

ENABLING ACTIVITIES IN BIODIVERSITY

Country:	Republic of Lebanon
Project Title:	Biodiversity Strategy, Action Plan and Report to the CBD
GEF Focal Area:	Biodiversity
Country Eligibility:	Convention ratified on 15.12.1994
GEF Financing:	\$ US 145,000
Government Contribution:	In-kind and personnel
Estimated Total Budget:	\$ US 145,000
GEF Implementing Agency:	UNDP
National Executing Agency:	Ministry of Environment
GEF Operational Focal Point:	Minister of Environment
CBD Focal Point:	Ministry of Environment
Estimating starting date:	March 1997
Duration of project:	12 months

Background/Context

1. Lebanon is situated on the Eastern shore of the Mediterranean Basin, to the West of Syria and to the North of geographic Palestine. It runs along an average of 220 km North-South and 48 km West East, comprising a total area of 10,452 km². It has two mountain ranges: Mount Lebanon which runs parallel to the sea overlooking the narrow coastal plain; and in the east the Anti Lebanon range which runs parallel to Mount Lebanon. The two mountain chains are separated by the elongated Bekaa Plain. The estimated combined population of Lebanon is 4.1 millions, of which about one million are foreigners. Lebanon is split into six administrative districts (Mohafazats) which are subdivided into 24 sub-districts or Cazas, each having a caimacam. In total there are 624 Municipalities in Lebanon.

2. Based on its geographic location and physiography, Lebanon enjoys a typical Mediterranean climate with some zonal variations between the Coastal Subtropical, the Mediterranean Middle Slopes, the cold High Lands, and the Sub-Desert Plains. These zonal variations account for the wide variability of ecosystems and the diversity of landscapes within a limited land area. The mean annual rainfall in Lebanon is about 700 mm in the coastal and mountainous regions, but decreases to below 200 mm in the extreme north-eastern plains of the country.

3. In terms of landscapes and biodiversity, Lebanon is regarded as an attractive country hosting more than 4633 native floristic taxa, of which 3761 are terrestrial and the rest are marine taxa. Of the terrestrial flora, 2863 species are angiosperms and the rest are either gymnosperms, ferns or bryophytes. It is estimated that around 392 species are endemic in Lebanon, 52 of these are globally threatened. In terms of fauna and wild life, Lebanon has around 340 species of birds, 52 mammals, 51 reptiles and amphibians, 900 fish and more than 1300 insects and butterflies.

4. Lebanon is an agricultural country where about 50% of the population benefits directly from agricultural production. Agricultural habitats contain a great number of wild ancestors and relatives of several cultivated species, mainly cereals and food legumes. In spite of the great importance of these wild relatives for improved cultivated species and for food security purposes, no efforts were undertaken in the past to conserve these species at a national level. Major threats to agrobiodiversity are: the expansion of urbanized center in the coast and in the Bekaa Valley, the introduction and adoption of high production inputs such as high yielding monocultures, and the misuse of fertilizers and pesticides gradually resulting in the disappearance of many local varieties of cereals, fruits and vegetables. The need for genetic conservation, in almost all crops is an urgent measure that should be taken in Lebanon.

5. Although rainfall percentage in Lebanon is slightly higher than those of neighboring Arab Countries, vast areas in the eastern parts of the country fall within the arid and semi arid ecological systems. Water flow from rainfall and snowfall is estimated at nearly 10 billions m³/year, of which 4 billions are carried by surface flow in 40 rivers. Seventeen of these rivers are perennial and emanate from the Mount Lebanon range with the exception of the Assi and Litani (Bekaa) and the Hasbani (Jabal Al-Sheikh). These rivers support the rich and diverse flora and fauna, particularly in the deep valleys where the local climate is mild. Lebanon's rivers are at present under great stress from the concentrated urban development, industrial expansion and intensive agricultural practices.

