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اللجنة الشعبية العامة للصحة والبيئة  
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مشروع التقييم الذاتي للقدرات الوطنية في مجال الاتفاقيات الدولية

**Final Report for Synergies among the Three Conventions**  
{Convention of Biological Diversity (CBD), United Nations Framework Convention  
on Climate Change (UNFCCC), and United Nations Convention to Combat  
Desertification (UNCCD)}

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## ***Background and Terms of Use***

*This document has been prepared by International consultant for the project: **Self-Assessment of National Capacity in Libya for Global Environmental Management (NCSA)** which implemented by The Environment General Authority (EGA), funded by the Global Environmental Facility (GEF) and administered by the UNDP Libya Country Office. The NCSA is a GEF initiative that aims to assess the capacity constraints, and the potential for implementing the three International Environmental Conventions on Biodiversity, Climate change and Desertification. The previous phase of the project resulted in the development of three individual (Climate Change, Biodiversity and Desertification) national action plans for capacity building for the implementation of the three conventions. The report describes the capacity development requirements and needs for the three conventions and the cross-cutting issues. It also provides an overview of capacity constraints of the three conventions, the action plans of these conventions and the action plan of the synergies (cross-cutting) issues which developed by the consultant. The information contained in this document has been compiled through a desk survey based on the three reports developed in the previous phase. This document will be used as a guideline reference for NCSA final report development. It has been reviewed by the NCSA focal point within EGA, CO Program Analyst and national stakeholders.*

Contact us at:

Self-Assessment of National Capacity in Libya for Global Environmental Management  
(NCSA)

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## Abbreviations and Acronyms:

CBD: Convention on Biological Diversity  
CBO: Community based organization  
CDI: Capacity Development Initiative  
CDM: Clean Development Mechanism  
CIC: Conventions Implementation Committee  
CST: Committee for Science & Technology  
DNA: Designated National Authority  
EIA: Environmental Impact Assessment  
GEF: Global Environment Facility  
GEF CB 2: GEF Cross-cutting capacity Building Project  
HCC: Higher Coordination Committee  
KM: Knowledge Management  
NCCC: National Committee on Climate Change  
NCSA: National capacity Self Assessment for Global Environmental Management  
NGO: Non-governmental organization  
PDD: Project Design Document  
SAC: Scientific Advisory Committee  
SEA: Strategic Environmental Assessment  
TCC: Thematic Coordination Committee  
ToR: Terms of Reference  
UNCCD: United Nations Convention to Combat Desertification  
UNDP: United Nations Development Programme  
UNFCCC: United Nations Framework Convention on Climate Change

Note: To be finalize after receiving the comments

Section I.  
Project and mission  
description

Draft

## **1.1 Brief description of Project**

The Environment General Authority (EGA) is implementing the National Capacity Self Assessment for the Global Environmental Project (NCSA), funded by the Global Environmental Facility (GEF) and administered by the UNDP Libya Country Office. The NCSA is a GEF initiative that aims to assess the capacity constraints, and the potential for implementing the three International Environmental Conventions on Biodiversity, Climate change and Desertification. The previous phase of the project resulted in the development of three individual (Climate Change, Biodiversity and Desertification) national action plans for capacity building for the implementation of the three conventions.

The main objective of the NCSA process is to identify and assess the critical capacity limitations and constraints and the priority of capacity required to address global environmental management. The principal outputs of the project will be:

- A stocktaking exercise of previous and ongoing activities related to capacity development, and a general overview-inventory of capacity development needs and an identification of priority constraints;
- A stakeholder analysis determining roles and responsibilities in the NCSA process;
- A description/inventory and an analysis of cross cutting issues and synergies, an identification of options for capacity development, and in depth analysis of priority options;
- A national assessment report setting out critical capacity development constraints and NCSA plan of action to meet prioritized capacity needs;
- A mechanism for monitoring and evaluating progress made by the Government of Libya to meet capacity development needs.

## **1.2 Description of the mission**

### **Mission Objective**

In consultation with the Co-program Analyst and the project's designated focal point within EGA, the consultant will facilitate the delivery of a final report on the National Capacity Self Assessment for the Global Environmental Project, which will take the form

of a single compilation of the three existing national action plans on Climate Change, Biodiversity and Desertification.

The final report is to be prepared for a national launch at the NCSA Workshop, being held in Tripoli, Libya

### **Mission Tasks and Responsibilities**

The consultant's responsibilities will include:

- Desktop review of the three capacity building individual national action plans on Climate Change, Biodiversity and Desertification prepared under the first phase of the existing project
- Conduct consultations with UNDP Libya Program Analyst, NCSA Project Focal Point, and relevant stakeholders as necessary
- Compilation of aforementioned National Action Plans into a single synergized report.
- Provide support to UNDP Libya Program Analyst in terms of technical inputs into matters pertaining to the NCSA project
- Provide support to UNDP Libya Program Analyst in terms of elaboration of a legal or working document pertaining to the NCSA project

### **Mission Outputs/Deliverables**

A comprehensive synergized report National Capacity Self Assessment for the Global Environmental Project.

## Section II.

Capacity Development needs  
in the three conventions and  
the cross-cutting issues.

## **2.1 Capacity needs in the three conventions and the cross-cutting issues.**

This section includes, the capacity development requirements for the three International Environmental Conventions on Biodiversity, Climate change and Desertification and the cross-cutting issues. Also it includes national capacities needed for the implementation of the three conventions and a number of general capacity-building tools and interventions that are available to help maximize synergy among the three conventions.

### **2.1.1 Capacity-building needs and priorities for CBD**

The major obligations and requirements of the CBD that are directly linked to capacity development issues are:

#### **2.1.1.1 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. It has been emphasized and developed within the framework of the

#### **2.1.1. 2 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).

#### **2.1.1.3 Driving Production and Use of Biodiversity Indicators.**

There is high consensus on the importance of information for assessment and decision-making on conservation and sustainable biodiversity 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.

#### **2.1.1.4 Strengthening Research Capacity and Technological Development.**

Establish the need to promote and increase research and technological development to contribute to conservation and sustainable biodiversity use has been stressed in several articles of the CBD. 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 means, so that countries that provide genetic resources, in particular developing countries can participate in it and get technology from the developed countries.

#### **2.1.1.5 Strengthening 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, including 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.

#### **2.1.1.6 Developing Strategies, Plans and Education Programs on Conservation and Sustainable Biodiversity Use.**

The economies of most developing countries are dependent on natural resources including biodiversity resources. The sustainable use of biodiversity components and resources remains to be the greatest challenge for developing county policies and strategies.

#### **2.1.1.7 Strengthening Protected Areas Systems.**

In situ conservation is one of the modalities considered in the CBD., Protected areas have an essential role within this modality. Therefore a national protected areas system should be developed to manage these areas in a proper way that insures the sustainable conservation of biodiversity and its use.

