Cover Note

Project Title: Regional: Mekong River Basin Wetland Biodiversity Conservation and Sustainable Use Programme (Laos, Cambodia, Vietnam)
Date: September 28th, 2001

	Work Program Inclusion	**Reference/Note:**
1. Country Ownership		
• Country Eligibility		Cover page
• Country Drivenness	Clear description of project's fit within: • National reports/communications to Conventions • National or sector development plans • Recommendations of appropriate regional intergovernmental meetings or agreements.	See, especially, Annex IX, supported by paragraphs: 30 and 36
• Endorsement	• Endorsement by national operational focal point.	Annex III-C
2. Program & Policy Conformity		
• Program Designation & Conformity	Describe how project objectives are consistent with Operational Program objectives or operational criteria.	Paragraph 2 of Section 3, "Global Environmental Objective", in Annex I: Incremental Costs Analysis
• Project Design	Describe: • sector issues, root causes, threats, barriers, etc, affecting global environment. • Project logical framework, including a consistent strategy, goals, objectives, outputs, inputs/activities, measurable performance indicators, risks and assumptions. • Detailed description of goals, objectives, outputs, and related assumptions, risks and performance indicators.	▪ Paragraphs: 9-15, Figure 1, Annex VII, supported by Annex VI for more details on each project site ▪ Annex II ▪ Paragraphs: 40-42 (goals, objectives, outputs); 43-49 (risks/assumptions); Annex II: Logframe Analysis (indicators)

	Work Program Inclusion	Reference/Note:
	• Brief description of proposed project activities, including an explanation how the activities would result in project outputs (in no more than 2 pages). [1]	▪ Cover Page summary
	• Global environmental benefits of project.	▪ Final paragraph of Section 3, "Global Environmental Objective", in Annex I: Incremental Costs Analysis

	• Incremental Cost Estimation based on the project logical framework.
	  • Describe project outputs(and related activities and costs) that result in *global* environmental benefits
	  • Describe project outputs (and related activities and costs) that result in joint *global and national* environmental benefits.
	  • Describe project outputs (and related activities and costs) that result in *national* environmental benefits.
	  • Describe the process used to jointly estimate incremental cost with in-country project partner.
	  • Present the incremental cost estimate. If presented as a range, then a brief explanation of challenges and constraints and how these would be addressed by the time of CEO endorsement.
		▪ Annex I
		▪ Annex I, line 1 of the Table
		▪ NA
		▪ Annex I, line 2 of the Table
		▪ Paragraph # 65 of brief
		▪ Paragraph # 64 of brief

• Sustainability (including financial sustainability)	Describe proposed approach to address factors influencing sustainability, within and/or outside the project to deal with these factors.	▪ See outputs 1.6 and 3.5 described in paragraph 42 and see also paragraph 43 ▪ Outputs contributing to meeting objectives 2 and 4 will also ensure sustainability of benefits
• Replicability	Describe the proposed approach to replication,(for e.g., dissemination of lessons, training workshops, information exchange, national and regional forum, etc) (could be within project description).	• Outputs contributing to meeting objective 3 are designed to promote replicability. See also paragraph 61 and outputs 1.1, 1.2, 1.10, 3.5, 3.6 in paragraph 42
• Stakeholder Involvement	• Describe how stakeholders have been involved in project development.	• Paragraph 54

[1] A project/program could undertake detailed design (specification of project outputs) during the first phase of implementation, with clear benchmarks for approval of the subsequent phase. A project could also be an adaptable program loan with several phases, where achievement of the clear benchmarks at the end of each phase is a necessary condition for approval of the next phase. In such projects, describe in detail the project output for the first phase and describe briefly the project activities for that phase.

	Work Program Inclusion	Reference/Note:
	• Describe the approach for stakeholder involvement in further project development and implementation.	• Paragraphs 50-53

• Monitoring & Evaluation	• Describe how the project design has incorporated lessons from similar projects in the past.
	• Describe approach for project M&E system, based on the project logical framework, including the following elements:
	  • Specification of indicators for objectives and outputs, including intermediate benchmarks, and means of measurement.
	  • Outline organizational arrangement for implementing M&E.
	  • Indicative total cost of M&E (maybe reflected in total project cost).
		• Paragraph 55
		• Paragraph #s: 66-71, Annex II
		• Budget table and paragraph 71

3. Financing		
• Financing Plan	• Estimate total project cost • Estimate contribution by financing partners. • Propose type of financing instrument	• Cover page; • Cover page; • Cover page
• Implementing Agency Fees	Propose IA fee	NA
• Cost-effectiveness	• Estimate cost effectiveness, if feasible. • Describe alternate project approaches considered and discarded.	NA NA
4. Institutional Coordination & Support		
IA Coordination and Support • Core commitments & Linkages	Describe how the proposed project is located within the IA's: • Country/regional/global/sector programs. • GEF activities with potential influence on the proposed project (design and implementation).	NA NA
• Consultation, Coordination and Collaboration between IAs, and IAs and EAs, if appropriate.	• Describe how the proposed project relates to activities of other IAs (and 4 RDBs) in the country/region. • Describe planned/agreed coordination, collaboration between IAs in project implementation.	• Outputs 1.4, 1.10; Annex X • NA
5. Response to Reviews		
Council	Respond to Council Comments at pipeline entry.	NA
Convention Secretariat	Respond to comments from Convention Secretariats .	NA

	Work Program Inclusion	Reference/Note:
GEF Secretariat	Respond to comments from GEFSEC on draft project brief.	NA
Other IAs and 4 RDBs	Respond to comments from other IAs, 4RDBss on draft project brief.	NA
STAP	Respond to comments by STAP at work program inclusion	NA
Review by expert from STAP Roster	Respond to review by expert from STAP roster.[2]	Annex III-B

[2] STAP Roster Review, and IA response, is a required annex of the project brief.

PROJECT BRIEF

1. IDENTIFIERS

PROJECT NUMBER:	
PROJECT NAME:	**Regional (Cambodia, Lao PDR, Vietnam): Mekong River Basin Wetland Biodiversity Conservation and Sustainable Use Programme**
DURATION:	1 January 2002 – 31 December 2006 Phase A : 1 January 2002 – 31 December 2003 Phase B : 1 January 2004 – 31 December 2006
IMPLEMENTING AGENCY:	United Nations Development Programme
EXECUTING AGENCY:	IUCN – The World Conservation Union Mekong River Commission Secretariat
REQUESTING COUNTRY:	Cambodia, Lao PDR, Vietnam
ELIGIBILITY:	Cambodia ratified CBD in February 1995 Lao PDR ratified CBD in November 1995 Vietnam ratified CBD in November 1994
GEF FOCAL AREA:	Biodiversity Conservation
GEF PROGRAMMING FRAMEWORK:	OP 2 Coastal, Marine and Freshwater Ecosystems

2. SUMMARY:

The Mekong River, one of the great river systems of the world, possesses immense biodiversity of truly exceptional international significance including many unique ecosystems and a wide array of globally-threatened species such as Irrawaddy Dolphin, Giant Ibis, Siamese Crocodile, and Giant Catfish. The diversity of the river fauna itself is surpassed only by that of the Amazon and the Congo, with between 500 and 1,300 species of fish present. This biodiversity forms the main natural resource for a population of 55 million people living in the Lower Mekong Basin - about one third of the total population of Cambodia, Lao PDR, Thailand and Vietnam combined. Despite the rapid economic advances of these countries, population growth and poverty levels remains high. Wetland degradation associated with increasing development pressures is heavy, e.g. only 1.3% of the once biodiversity-rich Mekong Delta now remains in a semi-natural condition, and planned development of river infrastructure threatens large-scale changes to the hydrological regime. Widespread hunting, inflated by a massive illicit wildlife trade, has brought many species to the brink of imminent extinction.

The Governments of the four Lower Mekong countries have implemented comprehensive actions to manage and conserve biodiversity found in the basin. However, barriers to effective conservation of global biodiversity remain. These include: i) unco-ordinated sectoral approaches to wetland planning at national and regional level; ii) weak policy frameworks and unsupportive economic environments for wetland biodiversity conservation and sustainable use; iii) inadequate information base on which to base wetland policy, planning and management decisions; iv) inadequate human and technical resources available for wetland biodiversity conservation; and v) lack of options over use of natural resources by local communities. The UNDP-GEF intervention, building specifically upon each country's national priorities, will remove these barriers at a regional and national level, and at four demonstration sites (Stoeng

Treng Ramsar Site, Cambodia; Attepeu Province, Lao PDR; Lower Songkram Basin, Thailand; and Plain of Reeds, Vietnam). Each represents one of the four key wetland ecosystems representative of the Lower Mekong Basin as a whole. The programme will be implemented in two phases, the first building the enabling environment and the second realising key outputs. GEF support will be integrated with bi-lateral and government programmes that promote sustainable community development and wise use of wetlands.

