as promote resource mobilization and coordination in implementation.

The National Capacity Self Assessment for Global Environmental Management (NCSA) Strategy and Action Plan document aims at providing analysis of the priority capacity constraints facing Syria while implementing the three UN Conventions.

The NCSA Strategy and Action Plan provides a road map for national capacity development initiatives that would, when implemented properly raise the national capacity for the required level of implementing the Conventions and gaining national environmental benefits responding to national priorities while doing so.

The NCSA Strategy and Action Plan describe in details the process of the NCSA project implemented by the Ministry of Local Administration and Environment from October 2005 to November 2007.

The NCSA Strategy and Action Plan document is divided into five main sections. The **first section** provides a summarized overview of the national environmental and socio-economic conditions affecting the environmental management system in Syria with links to the Millennium Development Goals.

The **second section** provides a summary of the stocktaking exercise conducted by the NCSA in 2006-2007 to identify the main capacity constraints facing the country in its implementation of the Conventions as well as the crosscutting Strategic capacity constraints common to all the Conventions.

The stocktaking has revealed a set of 39 thematic capacity constraints for the three Conventions and 10 Strategic capacity constraints. Thirteen capacity constraints identified for biodiversity, 13 for desertification control and 13 for climate change. The second section represents also an overview of the concept of capacity development as used in the NCSA and the three levels for capacity development: individual, organizational and systematic.

The **third section** puts the 39 thematic capacity constraints under in-depth analysis based on Logical Framework Analysis conducted in the NCSA process. The analysis developed a package of actions to respond to the 39 capacity constraints. Proposed 49 actions derived for biodiversity, 49 proposed actions for desertification and 44 proposed actions for climate change. This section provides a summary of the organizational capacity assessment exercise conducted by the NCSA and revolving around the strategic crosscutting capacity constraints.

The **fourth section** provides a suggested practical Action Plan for national capacity building in response to the identified capacity constraints based on synergies between similar actions and common constraints.

The NCSA Action Plan is composed of seven programs representing the crosscutting Strategic capacity constraints:

- 1- **Program One:** Developing and maintaining a national coordination mechanism.
- 2- **Program Two:** Integrating the Concepts of the three UN Conventions into the National Policies and Legislations.
- 3- **Program Three:** Resource Mobilization.
- 4- **Program Four:** Knowledge Management, Outreach and Networking.
- 5- **Program Five:** Development of Infrastructure Technical Training.
- 6- **Program Six:** Technology Transfer.
- 7- **Program Seven:** Local Community Empowerment.

The **fifth section** includes NCSA Action Plan, which proposes seventeen projects each described by implementation mechanism, objectives, activities and outcomes developed within the seven programs. The projects included 117 activities and 72 outcomes. The total budget of the Action Plan is estimated at 8.3 million US\$. The time frame of the projects depends on the nature of its activities, and would range from 2 to 5 years. Detailed schedule and budget for each project will be identified upon ratification of NCSA SAP.

An implementation mechanism for the NCSA Action Plan was also described in this section.

The study is provided with the references used to enrich its background, in addition to useful references related to environment in general and to the three UN Conventions in particular. Moreover, relevant publications from GEF, UNDP and NCSA of certain countries are included.

This NCSA Strategy and Action Plan would be of great value for policy makers, planners, scholars, scientists, researchers and graduate students in the different fields of environmental management.

2 Objectives of the NCSA Action Plan

The Ministry of Local Administration and Environment (the General Commission for Environmental Affairs) has been implementing the National Capacity Self Assessment for Global Environmental project (NCSA) funded by the Global Environmental Facility (GEF) and administered by the United Nations Development Program (UNDP) country office in Syria.

The NCSA is a GEF initiative that aims to assess the capacity constraints and potentials for implementing the three International Environmental Conventions on Conserving Biological Diversity, Combating Desertification and Climate Change through preparing an Action Plan for capacity development based on synergies and national priorities identified by the NCSA process.

The three UN Conventions endorsed by the international community within the United Nations system between 1992 and 1994 represent the backbone of global environmental management. The Conventions will contribute significantly to achieving the goals of sustainable development and conservation of the planet's natural resources for future generations, when implemented effectively. Despite their good will and efforts in implementation, many parties-especially developing countries- have limited capacity for full implementation.

GEF Council, recognizing the increasing importance of assisting developing countries to increase their capacity to participate in global environmental management launched the Capacity Development Initiative (CDI) late in 1990s. The goal of this partnership between the GEF Secretariat and the UNDP was to assess common capacity needs among countries and design a strategy to meet them. The CDI involved extensive consultations with partner countries, GEF and its Implementing Agencies; Secretariats of the Conventions on Biological Diversity, Climate change, and Combating Desertification/land degradation; other multi- and bilateral organizations; and non-governmental organizations.

As a first step in implementing the CDI recommendations, GEF Council approved funding for countries wishing to undertake "national self assessments of capacity building needs". The purpose was to support a country-driven consultative process of analysis and planning that will determine national priorities and needs for capacity development to protect the global environment. The resulting designed project NCSA implemented in many developing countries and countries in transition around the world as an initial baseline step to specify national requirements for synergistic and effective capacity development program.

The NCSA process represents the only nationally focused, global initiative explicitly designed to examine potential synergies between the Rio Conventions. In addition, countries can use them to mainstream the global environment into broader national sustainable development processes.

The objectives of this Action Plan are to:

- 1- Identify national capacity constraints limiting the proper implementation of the three Rio Conventions.
- 2- Identify potential synergies between the three Conventions at the national level.
- 3- Provide a practical framework to enhance the national capacity for synergistic implementation of the three Rio Conventions.
- 4- Streamline the commitments and obligations entailed in the global environmental management system into national policies.

3 Methodology

The NCSA process was launched at the Ministry of Local Administration and Environment (General Commission for Environmental Affairs) on 1 October 2005. The project was composed of various inter-connected stages for capacity assessment that have resulted in the formulation of the Strategy National Action Plan for capacity development in the three UN Conventions themes and cross-cutting issues:

- 1- Stocktaking and thematic profiles developed.
- 2- In-depth analysis of the priority areas.
- 3- Developing and endorsing the final NCSA Strategy Action Plan.

Stocktaking Phase

The stocktaking phase started by an inception workshop that aimed at raising awareness about the project components and objectives and identification of the main national partners and stakeholders. A Steering Committee headed by the Minister of Local Administration and Environment was established as an advisory body to the project. Members of the steering committee represented main stakeholders including the State Planning Commission, GEF, UNDP, and focal points of the three UN Conventions. Moreover, three thematic (technical) working groups were also established. Each included representatives of all stakeholders working on that specific theme.

During the stocktaking phase, a database on experts and activities on environment in general and the themes of the three UN Conventions was initiated. National consultants were recruited to develop three stocktaking reports that aimed at identifying the conceptual frameworks for capacity development under each Convention and identifying previous and current initiatives at the national level that were/are conducted in the aim of implementing the Conventions. Another three stocktaking reports conducted where national priority capacity constraints that limit the proper implementation of the Conventions identified and priority areas for capacity building suggested.

A stocktaking report was prepared which focused on cross-cutting issues among the three Conventions and aimed at developing the conceptual framework for cross-cutting issues in the early phase of stocktaking to assist in the streamlining of the Strategic planning process that will follow up.

A fifth stocktaking report focused on conceptual frameworks of capacity development as developed and implemented by the GEF/UNDP system and the three Conventions. This report helped in the formulation of the priorities in capacity development as related to the existing global conceptual framework.

The stocktaking reports were discussed in a national workshop held in January 2007 and resulted in the development and finalization of the priority capacity constraints under each Convention. A further package of cross-cutting priorities were identified by the cross-cutting stocktaking report to act as the "conceptual" backbone of the in-depth analysis and keep synergies and cross-cutting priorities embedded within the Strategic planning process.

The national capacity constraints were the focus of the subsequent phases of in-depth analysis and development of the NCSA Action Plan.

In-depth Analysis

After the identification of the national priority constraints in the stocktaking phases for the three Conventions, a set of Logical Framework Analysis (LFA) exercises were developed based on the priority constraints (problem statements) in each theme. This has resulted in specific root causes, outcomes and outputs that constituted the main elements of the NCSA Action Plan.

In this phase, two further exercises were conducted:

- 1- A detailed policy gap analysis based on the capacity constraints to identify existing gaps in policies with direct relation to the specific capacity constraints; and
- 2- A comprehensive organizational capacity assessment for key stakeholders involved in the implementation of the Conventions. The organizational capacity assessment was based on the cross-cutting priorities identified in the stocktaking phase.

Development of the NCSA Action Plan

The in-depth analysis (Logical Frameworks), policy analysis and organizational capacity assessment were all fed into the development of the NCSA Action Plan. The NCSA Action Plan was based on seven programs that represent the cross-cutting priority constraints, and a package of proposed project concepts was developed under each of the seven program areas. The selected project concepts were designed in a way to ensure synergies and to address the cumulative needs of the three UN Conventions together wherever feasible. In some particular areas, the projects were theme-specific and responded to certain challenges and priorities imposed by one of the Conventions.

The methodology used by NCSA Syria followed the traditional four-step process designed by the NCSA Global Support Program (GSP) and outlined in the NCSA Resource Kit published in 2005 with slight differences, however.

The NCSA Resource Kit provides an overall process design framework but still leaves a considerable amount of flexibility for national NCSA to design their processes in accordance to national needs and circumstances.

The process included high level of participation and transparency where the stocktaking priority constraints, in-depth analysis logical framework, and the draft Action Plan all extensively reviewed in national workshops and through individual consultation meetings with key stakeholders.

Elements of the NCSA process

NCSA integration into the Ministry of Local Administration and Environment

The Ministry of Local Administration and Environment (MLAE) implemented the NCSA project. During the project period, the NCSA has contributed to many activities in MLAE. This integration helped the NCSA to station some of its findings and recommendations resulting from the stocktaking phase into the Strategic objectives of the MLAE and other national policies.

NCSA Outreach Plan

The project has developed and implemented an outreach plan made up of several components. The plan included developing a website that includes all the NCSA products and participating in various workshops. NCSA distributed all studies and reports (on CDs) to a wide range of institutions and individuals. It included four CDs that contained all the stocktaking phase reports, Environmental Law No. 50 of 2002, Forestry Law No. 25 of 2007, and the documents related to the three UN Conventions. A fifth CD produced containing all contents of the previous CDs in addition to Final Report on Strategy, Work Plan and Monitoring and Evaluation Mechanism to implement the three Rio Conventions in Syria. All NCSA reports are available from the web site of MLAE (www.gcea.gov.sy) and that of UNDP/Syria (www.ncsa.undpprojects.sy).

Choice of National Consultants

The choice of national consultants was based on a transparent recruitment process that aimed at widening the range of expertise and backgrounds of national consultants. For ensuring a wide representation of national sectors and stakeholders in the stocktaking phase, the national consultants for the five main stocktaking reports (Biodiversity, Desertification, Climate Change, Synergies and Capacity Development) were selected in a way that included experts from public sector, academia, and NGOs. All reports were revised by the Focal Points of The three UN Conventions at MALE, and presented to stakeholders in technical group meetings and national workshops.

NCSA Sustainability

As the NCSA is an assessment and Strategic planning project, the sustainability will be a function of the implementation of the Action Plan itself. Sustainability requires high-level support, a resource mobilization strategy and a practical Action Plan with clear and practical objectives. A sustainable coordination system should also be developed and made functional.

One of the main elements of the sustainability of the NCSA project is the expected implementation of Cross-cutting Capacity Building GEF projects that were identified in the stocktaking phase and were used to design the CB 2 project especially the operational and technical linkages between scientific research and policy making in relation to the three Convention's themes.

Regarding the NCSA Action Plan the implementation and sustainability aspects were taken into deep consideration while designing the Action Plan as well as a proper and effective management and follow-up tools in MLAE and other institutions related to implementing the NCSA Action Plan.

Focusing on Synergies

The NCSA project has introduced the new concepts of synergies among the three themes of biodiversity, desertification control and climate change. The traditional trend is to work with each issue in separation and the NCSA task was to develop an Action Plan based on synergies that require the detailed analysis of crosscutting issues. This process is both time and resources consuming, and that was the reason for the NCSA/Syria project to identify priorities at an early stage.

The NCSA Action Plan was designed while keeping the synergy aspect as a main contributor. The seven programs of action were based on the synergies identified in the stocktaking phase while the individual suggested projects under each program were designed to meet the requirements of the three Conventions together unless theme-specific priorities and actions were identified.

NCSA Linkages with National Development Policies

The NCSA has been designed as a process to consolidate environmental capacity development in relation to the three Rio themes with direct linkages to global environmental requirements. This places a challenge on the NCSA staff and advisors to establish a direct link between the NCSA objectives in capacity development and national development needs and priorities stipulated mainly in socio-economic issues. This linkage is vital for maintaining the interest in the NCSA and streamlining the NCSA Action Plan for capacity development as another tool in obtaining the country's socio-economic needs.

During the in-depth analysis phase, a special study was conducted for policy analysis of priority areas in capacity development in the three themes to identify gaps in policies, link the NCSA Action Plan to current policies so that it will not be contradictory or redundant and focus on issues missed, and absent from current policy settings.

4 Introduction and Country Perspective

4.1 Overview

The Syrian economy is typically characterized as highly centralized and under full public sector control. This was no doubt the case prior to 1980, when Syria tried to achieve 'economic independence' through an extensive import-substitution industrialization (ISI) program. Foreign trade was exclusive to public sector enterprises, foreign investments were restricted and, with the exception of a small number of public enterprises, most of the production was geared towards satisfying local demand. However, Syria failed to take ISI to the level of an export-oriented program. A segment of the Syrian industry managed to break out and successfully penetrate East European and former USSR markets, thanks to the special relations Syria had with those countries during the 1980s and to their highly protected markets. Many of those exports were manufactured goods with significant growth potential.

In Syria, as elsewhere, ISI tended to foster mass consumption over capital accumulation, establishing the building of a national market. This created dependency on imported capital goods, without fostering the export capacity needed to earn foreign exchange, thereby precipitating balance of payments difficulties.

Currently, the Syrian economy has two key strengths: **First** it has maintained macroeconomic and exchange rate stability for almost a decade. **Second**, its debt (external and internal) to GDP ratio is low and it has accumulated a large reserve of foreign currencies. A remarkable feature of the Syrian economy is that it managed to achieve macroeconomic stability without the adoption of a full-fledged 'neo-liberal' policy package, which typically also includes privatization of public enterprises, liberalization of labor and financial markets, and the reduction of government activity in the field of social policy. However, macroeconomic stability masks several critical weaknesses and challenges. Paramount among which are the low rate of economic growth since the mid 1990s, rapid depletion of oil reserves, a poorly performing public sector, and political turmoil in the region.

The economy grew by an average of 7% a year in the first half of the 1990s, with a peak of 13.5% in 1992. Growth in the second half of the 1990s and early 2000s, however, was far less favorable so that, from 1999 to 2003, it plummeted to 1 %, reaching a low of -3.6 % in 1999. Consequently, GDP per capita is declining because growth rates are declining faster than that of population growth (GDP per capita growth averaged roughly 5 % from 1991 to 1996 and 0 % from 1997 to 2002). In fact, GDP per capita in 2002 was less than that of 1996.

When GDP is broken down by expenditure for the period from 1996 to 2002, it shows that shares of exports grew from 30.9 % to 42.8 % while the share of imports private consumption declined from 69.5 % to 57.4 %.

Private consumption contributed the most to growth of GDP, averaging 3.0 % of the 7.2 % growth rate over the period from 1996-1998. However, private consumption decreased

over the subsequent period (-1.7 %). This was not the case for public consumption, which contributed 0.1 % and 0.5 % to overall growth during the 1996-1998 and 1999-2002 periods, respectively. The contribution of net foreign demand (NFD) declined from 4.2 % to 1.2 %, due to an increase in leakages (imports) from aggregate demand. Nonetheless, NFD remained the single largest source of growth over the entire period, highlighting the significant role of oil exports.

As argued in the UNDP Syria case study (2005), in this context, the growth-poverty response of an increase in import-substitution would be highly pro-poor for Syria, given the high share of imports in GDP, the structure of imports and the demand spillovers from an increase in employment, productivity and real wages.

The overall contribution of investment to GDP growth remains low in comparison with other developing countries, and is cause for concern. The contribution of gross investment to GDP was -0.2 % for 1996-1998 and 1 % for 1999-2002, which yields an overall contribution of only 0.4 percent to the 3.6 % total average growth during the entire period. Public investment contribution to growth declined from 0.9 % to -0.1 % over the periods 1996-1998 and 1999-2002, respectively. This reflects the overall poor performance of public sector in Syria. Private investment had a negative (-1.1 %) contribution during 1996-1998. However, its contribution improved somewhat for the period from 1999 to 2002, to reach 1.1 %.

After a period of high growth in the early 1990's, the Syrian economy fell into a recession. This resulted in a growth pattern that was driven by foreign demand. However, growth based on oil exports may prove to be unsustainable. Therefore, a flexible poverty reduction Strategy will have to devise a more sustainable growth path to lift more Syrians out of poverty.

On the supply side, growth during the 1996-1998 was driven mainly by mining and manufacturing, with a contribution of 4.1% (a share of 56.7 %) due mainly to the increase in oil exports, then by agriculture, which contributed 2.6%. Thus, productive sectors contributed over 75% to economic growth during that period. This trend discontinued as the average growth rate of the industrial sector fell sharply from 13.9 to -3% over both periods (from 1996 to 1998 and 1999 to 2002), respectively. Consequently, its contribution to growth declined to an average of -1 % during the latter period.

The average rate of growth of agriculture also declined (from 11.3 to 2.7 %), which reduced its contribution to growth to reach 0.6 %, but it was still the second largest source of growth due to the poor overall rate of growth. Services (trade, transport and communications, finance and insurance and social and other services) contributed the most to growth from 1999-2002 with an average of 1.7 %.

5 Background: the UN Conventions on Conservation of Biodiversity, Combating Desertification and Climate Change

5.1 The UN Convention on Biological Diversity (UNCBD)

The UN Convention on Biological Diversity was an agreement of the International Conference in Rio de Janeiro in 1992, which entered the phase of application in 1993, and was ratified by the Syrian Arab Republic in 1996.

5.1.1 The objectives of the UNCBD

1. Conservation of biological diversity on three levels, genetic, species and ecosystem.
2. Sustainable use of biological resources.
3. Fair and equitable sharing of benefits arising from the use of genetic resources, including the reach of genetic resources through appropriate means and technologies concerning all rights to reach these technologies and the suitable funding.

5.1.2 Main Obligations of the UNCBD

- Develop National Strategies, plans or programs for conservation and sustainable use of biological diversity, or adaptation for this purpose existing strategies, plans or programs.
- Integrate, as far as possible and appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programs and policies.
- Identify components of biological diversity important for its conservation and sustainable use.
- Monitor components of biological diversity and pay particular attention to those requiring urgent conservation measures and those, which offer the greatest potential for sustainable use.
- Identify processes and categories of activities, which have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity.
- Establishment of a system of protected areas or areas where special measures need to be taken to conserve biological diversity.
- Develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity.
- Regulate or manage biological resources important for the conservation of biological diversity within or outside protected areas.