#### **2.1.1.8 Developing Mechanisms for Genetic Resources Access.**

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 CBD and in the agreement on Intellectual Property Rights for Trade (TRIPs) and in the case of ex situ collections acquired before the CBD and that are not being regulated by the FAO's Commission on Genetic Resources for Agriculture and Nutrition.

### **2.1.2 Capacity-building needs and priorities for UNCCD**

The major obligations and requirements of the UNCCD that are directly linked to capacity development issues are:

#### **2.1.2.1 Education and public awareness.**

To implement the UNCCD education programs should be developed in combating desertification and rehabilitation of degraded natural habitat and ecosystems. In addition to that public awareness about the consequences of desertification and mechanisms and actions needed to combat this Desertification.

#### **2.1.2.2 Transfer, acquisition, adaptation and development of environmentally sound, economically viable and socially acceptable technology.**

Technologies for combating Desertification and rehabilitation of degraded natural habitats are used in developed countries and most of these technologies are useful to the developing countries and can help in solving a lot of their problems in combating desertification. A national strategy should be developed to transfer and adopt these technologies.

#### **2.1.2.3 Training and technology regarding the use of alternative, renewable energy sources (aimed particularly at reducing dependence on wood for fuel).**

All parties recognize the importance of utilizing the alternative and renewable energy sources as an alternative of using wood in heat and cooking in desert areas. Each country should have a strategy to promote the use of these alternative resources in order to reduce the pressure on natural resources.

#### **2.1.2.4 Promotion of alternative livelihoods, including training in new skills.**

To alleviate putting pressure on the fragile system on the rangeland ecosystems, alternative livelihood systems have to be promoted and local community should be trained to utilize such techniques.

#### **2.1.2.5 Training of decision-makers, managers and personnel responsible for collection and analysis of data for disseminating and using early warning information on drought conditions, water resources and for food production.**

Knowledge management is considered as one of the challenging constraints facing the developing countries in implementing the UNCCD, therefore each country should develop a sustainable knowledge management system that provides decision-makers and managers with the information needed to take decisions concerning the desertification and drought.

#### **2.1.2.6 Sustainable Information collection, analysis and exchange system need to be developed.**

UNCCD relevant short-term and long-term data and information to ensure systematic observation of land degradation in affected areas and to better understand and assess the processes and effects of drought and desertification is needed to be established at the national level.

#### **2.1.2.7 Effective early warning and advance planning for periods of adverse climatic variation.**

Climate change impact on the natural habitats leads to long term drought and loss of biodiversity. Each party should develop an effective early warning and advance planning system to mitigate and reduce the climate change impact on the natural habitat systems.

#### **2.1.2.8 Research and development.**

Strategy for increasing research and development of new technologies to combat desertification and adaptation to drought is an obligation that all parties should develop to meet the national obligations of the UNCCD.

#### **2.1.2.9 Technical and scientific co-operation in the fields of combating desertification and mitigating the effects of drought.**

Coordination and cooperation mechanisms among the national, sub-regional and international institutions should be developed to combat desertification and mitigate drought effects.

#### **2.1.2.10 Joint research programs.**

Public and private sector institutions should be involved in research and development related to combating desertification and mitigation of drought effects. Joint research

groups should be formed from public and private institutions for the development of improved, affordable, accessible and sustainable technologies to achieve this goal..

#### **2.1.2.11 Empowerment and participation of civil societies, non-governmental organizations and community based organizations and those directly affected by desertification.**

Local community participation in the efforts to combat desertification is one of the sustainable measures that will ensure long term implementation of the developed plans and technologies. Each Country should have a plan for local community, NGO's and civil society organizations empowerment and participation in all efforts for combating desertification.

### **2.1.3 Capacity-building needs and priorities for UNCCC**

The major obligations and requirements of the UNCCC that are directly linked to capacity development issues are coming under three levels; system level, institutional level and the individual level.

#### **2.1.3.1 At the systemic level the following capacity building needs and priorities are required from each country.**

- Strengthening of policy framework (conflicting mandates, functions of responsible agencies).
- Mainstreaming climate change into countries' environmental programming in all sectors.
- Need for stronger political commitment.
- Need for long-term financial resources for climate change activities.
- Information about benefits from the implementation of the UNFCCC at all levels.
- Enhancing capacity for policy formulation, planning and integration of climate change
- A regional clearing house for information-sharing and networking on climate change
- Government institutions need to consolidate priorities between departments to place climate change as a priority in their sustainable development plans.
- Participation of key stakeholders, such as public and private sector, non-governmental organizations, academia and scientific and technical personnel, as well as local communities.
- Capacity to enforce policy instruments at the national level;
- Raising public awareness, incorporating climate change into national education systems.
- Establishment of regional centers of excellence.

#### **2.1.3.2 At the institutional level the capacity requirements were:**

- Need for country-specific secretariats or climate change departments with enough human resources and political power, and well-defined functions in climate change.

- Need to strengthen the management and administrative institutional capacity for the collection of data for further research in local emission factors for national GHG inventories, management and operation of national GHG inventory systems, establishment of research centers, database development, and development and implementation of adaptation strategies and plans.
- Institutional capacity enhancement in preparation of projects and programs; better data collection and monitoring; establishing and upgrading stations for systematic observation.
- Further technical and financial support for inventory preparation, climate change impact assessment and adaptation, institutional strengthening, and disaster mitigation.

#### **2.1.3.3 The capacity requirements at the individual level are:**

- Need for trained personnel in management and operation of national GHG inventory systems, development of climate change scenarios, database development, and development and implementation of adaptation and mitigation responses and strategies.
- Need for improvement of negotiation skills, and an increase in the number of representatives at international meetings to address the main topics discussed.
- Capacity in technology transfer, negotiation and management, specifically referring to the CDM.
- Enhancing the analytical capacity of experts, policy makers and decision makers.
- Need to enhance capacity to prepare projects and programs in the climate change area.
- Need to build capacity of a wide range of stakeholders from governments, non-governmental organizations, private sector, academia, and local communities.

#### **2.1.4 Cross-cutting Capacity Needs:**

A number of capacity needs can be identified that are common to three conventions.

**2.1.4.1 Low levels of awareness and knowledge limit the ability for discussion, decision-making and action.**

**2.1.4.2 Lack of information management, monitoring and observations hampers policy and decision-making.**

**2.1.4.3 Lack of synchronization of national policy, legal and regulatory frame-works leads to confusion between sectors and between national, regional and local levels.**

**2.1.4.4 Incentive systems and market instruments are inadequately developed.**

**2.1.4.5 Institutional mandates either overlap or have gaps, key institutions are not involved, and interactions between institutions are not always effective.**

**2.1.4.6 Science and technology are ineffectively mobilized in support of policy and decision-making.**

**2.1.4.7 Preparation for, skills in participating in, and reporting back on, international negotiations and agreements are weak.**

**2.1.4.8 Coordination, and processes for interaction within the country are poor.**

**2.1.4.9 Cooperation and networking within regions is often lacking.**

**2.4.10 Individuals tend to be ineffectively deployed, mobilized, motivated or given responsibility.**

**2.1.4.11 Institutional effectiveness is hampered by weak management and resource constraints.**

**2.1.4.12 Lack of financial resources and technology.**

## **2.2. National capacities needed for implementing the country-level requirements**

This section included the Capacity requirements needed to implement the synergies among the three Conventions at the country-level and the capacity building interventions available to fulfill each requirement.

