Biodiversity Proposal

Global Environment Facility United Nations Development Programme

Creating Protected Areas for Resource Conservation (PARC) in Vietnam Using a Landscape Ecology Approach

Project Title:

Creating Protected Areas for Resource Conservation

(PARC) in Vietnam Using a Landscape Ecology

Approach

GEF Focal Area:

Protection of Biodiversity

Country Eligibility

Biodiversity Convention Ratified on 31 October 1994;

. GEF Instrument Deposited on 12 May 1994

Total Project Cost:

US\$ 6.696 m

Proposed GEF Financing:

US\$ 6.041 m

Total Proposed Co-financing:

Government:

US\$ 0.655 m (and in kind)

Associated UNDP/IPF and GEF Projects:

\$4.55m plus UNDP/Environment and Natural Resources

Programme (ENRM)

Conservation Training and BAP - US\$ 3.0 m

Environmental Awareness - US\$ 0.553 m

Sub-Regional Biodiversity Conservation - US\$ 1.0 m

GEF Implementing Agency:

United Nations Development Programme

Executing Agency:

United Nations Office of Project Services

Local Implementing Agency

Counterpart:

Ministry of Forestry

Implementing Agency:

World Wildlife Fund- International

Estimated Start Date:

January 1996

Project Duration:

5 years

GEF Preparation Costs:

Block B - ~US\$ 103,900

1 Country and Sector Background

Vietnam remains one of the poorest countries in Asia with a per capita GDP of approximately \$200. In addition, years of isolation from many of its neighbors have left a dearth of appropriate managerial resources in many aspects of society, a major constraint to development. Fiscal constraints have left Vietnam unable to rebuild and maintain its infrastructure. However Vietnam's position in the Human Development Index is relatively high due to a well educated population, a comprehensive health service, and the strong position of women in society. Vietnam's population in 1992 was 70.8 million with an annual growth rate of approximately 2.3%, making it the 12th most populous country in the world.

The economic future for Vietnam looks bright as it is currently experiencing a period of profound transition from a centrally planned to a market-oriented system. The economic situation is extremely dynamic with current GDP growth (1992) estimated at 8.3% in real per capita terms. This rapid rate of growth is occurring in an economy which is still largely agrarian (39% of GDP in agriculture) but is rapidly moving toward a more industrialized and services base. These structural changes and other developments create an immediate and once-only opportunity for the development of appropriate policies, mechanisms and resource exploitation practices.

Vietnam has a land area of 330,363 km². It is a relatively mountainous country with a narrow central coastal strip and two major deltas in its northern and southern extremities. Average annual rainfall for most parts of this humid, tropical country is approximately 2,000 mm, although some areas receive up to 3.300 mm.

The forests, waters and wetlands of Vietnam contain a great wealth of flora and fauna. It is estimated that the nation's forests contain up to 12,000 species of higher vascular plants, of which 2,300 that are known to be used by humans for food, medicines, animal fodder, timber, oil, and many other purposes. The fauna of Vietnam is also very diverse. Some 276 species of mammals, 826 species of birds, 180 species of reptiles, 80 species of amphibians, 471 species of freshwater fish, and about 2,000 species of ocean fish are known, in addition to many thousands of invertebrate species. The flora and fauna in Vietnam also show a very high level of endemism and a high degree of local distinctiveness, with many endemic species of great conservation interest. Twenty-eight species of mammal, 40 species of bird, 7 species of reptile, and one species of amphibian found in Vietnam are listed in the IUCN's (1990) Red List of Threatened Animals.

Indicative of Vietnam's great biological wealth is the recent discovery of two large mammal species, the saola (Vu Quang ox) and the giant muntjac. Notably, this globally important biodiversity is being threatened as agricultural encroachment, population pressures, and unsustainable land use practices lead to a destruction and fragmentation of habitats.

The Government of Vietnam is seriously committed to biodiversity conservation. The first national park was established in 1962, despite the difficulties raised by the then ongoing conflict. In 1985, Vietnam adopted a National Conservation Strategy, and later the comprehensive National Plan for Environment and Sustainable Development (NPESD). The NPESD advocates the interdependence of environmental protection and economic development. In accordance with this new thinking, the Government and the UNDP Country Office in Vietnam prepared during 1992-93 a programmatic and strategic framework for Technical Assistance in Environment and Natural Resources Management for Vietnam (ENRM) (See Annex 1 for ENRM framework). The ENRM programme has taken the approach that environmental management in Vietnam should be preventive, inter-related, integrated and shared; its primary objectives are (i) reducing the impact of urban and industrial pollution, (ii) reducing the impact of natural disasters, and (iii) sustainable exploitation of natural resources. The present project was identified and designed through this preparation process to be a core element of this Technical Assistance programme. It is

important to note that the projects within this ENRM have been designed so that they are complementary to one another, and that the benefits of any one project is not limited to that project only, but will also facilitate/enhance the implementation of any other project. (For example, the Environmental Awareness project (VIE/93/030) will clearly benefit projects in all environmental sectors.) The proposed GEF PARC project and UNDP's ENRM programme were developed prior to the formulation of the World Bank's Country Assistance Strategy for Vietnam. However UNDP and the World Bank have worked closedly to ensure complementarity between their two natural resources management programme's for Vietnam.

Recently, the Government has reviewed and revised its national forestry policies. Regulations which affect wildlife, forest and coastal management both directly and indirectly, are being drafted in rapid succession. Most notable among these are Government Decree No. 39/CP (May, 1994); Law on Land (1993); and Forestry Protection and Development Act. A major result of these initiatives has been to shift responsibility of forest management and protection to local communities. Such policies may provide for greater equity, but they do not necessarily guarantee greater protection of biodiversity. They need to be complemented by programs that assist in incorporating local communities into plans to manage and protect biodiversity, not only to ensure that new unsustainable management practices do not begin, but also to be sure that existing sustainable ones are not lost. The Law in Land in particular, whose emphasis is on the allocation and uses of non-forestry land, provides the legal framework for action within which the PARC project will operate. As this law is very new, it is proposed that the PARC project will create one possible means by which this Law will be implemented, providing for community inclusion in park management and associated multi-use zones in Vietnam.

The proposed Protected Areas for Resource Conservation (PARC) project has also been identified as a priority in the context of Vietnam's Biodiversity Action Plan which was prepared with the assistance of a GEF Pilot Phase UNDP/GEF project (Conservation Training and Biodiversity Action Plan - VIE/91/G31). An early conclusion of the BAP discussions was the need for integrated protected area management, consisting of a mix of large and smaller core areas and for adjacent sustainable resource use zones, as one of the most important methods for preserving critical ecosystems, landscapes and biodiversity in Vietnam. This Pilot Phase project also developed a national conservation training programme consisting of field training for forest guards working directly with villagers in the forests; field training for park directors and deputy directors focusing on participatory protected areas management approaches; field training for protected area science offices in the areas of wildlife management and sustainable forest management; and advanced training for officials of the Ministry of Forestry, the Ministry of Science, Technology and Environment, the Forestry College, the Institute for Ecology and Biological Resources (IEBR).

The PARC project would build on these human and institutional capacities developed in the GEF Pilot Phase project. Specifically, capacity would be built within staff of the PARC site, including the Protected Area Director and Deputy Director, Science Officers, Forest Guards, and Community Extensionists. Technical transfer provided by the CTA and UNVs working in the PARC sites would be a valuable tool for capacity building. Also benefitting from capacity building through the implementation of the PARC project, would be the Provincial Forest Protection and Agriculture Departments, Provincial People's Committees, District Forest Protection and Agriculture_Offices and District and Commune People's Committees in the respective districts and provinces of the two selected sites. Extension programmes coordinated through the local offices of the Women's Union, Youth Union and Farmer's Union would also enhance the ability of these important mass organizations to outreach to their constituents.

Project Preparation

The initial idea for a model integrated protected areas management project specific to the environmental situation in Vietnam was proposed in late 1992 by the Vietnam Forest Protection Department (FPD) and the Forest Inventory and Planning Institute (FIPI). These two departments within the Ministry of Forestry are responsible for protected area management in Vietnam.

The idea for a GEF project focusing on the in-site protection of biodiversity was further discussed at the Ministry of Science, Technology and Environment (MOSTE) during the early planning meetings of the Biodiversity Action Plan (BAP) in February 1993, when it was agreed by the BAP Consultative Team of about 25 Vietnamese scientists and conservationists that protected area management in Vietnam was still in its infancy and needed suitable models and management systems more adapted to the fragmented ecosystems and heavily populated conditions of Vietnam. An early conclusion of the BAP discussions was that integrated protected area management, consisting of a mix of large and smaller core areas and adjacent sustainable resource use zones, was one of the most important methods for preserving critical ecosystems, landscapes and biodiversity in Vietnam.

In March 1993, as a result of these discussions, the "Protected Areas for Resource Conservation" (Vietnam PARC) concept was formally prepared as one of three complementary GEF pipeline projects for Vietnam, the other two focusing on watershed management and coastal marine resources. The PARC Project Brief was further developed by a multi-disciplinary team with inputs and ideas presented by the following people/institutions:

- *Provincial, district, and community leaders in eight provinces.
- *Pham Monh Glao/Nyuyen Nhu Phuonh of the MOF Forest Protection Department
- *Vu Van Dung, Nguyen Ngoc Chinh and Do Tuoc of Forest Inventory and Planning Institute (FIPI)
- *Professor Hoang Hoe of the Vietnam Forestry Association
- *Profession Vo Quy and Hoang Van Thang of the Centre for Natural Resources Management and **Environmental Studies (CRES)**
- *Dr. Nguyen Van Truong of the Institute of Economic Ecology
- *Ngo Si Hoai of the MOF International Cooperation Department
- *Nguyen Ba Thu of the Cuc Phuong National Park
- *Huynh Van Keo of the Bach Ma National Park
- *Hoang Ba Pho of the Lam Dong Provincial Forest Protection Department
- *Tran Van Tri of the Ha Tinh Provincial Forest Department
- *Yannick Glemarec and Justine Elmendorf of UNDP/Hanoi
- *Shanthini Sawson and David Hulse of the VIE/91/G31 project and WWF
- *Victoria Heymell of the IUCN

Further reviews of the project were undertaken by the Donor Working Group for Environment and Natural Resource Management¹ in June 1993, and during July-August 1993 as part of the BAP consultative process, including discussions with provincial, district, and community leaders in eight provinces.