3. COSTS AND FINANCING (US$ MILLION)

	TOTAL	DEVELOPMENT	PHASE A	PHASE B
GEF funding for project costs	9.29		3.85	5.44
GEF funding for administrative and support costs	0.61		0.26	0.35
PDF B	0.43	0.43		
Sub-total GEF funding	**10.33**	**0.43**	**4.11**	**5.79**
% TOTAL		**4%**	**41%**	**55%**
IUCN project development funds	0.06	0.06		
UNDP project development funds	0.10	0.10		
Government project development funds	0.04	0.04		
Other donors co-financing	17.11		7.40	9.70
Government co-financing	4.41		1.76	2.65
Sub-total co-financing	**21.72**	**0.20**	**9.16**	**12.36**
TOTAL PROJECT	**32.05**	**0.63**	**13.27**	**18.15**
% TOTAL	**100%**	**2%**	**41%**	**57%**

4. ASSOCIATED EXPENDITURES (US$ MILLION)

Baseline expenditures	108.52
Complementary and leveraged projects	38.29
Sub-total associated expenditures	**146.81**
Total Alternative Strategy	**178.84**

5. OPERATIONAL FOCAL POINT ENDORSEMENT

Cambodia

Name: Chhan Saphan **Title**: Acting Minister

Organisation: Ministry of Environment **Date**: 24/8/00

Lao PDR

Name: Xayaveth Vixay **Title**: Deputy Director General
Organisation: Science Technology and Environment Agency **Date**: 30/7/01

Vietnam

Name: Pham Koi Nguyen **Title**: Chairman
Organisation: GEF-Vietnam Commitee **Date**: 21/8/00

Thailand

Name: Dr Saksit Tridech **Title**: Secretary General
Organisation: Office of Economic Policy & Planning **Date**: 27/6/01

ABBREVIATIONS AND ACRONYMS

Agreement	-	Agreement on Cooperation for Sustainable Development of Mekong Basin
ADB	-	Asian Development Bank
AMME	-	ASEAN Ministers Meeting on the Environment
ASEAN	-	Association of Southeast Asian Nations
ASOEN	-	Asian Senior Officials on the Environment
BDP	-	Basin Development Plan
BSAP	-	Biodiversity Strategy and Action Plan
CBD	-	Convention on Biological Diversity
COP	-	Conference of Parties
CITES	-	Convention on International Trade in Endangered Species
CNMC	-	Cambodia National Mekong Committee
CTA	-	Chief Technical Adviser
CWTO	-	Country Wetland Training Officer
DANCED	-	Danish Co-operation for Environment and Development
DANIDA	-	Danish International Development Agency
EAP	-	Environment Action Plan
GDP	-	Gross Domestic Product
GEF	-	Global Environment Facility
GIS	-	Geographic Information System
ICLARM	-	International Centre for Living Aquatic Resources Management
IEBR	-	Institute of Ecology and Biological Resources (Vietnam)
IUCN	-	International Union for the Conservation of Nature
Lao PDR	-	Lao People's Democratic Republic
LARReC	-	Living Aquatic Resources Research Centre (Lao PDR)
M&E	-	Monitoring and Evaluation
MOU	-	Memorandum of Understanding
MRC	-	Mekong River Commission
MRCS	-	MRC Secretariat
NBCA	-	National Biodiversity Conservation Area
NEA	-	National Environment Agency
NEAP	-	National Environment Action Plan
NFTP	-	Non-timber Forest Products
NGO	-	Non-governmental Organisation
NMC	-	National Mekong Committee
NPD	-	National Programme Director
OEPP	-	Office of Environmental Policy and Planning (Thailand)
PDF	-	Project Development Fund
PMU	-	Programme Management Unit
PPER	-	Project Performance Evaluation Reports
PRA	-	Participatory Rural Appraisal
RPD	-	Regional Programme Director
SSC	-	Species Survival Commission
STEA	-	Science Technology and Environment Agency (Lao PDR)
ToR	-	Terms of Reference
UNDP	-	United Nations Development Program
UNEP	-	United Nations Environment Program
TNA	-	Training Needs Analysis
WAP	-	Wetland Action Plan
WCS	-	Wildlife Conservation Society
WUP	-	Water Utilization Program
WWF	-	Worldwide Fund for Nature

Background and Context

INTRODUCTION

1. The Mekong River is one of the great river systems of the world. Rising in the Tibetan Plateau and disgorging into the South China Sea some 4,800 kilometers later, it is ranked as the twelfth longest of the world's rivers, draining 795,000 km^2 of six countries – China, Myanmar, Thailand, Lao PDR, Cambodia and Vietnam. In terms of annual discharge it ranks eighth highest in the world at some 475,000 million cubic metres. The seasonal variation in water level is the source of the productivity of the system. Wet season river levels are up to 8-10 metres higher than dry season ones, creating a rich and extensive series of wetlands in the four countries of the Lower Mekong Basin prior to reaching the 4 million hectare delta.

2. The biodiversity of the Mekong River Basin is immense, and of truly exceptional significance to international biodiversity conservation even in comparison with other parts of tropical Asia. The river and its numerous tributaries, backwaters, lakes, and swamps supports many unique ecosystems and a wide array of globally-threatened species such as the Irrawaddy Dolphin, Siamese Crocodile, Giant Catfish and birds such as the Giant Ibis and Sarus Crane. The diversity of the river fauna itself is surpassed only by that of the Amazon and the Congo, with between 500 and 1,300 species of fish inhabiting the main channels, tributaries, and associated wetlands.

3. This biodiversity also forms the main natural resource for a population of 55 million people living in the Lower Mekong Basin - equivalent to more than 90% of the population of the entire Mekong Basin, and about one third of the total population of Cambodia, Lao PDR, Thailand and Vietnam combined. Population growth remains high in the Lower Mekong countries - 2.6% in Cambodia and Lao PDR, and 1.7% in Vietnam, all exceed the East Asia/Pacific regional average of 1.6%. It is estimated that some 36% of the population in Cambodia, 36% in Lao PDR, 13% in Thailand and 37% in Vietnam live below the poverty line.

4. Despite the rapid economic advances made over the last decade, Cambodia, Lao PDR, and Vietnam are classified as low income countries with a per capita GDP of US$ 280-360 (compared with an East Asia/Pacific region average GDP of US$ 990). Thailand is a middle income country with a per capita GDP of US$ 2,200, but rural households in the Mekong basin have a per capity income of US$ 800. With the exception of Thailand and to a lesser extent Vietnam, the national economies of the Lower Mekong states are based primarily on agriculture and natural resources. Over three-quarters of each of the populations of Cambodia, Lao PDR, Thailand, and Vietnam are living outside of towns and cities with livelihoods reliant almost entirely on subsistence farming, fisheries, wildlife, forest products and plant resource utilisation. Wetland biodiversity also makes a significant contribution to national economic indicators such as income, employment and foreign exchange. The socio-economic benefits of wetlands in the Lower Mekong are analysed in Annex V.

5. Such high levels of human population and usage have led to increasing unplanned development pressures within the basin, causing many direct threats to most of the endangered species and important ecosystems for which the region is renowned. Only 1.3% of the once biodiversity-rich Mekong Delta now remains in a semi-natural condition and the few remaining wetland species are wholly reliant on these remnant patches. Similarly in Esarn, a Thai portion of the Lower Mekong Basin, infrastructure development has reduced natural wetlands to a small fraction of their original distribution. The peak annual inundation of Lake Tonle Sap has been reduced by changes to the river peak flows, threatening the largest large waterbird breeding colony in Asia, and affecting annual fish production. Widespread hunting and over-fishing, inflated by a massive illicit wildlife trade, has brought many species to the brink of imminent extinction, and development of river infrastructure is believed to have caused the extinction of a number of endemic fish species.

GLOBAL SIGNIFICANCE OF BIODIVERSITY

1.1.1. Unique riverine wetland ecosystems

6. As one of the World's great rivers, the Mekong has a wide variety of unique riparian ecosystems. Many of these have disappeared elsewhere in tropical SE Asia over the last 100 years and the Lower Mekong remains one of the few areas where riverine, riparian, and gallery forest remain. Key freshwater wetland ecosystems are (see also Annex V):

- Upland tributaries: are fast-flowing rivers rising in the mountains and passing through dense stands of fringing gallery forest containing *Dipterocarpus turbinatus, D. alatus* and *D. costatus*. Most of the tributaries on the east side of the Mekong rise high in the Annamite Mountains and plunge steeply towards the Mekong Valley. Caves and waterfalls are common in the limestone karst. Little is known of the aquatic biodiversity inhabiting these areas, but the limited surveys conducted to date indicate over 53 species of fish are endemic to single sub-basins of the Lower Mekong Basin.
- Lowland river channels: comprise the main channels of the Mekong and its major tributaries such as the Nam Mun, Xe Kong, Se San, and the Srepok. Remnants of unique riverine dipterocarp forest dominated by *Dipterocarpus alatus, D. dyeri,* and *Hopea odorata* are associated with undisturbed areas of these systems. Exposed sandbars and rocks are widespread and dominated commonly by a single species, *Anogeissus rivularis*. In the dry season the rivers are broad, relatively slow-flowing, with a series of deep pools vitally important for the dolphins and seasonally-quiescent floodplain fish species but, in the wet season, water levels rise 8-10m and the currents become torrential.
- Floodplain wetlands: include seasonally-inundated lakes, swamps, and riparian forest. The inundated forest, most famous around Lake Tonle Sap, is dominated by the trees *Barringtonia acutangula* and *Diospyros cambodiana* which survive four months of inundation; a diverse mixed scrubland containing over 60 species; and floating perennial herbs including *Brachiaria mutica, Eichornia crassipes, Polygonium barbatum* and *Sesbania javanica*. Woody species, laden with fruits and seeds at the time of inundation, provide food for the 34 species of fruit-eating fish from the Mekong River.
- Deltaic formations: occur from where the Mekong River begins its separation into many channels downstream of Phnom Penh. On the Cambodia-Vietnam border is the "Plain of Reeds", most of which is now under rice cultivation, but some natural areas remain with *Nelumbo nucifera, Nymphacea nouchali, N. pubescens* and *N. tetragona*, and wet grass plains dominated by *Elocharis dulcharis, E. ochrostachys* and wild rice *Oryza rufipogon* (one of the few remaining sources for the natural stock of this species). In this area, there are a number of patches of the former riverine forest habitats of *Melaleuca* associated with *Syzgium* sp., *Elaeocarpus hygrophilus, Ficus microcarpa,* and *Cassia grandis*, often on peaty deposits.