### **2.2.1 Human resources:**

Human resources development including the scientific and technical skills at all levels (government, NGO, private sector, and local community) is very important requirement for implementing the three conventions. It is the pr-request for the success of any strategy and plan.

To maximizing synergies among the three Environmental Conventions in the area of human resources, the following Capacity-building interventions are available:

#### **2.2.1.1 Education**

Development or adaptation of existing curriculum at all academic levels of issues addressed by the three conventions (for example, expanded curricula in environment, biology, forestry, climatology, environmental law, policy analysis, and allied fields reflecting requirements under the convention).

Education on global environment issues can promote the development of an increased awareness and understanding of the impact of local deforestation, desertification and drought, land and ecosystem degradation, and climate change on sustainable development.

### **2.2.1.2 Training**

Use of existing national and regional specialized centers (such as regional centers for data management) to provide courses in technical areas relevant to all three conventions to targeted audiences (for example, collection of baseline data on forests that could be used for biodiversity purposes, calculation of carbon sinks, deforestation and desertification patterns and trends).

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. Training in information and data management is urgently needed. Another tool could be joint exchange programs of professionals at the national level (and between nations) on the implementation of activities under the different conventions.

### **2.2.1.3 Public outreach**

While the global and regional impacts of global environmental threats addressed in the Conventions have generally been well studied, much remains to be done to understand and forecast their impacts at the level of the countries, sectors, and communities affected by these threats. This should not be a strictly scientific or bureaucratic process. Scientific studies of impacts are, of course, essential, but the understanding of the likely socio-economic impacts of climate change, biodiversity loss, and desertification requires the active participation of affected stakeholders at the local, sub-national, or national level, and policy-makers in relevant economic sectors. This is a critical first step in formulating and implementing effective responses. Raising awareness of the three conventions at the national and global levels through media, fact sheets, public relations materials, video, radio programming, and other means is essential.

### **2.2.1.4 Community participation**

Involving local authorities and local communities in the planning and implementation of key components of the conventions (for example, in conducting inventories).

## **2.2. 2 Infrastructure development**

The infrastructure required including physical infrastructure, materials and equipment needed to provide an adequate and effective working environment, ensure results, and achieve desired long-term goals 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 (in, for example, data storage) and for cost effectiveness.

To maximizing synergies among the three Environmental Conventions in the area of infrastructure development, the following capacity-building interventions are available:

### **2.2.2.1 Technology Transfer: Technology transfer and cooperation is important to all three conventions.**

The three Environmental Conventions emphasize the importance of technology cooperation and transfer in achieving their respective goals. For climate change, priority areas for technology transfer include those technologies related to energy development and consumption. Energy efficiency and renewable energy technologies are critical if

countries are to avoid or reduce increases in carbon emissions without compromising their ability to meet their energy needs. Methods for preserving “carbon sinks,” such as low impact logging and more effective reforestation and forest management techniques are also needed in many countries. Adaptation technologies are likewise a priority area in climate change. Technologies related to sustainable agriculture, ecosystem protection, and management, sustainable forest management, and the environmentally sound management of genetic resources (from their collection to commercial development) is priorities for combating desertification and biodiversity loss. Many of these technologies are low cost and should be easily shared with the right incentives and mechanisms.

#### **2.2.2.2 Equipment:**

Office, laboratory and field equipment, and supplies (including hardware and user friendly and compatible software, GIS equipment, and vehicles) needed to carry out activities under the conventions.

#### **2.2.2.3 Material:**

The materials needed including maps and collections of soil samples, water samples, and vegetation.

### **2.2.3 Coordination and cooperation**

The coordination and cooperation among the different institutions involved in the implementation of the three Environmental conventions will increase the efficiency of the process and maximize the utilization of resources.

To maximizing synergies among the three Environmental Conventions in the area of Coordination and cooperation, the following Capacity-building interventions are available:

#### **2.2.3.1 Implementing bodies:**

Encourage governments to establish multidisciplinary, cross- sectoral committees to help build capacity among policy and decision-makers for joint implementation of the three conventions and integration of policy reforms into national environmental action plans.

#### **2.2.3.2 Compatible information systems:**

Build capacity to establish and maintain such systems in the different agencies and programs tasked with the implementation of the different conventions to ensure that data collected and processed in one agency or program can be used in another.

#### **2.2.3.3 National assessments of sustainable development:**

Assess the effectiveness of actions underway to implement the sustainable development plan under Agenda 21(If Available), international conventions, and other sustainable development initiatives. Also, assess the impact of a country’s structural adjustment program as part of the general assessment of conventions and sustainable development.

**2.2.3.4 Audits of government accountability:** Assess whether government actions are consistent with obligations under the three conventions.

**Section III.**

**Thematic constraints and  
action plans projects**

## 3.1 Thematic Constraints

### 3.1.1 Biodiversity Constraints

1. Lack of a comprehensive database on Libya's BD.
2. Lack of active coordination between national stakeholders working on BD.
3. Weak integration of BD concepts in the national policy formulation process.
4. Lack of national guidelines and management plans to protect BD.
5. Lack of the awareness of the society and the local communities about the potential importance of their role in the conservation and sustainable management of BD.
6. Lack of economic incentives for BD conservation.
7. Lack of linkages between the scientific research and the policy makers.
8. Lack of ex situ conservation programs for BD, especially threatened, rare and economically important species.
9. Insufficient capacity building and technology transfer.
10. Lack of guidelines for matters related to access to the genetic resources and benefit sharing

### 3.1.2 Desertification Constraints

11. The absence of the local community institutions and NGO's in combating desertification efforts.
12. Lack of institutionalization in the desertification combating efforts.
13. Lack of cooperation and coordination among different institutions concerns about desertification.
14. The absence of a integrated national plan for the utilization of natural resources and preventing the natural resources degradation which involved all stakeholders.
15. Lack of enforcement of laws and regulations related to desertification.
16. Lack of database and information management in fields related planning and protecting of land degradation.
17. Lack of public awareness and education related to desertification issues among all stakeholders.

### **3.1.3 Climate change constraints**

18. Lack of technical and institutional support to the national Climate Change focal point.
19. Weak in the scientific research on the impacts of climate change.
20. Lack of capacity in areas related to adaptation to climate change.
21. Lack of public awareness programs in areas related to Climate Change.
22. Low level of International and Regional cooperation and coordination in follow up of the Climate Change Convention.
23. Lack of economic (financial) mechanisms to implement the Climate Change Convention.