The project was discussed with the State Planning Committee (SPC) in March 1993. This is the institution responsible for the coordination of all international assistance to Vietnam, including assistance originating from global and multi-lateral funds such as the GEF. The SPC approved the project idea in

The Donor Working Group on Environment and Natural Resource Management is open to all major multilateral, bilateral and non-government organizations working in Vietnam, and meets regularly on a thematic basis.

April 1993 and have provided guidance, comments and ultimately approval for each stage of the development of the project.

The project was then submitted to a January 1995 GEFOP meeting for funding consideration. The project received universal praise on its quality, including the project concept, incremental costs calculations, extent of participation, and so forth. A recommendation was made, however, that the project should elaborate further upon two issues before it was considered any further: (i) site selection, and (ii) creation of an indicative management plan for the first year. The PARC project was therefore at that time given a Block B PDF grant to address these two issues. It was recommended that once these issues were clarified, that the project be resubmitted to the GEFOP for consideration.

After approval of the Block B funds, the project took a two-pronged approach to finalizing the PARC submission:(i) as the need for immediate action in Vietnam is urgent, an interim mission was sent out to finalize the brief in accordance with the GEFOP recommendations; (ii) a second longer term mission will be fielded upon approval of the GEF to draft the full Project Document.

(i) An interim mission consisting of a joint team between the Ministry of Forestry and World Wildlife Fund-International was immediately fielded in Vietnam to undertake consultations at the local, provincial and national level to finalize the site selection and to draft an indicative management plan for the first year of the project. The final selection process for the two model PARC sites addressed a wide range of development objectives as well as biodiversity conservation. In general, the PARC site selection process involved consideration of:

- the extent to which the local people living near the site wish to participate.
- maintenance of ecological functions vital to the economy of the rural communities and the nation and the larger Southeast Asian region as a whole.
- opportunities for sustainable rural development by promoting more efficient and ecologically sound use of natural products.
- establishment of land tenure systems that are compatible with cultural traditions of indigenous communities and ecological sustainability.
- environmental stabilization (e.g. reduced rates of siltation, greenhouse gas emissions, etc) of the surrounding region by sound watershed management and sound land use planning.
- sustainable uses of biodiversity which support indigenous communities, the agricultural economy, and major industries.
- the extent to which alternatives for sustainable livelihoods can be developed.
- opportunities for education in ecology and natural history for academic institutions, policy makers, and the general public, and contributions to scientific research on natural habitats, wild species, and their relationship with human development.
- protection of endemic genetic resources and preservation of distinctive ethno-biological forms and values of global significance.
- habitat size to maintain viable populations of important flora and fauna species.

As a result of this mission, the proposed PARC project will be implemented in two crucial concentrations of biodiversity: Yok Don National Park and Ba Be - Nahang nature reserves. (Please refer to Annex 2 for Maps and detailed information on these two sites.) Each of these sites is rated by the BAP as having quality A biodiversity and as being in need of urgent (Phase 1) investment. These two areas provide the required diversity to ensure that the project produces enough experience, resources and information to apply to the development of biodiversity conservation in other areas in Vietnam and elsewhere.

- (ii) In conformity with GEFOP recommendations, an indicative management plan for the first year has been prepared drawing on the existing management plans for the sites and encompasses the landscape ecology approach. The indicative management plan can be found in Annex 3.
- (iii) To draw up a full project document, a multi-disciplinary formulation mission will be undertaken to collect additional baseline data and survey related ongoing and planned projects and of current physical and environmental conditions, identify mechanisms by which the Steering Committee and Project Implementation Units can coordinate implementation of the project, and conduct further extensive consultations with central and provincial authorities, district and community leaders, professional associations, people's organizations and NGOs in order to refine the community involvement mechanisms, as this is essential to the success of the project. This mission is expected to get underway immediately following GEF approval.

2. Project Objectives

The overall development objective of this five year project is to conserve Vietnam's globally significant biodiversity through implementation of a landscape ecology approach to protected areas management which will seek to find a fair balance between the provision of ecologically sound livelihoods and the conservation of biodiversity in Vietnam's unique socioeconomic conditions. The project will introduce, develop and implement the PARC concept which is based on a participatory approach, an open consultative process, and the appropriate integration of conservation and development. The resulting capacity to implement the PARC project in Vietnam will be applicable to all areas in the country where biodiversity is fragmented, population pressure high, and socio-economic development integrally linked to conservation.

The global benefits to be obtained from the input of additional GEF funds above the normal Government of Vietnam contribution would include strengthening of Vietnam's capacity for:

- Preservation of endemic animal species, such as the severely endangered kouprey, tiger, the Tonkin snub-nosed monkey and many others. Besides their intrinsic value, they can provide important genetic material for domesticated animals and for evolutionary research.
- creation of carbon dioxide sinks through tree planting programmes.
- conservation of biodiversity of global significance.
- demonstration of a model approach to natural resource conservation applicable to other areas around the world.
- demonstration of the sustainable use of the components of biodiversity to ensure sustainable livelihoods for local human populations.

3. Project Description

Many tropical countries are faced with similar situations as Vietnam, where the remaining centers of biodiversity are under increasing stress to provide sustenance to an expanding population. During the last few decades, the frontiers of Vietnam's biologically rich wildlands have been retreating. What fragmented natural areas remain are often too small and too isolated to maintain unique habitats,

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species assemblages, or viable populations. The urgent unmet need is to seek a fair balance between the provision of ecologically sound livelihoods and the conservation of biodiversity.

PARC expands the function of conservation to mean wise preservation and use of natural resources to insure sustainability. The PARC concept is based on a modified landscape ecology approach, which is a recent development in conservation science based on the experiences gained from integrated protected area programmes in other tropical countries. The approach deals with the fragmentation of habitats and the multiplicity of objectives that must be met. In the case of PARC, these objectives include provision of sustainable livelihoods and generation of employment, protection of endemic genetic resources and preservation of distinctive enthno-biological forms and values of global significance, and mitigation of fragmentation effects. Instead of focusing conservation efforts on a small protected area, the PARC project plans to manage entire landscapes that include ecosystems in varying intensity of human uses.

The landscape included in the PARC site would include a large core protected area which is connected to smaller areas by suitably chosen corridors. Surrounding areas would be managed multiple-use zones dedicated to meeting the economic and cultural needs of local communities. These areas would be devoted to some forms of sustainable agriculture, agroforestry, tree plantations, and re-afforestation. The success of these multiple-use economic units is linked to the effective protection of the core area, corridors, and smaller conservation areas. Additional measures to promote ecologically sound human interactions may be provided by some form of buffer zones.

PARC would provide the benefits of conservation directly to local communities through the strong linkages of their livelihood systems to the core protected areas. Additional incentives such as land tenure will be conditioned to the ecological use of the land. Protection of the core reserve is also in critical watersheds whose continued protection is vital to surrounding agricultural areas. The core could also be the perpetual source of seedlings for tree plantations, inputs for value-added production of non-timber forest products, or the venue for ecotourism enterprises. The strategy behind PARC is that local communities will assist in the protection of the core reserve if they are able to draw direct benefits from its protection.

Immediate objective 1: To finalize management plans for two PARC sites in biologically, environmentally, socially and economically critical regions.

Outputs

- 1.1 Report documenting the ways that people in Vietnam as well as in other tropical countries have managed biodiversity sustainably through integrated protected areas and community forest management.
- 1.2 Socio-economic appraisals of the selected sites and designs for new or updated sustainable community resource projects and livelihood systems, including recommendations on land tenure concepts and a fair and equitable incentive system.
- 1.3 Measurable success indicators and baseline information.
- 1.4 Finalized management plans for the protected sites, based on the landscape ecology approach, including an analysis of sustainable financing options including development plans to integrate biodiversity conservation into regional planning.
- 1.5 Plans for the regeneration of corridors and buffer zones through tree plantations, assisted natural

regeneration, and other agro-forestry and rural development activities.

Immediate objective 2: To implement management plans and community programmes for two PARC sites with ongoing monitoring for progress and impact.

Outputs:

- 2.1 Management plans for PARC sites implemented, and impact monitored (based on the success indicators developed in Objective 1).
- 2.2 Project staff, community members and local government provided with 'on the job training' in integrated conservation and development.
- 2.3 Community resource development projects, such as the provision of credit and extension facilities to women, implemented.
- 2.4 Pilot-testing of sustainable financial mechanisms, including a trust fund, ecotourism and sustainable harvest and value-added production of non-timber forest products and creation of a financial plan for the project.
- 2.5 Significant areas regenerated using a vegetative cover appropriate to the area.

Immediate objective 3: To evaluate PARC implementation and modify if for replication in other areas based on the evaluation assessments.

Outputs:

- 3.1 Field surveys evaluating the impact of the project on biodiversity conservation.
- 3.2 Socio-economic surveys assessing the impact of the community development projects, and based on these assessments, modifications of the PARC concept for replication.
- 3.3 Preliminary plans to replicate the PARC project in other sites of Vietnam

4. Rationale for GEF Financing

The PARC proposal supports the objectives of the Convention on Biodiversity which the Government of Vietnam ratified on 31 October 1994.

It is in line with the following guidance for priority funding areas from the Conference of the Parties of the Convention on Biodiversity:

- It has national priority status and would fulfill the obligations of the Convention.
- It would help develop a strategy for the conservation of biological diversity and the sustainable use of its components in accordance with Article 6 of the Convention.
- It would strengthen conservation, management and sustainable use of ecosystems and habitats identified by the national government in accordance with Article 7 of the Convention.
- lt would identify and monitor wild biodiversity components under threat, and begin implementation of measures of their conservation and sustainable use.
- It would build capacities, including human resources development and institutional development,
 to facilitate the preparation and implementation of a strategy for the conservation of marine

biodiversity and sustainable use of its components.

- It would promote the sustainability of project benefits that offer a potential contribution to experience in the conservation of biological diversity and sustainable use of its components which may have application elsewhere, and encourages scientific excellence.
- It would provide access to other international, national and /or private sector finds and scientific and technical cooperation.
- It would have innovative measures aimed at conservation of biological diversity and or sustainable use of its components, including those which assist developing countries to address situation where opportunity costs are incurred by local communities and to identify ways and means by which these can be compensated.
- It would strengthen the involvement of local and indigenous people in the conservation of biodiversity and sustainable use of its components.
- It would promote the conservation and or sustainable use of endemic species.
- It would integrate social dimensions including those related to poverty into the conservation of biodiversity and the sustainable use of its components.