1.1.2. Global and national biodiversity values

7. Many of the unique riparian wetland ecosystems of the Lower Mekong are of global significance for their biodiversity or for the existence of particular globally-threatened species/sub species, and many wetland species, particularly fish endemic to particular tributary catchments, may still be undescribed. Key globally-threatened species/sub-species include (see also Annex V):-

Mammals: Irrawaddy Dolphin *Orcaella brevirostris* is believed to be **Critically Endangered** globally, but is classified as **Data Deficient**. The population remaining in the Mekong is estimated at less than 100 individuals, mostly between Phnom Penh and the Khone Falls in southern Lao and the Xe Kong River. Most of the mammals associated with wetlands are now threatened including the **Endangered** Wild Water Buffalo *Bubalus arnee* and Lowe's Otter Civet *Cynogale lowei,* the **Vulnerable** Eld's Deer *Cervus eldi,* Hairy-nosed Otter *Lutra sumatrana,* and Smooth-coated Otter *Lutrogale perspicillata,* and the **Near-threatened** Fishing Cat *Prionailurus viverrinus* and the Oriental Small-Clawed Otter *Aonyx cinerea*.

Birds: The wetlands of the Lower Mekong Basin support 14 globally-threatened bird species, namely the **Critically Endangered** Giant Ibis *Pseudibis gigantea*, re-discovered in 1993 along the Xe Kong and Mekong Rivers in southern Lao PDR, the globally **Endangered** Greater Adjutant *Leptoptilos dubius*, White-shouldered Ibis *Pseudibis davisoni*, White-winged Duck *Cairina scutulata*, Bengal Florican *Eupodotis bengalensis* and Nordmann's Greenshank *Tringer guttifer*; the globally **Vulnerable** Spot-billed Pelican *Pelecanus philippensis*, Lesser Adjutant *Leptoptilos javanicus*, Milky Stork *Mycteria cinerea*, Greater Spotted Eagle *Aquila clangula*, Green Peafowl *Pavo muticus*, Masked Finfoot *Heliopais personata*, Black-bellied Tern *Sterna acuticauda*, and Indian Skimmer *Rynchops albicollis* and eleven globally near-threatened wetland bird species. Lake Tonle Sap holds the largest breeding colonies of large waterbirds in Asia.

Reptiles: Siamese Crocodile *Crocodilius siamensis* is **Critically Endangered** globally and is listed on Appendix I of CITES. It was formerly widespread throughout the Lower Mekong Basin but has declined drastically due to excessive hunting and habitat destruction. These populations, believed to be confined to southern Lao PDR and Cambodia, are of extreme global importance as the last wild populations. Local, but unconfirmed reports exist for the presence of the **Data Deficient,** but probably **Critically Endangered**, False Gharial *Tomistoma schlegelii*. Over twenty species of turtles occur in the Lower Mekong Basin, ten of which are listed in the Red Data Book including the Chinese three-striped box turtle *Cuora trifasciata* which is **Critically Endangered** and five other species listed as **Vulnerable**.

Fish: While up to 1,300 species of fish may be present in the Lower Mekong Basin, one systematic taxonomic study has identified 456 species of which 179 (40%) are endemic and 53 species (11%) are known from only a single sub-basin, demonstrating a high level of local endemism. Two species are **Critically Endangered** globally, Leaping Barb *Chela caeruleostigmata* and Dwarf Botia *Botia sidthimunki*. The migratory Giant Catfish *Pangasianodon gigas* and Jullien's Carp *Probarbus jullieni* are **Endangered** globally, as are the Golden Arowana *Scleropages formosus*, and an endemic freshwater herring *Tenualosa thibaudeaui*. The Giant Catfish is believed to migrate over a thousand kilometers each year from around the Tonle Sap and the Delta to stretches on the Mekong upstream of Vientiane where it is thought to spawn. *Boraras micros*, the world's second smallest fish at less than 12mm long, inhabits swamps of the Mekong flood plain. Also present is a group of marine-type fish species including three large fresh-water stingrays *Himantura chaophraya* (disc diameter 2.5m), *H. oxyrhynchus* and *Dasyatis laoensis* (both up to 1m), and freshwater sharks (e.g. *Carcharhinus leucas*).

Invertebrates: The wetlands of the Lower Mekong Basin also contain a wealth of diversity of other groups. Limited surveys of molluscs have so far identified a rich biodiversity with a high level of endemism - of 160 mollusc species identified in 500km of the Mekong and its Mun tributary, 116 species (72%) are endemic. An as yet unidentified freshwater jellyfish *Moerisia* sp. has been found just south of Khone Falls, and a diverse range of invertebrate fauna including sponges are expected to be identified.

1.1.3. Key Biodiversity at the Demonstration Sites

8. Sites were selected by national governments according to a set of criteria approved at the first project steering committee meeting. Details of the sites, their selection, biodiversity values and the threats to it are given in detail in Annex VI. A summary of key biodiversity values follows:

Stoeng Treng Ramsar Site – Cambodia: The site supports a globally unique type of seasonally-inundated riverine forest, not found above the Khone Falls, nor further downstream. It is characterised by tall riparian trees and reed beds ("Treng" = "reed"). One of the main populations of Irrawaddy Dolphins in the Mekong breeds at the site. Three species of globally-threatened birds species have been recorded – Oriental Darter, Grey-headed Fishing Eagle, and Black-bellied Tern. The Critically Endangered Siamese Crocodile occurs in one of the tributaries to the site. Over 100 species of fish have been recorded included three globally-threatened species.

Attepeu Province – Lao PDR: The province contains pristine areas of upland and lowland forested wetlands. Irrawaddy Dolphin is present, along with Eld's Deer Cervus eldii, Fishing Cat Prionailurus viverrinus and Oriental Small-clawed Otter. A large array of waterbirds is present including the only known sites globally for Giant Ibis re-discovered here in 1993. Among the other nine globally-threatened species are White-winged Duck, White-shouldered Ibis, Lesser Adjutant, and Masked Finfoot. Siamese Crocodile is know to breed. Six species of globally threatened turtles are present, and over 127 species of fish including three globally-threatened species.

Lower Songkram River Basin – Thailand: The area is important mainly for its fish, over 182 species of which have been recorded including 20 endemic species, 11 of which are endangered in Thailand. Five species are globally-threatened – Giant Catfish *Pangasianodon gigas*, Royal Featherback *Chitala blanci*, Jullien's Carp *Probarbus jullieni*, an endemic freshwater Herring *Tenualosa thibaudeaui*, and a catfish *Probarbus labeaminor*. Two species new to science have been recorded recently. A survey of molluscs at a nearby site turned up 150 species. The riparian flooded forest is a key habitat.

Plain of Reeds – Vietnam: Two areas support natural remnants of deltaic grasslands, which characterise the Plain of Reeds. A large number of waterbirds are present including eight globally-threatened species, most notably the Endangered Bengal Florican and, in winter, about 80% of the world population of the eastern race of the Globally Near-threatened Sarus Crane *Grus antigone sharpei*. Four globally-threatened turtles have are present and over 40 species of fish have been recorded.

THREATS TO BIODIVERSITY

9. There are a range of threats to wetland biodiversity in the Mekong River. These can be categorised as habitat destruction and degradation; loss of ecosystem integrity; and depletion of species abundance and diversity. These threats are described below, their causes are summarized in Figure 1 and described in detail in Annex VII. Details of threats faced at each of the demonstration sites are given in Annex VI.

1.1.4. Destruction and Degradation of Wetland Habitats

10. Armed conflict, political issues, and geographic inaccessibility have limited economic development in the region for the past half century but recently much has changed this. Per capita GDP in Vietnam has nearly doubled in the past decade (from US$ 198 in 1985 to US$ 367 in 1998 (both at 1996 prices)) and its growth is projected to be one of the highest in South East Asia in 1999. While Vietnam may have a particularly fast rate of development, the other countries are also changing rapidly, resulting in increasing regional pressure on natural resources. This rapid economic growth, fueled by government policy goals and rapid population growth estimated currently at 2.5% per year, is resulting in uncontrolled development, placing enormous demand on wetlands. The conversion of wetlands through drainage and reclamation for unplanned industrial and urban use, their excessive modification to agricultural land, and the inappropriate management of those remaining, is causing significant loss of structure to the wetland ecosystems of the region.

1.1.5. Loss of Wetland Ecosystem Integrity

11. The productivity of the wetland systems of the Lower Mekong Basin have evolved around the huge differences in the height and duration of wet season and dry season flows. There are a number of existing and proposed developments that may result in alterations of the hydrological regime, reducing peak wet season flow and increasing dry season flow, the cumulative effects of which upon the biodiversity of the Basin's wetlands are unknown. Such alterations are likely to diminish wetland productivity through seasonal wetlands not filling, previously permanent wetlands drying out, and pulsed releases during the dry season sweeping away nests and young of riverine animals. The most significant of these

developments are hydropower dams (over 40 major schemes are at various stages of planning and construction on the main channel of its tributaries); but irrigation schemes, primarily for intensive rice production; and flood management schemes also pose cumulative threats.