### **3.1.4 Cross-cutting constrains over the three conventions**

**The analyses of the three above thematic national constraints reveal the present of the following constraints as across-cutting constrains:**

24. Lack of national capacity to implement the three Conventions.
25. Lack of coordination and cooperation among the national, regional, and international institutions.
26. Lack of scientific research and linkage between scientific research and policy making.
27. Lack of sustainable Knowledge management system and technology transfer strategy need for the implementation of the three Conventions.
28. Lack of outreach, networking, and public awareness program.
29. Weak integration of the three environmental Conventions in the national policy and development plans.
30. Lack of financial mechanisms to support the implementation of the three Conventions.
31. Weak involvement of local community in the implementation of the three Conventions.

### 3.2 The three thematic projects included in the action plan of each Convention.

<b>Biodiversity Project (BD)</b>	<b>Desertification Projects (Des.)</b>	<b>Climate Change Projects (CC)</b>
BD1:- Development of Libya's species biodiversity database.	Des.1:- Improving the national capacities to enhance combating desertification.	CC1:- Promote the capacity of the national Climate change focal point.
BD2:- Developing sustained coordination mechanisms between national parties working on biodiversity.	Des.2:- Establishing mechanisms for coordination between all the parties involved in combating desertification.	CC2:- Increase the scientific research in areas related to climate change impact and strengthening the linkages between research and policy makers.
BD3:- Integration of Biodiversity concepts in the National developmental Plans.	Des.3:- Efficient and sustainable utilization of natural resources.	CC3:- Develop and improve climate change adaptation plans and mobilize financial resources for implementing these plans.
BD4:- Developing national Criteria and management Plans for protected areas.	Des.4:- Strengthening the linkages between research and policy makers and institutions involved in combating desertification.	CC4:- Develop training and public awareness programs in areas related to climate change.
BD5:- Environmental education and public awareness.	Des.5:- Enhancing public awareness.	CC5:- Develop information management system and networks in areas related to climate change.
BD6:- Development of incentive and disincentive measures to promote biodiversity conservation and its sustainable use.	Des.6:- Empowerment of local communities and NGOs in combating desertification. Reviewing, upgrading and enforcement of legislations	CC6:- Develop national policies in Technology transfer related to climate change from regional and international institutions.

	and regulations dealing with desertification and natural resource management.	
BD7:- Improve linkages between scientific research and policy-making.		CC7:- Improve the national capacity in financial resource mobilization and improve the infrastructure to support techniques for GHG emissions.
BD8:- <i>Ex situ</i> conservation program for biodiversity conservation.		
BD9:- Enhancing the capacity of the staff and institutions working on biodiversity.		
BD10:- Developing guidelines to regulate access to biodiversity resources.		

### 3.2.1 The cross-cutting capacity building areas between the three Conventions.

To respond to the cross-cutting constraints identified above, the following programs has been suggested. Each program will have 2-6 projects that will respond to all the thematic constraints of the three conventions.

1. Knowledge management, outreach and networking.
  - 4.1 Development of an integrated knowledge management system for the three Conventions:
  - 4.2 Development of a comprehensive outreach and networking program for the three Three Environmental conventions at national, regional and global levels.
  - 4.3 Development of an integrated public awareness and education program.

## 2. Technical training and technology transfer.

- 2.1: Preparations of an inventory of current technologies and proposed technology transfer schemes in Biodiversity, desertification and climate Change.
- 2.2: Developing a comprehensive training program on priority technical concepts of the three conventions (CDM, ecosystem approach, Resources mobilization, SEA, etc...)

## 3. Development of sustainable institutional coordination mechanisms.

- 3.1: Developing and maintaining a national coordination mechanism (committee the committee will be one of the mechanisms) for the implementation of the three conventions.
- 3.2 Establishing Sustainable regional coordination mechanisms for the three conventions.

## 4. Linking research to policy making.

- 4.1: Developing technical directives for Biodiversity and desertification in the national EIA process.
- 4.2: Developing a regulatory framework for access to and benefits sharing of genetic resources.
- 4.3 Development of a policy system for strategic environmental assessment for economic and developmental agreements on the environment.
- 4.4 Developing national guidelines for adaptation measures to climate change in biodiversity and desertification sectors.
- 4.5: Draft regulations to facilitate the integration of the Three Environmental conventions within the national policy formulation process..
- 4.6 Development of national plan for conservation and sustainable utilization of various Libyan habitats based on the ecosystem approach.

## 5. Resource mobilization strategy for the three Conventions.

- 5.1: Development of market-based economic tools for environmental management in the themes of biodiversity, desertification and climate change.
- 5.2: Development of a national system for public-private partnership for resource

mobilization for environmental management with national, regional and global perspectives.

## 6. Local community empowerment.

6.1 Developing a comprehensive capacity building and innovation program for linking the three Environmental themes in community management activities.

6.2 Mobilization of community actions for conservation adjacent to protected areas.

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**Section IV.  
NCSA Action Plan**

The Synergies Action Plan was based on the six cross-cutting capacity building areas identified in section III above and the suggested projects/actions were designed in a way to respond to the cumulative and integrated priorities identified in the in-depth analysis. Most of the project have the synergy element by responding to the three themes together. However, some suggested projects were theme specific and respond to priorities related to only one convention.

The following project concepts were developed based on the three thematic reports and the capacity needs for the three conventions and the cross-cutting areas. The project concepts include rationale, objectives and proposed outcomes. The action plan includes a proposed implementation action plan (mechanism) involving all stakeholders.

## Program One: Knowledge management, outreach and networking

### Rationale:

The three thematic reports identify that knowledge and communication barriers facing the proper implementation of the three Environmental Conventions. Communication, data management, networking and outreach systems are grouped on one portfolio under the umbrella of "knowledge management".

The three thematic reports indicated that the national knowledge barrier in Libya 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. In addition to that it has been recognized 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 constrain throughout the three Conventions is the need for public awareness and education about the Conventions and the issues which they seek to address. In the thematic assessment reports, which formed the platform for the cross-cutting review, public awareness is cited as a key issue for implementation of Libyan's obligations under the Conventions. It is important to understand that the country needs to take preventive and mitigation action with regards to the environment, not only to meet its obligations under the Conventions, but for the protection and conservation of the natural resource base which is critical to sustainable development.

### Problem statement:

It was clearly stated in the country thematic reports that bases of Knowledge and technologies that are needed to combat desertification, adapt to climate change and conserve biodiversity do exist in Libya but are not managed properly and not shared adequately due to the lack of appropriate Knowledge management system. The databases are not available or if available updating is not part of their design. Also, networking is not efficient as it should be at the national and regional level). Among the causes that contributed to this are; the unqualified staff in knowledge dissemination; limited and conventional dissemination tools; Weak outreach for regional and global networking and inadequate follow up for procedures and approaches of communications and funding.

There is a need to increase public awareness to environment and development problems and promote public involvement in their solutions and increase the sense of personal environmental responsibility and greater motivation and commitment towards environmental management and sustainable development.

