# INTERNATIONAL TROPICAL TIMBER ORGANIZATION ITTO

#### PROJECT PROPOSAL

TITLE

DEVELOPMENT OF BENTUANG KARIMUN NATURE

RESERVE AS NATIONAL PARK (PHASE I)

SERIAL NUMBER

PD 26/93 REV.1 (F)

PERMANENT COMMITTEE

REFORESTATION AND FOREST MANAGEMENT

SUBMITTED BY

**GOVERNMENT OF INDONESIA** 

ORIGINAL LANGUAGE

**ENGLISH** 

#### SPECIFIC OBJECTIVES

The project aims, firstly is, to develop Bentuang Karimun Nature Reserve in West Kalimantan Province as a national park to conserve its biodiversity value and by developing and utilizing its research, educational, recreational and tourism potential. Secondly, due to its unique location adjacent to Lanjak Entimau Wildlife Reserve in Sarawak, Malaysia, it is suitable to establish cooperation in conservation activities between Indonesia and Malaysia through the development of transfrontier joint management reserve.

EXECUTING AGENCY

DIRECTORATE GENERAL OF FOREST PROTECTION AND NATURE CONSERVATION (PHPA), MINISTRY OF FORESTRY

Contribution

COOPERATING GOVERNMENTS

**DURATION** 

24 MONTHS

APPROXIMATE STARTING DATE

JANUARY 1994

BUDGET AND PROPOSED SOURCES OF FINANCE

Source	in US\$			
ITTO	1,165,722			
Gov't of Indonesia	0			
Executing Agency	143,550			
Other Sources	0			
TOTAL	1,309,272			

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SECTION ONE: CONTEXT

#### A. Relevance to ITTO

#### 1. Compliance with ITTO Objectives

This project is in response to the ITTA 1983, article 1 (c), (f) and (h) objectives:

- (c) To promote and support research and development with a view to improving forest management and wood use;
- (f) To encourage tropical timber reforestation and forest management;
- (h) To encourage the development of national policies aimed at sustainable utilization and conservation of tropical forests and their genetic resources, and at maintaining the ecological balance in the regions concerned.

The establishment of national park in Indonesia is aim to conserve the tropical forest and its genetic resource which in turn could support sustainable use of the genetic material needed in the future.

# 2. Compliance with ITTO Criteria

This project is submitted in accordance to the ITTO criteria in "natural forest management" and also "institutional framework, national planning". Although this project do not have direct relationship with all of the criteria set forth in Article 23.6 of ITTA. Nevertheless the development of national park as a natural forest management also aim to increase welfare of the people which could lessen destruction to the forest. Therefore, it is also considered to be relevant to ITTO Guideline for The Sustainable Management of Natural Tropical Forest, Principle 7, Appendix I, Article (a), Forest Where Logging Is Not Allowed which concern 'Protection Forest on Fragile Lands' and 'Forests Set Aside for Plant and Animal Species and Ecosystem Preservation'.

In addition, this project also meets ITTO Guidelines on The Conservation of Biological Diversity in Tropical Production Forest especially as a strategy for conserving biodiversity by establishing a large undisturb continuous protected areas covering representative examples of forest types and ecosystem between Malaysia and Indonesia. The types of Totally Protected Area is defined in Appendix 1 of the Guidelines [Document ITTO PCF (XII) 17. Rev.1.].

# 3. Relationship to ITTO Action Plan and Priorities.

The project will fall into ITTO criteria from the committee on reforestation and forest management: "help to create networks about tropical forest management, between tropical forestry research institute". This project also especially falls in the priorities to promote and financing a project for different management models, regional or subregional network of such project. Also this suit to the priority in helping to finance exchange visit and workshop participation by technical personnel.

The proposed project according to the priorities could create joint research activities between Indonesia and Malaysia easier and also strengthen the management skill of both forestry officials. This will furthermore established cooperation between two neighboring ASEAN countries, Indonesia and Malaysia, to promote sustainable tropical forest management.

#### B. Relevance to National Policies

#### 1. Relationship to sectoral policies affecting tropical timber.

The Forestry Land Use By Consensus Plan in 1984 have set aside area to be developed as production forest, and also for the totally protected area (TPA) such as national park, forest recreation and other conservation area. The sustainable management of forest and establishment of TPA have been given its legal base in the National Basic Forestry Act No. 5/1967 and the Conservation of Living Resources and Their Ecosystems Act No 5/1990.