This project is in alignment with the GEF Programming Guidance for 1995 at will serve to protect globally significant biodiversity (some 276 species of mammals, 826 species of birds, 180 species of reptiles, 80 species of amphibians, 471 species of freshwater fish, and about 2,000 species of ocean fish, in addition to many thousands of invertebrate species. The flora and fauna in Vietnam also show a very high level of endemism and a high degree of local distinctiveness, with many endemic species of great conservation interest. Twenty-eight species of mammal, 40 species of bird, 7 species of reptile, and one species of amphibian found in Vietnam are listed in the IUCN's (1990) Red List of Threatened Animals. Two large mammal species, the saola (Vu Quang ox) and the giant muntjac were recently discovered.) The project can demonstrate urgency for action (this globally significant biodiversity such is threatened by unsustainable natural resource utilization in Vietnam's rapidly expanding market economy). The project is also country-driven (the project has derived directly as a result of the country's BAP and ties in with other national sectoral frameworks such as plans for the socio-economic regeneration of rural areas and UNDP's ENRM programme). The project is also in line with the emerging guidance from the GEF Operational Strategy in Biodiversity which supports as a long term approach to biodiversity conservation, actions which strengthen existing protected areas and/or assist in the demarcation of potentially important new areas, as well as encouraging sustainable use of the components of biodiversity. The project directly addresses the GEF focal area of Biodiversity, and to a lesser extent, the limitation of greenhouse gases, since the project would involve extensive reafforestation of indigenous species in the buffer zones and tree plantations in multiple-use areas.

5. Sustainability and Participation

Participation at all levels (local, provincial, and national) has been evident throughout the development of the PARC project (please refer to section 1 under Project Preparation for a very detailed description of this process.) The long development phase of the project (2 years) reflects the importance that the PARC has put on the *process* of consultation as much as the output of the consultation.

In order to ensure that local participation is continued into project implementation, a Project Implementation Unit, under the direction of the National Steering Committee (for more information on this Committee please refer to Section 10, Institutional Framework and Project Implementation), would supervise day-to-day operational functions over the two sites and would work in cooperation with the Management Boards of the national parks which operate at the protected area level and generally include representatives from the Provincial and District Forest Protection Department and People's Committees. Vietnam PARC also hopes to institutionalize the inclusion of local participation in these

Park Management Boards by the Women's Union, Youth Union, Farmer's Associations, religious organizations, and other local groups. Such formalized participation by these local and provincial organizations will ensure that local people have input into important decisions such as location of reserve boundaries, and negotiating traditional use zones will help to ensure the project's social and institutional sustainability.

A number of factors, both as a result of the initial planning process and later as a result of project activities, will help to contribute to the project's long-term success. In particular:

social sustainability is ensured through the project's wide participatory consultative planning process and the active participation of community stake holders in the project implementation as described above.

financial sustainability is to be sought through the preparation of a financial plan in the project, and potentially through the development of financial instruments such as a trust fund.

economic sustainability is one of the principal innovative features of the project. This would require developing community resource development projects such as ecotourism and sustainable use of non-timber forest products, as well as provision of credit and extension facilities to women. Such initiatives will serve to enable communities to thrive in a market situation.

institutional sustainability is ensured through the development of new and innovative partnerships formed during the project in the form of a National Steering Committee and a local Project Implementation Unit (please refer to Section 10 Institutional Framework and Project Implementation for more on these partnerships). The fact that the project is firmly embedded in national environmental frameworks and action plans, including UNDP's strategic ENRM programme, and builds on capacities developed during the successful GEF Pilot Phase project will also contribute to institutional sustainability

6. Lessons learned and Technical Review

PARC builds upon the lessons learned and the capacities and processes built through the GEF Pilot Phase project (VIE/91/G31 and other related projects) in two important ways. First, VIE/91/31 developed the BAP for Vietnam and PARC is identified as a priority in this plan, as well as a core element to it. VIE/91/G31 undertook a comprehensive conservation training programme. PARC will utilize the human resources developed under this training programme. An open and inclusive National Steering Committee has proven to be an effective management tool for the ongoing GEF project VIE/91/G31. This would be a suitable arrangement for implementation of the PARC project and will help to ensure that PARC's lessons learned will be able to influence the required reforms in sectoral and social development policies. (For more linkages between the two projects, please refer to Section 1, Country and Sector Background).

Technical reviews: The present proposal, in addition to independent technical reviews, has also benefitted from from a review by the GEFOP. Care has been taken to ensure that all relevant recommendations made by the reviewers have been addressed in this final project brief. Please refer to Annex 5 for a copy of the latest STAP review.

7. Project Financing and Budget

The project will focus on activities most appropriate for GEF funding. In Vietnam, in the chosen areas, this includes: boundary demarcation; development of management plans and strategies; infrastructure

development for in-site conservation (minimal access roads, staff and office accommodations, research and tourist facilities); forest rehabilitation programmes, forest corridors, community forestry; community development programmes; training and recruitment of staff; monitoring and evaluation.

Accordingly, government and expert estimations for the *minimum* costs of intervention for establishing and developing pilot protected areas in Vietnam over five years, estimated in US Dollars *per protected area* of average 50,000 ha, is <u>US\$ 3,348,000</u>

Not including the GEF project formulation costs of approximately \$103,900, the total project cost for two PARC sites is \$6,696,000. The Government contribution, equivalent to the baseline scenario, is estimated at \$655,000 plus in kind. Accordingly the GEF contribution is \$6,041,000.

Taken on an Output by Output basis, the budget (in US Dollars) for proposed GEF financing is as follows.

PROJEC	T TOTAL ATTACKS TO A STATE OF THE STATE OF T	US\$ 6,041,000
	Project Management costs **	496,000
TOTAL:	Immediate Objective 3	630,000
3.3	Demonstration of the PARC modified landscape ecology experience and dissemination of results	130,000
3.2	Revised management plans and PARC model	400,000
3.1	Field surveys, measurements	100,000
	: Immediata Objectiva 2	4,545,000
2.5	Re-afforestation and agro-forestry programmes	690,000
2.4	Pilot sustainable financial programmes for two PARC sites	900,000
2.3	Community resource development projects	1,385,000
2.2	On the job training *	C
2.1	Two self-sustaining model PARC sites, including key training activities	1,570,000
	L: Immediate Objective 1	370,000
1.5	Plans for reforestation, agro-forestry, and tree plantations	80,00
1.4	Management plans for two PARC sites and recommendations for sustainable financing instruments	200,00
1.3	Baseline statistics and success indicators for monitoring	40,00
1.2	Detailed descriptions of the two PARC sites	40,00
1.1	Review of model integrated forest management and report preparation	10,00

^{*} There has not been a separate provision made for training in this budget as the costs of this activity are already built into the other activities and outputs.

8. Incremental Costs

Refer to Annex 4 for full estimation of incremental costs in standard reporting format. These costs have been estimated in line with existing draft guidelines.

9. Issues, Actions and Risks

Vietnam faces problems common to many tropical countries where the remaining centers of biodiversity are under increasing stress to provide sustenance to an expanding population. During the last few

^{**} Project management costs represent only approximately 8% of total project costs.

decades, the frontiers of Vietnam's biologically rich wildlands have been retreating. What fragmented natural areas remain are often too small and too isolated to maintain unique habitats, species assemblages, or viable populations. A typical biodiversity area includes a large core protected area lying close to smaller unprotected areas. Many areas with a potential for preservation or regeneration lie adjacent. The biodiversity area also meets the economic and cultural needs of local communities: agriculture, forestry, industry, housing etc.

The strategy to develop capacities to address these complex and multifaceted issues is based on the implementation of two model PARC sites, and the continuous dissemination of results and experience. Meeting the above challenges will require some innovative techniques in Vietnam, and the most appropriate approach for PARC in Vietnam is the *modified landscape ecology* approach. There are 4 components to this:

- (i) Providing direct development assistance to poor communities in and around the biodiversity centers.
- (ii) Developing and implementing financially sustainable management plans for the protected areas.
- (iii) Focusing other efforts on the management of forested areas which lie outside of the official protected area.
- (iv) Integrating biodiversity conservation into provincial and district development plans. Instead of focusing conservation efforts on a small protected area, entire landscapes which include ecosystems with varying intensities of human use are to be planned and managed from a biodiversity perspective.

The combination of these four elements is a recent development in conservation science based on the experiences gained from integrated protected area programmes in other tropical countries.

No resettlement programme will be implemented during the project. It is expected that after implementation of the PARC project, the area set aside for biodiversity conservation in Vietnam will have increased, and the overall landscape will have experienced economic development. Forests in corridors will have flourished. It is anticipated that economic development, new roads and urban settlements will help to direct people away from living and working in biodiversity core areas. In the zones surrounding the protected forests, sustainable agriculture and forestry will have been undertaken, and industrial activities may occur, and the livelihood of local people significantly improved. The success of these multiple-use economic units is linked to the effective protection of the core area, the regeneration and maintenance of corridors and smaller conservation areas.

There are no major risks foreseen in undertaking this project. However, mindful that biodiversity conservation operating in a vacuum will not alone be able to bring about sustainable benefits to the local people. Social and economic transformation is presently rapid in Vietnam, hence the project will have the opportunity to link into many rural development and policy development initiatives, and provisions for such linkages have been implicit in the development of this project by virtue of its presence in UNDP's overall ENRM Framework (See Annex 1). Such projects can provide the infrastructure and resources to allow an alleviation of pressure on biodiversity. They can also provide additional resources in support of comprehensive regulations and adequate enforcement at the national, provincial and local levels.

10. Institutional Framework and Project Implementation

PARC is a project of the Government of Vietnam. It will be executed by the United National Office of Project Services (UNOPS), and implemented by the Ministry of Forestry, Government of Vietnam, and World Wildlife Fund-International.

At the local and provincial levels, a Project Implementation Unit would oversee day-to-day operational functions of the two sites and would work in cooperation with the Management Boards of the national parks which operate at the protected area level and include representatives from the Provincial and District Forest Protection Department and People's Committees. As a result of their successful participation in the development process of Vietnam PARC, the project also hopes to institutionalize the inclusion of local participation in the park Management Boards by the Women's Union, Youth Union, Farmer's Associations, religious organizations, and other local groups. Such formalized participation by these local and provincial organizations will ensure that local people have input into important decisions such as location of reserve boundaries, negotiating traditional use zones, and so forth and thus will help to ensure the project's social and institutional sustainability.

Field operations and management would be undertaken by two project teams in situ. Membership in the teams could be drawn from district Forest Protection Departments of the People's Committees and provincial offices of the Ministry of Forestry. To ensure a full stake-holder commitment and a participatory approach, open and inclusive community consultative panels composed of representatives of local people's organizations would be organized to provide counsel and services to the project teams.