6. The present forest area is an important component of Lebanon biodiversity, estimated to be 70.000 ha, representing 7% of the total area. It includes a wide range of native forest species such as *Quercus spp.*, *Cedrus libani*, *Abies cilica*, *Juniperus spp.* and the Mediterranean Pines. Unfortunately, the Lebanese forests have been under continuous degradation over the last millennia, primarily by urbanization and infrastructure development. There is a need for starting afforestation programs in these degraded areas in order to bring the total forest coverage to the origin of 200.000 ha. Lebanon is also rich in rangeland biodiversity, primarily found in the Middle and Eastern Slopes of the country, which contributes significantly to the livelihood of livestock owners of these areas. Unfortunately, rangeland species are also subjected to various types of degradation, of which the most serious are: over-grazing, shrub cutting, flower-picking and urban development.

7. The overall degradation of biodiversity in Lebanon is a result of many social, economical and political factors over the past and recent history. Deforestation since biblical times, urban development, road construction, intensive and extensive agriculture, hunting, industrial development, and the lack of community awareness are the main causes of the degradation of the flora and fauna in Lebanon. There is evidence that many aquatic and terrestrial species have either disappeared, or are subjected to severe threats resulting from the destruction of their habitats. Reports have also showed that soil erosion, especially in the mountain and hilly areas which form 73% of the country is severe, and is caused primarily by rainfall intensity and runoff. The common heritage of land tenure is also an important factor in the course of land degradation and crop genetic erosion.

8. In Lebanon, there is a growing concern at all levels of governmental and non-governmental agencies to address environmental issues and to develop a better understanding for environmental protection and biological resource conservation. Lebanon has signed several international conventions dealing with nature conservation including the Basle Convention, the Convention on Biological Diversity, the Desertification Convention, and the Climate Change Convention. As to existing policies, there are legal provisions for the creation of nature reserves, protection of forests and agricultural lands, use of fertilizers and chemicals, and protection of water resources. Through the GEF/UNDP project on nature reserves, protected areas are officially declared, including Palm Islands, Horsh Ehden and Jabal El-Barouk. In addition to governmental bodies, Scientific Institutions such as the National Council for Scientific Research, the Agricultural Research Institute, the Marine Research Center, the Geophysical Center, the American University of Beirut, the Lebanese University, the University of Saint-Esprit, the University Saint-Joseph and others have been actively involved in various aspects of environmental conservation. Non governmental organizations are also playing an increasingly important role in conservation and environmental protection, both at the national and local levels.

9. The Country Study on Biodiversity, conducted by the Ministry of Agriculture with the financial assistance from GEF, and the technical support from UNEP is one of the most valuable resources describing the status and causes for degradation of biological diversity in Lebanon. It has produced nine study reports including, species checklist; socio-economic factors affecting biodiversity; terrestrial flora; terrestrial fauna; marine fauna and flora; freshwater fauna and flora; agricultural and livestock habitats; nature reserves; and the national current capacity and economic evaluation.

Objectives

10. The main objective of this project is to assist Lebanon to prepare a National Biodiversity Strategy and Action Plan (NBSAP) within the framework of the Convention on Biological Diversity. At the end of the project, a national report will be prepared for the CBD pursuant to decision II/17 of the Conference of the Parties (COP). The NBSAP will define the current status of biological diversity, reasons of degradation, strategies and priority actions to conserve and sustainably use its components in the context of the country's social and economic development.

11. Through a participatory and a multidisciplinary approach including the civil society, the NBSAP will enhance public awareness among all stakeholders from governmental bodies (agriculture, forestry, fisheries, tourism, industry, transport, energy, finance, and education), related NGOs, private sector, and the community about the importance of protecting biological diversity and the need for its conservation. One of the objectives of the NBSAP is to promote human resource development and institutional capacity building of the country.