# 2. Relationship to subsectoral aim and programs.

This project will conduct several activities such as biodiversity survey, socio-economic survey and management plan as well as joint proposal formulation for the two protected area.

The Biodiversity survey will help to lay scientific foundation for the conservation and management of flora and fauna. Bentuang Karimun Nature Reserve have good biodiversity potential, reports said that the area is the habitat for orang utan, honey bear, gibbons and the white fronted monkey also representative of forest bird communities.

The socio-economic condition of the dayak tribes surrounding Bentuang Karimun national park will be assessed, to design and plan appropriate involvement of the tribes in national park development and management. This is also in accordance to the policy of Indonesian government which would like to suppress poverty of education, material and cultural of remote areas.

The management plan formulation will includes also activities that will be implemented in the next phase such as the extension and awareness, further study and research of flora and fauna, development of national park facilities and other relevant management activity needed.

#### 3. Institutional and Legal Framework

The Directorate General of Forest Protection - Ministry of Forestry will be the implementing agency. Project execution will also have a committee to ensure the local people participation to a certain extent in park management.

The project Coordinator Committee and supervisor will be located in Jakarta at the Forestry Head Quarter. The project will also establish a steering committee composed of officials of relevant government agencies and the head of local people. This committee will coordinate and supervise the activities of the entire project activities.

The foreseen coordination mechanism between both governments will be done through reciprocal participation in the steering committee meetings.

#### PART II: THE PROJECT

#### 1. Origin

Indonesia has set aside almost 25 percent (49 million hectare) of its land as totally protected area. The TPA consist of protection forest and conservation areas such as nature reserves and national parks. In the year 2000 it is targeted that Indonesia could have 18.7 million hectares of conservation area.

National park establishment which also account the socio-economic condition of the area is set as a priority action program to be developed. Therefore the development of Bentuang Karimun Nature Reserve as a national park is seen as a high priority.

The Bentuang Karimun is located along the Sarawak border which makes it suitable to a transfrontier reserve linking the Sarawak Batang Ai and Lanjak Entimau Reserve. The cooperation will establish a transfrontier reserve as agreed at the 5th Meeting of the Cooperation Committee on Forestry between Indonesia and Malaysia in Kuala Lumpur, December 1992.

#### 2. Project Objectives

#### 2.1. Development objectives

To develop a model of natural forest management through the National Park system that not only will serve conservation of species and ecosystems but will also accommodate other purposes such as socio-economic development with the involvement of the local and regional communities. Such a model could be extended to regional cooperation between the neighboring countries of Indonesia and Malaysia.

#### 2.2. Specific objectives

- a. to develop Bentuang Karimun Nature Reserve as a national park by conserving the biodiversity value of the area and by developing its research, educational, recreation and tourism potential of the area.
- b. to initiate regional development and promote economic, scientific, educational, cultural, and tourism cooperation between Indonesia and Malaysia, particularly between West Kalimantan and Sarawak.

#### 3. Project Justification

#### 3.1 Problem to be addressed

There are several problems found in this area such as socio-economic and also lack of local flora and fauna distibution and richness data. The National Conservation Plan shown that little is known about the flora and fauna of the area and also and the low level of socio-economic condition of most dayak tribes.

The Dayak tribes mostly earn their living in the forests, sometimes forest concessions and nature reserve area were encroached. Therefore practically there are no other source of income for the local people and a socio-economic study have not been deeply conducted in this remote area.

3.2 Characteristic of the region where the project will be located

Bentuang Karimun, is one of the largest nature reserves in West Kalimantan. It covers a total area of 600,000 hectares and consists and supports a range of several type of ecosystems. These include lowland Dipterocarp forest (204,000 Ha), wet hill forest (330,000 Ha), montane forest about 58,000 Ha and moss forest which cover 8,000 Ha.

The biodiversity value in this area is very large includes good population of orangutan, honey bear, white fronted monkey and representative communities of forest birds. Moreover the forest is also botanically rich. Information from Malaysia describes that the Batang Ai and Lanjak Entímau Reserve as a final retreat of orangutan and the white fronted monkey in that country.

There is no physical boundary between the Malaysian and Indonesian reserve and it seems quite possible that these animals could also be encountered in Bentuang Karimun reserve. The area is surrounded by some logging concessions, and due to this condition it is important that this area should be established as a National Park or as a Totally Protected Area (TPA) which could give certain socio-economic benefits.