12. The rapid, often badly planned, industrialisation of the Lower Mekong Basin is increasing the pollution load in its waters which, in the absence of effective government control measures, will continue to increase. Pollution sources include industrial waste; pesticide, herbicide and fertilizer run-off resulting from excessive doses applied; acid-sulphate released by the oxidation of certain soils; and domestic sewage and household waste. Water in the Delta has been recorded with pHs as low as 3. Elsewhere, substantial logging activities within the Basin are reportedly causing increased sedimentation throughout its wetlands, and scour of river channels immediately below dams redistributes material resulting in siltation downstream. All these threats cause loss of ecosystem function.

1.1.6. Depletion of Species Abundance and Diversity

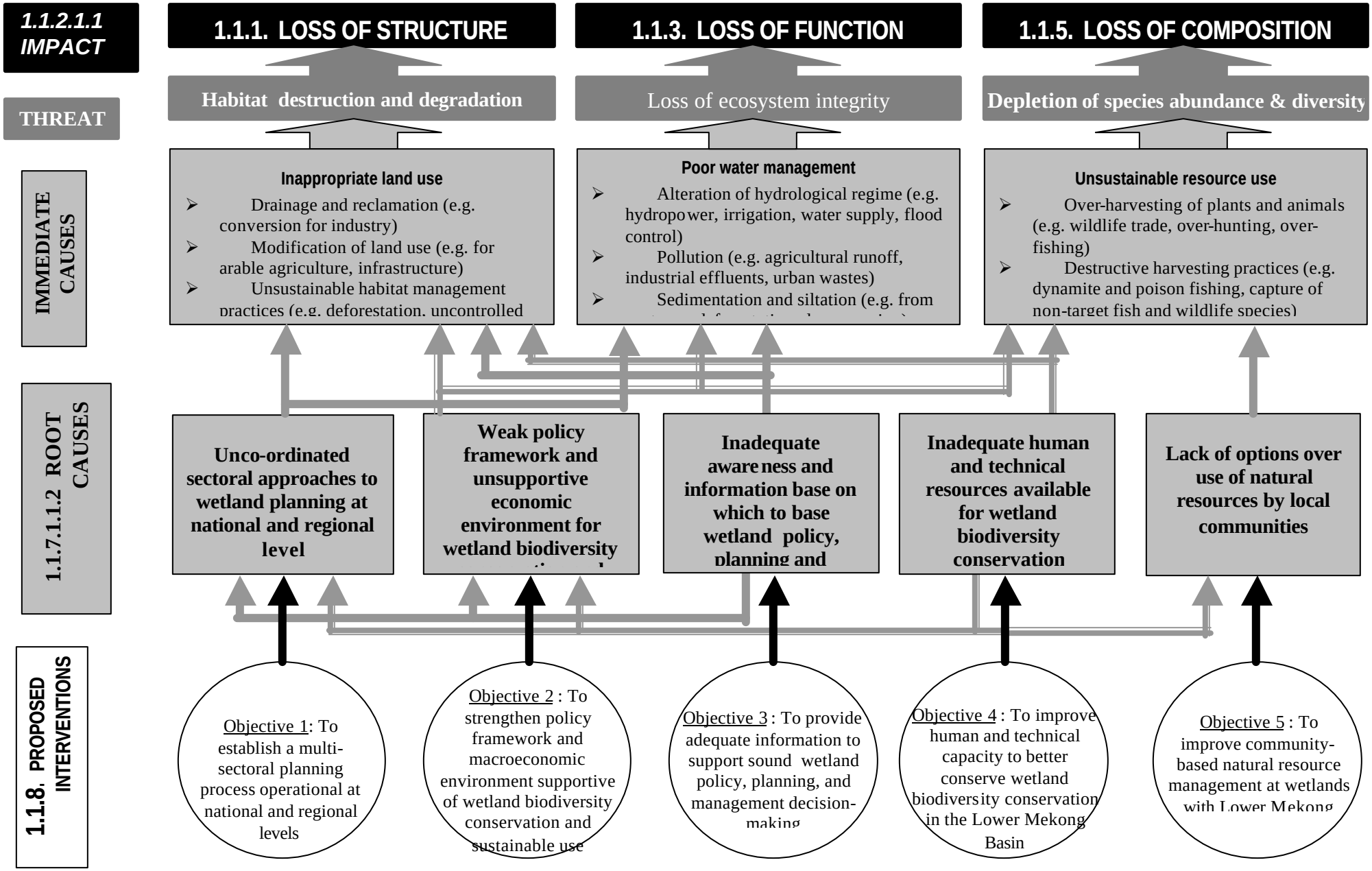
13. Human use of wildlife in the region is very high, and over-harvesting of plant and animal products is widespread. Guns remain prevalent after recent conflicts, although a wide variety of other weapons and traps are used for hunting. In Lao PDR, most animal protein consumed in rural households comes from captured wildlife, and wildlife markets trading for domestic consumption flourish. Wetland wildlife is targeted heavily, particularly migratory birds, e.g. at the western end of Tonle Sap, Cambodia, in 1995 over 30,000 eggs and chicks were collected from one waterbird colony including those from three endangered species – 3,100 Spot-billed Pelican eggs were harvested from a species whose global population is estimated at 11,500 birds. While protection is now enforced around Tonle Sap, similar levels of hunting are still experienced elsewhere in the Mekong Basin. The effects on population viability are unclear but are of concern since they involve international resources. In addition to subsistence use, there is a massive organised illicit movement of dead and live animals and plants into neighbouring lands particularly for traditional medicine in China and for food in Thailand. This has increased in the past 15 years with the increasing affluence of the destination countries. Enforcement of existing laws is hampered by a number of factors - ambiguity and conflict between statutes, low manpower, a basic communications network, and a perceived low priority by various government bodies. The situation is exacerbated by the widespread use of destructive harvesting practices which destroy non-target species. These practices include fish bombing (use of explosives to collect all the fish from a specific area which poses a severe threat to dolphins); electro-fishing (use of an electric charge to kill all aquatic organisms within a selected range); use of small-mesh nets (thereby taking immature stock); and tree-felling (to remove arboreal wildlife or allow easy gathering of fruit). Loss of ecosystem composition is further heightened by change in indigenous species composition caused by the introduction and spread of alien invasive species such as Giant Mimosa (*Mimosa pigra*) and Golden Apple Snail (*Pomacea canaliculata*).

ROOT CAUSES

14. Despite the baseline actions being undertaken, the wetlands of the Lower Mekong and the biodiversity they support continue to be lost. Although habitat destruction and degradation, loss of ecosystem integrity, and depletion of species abundance and diversity are the direct threats to the region's biodiversity, the root causes are found primarily in:

- Unco-ordinated sectoral approaches to wetland planning at national and regional level. At a national level ministries are not yet fully co-ordinated with regards to wetland conservation with interests from the energy, irrigation and water supply sectors often conflicting with those from forestry and environment. The Mekong River Commission is starting to develop a Basin Development Plan through a long-term consultative process.

FIGURE 1 : ROOT CAUSE ANALYSIS OF THREATS TO WETLAND BIODIVERSITY IN THE LOWER MEKONG BASIN



- Weak policy frameworks and unsupportive economic environments for wetland biodiversity conservation and sustainable use. No wetland policies exist in any of the countries and existing policies do not support wetland conservation or even advocate drainage and conversion into other uses. No attempt has yet been made to adopt a regional policy on wetland conservation and management for the Mekong, but MRC and ASEAN provide opportunities for regional policy development, since all four countries are signatory to both;
- Inadequate information base on which to base wetland policy, planning and management decisions. Little information is available about functions and values of wetlands, especially in local language, and few people at decision making level are fully cognizant of the ecological and hydrological processes that make wetlands so important for mankind;
- Inadequate human and technical resources available for wetland biodiversity conservation. There are no wetlands departments in any of the countries and few dedicated wetland staff, either at national level or on the ground. Often managers of wetlands are foresters or fisheries officers by training and they may not have the full grasp of management demands of wetlands.
- Lack of options over use of natural resources by local communities. Local people are often using wetland products unsustainably due to a lack of access and ownership over the resources and a lack of opportunities to develop sustainable management practices.

15. These factors are exacerbated by socio-political issues including widespread poverty and a high population growth rate throughout the region, as well as a history of conflict and a resulting weak governance structure.

BASELINE ACTIONS

1.1.7. Institutional Setting

16. Sustainable-use management of wetlands and water requires a co-ordinated, multi-sectoral approach which is currently lacking both at a regional and national level. Thailand has formed a National Wetlands Committee but no mechanisms exist currently within any of the three other countries to clarify inter-agency responsibilities for wetland management or to resolve the complex issues relating to wide-area wetland management. The Agreement establishing the MRC specifically targets co-operation in all fields of water management, and includes the mitigation of harmful effects at all stages of the development cycle from planning to execution. The MRC is embracing an integrated approach to development and the current fisheries and wetlands programmes have addressed ecosystem management functions. In late 1999, a Human Resources Development and Environment Division was created in the MRC and a new environment programme was launched in mid-2000. Similarly, the National Mekong Committees are being strengthened so that they could become a national mechanism for wetland conservation and sustainable use. An informal means of providing regional co-ordination could be through professional networks. However, the existing environmental networks in the region, such as the UN's INFOTERRA and UNEP's ENRIN, are solely information-based and, hence, do not fulfil this role.