- Rehabilitate and restore degraded ecosystems and promotion of the recovery of threatened species.
- Establishment of means to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology.
- Adopt measures for the ex-situ conservation of components of biological diversity, preferably in the country of origin of such components.
- Establish and maintain facilities for ex-situ conservation of and research on plants, animals and microorganisms, preferably in the country of origin of genetic resources.
- Adopt measures for the recovery and rehabilitation of threatened species and for their reintroduction into their natural habitats under appropriate conditions.
- Adopt, as far as possible and as appropriate, economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity.
- Introduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects.
- Promote -based on reciprocity- notification, exchange of information and consultation on activities under the jurisdiction or control which are likely to significantly affect adversely the biological diversity of other states or areas beyond the limits of national jurisdiction.
- Integrate the conservation and sustainable use of biological resources into national development strategies.
- Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements.
- Recognize the sovereign rights of states over their natural resources, the authority to determine access to genetic resources rests with the national governments and is subject to national legislation.
- Each UNCBD party shall endeavor to create conditions to facilitate access to genetic resources for environmentally sound uses by other UNCBD parties and not to impose restrictions that run counter to the objectives of this Convention.
- Each UNCBD party shall endeavor to develop and carry out scientific research based on genetic resources provided by other CBD parties with the full participation of, and where possible in, such parties.
- Each UNCBD party shall take legislative, administrative or policy measures, as appropriate, to provide for the reflective participation in biotechnological research activities by those CBD parties, especially developing countries, which provide the genetic resources for such research.
- Each UNCBD party shall take all practicable measures to promote and advance priority access on a fair and equitable basis by parties, especially developing countries, to the results and benefits arising from biotechnologies based upon genetic resources provided by those parties.
- Promote and encourage understanding of the importance, and the measures required for, the conservation of biological diversity, as well as its propagation through media, and the inclusion of these topics in educational programs.

- Cooperate, as appropriate, with other states and international organizations in developing educational and public awareness programs, with respect to conservation and sustainable use of biological diversity.
- Establish and maintain programs for scientific and technical education and training in measures for identification, conservation and sustainable use of biological diversity and its components.
- Promote and encourage research, which contributes to the conservation, and sustainable use of biological diversity.
- Promote cooperation with other states in the use of scientific advances in biological diversity research.
- Provide and/or facilitate access for and transfer to other parties of technologies that are relevant to the conservation and sustainable use of biological diversity.
- Transfer of technology includes results of scientific, economic and social researches, and information related to research, training, and traditional knowledge programs.
- Promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity, where necessary, through the appropriate international and national institutions.
- Cooperate in the fields of training and expertise exchange in technology development.

5.1.3 The concept of national capacity development in the UNCBD

Though the Convention on biological diversity does not include a particular article on capacity building, several articles contain capacity-building concepts. Secretariat of UNCBD identified the following themes for capacity building to realize the integrated implementation of the Convention:

- Integrating Biodiversity into National and Sectoral Development Plans and Policies;
- Promoting the Use of Economic and Command and Control Instruments for the Sustainable Management of Biodiversity;
- Driving Production and Use of Biodiversity Indicators;
- Strengthening Research Capacity and Technological Development;
- Strengthening Rural and Indigenous Capacity in Biodiversity Management;
- Strengthening Protected Areas Systems;
- Developing Strategies, Plans and Education Programs on Conservation and Sustainable Biodiversity Use;
- Developing Mechanisms for Genetic Resources Access and Sustainable Use.

5.2 The UN Convention on Combating Desertification (UNCCD)

The United Nations Convention to Combat Desertification (UNCCD), was adopted in Paris /France on 17 June 1994, and entered into force in 1996.

The Syrian Arab Republic (SAR) participated in the world summit in Rio in 1992 and took a part in the layout of Agenda 21, and signed the Convention on October of 1994, and ratified it in 1997.

The main goal of the Convention is to take effective measures to combat desertification and mitigate the impact of drought, in countries suffering of severe drought or desertification. This should be done through integrated approach, in conformity with Agenda 21 principles with the purpose of achieving sustainable development in affected areas.

The UN Convention on Combating Desertification acts through several principles which form the essence of the Convention and themes for implementation around the globe. These principles are participation of local communities in identifying priorities for combating desertification, and formulating programs to face desertification; national, regional and international cooperation and building partnership for combating desertification and sustainable management of lands.

5.2.1 Obligations of Parties to UNCCD

- Adoption of an integrated approach to address the physical, biological and socio-economic aspects to combat desertification;
- Integrating issues of combating desertification into all national development policies, particularly in strategies for poverty eradication.
- Allocating sufficient funds for the efforts of combating desertification, and regarding that as a national priority in development basis.
- Development of a National Strategy and Action Plan for combating desertification in a participatory approach, with special concentration on integrated management for desertification-threatened ecosystems.
- Development of regional and international partnership for combating desertification and exchange of knowledge and expertise in this field.
- Development of international cooperation in the fields of combating desertification through practical programs and exchange of technology and expertise.
- Collection, documentation and analysis of information, technology, and work relevant to combating desertification and information exchange on local, regional and international levels.
- Providing support for research, training and education in the fields of combating desertification and sustainable management of lands with special attention to the needs of local communities.
- Development, transfer and adoption of technologies appropriate to local conditions for combating desertification.
- Concentration on capacity building, education, and awareness.

5.2.2 The Concept of Capacity Development in the UN Convention to Combat Desertification

Article 17 of the UNCCD is specific to capacity building, education and public awareness. This article identified several principles and directions for capacity in the Convention:

- Full participation at all levels of local people, particularly at the local level, especially women and youth, with the cooperation of non-governmental and local organizations;
- Strengthening training and research capacity at the national level in the field of desertification and drought;
- Establishing and/or strengthening support and extension services to disseminate relevant technology methods and techniques more effectively, and by training field agents and members of rural organizations in participatory approaches for the conservation and sustainable use of natural resources;
- Adapt, where necessary, environmentally sound technologies and traditional methods for natural resources management in national and international cooperation programs.
- Establishment of innovative ways of promoting alternative livelihoods, including training in new skills;
- Training and capacity building in the field of early warning for drought;
- Capacity building in the field of developing national indicators for desertification;
- Develop and manage effective cooperation networking on the local, regional and international levels for capacity building.

5.3 UN Framework Convention on Climate Change (UNFCCC)

The agreement was adopted in the (Earth Summit) Conference of the United Nations in Rio de Janeiro in Brazil in 1992. The agreement went into effect in 1994. The number of countries, which ratified the agreement, was 190. Syria signed the agreement, ratified it in 1996, and went into effect in 2005.

Article 2 of the Convention states the objective, which is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level (according to 1995 levels) that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a timeframe sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

Commitments of industrial, rich nations include modification of policies and measures in the fields of energy conservation; reducing green gas emissions; providing a positive example of leadership and development in the fields of global environment protection. Commitments also include providing financial support to empower developing countries in application of activities and projects aiming at reducing greenhouse gas emissions; helping these countries to adapt to the potential impacts of climate change; taking all

possible practical measures to encourage transfer of environmentally friendly technology to developing countries.

Commitments of developing countries are limited to preparing National Communication about emissions from sectors: energy, transportation, industry, agriculture, municipalities, and housing. This commitment is present in several articles of the Convention (4, 5, 6, and 12). Other non-binding activities required from developing countries include integration of climate change policies in the national policies; implementing education and awareness programs; and provision of scientific research and information exchange. The treaty contains general articles that require the parties to encourage scientific research on monitoring gas emissions, and determining impacts of climate change on the parties. The general articles of the treaty also concentrate on capacity building, awareness, education, and exchange of information relevant to climate change.

5.3.1 Kyoto Protocol

After two and a half years of intense negotiations, the Kyoto Protocol was adopted at COP3 in Kyoto, Japan, on 11 December 1997. Kyoto Protocol shares the Convention's objectives, principles and institutions, but significantly strengthens the Convention by committing industrial countries to reduce greenhouse gas emissions below levels specified for each of them in the treaty by the year of 2015.

The complexity of the negotiations, however, meant that considerable “unfinished business” remained even after the Kyoto Protocol itself was adopted. The Protocol sketched out the basic features of its “mechanisms” and compliance system, for example, but did not explain the all-important rules of how they would operate. Although 84 countries signed the Protocol, indicating that they intended to ratify it, many were reluctant to actually do so and bring the Protocol into force before having a clearer picture of the treaty's rulebook. The Kyoto Protocol entered into force on 16 February 2005.

The Protocol has developed a number of mechanisms such as emissions trade, clean and sustainable development mechanisms, common application and carbon removal.

5.3.1.1 Commitments of Protocol Kyoto

- Designing and implementing national programs to reduce the impacts of climate change, and adapt to its impacts.
- Determination of national mechanisms for carbon isolation.
- Encouraging transfer and adoption of technologies which are friendly to environment and climate.
- Encouraging cooperation in scientific research on observation of climate change impacts, and response strategies.

5.3.1.2 Mechanisms of Kyoto Protocol

5.3.1.2.1 Clean Development Mechanism (CDM)

The clean development mechanism (CDM) defined in Article 12 provides for Annex I Parties to implement project activities that reduce emissions in non-Annex I Parties, in return for certified emission reductions (CERs). The CERs generated by such project activities can be used by Annex I Parties to help meet their emissions targets under the Kyoto Protocol. Article 12 also stresses that such project activities are to assist the developing country host Parties in achieving sustainable development and in contributing to the ultimate objective of the Convention.

5.3.1.2.2 Carbon Emissions Trading Mechanism (CETM)

Emissions trading, as set out in Article 17 of the Kyoto Protocol, provides for Annex I Parties to acquire units from other Annex I Parties and use them towards meeting their emissions targets under the Kyoto Protocol. This enables Parties to make use of lower cost opportunities to reduce emissions, irrespective of the Party in which those opportunities exist, in order to lower the overall cost of reducing emissions.

Only Annex I Parties to the Kyoto Protocol with emission limitation and reduction commitments inscribed in Annex B to the Protocol may participate in such trading. Such Parties may be prepared to transfer units when they do not require them for compliance with their own emission targets.

5.3.2 National Capacity Development in the UN Framework for Climate Change

The Convention through its executive committee developed in 2004 a group of suggestions about capacity building in developing countries from its National Communications. The most important themes are the following:

- Develop capacities in the field of national communications and inventory compilation.
- Develop institutional capacities in developing policies and national plans on climate change.
- Develop technical capacities to follow and compile emissions of greenhouse gasses (GHG).
- Evaluate the vulnerability and adaptation of developing countries to effects of climate change.
- Develop capacities for training and for public awareness on the causes of climate change, and ways to deal with it.
- Develop capacities in clean development mechanism and carbon removals mechanism.
- Develop capacities in transfer of promising and sustainable technologies.

5.4 Capacity Development in International Environmental Conventions

The United Nations Development Program (UNDP) and the Global Environment Facility (GEF) use the term capacity development instead of capacity building because the first term is more comprehensive and includes continuity and development of existing

capacities, while the term capacity building implies the absence of any capacities, therefore, starting from scratch.

UNDP defined capacity development as the ability of individuals, institutions and broader systems to perform their functions effectively, efficiently and in a sustainable way. GEF has developed a definition for capacity development similar to that of UNDP. GEF defined capacity development as the activities required to improve capacity of individuals, institutions, and systems to take and implement decisions, and to fulfill tasks effectively in a sustainable way. This definition is appropriated for assessment of implementation of national projects related to Rio Conventions.

The concept of capacity development relates, in general, to development of human resources, training, and institutional education and knowledge. Capacity development at the individual, institutional and systematic levels are considered central elements in capacity development.

5.4.1 Levels of Capacity Development

5.4.1.1 Capacity Development at the Individual Level

Capacity development at the individual level refers to the process of changing attitudes and behaviors, most frequently through imparting knowledge, and developing skills through training. However, it also involves learning by doing, participation, ownership, and processes associated with increasing performance through changes in management, motivation, morale, and levels of accountability and responsibility.

5.4.1.2 Capacity Development at the Institutional Level

Capacity development at the institutional level focuses on the overall performance and functioning capabilities, such as developing mandates, tools, guidelines and information management systems for the ability of the institution to adapt to changes. It aims to develop its constituent individuals and groups, as well as its relationship to the outside. Institutions can be governmental or non-governmental, local or national, and formal or informal.

5.4.1.3 Capacity Development at the Systematic Level

The systematic level capacity development is concerned with the creation of enabling environments, i.e. the overall policy, economic, regulatory, and accountability frameworks within which institutions and individuals operate. Relationships and processes between institutions, both formal and informal, as well as their mandates, are also important.

5.4.2 The Concept of capacity development in the International Environmental Conventions and in GEF capacity development initiatives

Capacity development in the three International Environmental Conventions is a main component of the Conventions objectives and implementation tools. Standards development for capacity development in the three Conventions and the initiatives relevant to the Conventions is done through two mechanisms:

1- Conventions mechanisms (conference of parties, scientific and technical groups) which work on developing special standards and guidelines for capacity development programs in each Convention.

2- The Global Environment Facility (GEF), which is considered the financial and technical mechanisms for Conventions implementation, contributes to development of standards for capacity development in the International Environmental Conventions Mechanisms.

Texts, initiatives and mechanisms of the International Environmental Conventions contain standards and guidelines particular to capacity development in each Convention. These standards can be used to identify national priorities for capacity development, and subsequent development of National Action Plan for capacity development.

5.4.3 Capacity Development in GEF

Responding to guidance from the global Conventions, the GEF Secretariat worked with UNDP to launch an initiative in January 2000, to gain a better understanding of the capacity needs of developing countries, and how these needs can be met. The Capacity Development Initiative (CDI) was developed by GEF for the above-mentioned purpose. In 2003, the board of GEF sat up a group of different executive programs for capacity development emerged from the CDI. Each of these programs targets a set of objectives for implementation of UN Conventions on Biodiversity, Combating Desertification, and Framework on Climate Change.

5.4.3.1 Standards for Capacity Development in GEF

The board of GEF approved a group of important standards for capacity development initiatives and programs. These standards are:

- Broad national ownership of projects.
- Involvement of all stakeholders in the decision-making process.
- Suggestions on capacity development are based on self-assessment of national needs and priorities.
- Use of holistic approach for capacity development at individual, institutional, and systematic levels.
- Integration of capacity development efforts in the broad sustainable development schemes.
- Encouragement of partnership among different institutions, with special emphasis on local initiatives.

- Use of learning-by-doing approach.
- Consistency with principles and standards of the Conventions.

5.4.4 Indicators for Capacity Development

GEF, as part of the CDI partnership, suggested that the following indicators for capacity development be used to develop capacity development projects, and assess their success during implementation:

- Awareness and knowledge;
- National policy, legal and regulatory frameworks;
- Institutional mandates, coordination, and processes for interaction and cooperation between all stakeholders;
- Information management, monitoring and observation;
- Mobilization of science in support of decision-making;
- Financial resources and technology transfer;
- Incentive systems and market instruments;
- Negotiation skills;
- Cooperation and networking within regions;
- Institutional management and performance; and
- Individual skills and motivation in key institutions.

5.4.5 UN Convention on Biological Diversity (UNCBD)

5.4.5.1 Capacity Development in UNCBD

The UNCBD does not include specific articles on capacity development, but this scope is spread over many other thematic and operational articles that include obligations related to capacity development. The main capacity development themes in the CBD are those related to technology transfer, and technical and scientific cooperation. Capacity development in UNCBD relies on technical training and information exchange through the clearinghouse mechanism. Capacity development is considered a main component in development of National Strategies and Action Plans for biological diversities.

Practical programs of UNCBD concentrate on regional and international cooperation, particularly among the southern states.

The following is a collective listing of major obligations and requirements of the UNCBD that are directly linked to capacity development issues:

- Integrating biodiversity into national and sectoral development plans and policies: Integrating conservation and sustainable biodiversity use in a balanced way into national and sectoral development plans and policies is perhaps the line of action that has gathered the most consensus and taken on the greatest complexity for its development in most developing countries.
- Promoting the use of economic and command and control instruments for the sustainable management of biodiversity: Instruments for environmental

management that promote conservation and sustainable biodiversity use need to be developed or updated (including economic incentives, command and control, and others).

- Driving production and use of biodiversity indicators: There is a high consensus on the importance of information for assessment and decision-making on conservation and sustainable biodiversity's use. This is also true for the measurement of policy performance and programs with this goal, as well as for the organizations responsible for their execution.
- Strengthening research capacity and technological development: Several articles of the UNCBD establish the need to promote and increase research and technological development to contribute to conservation and sustainable biodiversity's use. The parties consider access and technology transfer to be one of the means for strengthening the research and technological capacity of the countries. The creation of conditions favorable to research on biotechnology is another mean, so that countries that provide genetic resources, in particular developing countries, can participate in it.
- Strengthen rural and indigenous capacity in biodiversity management: It is necessary to develop the capacity of town and indigenous community organizations, as well as that of rural and other local communities for the preparation and implementation of land development plans. Community management of ecosystems, as well as institutional capacity development at the national, provincial and local levels that responds to and supports land plans and the community management of ecosystems should be included.
- Strengthening protected areas systems: In-situ conservation is one of the modalities considered in the UNCBD and within it; protected areas have an essential role.
- Developing mechanisms for genetic resources access: At the bottom of the relationship between genetic resources and biotechnology is one of the most promising industries of the next decades in various fields of economic activity (pharmaceutics, agro-industry, cosmetics, etc.). Behind this issue is also the consistency between the obligations entered into by the countries under the framework of the UNCBD and in the agreement on Intellectual Property Rights for Trade (TRIP) and in the case of ex- situ collections acquired before the UNCBD and that are not being regulated by the FAO Commission on Genetic Resources for Agriculture and Nutrition.
- Capacity development in the Cartagena Protocol: Capacity development is a key prerequisite for the effective implementation of the Cartagena Protocol on Biosafety. In order to be able to implement their obligations, parties need appropriate institutional mechanisms and infrastructure, well-trained human resources, adequate funding as well as easy access to relevant information.

5.4.5.2 National Priorities for UNCBD Implementation

Based on the results of six Consultative Provincial Workshops, three Technical Working Groups, and the Analysis of Stakeholders' Activities the participants in the National Workshops that was held in Damascus on January 17, 2007 identified 13 national

priorities of implementation of the activities related to the UN Convention on Biodiversity. These priorities are:

- Developing a Strategic coordination mechanism among stakeholders working in Biodiversity;
- Developing a national knowledge management and data processing system for monitoring and reporting on biodiversity;
- Strengthening institutional and legislative framework for regulating access to genetic resources and benefits sharing;
- Develop an institutional mechanism for assessing the impact of regional and international agreements on biodiversity;
- Developing national management guidelines for conservation sites;
- Strengthening capacity for mobilizing financial resources available for biodiversity;
- Developing national directives for Biodiversity Impact Assessment;
- Integrating the main concepts of the UN Convention on Biodiversity Conservation in the national development policies;
- Developing national capacity for in-situ conservation outside protected areas including capacity for community management;
- Empowering local community management of biodiversity;
- Developing linkages between research and policy making, and developing national policies for regional and international technology transfer;
- Developing long- term programs for awareness and education on new concepts in biodiversity management;
- Developing systems for economic incentives and evaluation of biodiversity components.

5.4.5.3 The main challenges/constraints in national capacity to implement UNCBD

Based on the results of six Consultative Provincial Workshops, three Technical Working Groups, and the Analysis of Stakeholders Activities, the participants in the National Workshops that was held in Damascus on the 17th of January 2007 identified, the following constraints facing implementation of the activities related to the UN Convention on Biodiversity:

Major Constraints for Implementing the UN Convention on Biodiversity:

- 1- Weak coordination mechanisms among stakeholders;
- 2- Administrative difficulties at the national and international levels in certain cases, and incompatibility of financial and administrative procedures among international donors and national executing stakeholders;
- 3- Weak institutional and legislative framework of regulating accesses to genetic resources and benefits sharing;
- 4- Lack of national directives for biodiversity impact assessment;

- 5- Low number of the specialized cadre in Biodiversity;
- 6- Weak integration of the UN Convention on Biodiversity Conservation main concept in the national policy formulation process;
- 7- Lack of clear national policies for regional and international technology transfer, and weak linkages between scientific research and policy making;
- 8- Weak participation of local communities in the projects;
- 9- Lack of institutional processes for assessing the impacts of development projects on biodiversity, and lack of economic incentives and valuation of biodiversity;
- 10- Slow mobilization of financial resources available for implementing the National Strategy of Biodiversity;
- 11- Lack of long-term programs for awareness and education on the new concepts of biodiversity.