The socio-economic benefit will in turn help to lessen the destruction or disturbance on the concession forest surrounding the area. This could give support to achieve ITTO year 2000 target that all trade in tropical timber would come from forest that are manage sustainably.

Another important reason to protect the area is its function as part of the catchment for Kapuas river which have an important social and economic development roles.

Bentuang Karimun is closely linked to local and regional communities both in Indonesia and Malaysia. This project will identify management activities, program priorities and organization structures needed to realize the above mentioned ecological and community development cooperation.

# 3.3. Other relevant aspects of the pre-project situation

The ecosystems of most area in Bentuang Karimun are have not been recorded in detail, therefore, the composition and diversity of flora in those area are very important to know in detail. Furthermore there are some concession company which will harvest the timber surrounding the nature reserve. Most of the dayak tribes surrounding the reserve still depend their livelihood in the forest. There are probably some encroachment caused by the people to the nearby forest.

#### 3.4. Intended situation after project completion

The completion of Phase I, Development of Bentuang Karimun Nature Reserve to a national park will resulted first, the change of status of the reserve into a national park, a steering committee and also project organization have been established to implement the management plan.

The socio-economic status of the area have been assessed and resulted in the identification for further development for the surrounding people. And most important is the people are prepared to accept the management plan implementation including the law enforcement and management in the reserve.

Survey results are going to be store as data base in scientific monitoring and evaluation in the future. There would also be simple guidance for species identification of flora and fauna of the area. In depth biodiversity surveys will provide extensive information for this area. Especially to know the wildlife population status in a protected area particularly of wildlife demand in trade.

# 3.5 Target beneficiaries and others affected.

The project is going to be conducted with the consultation of the local people, which then give people full participation. It is also hope that the people could see the importance of this project, and act according to the expectation. The people can also see that with the development of the area there will opportunities for also increasing their livelihood.

The project will also try to increase the participation of the concessions company to increase the local people welfare, because the national park establishment could help to lessen destruction comes to the concession area. The involvement of logging companies could also become a model of development in other areas.

# 3.6 Project strategy.

# 3.6.1. Reason for selection

The project is aimed to develop Bentuang Karimun Nature Reserve to become a national park which could also lessen the socio-economic problems of the area. Moreover, this area is suitable for intensive management activity in conserving the biodiversity value, due to its location; surrounded by logging concession and also traditional use of the area by the dayak tribes.

Other arrangement which can be done is that development can be done by the logging companies. The companies can arrange some compensation payment to the local tribes by means of providing infrastructure, education, amenities and other facilities.

For the conservation of biodiversity in this area the existence of Bentuang Karimun as a protected area can be seen to provide a more complete ecotone for the wildlife. The result of biodiversity survey could become a model of reestablishment ecosystem in situation similar to the national park ecosystem that have been disrupted by certain activities.

#### 3.6.2. Lessons drawn from the past.

There has not been any intensive management conducted in this area. Nevertheless, from other experiences some suggestions have been made for development of a national park such as development of traditional use zone, local people involvement in the decision making process in its management and many other activities.

# 3.6.3. Technical and scientific aspects.

There are some activities which will be conducted. A wide range of scientific method will be applied to gather information in detail about the flora and fauna, also social and economic condition of the area. A map of zonation of the national park will be produced, as well as the plan of locations to provide the public service facilities. Survey will also be conducted to provide a list of indicator species for monitoring activities.

#### 3.6.4. Economic aspects

The project will be beneficial to the surrounding community where national park will have zonation system, and in the implementation phase there will be training and guidance for the local people to develop their activities and increase their livelihood. Nevertheless at this early stage the economical activities aspects could not yet be quantified.

#### 3.6.5 Environmental aspects

The surveys which are going to be conducted is a multidisciplinary approach that are going to examine the biodiversity, socio-economic and also technical aspects in the national park development. The involvement of national institutions in developing the management plan will be conducted to minimize and mitigate the negative impact of the development. Especially, on tourism development and traditional use of the area either to the culture and also to the wildlife in the area.

# 3.6.6. Social aspects.

In order to gain support from the local people in the management plan implementation stage, there will be regular consultation with head of dayak tribes and other local communities as well as local government in the development of management plan. The change of the status and future prediction will be informed to the people in very early stage of the project.

#### 3.6.7. Managerial aspects.

The existing management organization are designed in order to assure control over the project implementation, either in administrative as well as technical aspects. Therefore the organization structure is arranged as any other projects in the country.