17. The following principal agencies are involved currently in policy-making, planning, and management of wetlands and environmental sectors in each country. Greater detail is available in Annex VIII.

1.1.7.1. Mekong River Commission

18. The *Mekong River Commission* (MRC) is an inter-governmental organisation of the four Lower Mekong Basin states, established in its present form in 1995 upon the signing of the "*Agreement on Co-operation for the Sustainable Development of the Mekong River Basin*".

19. The MRC Secretariat (MRCS) has recently been re-organised and an Environment Division has been created to implement a new Environment Programme. The new programme comprises five components namely i) environmental monitoring and assessment, ii) environmental management and policy support, iii) strategic networking and co-ordination, iv) awareness and capacity building, and v) support studies and research facilitation. It does not have a main component focusing on wetlands, biodiversity issues, conservation activities, or any combination thereof, but these issues are addressed under the first two components of the programme.

20. In each country the focus for MRC activities is a *National Mekong Committee* that formulates national policies *vis-a-vis* the MRC, provides co-ordination between national line agencies and MRC projects, and implements MRC programmes in their respective countries. Although the structure of the NMCs varies by country, the general arrangement is to have three bodies: (i) an inter-ministerial policy-making body; (ii) a management group consisting of key governmental departments; and (iii) a secretariat to support the NMC.

1.1.7.2. Cambodia

21. The two key agencies involved in the conservation and management of wetland biodiversity are the Ministry of Environment which is the administrative Authority for the *International Convention on Wetlands* (The Ramsar Convention), the focal point for the *Convention on Biodiversity* and has a mandate in the management of Protected Areas in Cambodia (by Royal Decree); and the Department of Fisheries in the Ministry of Agriculture, Fisheries and Forestry which is responsible for the fisheries domain as defined by the Fisheries Law (Kret #33; 1987), including fisheries concession areas, fish sanctuaries, as well as inundated forests, swamps and other fish production areas. Jurisdiction over crocodiles, turtles and other aquatic species is also claimed by the Department.

22. The Council of Ministers has established two cross-sectoral committees in order to encourage inter-ministerial co-operation. The Cambodia Development Committee co-ordinates overall development and the Cambodia National Mekong Committee (CNMC) oversees water management issues within the Mekong River Basin. Since most of the country falls within the Basin, the CNMC effectively has a national mandate but does not have any responsibility for coastal issues. It is an inter-sectoral committee with broad responsibilities for water and freshwater wetland issues and is one of the few existing mechanisms to promote inter-ministerial collaboration and inter-sectoral integration. A working group under CNMC guided the development of the National Wetland Action Plan.

1.1.7.3. Lao PDR

23. Two key agencies are again involved in the conservation and management of wetland biodiversity namely the Living Aquatic Resources Research Centre (LARReC), established as one of the nine agencies under the National Agricultural and Forestry Research Institute in the Ministry of Agriculture and Forestry, was given the responsibility for wetland management in Lao PDR in March 2000 including co-ordination of the MRC wetland and fisheries programmes; and the Science, Technology and Environment Agency (STEA) in the Prime Minister's Office, responsible for policy development and co-ordination of environmental affairs, which is the focal point for the *Convention on Biodiversity*.

24. The Lao National Mekong Committee, reporting to the State Planning Committee, is the only multi-sectoral co-ordinating body dealing with water issues.

1.1.7.4. Thailand

25. Wetland biodiversity conservation in Thailand is dealt with by three key agencies - the Office of Environmental Policy and Planning (OEPP) in the Ministry of Science, Technology and Environment is the administrative authority for the *International Convention on Wetlands* (Ramsar) and the *Convention on Biological Diversity*, although Thailand has not yet ratified the latter; the Royal Forest Department in the Ministry of Agriculture and Co-operatives is responsible for the protection and management of forests including some wetlands, wildlife conservation, and Protected Areas; and the Department of Fisheries in the same Ministry is responsible for all aspects of fisheries management.

26. Thailand has created an inter-sectoral National Committee on Wetland Conservation as a sub-committee of the National Environment Board which has a broad mandate for wetlands issues. OEPP is the Secretariat of this sub-committee. Thailand also has a National Mekong Committee but this has primarily focused on energy and water management issues.

1.1.7.5. Vietnam

27. Three key agencies are involved with wetland biodiversity issues in Vietnam. The National Environment Agency (NEA) in the Ministry of Science, Technology and Environment is responsible for policy development and co-ordination of environmental action in Vietnam, is the administrative authority for the *International Convention on Wetlands* (The Ramsar Convention), and is the focal point for the *Convention on Biodiversity*. However, it has no role in the management of wetlands. The Forest Protection Department in the Ministry of Agriculture and Rural Development is responsible for Protected Area Management. The Ministry of Fisheries, is responsible for all fisheries management issues.

28. The Vietnam National Mekong Committee, which reports to the Prime Minister's Office, has a major responsibility for the co-ordination of activities in the Mekong Delta, and has been appointed by Government as the implementing agency for the PDF phase of the current project.

1.1.8. National Actions

29. During the past decade, the Governments of the four Lower Mekong countries have taken significant steps towards biodiversity conservation and have implemented comprehensive actions to manage and conserve much of the rich natural resources and biodiversity found in the basin. Greater detail can be found in Annex IX.

30. The UNDP-GEF intervention will build specifically upon the following national priorities identified by each country:

- In Cambodia, the programme will help to demonstrate the Ramsar "*Wise Use Principle*" through a project in Stoeng Treng Ramsar site (Component 3). Its 1998 NEAP lists training as a priority area and this is addressed under Outputs 1.1, 1.10, and 3.6. The Government has also stressed the need for an integrated policy and action plan for wetlands, and the programme will address this under Outputs 1.3, 1.5, 1.6, and 2.1-2.3.
- In Lao PDR, the 1994 EAP stresses the importance of social and economic aspects of conservation, and any nature conservation action should be linked to local livelihood improvements. The programme will demonstrate this at the Xe Kong and Xe Pian Plain in Attepau Province (Component 4). The draft BAP calls for integration and increased co-ordination, an issue that the programme will address under Outputs 1.1-1.3, 1.6, and 2.1-2.3. Information to support decision-making is also stressed as an urgent requirement, and the programme will address this under Outputs 1.4, 1.6-1.9, 2.1-2.3, 4.5 and 4.7.

- The Government of Thailand is keen to promote restoration of degraded lands as stated in Objective 3 of the *National Policy and Action Plan for Sustainable Development 1997*. The programme will assist by helping to restore areas in the Songkram River Basin (Component 5). The Wetlands Action Plan lists seven main objectives which will be covered by the programme as follows - awareness raising (Outputs 1.6-1.9, 2.1, 5.4, and 5.6); improved management (Outputs 2.1 and 2.2, 5.1, 5.3, and 5.5); capacity development (Outputs 1.1, 1.10, and 5.7); study and research including the establishment of a network of researchers (Output 1.2, 1.4, and 1.9); improved land tenure and ownership (Outputs 5.1, 5.3, and 5.5) improved institutional efficiency (Outputs 2.1-2.3) and promotion of international co-operation (Outputs 1.2-1.6, 1.9, and 1.10)

- In Vietnam, the key issues listed in a 1999 review of biodiversity priorities included the need for institutional co-ordination, which the programme will address under Outputs 1.1-1.3, 1.6, and 2.1-2.3, and enhancement of public awareness, education and training which will be covered under Outputs 1.1, 1.2, 1.7-1.10, 6.3, and 6.6-6.8. The review also stressed the need to deal with a broader array of issues, such as integration of biodiversity concerns into strategic environmental impact assessments (Output 1.4); invasive fish species (Output 1.9); sustainable tourism (Output 6.2); and marine, coastal and freshwater biodiversity (all outputs).

1.1.9. Wetland Protected Areas in the Lower Mekong

31. All four Lower Mekong states have Protected Area Systems and management authorities, but all are currently under review. In 1997 they totaled 148,000 km^2 (11.7 % of the total land area of the four countries) but there are concerns over the significance of some of the existing protected areas and about the adequacy of the representativeness of the systems – there is only one wetland National Park in the entire Lower Mekong Basin and most wetlands in the region do not have any legal status.

32. In Cambodia, the *1993 Royal Decree List of National Parks, Wildlife Sanctuaries or Protected Landscapes* created 23 Protected Areas, covering 3.3 million hectares. The List includes Peam Krasop Wildlife Sanctuary and Ream National Park, both containing mangrove forests, but neither are in the Mekong Basin. There are no fully protected freshwater wetlands, but Tonle Sap is designated as a 316,250 ha Multiple Use Area. Dong Peng Multiple Use Area, a 27,700 ha large *Melaleuca* swamp and the only other wetland area on the List, is on the coast, again outside the Basin. The Stoeng Treng Ramsar site (see Component 3) was designated in 1999, when Cambodia joined the Ramsar Convention. There is no management plan for the site, and the programme will help with the preparation of this plan.

33. In Lao PDR, 17 National Biodiversity Conservation Areas were gazetted in 1993. A further 11 sites have been identified. None of these are wetlands *per se*, but several contain river stretches and wetland areas. Parts of the demonstration site covering Attepeu Province in Lao PDR, are incorporated in the Xe Pian NBCA and Dong Ampham NBCA and the Phou Khantong proposed NBCA (see Component 4).