## **Proposed Projects:**

### **Project 1.1 Development of an integrated 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 knowledge management capacity to host the knowledge management 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 collecting, processing and distribution of information related to the three conventions.
- To contribute to the use of the knowledge management 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:**

- Conducting needs assessment survey to identify gaps and priority knowledge management needs for related institutions.
- Identification of the content of the knowledge management system and sources of information
- Selecting proper knowledge management channels and systems based on existing ones that can be upgraded.
- Purchase and development of required software and connectivity systems.
- Creating an open source accessible system for the collection and retrieval of information in the form of a database or other knowledge management media.
- Defining roles and responsibilities on the addition and use of existing information and sorting all issues related to intellectual property rights.
- Identification of suitable indicators and processes of data generation for combined monitoring of biodiversity, desertification and climate change indicator systems.
- Training for key personnel directly linked with the design, management and use of the knowledge management (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.
- Trained personnel in the use and management of the KM system.
- Multi-media and modern software knowledge products developed and accessible.

**Estimated Budget:**

**Project 1.2 Development of a comprehensive outreach and networking program for the three Environmental 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 can 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 between national and regional and global partners in issues of common interest.

**Activities:**

- Conducting a thorough survey of the existing networks and organizations working in implementing the conventions at the national and regional levels.
- Identification of the key stakeholders at the global level linked directly with implementing the conventions.

- Development of thematic partnership groups at the national level.
- Exploration of possible partnerships at the national, regional and global level, at this same order.
- Implementing team collaboration tools and processes (discussion forums, workshops and meetings) for stakeholders.
- Foster the involvement of an expert group and partnerships with key international, regional, multilateral and local organizations
- Developing demonstration projects and partnerships with key regional and global partners for specific and realistic objectives.

**Outcomes:**

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

**Estimated Budget:**

**PROJECT 1.3: Developing an integrated Public awareness and education program.**

This project will focus on the target groups of the general public and students in various education phases. 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 of 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 Libian 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 four organizations. The Environment General Authority, the institution responsible for public education in Libya (Ministry of Education for example), 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. The coalition can increase in membership with the support provided by the Environment General Authority (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:**

- Establishment of the project's coordination system.
- Survey and analysis of all education and awareness approaches and guidelines developed by the three conventions.
- A national assessment of all previous and existing awareness and education projects with gap analysis and identification of lessons learned.
- Selection of content to be used in the awareness and education plans derived from the conventions and localized to national conditions.
- Development of 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.
- Development of new concepts in the curricula.
- Development of the new university course outlines, resources, and planning for implementing the new courses.

**Outcomes:**

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

**Estimated Budget:****Program 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 which 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. This will greatly increase the prospects for institutional sustainability of the project by having project activities closely connected to national frameworks.

The 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 combine 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.

## Program Two: Technical Training and Technology Transfer

### **Rationale:**

Building capacity of researchers, managers and practitioners in the field of Biodiversity, Desertification and Climate Change is needed to ensure successful implementation of the three Environmental Conventions. The components of this program will promote innovative technical and institutional mechanisms to enhance environmental management practices with local, regional and global environmental benefits. By doing so, the program will promote and enhance synergies between the three Conventions.

### **Program components:**

#### **Project 2.1: Preparations of an inventory of current technologies and proposed technology transfer schemes in the themes of Biodiversity, Climate Change and Desertification:**

This project will tackle the issue of technology transfer by conducting a thorough national need assessment of new technologies related to the three themes. This will also be coupled with a comprehensive inventory of existing technologies. This project will not go beyond the point of assessment and identification of potential technology transfer systems. The results of this assessment will enable Libya to develop and implement targeted technology transfer initiatives.

#### **Implementation mechanism:**

This project should be implemented by technology developers and users in Libya, as well as policy makers related to intellectual property rights issues. Overall guidance should be done by the Environmental General Authority. The involvement of private sector and the technology development research institutions is crucial.

#### **Objectives:**

- To develop a comprehensive technology inventory and needs assessments for Libya.
- To conduct gap analysis of existing technology and identify required technology.
- 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 technology transfer programs for Libya.
- To create an enabling environment for technology transfer.

**Activities:**

- 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.
- 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.
- Identify the national experts and researchers in the field of technology transfer in order to form a national advisory technical board that assist the government technical matters.
- Establish a sustainable database of required technology and its sources.
- Explore potential technology transfer routes and partnership.
- Develop a national plan for transfer of appropriate technologies and create an enabling environment.
- Develop a capacity building program related to the new technologies.

**Outcomes:**

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

**Estimated Budget:**

**Project 2.2: Conduct 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 between 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.

**Implementation Mechanism:**

The project should be coordinated by the Environment General Authority and two or three well established training centers in Libya where individual training courses will be developed with the support of global training organizations specialized in the three conventions. Training experts should be selected on competitive bases. Strict and transparent guidelines should be used for selecting trainees who will transfer the knowledge to other professionals.

**Objectives:**

- To develop and implement training programs on the three conventions
- To create a roster of national experts with adequate knowledge of the three conventions.

**Activities:**

- Conducting a national needs assessment exercise for identification of training needs and modules.
- Consult with the secretariats and scientific bodies of the three conventions in selecting proper training modules.
- Identification of global and regional partners with experiences in training of the modules selected.
- Development of training materials and manuals
- Establishing the team of experts in training.
- Selection of trainees.
- Conducting training programs.

**Outcomes:**

- National capacity in the technical parts of three conventions built.
- Training materials and manuals developed and used.
- Increased base of trained practitioners.
- Knowledge translated into actions on the ground from the institutions in which individuals work.

**Estimated Budget:****Program Sustainability:**

No additional institutions or management structures requiring or created by the project. The project will be executed and hosted by the Environment General Authority. 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. This will greatly increase the prospects for institutional sustainability of the project by having project activities closely connected to national frameworks. 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 will be a sustainable asset for the country in its implementation to the global conventions and achieving impacts.

## Program Three: Developing and maintaining sustainable national coordination mechanisms

### **Rationale:**

The efforts of environmental management are scattered among many institutions in Libya. Currently, there are several agencies with some degree of responsibility or influence with regard to environmental issues; among them: Environment General Authority, and other so called ministries that have activities related to environment (*List of Ministries, NGO's, Departments and academic institutions should be added by Sarah*)

There is lack of coordination among those agencies and duplication of efforts. At the same time the legal framework is not clearly spelled out and more important there are serious problems in enforcing environmental law. Lack of equipment, trained personnel and general awareness are inhibiting the consistent implementation and enforcement of environmental laws in Libya. This would require identification of roles and responsibilities for each institution. In addition to that subsequently training programs for the staff should be implemented.

### **Project 3.1: Development of a sustainable coordination mechanism between institutions implementing the three conventions:**

The NCSA stocktaking and capacity assessment exercises have identified a set of ..... (Sarah) key institutions related directly with the implementation of one or two of the three conventions. The main aim of this project is to formulate a sustainable coordination system between these institutions. This can be better applied through 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 ..... members from the three thematic committees.