An open and inclusive National level Steering Committee, which has proved an effective management tool for the ongoing GEF project VIE/91/G31 will also be formed to provide overall guidance at the national level. Membership and organization of the Committee will be finalized as part of the Project Document Formulation mission, however it is likely that the following organizations/institutions could be represented: the State Planning Committee, Ministry of Forestry, Ministry of Science, Technology and the Environment, Park Management Boards, People's Committees from the two concerned provinces, Director of the two concerned protected areas, and UNDP. Among other benefits, the presence of such a Steering Committee will allow the project apply lessons learned from PARC towards the required reforms in sectoral and social development policies. This Committee would furthermore provide coordination with other government agencies whose cooperation is essential to successful project implementation.

Please refer to Annex 6 for a diagram of the institutional framework for project implementation.

11. Monitoring and Evaluation

The project will be subject to the standard UNDP tri-partite monitoring system as well as the emerging monitoring and evaluation guidelines of the GEF.

An environmental overview of the project has been prepared, along with a management strategy for environmental management, and this should guide monitoring of environmental and social impacts.

In the final year of the project a full-scale evaluation of the project will be undertaken that will provide detailed, practical recommendations for the implementation of future biodiversity conservation projects in Vietnam. In addition, in line with GEF recommendations, the full-scale evaluation will consider such issues as knowledge acquisition, capacity improvement, environmental impact, etc.... It is acknowledged that many of the benefits/results of the project (e.g. regeneration of corridors) will not be realized in the short term (i.e. during the life of the GEF project), so provision will be made for longer-term monitoring of the project beyond the life of the GEF project.

12. Schedule/Duration

Due to the comprehensive and reiterative process and wide participation in the project brief formulation, it is expected that implementation could commence as soon as it has gained approval of the GEFOP, GEF Executive Council, and UNDP. This is expected by January 1996.

Implementation covers a five year period, and the approximate timing of the outputs is as follows: (Please refer to the indicative management plan for year one - Annex 3 which provides more detail.)

Output	Ye	ar 1	Y	ear 2	N	er 3		ear 4			ear 5
1.1	x						 		+-	•	1
1.2	x								_		
1.3	×										
1.4		x		1							
1.5		х		1			 	+			-
1.6		×		-		 			-		-
2.1		· · · · · · · · · · · · · · · · · · ·	хх	x	×	×	×				
2.2				1	x x	×	x	×	+-		
2.3						XX	xx	×			
2.4	,						x x	x x	-	· <u>· · · ·</u>	
2.5			·				x x	x x			
3.1					1		···		×	×	
.2									-		
.3					 		-	 	×	×	

13. Annexes

- 1. **ENRM Framework**
- Detailed descriptions and maps of two PARC sites. 2.
- Indicative management plan for first year of project 3.
- Full estimation of incremental costs in the standard reporting format 4.
- 5. Review of STAP expert
- Diagram of Institutional Framework 6.
- Letter of approval from Government of Vietnam 7.

Annex I: Ongoing Projects in the ENRM Programme

KAS/92/054 - Follution Control in East Asia Seas			
VIE/95/020 - Mangrove Conservation (P) VIE/93/G27 - Protected Areas for Resource Conservation (P) VIE/86/001 - Water Management RAS/92/078 - Farmer - Center Agriculture Resource Management	VIE/93/002 - Seismological Network VIE/92/023 - Sea Dykes Engineering Services VIE/94/016 - Biological Termites Control (P)	VIE/93/030 - EA - pilot project component VIE/94/024 - Phasing out CFCs in aerosols in Vietnam (P) VIE/94/024 - Phasing out CFCs in aerosols in Viet Tri (P) VIE/92/025 - Industrial Pollution Control in Dong Nai (P) VIE/92/0281 - Capacity 21 - pilot project component VIE/95/003 - Env. Issues in Open Mining (P)	Pilot Projects
VIE/91/G31- Biodiversity Action Plan and Conservation Training. BAP component VIE/89/034 - Red River Delta Master Plan VIE/93/019 - Water Sector Review	VIE/94/009 - Action Plan for Water Disaster Mgmt VIE/89/034 - Red River Delta Master Plan	VIE/93/030 - Program Framework for Env. Awareness RAS/92/G31 - Reduction Green House Gas Emission RAS/92/076 - Sustainable Business Training Facility INT/93/G61 - Montreal Protocol	Pre- investment Studies
VIE/91/G31 - Biodiversity Action Plan and Conservation Training VIE/88/005 - Hormone Production VIE/93/001 - Fish Culture II VIE/92/002 - Coastal Reforestation VIE/91/005 - Cuu Long Delta Rice Research VIE/91/005 - Cuu Long Delta Rice Research VIE/91/005 - Marine and Coast Resource Mngt (IP) VIE/93/G26 - Reduction of Green House Gases (P) VIE/93/G26 - Reduction of Green House Gases (P) VIE/93/G26 - Reduction of Green House Gases (P) VIE/93/G30 - Env. Awareness VIE/93/G30 - Env. Awareness RAS/92/063 - Sustainable Fisheries in Asia RAS/92/063 - Sustainable Fisheries on Biodiversity RAS/92/070 - Remote Sensing for Natural Resource & Env.	VIE93/G23 - Reduction of Green House Gases (P) VIE93/031 - Disaster Mgmt Jinit VIE95/026 - Son La Seismological Risk Assessment (P) RAS/92/067 - Disaster Preparedness GLO/93/G31 - Training Prog. for Climate Change	VIE/93/020 - Industrial Env. Protection VIE/93/023 - Marine and Coastal Resource Mangmt (P) RAS/92/073 - Env. Sound Technology VIE/93/031 - National Capacities to manage investments VIE/93/030 - Environmental Awareness INT/92/207 - Trade & Environment RAS/93/040 - Economy & Environment Research in Asia RAS/93/068 - Awareness Creation	Capacity Building
Natural Resources Sustainably Exploited	Impact of Natural Disasters Reduced	Impact of Industrial and Urban Pollution Reduced	

Annex 2 - Information on the Two PARC Sites

Yok Don National Park, Dac Lac Province

Dac Lac Province, situated in the Central Highlands along the border with Cambodia, has Vietnam's largest remaining forest area. The province covers an area of 19,800 km² and has a permanent population of 1.126 million (1992) giving a density of 57 per km². The province is divided into 16 districts and one provincial town. Buon Ma Thuot, the provincial capital, can be reached by air from various destinations in southern Vietnam.

Yok Don National Park lies in Ea Sup district and its entrance is 40 km from Buon Ma Thuot. The Western edge of the park lies along the Cambodian border. The park lies on a relatively flat area surrounding the Srepok river, with two main mountainous protrusions. It lies at 13°N latitude, has an average rainfall of 1500-1600 mm per annum, and a tropical monsoon climate with a well defined dry season. Yok Don was declared a nature reserve in 1986 and upgraded to a National Park in 1991. The parks's 58,000 hectare core area was surveyed by national and international experts in 1989 and a draft management plan submitted to the Government. Map 2 illustrates Yok Don National Park.

The area surrounding Yok Don is economically poor, due to its relative isolation and weak infrastructure. At least 6 different ethnic groups inhabit the area. The main economic activities of people are forestry, agriculture and hunting/gathering.

The road from Buon Ma Thuot passes much good quality plantation forest. The population around the park is at present low, and much primary and good secondary forest remains. Indications are that the area surrounding Yok Don could support a growing population without compromising the ecosystem of the park.

The full area has not been comprehensively surveyed. Indications are (for example from the bird species discovery curve) that the area is one of the most biologically diverse in the Indochina region. Five types of vegetation can be found in the park, the dominant three being dry dipterocarp, riverine evergreen and hill evergreen forests. So far, over 450 plant species have been identified, 225 bird species, and 58 mammal species. Some of the more important larger mammals observed in Yok Don include kouprey, tiger, elephant, banteng. However estimates of scientist studying Yok Don over recent years indicate that the densities of many mammals are declining. Moreover it is certain that current stocking levels are well below carrying capacity.

The 1989 draft management plan indicated that the major threats to the biodiversity are poaching and fires. These are often driven by poverty, insecurity, and limited understanding of sustainable development. The draft management plan recommended that the following actions be taken to protect the area:

- zoning of biodiversity areas;
- recruitment and training of park staff. In particular it will be necessary to development professional management and community participation skills;
- develop facilities for field research and monitoring. A park-based research facility could both generate revenue and provide a means to improve knowledge of the park:
- develop a programme for tourist development. Although very isolated, the area offers excellent tourist potential in the form of good wildlife viewing facilities (on foot and elephant back trekking), camping, rafting, and cultural diversity;
- wide-ranging extension, information, education and awareness programme.

In March 1995 a WWF/IUCN Tiger Action Plan mission visited the park. A principal finding was that, although six years have passed since the preparation of the plan, all the above remain crucial management issues for Yok Don. In addition, economic developments since 1989 mean that there is now a greater range of economics alternatives available to people, but also much less of a social security system. The results of this are a greater threat on the remaining forests through incursion, poverty . and in-migration. Accordingly it will also be necessary to focus other development efforts on surrounding communities to ensure a broadened management scope of the area. However the small population of approximately 5670 (1048 households) living in the park is not considered a threat to the park resources, and could be developed as part of the solution to the protection of the forests.

The existing park management have adopted a pragmatic approach to the task of forest protection, and have developed ambitious management plans. However existing resources are inadequate to the growing threats, and could not account sufficiently for the needs of nearby communities. The Yok Don forest protection team has 35 men monitoring the five guard houses. A major development since 1989 is the rapid growth of tourism in Vietnam. Consequently Yok Don has a team of 6 people working with tourism. This generates financial resources available for biodiversity protection. However a valid concern for the park authorities is that they have had little experience with tourism and they require assistance to ensure sustainability.

Ea Sup and surrounding districts provide an ideal model for the modified landscape approach to biodiversity conservation. The protected area is surrounded by many primary forested areas, both in Dac Lac and across the Cambodian border. These house important biodiversity. Surveys reveal that there are many animal visitors to Yok Don from these areas. At the same time, the areas around the park and near these forested areas house a growing human population, including many seasonal visitors. Using appropriate measures, Yok Don, surrounding forests and corridors can be protected, animal movement patterns be retained, and communities in the region can benefit. An area of up to 100,000 ha can be managed by the local authorities with the primary objective of conserving biodiversity. These efforts to protect the forest can accompany parallel efforts to assist the communities, and intensify their

activities and increase their wealth. Since it is located on the border with Cambodia, there is also an excellent opportunity for trans-frontier management arrangement. The Government of Cambodia issues a Decree in 1994 relating to national parks. This identified a large forested area, Phnom Nam Lear, adjacent to Yok Don as a priority for protection.

