THE REPUBLIC OF YEMEN

Conservation Zoning Plan of Socotra Islands

(Socotra, Samha, Darsa, Abd Al Kuri, and associated small islands rocks and rock outcrops)





PRESIDENTIAL DECREE NO. 275 OF THE YEAR 2000

INTEGRAL TEXT, MAPS AND BACKGOUND INFORMATION



The Environment Protection Council UNDP-GEF Socotra Biodiversity Project YEM/96/G32



Summary

The Republic of Yemen Presidential Decree no. 275, year 2000, ratifying the Conservation Zoning Plan of Socotra Archipelago is hereby presented with the original integral text of the Decree and associated maps. The subsequent chapters provide an outline of the scientific effort and extensive community consultation process which led to the formulation of the plan.

The Archipelago of Socotra is a special biodiversity conservation area of high global importance. The people of Socotra have lived in a sound balance with their environment for centuries and until present days. The Zoning Plan focuses on the conservation of existing traditional uses and practices for the sustainable use of natural resources by the local community. In most cases, these were found to be highly compatible with the objectives of biodiversity conservation. Such close links between the objectives of nature conservation, and the need to preserve traditional practices of the local community, have gained full support for the Zoning Plan at local level.

A significant effort has led to the formulation of the present Zoning Plan, which covers all terrestrial and marine habitats of the archipelago. This effort involved over 150 national and international scientists, experts and local staff, supported by a vast consultation process across all levels of Socotran society, as well as other stakeholders on the islands and mainland Yemen.

The Zones illustrated below form the basis of the plan, and associated zoning maps have been reviewed and approved by all community leaders in Socotra prior to submission to the Government of Yemen:

1. Resource Use Reserve Which contains <u>General Use Zones</u> 2. National Park Which contains <u>Areas of Special Botanical Interest</u> 3. Nature Sanctuaries

The official endorsement of this plan has met the last remaining condition for the declaration of Socotra Archipelago as a Man and Biosphere Reserve and World Heritage Site by UNESCO.



Location of Socotra Islands, Republic of Yemen

SECTION ONE THE PRESIDENTIAL DECREE

[Integral text – translation: EPC/UNDP GEF Socotra Biodiversity Project]

THE REPUBLIC OF YEMEN PRESIDENTIAL DECREE NUMBER 275 OF YEAR 2000

Regarding the conservation zoning plan for Socotra Islands (Socotra, Samha, Darsa, Abd Al-Kuri and the associated small islands, rocks and rock outcrops) into areas for conservation and development.

The President:

After reviewing the Constitution of the Yemeni Republic,

And the presidential decree number (20) for the year 1991 regarding the council of ministers,

And the law number (260) for the year 1995 regarding environment protection, And the presidential decree number (72) for the year 2000 regarding the cabinet formation and naming its members,

And the Council of Ministers decree number (94) regarding the formation of the Environment Protection Council and its structure, and its amendments,

And based on the presentation of the Chairman of the Environment Protection Council, And after the approval of the Council of Ministers.

DECREE

PART ONE Names and Definitions

Article (1) This decree is called the conservation zoning plan for Socotra islands (Socotra, Samha,, Darsa, Abd Al-Kori, and the associated small islands, rocks and rock outcrops) into areas for conservation and development.

Article (2) For the purpose of executing this law, the following words and phrases are assigned the meanings indicated in front of each of them unless otherwise expressed by the text:

The republic: The Yemeni Republic The responsible authority: ministries or departments or public institutions and Environment Protection Council The council: The Environment Protection Council Socotra islands: Socotra group of islands including the islands of Socotra, Samha, Darsa, Abd Al-Kori, and the associated small islands, rocks and rock outcrops Resource Use Reserve: An area managed to ensure long-term protection of the unique biological diversity of Socotra islands while providing, at the same time a sustainable flow of natural products and services to meet community needs and appropriate development activities.

General Use Zone: it is located within the resource use reserve and includes sites where a significant level of habitat modification has occurred and is designated for appropriate general development purposes.