Major Constraints for Protected Areas:

- 1- Weak institutional and legislative framework and administrative work plans for the protected areas;
- 2- Minor role of the local societies in managing the protected areas;
- 3- Low financial resources;
- 4- Lack of public awareness of the benefits of the protected areas;
- 5- Lack of professional cadre to manage the protected areas.

5.4.6 Capacity development in UNCCD

Article 17 of the UNCCD is specific to capacity development, education and public awareness and it identifies a group of principles and orientations on capacity development as follows:

- Effective participation of local communities in the efforts of capacity development to empower these communities in sustainable management of natural resources and to combat desertification;
- Strengthening training and research capacity at the national level in the field of desertification and drought;
- Establishing and/or strengthening support and extension services to disseminate relevant technology methods and techniques more effectively, and training field agents and members of rural organizations in participatory approaches for the conservation and sustainable use of natural resources;
- Fostering the use and dissemination of the knowledge, know-how and practices of local people in technical cooperation programs, wherever possible;
- Developing innovative ways of promoting alternative livelihoods, including training in new skills;
- Training and capacity development in the field of early warning for drought;
- Capacity development in the fields of national desertification indicators development;
- Development and management of effective cooperation networks on the local, regional and international levels for the purpose of capacity development.

5.4.6.1 National Priorities for UNCCD Implementation

Based on the results of six Consultative Provincial Workshops, three Technical Working Groups and the Analysis of Stakeholders' Activities the participants in the National Workshops that was held in Damascus on 17 January 2007 identified 13 national priorities of implementation of the activities related to the UN Convention on Combating Desertification. These priorities are:

- Developing a national land use policy;
- Considering desertification control a national development priority and allocating financial resources needed;
- Developing sustainable management for water resources;
- Developing guidelines for the rehabilitation of degraded land;
- Strengthening linkages between scientific research and policy making;
- Developing educational and training programs on sustainable land management and desertification control for all levels;
- Identifying the role and responsibilities of stakeholders working on desertification control and developing a coordination mechanism among them;
- Developing a national indicator's system to monitor desertification, drought and to management of knowledge;
- Strengthening capacity for outreach and networking with regional and global organizations and programs;
- Empowerment of local communities to develop sustainable livelihood and documenting traditional knowledge in the fields of Desertification Control;
- Developing systems for economic valuation of the costs of land degradation;
- Developing an institutional mechanism to evaluate the impacts of regional and international economic and agriculture agreements on land management;
- Strengthening the concept of the "ecosystem approach" in national policies and programs to combat desertification.

5.4.6.2 The main challenges/constraints in national capacity to implement UNCCD

Based on the results of six Consultative Provincial Workshops, three Technical Working Groups, and the Analysis of Stakeholders' Activities the participants in the National Workshops that was held in Damascus on the 17th of January 2007 identified, the following constraints facing implementation of the activities related to the UN Convention on Combating Desertification:

- 1- Poor coordination among stakeholders;
- 2- Weak integrated management of natural resources especially those of soils and water;
- 3- Weak legislations and their enforcement;
- 4- Weak scientific and socio-economic research and studies directed towards combating desertification;
- 5- Weak educational and training programs for various target groups on sustainable land management;
- 6- Weak national institutional and individual capacity development to identify and manage desertification control schemes.

5.4.7 UN Framework Convention on Climate Change (UNFCCC)

5.4.7.1 Capacity development in UNFCCC

The Convention through its technical and executive committees developed in 2004 an integrated program and framework for capacity development to implement the Convention objectives. This was based on article 6 of the Convention on education, training and environmental education.

This framework for capacity development includes a group of priorities that were drawn out of developing countries communications, and the objectives of the Convention. The main priorities are:

- Preparation of national communications and reports on greenhouse gases emissions;
- Management of data base on emissions;
- Strengthening national institutional capacities;
- Assessment of vulnerability and adaptation to climate change;
- Strengthening capacity to implement adaptation measures.

The Convention through its executive committee developed in 2004 a number of suggestions in capacity building from analysis of national communications of the developing countries. The most important suggestions are:

- To develop capacities in the field of national communications and inventory compilation;
- To sustain capacities in developing strategies and national plans on climate change;
- To develop technical capacities to follow and compile emissions of GHG;
- To evaluate the vulnerability and adaptation of developing countries to effects of climate change;
- To sustain capacities in training and public awareness on the reasons for climate change and how to deal with it;
- To develop capacities in clean mechanism and carbon trading; and
- To develop capacities in transfer of promising and sustainable technologies.

5.4.7.2 National Priorities for UNFCCC Implementation

Based on the results of six Consultative Provincial Workshops, three Technical Working Groups, and the Analysis of Stakeholders Activities, the participants in the National Workshops that was held in Damascus on January 17th, 2007 identified 13 national priorities of implementation of the activities related to the

UN Conventions on Climate Change. These priorities are:

1. Develop capacity development for implementing GHG mitigation measures;
2. Provide economic incentives for climate change mitigation and adaptation;
3. Strengthen institutional and technical capacity development for the Climate Change Focal Point;
4. Develop linkages between policy making and research, and national policies of technology transfer at the regional and international levels;
5. Integrate the UNFCCC main concepts in the national policy formulation process;

6. Develop capacity for rational and efficient uses of energy;
7. Develop practical education and training programs;
8. Capacity development for knowledge management and networking;
9. Develop the quality of national communication reports;
10. Capacity development for national GHG inventory;
11. Capacity development for national adaptation plans;
12. Create environment for utilization of renewable energies and encourage this direction;
13. Develop capacity for resource mobilization.

5.4.7.3 The main challenges/constraints in national capacity to implement UNFCCC

Based on the results of six Consultative Provincial Workshops, three Technical Working Groups, and the Analysis of Stakeholders' Activities the participants in the National Workshops that was held in Damascus on the 17th of January 2007 identified, the following constraints facing implementation of the activities related to the UN Convention on Climate Change:

- 1- Lack of projects , studies and budgets especially in the field of impacts of climate change on bio-systems in Syria;
- 2- Weak coordination among stakeholders;
- 3- Absence of updating available data basis and low accessibility to information;
- 4- Weak institutional and technical capacity development for climate change;
- 5- Low levels of awareness on climate change;
- 6- Freezing the National Committee of climate change, and lack of clarity of its mandate and mechanism.

5.5 Stakeholders Analysis and Priority Capacity Constraints

for the Three UN Conventions

Ten national capacity development priorities in integrating the UN Convention on Biodiversity, Desertification Control, and Climate Change have been identified by all stakeholders to overcome major constraints in implementing the UN Conventions:

١- Develop Sustainable institutional coordination mechanisms

The Ministry of Local Administration and Environment (the General Commission for Environmental Affairs) is the focal point for all the three UN Conventions on Biodiversity, Combating Desertification and Climate Change. However, the implementation of obligations depends upon the active involvement and commitment of other stakeholders especially line governmental institutions and NGOs. This requires a dynamic and sustainable coordination mechanism among the various institutions, and to present the synergy perspective to all stakeholders. This will help in developing integrated responses to the commitments and inter- linkages among the Conventions.

2- Develop clear and systematic integration of the cross-cutting concepts in the national policy and legislation

The main cross-cutting concepts advocated by the Rio Conventions and which constitute the main policy elements of biodiversity, desertification and climate change are not well reflected in current national development and sectoral policies in a clear and integrated manner. Linkages between the Conventions and poverty eradication should be emphasized to ensure the credibility of integrating the themes into development policies in Syria.

3- Knowledge management and networking

Knowledge is a major tool in the management of environment. Since efforts in implementing the Three Rio Conventions are divided among various sectors and institutions, a priority need will be to develop the national knowledge management capacity for synergies between the three themes. Information should be collected, saved, processed and exchanged between institutions and professionals through effective knowledge management networks whether these networks already exist or should be developed. The knowledge management system could act as a tool for unified monitoring of environmental components and reporting requirements of the three Conventions.

4- Capacity development for financial mobilization and building partnerships

Technical and practical knowledge for financial and technical resource mobilization to implement projects and programs tackling synergies between the three themes is of great importance to develop technical cooperation between Syria and international and regional organizations and institutions. This is a major field for capacity development at institutional and individual levels of MLAE/GCEA since financial constraints represent some of the major difficulties facing environmental management in Syria. Integrated resource mobilization can also help in minimizing overlaps and maximizing the benefits from international aid.

5- Develop education and research

The existing educational system in environmental sciences and natural sciences in general does not adequately address scientific and practical linkages between the themes of biodiversity, desertification and climate change, and between these themes and the natural environment.

Education on global environment issues can promote the development of an increased awareness and understanding of the impact of local actions that degrade the environment sustainable development and human well-being and will assist in developing educational packages that address the three themes and their cross-cutting issues in an integrated manner.

Concepts related to the synergies between the Conventions should be integrated in educational programs and curricula to ensure a sustainable flow of education packages and an integrated approach to education for environmental management and linkages between the three themes.

Another important capacity development priority is creating an enabling system for linking scientific research to policy making. Scientific research should focus on

cumulative and synergistic impact assessments of the linkages between biodiversity losses; desertification and climate change and produce informed decisions on integrated responses and mitigation plans.

6- Development of infrastructure facilities

Implementation of the Rio Conventions requires efficient infrastructure at the levels of research and development. This will include developing new capacities in existing facilities such as laboratories, data centers, libraries, museums, herbariums, field stations, and monitoring sites. These could be shared between two or more institutions implementing activities under the Conventions to make use of existing synergies and for cost effectiveness.

7- Training and rehabilitation

Environmental and technical training packages should be developed by and for national institutions to focus on linkages and synergies among the Conventions. Programs must be developed to utilize existing national and regional specialized centers to provide courses in technical areas relevant to all three Conventions to targeted audiences. Another training tool could be course materials for technical professionals and agency staff on issues relevant to the three Conventions and the synergies, complementarities, and areas of overlap that exist to be used in structured courses, workshops, and seminars. Such training programs will increase the practical capacity by proof and evidence of the success stories in synergies and provide hands-on experiences to be applied in local conditions.

8- Local communities' empowerment and participation

One of the most important challenges in implementing the Rio Conventions is the development of the capacities of the communities who are the end beneficiaries of any environmental management program. Local communities' capacities to address issues of biodiversity, desertification and climate change should be developed in a sound technical way keeping close attention to the linkages with sustainable livelihoods. This can be accomplished through capacity development for local institutions to enable them develop their own initiatives to implement global environmental thinking in the local context.

9- Develop outreach, awareness and education programs on synergies among Conventions

Although many awareness and outreach programs have been implemented on sectoral basis, there is still a need to advocate the integrated synergies between the three Conventions for various stakeholders to keep up with new technical developments. Any awareness and outreach program should be considered as tools for capacity development and not an end by itself.

10- Develop means for technology transfer

The Rio Conventions emphasize the importance of technology co-operation and transfer in achieving their respective goals. Mutually- supportive technologies like renewable

energy, agriculture efficiency and ecosystem preservation will be of high value to address the common elements and synergies from a technological perspective.

6 Analysis of Thematic Capacity Constraints and Strategy

The analysis exercise was conducted during September 2007, where the major capacity constraints identified during the stocktaking phase were subjected to an analytical framework. The three thematic profiles were then summarized through developing logical frameworks for the three themes, from which the outcomes and outputs were extrapolated through the logical framework analysis to feed into the NCSA Strategy and Action Plan. The Strategy included the activities required to overcome and address constraints as an action-oriented response to the key capacity constraints that have been described through the NCSA process.

6.1 Priority Capacity Building for Implementing the UN Convention on Biodiversity

1- Develop a Strategic coordination mechanism among stakeholders working in Biodiversity

A National Committee for Biodiversity Conservation was established during the process of developing the National Biodiversity Strategy in 1992. However, the Committee has not been active ever since and there is a need to:

- 1-1 Establish a practical, effective and sustainable coordination mechanism that brings together main institutions working in biodiversity for proper coordination. The General Commission for Environmental Affairs (GCAE) at MLAE could be the secretariat and focal point of this coordination mechanism.
- 1-2 Develop a sustainable monitoring and evaluation system to verify the effectiveness of the different coordination mechanisms.

2- Develop a national Knowledge Management (KM) and data processing system for monitoring and reporting on Biodiversity

Certain stakeholders are monitoring the status of biodiversity in Syria. However, such activities are conducted without a solid framework where all stakeholders could contribute to and share information. Hence, there is need for developing a viable monitoring system of the state of biodiversity where the role and responsibilities of stakeholders are well identified. This entails the necessity for developing national biodiversity indicators to be used in monitoring and reporting. Since biodiversity conservation efforts are divided among various sectors and institutions, a priority need will be to develop the national knowledge management capacity for biodiversity.

Information should be collected, saved, processed and exchanged among stakeholders through an effective knowledge management network.

At the level of knowledge management for capacity development new and practical training programs should be developed based on best practices in biodiversity conservation at the national or regional level of implementation. Such training programs will increase the practical capacity by proof and evidence of the success stories in biodiversity conservation and provide hands-on experiences to be applied in local

conditions. To achieve the above objectives the following actions have been suggested to be integrated in the NCSA Strategy:

- 2-1 Conduct a Knowledge Management needs-assessment and gap analysis for biodiversity information.
- 2-2 Identify biodiversity monitoring indicators and verified sources of data.
- 2-3 Establish Knowledge Management network.
- 2-4 Create a functional and sustainable training program in the use and maintenance of the KM system with periodical data updating.

3- Strengthen the institutional and legislative framework for regulating access to genetic resources and benefits sharing

The institutional and legislative framework for regulating the issues of and access to genetic resources and benefits sharing could be adequately developed through a package of re-enforcing modern policies and legislations to ensure smooth access and equitable sharing of the benefits taking in consideration the intellectual property rights of all stakeholders especially farmers. This issue needs also technical capacity development and institutional networking. To develop this capacity, the following actions have been suggested to be integrated in the NCSA Strategy:

- 3.1 Review the existing mechanisms for genetic resources management and identify the legal gaps.
- 3.2 Draft and test policy options.
- 3.3 Implement legislation on regulating access to genetic resources and benefits sharing.
- 3.4 Conduct a training program on the access and benefits sharing of genetic resources.

4- Develop an institutional mechanism for assessing the impact of regional and international agreements on biodiversity

Syria adopted the Social Market System. Therefore it is taking steps to liberalize its economy slowly. It has signed many trade and economic agreements with international institutions including agricultural and industrial activities. Some agreements include articles and provisions that have direct and cumulative impacts on biodiversity. A capacity development program should be established to raise the awareness at the institutional, individual and community levels for the linkages between trade, agriculture and other economic agreements and biodiversity issues.

The following actions have been suggested to integrate in the NCSA Strategy to develop the national capacity in assessing the impact of the regional and international agreements on biodiversity:

- 4.1 Conduct a retroactive analysis and assessment of the impacts of trade and economic agreements on biodiversity.
- 4.2 Develop and implement a national framework for strategic environmental assessment.
- 4.3 Implement a national training program on Strategic environmental assessment.

- 4.4 Develop a sustainable institutional system to assess the potential impacts of new trade and economic agreements on biodiversity.

5- Develop national management guidelines for conservation sites

The number of conservation sites in Syria reached 24 with a total area of 268426 hectares representing about 1.5% of the total area of Syria. However, there are no specific management guidelines for such areas. Public and civil institutions managing conservation sites need to develop its technical capacity in developing and implementing management plans that meet the various demands of conservation and sustainable use. To achieve this goal the following actions have been suggested to integrate in the NCSA Strategy:

- 5.1 Comprehensive comparative review of the current management systems of conservation sites is conducted with gap analysis.
- 5.2 Capacity building and training programs for conservation site management are developed and operated.
- 5.3 All conservation sites in Syria have management plans related to their specific uses and functions.

6- Strengthen capacity for mobilizing financial resources available for biodiversity

Most institutions lack the technical and practical knowledge for resource mobilization to implement biodiversity projects. Another reason why this issue is very important is the fact that the National Strategy on Biodiversity has not been effective thus far mainly due to the absence of a practical resource mobilization plan and fund raising Strategy. This is a major field for capacity development at institutional and individual levels. To fulfill this gap the following actions are suggested to be integrated in the NCSA Strategy:

- 6.1 Review all available resource mobilization tools and opportunities for biodiversity conservation and sustainable use.
- 6.2 Develop a system for private-public partnership for resource mobilization.
- 6.3 Conduct training program on resource mobilization.
- 6.4 Prepare and promote resource mobilization Strategy for biodiversity.

7- Develop national directives for biodiversity Impact Assessment

Detailed environmental impact assessment directives for Biodiversity have not been developed. A capacity development program to develop the directives and a mechanism for its application in environmental impact assessment studies should be initiated. The following actions have been suggested to integrate in the NCSA Strategy to activate such program:

- 7.1 Develop the guidelines for Biodiversity Impact Assessment including biodiversity directives.
- 7.2 Conduct a national training program for Biodiversity directives and EIA studies.
- 7.3 Develop and implement a national system of guidelines for restoration and/ or rehabilitation of degraded habitats.

8- Integrate the main concepts of the UN Convention on Biodiversity

Conservation in the national development policies

The main concepts advocated by the UN Convention on Biodiversity Conservation and which constitute the main policy elements of biodiversity are not well reflected in current national development and sectoral policies (except in the National Strategy of Biodiversity which is partially implemented, and the Agricultural Development Strategy). Linkages between biodiversity and poverty eradication, for example, should be emphasized to ensure the credibility of integrating biodiversity into development policies. A major capacity development effort should be taken to increase the awareness and familiarity of major institutions with the new concepts of biodiversity management practices. This can be done by integrating the following actions into the NCSA Strategy:

- 8.1 Develop and implement a comprehensive capacity building/awareness plan to integrate CBD concepts in national policies and legislation.
- 8.1 Develop a practical framework for linking biodiversity with poverty reduction policies and efforts.
- 8.3 Draft national policy /plans for conservation of different habitats and thematic programs identified by the CBD.
- 8.4 Identify national biodiversity indicators and develop national program for monitoring the progress towards achieving the Biodiversity 2010 targets.
- 8.5 Implement national operational guidelines for the ecosystem approach with one/two demonstration projects implemented.

9- Develop national capacity for in-situ conservation outside protected areas including capacity of community management

In spite of the development of a national network of protected areas, this network does not cover more than 1.5% of the area of Syria. However, biodiversity-rich habitats are eroded and degraded outside the network of protected areas.

Capacity development efforts should be established to furnish the environment for in-situ conservation of biodiversity-rich areas beyond the current and proposed protected areas system especially on important bird areas and national tourism parks and developing management plans for all kinds of protected areas. The following actions have been suggested to integrate in the NCSA Strategy:

- 9.1 Design a national plan to identify key habitats outside protected areas.
- 9.2 Identify key species important for conservation and draft conservation plans based on species diversity.
- 9.3 Develop a training program on community management of biodiversity outside protected areas based on previous and current national experiences.
- 9.4 Develop and implement national program for the management and control of invasive species in cooperation and participation of local community.
- 9.5 Produce awareness toolbox for promoting the importance of key species conservation.

10- Empower local community management of biodiversity

Except for a few successful cases in community management of certain sites in protected areas and the Integrated Development of the Syrian Steppe, this experience is not

available to manage elements of biodiversity at the community level. Hence, there is a great need to develop capacity for managing biodiversity rich areas, and integrate the concepts of conservation, sustainable use, benefit sharing with local rural community development plans. The following actions have been suggested to integrate in the NCSA Strategy to achieve the above goal:

- 10.1 Document and protect local community know-how and integrate it into the local development plans in targeted areas.
- 10.2 Create and /or upgraded local community institutions.
- 10.3 Develop community-based training packages and conduct training programs.
- 10.4 Develop a package of community actions tool-kit linking poverty reduction and gender empowerment to conserve biodiversity and sustainably use its components.