12. The project will rely on extensive analysis, consultations and dialogues on pertaining issues of biodiversity. It will assess the existing gaps in knowledge and identify options for the sound use and conservation of biodiversity. The main thrusts and provisions of the NBSAP addresses the policies, strategies and actions aimed at conserving, managing and monitoring biodiversity. The NBSAP will also identify entities responsible for the implementation of activities to be undertaken according to the strategy.

Time Plan and Sequencing

13. The Ministry of Environment, through a multidisciplinary, integrated and participatory approach, will be executing all activities of the NBSAP as shown in the attached table of activities. A national steering committee involving related ministries and governmental agencies (agriculture, forestry, fisheries, tourism, industry, transport, energy, finance and education), local NGOs, universities, research institutions, donor countries and the private sector is to be established in the first month of project. Under supervision of the steering committee, a planning team will be formed to undertake the work of the enabling activity. Planning team members will be selected according to their biodiversity and planning expertise and will be lead by a national consultant, assisted by an international consultant, and other national consultants on various aspects of biodiversity and public participation. The lead national consultant will exercise and facilitate project activities and run the national and provincial workshops. The international consultant will be used for training of the planning team and other national consultants, and will assist the lead national consultant in the identification and analysis of options, preparing the NBSAP and the first national report. Terms of reference for national and international consultants will be finalized by the second month of the project.

14. During the first two months of the project, the planning team will be able to digest, summarize and synthesize existing knowledge on biological diversity, especially those provided by the country study.

15. Two familiarization courses/seminars will be organized for the planning team. The first one will be held in month 2 of the project to introduce to the planning team and national consultants the role of biodiversity in national development and the objectives of the enabling activity as well

as the WRI/UNEP/IUCN Guidelines, GEF Criteria for enabling activities, and the Convention on Biological Diversity. The second seminar will be held in month 4 of the project so as to inject to participants biodiversity planning processes and specific methodologies involved in the assessment of options and the formulation of the NBSAP. The timing of these courses is planned so that the maximum momentum generated from each one of them will be used in the subsequent activities; namely the assessment of existing data, the identification of options and the preparation of the BSAP. Participants will therefore be able to fully contribute to the process of the Enabling Activity.

16. The first national workshop is planned to take place during the third month of the project, to explain to the participants the objectives of the enabling activities, to present results of the inventories and stocktaking process, and to brainstorm on the possible options necessary for the NBSAP.

17. As communication and transportation within the country and between provinces is frequently difficult, in addition to the difficult political situation of Lebanon, four provincial workshops will be held in North Lebanon, Mount Lebanon, Bekaa Valley and South Lebanon. These workshops will be organized by the lead national consultant and the planning team during the fourth and fifth months of the project, just after the first national workshop. Each provincial workshop will include participants from governmental agencies, local NGOs, researchers and university lecturers interested in biodiversity and community leaders of the province. It is planned that each workshop will trigger dialogue and partnership among participants on the identifications and analysis of options to meet the objectives of the CBD and the development of the NBSAP. Clearly, each provincial workshop is planned to devise a biodiversity strategy close to the needs of local community in each province that will be part of the overall NBSAP.

18. During the project, but more specifically between the two national workshops, the lead national, other national consultants and the planning team will ensure that there is an ongoing dialogue on the NBSAP with the policy makers and the stakeholders. This dialogue will be conducted through small ongoing sectoral and cross-sectoral meetings which will inject analytical and strategic thinking to all participants to actively contribute to the process and provide input to the NBSAP.

19. Building on the recommendations of sectoral meetings, provincial workshops and the first national workshop, the priority options will be identified, the human capacity developed, and the NBSAP formulated. The preparation of the NBSAP will be completed in month 10 of the project shortly after the convening of the second national workshop. The second national workshop will be held in month 9 of the project, to review strategies and priority options and to obtain further input for the finalization and endorsement of NBSAP.