### **Implementation mechanism:**

The secretariat of the implementation mechanism will be the Environment General Authority. Three thematic committees will be formed as follows:

#### **Biodiversity national committee:**

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#### **Climate Change National Committee:**

#### **Desertification National Committee:**

**Objectives:**

- To create sustainable coordination mechanisms for national synergies in implementing the 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.

**Activities:**

- National assessment of lessons learned and experiences of previous coordination committees.
- Formulation of the thematic committees.
- Formulation of the higher coordination committee.
- Development of the final ToRs and mandates of each committee.
- Development of reporting systems.
- Establishment of a scientific/technical advisory committee.

**Outcomes:**

- Effective coordination mechanism system for implementing the three conventions is developed among the stakeholder institutions
- Technical and organizational capacity for implementing the Three Environmental conventions consolidated and strengthened.
- Implementation of the Three Environmental conventions is more coordinated.

**Estimated Budget:****Project 3. 2. Technical and professional strengthening of the Three Environmental Conventions Focal points at the Environment General Authority.**

This project will be based on the capacity development needs of the Three Environmental Conventions' focal points at the Environment General Authority. 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 in place a comprehensive capacity building program should be designed and implemented.

**Objectives:**

- To create a stable and effective organizational structure for the integrated functions of the three Environmental conventions focal points.
- To increase the individual capacity of the focal points and the organizational capacity of the Environment General Authority in implementing the three Environmental conventions.
- To create a system of direct coordination between the three focal points.

**Activities:**

- Design 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 the Environment General Authority

- Develop a comprehensive capacity building plan for the focal points and the Environment General Authority.
- Mobilize capacities from the various Environmentalus organizations, departments and ministries to the Environment General Authority to work with the UNFCCC, CBD and UNCCD focal points at the ministry (**Sarah**) to facilitate the implementation of conventions.
- Conduct the capacity building plan.

**Outcomes:**

- Qualified and professional Conventions' implementation units (entities) are established at the Environment General Authority
- Better implementation of the CBD, UNCCD and UNFCCC by Libya while ensuring synergies in implementation.
- Negotiation, networking and reporting skills of the focal points improved.

**Estimated Budget:**

**Sustainability:**

This program will support technical, administrative and institutional coordination for the implementation of the three Environmental conventions.

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

## Program Four: Using Research for Policy Making:

**Rationale:**

This is the central program of the NCSA action plan. The end objective of this program is to enhance the quality and impact of policy formulation processes by direct linkages to research outcomes. The NCSA project has designed a cross-cutting capacity building proposal (CB2) for GEF to build and maintain a national network and coordination mechanism between research and policy makers. The individual projects in this program have been designed to serve specific technical priorities that were evident from the NCSA process and will all be based on the research policy coordination mechanism suggested to be developed by the CB 2 project.

The projects in this program are theme-specific and respond to specific technical priorities arising from the NCSA process.

### **Project 4.1: Developing technical directives for Biodiversity and desertification and rehabilitation of degraded lands in the national EIA process.**

**Implementation mechanism:**

The implementation mechanism should involve all stakeholders linked to the EIA process in Libya in all its development phases. The stakeholders should represent government, private sector, NGOs and local communities. The main stakeholder is the Environment General Authority through its department which develops and implements EIA guidelines (If available).

**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 biodiversity hotspots and desertification vulnerable sites which are prohibited from use as development projects.

**Activities:**

- Conduct a survey and gap analysis of the current EIA system in terms of biodiversity and desertification issues.
- Screening to determine which projects, interventions or development activities require directives for biodiversity and desertification.
- Identification of directives for biodiversity and desertification to be used in the ToRs of EIA and specifying projects that need biodiversity and desertification EIAs.
- Identify biodiversity and desertification proper mitigation measures.
- Develop direct indicators for monitoring of the EIA mitigation options.
- Issuing national directive for biodiversity and desertification to be adhered by all stakeholders.
- Developing guidelines for restoration and rehabilitation of degraded lands and habitats as key components of the EIA process and license.
- Identification of biodiversity and desertification hotspots which 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.

**Outcomes:**

- New EIA system developed includes directives for biodiversity protection and desertification control which is legally-binding.
- Guidelines for restoration and rehabilitation of degraded lands integrated within the EIA mitigation measures.
- Biodiversity and desertification hotspot habitats protected from development activities based on the EIA and licensing process.

**Estimated Budget:**

**Project 4.2: Developing a regulatory framework for access to and benefit sharing of genetic resources.**

**Implementation mechanism:**

This project should involve all national stakeholders related to the process of identification, processing and use of genetic resources and intellectual property rights. It needs to be expanded to include legislators and policy developers in sustainable development, trade and agriculture.

**Objectives:**

- To develop a national regulatory framework for the access and benefits sharing of genetic diversity.
- To protect the national sovereignty rights on genetic resources as governed by the CBD framework.
- To facilitate a development-friendly system for benefit sharing that protects the rights of local communities and indigenous knowledge holders.
- To develop enabling environment for fair and equitable technology transfer related to genetic resources.
- To ensure that the government have sovereign rights over the biological resources in the country and the authority to determine access to genetic resources rests with the government.
- To enhance Libya's involvement in the global system of access and benefit sharing by developing its own national legislation with a development focus.

**Activities:**

- Analysis of the current national legislation pertaining to genetic resources and IPR in general.
- Survey and assess the CBD guidelines on access and benefit sharing with special emphasis on the Bonn guidelines.
- Review and understanding of the global trade-related mechanisms for access and benefit sharing and the development-based alternatives.
- Develop national regulatory mechanisms for access and benefit sharing from a national development perspective.
- Conducting a training program for practitioners and an awareness program for the public on the issues of access and benefit sharing based on national regulatory system.

**Outcomes:**

- A national, development-based regulatory legislative system for access and benefit sharing is designed.
- Rights of local communities and genetic resources owners protected from a sovereign perspective based on CBD guidelines.
- Libya's regulatory framework ready and development-friendly before engaging in the global access and benefit sharing system.
- Qualified practitioners and legislators trained in access and benefit sharing issues.
- Provisions for access to benefits sharing of genetic resources are developed.

**Estimated Budget:**

### **Project 4.3 Development of a policy system for strategic environmental assessment for 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 Environment General Authority should be involved through its licensing and EIA department as well as the trade and environment national committees (If available).

#### **Objectives:**

- To establish an effective system for the application of strategic environmental assessment (SEA)
- To use 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 Libyan trade policy to protect the environment through the promotion of sustainable development.

#### **Activities:**

- Establishing a national strategic committee for the development of national system/guidelines for SEA.
- Developing national operational and technical directives and by laws for SEA.
- Applying the SEA in analysis of current trade and economic agreements.
- Conducting training programs on the application of SEA.
- Establishing 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 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 developed and functional.
- A policy system for strategic environmental assessment for economic and developmental agreements on the environment developed.
- Newly negotiated trade agreements subject to participatory and transparent SEAs.