National Park: natural areas of land or sea designated to protect the ecological integrity of the unique ecosystems of Socotra islands for present and future generations to provide a foundation for scientific, educational, and recreational opportunities, beside the appropriate development activities for ecotourism.

Nature Sanctuaries: these are areas of land or sea characterized by rare plant or animal species still retaining their natural character set aside for scientific research.

PART TWO Objectives

Article (3) The purpose of this law is to fulfill the following objectives:

- 1. Protect the biodiversity of Socotra islands.
- 2. Achieve a balance between the population needs in development and the available natural resources such that they are not negatively impacted.
- 3. Preserve the traditional practices in management of natural resources.
- 4. Protect the nature sanctuaries of national and international importance in Socotra islands.
- 5. Protect the genetic material of rare and endemic species in Socotra islands.
- 6. Exercise a sound environmental management in these areas to protect natural resources from negative impact of development activities.

PART THREE The Zoning of Socotra Islands

Article (4) Socotra islands are divided into three main areas as follows:

First:

(a) Resource Use Reserve

The objectives of these areas are as follows:

To protect and maintain the unique biological diversity of Socotra islands, as well as other natural, cultural and landscape values of the area in the long term.

To maintain and, where appropriate, enhance the existing traditional management practices for the sustainable use of natural resources.

To protect the natural resource base from being alienated for other land and resource use purposes and other development activities.

Areas:

Approximate Total Area Covered (terrestrial): 890 km²

Percentage of Total Land Area: 23.5% Approximate Total Area Covered (marine): 16498 km²

(b) General Use Zone:

The objectives of these areas are as follows:

To allow for the development of essential infrastructure required to improve the standard of living of the local community (i.e. roads, power lines, and commercial development) to minimize negative impact on the environment to an acceptable level. Areas:

Approximate total area covered (terrestrial): 55 km²

Percentage of Resource Use Reserve (terrestrial): 6.14%

Percentage of total land area: 1.4%

Approximate total area covered (marine): 1 km²

Second: National Parks

The objectives of these areas are as follows:

To protect the unique natural habitats and landscapes of Socotra islands, which are of high national and international significance for scientific, educational, recreational or ecotourism development purposes.

To perpetuate representative examples of the unique biotic communities, genetic resources, and endemic species, found in the Socotra islands, and maintain biodiversity. To manage these areas in a sound environmental manner for educational, cultural and recreational purposes.

Areas:

Approximate total area covered (terrestrial): 2748 km²

Percentage of total land area: 72.6%

Approximate total area covered (marine): 1514 km²

Third: Nature Sanctuary

The objectives of these areas are:

To preserve rare and fragile habitats, ecosystems, species and unique landscapes in as undisturbed a state as possible.

To maintain the essential natural attributes and qualities of the environment over the long term for future generations.

Areas:

Approximate total area covered (terrestrial): 95 km²

Percentage of total land area: 2.5%

Approximate total area covered (marine): 154 km²

Article (5) The boundaries of the areas in article (4) of this law are determined according to the following attached maps:

(a) Map number (1) of the terrestrial protected areas in Socotra islands.

(b) Map number (2) of the marine protected areas in Socotra islands.

PART FOUR Management and Implementation

Article (6) Environment Protection Council and the Ministry of Construction and Housing and Urban Planning oversee the implementation of the conservation zoning plan for primary and secondary areas included in this law and send regular periodical reports to the Council of Ministers on the achieved results.

Article (7) The Environment Protection Council and the responsible authorities must develop plans and guidelines necessary to manage these areas and organize activities within them each within its jurisdiction according to the provisions of this law.

Article (8) Travel to and from the Socotra islands should be regulated according to the capacity of these islands.

PART FIVE Concluding Provisions

Article (9) Every citizen or any person is prohibited from hunting with firearms or any other means without permit from the responsible authorities; or cause any harm to the environment in the areas determined by this law according to the attached maps.

Article (10) Importing seeds, seedlings, pesticides or fertilizers into the Socotra islands is prohibited unless the responsible authorities have conducted the necessary analysis and examination and issued permits in coordination with the council.

Article (11) it is prohibited to import qat seedlings to cultivate in all parts of Socotra islands.