This case is almost unique in Vietnam. Good primary forest habitat has been preserved, and there is even good primary forested area to be used in buffer areas. It is prevention rather than cure: it is possible to act now to prevent the otherwise inevitable and immediate fragmentation and destruction of the ecosystem and the biodiversity.

However as elsewhere in Vietnam, the situation is changing quickly. Economic liberalization is allowing greater trade, and decreased controls mean sustainability of exploitation is no longer assured. movement of people is easier, and remaining forest are attractive to agriculturalist without land. It is essential to act now in order to avoid the costly degradation experienced in many places in Vietnam and in the region.

Ba Be National Park, Cao Bang Province and Nahang Nature Reserve, Tuyen Quang Province

Cao Bang and Tuyen Quang are adjacent provinces in Northeastern Vietnam covering a combined area of 14,246 km² and a population of 1.227 million people - see map 4 (1992 figures). Administratively, Cao Bang is divided into 12 districts plus the provincial town, and Tuyen Quang into 5 districts and the provincial town. The provinces share similar socio-economic conditions, with a weak physical and economic infrastructure, relatively high levels of poverty, and a number of ethnic groups making up a large percentage of the population.

They also share similar geographical conditions. Annual rainfall is in the range of 1400-1800 mm, the climate is mild tropical, and the original vegetation is humid tropical monsoon forest. They lie in unit 6a of the biogeographical classification system for the Indo-Malayan Realm developed by McKinnon and McKinnon (1986). The provinces lie at a latitude 21-23°N. Although not particularly high in altitude, the large number of spectacular and steep limestone peaks in the 1000-1200m range ensure that terrain across the provinces is rugged, with many small lakes, rivers and streams lying between the hills. The majority of the two provinces lie in the altitude range of 300-800 meters. Map 3 illustrates the two provinces.

Ba Be National Park (see Map 4) is situated in Ba Be District, Cao Bang Province near to the borders with Tuyen Quang and Bac Thai Provinces. It was established as a national park in 1992. The protected core area covers 7,611 hectares and is centered on a freshwater lake covering approximately 500 hectares. A buffer zone of over

40,000 hectares has been designated. The core area has three peaks of over 1000m, and the area is renowned for its waterfalls and has a history of tourism and recreation.

Recent surveys, although not comprehensive, indicate the rich biodiversity in Ba Be, with over 370 species of plant, 64 animals, 111 birds, 33 bats, and 10 species of rare, mountain freshwater fish reported. Important mammal species living in the park include leopard, Francois leaf monkey, and possibly tiger and Tonkin snub-nosed monkey (see below).

Temporary headquarters have been constructed at the park entrance, and a staff of 35 persons recruited to manage the park and guard the forests. However the small area of Ba Be means it is of limited value for biodiversity conservation. Given that the good quality forest surrounding the lakes stretch into the neighbouring provinces, the Government of Viet Nam is considering various alternatives by which the protected area could be expanded. One possibility is to extend the park south to Pia Booc mountain, an extension of over 20,000 hectares and remaining in Ba Be district. A second possibility is to extend the reserve into Chu Don District, Bac Thai province. Here, adjacent to Ba Be, large areas of primary and good secondary forest remain, and holding some remaining populations of the Tonkin snub-nosed monkey. However a restricted military sensitive zone may complicate management of protected areas. A third possibility is to extend the protected area into Nahang district, Tuyen Quang province (see map 5).

A nature reserve has already been established in Nahang district, centered on the small town of Nahang about 20km to the southwest of Ba Be (see Maps 2 and 5). The reserve is divided into two core areas covering a total of over 20,000 hectares, and proposed surrounding regeneration and buffer areas. As a nature reserve, this area is presently under the control of the provincial authorities. This reserve was quickly established as recently as 1994 in order to protect its large populations of the Tonkin snub-nosed monkey (*Pygathrix avunculus*). This species has been identified by IUCN (Eudey, 1987) as one of the four most threatened primates in Asia, and is endemic to Nahang and surrounding forests. Until as recently as 1950 the range of this species was a circular area of over 100km radius centered on Nahang.

Little attention was given to this area until early 1992 and few surveys have been undertaken in recent times. A quick review revealed over 350 plant species and 56 mammal species including pygmy loris, tiger, clouded leopard and François leaf monkey. There is also good, primary forest lying outside the nature reserve, some of it in the designated buffer zones. This forest reaches far beyond Nahang district, into Bac Thai Province in the East, and towards Ba Be National Park in the North.

Nahang nature reserve was established quickly and due to constraints in resources it currently exists only on paper. A staff of five has been appointed by the provincial authorities, and they are currently working without salaries. Plans are to be drawn up

to construct a headquarters, build research facilities, patrol rivers and forests, and establish tourism. Discussions are also ongoing with ethnic minorities inhabiting the core area to ensure a sustainable use of resources. However the implementation of these plans is constrained by the lack of financial and human resources.

For the two designated protected areas, and for unprotected forests, the main threats to the remaining biodiversity have been identified as:

- hunting and poaching;
- fragmentation and agricultural encroachment;
- growing urban areas and infrastructure.

Local management has identified the first two of these, originating from people living inside the park, as the principal threat to the core zones. Even the core and buffer of the two protected areas house sizeable populations, with over 2,500 in Ba Be and up to 11,000 in Nahang. The Tai, Dao and Hmong ethnic minority groups form the majority of these populations. Socio-economic conditions in the forested areas are particularly difficult, with the main economic activities being rain-fed agriculture in the narrow valley bottoms, and hunting and gathering activities in the forests. In areas surrounding the core zones the clearing of forest for cultivation is still common.

From the map it is clear that the modified landscape approach is appropriate to the area. The three established core zones and much of the buffer zones contain pristine forests. Good patches of scattered forests lie in the limestone mountains which separate these core areas. There is significant potential to regenerate much and link core areas thereby establishing a large forested zone. The combined protected area could be well over 50,000 hectares. Outside of this area there is a lot of regrowth forest and bamboo forest. However the population density in the area is high, and much of the forest in the three adjoining provinces has been significantly degraded, In between the protected areas lie many settlements and many barren areas. Agricultural practices in these areas are extensive.

With the full involvement of the three provincial authorities, the local district authorities and local communities, it should be possible to manage a vast landscape from a biodiversity perspective. By adopting good and more intensive land-use techniques, the pressure on the remaining forest could be relieved. Given time, it would be possible to focus economic activities in areas away from forest. The local authorities have plans to both promote the development of poor people in the area, and develop the size of the protected area in a step by step manner. The modified landscape approach complement these plans.

Accordingly, key management issues to be addressed in the near future are:

consultation with authorities and forest departments in the three concerned

provinces and all districts;

- consultation with the various ethnic groups and other residents in and around
- land-use planning and zoning for biodiversity conservation integrated across the three provinces, overcoming the fragmentation effect;
- delineation and enforcement of protected areas.
- development of community development programmes;
- development of education programmes for local communities;
- development of a research and monitoring programme;

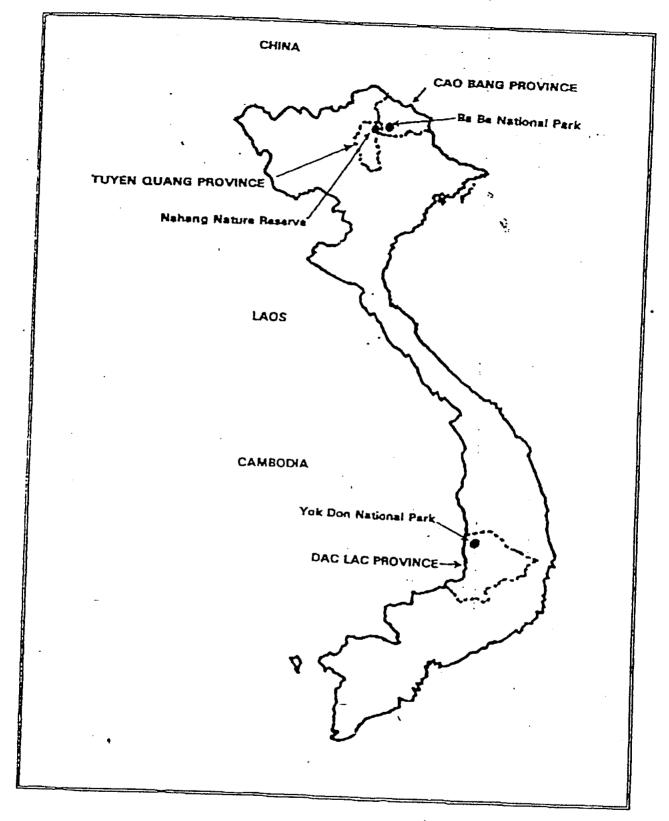
The Nahang-Ba Be area exemplifies the situation in Viet Nam in 1995. As little as ten years ago, forest protection would have been unnecessary, as there was little pressure on the forest. Now, the remaining forest is facing many new and growing threats, but efforts to conserve the forest can also benefit from new opportunities.

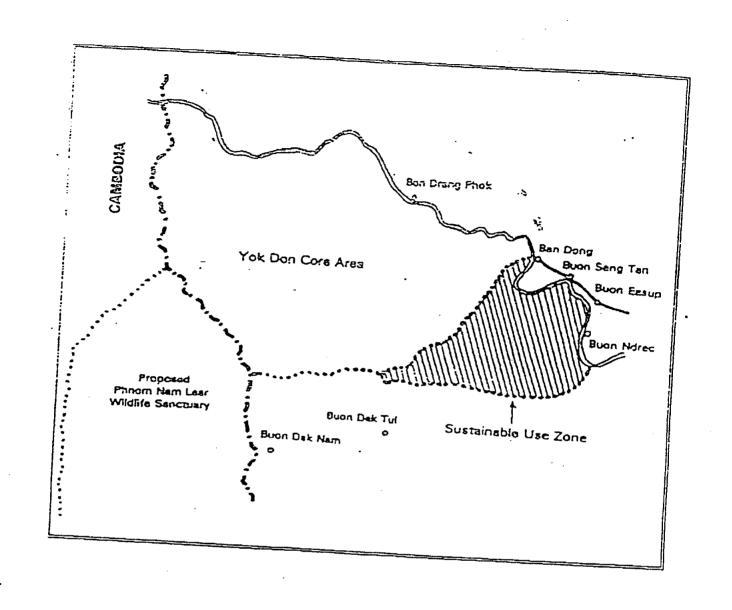
New threats include the effects of the liberalization of the economy. Now, individual \cdot goldminers and agriculturalists are free to engage in activities which may be environmentally damaging. Another threat stems from rural economic structural transformation which has lead to the upgrading of the Nahang main access track to a metal-surfaced, all year road. Local park management have expressed their belief that this will facilitate control of in-park activities but there is also a danger that it will encourage exploitation and degradation. Third, the improving economic situation in Vietnam has freed more finances for investment into the area, both private and public. These may indirectly damage the forest. An example of this is a large-scale gold mine located just outside the park's northern boundary.