#### **Estimated budget:**

## **Project 4.4 Developing national assessments for adaptation measures to climate change for biodiversity and desertification sectors**

### **Implementation Mechanism:**

This project should be implemented by all partners involved in policy making and scientific research in the fields of biodiversity, desertification, agriculture and climate change. The main stakeholder is the Environment General Authority and the main coordination mechanism is the national committee on Climate Change.

### **Objectives:**

- To assess the vulnerability of the biodiversity components, natural habitats, land and agricultural sector to potential climate change in Libya.
- To develop a national mechanism for the identification of potential adaptation measures for climate change impact on biodiversity and land management.
- To strengthen Libya's planning portfolio in terms of adaptation measures and to seek practical resource mobilization for implementing adaptation measures.
- To improve on agricultural management practices allowing carbon sequestration to occur in soil.
- To implementing land use planning initiatives that guide the expansion of human settlements away from high risk zones
- To establishing national and regional hubs and information networks for rapid response to extreme weather events.

### **Activities:**

- Review and analyze the adaptation portfolio at the UNFCCC and associated global and regional networks.
- Conduct an assessment of vulnerability to current climate variability and extreme weather events, and to assess where climate change is causing increases in associated risks using participatory approach.
- Conducting vulnerability assessment studies on selected sectors and areas related to biodiversity and land management.
- Identify fragile ecosystems and species prior to a crisis, to maximize protection during and following a disaster.
- Develop forest management and watershed protection system to improve yields, provide habitat and reduce climate hazards
- Enhance capacity building, including institutional capacity, for preventive measures, planning, preparedness and management of disasters relating to climate change.
- Conduct public awareness program for highlighting Vulnerabilities and sectoral problems and the way forward in dealing with adaptation to climate change.
- Conducting training programs on the use of adaptation methodologies in the national context.
- Identification of suitable adaptation measures and test them.
- Identify resource mobilization mechanisms for adaptation projects.

### **Outcomes:**

- Vulnerability of habitats and land degradation (agricultural sector) to climate change assessed.
- Adaptation methodology identified and practiced in Libya.
- National adaptation measures identified and tested.
- Resource mobilization plan developed based on sound adaptation measures.

**Estimated budget:**

**Project 4.5: Development of conservation and sustainable use plans for various habitat biodiversity in Libya based on the ecosystem approach:**

**Implementation Mechanism:**

This project is based on field research and ecological studies and will involve institutions active in documenting the state and conditions of various habitat biodiversity in Libya. The project will be also linked to the Environment General Authority to ensure proper reporting to the CBD in relation to the thematic biodiversity programs.

**Objectives:**

- To document the state of biodiversity in various habitats and ecosystems in Libya.
- To develop conservation plans based on different habitats biodiversity with special focus on in-situ conservation specially outside protected areas.
- To introduce the practical concept of ecosystem approach in Libya and implement demonstration projects.
- To develop national capacities in habitat specific conservation and sustainable use measures.

**Activities:**

- Assessing the current biodiversity status in various habitats and CBD thematic programs (inland water biodiversity, mountains, dryland biodiversity, marine biodiversity, agrobiodiversity, forest biodiversity, etc..).
- Direct capacity building efforts toward the conservation of each habitat and ecosystem approach.
- Identification of threats and impacts on biodiversity in each habitat.
- Conducting a public awareness program for the conservation of biodiversity in various habitats.
- Encouraging targeted research on biodiversity components in hotspot habitats based on ecosystem approach.
- Identification of conservation and sustainable use plans for each habitat's biodiversity within the ecosystem approach.
- Implement demonstration projects based on the ecosystem approach.

**Outcomes:**

- The state of biodiversity in each habitat and ecosystem documented and updated.
- Conservation plans developed for each habitat based on ecosystem approach.

- National qualified researches, managers and practitioners trained in habitat conservation and sustainable use using the ecosystem approach.
- Demonstration projects based on ecosystem approach implemented.

**Estimated Budget:**

**Program Sustainability:**

The program projects are expected to be institutionally and socioeconomically sustainable. At the institutional level, the project will follow already defined national plans and will work within national institutions without creating new institutions. Thus, no additional institutions or management structures requiring additional financing will be created by the project.

Projects 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 activities. This will greatly increase the institutional sustainability of the project by having project activities closely connected to national frameworks. The practices to be promoted will also be helpful in improving the livelihood of the local community.

**Program Five: Resource Mobilization Strategy for the three Conventions.**

**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 three Environmental Conventions.

The use of economic incentives has been gaining momentum worldwide for its broad success environmental protection. Market-based or economic incentives will provide financial rewards for environmental protection in Libya. 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.

Libya is in need for capacity development at systemic and institutional levels for establishing and operating economic tools and incentives for various stakeholders in environmental management dimensions. Especially, if there is a lack of expertise in fund raising and a non-traditional resource mobilization strategy for activities related to the implementation of the three Environmental Conventions and environmental management. According to the current situation in Libya. Some instruments have to be identified and implemented for waste management, climate change, biodiversity, and sustainable land management. One of the major focus areas of this program will be economic valuation of environmental costs and ecosystem services. This approach has some 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.

### **Project 5.1: Development of 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 Environment General Authority in close cooperation with the **Ministries of finance, planning, trade and industry and the private sector.**(names to be verified by Sarah) 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:**

- Comprehensive assessment of currently used and identified economic tools for environmental management.
- Survey and documentation of the whole spectrum of market-based economic tools.
- Developing national guidelines for economic valuation of ecosystem services.
- Developing national guidelines for assessing the economic costs of environmental degradation in biodiversity and land management.
- Developing economic scenarios for the cost-effectiveness of the adaptation measures.
- Developing a training program on economic tools for environmental management.
- Identification and testing of suitable economic tools in the sectors of biodiversity, land degradation and climate change.
- Promote using subsidies and incentive mechanism for resources conserving activities and products (example: Tax relief or differential taxes).
- Develop legal tools to use penalties (fines and taxes) on all practices leading to land degradation and loss of biodiversity
- Adoption of identified market-based tools.

#### **Outcomes:**

- Market-based economic tools for environmental management in the sectors of biodiversity, land management and climate change developed.

- National guidelines and procedures for economic valuation of the cost of environmental degradation and values of ecosystem services developed.
- National capacities in developing and implementing economic tools for environmental management enhanced.
- Cost-effectiveness of adaptation measures assessed.

**Estimated cost:**

**Project 5.2: Development of a national system for public-private partnership for resource mobilization for environmental management.**

This is a project that will be implemented in full partnership between government and private sector where fair and equitable public-private partnerships should be built. A special coordination mechanism should be designed with overall guidance from the Environment General Authority

**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 Corporate Social and Environmental Responsibility (CSER)

**Activities:**

- Conduct inventory and assessment of the current public, private and civil-private partnerships for environmental management in Libya.
- Identification of potential partnerships between public, civil and private stakeholders.
- Introduction of corporate social and environmental responsibility guidelines.
- Establishment of a sustainable program for partnership with the private sector at the Environment General Authority.