Article (12) Socotra conservation zoning plan becomes part of the master plan for the development of Socotra islands under preparation.

Article (13) New protected areas can be declared, or the borders of existing ones be expanded, by a decree from the Council of Ministers as needed for environmental management and development, on a recommendation from the Environment Protection Council.

Article (14) All ministries, departments, public and private institutions must conduct an environmental impact assessment for all projects and activities they implement or supervise their implementation according to environment protection act number (26) for the year 1995.

Article (15) The government should provide sufficient financial resources to allow the implementation of the plan and fulfill the objectives of this law within the budget of the council.

Article (16) The council will issue the necessary regulations to implement this law in coordination with the responsible authorities.

Article (17) All ministries and institutions involved in the development of Socotra islands adhere to the implementation of the conservation zoning plan each in their areas of specialization.

Article (18) all ministries and concerned institutions develop plans and programs for the development of Socotra islands according to the conservation zoning plan.

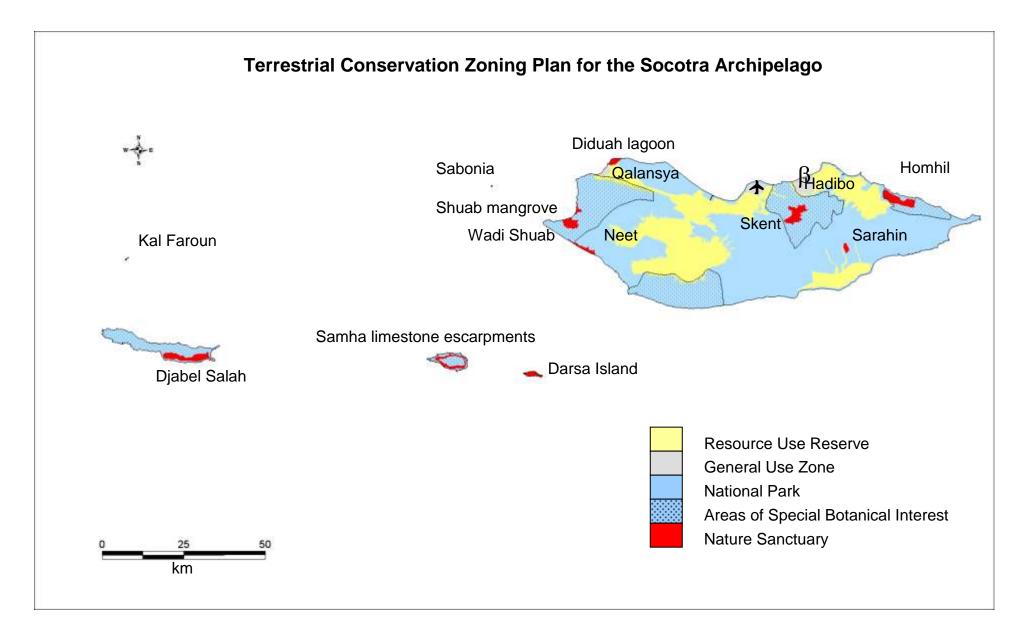
Article (19) The conservation zoning plan is the prerequisite for the declaration of Socotra islands as a biosphere reserve.

Article (20) Socotra conservation zoning plan is part of the master plan for the social and economic development of Socotra islands.

Article (21) This law goes into effect starting on 18/4/2000 and be published on the official paper.