34. In north-eastern Thailand, 24 wetlands were surveyed in 1993. None had National Park or similar protection status. Five were Non-hunting Areas (covering 3,478 ha) and one was a Wildlife Sanctuary (156,000 ha), but these designations allow fishing and use of timber products. One of the non-hunting Areas is Boeng Khong Long, part of the Songkram River Basin demonstration site (see Component 5). In early 2000, Boeng Khong Long was included in a list of recommended Ramsar sites.

35. Vietnam has the only wetland National Park in the region - Tram Chim National Park, covering 7,740 ha which received recent approval for a Government investment programme amounting to US$ 4.2 million. Lang Sen Provincial Reserve, covering 3,280 ha, is protected under local legislation. Tram Chim and Lang Sen Provincial Reserve are included in the demonstration site in Vietnam (Component 6).

1.1.10. Current Programmes

36. In addition to these national initiatives, a number of donor-funded projects have targeted specific aspects of wetland conservation. The Mekong Wetlands Biodiversity Programme will work closely with these to avoid duplication, identify possible areas of collaboration, and promote information exchange A full list (presented in Annex X) includes:

- A number of the MRC programmes, in particular Fisheries, Environment, Human Resources Development and BDP;
- WB World Bank/GEF-MRC Water Utilisation Programme. This programme is being implemented by MRCS and as such there will be good collaboration;
- UNDP-GEF funded biodiversity conservation project in Tonle Sap. This is a recent GEF-funded initiative, complementing the current ADB-funded investment plan for Tonle Sap. Collaboration will be ensured through UNDP Cambodia;
- FAO-UNDP-GEF National Biodiversity Strategy and Action Plan for Cambodia. Collaboration will be ensured through UNDP Cambodia;
- UNDP-DANIDA supported National Biodiversity Strategy and Action Plan for Lao PDR. Collaboration will be ensured through UNDP Lao;

RATIONALE AND OBJECTIVES (ALTERNATIVE)

37. Despite the baseline actions being undertaken, the wetlands of the Lower Mekong and the biodiversity they support continue to be lost. Although habitat destruction and degradation, loss of ecosystem integrity, and depletion of species abundance and diversity are the direct threats to the region's biodiversity, the root causes are found primarily in:

- Unco-ordinated sectoral approaches to wetland planning at national and regional level;
- Weak policy frameworks and unsupportive economic environments for wetland biodiversity conservation and sustainable use;
- Inadequate information base on which to base wetland policy, planning and management decisions;
- Inadequate human and technical resources available for wetland biodiversity conservation; and
- Lack of options over use of natural resources by local communities.

38. These factors are exacerbated by socio-political issues including widespread poverty and a high population growth rate throughout the region, as well as a history of conflict and a resulting weak governance structure.

39. Building on new national government and MRC initiatives for conservation and development, the UNDP-GEF intervention aims to assist the Lower Mekong countries incrementally to develop and demonstrate new approaches to protect, use sustainably, and integrate wetland biodiversity with economic development and social reform with a specific focus on the need for an integrated basin-wide approach to biodiversity management and conservation. The geographical scope of the programme lies entirely within the Indochinese bioregion of the Indomalayan Realm and is defined as "all points of the catchment downstream from the Mekong's entry into Lao PDR". It encompasses a wide range of wetland ecosystems from those high in the Annamite Mountains through to Lake Tonle Sap, one of the largest and most productive lakes in the world, but it excludes the coastal area.

40. This programme will operate on three broad levels:

- At the regional level, the basin-wide policy framework and economic environment will be developed to be more supportive of wetland biodiversity conservation and sustainable use

through influencing ministers and developing wetland policy guidelines. The institutional capacity to implement these policies will be strengthened.

- At the national level, management planning processes will be enhanced by encouraging a multi-sectoral approach, through building capacity, and increasing public involvement. The information base needed to support sound wetland policy, planning and management decision-making will also be strengthened.
- Finally, at the local level, demonstrations of Protected Area System management planning and integrated community development will be implemented for biodiversity conservation, agriculture, and other related sectors, focusing on improving sustainable use practices at wetlands in and around four of the key sites within the basin.

41. The programme will remove specific barriers and the underlying threats to globally significant biodiversity within the Lower Mekong Basin through five objectives dealing with the five root causes identified above (see also Annex VII) undertaken in two phases (see Annex III):

Objective 1 : To establish a multi-sectoral planning process operational at national and regional levels

Under this objective, the institutional framework for regional and national wetland conservation will be clarified and strengthened so that wetland conservation and management institutions are more effective in producing co-ordinated policies supporting sustainable-use of wetlands. In particular, support will be provided to:

- assist the MRCS to incorporate biodiversity issues within water management and regional basin planning (Outputs 1.3, 1.4, 1.6-1.10, 2.2, 3.5, 4.5, 5.6, and 6.6)
- focus the institutional co-ordination of wetland activities through the mechanisms of the Ramsar Convention (Output 1.5); and
- develop regional networks of wetland specialists and managers to co-ordinate site-based activities and other conservation initiatives (Output 1.2 and 1.10).

Objective 2 : To strengthen policy framework and macroeconomic environment supportive of wetland biodiversity conservation and sustainable use

Under Objective 2, measures will be taken to strengthen the policy framework and influence the macroeconomic environment to be more supportive of wetland biodiversity conservation and sustainable use. In particular, the programme will:

- undertake a cross-sectoral review of environment and development sectoral policies, strategies and plans, and macroeconomic policies (Output 2.1);
- provide technical support for establishing and updating National Wetland Action Plans to ensure protection of global biodiversity in each of the four countries (Output 2.2);
- develop a set of regional guiding principles to promote an integrated approach to catchment management for which legal standing would be sought through MRC (Output 1.3); and
- organise a series of national seminars to seek changes in policy to favour wetland biodiversity resulting from increased understanding of wetland issues by senior decision-makers (Output 2.3).

Objective 3 : To provide adequate information to support sound wetland policy, planning, and management decision-making

Under Objective 3, the programme will create a broader and more policy-relevant information base to support policy makers, planners, and managers. Its dissemination will be facilitated by mechanisms to improve information flow regionally to all levels of policy through the enhanced Ramsar Administrative

Authorities (Output 1.5), the MRCS (Output 1.1), and the regional networks (Outputs 1.2 and 1.10). In particular, support will be provided to:

- gather and disseminate information on the economic value of wetlands functions and products in the region (Outputs 3.5, 4.5, 5.6, and 6.6);
- undertake strategic environment assessment of cumulative trans-boundary effects of proposed hydropower dams upon the biodiversity of the Lower Mekong Basin (Output 1.4);
- develop biodiversity overlays and use them to integrate wetland considerations into development planning (Output 1.6);
- produce wetland biodiversity assessment and training tools (Output 1.7);
- publish a Regional Red Data Book of threatened plants and animals (Output 1.8)
- undertake a regional initiative to address the impacts of invasive fish species (Output 1.9); and
- disseminate lessons learned and programme results regionally (Output 1.1).

Objective 4 : To improve human and technical capacity to better conserve and sustainably manage wetlands in the Lower Mekong Basin

The programme will rectify the lack of adequate human capacity in wetland biodiversity conservation at all levels within the Lower Mekong Basin by identifying training needs and targets and providing focused training in the relevant areas identified. It is envisaged that an effective and highly incremental approach to increasing capacity will be to build upon existing training programmes to add on wetland-related components and to target the training of, and support for, selected "wetland trainers" from the region. In particular, the following outputs are planned:

- capacity of senior team members built through tailored, short-course, overseas training (Output 1.1);
- a comprehensive training plan developed through a regional and national wetland training needs analysis (Output 1.1);
- a regional wetland biodiversity conservation training team established and implementing training in the four countries (Output 1.1);
- national wetland biodiversity conservation training programmes operating in four countries (Outputs 3.6, 4.6, 5.7, and 6.7);
- wetland biodiversity conservation issues integrated into existing regional training initiatives (Output 1.10); and
- measures to combat illegal wildlife trade in wetland species strengthened throughout the region (Output 1.10).

1.1.10.1.1

1.1.10.1.2 Objective 5 : To improve community-based natural resource management of wetlands in the Lower Mekong Basin

The programme will redress the lack of options experienced by local communities over use of natural resources in order to support sustainable management of important wetlands by providing opportunities to develop sustainable management practices, by improving access and ownership over wetland resources and, through education and awareness programmes, by including local people in the management of sites (Components 3-6).

PROGRAMME COMPONENTS AND EXPECTED RESULTS

42. In order to meet these five objectives the programme will undertake activities in six project components, which are discussed in detail below and in Annex II – Logical Framework Analysis. Because the framework for wetlands remains generally uncoordinated at both national and regional levels, and because there is an inadequate base of available information human and technical resources on which to plan and manage wetlands, there is a need to ensure the development of the enabling environment in which the programme is operating, e.g. that the information base is built, that awareness is raised, and that mechanisms are developed for implementing the responses to wetland problems. As a result, the programme will be implemented in two phases - Phase A, operating for two years, will build the enabling environment to nurture a firm foundation upon which Phase B, operating for three years, can deliver and realise successfully all of the intended outputs. Details of phased activities are given in Annex III. A summary of programme outputs is given below with a breakdown of the funding required to fulfil them. Component activities are listed in Annex II. The expected cost and sources of funding for each output are indicated in Annex I.