However, as mentioned above, the new socio-economic situation in Vietnam will facilitate environmental protection in the area. First, individual responsibility in decision-making is being encouraged and this should foster more sustainable exploitation techniques. Second, a greater emphasis is being placed upon people and community participation in decision-making and development processes. People involvement in planning and decision-making should lead to better resource allocation decisions. Third, the quickly growing economy is helping to provide economic alternatives to those previously engaged in poverty-driven, unsustainable agricultural practices. Finally, a general increased awareness of environmental issues and appreciation of biodiversity is leading to a raising of biodiversity conservation on the national and provincial agendas.

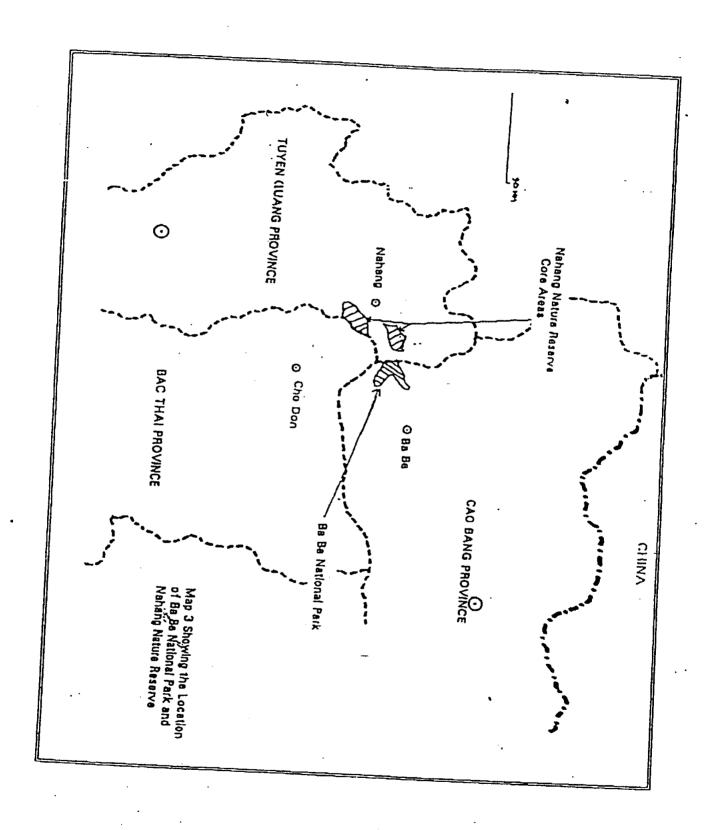
If assistance is given to the local forest protection authorities now, it is still possible to exploit the above alternatives and so meet the above-listed threats. In the long term it is likely that the population and range of the Tonkin snub-nosed monkey could return to their levels of the mid-1950s, or greater. On the other hand, waiting just a short time could mean that the rapidly changing situation will cause the depletion, even loss, of this important biodiversity.

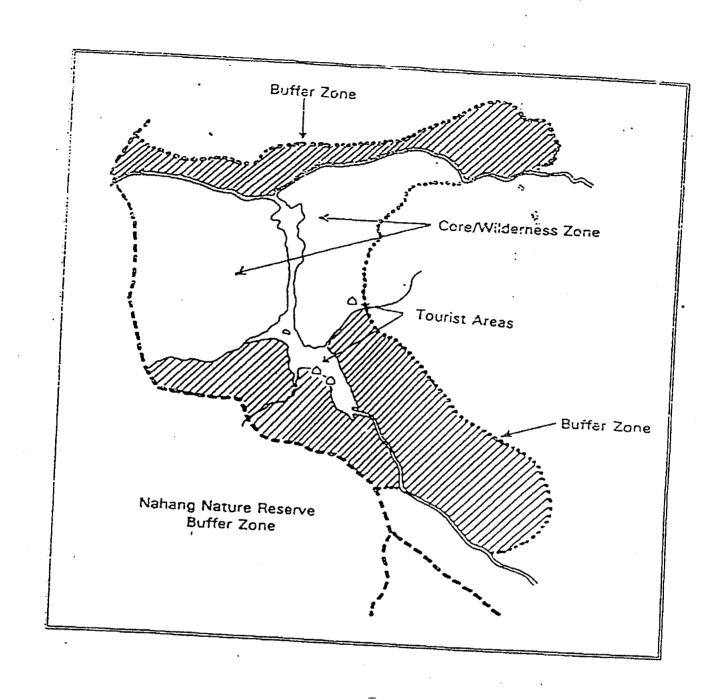
MAP 1: MAP OF VIETNAM SHOWING PARC SITE LOCATIONS



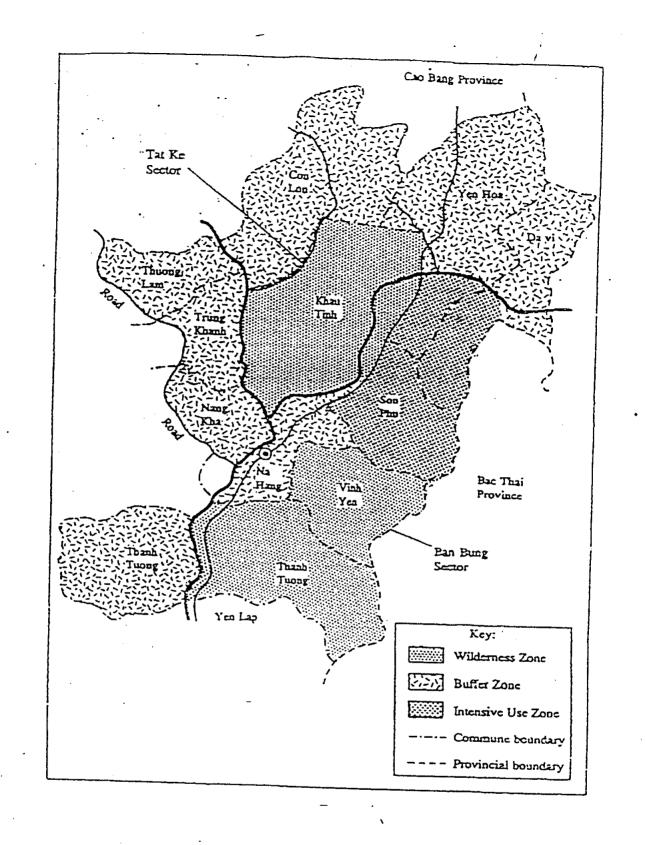


Map 2: Yok Don National Park





Map 4: Ba Be National Park



Map 5: Nahang Nature Reserve

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ANNEX 3: OPERATIONAL WORKPLAN FOR YEAR 1 ACTIVITIES

This operational plan for the first year of central project and PARC field activities is based upon the existing draft management plans for Yok Don and Ba Be-Nahang, discussions with the park and local authorities, and experience gained from implementation of similar projects in other countries. However this plan should be considered as indicative; more detailed workplans will be updated and prepared annually by the Project Staff.

In order to meet the project objectives of building national capacity to formulate and implement ICDPs, it will be necessary to implement several activities at the national level. This will also ensure feed-back from project results into the national planning system and the dissemination of project experience. These activities are listed below under the heading "National Project Administration". These activities will provide national protected area officials with essential professional experience and skills in developing a protected area network which incorporates a more participatory planning and implementation process. The first three activities listed for Immediate Objective 1 in section 6.0 of the project brief are covered by these national activities.

In year 1, the majority of activities will be undertaken at the local level, although national teams and experts will also participate. These activities are divided into two categories: those undertaken at Nahang-Ba Be and those undertaken at Yok Don. These activities correspond to the latter three listed under Immediate Objective 1 in section 6.0 of the project brief.

Following the brief description of the operational activities, an activity timeframe and budget is provided in table form.

1. National Project Administration

1.1 Project Start-up

The first activities will be to establish the project and to set up the project management structure.

1.2 Operational Activities

First year activities in Hanoi will aim at the establishment of working groups, the design of training programs, and key training activities.

National level activities which will take place over the two sites during the first year include the documenting of the ways that people in Vietnam, Southeast Asia and other tropical countries have managed biodiversity sustainably in the past; the conducting of socio-economic appraisals of the selected sites and

design and encourage sustainable community resource projects and livelihood systems, and; the finalisation of measurable success indicators.

2. Nahang-Ba Be Biodiversity Complex Project Administration

2.1 Project Start-up

Several start-up activities will be undertaken before it is possible to commence activities targeting the project objectives. It will be necessary to recruit local staff, establish management teams, hold consultative workshops, etc. These should include involvement from both of the two provinces and districts concerned, with observers invited from neighbouring Cho Don District of Bac Thai Province. In addition, it will be necessary to design and upgrade communications between the headquarters of the two contiguous protected areas.

2.2 Project Operational Activities

During the first year, some initial activities will take place targeting the project objectives. These include designing a joint management plan covering the two adjoining protected areas and analysing sustainable financing beyond the project period of GEF support; drafting development plans for the area using the modified landscape approach and biodiversity perspective, classifying land use, delineating the revised/expanded protected area border (PARC), establishing corridors, buffer zones, regrowth areas, multiple use areas, and economic activity areas; and planning re-afforestation and regeneration of the corridors, buffer zones and surrounding areas which contain fragmented forests.

3. Yok Don National Park Project Administration

3.1 Project Start-up

Start-up activities must be undertaken before it is possible to commence activities targeting the project's field activities. However, since Yok Don National Park is already a more operational protected area unit with a management board and infrastructure, these activities will be different than at Nahang-Ba Be. It will be necessary to recruit local staff, establish management teams, and to hold consultative workshops. These activities should include involvement from Dac Lac Province and observers from the proposed Phnom Nam Lear Wildlife Sanctuary and other conservation professionals from neighbouring Cambodia if possible.