20. The first national report will be completed in December 1997 and submitted to the COP of the CBD at its 4th session. The national report, as well as the NBSAP will be translated into Arabic and will be disseminated in Lebanon to allow for wider understanding of biodiversity issues, conservation and sustainable use.

21. The project, using all possible means of radio and local radios, TV and local TV stations, newspapers, Internet, leaflets, etc., will ensure that public awareness is raised and general community outreach is followed taking into account the effective participation and genuine commitment of the civil society through out the NBSAP.

Table of activities

Activity/Month	1	2	3	4	5	6	7	8	9	10	11	12
1- Establishment of steering committee and interagency planning team	x											
2- Finalization of TORs for Nat'l & Internat'l Consultants	x	x										
3- Stocktaking and analysis of information on BD, (Digest)	x	x										
4- Familiarization courses		x		x								
5- First national workshop			x									
6- Provincial workshops (4)				x	x							
7- Public awareness /outreach				O	N	G	O	I	N	G		
8- small cross-sectoral mtg.				O	N	G	O	I	N	G		
9- Analysis and evaluation of options					x	x						
10- Preparation of NBSAP						x	x	x	x	x		
11- Second national workshop									x			
12- Preparation and submission of the first national report to the CBD										x		
13- Translation into Arabic, publication & dissemination of NBSAP										x	x	x

Coverage without Duplication

22. It is planned that this project will cover all tasks necessary for the formulation of the NBSAP taking into consideration all related existing studies and reports. The project will be able to draw on a variety of existing sources of information such as: GEF/UNEP Biodiversity Country Study of Lebanon (Project GEF/6105-92-72); Establishment of an Enabling Environment for Integrating the Principles of Sustainable Development in Lebanon (LEB/93/G81/B/15/00); Strengthening of Natural Capacity and Grassroots *in situ* Conservation for Sustainable Biodiversity Protection (LEB/95/G31/A1G/99); Building Capacity for DFG Inventory and Action Plan in Response to UFCCC Communications Obligations (LEB/95/632); Assessment of the State of Environment in Lebanon; the Final Report, November 1995 by METAP; and Environmental Strategy Framework-WB 1996.

23. The NBSAP will be prepared using the Biodiversity Country Study (1996) and where possible benefiting from all previous reports. The enabling activity will minimize any duplication efforts but will build upon and add to the already existent knowledge of biodiversity. It will assist Lebanon in evaluating and reviewing processes and activities that have significant adverse impacts on conservation and sustainable use of biodiversity pursuant to article 7 of the CBD. In this way, Lebanon will gain a better understanding of the nature and scope of its biodiversity assets and issues as well as clearer sense of the options for the conservation of biodiversity and the sustainable utilization and management of its components.

24. In the future, the NBSAP will lead in the future to the establishment of a biodiversity data management through an appropriate data base system which will be the tool for monitoring biodiversity status and planning exercise. The NBSAP will also enhance means of dissemination of information within and outside the country, especially to the CBD.

Best Practice

25. In order to incorporate biodiversity into the mainstream of national development, the project will be lead by a steering committee involving all stakeholders from relevant ministries and governmental bodies, key NGOs, universities, the private sector, and the community. All project activities will be done in-country to the maximum effect by national consultants. Close consultation with other experts in the region will be sought to share experience and incorporate lessons learned in other countries. The international consultant will be used for backstopping and training of the planning team in analyzing and planning activities. The methodology for the implementation of the project will be based on the "Guidelines for Country Study on Biological Diversity" (UNEP 1993), the "Guideline to the Convention on Biological Diversity" (IUCN, 1994) and the "Guidelines for preparing National Biodiversity Planning" (WRI/UNEP/TUCN, 1995). The same documents will be used for training. The project will also be followed as closely as possible to the nine criteria mentioned in the GEF Operational Criteria for Enabling Activities.