1.1.10.1.3 Component 1 : Improving capacity for bio-regional planning to rationalise biodiversity conservation and economic development in the Lower Mekong River Basin

1.1.10.1.4

Many of the root causes described above manifest themselves on a regional basis. The UNDP-GEF intervention will contribute to regional biodiversity planning through a number of activities which aim to result in the following outputs.

1.1.10.1.4.1 Output 1.1 : Regional and national support structures for all programme activities established and operational ¾ US$ 4.852 million (GEF 0.870 million; Gov 0.009 million; Others 3.973 million) contributing to Objectives # 1, 3 and 4.

A central Programme Management Unit (PMU) will be established for the lifetime of the programme to co-ordinate and implement the activities. Guidelines will be developed to promote management information exchange, technology transfer and mutual assistance projects between and among the four countries. Details of national and local arrangements are given in the section on Implementation Arrangements.

A regional wetland training team will be established comprising a Regional Training Co-ordinator and two training officers from each of the four countries. A comprehensive Training Needs Analysis (TNA), building on one by MRCS (see Output 1.10), will be undertaken in the initial stages of the programme implementation by this team, with assistance from international experts, relevant international specialist NGOs, and in consultation with educational establishments. The TNA will define clearly the following:-

- Who within the Mekong Basin needs the training?
- Exactly what training is required to fulfil these needs?
- Where can the training take place?
- How often should the training take place?
- Expertise required to undertake the training

The capacity of the regional wetlands training team will be built through a comprehensive programme of training in introduction to wetland benefits and management; communication skills; and planning,

delivery and evaluation of training activities. This training will be undertaken over a period of 12 months at specialist agencies within the Asia-Pacific region. A regional resource base will developed through the compilation of wetland training materials from global, regional and national sources, translated into the four national languages as appropriate.

The regional dissemination of programme results and lessons learned will be achieved through publication of a regional wetland newsletter and fact-sheets in English and the four national languages, and through partnerships with media and extension officials. A newsletter, published every three months in electronic form and in hard copy, will be distributed through the networks, the national offices and the field offices. The programme will prepare a number of fact-sheets to raise awareness amongst decision-makers, wetland managers and the general public which about relevant issues. Other awareness activities will be developed in the four demonstration sites based upon the scope and breath of the programme activities in each site (Outputs 3.2, 4.3, 5.4, and 6.3).

A system for monitoring and evaluation will be established – details are given in the section entitled Monitoring And Evaluation Plan. The capacity of national agency staff to monitor and evaluate the programme will be increased through training, and subsequently the effectiveness of demonstration activities assessed. Staff exchanges, between national programme co-ordination offices and between other offices within the region will be promoted and facilitated. Regular, bi-annual meetings of the senior national programme staff will be organised to facilitate technology and information transfer as part of regional wetland specialists and managers networks (Outputs 1.2 and 1.10). All internal project reports, publications and research findings will be stored at the office of the PMU, both in hard copy and in electronic form. Electronic information will be made accessible through a programme web-site. Hard copies of reports and official publications will also be housed with the MRCS in Phnom Penh, and with the UNEP Environmental Assessment Programme Asia-Pacific Office in Bangkok, which acts as a library for all relevant information in the Mekong Region.

1.1.10.1.4.2 Output 1.2 : Regional networks of wetland specialists and managers developed to build upon and share wetland management experiences ¾ US$ 0.313 million (GEF 0.227 million; Gov. 0.010 million; Others 0.08) contributing to Objective # 1.

Two regional networks will be established to identify and promulgate successful approaches to the management of the all aspects of wetlands in the region. The Species Specialist Network will be composed primarily of senior and middle-ranking technical officers and scientists and will be modelled on the Specialist Group arrangements operated by Wetlands International and IUCN. The focus of the Sites Network will be at the field level with technical officers and managers from specific sites participating and sharing experiences. The demonstration sites will be developed as the network's national co-ordination points. This network will be modelled upon others operating in Asia, e.g. the East Asian-Australasian Shorebird Reserve Network and the North East Asian Crane Network.

Networks will share information between members and between networks on wetland and species issues and management responses, tackle regional threats by building the regional capacity to respond to them, provide technical support and back-stopping, provide the focus for the development and implementation of training activities, administer a small grants scheme to support the implementation of activities arising from the development of programme activities, and increase public awareness by acting as conduits for the dissemination of information. They will link with other components of the programme notably:

- implementation of the training component related to site management activities (Outputs 3.6, 4.6, 5.7, and 6.7);

- development of biodiversity overlays (Output 1.6) and will provide an integrated and common approach to the implementation of initiatives identified therein;
- regional initiative to address the impacts of invasive fish species (Output 1.9); and
- awareness programmes (Outputs 3.2, 4.3, 5.4, 6.3).

1.1.10.1.4.3

1.1.10.1.4.4 Output 1.3 : Regional guiding principles developed for conservation of Lower Mekong Basin wetlands ¾ US$ 0.602 million (GEF 0 million; Gov. 0.004 million; Others 0.599 million) contributing to Objective # 2.

The comprehensiveness of the strategic policy framework for national wetland biodiversity conservation and sustainable development varies between the four countries, but is largely inadequate or ineffective. However, it is unrealistic to assume that a UNDP/GEF intervention will be able to provide the required policies since integration of four national policies into one regional approach will be a very lengthy process lasting well beyond the life of the programme. Moreover, Governments treat national policy development as a sovereign issue and would take external interventions as advisory only. Instead, the programme will seek to develop a set of guiding principles to promote an integrated approach to catchment management, which will form the foundation for a future regional policy document. This is in line with Decision IV/4 of CBD and Resolution VII.18 of Ramsar COP7, and follows recommendations of the 2000 Vision for Water and Nature.

The UNDP/GEF intervention will produce a set of guiding principles covering key issues including, but not limited to, flood cycles required to maintain the aquatic ecosystem functions; cross-border EIA for development activities in the Region; and integration of wetland concerns into macroeconomic and sectoral development policies, strategies and plans. Guidelines will also cover harmonisation of development and economic policy instruments for wetland management between countries; improved management of wetland protected areas; and protection measures for "flagship species" in the Mekong wetlands. The guidelines, which will be submitted for endorsement by the four countries through their Ramsar Authorities, and their National Mekong Committees, will complement those for water utilisation that the World Bank/GEF-MRC Water Utilisation Programme will develop during the coming years. Legal support for the guidelines will be provided through the MRC Council.

1.1.10.1.4.5 Output 1.4 : Potential biological and economic changes arising from alterations to the hydrological regime of the Lower Mekong Basin assessed ¾ US$ 1.000 million (GEF 0.250 million; Gov. 0; Others 0.750 million) contributing to Objective # 3.

1.1.10.1.4.6

The programme will determine the likely biological impacts of the cumulative impact of changes to the hydrological regime on the biodiversity of the basin's wetlands, and the resilience the biota has for absorbing such alterations. This will complement the flow modeling and related studies in the Mekong River Basin being carried out by the World Bank-GEF funded MRC WUP (Annex XI). Flora and fauna forming key components of important habitats likely to be sensitive to such changes will be selected for study and various methods will be employed to answer three questions:

- What happens to biota as a result of reduced flood levels from water being held back by dams during the wet season? and
- What happens to biota as a result of increased flows during the dry season from water being released, particularly in pulses?
- What happens to biota as a result of reduced sediment load and nutrient supply?

The expected impacts on critical habitats and species will be predicted qualitatively or quantitatively for different cumulative scenarios and approximate economic valuations made. The WB-GEF/MRC WUP (see Annex XI) review of national EIA procedures in the four countries will be supported in order to determine the appropriate steps required for the inclusion of the wetland biodiversity component into the project planning cycle, and agreed procedures for enforcing the findings of a SEA at the regional level. Recommendations aimed at reducing adverse effects on biodiversity will specifically address:

- guidelines for revised dam management procedures, particularly pulsed water release; and
- the need for, benefits of, and feasibility of a regional procedure for reviewing and assessing the trans-boundary effects not currently covered under national EIA guidelines.

1.1.10.1.4.7 Output 1.5 : Ramsar Convention supported throughout the region ¾ US$ 0.185 million (GEF 0; Gov 0.039 million; Others 0.146 million) contributing to Objective # 1.

1.1.10.1.4.8

Each country's Ramsar Administrative Authority will be reinforced as the focal point for wetland issues by enhancing its capacity to co-ordinate all national agencies in their management and wise use of wetlands. This will comprise provision of specialist civil servants, trained in wetland management issues (see Output 1.1), and supported logistically. In the case of Lao PDR, the programme will first provide support for the Government to consider ratification of the Convention. Technical and logistical support will also be provided to establish a National Ramsar Committee (NRC) in each country in line with the Convention's Work Plan 2000-2002 and Resolution 7 of COP5. The opportunity for linkages with the National Mekong Committee in each country will be explored. However, the NRCs will a) deal specifically with wetland biodiversity and wise use, and b) deal with all wetlands within the country, not just within the Mekong Basin.

A wetlands officer will provide sub-regional co-ordination for Ramsar issues in the Lower Mekong Basin. This will include support for facilitating the Convention's implementation in the four countries, fostering a regional perspective and developing regional liaison mechanisms. This post will be sustained by the Ramsar Convention Bureau after the lifetime of the programme. Each country will list each of the demonstration sites (see Objective 4) as a Ramsar site prior the end of the programme.