# 3.7. Reason for ITTO Support.

#### 3.7.1 ITTO aspects

The government realize that there are not enough funding to carry out the proposed activities in such short time, because national park development funding priorities are still have to be allocated for 31 other national parks and other types of TPA. The required funding budget to conduct this project is enormous compare to what allocated in the present funding activity. Therefore this project would need ITTO assistance, in addition it could support ITTO year 2000 target that every timber should come from sustainable management forest.

# 3.7.2. Relationship to relevant action supported by other donors

The project is proposed to be implemented by the Directorate General of Forest Protection and Nature Conservation. There are no other donors related or involved to the implementation of the project.

#### 3.8. Risks

There are risk, from lack of support of the local people in the establishment of the national park in the area, if initial awareness activities are carried out long after the status have been changed. Therefore people awareness have to be conducted since the beginning of the project implementation.

#### 4. Outputs

The output of the project will be :

- a. Management plan for Bentuang Karimun National Park
- b. Joint project proposal for further cooperation between the Government of Indonesia and Malaysia.

The management plan will propose implementation activities and the level of required budget. This will form the Phase II proposal for the support to ITTO or other international assistance.

#### 5. Activities and Inputs

a. Upgrading the status of the Bentuang Karimun Nature Reserve to a National Park;

This component will establish the project organization including the professional management team, project office and associated facilities. The Project Coordinator will responsible for recruiting and assigning field and administrative staff. The Project Coordinator will be an Indonesian or foreign expert depending on the availability of a suitably qualified and experienced person. The required field staff or consultant is as follows:

- A Park Planner
- A Regional Planner
- An Ecologist
- A Resource economist
- A Primatologist
- A Herpetologist
- A Sociologist
- A Landscape Architect Specialist
- An Ornithologist

Project formulation, Work Plan, staff recruitment, field staff assignment and mobilization has to be undertaken within the 6 month period. This will include the design of each field staff assignment.

#### b. Information gathering (surveys)

Information gathering will include field surveys, analyzing and compilation of data. Field survey include the following activities:

- Biodiversity surveys
- Socio-economic, ecotourism, agroforestry survey
- Site selection survey

These surveys will be conducted to the maximum extent of ecological site/zonation, regardless of the boundary demarcation. This stage requires full cooperation between the two countries, Indonesia and Malaysia.

#### c. Management Plan formulation

The management plan is a long-term document for a period of 25 years. It will include the compilation and analysis of the collected field data, a detailed plan for the protection of the national park, its potential extension and plan for the utilization of the area for research, tourism and non-conflicting traditional use of the surrounding community.

The longterm goals and objectives of this Management Plan will guide the preparation of short-term management plans. This flexibility allows for changes in regional, social and economic perspective.

# 6. Logical framework

The logical framework is not attached in this proposal. It will be completed and presented in the evaluation process.

#### 7. Work plan

The duration of the proposed project shall be 2 years. The proposed work plan are the following activities. The workplan is attached in this proposal as Annex 2.

# 8. Institutional arrangements for Project Execution and Operation

# 8.1. Project management structure

The general principles followed in the project design are :

- a. The project shall involve Government of Indonesia personnel, local as well as expatriate experts.
- b. Each expatriate expert shall have an Indonesian counterpart of corresponding background. The government personnel, local and expatriate expert shall work together closely as a professional team.
- c. There shall be a greater number of Indonesian than expatriate experts.

The steering committee will be composed of officials from relevant government agencies and institution as well as community representatives. This committee will help the project manager and assist the team leader in the development of the entire project activities.

# 8.2. Future operation and maintenance

After the completion of the project all data shall belong to the executing agency, and the management shall be transferred to the executing agency by the end of second year of phase I.

# 9. Prior obligations and prerequisite

Before the starting of the project, legal status of the area must have been declared by Ministerial Decree. Therefore boundary demarcation will have to be establish prior to this condition. The staff, of the project will have to be chosen for this purpose at least 3 months before the project starts. At the start of the project the people of the steering committee will have to be appointed.

#### 10. Possible future action

This project will be continued in Phase II according to the proposed Joint Project Proposal. Phase II are going to implementing the management plan. There will also be a engineering design study and site plan for that area. Certain construction activity will also be conducted as well as research, monitoring and law enforcement activities.

# PART III : MONITORING, REPORTING AND EVALUATION

The project shall be subject to periodic technical review and monitoring in accordance with the policies and procedures of Government of Indonesia and ITTO.