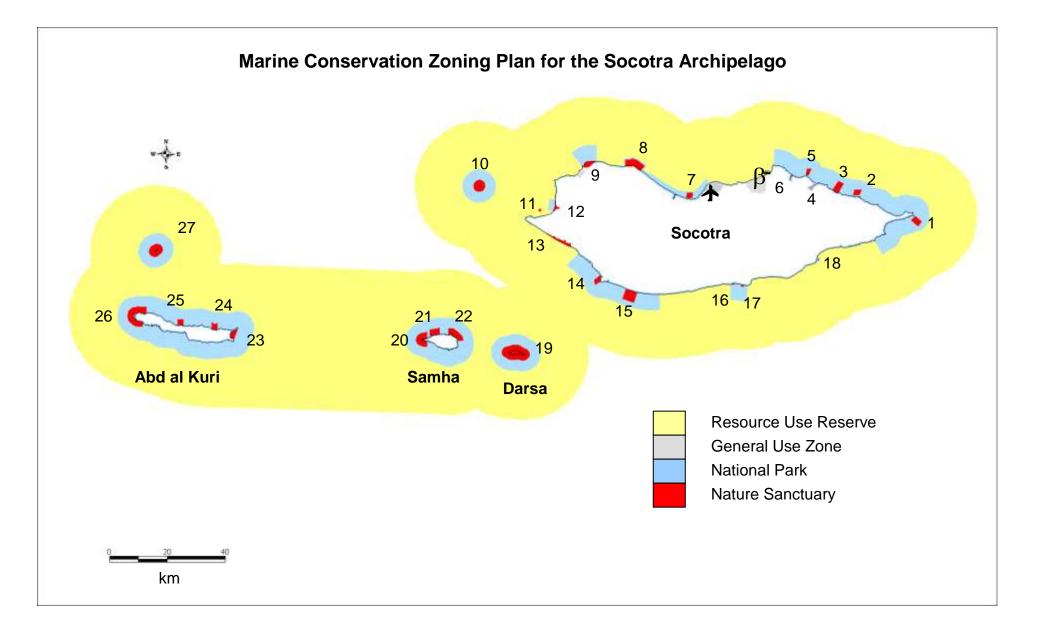
Issued at the presidency in Sana'a Date: 29 Jumada Thani /1421 28 September 2000

Ali Abd-Allah Salih The President Dr. Abd Al-Karim Al-Iriany **The Prime Minister**



	Criteria for Selection of	Te	rres	stri	al l	Vat	ure	e Sa	anc	tua	irie	S		
N.S	Nature Sanctuary	Diversity	Rarity	Fragility	Endemic plants	Endemic animals	Flagship species	Important Birds Areas	Intrinsic appeal / Landscape	Naturalness	Typicalness	Research / Study	Possibility for effective management	Proposed by locals
1	Homhil	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
2	Skent	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
3	Sarahin	\checkmark			\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
4	Neet		\checkmark	\checkmark		\checkmark					\checkmark	\checkmark	\checkmark	\checkmark
5	Wadi Shuab		\checkmark		\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
6	Shuab Mangrove		\checkmark	\checkmark		\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
7	Diduah Lagoon			\checkmark				\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
8	Djabel Salah (Abd al Kuri)	\checkmark			\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
9	Samha - limestone escarpments	\checkmark			\checkmark			\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	
10	Darsa							\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	
11	Kal Faroun			\checkmark				\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	
12	Sabonia			\checkmark				\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	

Summary Activity Guid Terrestrial Zoning Plar	Resource Use Reserve	General Use	National Park	Nature Sanctuary	
Industrial development		~	~	×	X
Airport	X	×	~	×	X
Hospital		~	~	✓	X
Road construction		~	~	×	X
Intensive agriculture		×	~	×	X
Controlled grazing		~	~	✓	X
Traditional plant use		~	~	√	X
Ecotourism Infrastructure		~	~	√	X
Research and Education	X	\checkmark	✓	✓	\checkmark