11- Develop linkages between research and policymaking, and develop national policies for regional and international technology transfer

There is a clear weakness in the links and relationships between scientific research on biodiversity issues (when available) and the policymaking and management systems. A capacity development program for creating an enabling environment for linking scientific research to policy making is one of the major priorities in biodiversity management. Moreover, most efforts of technology transfer is not conducted within a framework of a national plan, but mostly through bilateral activities between national and regional or international institutions. Hence, there is need to develop capacity building for establishing an integrated and sustainable mechanism for technology transfer and adoption at the national level to insure conservation of biodiversity and food security. The following actions have been suggested to be integrated in the NCSA Strategy:

- 11.1 Establish an accessible database of research on biodiversity conservation and its sustainable use.
- 11.2 Use scientific research for enhancing monitoring of biodiversity components and development of habitat-specific and species-specific conservation plan.
- 11.3 Conduct national inventory of available technologies related to biodiversity as well as a technology needs assessment.
- 11.5 Draft national policy and legislation on technology transfer and adopt it by relevant stakeholders.
- 11.6 Develop regional and international networks for technology transfer based on national inventory and policy statements.

12- Develop long- term programs for awareness and education on new concepts in biodiversity management

Awareness and education programs have been included in biodiversity projects in many cases. However, such programs ended with ending the concerned projects. There is a need to develop new concepts on biodiversity science and applications, especially benefits sharing, ecosystem approach and Strategic biodiversity impact assessments for various stakeholders to keep up with new technical developments and include such concepts in the education programs at all levels. The following actions have been

suggested to integrate in the NCSA Strategy to develop the sustainable awareness and education program:

- 12.1 Identify the main emerging CBD concepts for the education/awareness program.
- 12.2 Identify gaps in current education and awareness programs through a comparative survey.
- 12.3 Design and implement education/awareness program to fill the gaps.

13- Develop systems for economic incentives and valuation of biodiversity Components

The absence of systems for economic incentives and valuation of biodiversity components is a major shortcoming in biodiversity and natural resources management. Economic tools are to be developed and advocated in decision-making processes, with particular emphasis on providing economic incentives and economic valuation. To do so the following actions have been suggested to integrate in the NCSA Strategy:

- 13.1 Identify and apply suitable economic incentives for biodiversity and natural resources management.
- 13.2 Develop and conduct training programs on economic incentives and valuation tools.
- 13.3 Develop business plans for biodiversity conservation projects between private sector and other stakeholders.

6.2 Priority Capacity Building for Implementing the UN Convention on Desertification Control

1- Develop a national land use policy

Desertification and land degradation problems can be attributed mainly to the absence of an effective national policy or guidelines for land use planning. Syria needs to invest in capacity development efforts at both policies and individual levels for the main objective of developing an effective land use policy that will protect the fertile land from desertification and urbanization, and assign sustainable use patterns for various types of land. Therefore, the following actions have been suggested to be included in the NCSA Strategy:

- 1.1 Develop sustainable land use plan.
- 1.2 Incorporate participatory management and ecosystem approach in land use planning.
- 1.3 Propose legislation options to support the land use plan.
- 1.4 Establish a training module for implementing the new land use plan.
- 1.5 Introduce market-based economic instruments for valuation of the ecosystem damage and proposing incentives for sustainable land management.

2- Consider desertification control a national development priority and allocate financial resources needed

Land degradation and desertification are challenging problems and are occurring at an accelerated rate. However, they are not yet considered to be a major socio-economic and developmental challenge, nor have they enough financial and technical resources. It is necessary to consider integrating combating desertification within the socio economic development policies and plans and to allocate enough financial and technical resources. To do so the following action are needed to be addressed by the NCSA Strategy:

- 2.1 Promote combating desertification as priority in socio economic development plans.
- 2.2 Develop sustainable mechanism to mobilize financial resources for desertification projects.
- 2.3 Utilize national and global funding mechanisms for the implementation of the national Action Plan projects in combating desertification.

3- Develop sustainable management for water resources

Efforts for desertification control are highly related to the efforts of management of water resources and rationalizing of water use as scarcity of water resources is considered the main technical constraint causing land degradation. Technical and institutional capacity development is required at all levels to develop a new concept of water demand management aiming to protect the ecosystem and natural resources. To overcome this capacity constraint the LFA has suggested the following actions:

- 3.1. Assess the current status of water resources.
- 3.2. Develop and promote a sustainable plan for water resources management.
- 3.3. Conduct training for stakeholder institution staff on water resources management.

4- Develop guidelines for the rehabilitation of degraded land

Effective guidelines for rehabilitation of degraded lands are practically not present to follow up land degradation caused by developmental activities, and the best practices and success examples in land rehabilitation are very rare. Integrating practical guidelines for land rehabilitation in the capacity development plans is a priority. To fulfill this objective the LFA has suggested the following actions:

- 4.1 Identify guidelines for the rehabilitation of degraded land verify by all stakeholders.
- 4.2 Conduct a training program on the use of degraded land rehabilitation guidelines.
- 4.3 Promote the use of guidelines in the EIA studies.

5- Strengthen linkages between scientific research and policy-making

Scientific research on land degradation issues has been conducted but their results are not finding their route to the policy-making and management systems. A capacity development program for establishing a mechanism for linking scientific research to policy-making is one of the major priorities in sustainable land management, which should include the following actions:

- 5.1 Complete a comprehensive assessment of the state of research in desertification.
- 5.2 Enhance scientific research related to desertification and land degradation.
- 5.3 Train specialized staff and establish special research centers for land degradation studies.
- 5.4 Develop and implement coordination mechanisms between policy-making and research institutions.

6- Develop educational and training programs on sustainable land management and desertification control for all levels

Awareness, education and training programs have been introduced at all education levels in Syria. Moreover, the Environmental Studies Center was established and specialized studies have been introduced to the curricula of universities. However, there is a general lack of sustainable and technically sound programs for various target groups associated with land management on sustainable land management priorities and combating desertification. Such concepts in land management should be integrated in curricula and taught in training programs that are based on hands-on examples and lessons learned in sustainable land management issues. To achieve such objectives the LFA has suggested the following actions to be included in the NCSA Strategy:

- 6.1 Develop and implement sustainable national educational and public awareness programs.
- 6.2 Enhance women and youth participation in sustainable land management.
- 6.3 Develop public awareness packages and programs on sustainable land management.
- 6.4 Introduce desertification concepts into educational programs and curricula.

7- Identify the role and responsibilities of stakeholders working on desertification control and develop a coordination mechanism among them

Many stakeholders are conducting efforts of land management and combating desertification with minimal coordination among them. There is a pressing need to define specific roles and responsibilities of each stakeholder and develop an institutional mechanism for coordination among them for efficient integration of available resources. Accordingly, the LFA has suggested the following actions to be incorporated in the NCSA Strategy:

- 7.1 Develop harmonization and coordination mechanisms to combat desertification.
- 7.2 Define the roles of the stakeholder institutions working on desertification control.
- 7.3 Develop the TOR (mandate) for institutions involved in desertification control
- 7.4 Implement a practical and sustainable institutional coordination mechanism.
- 7.5 Train the staff of the involved institutions.

8- Develop a national indicator system to monitor desertification and drought

There is a pressing need to develop and implement a national program for monitoring desertification and drought strikes based on a sound system of indicators. This system should be linked to a national program for knowledge management on sustainable land management issues and should be accessible to all stakeholders. The LFA has suggested the following actions to be included in the NCSA Strategy to develop such program:

- 8.1 Upgrade the EIA system with directives on land management and desertification.
- 8.2 Integrate sustainable land and water management systems in the EIA process with focus on ecosystem approach.
- 8.3 Develop EIA directives and guidelines for land and water management with focus on mitigation measures.
- 8.4 Draft guidelines for rehabilitation of damaged lands.
- 8.5 Conduct training courses on desertification and land management directives and its use in the EIA.

9- Strengthen capacity for outreach and networking with regional and global organizations and programs

The capacity of national organizations in coordination and networking with regional and global programs and organization should be enhanced. The capacity development program should include training on opening communication channels with regional and global stakeholders for sharing experiences and developing practical partnerships. To do so, the LFA has suggested the following actions:

- 9.1 Identify potential networking opportunities based on the review of existing networks and organizations at the regional and global level.
- 9.2. Propose and test networking and outreach mechanisms with regional and global organizations and programs.
- 9.2 Develop operational procedures and time frame for networking at all levels.

10- Empowerment of local communities to develop sustainable livelihood and document traditional knowledge in the fields of desertification control

Local communities are the ultimate beneficiary of sustainable land management programs and their empowerment through training, institutional and technical capacity development and financial resources development is a key factor for the success of any desertification control programs. This should be associated with documenting and implementing traditional knowledge for sustainable land management. To empower the local community, the LFA has suggested the following actions:

- 10.1 Document and protect local community know-how and integrate it into the local development plans in target areas.
- 10.2 Create and /or upgrade local community institutions.
- 10.3 Develop community-based training packages and conduct training programs.

- 10.4 Develop a package of community actions toolkit linking poverty reduction and gender empowerment to conserve biodiversity and sustainable use of its components.

11- Develop systems for economic valuation of the costs of land degradation

The real economic loss associated with natural resources degradation due to land degradation processes lead to great economic losses, which need to be identified and valued. The development and application of systems for economic valuation of such losses would be very helpful for decision-makers and environmental advocates for integrating economic cost effectiveness models in natural resource management options. The LFA has suggested the following actions to achieve this goal:

- 11.1. Establish national database and monitoring system on land degradation.
- 11.2. Develop and test national economic valuation system including valuation tools.
- 11.3. Conduct economic valuation training programs for stakeholder institutions staff.

12- Develop an institutional mechanism to evaluate the impacts of regional and international economic and agriculture agreements on land management

Many trade and economic agreements are being signed in Syria within the framework of integration into the global economic system. Some agreements include articles and provisions that have a direct and cumulative impact on sustainable land management. A capacity development program should be established to study the impacts of such agreements on land degradation, natural resources and food security. To develop these mechanisms, the LFA has suggested the following actions:

- 12.1 Establish mechanism to assess the impacts of existing and new economic/agricultural agreements on desertification.
- 12.2 Review previous and new agreements to understand economic and agricultural impacts on desertification and land degradation.
- 12.3 Develop and test training module on strategic environmental assessment.
- 12.4 Increase decision-makers awareness on the economic and agricultural agreements impact.

13- Strengthen the concept of the "ecosystem approach" in national policies and programs to combat desertification

In spite of the development in mechanisms of desertification control in Syria, most activities do not apply in a way or another the "Ecosystem approach", which has proved to be the most holistic approach in management of natural resources at the global levels. As it entails management of all components of the complex ecosystems (environmental, social and economic), it is the most practical entry point for sustainable land management. This concept should be advocated to all stakeholders and decision-makers through all potential capacity development tools and programs. Therefore, the LFA has suggested the following actions to be integrated in the NCSA Strategy:

- 13.1 Review the literature about the ecosystem approach and its requirements.
- 13.2 Conduct awareness campaign on the importance of the ecosystem approach among all stakeholders.

13.2 Conduct training courses on the ecosystem approach for related staff.

6.3 Priority of Capacity Building for Implementing the UN Framework Convention on Climate Change

1- Develop Capacity building for implementing GHG Mitigation measures

Mitigation measures are key components of the climate change. The required capacities relate to technical capacity to undertake Green House Gases (GHG) mitigation (energy, industrial processes, agriculture, forestry, and wastes). Technical capacity to identify GHG mitigation options in the various areas and to elaborate mitigation plans, capacity to use forecasting models in the different sectors and capacity to undertake cost assessments should be developed. Based on the LFA of this capacity constraint the following actions are suggested to improve national capacity:

- 1.1. Adopt guidelines for implementing GHG mitigation studies.
- 1.2. Conduct awareness programs for promoting the application of these guidelines by related sectors.
- 1.3. Identify medium to long-term GHG mitigation plans
- 1.4. Implement GHG mitigation projects.

2- Provide economic incentives for climate change mitigation and adaptation

There is need for capacity development at systematic and institutional levels for establishing and operating economic tools and incentives for various stakeholders in climate change dimensions. Based on the LFA of this capacity constraint the following actions are suggested:

- 2.1 Identify appropriate economic incentives for adaptations.
- 2.2 Mobilize financial resources to implement mitigation and adaptation options in related sectors through public-private sector partnerships.

3- Strengthen institutional and technical capacity development for the Climate Change Focal Point

One of the main missions of the national Focal Point of the UN Framework Convention on Climate Change at the General Commission for Environmental Affairs (GCEA), the Ministry of Local Administration and Environment is coordinating national activities in the field of climate change and is in need for more capacity development investments in all aspects of climate change. This will ensure high quality management and coordination performance of the climate change unit parallel to the on-going technical and institutional capacity building process GCEA. Specific issues in capacity development include energy evaluation and emission factors, adaptation and mitigation programs and CDM mechanisms. The Clean Development Mechanism (CDM) is characterized by its fields of application and global technical details. CDM requires understanding of the institutional and legal framework, technical infrastructure, enforcement capacity, and human resources needed to implement the mechanism. Major

efforts in capacity development should be focused on this particular issue. To fulfill this capacity requirement, the LFA of this capacity constraint suggested the following actions to be integrated in the NCSA Strategy:

- 3.1. Evaluate the technical capacity of the Designated National Authority (DNA) and the National Climate Change committee and assess their capacity needs.
- 3.2. Develop and conduct a capacity development program based on the needs assessment.
- 3.3. Conduct special training program to improve the negotiations skills of the national UNFCCC delegates.

4- Develop linkages between policy-making and research, and national policies of technology transfer at the regional and international levels

The linkages between policy makers and research results are weak. Most efforts conducted in national scientific research centers and regional and international bodies in Syria on energy and climate change issues do not find their way to the policy-making and management systems for a reason or another. A capacity development program for creating an enabling environment for linking scientific research to policy making is one of the major priorities in energy management and climate change. The research capacity-building component should be focused on systematic observations and collecting, managing and utilizing activity data and emission factors as well as capacity to establish a sustainable Observation System on Climate Change. Moreover, fulfillment of obligations under the UNFCCC, financial and technological support is necessary to insure technology transfer such as building institutional capacity, establishing/strengthening research centers and funding demonstration projects that mitigate climate changes effect. Other capacity requirements include capacity to identify, adapt and disseminate relevant climate change safe technologies and capacity to coordinate the various technology transfer initiatives and to report on the achievements. Based on the above, the LFA of this capacity constraint suggested the following actions:

- 4.1 Identify and promote linkage mechanisms between research, and policy making to implement the climate change convention.
- 4.2 Adopt linkage mechanisms between research, systematic observation, and policy making to implement the climate change convention by stakeholders.
- 4.4 Develop a system for integrated inventory of GHG emissions and adaptation measures within the policy making process.
- 4.5 Conduct comprehensive inventory of current applied technology.
- 4.6 Conduct national technology needs assessment study.
- 4.7 Promote environmentally sound technologies to implement Climate Change Convention.
- 4.8 Adopt and enforce a legal, regulatory and institutional framework that coordinates the national efforts for technology transfer,
- 4.9 Develop technology transfer projects based on financial opportunities.
- 4.10 Adopt environmentally sound Climate Change technology by stakeholders.

5- Integrate the UNFCCC main concepts in the national policy formulation Process

In spite of the fact that climate change has great impacts on the environmental, development, economic, tourism and health sectors, the concepts of climate change and UNFCCC are not well integrated in the national policy and planning system. The concepts of climate change and mitigation and adaptation measures are needed to be integrated into the national policies, legislations and indicators in all related sectors. Based on the LFA of this capacity constraint the following actions are suggested to be included in the NCSA Strategy:

- 5.1 Promote the integration of UNFCCC concepts in sectoral policies.
- 5.2 Develop a regulatory framework to implement future climate change options, including incentives and regulations and involve decision makers from all relevant sectors.
- 5.3 Integrate identified adaptation measures into relevant sectoral policies.

6- Develop capacity for rational and efficient uses of energy

To minimize GHG emissions, changes in economic development and energy policies, and fulfilling the requirements of the UNFCCC need to be addressed through a strong program for capacity building, and to emphasize more on developing renewable energy options. The national focus on energy efficiency will be a positive driving force in many sectors including energy, agriculture, industry, housing and transport, and a practical capacity development program should be associated with this transition. This approach needs development of technologies and practices for energy efficiency at all levels of energy consumption, which should include the following actions:

- 6.1 Promote and adopt energy efficiency programs in all sectors.
- 6.2 Develop and implement guidelines for energy audit and energy efficiency programs.
- 6.3 Create financial incentives for projects using energy saving mechanisms.

7- Develop practical education and training programs

Implementation of the UNFCCC requires development of practical education and training programs, which are major cross-cutting for successful environmental program for capacity building. The main entry point for education and awareness could be the adaptation measures and plans for different sectors and assimilating and processing new practical knowledge resources on climate change adaptation and mitigation measures and clean development mechanism especially project design and requirements. Other entry points for education, awareness and training could be based on identifying socio-economic impacts of climate change in addition to major environmental impacts. Education and training program for climate change should be based on the national priorities and capacity building constraints identified and should be looked at as a tool and not an end by itself. Therefore, the NCSA Strategy should include the followings:

- 7.1 Develop public awareness programs to implement Climate Change Convention at different levels.

7.2 Integrate climate change issues in curricula of schools and other academic institutions.

8- Capacity development for knowledge management and networking

There is a clear need at the national level to develop a knowledge management and networking system that would facilitate the acquisition, processing and dissemination of technical knowledge on climate change issues across organizations and between various professionals in the field. Based on that, the LFA of this capacity constraint suggested the following actions to be included in the NCSA Strategy:

- 8.1 Develop operational procedures and a time frame networking at all levels.
- 8.2 Improve the communications and sharing of experiences between the national institutions and regional and global partners.
- 8.3 Develop data and information management plan.
- 8.4 Develop efficient climate change knowledge dissemination system.

9- Develop quality national communication reports

Syria is processing the first communication Report on climate change, and would submit it in mid 2008. Determining the full implications of the greenhouse gas emissions of an energy system using IPCC bottom-up methodology requires examination of every phase of the whole energy chain, from the supply side of the energy system (i.e., resources extraction, refineries, electric power plants) to the demand side (i.e., industrial plants, residential and commercial units). Quality communication reports require determining local/regional emission factors, taking into account all variables such as technology employed, efficiency and type of fuel as well as developing and conducting capacity-building efforts for using the modern energy balance software systems. Based on the LFA of this capacity constraint the following actions are suggested:

- 9.1. Develop training materials on quality of reporting.
- 9.2. Conduct training on reporting quality on issues related to climate change.

10- Capacity development for national GHG inventory

Survey of GHG emissions needs national efforts for capacity development in GHG inventory, which should include capacity to enforce and sustain GHG inventory process, technical capacity to undertake GHG inventory in the 6 related emissions and sink sources, capacity to collect and compile relevant data and capacity to enter and maintain GHG data in an electronic database. Based on the LFA of this capacity constraint the following actions are suggested:

- 10.1 Assess capacity development for national GHG inventory.
- 10.2 Develop capacity development plan for national GHG inventory.
- 10.3 Conduct training on implementing the development plan.

11- Capacity development for national adaptation plans

One of the main priorities should be to build national capacity for developing adaptation plans and measures for the impact of climate change on major sectors (water, agriculture,

energy, transportation, municipalities, etc.). This is consistent with the great emphasis given to adaptation measures in all developing countries. Required capacity in this field relates to technical capacity to undertake vulnerability assessments (agriculture, forestry, water resources, health, housing, etc.), technical capacity to identify adaptation options in the various areas and to elaborate adaptation plans, and technical skills to use climate models, to use scenarios and to interpret results. Based on the LFA of this capacity constraint the following actions are suggested:

- 11.1 Develop guidelines for implementing adaptation studies.
- 11.2 Conduct awareness programs for promoting the application of these guidelines by related sectors.
- 11.3 Develop sectoral vulnerability assessment reports
- 11.4 Identify medium to long-term adaptation and mitigation options.
- 11.5 Implement adaptation and mitigation projects.