3.2 Project operational activities

NAHANG-BA BE FIELD ACTIVITIES	BUDGE		QUARTER			
	τ(US \$)	1	2	3		
FIELD MISSIONS TO BOTH PROVINCES AND PROTECTED AREAS	15,000					
WORKSHOP WITH LOCAL AND PROVINCIAL OFFICIALS	10,000		-		+-	
DEVELOP FINANCIALLY SUSTAINABLE PLAN				-		
DRAFT AND APPROVE MANAGEMENT PLAN	15,000				<u> </u>	
2.2.2 DRAFT DEVELOPMENT PLANS FOR THE TWO LANDSCAPES						
ANALYZE PROVINCIAL DEVELOPMENT PLANS	10,000			_	1	
PREPARE MAPS, DETERMINE EXACT LAND COVER AND SETTLEMENT PATTERNS FOR CONCERNED DISTRICTS	10,000			-		
HOLD WORKSHOPS WITH PROVINCIAL AND DISTRICT OFFICIALS	10,000			•	•	
PROVIDE RECOMMENDATIONS FOR REVISED LAND ZONING, AGRICULTURAL AND FORESTRY INTENSIFICATION, AND PROVINCIAL DEVELOPMENT	10,000				•	
2.2.3 PLAN REFORESTATION AND REGENERATION OF CORRIDORS, BUFFER AND SURROUNDING ZONES						
RECRUIT FOREST REGENERATION PLANNING TEAM	10,000					
DEVELOP PLANS TO INTENSIFY AGRICULTURE PRACTICES WITHIN ALLOCATED/SUSTAINABLE USE ZONES	10,000					
PLAN REFORESTATION AND REGENERATION AT DA VI AND IN OTHER KEY AREAS OUTSIDE PROTECTED ZONES	10,000					

3. YOK DON PROJECT ADMINISTRATION

YOK DON FIELD ACTIVITIES	BUDGET (US\$)	1	Qu 2	ARTER 3	4
3.1 PROJECT START-UP					100000.00
RECRUIT LOCAL PROJECT STAFF		<u> </u>			Τ
ESTABLISH YOK DON PROJECT IMPLEMENTATION UNIT	15,000				
PLAN AND HOLD CONSULTATIVE WORKSHOP WITH LOCAL COMMUNITY REPRESENTATIVE (AND OBSERVERS FROM CAMBODIA) TO PRESENT PROJECT	10,000		•		•
3.2.1 Analysis and update of Yok Don management plan					

PROJECT OBJECTIVES. THESE INCLUDE THE ANALYSIS, AND WHERE NECESSARY THE REDESIGN, OF THE CURRENT MANAGEMENT PLAN FOR YOK DON; DRAFTING DEVELOPMENT PLANS FOR THE AREA USING THE MODIFIED LANDSCAPE APPROACH AND BIODIVERSITY CONSERVATION PERSPECTIVE, CLASSIFYING LAND USE, DELINEATING THE REVISED/EXPANDED PROTECTED AREA BOUNDARIES (PARC), ESTABLISHING CORRIDORS, BUFFER ZONES, REGROWTH AREAS MUI TIPLE USE AREAS, AND ECONOMIC ACTIVITY AREAS; AND PLANNING RE-AFFORESTATION AND REGENERATION OF CORRIDORS, BUFFER ZONES AND THE FRAGMENTED FORESTS AND COMMUNITY FOREST PLOTS OF THE ETHNIC PEOPLES LIVING IN THE SURROUNDING AREAS.

TABLE 1: PARC OPERATIONAL PLAN ACTIVITY TIMEFRAME AND BUDGET FOR YEAR 1

1. NATIONAL PROJECT ADMINISTRATION

NATIONAL PROJECT ADMINISTRATION ACTIVITIES	Budge: T (US\$)	1	- Qi	JARTER 3	
1.1 PROJECT START UP	1000				<u> </u>
RECRUIT PROJECT PERSONNEL				T	Τ
ESTABLISH PROJECT IMPLEMENTATION UNIT IN HANGI	10,000				
DESIGN REPORTING AND PROJECT MONITORING PROCEDURES					
PREPARE WORKPLAN AND INCEPTION REPORT					_
NATIONAL PROJECT OPERATIONAL ACTIVITIES		<u> </u>	1		<u> </u>
1.2.1 HANOI					
NATIONAL STEERING COMMITTEE MEETING					
PROJECT MANAGEMENT TRAINING	10,000		_		-
DESIGN WORKSHOP AND STUDY TOUR PROGRAMME (IN- COUNTRY AND OVERSEAS)				•	•
ESTABLISH NETWORK OF EXPERTS ON FINANCIAL SUSTAINABILITY AND INITIATE STUDIES			•		
1.2.2 NATIONAL - DOCUMENTING OF WAYS PEOPLE HAVE - SUSTAINABLY MANAGED BIOC. : ERSITY	,				
RECRUIT INTERNATIONAL CONSULTANT			•		
COLLECT DOCUMENTATION	10,000				
PRODUCE REPORT ON SUSTAINABLE BIODIVERSITY MANAGEMENT	20,000			•	*
.2.3 NATIONAL - CONDUCTING SOCIO-ECONOMIC SURVEY(S)			<u> </u>	<u> </u>	

YOK DON FIELD ACTIVITIES	BUDGET (US\$)	1	Q 2	UARTER	4
RECRUIT CONSULTANTS	5,000				
FIELD MISSIONS TO REVIEW EXISTING MANAGEMENT PLAN	15,000				
REVIEW AND REDESIGN TOURISM PLAN FOR YOK DON AND ADJOINING AREAS IN DAC LAC					
WORKSHOP WITH LOCAL AND PROVINCIAL OFFICIALS	10,000				•
PREPARE UPDATED/INTEGRATED MANAGEMENT PLAN	15,000				
3.2.2 DRAFTING DEVELOPMENT PLANS FOR DAC LAC FROM A BIODIVERSITY PERSPECTIVE					
ANALYZE PROVINCIAL DEVELOPMENT PLAN FOR YOK DON	10,000				
PREPARE MAPS, DETERMINE EXACT LAND COVER AND SETTLEMENT PATTERNS FOR CONCERNED DISTRICTS	10,000				
HOLD WORKSHOPS WITH PROVINCIAL AND DISTRIC (OFFICIALS	10,000				•
PROVIDE RECOMMENDATIONS FOR REVISED LAND ZONING, AGRICULTURAL AND FORESTRY INTENSIFICATION, AND PROVINCIAL DEVELOPMENT	10,000				•
3.2.3 Plan reforestation and regeneration of corridors, buffer and surrounding zones					
RECRUIT FOREST REGENERATION PLANNING TEAM	10,000			•	
DEVELOP PLANS TO INTENSIFY AGRICULTURE PRACTICES WITHIN ALLOCATED COMMUNITY ZONES	10,000				
PLAN REFORESTATION AND REGENERATION ALONG PROTECTED AREA BOUNDARY AND IN KEY CORRIDORS OUTSIDE THE PROTECTION ZONES	10,000				•

NOTE ON COSTING: A BLANK SPACE IN THE 'COST' COLUMN INDICATES EITHER THAT THE ACTIVITY HAS NO COST, OR THAT THE GOVERNMENT OF VIETNAM OR THE CONTRACTED IMPLEMENTING AGENCY WILL COVER THE FUNDING.

ANNEX 4

Standard Reporting Format for the Proposed Approach to Estimating and Agreeing on Incremental Costs in the Vietnam PARC Project

1. Broad Development Goals

The overall development objective of this five year project is to conserve Vietnam's valuable biodiversity and natural resource base. The project will introduce, develop and implement the PARC concept which is based on a participatory approach, an open consultative process, and the appropriate integration of conservation and development. Capacity to implement the PARC concept in Vietnam will be applicable to all areas where biodiversity is fragmented, population pressure high, and socio-economic development integrally linked to conservation.

2. Baseline

Recent government budget figures indicate that Vietnam is currently spending about US\$ 31 million annually for forest sector programmes, of which approximately US\$ 5 million is targeted for protected area management. This funding situation, although far from optimal, is adequate to *maintain* at a minimum level, a portion of the 87 protected areas of Vietnam. The average expenditure is therefore US\$ 60,000 per protected area, per year. This money would normally go to basic maintenance of a park at a minimum level.

For the selected sites, based on 1994 figures, the budget allocated to protected areas management (per year) are estimated as follows:

Yok Don National Park:

\$80,000

Nahang Nature Reserve:

\$0

Ba Be National Park:

\$51,000 \$131,000

Total \$131,0
Total over the five year project implementation,

on, $$131,000 \times 5 = $655,000$

Despite the above investments, recent trends in Vietnam show that economic development and inappropriate management techniques are combining to lead to a reduction of biodiversity and depletion of ecosystems. However there are significant opportunity costs to be incurred by further domestic investments in biodiversity. The Government of Vietnam is facing severe fiscal constraints at a time of heavy demands on-public sector spending. For the Government to invest in biodiversity conservation, it would have to *forego* investments in other crucial sectors, such as rural roads, power supply, schools, or telecommunications. All recent economic analyses in Vietnam indicate that such investments would have very high economic yields. Hence, investing in biodiversity means not investing in these crucial high yield sectors, and could mean a loss in terms of domestic benefits.

Routine government investment in integrated spatial planning (on the basis of laws such as the Law on Land) has been very limited to date, and has not yet been proposed for those two sites for which the PARC concept will be implemented. Consequently, it is not possible to include such planning in the project's baseline scenario. It is the hope, in fact, of this project, that the PARC project will be able to demonstrate to the Government of Vietnam, one method by which the Law on Land can be implemented.

3. Global Environment Objective

At the existing level of protection, and given the current economic and policy environments that decentralizes forest management authority while at the same time encouraging rapid exploitation of the resources, additional funds are needed in order to ensure that national development priorities can be reconciled with the need to protect and sustainably use the country's rich biological resources.

If appropriate resource management techniques are not developed and adopted, the global losses to be incurred would include:

- Loss of endemic animal species, such as the severely endangered kouprey, tiger, the Tonkin snub-nosed monkey and many others. Besides their intrinsic value, they can provide important genetic material for domesticated animals and for evolutionary
- loss of sequestration of carbon dioxide through loss of vegetative cover
- loss of biodiversity of global significance.

4. GEF Alternative

In order to appropriately protect the ecosystem and the globally important biodiversity, it will be necessary to invest substantially in the PARC area. It will be further necessary to develop financially sustainable management mechanisms for the PARC areas. The proposed GEF alternative tackles these two issues. Hence it will (i) protect biodiversity and ecosystems at the project site, and (ii) provide a demonstration model approach to natural resource conservation applicable across the country and to other areas in the world.

It is estimated that in order to fully achieve the above, the following interventions will be

boundary demarcation development of management plans and strategies infrastructure development for in-site conservation (minimal access roads, staff and office accommodations, research and tourist facilities) forest rehabilitation programmes, forest corridors, community forestry community development programmes training and recruitment of staff

monitoring and evaluation

A detailed budget covering the total costs of intervention for establishing and developing two pilot protected areas in Vietnam over five years is provided in section 7 of the project brief.