Institutional framework and project implementation

26. The project will be executed by the Ministry of Environment (MOE). The MOE will appoint a national consultant (coordinator) who will manage a multidisciplinary planning team under the supervision of the Steering Committee, involving related ministries and governmental agencies (agriculture, forestry, fisheries, tourism, industry, transport, energy, finance and education), in cooperation with the private sector, NGOs, Universities research councils, and donor countries. The Steering Committee will have the overall responsibility for overseeing the implementation of the project. This broad based representation should assure that biodiversity planning becomes an integral part of mainstream planning efforts to achieve sustainable development.

27. Despite the existence of the country study in Lebanon, there is still a need for this study and other related reports to be synthesized and summarized by the planning team to be presented in the first national workshop and the four provincial workshops. The assessment and evaluation of existing knowledge will be done by the lead national consultant, assisted by other national consultants and other members of the planning team. The planning team will have representatives from key Ministries, scientific institutions, NGOs and the private sector.

28. Workshops and meetings will be held in the various regions of Lebanon and with the various sectoral stakeholders, notably agriculture, forestry, irrigation, fisheries, transport, industry, tourism and education. Outcomes of these meetings will be discussed at the second national workshop.

Project Financing (in \$ US)

	PRODUCT	PROCESS	SUB-TOTAL
Stocktaking and inventory	0	3 000	3 000
- National consultants		2 000	2 000
- Documentation		1 000	1 000
Identification and analysis of options	10 000	58 000	68 000
- International Consultant		7 000	7 000
- National Consultants 10p/m	10 000	15 000	25 000
- Familiarization Courses		8 000	8 000
- First national workshop		8 000	8 000
- Provincial workshop (4)		12 000	12 000
- Public Awareness		3 000	3 000
- Travel, miscellaneous		5 000	5 000
Strategy and Action Plan	20 000	29 000	49 000
- International Consultant		7 000	7 000
- National Consultants	20 000	4 000	24 000
- Cross-sectoral meetings, Dissemination		7 000	7 000
- One national workshop		8 000	8 000
- Public Awareness		3 000	3 000
First National Report	12 000	3 000	15 000
- National Consultants	6 000		6 000
- Translation, publication & dissemination	6 000	3 000	9 000
Coordination and management costs	4,000	6,000	10 000
TOTAL	46,000	99 000	145 000

Deviation from Criteria and Norms

29. The overall budget as well as cost of individual activities do not deviate from the overall cost norms.

Annex 1. Dimensions of Enabling Activities (Standard Activity Matrix)

Enabling Activity Commitment	Output	Capacity	Building	Public participat.	Comments
		Inst. Strength	Training		
<i>Stocktaking and Assessment, based on Existing Information</i> - biodiversity and biological resources - cross-sectoral issues - policy and regulatory framework - institutional and human capacity - analysis of root causes of BD loss - technologies for conservation and sustainable use - activities with adverse impacts - existing measures and programs - preliminary statement of objectives - identification of gaps - assessment of existing needs					1
<i>Identification and Analysis of Options to Meet the Objectives of the CBD</i> - strategies for conservation - strategies for sustainable use - strategies for benefit sharing	x x x	x x x	x x x	x x x	2
<i>Planning and Preparation of a Strategy and Plan</i> - national strategy - national action plan	x x	x x	x x	x x	2
<i>Preparation of the first National Report</i> - first national report	x			x	

Comments on Annex 1 (Standards Activity Matrix)

1. Valuable information can be obtained from the draft GEF/UNEP Biodiversity Country Study in Lebanon. Other information can be obtained from the Study on National Policy, Institutional Framework and Human Resource Training, undertaken by the Ministry of Environment in cooperation with UNDP. The national consultants will synthesize this information into working papers so as to be presented at the first national workshop.
2. Efforts are needed to analyze and develop existing information in the Country Study and generate findings through this enabling activity within the framework of the CBD, the Guidelines of the WRI/UNEP/IUCN 1995, and the GEF Operational Criteria for Enabling Activities.