12- Create environment for renewable energy

Development in energy policies and the feasibility of alternative energies is growing at slow pace in Syria. However, recent economic developments should put more emphasis on developing renewable energy resources (such as wind and solar) in the national energy mix. Capacity development in the field of systematic and institutional aspects of renewable energy is considered one of the main priorities.

Based on the LFA of this capacity requirement the following actions are suggested:

- 12.1 Conduct awareness program for prompting the utilization of renewable energy resources.
- 12.2 Introduce a system of incentives for companies making investments in renewable energy projects.

13- Development of capacity for resource mobilization

Technical and practical knowledge of stakeholders for resource mobilization to implement climate change projects needs to be developed in Syria. Particular focus should be given to GEF resource mobilization options in the area of climate change. This is a major field for capacity development at institutional and individual levels. The LFA of this capacity requirement suggest the following actions to be integrated in the NCSA Strategy:

- 13.1 Review the potential and available resource mobilization tools for Climate change.
- 13.2 Develop system for partnership for resource mobilization between all stakeholders.
- 13.3 Conduct training program on resource mobilization for implementing Climate Change Convention.

Hence, the NCSA Strategy is designed to include the following seven programs:

- 1. Program One: Develop sustainable institutional coordination mechanisms.**
- 2. Program Two: Develop clear and systematic integration of the cross-cutting concepts in the national policy and legislation.**

3. **Program Three: Capacity development for financial mobilization and building partnerships.**
4. **Program Four: Knowledge management, networking, outreach and awareness program.**
5. **Program five: Development of infrastructure facilities, training and rehabilitation.**
6. **Program six: Develop means for technology transfer.**
7. **Program Seven: Local communities' empowerment and participation.**

7 NCSA Action Plan

The NCSA Action Plan has been developed through a participatory process that included coordination among NCSA consultants and national stakeholders. The first step in developing the NCSA Action Plan was to conduct an in-depth analysis of the thematic priority capacity constraints as discussed in details in section 6. In-depth analysis resulted in a logical framework analysis for the three themes (Biodiversity, Desertification Control and Climate Change), which illustrated the outcomes, and outputs that should integrate in the Action Plan.

The Action Plan was based on the seven cross-cutting Strategic priorities, and the suggested projects/actions were designed in a way to respond to the cumulative and integrated priorities identified in the in-depth analysis where most of the project has the synergy element by responding to the three themes together. However, some suggested projects are theme specific and respond to priorities related to only one Convention.

The seven programs of the NCSA Action Plan include 17 projects. A concept Note was developed for each of the 17 suggested projects.

The following project concepts were developed based on the three thematic logical framework analysis and the packages proposed actions that can be viewed in Annex I. Each of the project concepts includes rationale, objectives and proposed outcomes. The time frame of each project would depend on the nature of its activities, and would range from 2 to 5 years. Detailed schedule and budget for each project will be identified upon ratification of NCSA SAP.

The Action Plan includes a proposed monitoring, evaluation and implementation mechanism involving all stakeholders.

7.1 Program one: Develop sustainable institutional coordination mechanisms

7.1.1 Rationale

The efforts of environmental management are scattered among many institutions in Syria. Currently, there are several agencies with different degree of responsibility or influence with regard to environmental issues; among them are MLAE, MAAR, M Irrigation, M Electricity, M Transportation, M Oil and Mineral Wealth, M Housing, M Health, M Education; academic institutions; and various NGOs.

There is some confusion over the roles of agencies and authorities, and in other instances, lack of coordination among those agencies and duplication of efforts. There is a pressing need to define specific roles and responsibilities to avoid duplication of efforts. At the same time the, legal framework is not clearly spelled out. More important, there are serious problems in enforcing environmental laws. In addition, financial constraints and

lack of equipment, trained personnel and general awareness are inhibiting the consistent application and enforcement of environmental laws in Syria. This requires identification of roles for each institution and subsequently implementing training programs for the staff.

7.1.2 Proposed Projects

7.1.2.1 Project 1.1: Development of a sustainable coordination mechanism among institutions implementing the three conventions

The NCSA stocktaking and capacity assessment exercises have identified a set of key institutions related directly to the implementation of one or more of the three conventions. The main aim of this project is to develop a sustainable coordination system among these institutions. Such a coordination system could be better applied through the existing networks and cooperation mechanisms or expanding them. As the mandates and requirements of the different institutions are diverse and the focus is different, it will be more realistic and practical to form three thematic coordination groups that can be then overseen by a higher coordination committee formed of 6 members from the three thematic committees.

Implementation mechanism:

The secretariat of the implementation mechanism will be the General Commission for Environmental Affairs (GCEA) at MLAE. Three thematic committees will be formed as follows:

Biodiversity national committee:

- 1- Ministry of Local Administration and Environment (the General Commission for Environmental Affairs and the Environmental Research Center).
- 2- The State Planning Commission.
- 3- Ministry of Agriculture and Agrarian Reform (The General Commission for Scientific Agricultural Research, and the Directorate of Forestry).
- 4- Ministry of Irrigation.
- 5- Ministry of Higher Education.
- 6- Ministry of Housing.
- 7- Ministry of Tourism.
- 8- Ministry of Information.
- 9- Ministry of Education.
- 10- Ministry of Industry.
- 11- Ministry of Health.
- 12- The Central Bureau of statistics.
- 13- Professional organizations (Syndicate of Agricultural Engineers).
- 14- NGOs.

Desertification National Committee:

1. Ministry of Local Administration and Environment (the General Commission for Environmental Affairs and the Environmental Research Center).
2. The State Planning Commission.
3. Ministry of Agriculture and Agrarian Reform (The General Commission for Badia (Steppe land) Development, the General Commission for Scientific Agricultural Research, and the Directorate of Forestry).
4. Ministry of Irrigation.
5. Ministry of Housing.
6. Ministry of Higher Education.
7. Ministry of Electricity.
8. Ministry of Oil and Mineral Wealth.
9. Ministry of Education.
10. Ministry of Industry.
11. Ministry of Transportation.
12. Ministry of Health.
13. Ministry of Information.
14. Ministry of Tourism.
15. The Central Bureau of statistics.
16. General Authorities, General Directorates and Research Centers.
17. Professional Organizations (Syndicate of Agricultural Engineers).
18. NGOs.

Climate Change National Committee:

1. Ministry of Local Administration and Environment (the General Commission for Environmental Affairs and the Environmental Research Center).
2. The State Planning Commission.
3. Ministry of Agriculture and Agrarian Reform (The General Commission for Scientific Agricultural Research, and the Directorate of Forestry).
4. Ministry of Housing.
5. Ministry of Transportation.
6. Ministry of Higher Education.
7. Ministry of Electricity.
8. Ministry of Oil and Mineral Wealth.
9. Ministry of Education.
10. Ministry of Irrigation.
11. Ministry of Health.
12. Ministry of Information.
13. Ministry of Tourism.
14. The Central Bureau of statistics.
15. The General Directorate of Meteorology.
16. General Authorities, General Directorates and Research Centers.
17. The Professional Syndicates.
18. NGOs.

Higher Coordination Committee

The three thematic committees will select a higher committee for coordination among the three thematic committees to oversee the coordination and synergy efforts. The details and TORs of each committee will be described in the section on Monitoring and Evaluation Mechanism.

Objectives

- To create sustainable coordination mechanisms for national synergies in implementing the three UN Environmental Conventions and the NCSA Action Plan.
- To increase the effectiveness of current coordination mechanisms and ensure proper implementation of all suggested projects based on synergies.

Scientific Consultation Committee

The scientific consultation committee shall be formed of specialists (consultants) from at least fifteen different fields that cover the themes of the International Environmental Conventions. The consultants should be selected based on their experiences and knowledge of the more recent information on the International Environmental Conventions. All field shall be presented equally. **The task of the committee** will be providing scientific support to other committees, playing a role in preparation of project documents based on the concept notes presented in the action plan, providing consultation and advises to the General Commission for Environmental Affairs and to other entities involved in implementing the conventions.

Activities

- National assessment of lessons learned and experiences of previous coordination committees.
- Establish the thematic committees.
- Establish the higher coordination committee.
- Develop the final TORs and mandates of each committee.
- Develop reporting systems.
- Establish a scientific/technical advisory committee.

Outcomes

- Effective coordination mechanism system for implementing the three UN Conventions is developed among the stakeholder institutions.
- Technical and organizational capacity for implementing the Rio Conventions are consolidated and strengthened.
- Implementation of the Rio conventions is well coordinated.

Estimated Budget

This project does not need a real budget except expenses for committees meeting, which will be covered by projects for which the meeting is intended.

Project 1.2. Strengthen the technical capacity of the Rio Conventions focal points at the GCEA

This project will be based on the capacity development needs of the Rio Conventions' focal points at the GCEA. The first step will be to develop a stable and effective organizational structure for the functioning and coordination of the three focal points to act in a synergistic manner. Once the coordination structure is established, a comprehensive capacity-building program should be designed and implemented.

Objectives

- To create a sustainable and effective organizational structure for the integrated functions of the three Rio Conventions focal points.
- To raise the individual capacity of the focal points and the organizational capacity of the GCEA in implementing the Rio Conventions.
- To create a system of direct coordination among the three focal points.

Activities

- Develop an organizational cooperation structure for the three focal points.
- Conduct a capacity needs assessment for the individual focal points and the organizational system of implementing the Conventions at GCEA.
- Develop a comprehensive capacity-building plan for the focal points and GCEA.
- Mobilize capacities from the various ministries, organizations and departments to GCEA to work with the UNFCCC, CBD and UNCCD focal points to facilitate the implementation of Conventions.
- Conduct the capacity-building plan.

Outcomes

- Qualified and professional Conventions' implementation units (entities) are established at the GCEA
- Improved implementation of the CBD, UNCCD and UNFCCC in Syria while ensuring synergies in implementation.
- Developed negotiation, networking and reporting skills by the focal points.

Estimated Budget
300,000 US\$.

Sustainability

The Government of Syria has heavily invested in adequate institutional capacity to handle preparation and implementation of natural resources management projects during previous years. This program will support technical, administrative and institutional coordination for the implementation of the Rio conventions.

The projects of this program will build on the existing management structures at GCEA, which will be scaled-up for administration and technical development and ensure sustainability of the functions of established coordination mechanisms and the new capacities of the Conventions' focal points.

7.2 Program Two: Develop clear and systematic integration of the cross-cutting concepts in the national policy and legislation

7.2.1 Rationale

Syria is moving towards integrating with the international economic system at relatively reasonable rate, and has signed many trade and economic agreements including agricultural and industrial activities. Some agreements include articles and provisions that have direct and cumulative impacts on the environmental issues including the Biodiversity, Desertification and its adaptation to Climate Change. To reduce the impact of these agreements and increase the benefits, the concepts of the three Rio agreements should be integrated in the national policies, legislations and development plans of all sectors. This integration process should include a national system for assessing the impact of all agreements and a sustainable regulatory framework for a sustainable integration process.

7.2.2 Proposed Projects

7.2.2.1 Project 2.1. Develop a regulatory framework for systematic integration of the crosscutting concepts of the Rio Conventions in the national policy and legislation

Implementation mechanism

This project should involve all national stakeholders involved in the implementation of Rio Conventions and related to the integration process of the Conventions in the national policy, legislation and development plans, which may include the legislation and planning national institutions.

Objectives

- To assess the status of the integration process of the crosscutting concepts of the three conventions.
- To identify the policy and legislation gaps related to the crosscutting concepts of the three Conventions.
- To suggest and test the policy and legislation options to be integrated with all stakeholders.
- To develop a national regulatory framework for the integration of crosscutting issues concepts.

Activities

- Survey of the current national legislation and development plans for the presence of crosscutting concepts.

- Develop a national team to identify the policy and legislation gaps and suggest the policy and legislation options for concepts to be integrated.
- Test the policy options with the participation of all stakeholders and determine the suitable options to be integrated.
- Promote the policy options among the policy makers in the country.
- Conduct a training program for policy makers on crosscutting issues related to the three Rio Conventions and its integration in the national policy legislation and development plans.
- Develop the national regulatory framework for the integration of crosscutting issues concepts.

Outcomes

- A national, development-based regulatory legislative system for the integration of the crosscutting concepts developed.
- The national rights in the three Conventions are protected.
- The national team for the integration of international conventions is developed .
- The national regulatory framework for the integration of the crosscutting concepts of the three conventions is made clear .
- Qualified practitioners and legislators trained in crosscutting issues.
- Provisions for crosscutting issues in implemented the three Rio Conventions are developed.

Estimated Budget

200,000 US\$.

7.2.2.2 Project 2.2. Development of a policy system for assessing the impact of the economic and trade agreements on the environment

Implementation mechanism

This project should involve the wide spectrum of organizations and sectors associated with the trade negotiations and the development and implementation of trade and economic agreements. The project should be inclusive enough to involve NGOs and civil society organizations concerned with environmental protection and sustainable development. The General Commission for Environmental Affairs/MLAE should be involved through its integrated licensing and EIA department as well as the trade and environmental national committees.

Objectives

- To develop a practical and effective system for the application of Strategic Environmental Assessment (SEA).
- To apply the SEA system in assessing the environmental impact of currently implemented trade and economic agreements at the bilateral, regional and global levels.

- To use the SEA in assessing new agreements prior to signature and assist negotiators in identification of potential environmental impacts of trade and economic agreements.
- To ensure that trade agreements are environmentally friendly and supportive of sustainable development objectives.
- To strengthen the capacity of Syrian trade policy to protect the environment through the promotion of sustainable development.

Activities

- Establish a national Strategic committee for the development of national system/guidelines for SEA.
- Develop national operational and technical directives and laws for SEA.
- Apply SEA in analysis of current trade and economic agreements.
- Conduct training programs on the application of SEA.
- Establish a national system for use of SEA in negotiations for new trade and economic agreements.
- Seek provisions in trade agreements under which parties to those agreements strive to ensure that they do not weaken or reduce the protections afforded in national environmental laws and policies as an encouragement for trade.

Outcomes

- Procedural and technical SEA guidelines and directives are developed and made functional.
- A policy system for Strategic environmental assessment for economic and developmental agreements on the environment is developed.
- Newly negotiated trade agreements are made subject to participatory and transparent SEA(s).

Estimated budget

250,000 US\$.

Program Sustainability

The program is expected to be institutionally sustainable. The project will follow already defined national plans and will work within national institutions without creating new institutions or decision-making bodies. Thus, no additional institutions or managerial structures requiring additional financing will be created by the project.

Project activities build on the country's ongoing environmental management programs as well as national action programs to combat desertification and the Strategy for biodiversity and climate change. The capacity building and training program will be directed toward the existing staff and it will be on-job training in most cases. This will greatly increase the prospects for institutional sustainability of the project by having project activities closely connected to national frameworks.

7.3 Program Three: Capacity development for financial mobilization and building partnerships

7.3.1 Rationale

This program is based on the identification and use of proper economic instruments and tools for environmental conservation and management that are based on market-mechanisms and other economic approaches resulting ultimately in the leverage of additional resources for the implementation of the Rio Conventions. The use of economic incentives has been gaining momentum worldwide for its broad success in environmental protection. Market-based or economic incentives will provide financial rewards for environmental protection in Syria. Market-based approaches to environmental protection in the form of economic incentives are a clever form of government regulation that goes beyond the command and control measures to active involvement of partners, especially from the private sector. Syria is in need for capacity development at systematic and institutional levels for establishing and operating economic tools and incentives for various stakeholders in environmental management dimensions. Currently, there is a lack of expertise in fund raising and a non-traditional resource mobilization Strategy for activities related to the implementation of the Rio conventions and environmental management.

At present economic incentives for environmental management are not well identified or experimented in Syria. Some instruments have been identified but still not developed or implemented for waste management and climate change, but no instruments are identified for biodiversity and sustainable land management. One of the major focus areas of this program will be economic valuation of environmental costs and ecosystem services. An incentive-based approach offers advantages that distinguish it markedly from the regulatory approach. These advantages include flexibility, encouragement of technological innovation, improved relationships between the private and public sector, better management of resources, and substantial cost savings.

7.3.2 Proposed Projects

7.3.2.1 Project 3.1: Develop market-based economic tools for environmental management in the themes of biodiversity, desertification and climate change

Implementation Mechanism

This project should be implemented by the GCEA in close cooperation with the Ministries of finance, planning, trade and industry and the private sector. It will need to explore potential development of market-based economic instruments for resource mobilization for biodiversity conservation and sustainable land management and adaptation measures. The involvement of specialized economic research centers will be highly useful.

Objectives:

- To develop and implement market-based economic tools for environmental management in the sectors of biodiversity, land management and climate change.
- To develop national guidelines and procedures for economic valuation of the cost of environmental degradation and values of ecosystem services.
- To assess the potential for using economic instruments to provide incentives and financing for combating desertification, adaptation to climate change and biodiversity conservation.
- To increase national capacities in developing and implementing economic tools for environmental management.
- To apply economic tools in an enabling legislative system.

Activities

- Conduct comprehensive assessment of currently used and identified economic tools for environmental management.
- Conduct comprehensive survey and documentation of the whole spectrum of market-based economic tools.
- Develop national guidelines for economic valuation of ecosystem services.
- Develop national guidelines for assessing the economic costs of environmental degradation in biodiversity and land management.
- Develop economic scenarios for the cost-effectiveness of the adaptation measures.
- Develop a training program on economic tools for environmental management.
- Identify suitable economic tools in the sectors of biodiversity, land degradation and climate change.
- Introduce subsidies and incentive mechanism for resources conserving activities and products (example: Tax relief or differential taxes).
- Impose penalties (fines and taxes) on all practices leading to land degradation and loss of biodiversity.
- Legalize such tools through legislative and economic reform processes.
- Adopt identified market-based tools.

Outcomes

- Market-based economic tools for environmental management in the sectors of biodiversity, land management and climate change are developed.
- National guidelines and procedures for economic valuation of the cost of environmental degradation and values of ecosystem services are developed.
- National capacities in developing and implementing economic tools for environmental management are enhanced.
- Cost-effectiveness of adaptation measures are assessed.

Estimated Budget:

400,000 US\$.

7.3.2.2 Project 3.2: Develop a national system for public-private partnership for resource mobilization for environmental management

This project will be implemented in full partnership between government and the private sector where fair and equitable public-private partnerships should be built. A special coordination mechanism should be developed with overall guidance from the GCEA.

Objectives

- To develop fruitful and effective partnerships between environmental management institutions and private sector in the fields of land degradation, biodiversity conservation and adaptation to climate change.
- To develop a national system for defining social and environmental responsibilities of national corporations.

Activities

- Conduct a comprehensive inventory and assessment of the current public- private and civil-private partnerships for environmental management in Syria.
- Identify potential partnerships between public, civil and private stakeholders.
- Introduce social and environmental responsibility guidelines for national corporations.
- Establish a sustainable program for partnership with the private sector at the GCEA.

Outcomes

- Partnerships between public, private and civil sectors for specific environmental management initiatives are forged and implemented.
- Corporate Social and Environmental responsibility guidelines are developed.

Estimated budget

150,000 US\$.

7.4 Program Four: knowledge management, networking, outreach and awareness program

7.4.1 Rationale

The knowledge and communication barriers facing the proper implementation of the Rio Conventions are closely related and have been identified by the three thematic profiles together. The knowledge portfolio was divided into communication, data management, networking and outreach systems that all can be grouped together under the umbrella of "**knowledge management**".