Criteria for Selection of Marine Nature Sanctuaries

		ection of Marine r	va	ul		Ja		<u>u</u>	all	62)		
National Parks surrounding Nature Sanctuaries		Nature Sanctuaries	Biotope	algae / seagrass	coral	fish	birds	Other fauna	mangrove	turtle	lobster	Locally proposed	Natural beauty
East Socotra - Ras Momi & Cliffs	1	Galas	✓	✓		✓		✓				✓	
North East Socotra - Hallah to	2	Roosh	\checkmark		\checkmark	\checkmark						\checkmark	\checkmark
Howlef Port Area	3	Rhiy di Adhoh to Di Timireh	\checkmark	✓	\checkmark	✓		\checkmark					
	4	Khor Qariyah	✓				✓	✓					\checkmark
	5	Rhiy Di Hamri	\checkmark		\checkmark	\checkmark		\checkmark				\checkmark	√
	6	Khor Di-Lisheh	V	<u> </u>		V		✓					√
North Socotra - Qadhob to	7	Ras Qatalni - Alama	\checkmark	\checkmark	\checkmark	\checkmark						\checkmark	\checkmark
Ras Qadama	8	Qadama and Medina	✓	✓	✓	✓				✓			\checkmark
North West Socotra - Diduah Lagoon	9	Diduah Lagoon	\checkmark	\checkmark		✓	\checkmark	\checkmark				\checkmark	\checkmark
Sabonia 3nm Buffer	10	Sabonia (islands to 1 nautical mile offshore)		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark	\checkmark
	11	Shuab Markab (wreck)		\checkmark		\checkmark					\checkmark		
West Socotra - Ras Bidoh to Shuab	12	Shuab Mangrove	\checkmark				\checkmark	\checkmark	\checkmark				\checkmark
South West Socotra - Neet to	13	Neet Mangrove	\checkmark					√	✓		\checkmark	✓	
Qatanin	14	Qatanin	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark					✓
South Socotra - Qaara	15	Muthaz (Barbara) - Zeraghin	✓	✓	\checkmark	✓		\checkmark				✓	\checkmark
South Socotra - Maharef to	16	Qashor	\checkmark	\checkmark		\checkmark					\checkmark	\checkmark	\checkmark
Bidholah	17	Qasharhin of Maharef	\checkmark	\checkmark	\checkmark						\checkmark	\checkmark	\checkmark
South Socotra - Mahfirhin	18	Qasharhin of Mahfirhin									\checkmark	\checkmark	
Darsa 3nm Buffer	19	Darsa (island to 1 nautical mile offshore)	\checkmark	✓	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
Samha 3nm Buffer	20	West Samha			\checkmark	\checkmark				\checkmark			\checkmark
	21	North Samha			\checkmark	\checkmark				\checkmark			\checkmark
	22	East Samha	\checkmark		\checkmark	\checkmark							\checkmark
East Abd al Kuri and highlands	23	Anjara Bay			\checkmark	✓				\checkmark			\checkmark
North Abd al Kuri	24	Bir Al Agooz Area			√	√							
	25	Bait Eesa Area			\checkmark	✓							
West Abd al Kuri	26	Khaisat en Naum Area			\checkmark	\checkmark							\checkmark
Kal Faroun 3nm Buffer	27	Kal Faroun (islands up to 1nm offshore)		\checkmark	\checkmark	\checkmark	\checkmark			\checkmark		\checkmark	\checkmark

Summary Activity Guide for the Marine Zoning Plan		Resource Use Reserve	General Use	National Park	Nature Sanctuary
Sea Port		\checkmark	\checkmark	X	X
Ballast disposal		X	X	X	X
Trawling		×	×	X	X
Shark fishing by net		✓	✓	X	×
Hook and line		✓	✓	\checkmark	×
Turtle exploitation		X	X	×	×
Managed ecotourism	é	✓	✓	\checkmark	✓
Research and Education		✓	✓	\checkmark	\checkmark

SECTION TWO Background to the Decree

The Government of Yemen has ratified the International Convention on Biodiversity in February 1996. In the same year, the **Government Decree IV announced Socotra Island as a special, natural area in urgent need of protection**, and called for assistance to formulate a Master Plan for Development of the Socotra Archipelago. In mid 1997, the Global Environment Facility (GEF) agreed to fund the project "Conservation and Sustainable Use of the Biodiversity of Socotra Archipelago", jointly managed by the Environment Protection Council (EPC) and the United Nations Office for Project Services (UNOPS), with technical supervision from the United Nations Development Programme (UNDP) and the GEF. The project has operated in Socotra from year 1997 to early 2001.

The principal objective of the project was to design a Zoning Plan for the Conservation of Biodiversity and Management of Natural Resources. This Zoning Plan is the basis on which the Development Master Plan for the archipelago is being developed. The Zoning Plan aims at integrating development needs with environmental protection and sustainable use of natural resources.