**Outcomes:**

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

**Estimated budget:**

**Project 5.3 Development of an effective national implementation system for Clean Development Mechanism (CDM)**

**Implementation Mechanism:**

This project will be implemented by the National Designated Authority (DNA) for the CDM in partnership with the national committee for climate change. Clear and direct coordination mechanisms should be also established between the two committees and the private sector.

**Objectives:**

- To raise the national capacity in designing and implementing CDM projects.
- To enhance the national implementation process of the CDM and increase its efficiency.
- To integrate development components into CDM projects.
- To enhance the participation of the private sector in the CDM process.

**Activities:**

- Capacity needs assessment for the DNA and national climate change committee in terms of CDM.
- Analysis of the current CDM process and identifications of gaps and weaknesses.
- Developing capacity building initiatives in CDM design and implementation.
- Identification and removal of barriers restricting the participation of the private sector in CDM process.
- Developing CDM PDDs in partnership between public and private sectors.
- Inclusion of development objectives (poverty alleviation, local development, etc..) in CDM projects.

**Outcomes:**

- National capacity in designing and implementing CDM projects is developed.
- The national implementation process of the CDM is more effective and inclusive.
- CDM PDDs developed and approved by all related stakeholders.
- National development priorities integrated into CDM projects.
- The participation of the private sector in the CDM process improved.

**Estimated Budget:**

## Program Six: Local Community Empowerment

**Rationale:**

Sustainable impact of the environmental projects is difficult to achieve unless there is participation and acceptance by local communities. Adoption of Conventions can not be expected unless communities assume responsibility for the management of their natural resources. This requires several fundamental changes in dealing with the Local community which including: (i) more delegation of management responsibilities to local communities; (ii) improved operational linkages with public staff; (iii) simplified diagnostic and planning procedures; (iv) flexibility in terms of the activities to be supported; and (v) increased number of field teams to expand coverage. The main principle of this program is that the local 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 to increase the community sense of ownership and responsibility for infrastructure and eventually will enhance the sustainability of the development effort and adoption of the three Environmental Conventions in Libya.

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. The added value of this program will be the tendency to integrate biodiversity conservation and sustainable use, sustainable land management approaches, and adaptation to climate change at the community level with combined results benefiting the implementation of three conventions together.

**Project components:**

**Project 6.1: Development and implementation of capacity building and innovation program for community management of natural resources based on traditional knowledge.**

**Implementation system:**

This project should be implemented by mobilizing all networks and institutions with direct linkages to community action. The Environment General Authority and Ministry of Agriculture should be closely involved with the implementation of community based initiatives. One of the main partners of this project would be the NGOs and CBOs.(If available)

**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, 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 knowledge and farmers practices in natural resources management 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, afforestation, 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.
- Applying a community approach where the community individuals, and their organizations would play an integral role to promote sustainable utilization of natural resources.
- Designing 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 improved.
- Demonstration projects on community-based, linking biodiversity conservation and sustainable use, sustainable land management and adaptation to climate change implemented.
- Communities empowered to utilize traditional knowledge in natural resource management with appreciation to their property rights.
- A practical framework based on the integration of biodiversity conservation and sustainable land management with poverty alleviation developed.
- A package of community actions toolkit linking poverty reduction and gender empowerment to community management developed.

**Estimated Budget:**

**Project 6.2: Mobilization of community action for conservation adjacent to protected areas:**

**Implementation Mechanism:**

This project will be implemented by the Environment General Authority and the community based organizations around protected areas. The project will ensure environmentally sustainable, economically productive and socially responsible practices around protected areas so that protected areas will not suffered from any negative impacts from adjacent socio-economic activities and communities will be involved into the sustainable management processes.

**Objectives:**

- To involve local communities in conservation action 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 builed the capacity of communities in sustainable 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 the communities development plans.
- To add a cultural and traditional knowledge component to the conservation and

sustainable use of biodiversity in protected areas' geographical and ecosystem continuity.

**Activities:**

- A comprehensive assessment of the socio-economic conditions of local communities around protected areas.
- Development of livelihood management plans around the protected areas that are compatible with the conservation and sustainable use methodology.
- Establishing partnerships with local communities in management of sites around protected areas.
- Providing training and capacity development in the methodologies of community base 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.
- Introduce a system for the prevention of introduction of invasive species to protected areas and their surroundings.

**Outcomes:**

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

**Estimated Budget:**

**Program Sustainability:**

This program is expected to be the most sustainable one among the other programs if it is implemented in the right way. At the institutional level, the project will build the capacity of public staff in local community participation systems and development of livelihood management plans. It will strengthen the links between local community and decision makers. In addition to that, the local community institutions will be empowered to ensure their capability in managing their natural resources and capable of using their traditional knowledge for improving the community well-being. The practices to be promoted will also be compatible with the average level of human and financial capital present in local communities. The active 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 Libya 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 three Environmental Conventions.

#### NCSA Action Plan Implementation Mechanism:

The NCSA action plan needs a effective implementation mechanism based on institutional coordination and transparency. The following mechanism is hereby suggested.

At the Environment General Authority:

The Environment General Authority is the organizational focal point for the three Environmental Conventions which is responsible for the proper internal coordination of the implementation of the three conventions.

The NCSA action plan suggests the formation of a Conventions Implementation Committee (CIC) composed of the three technical focal points for the UNFCCC, CBD and UNCCD and headed by the Secretary General of the Environment General Authority.

The CIC mandate will be:

- Coordinating the implementation of the three Environmental Conventions.
- Integrating specific and cross-cutting requirements in a unified implementation system.
- Sharing of new approaches in each convention and ensuring synergies in implementation.
- Integrating common priorities in the conventions in the national development plans.
- Overall supervision of the implementation and resource mobilization of the NCSA action plan.

## **At the national level:**

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 Environment General Authority. Specific ToRs should be developed for the three thematic committees based on the specific nature of each convention and the following mandate:
- Overall coordination of the implementation of the Convention, including review and preparation of reporting requirement and reviews of conventions literature.
- Coordinate the various networks and committee established by each convention.
- Integrating the priorities and requirements from the implementation of the convention in the strategic planning of each all sectors.
- Overall supervision and guidance of the implementation of the NCSA action plan related to the particular convention.

Higher Coordination Committee:

The members of the three committees should in turn select a Higher Coordination Committee (HCC) composed of two members of each TCC plus the Secretary General of the Environment General Authority a head. 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.

### **Scientific Advisory Committee (SAC):**

The SAC should be composed of 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: project proposals development; protected area management and ecosystems approach; impact assessment; agrobiodiversity conservation; traditional knowledge in land management; desertification control; community management of natural resources; adaptation to climate change; and 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-fledged proposals based on the project concepts identified in the NCSA action plan. The SAC will also provide advice and consultation to the Environment General Authority and other institutions involved in reporting and implementation of the conventions.

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