The knowledge barrier in Syria is the most important because of the limited information and weak knowledge generation and processing, especially regarding environmental management. Even if some of the information is available, its accessibility and

dissemination to the target stakeholders is still very weak and largely does not exist. On the other hand, it has been proven that sound decision-making is enabled by accurate, complete and relevant information, where knowledge management system can play a key role in supporting the management staff with the needed information.

A common thread running through all three Conventions is the need for public awareness and education about the Conventions and the issues that they seek to address. In the thematic assessment reports, which formed the platform for the crosscutting review, public awareness is cited as a key issue for implementation of Syria's obligations under the Conventions. It is important to understand that the country needs to take preventive and mitigation action concerning the environment, to not only meet its obligations under the Conventions, but also for the protection and conservation of our natural resources base which is critical to sustainable development.

7.4.2 Proposed Projects

7.4.2.1 Develop an efficient knowledge management system for the three Conventions

Implementation mechanism

An existing data management entity linked to at least one of the three Convention themes can act as the custodian to this project by enhancing its infrastructure and KM capacity to host the KM system. Other key stakeholders should join, as equal status partners, to provide the information and the necessary processing required. The implementation system can include the data management system, governmental organizations and academic/research centers.

Objectives

- To establish a national knowledge management system for the collection, processing and distribution of information related to the three conventions.
- To contribute to the use of the KM system in enhanced informed decision-making and better awareness programs.
- To develop a set of national indicators for the monitoring of state of biodiversity, desertification and climate change.

Activities

- Conduct assessment to identify gaps and priorities in knowledge management needs for related institutions.
- Identify the content of the KM system and sources of information.
- Select proper knowledge management channels and systems based on existing ones that can be upgraded.
- Purchase and develop required software and connectivity systems.
- Create an open source accessible system for the collection and retrieval of information in the form of a database or other KM media.
- Define roles and responsibilities on the addition and use of existing information and sorting all issues related to intellectual property rights.

- Identify suitable indicators and processes of data generation for combined monitoring of biodiversity, desertification and climate change indicator systems.
- Train key personnel directly linked with the design, management and use of the KM system.

Outcomes

- A comprehensive, sustainable and maintained KM system to serve all stakeholders is operational and accessible.
- Improved knowledge about the three themes and updated channeling of new information.
- A national indicator system with clear sources of monitoring information for the three themes of biodiversity, climate change and desertification is established.
- Trained personnel in the use and management of the KM system.
- Multi-media and modern software knowledge products are developed and made accessible.

Estimated Budget
750,000 US\$.

7.4.2.2 Project 4.2: Develop a comprehensive networking and outreach program for the three Rio Conventions at national, regional and global levels

This project is based on two components related to outreach and networking from an organizational perspective where experiences and activities can be shared and new partnerships can be established for more concerted and effective activities related to the implementation of the three conventions. This project could be implemented as a theme-specific project or based on synergies. The objectives and activities stated below are related to the synergies perspective but can be used with slight modifications to the theme specific projects.

Implementation mechanism

Three organizations, each specialized in one of the themes will take the lead in its own theme while the three of them will constitute an "implementation coalition" that will coordinate the activities and reach out to various stakeholders. In case that one organization or an existing committee can be equipped with the necessary networking and comprehensive knowledge of the three themes together, it can act as the implementation agency (network).

Objectives

- To engage national stakeholders in a networking and outreach system with other national stakeholders.
- To engage national stakeholders in a networking and outreach system with regional and global partners.

- To document and use lessons learned and experiences from networking programs for the benefit of national stakeholders' activities in implementing the Conventions.
- To facilitate opening of new opportunities in partnerships with national, regional and global partners in implementing the Conventions.
- To contribute to the process of coordination in policies and statements among national, regional and global partners in issues of common interest.

Activities

- Conduct a thorough survey of the existing networks and organizations working in implementing the conventions at the national and regional levels.
- Identify the key stakeholders at the global level linked directly with implementing the conventions.
- Develop thematic partnership groups at the national level.
- Explore possible partnerships at the national, regional and global level .
- Implement team collaboration tools and processes (discussion forums, workshops and meetings) for stakeholders.
- Foster the establishment of expert groups and partnerships with key international, regional, multilateral and local organizations
- Develop demonstration projects and partnerships with key regional and global partners for specific and realistic objectives.

Outcomes

- National organizations involved in partnerships that can deliver combined impacts.
- More involvement of national organizations in regional and global environmental activities.
- Sharing of experiences and lessons learned between involved organizations in the network.
- Sustainable professional networks that can enhance the development and implementation of trans-boundary activities.
- Better coordination of positions and statements especially in south-south networking.

Estimated Budget

300,000 US\$.

7.4.2.3 PROJECT 4.3: Develop a sustainable public awareness and education program to implement the three Conventions

This project shall focus on the target groups of the general public and students in various education stages. It should be able to bring simplified information for the public and state-of-the-art knowledge to students about the three conventions and themes, with special focus on the new concepts and approaches developed by the scientific bodies of the conventions. The aim of this project is to transfer the quality knowledge resulting

from the Conventions, tailored to the Syrian conditions to the general public and students in a variety of suitable awareness and education tools.

Implementation Mechanism

This project should be implemented by a coalition of three organizations. The ministry responsible for public education in Syria would be the Ministry of Education in specific, an NGO with an excellent record in environmental awareness activities, and a university that will take the lead in introducing the concepts of the three Conventions in its curriculum and be committed. The coalition could increase in membership with the support provided by the GCEA (Focal point of the Conventions), the Ministry of Higher Education (for planning the modification of university courses) and another NGO that can assist in awareness activities. This will be the first awareness project to act on the three issues of biodiversity, climate change and desertification together.

Objectives

- To increase the level of public awareness of the conventions and the associated themes, with special focus on new concepts.
- To enhance the school curricula with new concepts in the three conventions.
- To develop a higher education package of courses related to biodiversity, climate change and desertification.

Activities

- Establish the project's coordination system.
- Survey and analysis of all education and awareness approaches and guidelines developed by the three conventions.
- Identify a national assessment of all previous and existing awareness and education projects with gap analysis and lessons learned.
- Select contents to be used in the awareness and education plans derived from the conventions and adapted to national conditions.
- Develop awareness Strategy with used modules and awareness tools.
- Set up pre-service and in-service training programs for all teachers, administrators, and educational planners.
- Prepare publications and conduct seminars and workshops for schools, universities and communities to spread knowledge and awareness to the targeted communities and their schools and community centers.
- Develop new concepts in the curricula.
- Develop the new university course outlines, resources and planning for implementing the new courses.

Outcomes

- Improved awareness in the general public about the Conventions and the themes of biodiversity, desertification and climate change.
- School curricula are enhanced with new concepts.
- New university courses are developed for biodiversity, desertification, climate change and their linkages.

Estimated Budget
850,000 US\$.

7.4.2.4 Project 4.4: Development of a technology transfer system and capacity building for energy efficiency and renewable energy

A special attention was apparent in the NCSA process on adopting energy efficiency and renewable energy technologies through the UNFCCC and other technology transfer systems as a basic requirement for adaptation and mitigation measures and as an urgent process for restructuring the energy sector to face the rise in oil prices.

Implementation mechanism

Energy policy makers should implement this project: Ministry of Electricity, Ministry of Oil and Mineral Wealth, relevant research centers, private sector, and the Ministry of Local Administration and Environment (general Commission for Environmental Affairs and Environmental Research Center).

Objectives

- To develop a comprehensive technology inventory and needs assessments for energy efficiency and renewable energy.
- To identify required technology through a gap analysis of existing technologies in energy efficiency.
- To identify potential technology transfer routes.
- To assess the current national and global legislative framework regarding technology transfer and intellectual property right related to energy efficiency and renewable energies.
- To design realistic and well-articulated technology transfer programs for Syria.
- To create an enabling legislative and administrative environment for technology transfer in sustainable energy.
- To develop a system of incentives for companies making investments in renewable energies.

Activities

- Survey and analysis of all technology transfer guidelines and approaches developed in the UNFCCC and Kyoto Protocol is conducted.
- Conduct a thorough national technology assessment exercise for energy efficiency and renewable energies.
- Identify gaps in technologies available nationally.
- Identify the required technology.
- Assess the national legislative and administrative system for technology transfer and identify needed modifications to overcome legislative and financial barriers.
- Create a database of required, appropriate energy efficiency and renewable energy technologies and its sources that is continuously updated.
- Explore potential technology transfer routes and partnerships.

- Develop a national plan for transfer of appropriate priority needs technologies and their sources with adequate enabling environment.
- Develop a capacity building program related to the new technologies
- Combine standards, tools, and training in making energy efficiency an integral part of corporate management systems.
- Capacity building on the development and implementation of government-sponsored recognition schemes based on verified energy savings.
- Organize workshops involving all the concerned institutions with the objective of presenting the appropriate approaches to assess technology transfer needs.
- Provide financial and non-financial incentives for the diffusion of relevant technologies
- Collect information on cost-effective technologies (energy efficient, renewable energy technologies) via different sources.

Outcomes

- National needs in technology transfer for energy efficiency and renewable energy are identified.
- Regional and global technology transfer routes are identified.
- Database on new technologies is developed and updated.
- An enabling legislative and administrative environment for technology transfer is established.
- Technology transfer agreements, partnerships and initiatives are designed.
- A national technology capacity-building plan for energy efficiency and renewable energy is developed.
- Barriers against technology transfer are removed.
- Guidelines for energy audit and energy efficiency programs are developed and implemented
- System of incentives for companies making investments in renewable energy is introduced

Estimated Budget

800,000 US \$.

Program Sustainability

This is the most sustainable and self-improvement program, and will be within the priorities of the national plans and will work within national institutions without creating new instances or decision-making bodies. The project activities will also build on the country's ongoing environmental management programs as well as national action programs to combat desertification and the Strategy for biodiversity. This will greatly increase the prospects for institutional sustainability of the project by having project activities closely connected to national frameworks. Moreover, the practices to be promoted will be compatible with the average level of human and financial capital present in communities. Transfer of knowledge and dissemination of technologies associated with the project's capacity building and on-the-ground demonstrations should

strengthen beneficiaries towards improved and more stable resource based livelihoods and self-reliance.

The individual projects will be based on knowledge, which is a non-depleting resource that will be always generated, processed and maintained. The outcome of the three projects should be combined to produce a sustainable source of information and a system of intellectual development that will be sustainable by the sustainability of knowledge.

It is estimated that the project has a reasonably high probability of being sustainable after project termination date.

7.5 Program five: Development of infrastructure facilities, training and rehabilitation

7.5.1 Rationale

Improving enabling working environment through providing good infrastructure and building the capacity of researchers, managers and practitioners in the field of Biodiversity, Desertification and Climate Change is needed to ensure successful implementation of the three Rio Conventions (Biodiversity, Desertification Control and Climate Change). The components of this program should include a sustainable system that continuously provides and upgrades the infrastructure of the working place and an efficient training program for all staff working on crosscutting issues among Biodiversity, Desertification Control and Climate Change. By doing so, the program will promote and enhance synergies among the Conventions and lead to fast and efficient adoption of the new transferred technologies related to the three Conventions.

7.5.2 Proposed Projects

7.5.2.1 Project 5.1: Develop national system for infrastructure building, and comprehensive training program on priority technical concepts of the three conventions

Implementation Mechanism

The project should be coordinated by the General Commission for Environmental Affairs and two or three well established training centers in Syria where individual training courses will be developed with the support of global training organizations specialized in the three conventions. Trainees should be selected based on a competition module where strict and transparent guidelines should be used for selecting trainees who will transfer the knowledge to other professionals.

Objectives

- To develop and implement training modules on the three conventions.
- To create a pool of national experts in various organizations with adequate knowledge of the three conventions and their relations.

Activities

- Conduct a national needs assessment exercise for identification of training needs and modules.
- Engage with the secretariats and scientific bodies of the three conventions in selecting proper training modules.
- Identify global and regional partners with experiences in training of the selected modules.
- Develop training manuals.
- Establish the team of trainers.
- Select trainees.
- Conduct training programs.

Outcomes

- National expertise in the three conventions is built.
- Training manuals are developed and used.
- Increased base of trained practitioners is established.
- Knowledge is translated into actions on the ground from the institutions in which individuals work.

Estimated Budget
650,000 US\$.

7.5.2.2 Project 5.2: Develop technical directives for Biodiversity, Desertification and rehabilitate degraded lands in the national EIA process**Implementation mechanism**

The implementation mechanism should involve all stakeholders linked to the EIA process in Syria in all its development phases. The stakeholders should represent government, private sector, NGOs and local communities. The main stakeholder is the GCEA through its integrated licensing department, which develops and implements EIA guidelines.

Objectives

- To develop and implement specific directives for biodiversity protection and desertification control in the national EIA system.
- To develop national guidelines for rehabilitation and restoration of degraded land as a basic component of EIA mitigation measures.
- To identify habitats of special biodiversity and desertification vulnerability which are not suitable for development projects.

Activities

- Conduct a survey of the current EIA system and gap analysis for biodiversity and desertification.
- Screen to determine which projects, interventions or development activities require directives for biodiversity and desertification.

- Develop clear directives for biodiversity and desertification to be used in the TORs of EIA and specifying projects that should do biodiversity and desertification EIAs.
- Identify biodiversity and desertification proper mitigation measures.
- Develop direct indicators for monitoring of the EIA mitigation options.
- Use of the directives in few demonstration EIAs.
- Issuing national directives for biodiversity and desertification to be adhered to by all stakeholders.
- Develop guidelines for restoration and rehabilitation of degraded lands and habitats as key components of the EIA process and license.
- Involve the right experts in the process at the right time, and linking various components of the impact assessment process (social, environmental, health ... etc.).
- Identify biodiversity and desertification hotspots that are vulnerable and not suitable for development projects.
- Promote environmental management and impact assessment through industrial and economic forums, perhaps using examples from the leading companies to demonstrate the value and benefit of taking action.
- Encourage leading companies to require suppliers, business partners, and others who they work with, to have biodiversity policies and Action Plans that include biodiversity and impact assessment practices.

Outcomes

- National directives for biodiversity protection and desertification control are inserted in the national EIA system and become legally binding.
- Guidelines for restoration and rehabilitation of degraded lands are integrated within the EIA mitigation measures.
- Biodiversity and desertification hotspot habitats are protected from development activities based on the EIA and licensing process.

Estimated Budget

400,000 US\$.

Program Sustainability

This is a comprehensive technical training program that targets practitioners in the fields of linkages among biodiversity, desertification and climate change. The project can be implemented to serve three parallel lines representing the three themes or in combination and synergies. This will be a long-term training program with a special attention on training for trainer system and focusing on technical terms and new concepts in the three Conventions, which will build a national capacity and empower the national expertise in the crosscutting issues among the three Conventions. The training materials created by this project also will be used for a sustainable training program on the crosscutting issues. All these will lead to institutional sustainability of the training program after the end of the project.

7.6 Program six: Develop means for technology transfer

7.6.1 Rationale

Building capacity of researchers, managers and practitioners in the fields of Biodiversity, Desertification and Climate Change is needed to ensure successful implementation of the three Rio Conventions (Biodiversity, Desertification Control and Climate Change). The components of this program will strive to promote innovative technical and institutional mechanisms to enhance environmental management practices with local, regional and global environmental benefits. By so doing, the program will promote and enhance synergies among the Conventions. In the process of capacity building there is also a strong component of technology transfer within the framework of the three conventions.

7.6.2 Proposed Projects

7.6.2.1 Project 6.1: Preparation of technology needs assessments in the themes of Biodiversity, Desertification Control, and climate change

This project will tackle the issue of technology transfer by conducting thorough national needs assessment of new and proper technologies related to the three themes. This will also be coupled with a comprehensive inventory of existing technologies. It is difficult to envisage the typology and context of the technology needed so this particular project will not go beyond the point of assessment and identification of potential technology transfer systems. Based on this assessment Syria can be better prepared to develop and implement targeted technology transfer initiatives.

Implementation mechanism

This project should be implemented by technology developers and users in Syria, as well as policy makers related to intellectual property rights issues. Overall guidance should be done by the Ministry of Local administration and Environment. The involvement of private sector and the research institutions for technology development is crucial.

Objectives

- To develop a comprehensive technology inventory and needs assessments for Syria.
- To identify required technology through a gap analysis of existing technologies.
- To identify potential technology transfer routes.
- To assess the current national and global legislative framework regarding technology transfer and intellectual property right.
- To design realistic and well-articulated technology transfer programs for Syria.
- To create an enabling legislative and administrative environment for technology transfer.

Activities

- Survey and analyze all technology transfer guidelines and approaches developed within the three conventions.
- Conduct a thorough national technology assessment exercise in the themes of climate change, biodiversity and desertification control.
- Identify gaps in technologies available nationally.
- Identify the required technology.
- Assess the national legislative and administrative system for technology transfer and identify needed modifications to overcome barriers.
- Establish a roster of national experts and researchers in the fields of technology transfer in order to form a national advisory technical board that assist the government in all related technical matters.
- Create a database of required appropriate technologies and its sources that is continuously updated.
- Explore potential technology transfer routes and partnerships.
- Develop a national plan for transfer of appropriate priority needs technologies and their sources with adequate enabling environment.
- Develop a capacity-building program related to the new technologies.

Outcomes

- National needs in technology transfer are identified.
- Regional and global technology transfer routes are identified.
- Database on new technologies is developed and updated.
- An enabling legislative and administrative environment for technology transfer is established.
- Technology transfer agreements, partnerships and initiatives are designed.
- A national technology capacity-building plan is developed.
- Barriers against technology transfer are removed.
- A legal, regulatory and institutional framework that coordinates technology transfer, adaptation and enforcement is developed

Estimated Budget

500,000 US \$.

7.6.2.2 Project 6.2: Develop and implement a comprehensive training program on priority technical concepts of the three conventions

This is a comprehensive technical training program that targets practitioners in the fields of linkages among biodiversity, desertification control and climate change. The project can be implemented to serve three parallel lines representing the three themes or in combination and synergies. This will be a long-term training program with a special attention on training for trainer system and focusing on technical terms and new concepts in the three conventions.

Implementation Mechanism

The project should be coordinated by the GCEA and two or three well-established training centers in Syria where individual training courses will be developed with the support of global training organizations specialized in the three conventions. Trainees should be selected based on a competition module where strict and transparent guidelines should be used for selecting trainees who will transfer the knowledge to other professionals.

Objectives

- To develop and implement training modules on the three conventions
- To create a pool of national experts in various organizations with adequate knowledge of the three conventions and their relations.

Activities

- Conduct a national needs assessment exercise for identification of training needs and modules.
- Identify global and regional partners with experiences in training of the modules selected.
- Develop training manuals.
- Establish the team of trainers.
- Select the trainees.
- Conduct training programs.

Outcomes

- National expertise in the three conventions is built.
- Training manuals are developed and used.
- Base of trained practitioners is increased.

Estimated Budget

1000,000 US \$.

Program Sustainability

No additional institutions or management structures requiring additional financing will be created by the project. The project will be executed and hosted by General Commission for Environmental Affairs. The project will base its interventions mainly on existing organizations, such as local authorities, municipal and local governments and local interest groups.

The project activities are built on the country's ongoing programs as well as national action programs in climate change, biodiversity and desertification control. This will greatly increase the prospects for institutional sustainability of the project by having project activities closely connected to national frameworks. The practices to be promoted will also be compatible with the average level of human and financial capital present in communities. The capacity building and on-the-ground demonstrations of new technologies should strengthen beneficiaries towards improved and more stable resource based livelihoods and self-reliance. The technologies and knowledge to be transferred

and localized will be a sustainable asset for the country in its pursuit of implementing the global conventions and achieving national impacts.