5. System Boundary

Implementing the proposed GEF alternative will place a demand on the human resources in Vietnam. Vietnam has a limited human resource base, and in order to suitably undertake all project activities, many resources will have to be diverted from other development initiatives. This may cause some indirect losses to the development process in Vietnam.

Protecting biodiversity will lead to some short-term economic losses to those people currently exploiting the natural resource base. However these short-term losses will eventually be outweighed by the many long-term benefits of protecting ecosystems and biodiversity and sustainable livelihoods.

6. Additional Domestic Benefits

Over one-third of Vietnam's population derives at least a portion of their sustenance income from collecting fuelwood, fodder, natural foods and other non-timber forest products. Nationally, the estimated economic value of this income is conservatively estimated at US\$ 600 million annually. The proposed GEF alternative should help to do this on a more sustainable basis, and therefore in the long run implementing the GEF alternative could potentially increase this figure.

In the timber sector, the permissible sustainable cut in Vietnam is 800,000 cubic meters annually, of which approximately 600,000 cubic meters is collected from natural forests. If these natural forest timber sources were depleted through non-sustainable utilization, the replacement cost of importing cut timber at a cost of US\$ 300-350 per cubic meter would be between US\$ 180 and 210 million/annually.

Additional domestic benefits such as reduced rates of siltation, watershed protection, and realization of ecotourism and other non-timber forest products value may also accrue as a result of the PARC project.

While there could potentially be additional domestic benefits accrued from implementing the proposed GEF alternative as outlined above, none of them meet all the generally agreed-upon criteria for subtraction from the cost: they are not easily-quantified and readily-monetized; they are not certain to be captured by the host country if it implements the project; they will not all necessarily accrue within a time horizon of interest to current policy-makers. Moreover, some benefits will accrue to a small narrow group, but others, such as watershed protection will be beneficial to a larger undefined constituency. These additional benefits should not therefore be

subtracted from the incremental cost of the project.

7. Costs

As indicated above (section 2), the baseline scenario is Government investment of approximately \$655,000 and in kind over the five years.

The total project costs, over five years, for two project sites, is \$6,696,000. This does not include project formulation costs, which are estimated at \$103,900.

8. Incremental Costs Matrix

	Costs	Domestic Benefits	Global Environment Benefits
Alternative	\$6,696,000	long term domestic benefits	-Protection of ecosystems and species of global sigsequestration of CO2
Baseline	\$655,000	short term benefits but unsustainable over long term	none
Increment	\$6,041,000		

9. Agreement

The project has already undergone a long and thorough preparation process. This has involved local community representatives, Government officials at all levels, national and international technical experts, STAP, UNDP and international NGOs. All concerned parties and stakeholders have been thoroughly consulted and have agreed to the project in principle.

Once a complete project document has been prepared (this will be finalized under the Block B PDF granted to the project at the January 1995-GEFOP), this will again be circulated to all concerned parties to secure their further input. However, given the already long process, no obstacles to reaching rapid agreement are likely.

Review of PARC project by a STAP expert from the Dept. of Biology, University of Mass. Highlights of the review have been numbered, and UNDP's response to these comments can be found at the end of the review.

Comments on the proposal: Creating Protected Areas for Resource Conservation (PARC) in Vietnam Using a Landscape Ecology Approach

This proposal seeks to develop a participatory management plan for conservation and sustainable utilization of natural resources in and around two protected areas in Vietnam. The participatory management plan will involve local communities. Moreover, the project will entail community development projects and the strengthening of infrastructure and human resources. Extension of the plan to other areas, based on experiences at the proposed sites, is an integral part of the overall objectives. Conservation of biodiversity provides the context for the whole project.

Vietnam, the focus of the project, has experienced considerable degradation of its environment during the last few decades. The country's unique biota is severely threatened from a number of directions. Although the project proponents do not provide any figures about the rate of loss of biodiversity, I believe the rate is high. Thus this project has a sense of urgency. The successful implementation of the project should result in effective conservation of biological resources that are important from a national as well as an international perspective.

The proposal is unusually strong in its overall approach. The goals are ambitious and even partial success in realizing the many objectives of the proposal will constitute a substantial achievement. The project objectives are clear and concise and the outputs are related to the objectives. It is however not clear how the approaches to be used will yield desired results. For example, the project refers to landscape ecology and modified landscape ecology approach several times, but these approaches are not defined and various inputs and outputs are not specified. Fortunately, enough has been written about landscape ecology that one could almost guess the approach the proponents will be taking, and hope that they will succeed.

While the project appropriately emphasizes management, it should be obvious that one cannot effectively manage the resource until one knows what the resource is and I hope that in the project a serious effort will be made to assess the resources. For a project that is central to conservation of biodiversity, sufficient details concerning the project's contribution to the inventory of biodiversity should have been provided and I hope such details exist in other documents. The project proponents must not overlook the tremendous opportunity to assess and monitor biodiversity at all levels of biological organization in various landscapes, managed and unmanaged, at the two sites. 2

The sustainability of this project is difficult to evaluate. Although the participatory elements are well outlined there is insufficient information about financial and human mechanisms that would allow the proposed activities to be continued. The project also describes a number of other initiatives that are relevant to the main theme of the proposal. Perhaps then, collectively, an adequate infrastructure will be created to sustain project activities beyond the period of current funding from GEF.

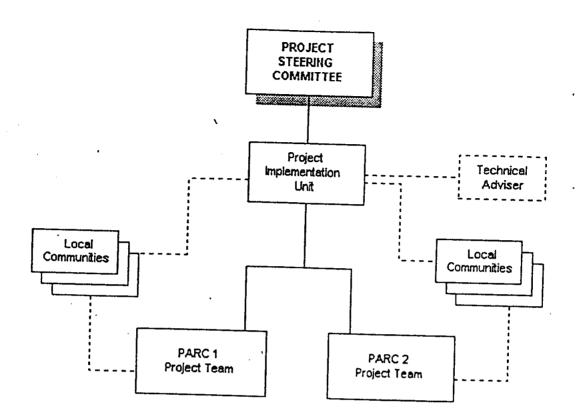
The innovative features of the project include the goal of integrating biological, socio-economic, and management approaches to preserve and utilize natural resources.

It is difficult to determine if the funding level is appropriate or not. Very few details are provided about the manner in which the funds will be spent. There seems to be undue emphasis on workshops and curiously each workshop is supposed to cost \$10,000. I recognize that the budget allocations are preliminary but I hope that before implementation the UNDP staff and project proponents will carefully review the budgetary details. 4

Overall, this is a very good proposal. The success of the project will have a strong bearing on management of natural resources in other parts of the world. The project deserves a very high priority for funding.

UNDP response to comments:

- Since addressed in Section 3 Project Description and Section 9, Issues, Actions, and Risks.
- 2. Since addressed in Section 3 Project Description, Outpus 1.3 and 3.1
- 3. Since addressed in Section 5 Sustainability and Participation
- 4. The budgetary figures were arrived upon based on previous experience of the cost of such activities in Vietnam (e.g. through experience gained in the Pilot Phase GEF project and other UNDP activities in the country.) These indicative figures are, of course, subject to revision during the project document formulation mission.



BỘ LÂM NGHIỆP. Số <u>59</u>2 /HTQT

V/v: Đự án PARC của Quỹ mới trường toàn càu.

CỘNG HÒA XÁ HỘI CHỦ NGHĨA VIỆT NAM Độc lập - Tự do - Hạnh phúc

Hà nội, ngày 14 tháng 3 năm 1995

Kinh giri:

Ủy ban Kế hoạch Nhà nước

Trong hon hai năm qua, Bộ Lâm nghiệp đang xúc tiến với Chương trình Phát triển của Liên hiệp quốc (UNDP) và Quỹ Quốc tế về Bảo vệ Thiên nhiên (WWF) xây dựng dự ấn trên do Quỹ môi trường toàn cầu (GEF) tải trọ nhằm giúp bảo tòn những hệ sinh thái vô giá của Việt nam. Bản dự án tóm tắt do Bộ Lâm nghiệp và UNDP soạn thảo và đệ krình cho GEF duyệt vào tháng Giêng 1995. Các thành viên của Ủy ban GEF đã tán thành bản dự án tóm tất và hỗ trọ tích cực cho công tác bảo tòn tính da dạng sinh học ở Việt nam. Để chuẩn bị tiếp cho dự án, GEF đề nghị chọn ra hai khu thực hiện dự án.

Tiếp theo một số cuộc họp trao đổi giữa Cục kiếm làm, Vụ họp tác quốc tế và tổ chúc quốc tế liên quan để quyết định địa điểm, ngày 27 tháng 2 năm 1995, các bên đã đồng ý chọn Vườn quốc gia Yok Don ở tinh Đắc lắc và tổ họp khủ Vườn quốc gia Ba Bế tại tinh Cao bằng và Khu bảo tòn thiên nhiên Na Hang tại tình Tuyên quang là những khu thích họp để đưa vào dụ án.

Chuyển di thực địa Na Hang và Ba Bể tuần vừa qua của cán bộ Bộ Lâm nghiệp và chuyển gia WWF thành công và cho thấy rằng đây là một khu mà GEF cần khẩn trương thực hiện vì tình trạng rùng bị xế nhỏ và vì tầm quan trọng của các loài động vật địa phương tìm thấy ở đó. Rừng Na Hang được biết là nơi dự trữ cuối cùng của loài voọc mũi hệch Tokin snub-nosed monkey.

Tương tự như vậy, Vườn quốc gia Yok Don là một khu rùng quan trọng ở biên giới tiếp giáp Cảm pu chia, và nó là sinh cảnh cho nhiều loài thủ lớn hiện nay dang bị đe dọa tại miền nam.

Bộ Lâm nghiệp xin thông báo với Ủy ban Kế hoạch Nhà nước rằng dụ án PARC do GEF thực hiện sẽ được tiến hành tại Na Hang - Ba Bế và Yok Don. Xét tầm quan trọng của những khu này và để phù hợp với co chế hoạt động của GEF, việc thực hiện dự án PARC sẽ tăng cường hơn nữa công tác bào tòn của các tổ chức quốc tế và trong nước tại hai khu này và những khu bào vệ quan trọng khác của Việt nam.

Noi gui: *

- Nhu trên.
- Luu: VT, HTQT.
- UNDP

K/T BO TRƯỞNG BO LÂM NGHIỆP
____THỨ TRƯỞNG

Mayer Dan Dung

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