The Zoning Plan was submitted to the Council of Ministers in November 1999, and approved by Prime Ministerial Decree on April 18th, 2000. This formed the basis for the Presidential Decree no. 275 presented in this document.

The official endorsement of this plan has met the last remaining condition for the declaration of Socotra Archipelago as a Man and Biosphere and World Heritage Site by UNESCO, thus adding significantly to the international status of Yemen as a tourism destination.

The Process

The present Zoning Plan was prepared on the basis of (a) all previously existing studies on the archipelago, and (b) extensive fieldwork and data collection carried out on site by the GEF Socotra Project. This was parallel to an extensive consultation process with the local community, throughout the archipelago. Main steps which led to the formulation of the Zoning Plan are outlined in this chapter.

Step 1. Data Collection

Baseline Surveys

Over sixty Yemeni and international experts from a wide range of regional and international institutions joined forces with the project team in what was the largest effort ever performed towards the inventory and mapping of terrestrial and marine biodiversity of the archipelago. The survey effort covered the islands of Socotra, Abd Al Kuri, Samha, Darsa and all other rock outcrops of the archipelago. The Royal Botanic Gardens of Edinburgh, UK, and the Senkenberg Institute – Hariri and Associates were contracted by the GEF Biodiversity Project to design and implement the above surveys, in close collaboration with the local project team. Birdlife International was responsible to design

and implement bird surveys with support from the Darwin Initiative programme, in conjunction with the local project team. Other institutions involved were: Aden University, Yemen; Sana'a University, Yemen; AREA, Taiz, Sana'a and Dhamar, Yemen; Ibb University, Yemen; Marine Science Research Institute, Aden and Mukalla, Yemen; Institute of Fisheries Training, Aden, Yemen; the Marine Science Station, University of Jordan and Yarmouk University, Aqaba, Jordan; NCWCD Kingdom of Saudi Arabia (KSA); Australian Institute of Marine Science, Australia; Red Sea University, Sudan; School of Ocean Sciences, Bangor, UK; PERSGA, Jeddah, KSA; University of Gent, Belgium; Institute of Biodiversity and Environment Conservation, University of Malaysia, Sarawak, Malaysia; German Museum of Oceanography, Stralsund, Germany; University of Darmstadt, Germany; Rostok University, Germany; Museum fur Tierkundie, Dresden, Germany; Tropical Herbarium of the University of Florence, Italy; Faculty of Zoology and faculty of Tropical Agriculture , University of Florence, Italy; Institute of Zoology, University of Rome, Italy.

The basis of all such surveys was the comprehensive review of all previously existing scientific studies on the terrestrial and marine environment, biodiversity and people of the archipelago, conducted by Yemeni and international researchers. Extensive terrestrial and marine field surveys were then carried out, significantly increasing the knowledge base through discovery of large numbers of new species and other important findings. Preliminary results were used to design the Conservation Zoning Plan for the archipelago. The final scientific results of the above work are being prepared for publication in two special volumes of the Fauna of Arabia, and other scientific journals.

Establishment of close links with Local Community and Local Authorities

30 socotri Environmental Extension Officers were recruited from all parts of the archipelago, and acted as a constant direct link between the project and the local community. They collected vital information on the status of the environment in their areas, held village meetings on a regular basis, relied information on project objectives and activities at local level, and provided feedback from the community to the project team.

Regular meetings were held with all representatives of the local authorities in Socotra, to exchange views and guide the formulation of the Zoning Plan.

Data Collected Through Environmental Extension Officers

A significant amount of fishery records and of bi-monthly reports on the status of terrestrial habitats were collected by the network of Environmental Extension Officers and external consultants. The protection and management of marine and terrestrial target areas has started with the support of the local fishermen and local authorities.

Ecotourism Study

A draft ecotourism development plan was prepared with the assistance of an international expert. He visited the archipelago twice in one year, worked with the local team to identify areas of high ecotourism potential, and produced guidelines for the development of environmentally friendly tourism infrastructure. This forms an integral part of the zoning plan.