7.7 Program Seven: Local communities' empowerment and participation

7.7.1 Rationale

Local communities are the ultimate beneficiary of biodiversity conservation and sustainable land management programs and their empowerment through training, institutional and technical capacity development and financial resources development is a key factor for the success of any natural resources and environmental management programs. This requires several fundamental changes in the way we deal with local community support such as: (i) Give more management responsibilities to local communities; (ii) Improve operational linkages between local community and public staff; (iii) Simplify diagnostic and planning procedures for local community development; (iv) Flexibility in terms of the activities to be supported; and (v) increased number of field teams to expand coverage. To create such changes, the main principle of this program is that the communities, including the rural poor, would be empowered to work out their development programs and Action Plans according to their own needs and priorities. This project aims at increasing the community ownership and responsibility for infrastructure and eventually will enhance the sustainability of the development effort and adoption of the Rio Conventions in Syria.

Sustainable impact after completion of a basic investment is difficult to achieve unless there is local participation and acceptance by both the beneficiaries and local communities. Therefore, adoption of Rio Conventions cannot be expected unless communities assume responsibility for the management of their natural resources.

The benefit of this project will be the tendency to integrate biodiversity conservation and sustainable use with sustainable land management approaches and introducing adaptation to climate change at the community level with combined results benefiting the three Conventions together.

7.7.2 Proposed Projects

7.7.2.1 Project 7-1: Development and implementation of a comprehensive capacity building and innovation program for community management of natural resources based on traditional knowledge

Implementation mechanism

This project should be implemented by mobilizing all networks and institutions with direct linkages to community action. The General Commission for Environmental Affairs and the Ministry of Agriculture and Agrarian Reform should be closely involved with the implementation of community-based initiatives. One of the main partners of this project

would be the Non Governmental Organizations (NGOs) and Community Based Organizations (CBOs).

Objectives

- To increase the technical and administrative capacity of CBOs in community management of natural resources.
- To demonstrate the implementation of community-based projects linking biodiversity conservation and sustainable use with sustainable land management and adaptation to climate change.
- To empower the communities to utilize traditional knowledge in natural resource management with proper conservation of their property rights.
- To develop a practical framework based on evidence on the integration of biodiversity conservation and sustainable land management with poverty alleviation.

Activities

- Document traditional and local knowledge and practices of farmers in land and resources management and biodiversity and incorporate in the development of innovations and the application of new technologies;
- Develop database for traditional knowledge and its uses;
- Provide training and awareness raising to understand and up-take knowledge generating from local community and understand the impact of environment and natural resources degradation on community well-being;
- Documenting success story of community management linked to poverty reduction and sustainable livelihoods in local communities.
- Strengthen the capacities of community organizations to assume various developmental activities such as land rehabilitation, forestation, water harvesting and input supply;
- Facilitate dialogue on key policy issues such as land tenure impacting on natural resources management through the development of permanent consultation and negotiation processes between local communities, national policy-makers and research community;
- Develop modules of community management of natural resources based on national, regional and global experiences.
- Conduct capacity-building initiatives on community management in the specific linkages between biodiversity conservation and land management.
- Apply a community approach where the community individuals, and their organizations would play an integral role to promote sustainable utilization of natural resources; and
- Design a community action toolkit based on experiences with special focus on the gender and poverty reduction dimensions of community management.

Outcomes

- Technical and administrative capacity of CBOs in community management of natural resources is enhanced.

- Implementation of community-based projects linking biodiversity conservation and sustainable use with sustainable land management and adaptation to climate change is evident through demonstration projects.
- Communities are empowered to utilize traditional knowledge in natural resource management with proper conservation of their property rights.
- A practical framework based on evidence on the integration of biodiversity conservation and sustainable land management with poverty alleviation is developed.
- A package of community empowerment actions toolkit linking poverty reduction and gender to community management is developed.

Estimated Budget
750,000 US \$.

7.7.2.2 Project 7.2. Mobilization of community action for conservation of adjacent areas to protected area

Implementation Mechanism

This project will be implemented by the GCEA, NGO's, the GEF SGP and the community based organizations around protected areas. The project will strive to ensure environmentally sustainable, economically productive and socially responsible practices around protected areas so that no negative impacts will be suffered by protected areas from adjacent socio-economic activities and to integrate communities into conservation processes.

Objectives

- To involve local communities in conservation actions around protected areas and increase their ownership of sustainable resource management practices.
- To widen the geographical area and economic scope of sustainable management around protected areas.
- To raise the capacity of communities in community management of biodiversity and natural resources around protected areas.
- To integrate the concept of conservation and sustainable use of biodiversity components and sustainable land management to communities.
- To add a cultural and traditional knowledge component to the conservation and sustainable use of biodiversity in protected areas' geographical and ecosystem continuity.
- To prevent the introduction of invasive species in protected areas.

Activities

- Conduct a comprehensive assessment of the socio-economic conditions of local communities around protected areas.
- Develop livelihood and socio-economic activities alternatives that is compatible with the conservation and sustainable use methodology.
- Establish partnerships with local communities in community management.

- Provide training and capacity development in the methodologies of community management and conflict resolution.
- Strengthen local and community organizations and indigenous institutions to enhance participation and ownership in natural resources management, activities and programs and decision-making
- Establish participatory community coordination groups around each protected area to ensure the bottom up feed of information
- Designing a program for the prevention of introduction of invasive species to protected areas and their surroundings.

Outcomes

- Local communities are involved in conservation action around protected areas.
- The geographical area and economic scope of sustainable management around protected areas is widened.
- The capacity of communities in community management of biodiversity and natural resources around protected areas are developed.
- A national program for the prevention of invasive species is developed and implemented with the partnership of community management.

Estimated Budget

750,000 US \$.

Sustainability

The program is expected to be institutionally and socio-economically sustainable. At the institutional level, the project will follow already defined national plans and will work within national institutions without creating new instances or decision-making bodies. Thus, no additional institutions or management structures requiring additional financing will be created by the project.

The practices to be promoted will also be compatible with the average level of human and financial capital present in communities. The community participation through their empowerment should strengthen beneficiaries towards improved and more stable resource based livelihoods and self-reliance.

The program will strengthen the enabling environment through the community empowerment so that Syria can effectively implement its commitments for the implementation of the UN Convention to Combat Desertification, Climate Change, and Biodiversity.

The proposed program is aligned with the GEF Strategic Approach to support community empowerment in that it will address needs which have been identified as priorities by the community and which are consistent with those identified by the Rio Conventions.

8 NCSA Action Plan Implementation Mechanism and Monitoring and Evaluation plan

8.1 Implementation Mechanism

The NCSA Action Plan needs a robust and effective implementation mechanism based on institutional coordination and transparency. The following mechanism is hereby suggested.

8.1.1 At the national level

8.1.1.1 Thematic coordination committees

Three thematic coordination committees (TCC) should be created, each hosted and coordinated by the focal point of the Convention and headed by the Secretary General of the GCEA.

A national committee for each of Biodiversity Conservation, Desertification Control and Climate change exist in relevant directorates at the General Commission for Environmental Affairs of the Ministry of Local Administration and Environment. These committees should be developed and activated as follows:

1- The National Committee for Biodiversity Conservation: This committee consists of representatives of the following Ministries and Institutions:

- a. Ministry of Local Administration and Environmental (General Commission for Environmental Affairs).
- b. State Planning Commission.
- c. Ministry of Agriculture and Agrarian Reform (General Commission for Agricultural research and Directorate of Forestry).
- d. Ministry of Irrigation.
- e. Ministry of Housing.
- f. Ministry of Information.
- g. Ministry of Education.
- h. Ministry of High Education (the Universities).
- i. Ministry of Tourism.
- j. Ministry of Industry.
- k. Ministry of Health.
- l. Central Bureau of Statistics.
- m. Relevant Commissions and Research Centers.
- n. Relevant Professional Syndicates (Syndicat of Agricultural Engineers).
- o. NGOs.

2- The National Committee for Combating Desertification: This committee consists of representatives of the following Ministries and Institutions:

- a. Ministry of Local Administration and Environmental (General Commission for Environmental Affairs).
- b. State Planning Commission.
- c. Ministry of Agriculture and Agrarian Reform (General Commission for Agricultural research, General Commission for Steppe Development, and Directorate of Forestry).
- d. Ministry of Irrigation.
- e. Ministry of Housing.
- f. Ministry of Information.
- g. Ministry of Education.
- h. Ministry of High Education (the Universities).
- i. Ministry of Tourism.
- j. Ministry of Oil and Mineral Resources.
- k. Ministry of Industry.
- l. Ministry of Transportation.
- m. Ministry of Health.
- n. Central Bureau of Statistics.
- o. Relevant Commissions and Research Centers.
- p. Relevant Professional Syndicats (Syndicat of Agricultural Engineers).
- q. NGOs.

3- The National Committee for Climate Change: This committee consists of representatives of the following Ministries and Institutions:

- a. Ministry of Local Administration and Environmental (General Commission for Environmental Affairs).
- b. State Planning Commission.
- c. Ministry of Agriculture and Agrarian Reform.
- d. Ministry of Oil and Mineral Wealth.
- e. Ministry of Irrigation.
- f. Ministry of Housing.
- g. Ministry of Information.
- h. Ministry of Education.
- i. Ministry of High Education (the Universities).
- j. Ministry of Electricity.
- k. Ministry of Transportation.
- l. Ministry of Tourism.
- m. Ministry of Industry.
- n. Ministry of Health.
- o. Ministry of Irrigation.
- p. The General Directorate of Meteorology.
- q. Central Bureau of Statistics.
- r. Relevant Commissions and Research Centers.
- s. Relevant Professional Syndicats (Syndicat of Agricultural Engineers).
- t. NGOs.

8.1.1.2 Tasks of Thematic Coordination Committees

- Overall coordination of the implementation of the Convention, including review of and preparation of reporting requirement and reviews of conventions literature.
- Linkages with the various networks and committees established by each convention.
- Integrating the priorities and requirements from the implementation of the convention in the Strategic planning of each organization member in the committee.
- Overall supervision and guidance of the implementation of the NCSA Action Plan related to the particular convention.
- Development of specific TORs for each of the three thematic.

8.1.1.3 Higher Coordination Committee (HCC)

The HCC is composed of two members of each of the three above-mentioned thematic committees, and then the members of the committee choose a head for the committee. The HCC will be the main entity developing strategic planning for the integrated implementation of the three conventions and in particular the NCSA Action Plan. Specific TORs should be developed for the committee.

8.1.1.4 Scientific Advisory Committee (SAC)

The SAC should be composed of 15 profound scientists/ professionals selected by merit with proven experience and updated knowledge on the three conventions. The membership should be based on equal representation of expertise in the following fields:

- a. Project proposals development.
- b. Protected Area management.
- c. Ecosystems and habitats.
- d. Impact Assessment
- e. Genetic Resources
- f. Agrobiodiversity
- g. Land use planning
- h. Traditional knowledge in land management.
- i. Desertification control.
- j. Community management of natural resources.
- k. Energy efficiency.
- l. Renewable energies.
- m. Adaptation to Climate Change.
- n. CDM concepts.
- o. Economic incentives.

This committee will act as a backstopping and advisory body to the various Committees associated with the conventions and will be active in the formulation of full proposals based on the project concepts identified in the NCSA Action Plan. The SAC will also provide advice and consultation to the GCEA and other institutions involved in reporting and implementation of the conventions.

8.1.2 At the General Commission for Environmental Affairs (GCEA) level

The General Commission for Environmental Affairs is the organizational focal point for the three Rio conventions, and that brings it a benefit for the proper internal coordination of the implementation of the three conventions. The General Commission for Environmental Affairs has been going through a successful capacity building and organizational development process since it was established and the current NCSA Action Plan should be anchored to that emerging organizational structure.

The NCSA Action Plan suggests the formation of a Conventions Implementation Committee (CIC) composed of the three technical focal points for the CBD, UNFCCC and UNCCD with the following objectives:

- Integrating specific and crosscutting requirements in a unified implementation system if possible.
- Sharing of updates and new approaches in each convention and ensuring synergies in implementation.
- Integrating common priorities in the conventions in the overall GCEA Action Plan and Strategic planning process.
- Overall supervision of the implementation and resource mobilization of the NCSA Action Plan.

8.2 Monitoring and Evaluation Plan

The above section explained the implementation mechanisms and showed the general structure of the national implementation team. According to the above mechanisms the following Monitoring and Evaluation Plan is suggested:

- a- The TOR's of each committee should be developed and discussed within these committees.
- b- Develop Indicators for each project; three types of indicators can be developed:
 - ◆ Implementation indicators.
 - ◆ Performance indicators.
 - ◆ Impact indicators.
- c- Reporting system for the different committees and the projects management unites should be identified, the following reports are suggested:
 - ◆ Quarterly Progress Report.
 - ◆ Annual Report.

- ◆ Activity Feedback Report.

8.2.1 Conduct Impact Assessments Inventories by the end of each project and program

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10 Annexes

Annex I. Logical Framework Analysis

Capacity constraints for implementing the UN Convention on Biological Diversity (CBD)

Long-term goal:	Developing the national capacity to implement the three international environmental conventions on Biological Diversity Conservation, Climate Change and Combating Desertification.
Project objective:	Development of a national action plan for capacity development in implementing the Convention on Biological Diversity (CBD) in harmony with the other Conventions.

1- Weak coordination mechanism(s) among stakeholders.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 1: Develop sustainable coordination mechanisms among related institutions to implement CBD.	Stakeholders participated effectively in the implementation of the CBD	Documents of mechanisms developed (thematic groups and steering committees). Information flow among different stakeholder institutions and projects possible and easy.	Willingness of the stakeholders to coordinate and cooperate in this issue.
Output 2.1 Sustainable coordination mechanisms are identified and tested by both parties.	Number of mechanisms identified and tested.	List of the coordination mechanisms.	Availability of expertise in stakeholder institutions.
Output 2.2. Effective mechanisms are adopted and implemented	Number of mechanisms adopted.	Adapted and implemented mechanisms document	Commitment of the stakeholder institutions to adopt the coordination mechanisms.

2- Coordination mechanisms between national and international agencies are not available.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 2: Adapting sustainable and effective mechanisms to facilitate communication between national and international agencies to implement CBD.	Communication between national and international agencies is easy and effective.	Coordination mechanisms utilized efficiently by both parties.	Willingness of both parties to use sustainable and efficient coordination mechanisms.
Output 2.1 Sustainable coordination mechanisms are identified and tested by both parties.	Number of mechanisms identified and tested.	List of the coordination mechanisms.	Availability of expertise to identify and test new and efficient mechanisms
Output 2.2. Effective mechanisms are adopted and implemented	Number of mechanisms adopted by both parties.	Adapted and implemented mechanisms document	Willingness of both parties to change to new coordination mechanisms

3-Weak institutional and legislative framework of regulating accesses to genetic resources and benefits sharing.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 3. Develop and establish legal framework for regulating access to genetic resources and benefits sharing.	Genetic resources and benefits sharing framework produced.	Regulatory framework in place.	The willingness of the government agencies to regulate access and benefit sharing.
Output 3.1 Existing policy and legislations related to genetic resources management reviewed and legal gaps determined.	Number of policies and legislations reviewed. No. of gaps identified.	Review reports. List of legal gaps	Availability of expertise.
Output 3.2 Identify and test policy and legislation options in participatory approach.	Number of policy and legislation options identified. Number of institutions and/or experts participated in the testing process.	List of policy options identified. Number of workshops conducted. Draft regulations for access to genetic resources.	Willingness of the stakeholder institutions to participate in the testing of options.
Output 3.2 Legislation on regulation of access to genetic resources and benefits sharing adopted by stakeholders and ready for implementation	Draft of the law on regulations of access to genetic resources and benefits sharing prepared and ready for implementation.	The document of the law drafted.	Commitment of the related stakeholder institutions to adopt the law

4- Lack of national directives for biodiversity impact assessment.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 4: Development of the specific and detailed national directives for Biodiversity Impact Assessment (BIA)	BIA directives are identified and implemented	BIA directives draft.	Existing of national law for EIA. Willingness of the stakeholder institutions to implement the EIA study for all projects and inventories.
Output 4.1 Biodiversity directives are identified and verified by all stakeholders.	Number of Biodiversity directives identified. Number of institutions participates.	Biodiversity directives document.	Availability of expertise in related institutions to develop the directives.
Output 4.2 A training programme for Biodiversity directives in EIA is established and operational	Training programme developed and functional	Training programme manuals.	Willingness of the stakeholder institutions to participate in the training. Willingness to implement the developed directives.

5. Well trained experts in biodiversity is lacking (Low number of the specialized cadre in biodiversity).

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 5: Training program for biodiversity	National experts for implementing the	List of the name of qualified experts	Commitment of the stakeholder

issues established.	CBD available.	available in the national database.	institutions to participate in training.
Output 5.1 The training needs of the stakeholder institutions assessed and gaps identified. .	Number of training areas identified.	Report on the training gaps and areas.	Willingness of the stakeholder institutions to participate.
Output 5.2. Training plan suggested through the active participation of all stakeholder institutions.	Number. of training programs suggested by stakeholders.	List of the training programs.	Commitment of the related institutions to support the plan.
Output 5.3. Training plan promoted and implemented by related institutions.	Number of training programs started.	Training materials.	The availability of the training expertise and funds.

6-Weak integration of the UN Convention on Biodiversity Conservation main concept in the national policy formulation process.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 6: The CBD main concepts integrated in the national policy formulation process	The CBD concepts are integrated in the national policy.	Report on strategies and policies integrated CBD main concepts	The willingness and commitment of decision makers to cooperate in this issue.
Output 6. 1: Promoting the integration of CBD concepts in Sectoral policies.	<ul style="list-style-type: none"> Number of strategies and policies modified to incorporate the CBD main concepts 	Feedback report on workshops conducted for policy makers	The willingness of stakeholders to address climate change adaptation and mitigation measure in their future plans
Output 6.2: Development of regulatory framework to implement future climate change options, including incentives restrictions and involve decision-makers from relevant sectors	<ul style="list-style-type: none"> Number of workshops for policy makers and implementers Develop a regulatory framework to implement future climate change options Number of Guidelines Number of workshops Number of policies integrating climate change issues Number of policies integrated climate change issues 	<ul style="list-style-type: none"> Regulatory framework to implement future climate change options document climate change and CBD concepts integrated in all relevant policies and strategies Policy and action plans for climate change put in place Awareness programme climate change and CBD Conducted law document regulatory framework report progress report of policies integrated climate change issues 	Strong cooperation between different institutions involved in climate change issues.

7- Lack of clear national policies for regional and international technology transfer, and weak linkages between scientific research and policymaking.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 7.1. Developing and maintaining regional and international partnerships for the technology and knowledge transfer.	The partnership with the regional and international institutions working in the field of the biodiversity technologies functional.	Multi and bi-lateral agreements documents	Willingness and commitment of both parties.
Output 7.1.1 Regional and international network for technology transfer Established.	Number of networks established.	Signed document of the partnership agreements.	Willingness of the regional and international institutions to join the network.
7.1.2 A comprehensive inventory of available new technologies related to CBD.	List of the new technologies in the CBD related issues.	Technology inventory Documents.	Ability to investigate available technology.
Output 7.1.3 New technologies tested and adopted.	Number of new technologies tested. No. of transferred technologies adopted	Report on the technologies adopted.	Ability of the national agencies to test and promote the transfer technology.
Outcome 7.2 Develop efficient and sustainable mechanisms for linkage between scientific research and policy making	Results of scientific research used in development planning	Systematic integration of the biodiversity research results in development planning	Willingness of the research institutions and policy making institutions to cooperate in

			implementing the CBD.
Output 7.2.1 A sustainable mechanism for linking scientific research and development policy established	The mechanisms established and accepted by stakeholder institutions.	List of possible linkages mechanisms.	Commitment of both Parties to coordinate and cooperate.
Output 7.2.2 An accessible database research on CBD related areas initiated and updated regularly.	Comprehensive database for scientific research established and accessible.	Database manuals	Data and funding available.