The project shall be subject to evaluation in accordance with the policies and procedures of the Indonesian Government and ITTO. The evaluation shall take place at the end of the first and second year of Phase I.

Monthly progress report shall be submitted to Indonesian Government only while Be-quarterly report shall be submitted to the Government and also ITTO. By the end of the first year annual report shall be submitted to the government and ITTO.

The Management Plan will be produced by the executing agency at the end of phase I. The draft project proposal for phase II described in Part II Article 3 will be completed by the implementing agency before the last working day of the Phase I.

#### PART IV : BUDGET

The Phase I proposed project budget is estimated at US\$ 1,135,970 which comprises of US\$ 996,270 from ITTO and US\$ 139,700 from the Government of Indonesia. The proposed financial plan is shown in Appendix 1.

Appendix 2. Time Table Activities for Phase I

No.	Activities	YEAR 1			YEAR 2			
		Q1 Q2	Q3	Q4	Q1	Q2	Q3	Q4
A	Management Plan Formulation							
1	Socio-economic survey - Natural Resource economic survey - Sociology survey	xxxxx xxxxx						
2	Biodiversity survey - ecological survey - Primate survey - Ornithological-svy - Herpetological survey		xxx xxx xxx	xxx xxx x				
3	Landscape survey		xx	хх				
4	Management Plan Formulation - Regional planning - Park Planner acti- vities	xx	xxx	xxx xxx	xxxx		« xxx	xxx
В	JOINT PROPOSAL  DEVELOPMENT  - Annual meeting with  Lanjak Entimau park  officers		ē	хx				xx
С	PRE-PROJECT IMPLEMENTATION	-						•
	<ol> <li>People awareness program</li> <li>Main facilities development         <ul> <li>Construction</li> <li>Equipment</li> </ul> </li> </ol>		хх	хх	хх	xx	х	×
D	MOF and ITTO MONI- TORING AND EVALUATION			;				

<sup>\*</sup> x = represent 1 month

#### TERM OF REFEERENCE FOR CONSULTING SERVICE

# 1. Park Planner (Team Leader) (International 20 mm)

Qualification MSc with 5 Years experience and PhD in Natural Resource Management or related subject with 3 years experience in national park development;

- a. Design time table for research activities to be carried out by other specialist
- b. Formulate the development of long-term Bentuang-Karimun National Park Management Plan, based on survey conducted by the specialist
- c. Carry out activities to built up joint proposal activity with Lanjak-Entimau park planner
- d. Design training need for national park personnel as well as the community
- e. Design research need for monitoring of park biodiversity
- f. Design zoning of the park into acceptable socio-economic condition for the area.

### 2. Regional Planner (Co-Team Leader) (National; 12 man months)

Qualification MSc with 5 Years experience or PhD with 3 years experience in Urban Planning or related subject in national park development;

- a. Conduct survey of development activities and role of the community in local government planning.
- b. Assist team leader in the national park management plan formulation
- c. Design national park tourism development plan according to the existing regional plan
- d. Conduct survey of material and other resource required for community development

#### 3. Landscape Architecture Specialist

(National 4 man months)

Qualification MSc with 5 Years experience or PhD with 3 years experience in Landscape Architecture or related subject in national park development;

- a. Design site and building construction plan of park facilities for management activities and public services with minimum impact to the surrounding environment.
- b. Assist park planner in formulating the management plan for those facilities

#### 4. Ornithologist

(National; 4 man months)

Qualification MSc with 5 Years experience or PhD with 3 years experience in Ornithological survey or other related biological subject

- a. Conduct survey to determine bird population diversity and density in the reserve
- b. Assist the team leader in the preparation of management plan to develop important habitat to be protected and zonation of the area in terms of birdlife

#### 5. Primatologist

(National; 6 man months)

Qualification MSc with 5 Years experience or PhD with 3 years experience in Primatological survey or related subject.

- a. Conduct primatological survey to determine the primate population and distribution in the reserve
- b. Assist the team leader in preparing the management plan to identify important habitat to be protected particularly for the rare and endangered primate species.

#### 6.Herpetologist

(International; 6 man months)

Qualification MSc with 5 Years experience or PhD with 3 years experience in Reptile survey or related subject

- a. Conduct a herpetological survey to determine reptile population and distribution in the reserve
- b. Identify important site area to be protected
- c. Assist the management plan preparation for protection scheme.