Step 2. First Zoning Plan Draft

Drafting of the plan

Findings from all activities above, have indicated a number of areas that are of special value to biodiversity, natural resources conservation, and ecotourism. Preliminary scientific results of the surveys were jointly reviewed at a Zoning Plan technical workshop held at the UNDP CO in Sana'a on July 17-19, 1999. Over 40 participants attended, including high representatives of the local community from Socotra, the GEF Socotra Biodiversity project team, representatives of relevant ministries, key national and international scientists involved in the surveys, the EU representative, national tour operators working in Socotra, the project international eco-tourism expert.

Prior to the workshop, the Socotran GEF project team, supported by all Environmental Extension Officers, developed a draft Zoning proposal with associated activity/management guidelines for each zone. During the workshop, the GEF team with the assistance of scientific consultants, and with the input of all workshop participants, developed a first draft Zoning Plan.

Consultation with Local Community Leaders across all the islands

The above draft was used as a basis for extensive consultation with local community leaders throughout the island of Socotra, Abd Al Kuri and Samha. A total of 14 large meetings, which involved approximately 500 local *sheiks, muqaddams* and all local government representatives, were held throughout the islands. All areas were covered by the consultation process. During these meetings, the Zoning Plan proposal was explained to the community by the GEF Socotran team, and submitted to the review of community leaders.

Results of the Consultation Process

Because of the high level of prior local community involvment in development of the Plan, the immediate results and feedback received in the meetings were very encouraging: the draft zoning plan proposed by the project team obtained strong support from all community leaders. Minor adjustments to the draft were made to reflect all their views and recommendations. It should be noted that changes were mostly towards a more conservation-oriented approach. With respect to the GEF team's proposal, new strictly protected areas were requested by the community, and less infrastructure development areas were deemed necessary. This reflects well the high level of environmental awareness of the local community, who is generally assigning high priority to the long-term conservation of their natural habitat, versus unplanned infrastructure development.

Step 3. Zoning Plan

The outcome of the extensive consultation process has been fully incorporated in the Zoning Plan. A set of explanatory maps and illustrations have been produced to explain the Zoning Plan to the wider audience at national and international level.

Support activities

Besides the above activities, which are directly linked to the formulation of the zoning plan, the project focused on a wide range of other activities, which were essential to the achievement of the above main objective. These are outlined below.

Environmental Awareness Campaign

An extensive environmental education and awareness campaign was implemented to involve the people of Socotra in the conservation of their unique biodiversity. The main focus has been on schools and on the wider community at village level, through a wide range of activities.

All teachers and most students of all 37 schools of Socotra were reached by environmental lectures held by project staff. Over 170 teachers, out of a total 240, were certified after attending formal environmental education courses in Hadibu.

Development of Legal Tools

Advanced legal tools were developed and are being applied in close collaboration with EPC, for the regulation of biodiversity prospecting and research and for the protection of national rights with regards to biological resources. All biodiversity research in the archipelago is currently carried out under such framework agreement, and under the supervision of the EPC.

Capacity Building and Training

One of the main objectives of the project is to create professional capacity at local level, to allow the long-term continuation of biodiversity conservation efforts.

A significant capacity building effort for project staff, extension officers, school teachers and interested members of the local community was performed. Topics covered during formal training courses include: Botany, Zoology, bird conservation, GIS mapping and use of GPS, scuba diving, marine biodiversity, fisheries processing and marketing, marine resource management, sea turtles conservation, fundamentals of ecology, English language, eco-tourism, computer use, design and implementation of socio-economic surveys. A significant amount of on-the-job training was also possible as key project staff participated in all biodiversity survey work.

Establishment of the Socotra Conservation Fund

It is widely recognised that the implementation of the conservation Zoning Plan for Socotra Archipelago will require significant financial and technical resources in the future. In support of the effort of the Government of Yemen, the GEF Socotra Biodiversity Project provided legal advice towards the creation of the Socotra Conservation Fund, for the benefit of the local community. The principal objective of the SCF is to provide additional financial resources to complement the conservation effort of EPC, towards the implementation of the Zoning Plan in the long-term.