8- Weak participation of local communities in the projects.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 8: Increased local communities capacity to implement CBD	Local community capacity improved.	Impact survey report.	Willingness of local community to participate in CBD implementation.
Output 8.1. Community-based training packages and programmes developed.	Number of community-based training programmes conducted. Number of best practices adopted.	List of community-based programmes. Document of action plan.	Commitment of the local community to participate in the program.
Output 8.2. Local community institutions upgraded or created.	Number of local community institutions involved or created.	Local community organizations and networks charts.	Willingness of the local community to established new

			institutions.
Output 8.3. Traditional knowledge and know-how protected and integrated with the development plans in target areas.	Number of surveys conducted to document traditional knowledge.	Document included the traditional knowledge and know – how related to CBD that can be integrated.	Commitment of the local community to participate in this activity.

9- Lack of institutional processes for assessing the impacts of development projects on biodiversity, and lack of economic incentives and valuation of biodiversity.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 9: Development of Environmental Impact Assessment (EIA) system to assess the impact of projects and inventories.	The EIA system established and enforced by the governmental institutions.	EIA documents regulatory	Existing of national law that mandate the use of EIA system.
Output 9.1 Environmental degradation indicators developed and adopted by stakeholders.	Number of indicators adopted by stakeholders.	List of indicators.	Availability of the expertise to develop the indicators.
Output 9.2 A training programme on EIA studies conducted.	Number of training workshops. Number of participants	Training manual and program.	Willingness of the stakeholder institutions to participate in the training.
Output 9.3 EIA legislation drafted and adopted by stakeholders.	EIA legislation developed and adopted.	Draft legislation ready for enforcement.	Commitment of the government to enforce the law.

10- Slow mobilization of financial resources available for implementing the national strategy of biodiversity.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 10 Strengthening the capacity of national institutions to mobilize resources for implementing CBD.	The capacity for resources mobilization of different stakeholders has been improved (build).	The document of resources mobilization strategy.	The willingness of stakeholders to apply the resource mobilization strategy.
Output 10.1 Potential and available resource mobilization tools for biodiversity reviewed.	Number of potential and available resources mobilization tools.	List of potential and available resources mobilization tools.	
Output 10.2 A system for partnership for resource mobilization developed	Number of resource mobilization programs developed and adopted.	Document of partnership agreements.	
Output 10.3 Training programme on resource mobilization is developed	Number of training courses on resource mobilization conducted.	Training materials	Willingness of government and related organizations to implement fundraising training program.
Output 10.4 Sustainable resource mobilization strategy implemented.	Number. of projects following the strategy. Number of institution adopts the strategy.	Fundraising strategy report produced	Commitment of the stakeholder institutions to implement the strategy.

11- Non-sustainable long term programs for awareness and education on the new concepts of biodiversity.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 11: Develop long-term awareness programs in Biodiversity management based on new CBD concepts.	The concerned parties' awareness Improved.	Impact survey.	Willingness and commitment of stakeholders to participate
Output 11.1 Identification of new CBD concepts to be promoted by the education and awareness program.	Number of CBD concepts identified.	List of the CBD concepts.	Availability of expertise
Output 11.2 Survey of current education/awareness program and identifying gaps	Number. of Gaps identified.	List of gaps identified.	Availability of expertise
Output 11.3 Education/awareness programs developed and accepted by stakeholders.	Number of education/awareness programs accepted by stakeholders.	The program document.	Willingness of the stakeholders to implement the programs.
Output 11.4 Education/awareness program tools produced	Number of tools tested and adopted.	Awareness toolboxes to include brochures, CDs, etc.	Fund and experts availability.

Capacity constraints for implementing the UN Convention on Combating Desertification

Long-term goal:	Developing the national capacity to implement the three international environmental conventions on Conserving Biological Diversity, Climate Change and Combating Desertification.
Project objective:	Development of a national action plan for capacity development for implementing the UN Convention on Combating Desertification in harmony with the other Conventions.

1. Develop a national land use policy.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 1: Develop sustainable land use plan.	Land use plan ready and accepted by all stakeholders.	Draft of land use document and maps.	The willingness of the government to implement the sustainable land use plan.
Output 1.1 Participatory and ecosystem approach incorporated in land use planning.	Number of institutions participated in the land use planning.	Issue and launch of land use law	The commitment of the stakeholder institutions to support the action plan.
Output 1.2. Legislation options to support the land use plan proposed.	Number of legislation options proposed for land use.	Legislation option document draft.	The willingness of the stakeholder institutions to support land use plan
Output 1.3. Legislation related to land use options are tested and accepted by stakeholders.	Number of legislation options tested.	Report on the options.	The availability of the expertise.

Output 1.4. Legislation options promoted and adopted.	Number of legislation options promoted and adopted.	Report	The commitment of stakeholder institutions to adopt and enforce the legislation.
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2. Consider desertification control a national development priority and allocate financial resources needed.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 2: consider combating desertification as priority in development plans	Combating desertification considered as priority in development plans	Developed plans document.	Willingness of stakeholders to consider combating desertification as a national priority.
Output 2.1 Combating desertification promoted as priority in development plans.	Number of workshops conducted about this issue. No. of stakeholders attending.	Feed back report. Awareness materials	Willingness of the stakeholders to participate in the workshops.
Output 2.1 Combating desertification included into the development plan as priority.	Number of development plans includes combating desertification.	List of development plans including CD as priority.	Commitment of the stakeholder institutions to implement the plans with CD as priority.
Outcome 2.1 Developed sustainable mechanism to mobilize financial resources.		The document of resources mobilization strategy.	The willingness of stakeholders to apply the resource mobilization strategy.
Output 2.1.1 Potential and available resource mobilization tools for desertification	Number of potential and available resources mobilization tools.	List of potential and available resources mobilization	

control reviewed.		tools.	
Output 2.1.2 Training program on resource mobilization is developed	Number of training courses on resource mobilization conducted.	Training materials	Willingness of government and related organizations to implement fundraising training program
Output 2.1.3 Sustainable resource mobilization strategy implemented.	Number of projects following the strategy. Number of institutions adopt the strategy	Fund raising strategy report produced.	Commitment of the stakeholder institutions to implement the strategy

3- Develop sustainable management for water resources.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 3: Develop a sustainable water resources management plan.	Water resources managed improved and its management plan sustained.	Management plan accepted and implemented by stakeholder institutions	Commitment of the stakeholder institutions to implement and sustain the management plan.
Output 3.1. Current status of water resources assessed.	Number of water resources assessed	Report on the status of the water resources available.	Willingness and availability of expertise.
Output 3.2. Sustainable management plan developed and promoted.	Management plan accepted by stakeholders.	Management plan document.	The availability of experts.
Output 3.3 Stakeholder institution staff trained on the management plan implementation..	Number of training workshops conducted. Number of staff participates.	Training materials. Feed back reports.	The active participation of the stakeholder institutions staff.

4- Develop guidelines for the rehabilitations of degraded land.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 4: Develop guidelines for the rehabilitation of degraded land.	Rehabilitation guidelines accepted and adopted.	The report included the guidelines and their use.	Commitment of the stakeholder institutions to develop the guidelines and adopted them in their studies.
Output 4.1 Guidelines for the rehabilitation of degraded land are identified and verified by all stakeholders.	Number of guidelines identified. No. of institutions participate.	List of the guidelines. Feed back report.	Willingness of the stakeholder institutions to participate effectively. Availability of expertise in related institutions to develop the directives.
Output 4.2 A training program on the use of guidelines conducted.	Number of training workshops and participants.	Training program manuals	Willingness of the stakeholder institutions to participate in the training.

5- Strengthening linkages between scientific research and policy making.

Outcome 5: Establish strong and sustainable link between scientific research and policy making.	Link mechanisms between research and policy making are developed and accepted by both sides	A document of proposed and adopted linkage mechanisms	Willingness of both parties to cooperate. Commitment of both to exchange information.
Output 5.1. Scientific research related to desertification and land degradation enhanced.	Number of research projects related to desertification implemented. Number of published articles on desertification issues. Increased outputs in project areas.	List of researches related. List of the published articles in this area.	Availability of funds.

Output 5.2. Specialized staff and research centres developed.	Number of qualified personnel, research centres and institutions involved in combating desertification.	Names and CV's are in the database.	Availability of funds.
Output 5.3 Coordination mechanisms between policy and research stakeholders developed.	Number of mechanisms linking research to policy making.	Report including the linkage mechanisms.	The commitment of the government institutions and the scientific research institutions to adopt the linkages mechanisms.
Output 5.4 Mechanisms are evaluated and adopted.	Number mechanisms adopted.		

6- Develop educational and training programs on sustainable land management and desertification control for all levels.

Outcome 6: Educational and public awareness programs are implemented.	Public awareness. and education packages developed and implemented by stakeholders	Extension and public awareness programmes documents Feed back survey.	Qualified personnel and expertise at governmental and educational institutions.
Output 6.1. Local community participation in sustainable land management enhanced.	Number of workshops, field-days, mass-media programmes and meetings implemented.	Number of workshops and number of participants.	Local community are willing to participate.
Output 6.2. Public awareness packages and programmes on	Number of packages and programmes implemented by stakeholders.	Public awareness packages and materials.	External financial resources available

sustainable land management developed			
Output 6.3 Desertification concepts introduced into school and universities programs and curriculum.	Number of books that include desertification concepts	The curriculum guide document.	The concepts of desertification to be introduced accepted by stakeholders.

7- Identify the role and responsibilities of stakeholders working on desertification control and develop coordination mechanisms among them.

Outcome 7: Develop Harmonization and coordination mechanisms among stakeholders in combat desertification.	Coordination mechanisms sustainable and efficient among stakeholders involved in combating desertification.	An action plan including mechanisms to coordinate national efforts in combating desertification.	Commitment of all stakeholder institutions to implement the action plan.
Output 7.1. The Roles of institutions defined..	Number of institutions involved	Document including lists of institutions and proposed roles	The stakeholders' willingness to coordinate efforts.
Output 7.2. TOR (mandate) for involved institutions developed.	Number of institutions have identified TOR	TOR document accepted by stakeholders.	The different institutions and NGO's are committed to cooperate.
Output 7.3. Staff of the involved institutions	Number of training programmes on	Training materials	Staff recruited and ready for training.

trained and qualified.	combating desertification	Workshops feed back reports	
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8- Develop a national indicator system to monitor desertification, drought and to management knowledge.

Outcome 8: Development of the specific and detailed national indicators for desertification Impact Assessment (DIA)	DIA indicators are identified and implemented	Document for EIA indicators on desertification management accepted by stakeholders.	Existing of national law for EIA. Willingness of the stakeholder institutions to implement the EIA study for all projects and inventories.
Output 8.1 Desertification indicators are identified and verified by all stakeholders.	Number of desertification indicators identified and verified.	Desertification management indicators document.	Availability of expertise in related institutions to develop the indicators
Output 8.2 A training programme for Desertification indicators in EIA is established and operational	Training programme developed and functional..	Training programme manuals	Willingness of the stakeholder institutions to participate in the training.

9- Strengthen capacity for outreach and networking with regional and global organizations and programs.

Outcome 9: Strengthening regional capacity and networking to combat desertification.	Means for regional capacity building and networking are available and accepted by all countries.	Action plan document for regional capacity building and networking.	Strong political commitment and influence to support the regional cooperation action plan.
Output 9.1 Operational	Number of regional and	Document of	Qualified staff and

procedures and time frame for networking at all levels developed.	international networks and thematic groups identified.	proposed and adopted procedures and networking accepted by all stakeholders.	strong capacity for networking.
Output 9.2. Term of reference (TOR) and duties for thematic groups and networks developed.	Number of regional and global networks and thematic groups and have TOR.	TOR and duties report	Willing of regional and global stakeholders to cooperate and coordinate efforts.

10. Empowerment local communities to develop sustainable livelihood and document traditional knowledge in the fields of Desertification Control.

Outcome 10: Improve the capacity of local communities to combat desertification.	The capacity of local communities in the affected areas increased.	Impact survey report	Willingness of local community institutions to cooperation.
Output 10.1. Local community institutions upgraded and/or created.	Number of local community institutions involved.	Report on local community organizations and networks available.	Commitment of the local community to attained the upgrading programs.
Output 10.2. Community-based training packages and programmes developed.	Number of community-based training programmes developed.	Training materials.	Availability of training materials and capable trainers.
Output 10.3 Local community training on subject related	Number of training courses conducted.	Feed back reports.	Commitment of the local community to participate actively in

conducted.			the training programs.
Output 10.4. Traditional knowledge and know-how protected and integrated with the development plans in target areas.	Number of surveys conducted to document traditional knowledge	Document included the traditional and know – how in the target areas.	Availability of experts and fund.

11- Develop systems for economic valuation of the costs of land degradation.

Outcome 11: Creating economic valuation system for land degradation.	The economic valuation system developed and adopted by stakeholder institutions.	Document that describe the system and the needed studies.	Available and accessible others' database
Output 11.1 National database and monitoring system on land degradation established.	Data base availability and accessibility.	Data base manuals.	Availability of fund and data base experts for continuous updating
Output 11.2. Economic valuation training programs conducted for stakeholder institutions staff.	Number of training programmes created. Number of institutions participated.	Feed back report.	Availability of technical capacity within the stakeholder institutions

12. Develop an institutional mechanism to evaluate the impacts of regional and international economic and agriculture agreements on land management.

Outcome 12: Developed mechanism to benefit from implementing the desertification convention.	Mechanisms are available and accepted by stakeholders. Number of activities	Document included the impact evaluation mechanisms.	Enough political understanding and commitment to support the proposed mechanisms.
Output 12.1. Agreements reviewed to understand their impact.	List of the benefits and obligations of the agreements reviewed.	Feed back report on the benefits and obligations	The ratification of the agreements. The availability of experts.
Output 12.2. Institutional mechanism to evaluate the impacts of regional and international economic and agriculture agreements on land management developed	Mechanisms tested and accepted by stakeholder institutions.	List of mechanisms developed and adopted	Availability of qualified staff, expertise and personnel at stakeholder institutions
Output 12.3 Awareness among decision makers increased on the economic and agricultural impact of the agreements.	Number of staff involved in the program Number of awareness programs conducted.		Availability of public awareness materials

13- Strengthen the concept of the "ecosystem approach" in national policies and programs to combat desertification.

Project Strategy	Indicator	Sources of verification	Assumptions
Outcome 13: Strengthen the concept of the "ecosystem	The national policies and programs to combat desertification	The policy and programs documents.	The acceptance of the stakeholder institution to use this approach.

approach" in national policies and programs to combat desertification.	conducted according to the "ecosystem approach" concept.		
Output 13.1 Review the literature about the approach and its requirements.	Information about the approach available	Documents that have all available information.	The information about the approach accessible.
Output 13.2 Training courses on the ecosystem approach conducted for related staff	Number of courses conducted. Number of staff trained	Feed back reports.	Availability of training materials and found.

Annex II. NCSA Accomplishments

Self Assessment of National Capacity Building Needs in Syria to Manage Global Environmental Issues (NCSA/ SYR/05/12)

Objectives

The main objectives of the NCSA are to assist the Syrian Government and the national stakeholders to assess capacity-building needs, identify major constraints and priority areas, and develop a Strategy and Action Plan for global management of environmental issues.

Outcome

Sustainable management of environment and natural resource incorporated into poverty reduction Strategies/key national development frameworks and sector Strategies.

The Principle Activities/Results

1. Project launching and management
2. Stakeholder analysis determining roles, and responsibilities in the NCSA process.
3. Analysis of cross cutting issues and synergies, an identification of options for capacity development, and in depth analysis of priority options.
4. National assessment report setting out critical capacity development constraints and NCSA Strategy and Action Plan to meet prioritized capacity needs.

NCSA Accomplishments

1. Project Management Unit established and functioning.
2. Stakeholders and their roles and activities have been identified through Thematic Working Groups, Consultative Workshops and computer search of documents available at Al Assad Library and the National documentation Center.
3. Major constraints and thematic priorities for capacity building have been identified for each of the three UN Conventions through 6 Provincial Consultative Workshops, and a National Workshop.
4. Cross cuttings among the three UN Conventions have been identified through Technical Support Groups.
5. The followings have been published (CD Rom):
 - Analysis of Stakeholders' activities on the UN Conventions on Conserving Biological Diversity, Combating Desertification and Climate Change (conducted by National consultants).
 - The results of the Thematic Working Groups.
 - The results of through 6 Provincial Consultative Workshops.
 - The results of the National Workshop on major constraints and thematic priorities for capacity building in each of the 3 UN Conventions.

Broad Assessment of Stakeholders' Activities on Biodiversity (conducted by a national consultant).

Broad Assessment of Stakeholders' Activities on Desertification Control (conducted by a national consultant).

Broad Assessment of Stakeholders' Activities on Climate Change (conducted by a national consultant).

Synergies among the Rio Conventions and Priority Areas for National Capacity Building for Implementation in Syria.

NCSA Strategy and Action Plan.

6. Published materials are distributed to all stakeholders, the Governors, and to the participants in workshops and Thematic Working Groups.
7. All results are available from the web site of NCSA (www.ncsa.undpprojects.sy) and/or that of GCEC (www.mlae-sy.org).
8. Awareness has been increased at all levels.

Workshops and Thematic Meetings

A- Consultative Provincial Workshops

The main objectives of the provincial consultative workshops were: (1) to discuss stakeholders activities in implementing the three UN Conventions of Biodiversity, Combating Desertification and Climate Change; (2) identify major constraints of implementation; (3) identify priority areas for capacity building; (4) provide awareness about environmental issues; and (5) gain future support of the officials at the provincial level for the outcome of NCSA (the Strategy and work plan).

Six Consultative Provincial Workshops were held in the Middle Area (Hama 15 August 2006), Coastal Area (Lattakia 17 August), Northern Area (Aleppo 23 August) Southern Area (Sweda 18 September) and Eastern Area (Hasakeh 23 November and Der El Zor November 29, 2006).

B- National Workshops

- 1- The National Workshop on Identification of Major Constraints and Priority Capacity Building Needs for implementing the UN Conventions on Biodiversity, Desertification Control and Climate Change(Damascus, 17 January 2007).
- 2- The National Workshop on Synergies among the Rio Conventions and Priority Areas for National Capacity Building in Syria (Tartous, 14 August 2007).
- 3- The National Workshop on Strategy and Action Plan for National Capacity Building for Implementation of the UN Conventions on Biodiversity, Desertification Control and Climate Change and their Synergies in Syria (Damascus 24 October 2007).

C- Thematic Working Groups

The Thematic Working Groups consist of senior technical-level expertise from various stakeholders in each thematic area, and provincial and local-level stakeholders. The TWG's help in preparing thematic assessments and in providing input into the overall capacity needs assessment under the NCSA. The following meetings were held:

- 1- The Thematic Working Group for Biodiversity (Knetra 29 June 2006).
- 2- The Thematic Working Group for Desertification Control (Damascus, 2 July 2006).
- 3- The Thematic Working Group for Climate Change (Damascus, 19 July 2006).

D- Technical Support Groups

- 1- The Technical Support Group for Climate Change (Sednaya 27 June 2007).
- 2- The Technical Support Group for Desertification Control (Knetra 2 July 2007).
- 3- The Technical Support Group for Convention of Biological Diversity (Jabal Al Shikh 23 July 2007).
- 4- The Technical Support Group for NCSA Strategy and Action Plan Damascus 6, 19 and 25 September, and 17 October 2007).

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Reference: MLEA, UNDP and GEF. 2007. NCSA Strategy and Action Plan for Capacity Building to Implement the UN Conventions on Conserving Biological Diversity, Combating Desertification and Climate Change and Their Synergies in Syria .The Ministry of Local Administration and Environment, the United Nations Development Program and the Global Environmental Fund. Self-Assessment of National Capacity Building Needs in Syria to Manage Global Environmental Issues (NCSA). October 2007. Damascus, Syria.