#### 7. Ecologist

(International; 6 man months)

MSc/PhD in Ecology or Botany or related subject; 5/3 years experience in tropical forest survey

- a. Conduct ecological and botanical survey to analyze vegetation dis tribution and type of ecosystems exist in the reserve.
- b. Identify important sites to be protected and why
- c. Assist the team leader in management plan preparation and formulation.

#### 8. Natural Resource Economist

(National / International; 6 man months)

MSc/PhD in Natural Resource Economy or related subject; 5/3 years experience in tropical forest survey

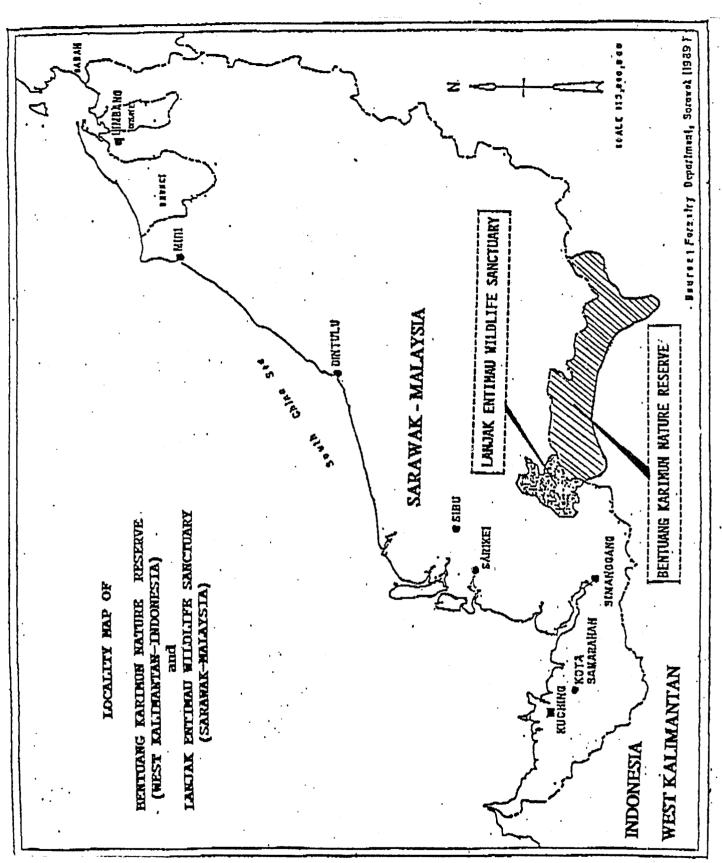
- a. Conduct socio-economic survey to identify economic activities of the people surrounding the national park
- b. Design development of social and economic activities for the community which support national park management
- c. Assist the team leader in the park management plan formulation as well as bufferzone activity and community development.

#### 9. Sociologist

(National; 8 man months)

MSc/PhD in Sociology or related subject; 5/3 years experience in tropical forest survey

- a. Identify all users of the forest or other resources and the nature of their claim upon them
- b. Analyze the extent to which they depend on these resources and their livelihood
- c. Map the territories claimed by different categories of users at different times of the year, showing any areas and conflict
- d. Describe system of land tenure
- e. Identify who makes the decisions over the use of the resources and how the decision are taken
- f. Describe traditional ways of regulating resource use and for resolving conflicts between users
- g. Determine how far the project can and should build on traditional social institution



This map is adopted from the ITTO Doc 106/90 Rev.1 (F) page 12.

APPENDIX 1. FINANCIAL PLAN FOR PHASE!
DEVELOPMENT OF BENTUANG KARIMUN NATURE RESERVE AS A NATIONAL PARK

TOTAL	70.000 75.000 288.000 325.000	30.000 22.000 13.000	25.000 14.000 30.000 50.000 25.000	5.500
Gorthillution	75.000	5.000	30.000	5.500
GRANT	70.000 75.000 288.000 250.000	30.000 22.000 8.000	25.000 14.000 50.000 25.000	
YEAR2	20.000 36.000 108.000 200.000	15.000 12.000 8.000	7.000	3.000
YEAR I	50.000 39.000 180.000	15.000 10.000 5.000	25.000 7.000 30.000 50.000	2.500
. HEW	PROJECT PERSONNEL     National Expert     Administrative personnel     International consultant     Fellowshin and training		III. CAPITAL ITEMS 1. Capital equipment - speedboat - Computer - car - car - GIS equipment - Field equipment	2. Operating costs - maintenance