1.1.10.1.4.9 Output 1.6 : Tools developed and used to integrate wetland biodiversity considerations into development planning ¾ US$ 1.644 million (GEF 1.092 million; Gov.0.016 million; Others 0.536 million) contributing to Objective # 3.

1.1.10.1.4.10

This output aims to develop a series of tools for critically important taxa and habitats to complement the MRCS BDP and ensure that critical biodiversity is integrated into future development planning. Complementary support for the BDP will be highly incremental and will ensure that the tools will have direct and targeted application by regional bodies such as MRCS, National Governments, and NGOs. It is anticipated that regional, national, and local plans will be amended to ensure sustainability of developments as a direct result of these.

First, biodiversity overlays will be developed for the most critical species and groups and for the most threatened wetlands within the Lower Mekong Basin. They will provide a much clearer understanding of the ecological requirements of wetland taxa and habitats and will feed directly into the assessment of biotic resilience (Output 1.4) and the development of the Regional Red Data Book (Output 1.8). The

overlays will define and map clearly the critical habitats, migration routes, and multiple threats to species and groups and, therefore, will provide the framework for co-ordinating regional conservation efforts. Baseline data will be gathered to determine the status of species and ecosystems through survey and reviews supplemented by local and provincial meetings. The overlays will be drafted on the basis of these studies, and a regional workshop will determine the regional priorities for the conservation and protection of species groups and habitats. Through a consultative process, a final overlay will be developed and agreed at a second regional workshop.

Second, regional species action plans will be developed for the four flagship species connected with the demonstration sites – Irrawaddy Dolphin (Cambodia), Siamese Crocodile (Lao PDR), Giant Catfish (Thailand), and Sarus Crane (Vietnam) – to ensure that activities undertaken at the sites are a) not compromised by actions elsewhere, and b) strengthened by complementary measures effected elsewhere. Species action plans will be based upon the information from the biodiversity overlays and will be drawn up by regional working groups, making particular use of the Regional Networks of Wetland Managers (Output 1.2), and co-ordinated by the PMU. Two regional workshops will be held to discuss the drafts and agree adoption of the final plans. Support has been pledged by IUCN SSC specialist group on dolphins and the International Crane Foundation for the preparation of these action plans.

Third, development of a trans-boundary, sub-regional action plan, with a focus on biodiversity and wetland issues, will be demonstrated for that stretch of the main Mekong River generally agreed to be the most important for biodiversity conservation, namely between Pakse (Lao PDR) and Kratjie (Cambodia). Working through the Programme Steering Committee and structures within the MRC, a working group (including observers from Thailand and Vietnam) will be formed to develop the plan using information from the biodiversity overlays, from the MRC BDP, the regional guiding principles (Output 1.3), the wetland action plans (Output 2.2), the economic valuations (Output 3.5, 4.5, 5.6, and 6.6) assessment of biological change (Output 1.4), and the demonstration projects at Stoeng Treng and Attepeu (Components 3 and 4). Participation of the national, provincial, and district administrations (political and technical), the MRCS, NGOs and of the local people will be critical to the process.

1.1.10.1.4.11 Output 1.7 : Wetland biodiversity assessment and training tools produced for the Lower Mekong Basin ¾ US$ 0.149 million (GEF 0.110 million; Gov. 0.005 million; Others 0.034) contributing to Objective # 3.

The paucity of basic biodiversity identification and training tools for the region in local languages is a major barrier to the identification of national and global priorities; implementing good management, effective ecosystem and species conservation; and planning sound development. Regional initiatives to build the biodiversity assessment information base by the MRCS and by IUCN, through funding from the Environment Component of World Bank/Netherlands Partnership Programme, will be complemented through the UNDP-GEF intervention by expanding the coverage of species and making the information available in local languages. Using a consultative approach involving national and international experts, regional standards for the classification and assessment of wetland ecosystems will be developed and published in the four Lower Mekong Basin languages. These will include tools to identify and assess higher wetland plants, reptiles and amphibians, aquatic insects, crustacea and molluscs. These tools will feed directly into the national training programmes planned under Outputs 3.6, 4.6, 5.7, 6.7 and provide much of the basic resource material for building human capacity in the region.

1.1.10.1.4.12 Output 1.8 : Regional Red Data Book of threatened plants and animals published ¾ US$ 0.199 million (GEF 0; Gov. 0.004 million; Others 0.195 million) contributing to Objective 3.

Red Data Books are used the world over as policy and awareness tools to highlight the plight of threatened species. IUCN – The World Conservation Union has prepared global guidelines for the preparation of such books and the programme will follow these in preparing a *Lower Mekong Wetlands Red Data Book*. This activity will complement the ASEAN Red Data Book that is being prepared by the ASEAN Biodiversity Centre in Manila and the Asia Red Data Book that IUCN is producing for South and Southeast Asia. The *Lower Mekong Wetlands Red Data Book* of threatened wetland animal and plant species will provide regional priorities and direction towards the conservation of threatened and endangered wetland species of the Mekong Basin. Threats will be assessed following IUCN categories and criteria, in order to ensure consensus throughout the Region.

A working group, with representatives from all four Governments, will oversee and direct the process of development of the book, and the actual preparation and publishing of the text. This will include translation from English into all four main languages of the region (Khmer, Lao, Thai and Vietnamese) and printing 500 copies in each language. Resources will be provided to conduct training courses for local forestry and wetlands staff, as well as policy, customs and immigration officers to make them familiar with the most critical species and to enable them to implement better the obligations under CITES (see Output 1.10).

1.1.10.1.4.13 Output 1.9 : Regional initiative to address the potential impacts of invasive alien fish species ¾ US$ 0.170 million (GEF 0.163 million; Gov.0.007 million; Others 0) contributing to Objective # 3.

Introductions of exotic and potentially invasive fish species for aquaculture and fisheries have been widespread in the Lower Mekong Basin. CBD Article 8(h) recognizes the importance of the global problem calling on contracting Parties to *"prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats and species"*. Implementation of Article 8 was identified as a high priority at COP2 and the importance of regional and international co-operation was stressed. COP 3 specifically encouraged the Scientific Committee for Problems in the Environment (SCOPE) and IUCN to develop a global strategy and action plan to deal with harmful invasive species which resulted in the formation of the Global Invasive Species Programme (GISP).

The UNDP-GEF intervention will work with GISP, build upon the fish component of the WWF Eco-regions Project initiated in 1999, and liaise with the MRC Technical Advisory Body on Fisheries Management and the MRC initiative to develop aquaculture of native species. It will review technically the number and scale of the introductions throughout the Mekong River and the fish species involved, and will determine the potential impacts in the event of escape. A strategy will be developed to provide a measure of response. Awareness of the issues, currently negligible, will be raised through provision of regional and national fora and education and training materials, the latter calling heavily on case studies from countries where introductions of fish and other species have resulted in significant adverse impacts upon local economies and native biodiversity.

1.1.10.1.4.14 Output 1.10 : Wetland biodiversity conservation issues, including illegal trade in wetland species, integrated into existing regional training initiatives ¾ US$ 0.677 million (GEF 0.649 million; Gov.0.028 million; Others 0) contributing to Objective # 4.

The MRC is currently undertaking a regional Training Needs Analysis as part of the development of the Environment Programme. The WB-GEF-funded MRC WUP and BDP also have capacity building components but these may not address biodiversity issues adequately. This programme will work to

provide how biodiversity issues can be integrated into these initiatives. This will include dissemination of this programme's outputs such as the biodiversity overlays (Output 1.6) and the assessment of potential biological and economic changes arising from alterations in the hydrological regime (Output 1.4). The Regional Training Co-ordinator will be responsible for liaising with the MRC HRD staff to arrange appropriate inputs to these programmes.

Illegal trade in wildlife resources, particularly in species derived from wetlands, poses a real threat to the continued existence of much globally significant biodiversity in the region. The UNDP-GEF intervention will assist in countering this trade particularly in wetland species through training and awareness programmes; developing CITES (The Convention on International Trade of Endangered Species of Wild Flora and Fauna) administrative procedures and databases; supporting a network of wildlife trade specialists; and facilitating intra-regional exchange visits. Training will focus on enforcement of wildlife trade controls, identification of species in trade, and systems for monitoring and recording data at provincial level. Awareness will focus on development and dissemination of awareness materials aimed at all levels, from decision-makers to consumers of wildlife products. The intervention will work in close collaboration with TRAFFIC, a joint programme of IUCN and WWF, which was designated as the official training authority for CITES in 1999.

1.1.10.1.4.15

1.1.10.1.5 Component 2 : Strengthening national capacity for conservation and sustainable human development of wetlands

Many of the root causes described above manifest themselves on a national level and require a nationally-co-ordinated response. The UNDP-GEF intervention will contribute to national biodiversity planning and human development through a number of activities resulting in the following outputs.

1.1.10.1.5.1 Output 2.1 : Cross-sectoral policy analysis and formulation of recommendations for wetland management ¾ US$ 0.468 million (GEF 0; Gov. 0.011 million; Others 0.457 million) contributing to Objective # 2.

Although current macroeconomic and sectoral policy has been identified as a major root cause of wetland loss and degradation, much more information on policy effects on wetlands is needed before measures can be taken to overcome these threats. This needs to be rectified by looking at wetland concerns from beyond the environmental and natural resource sectors, since it is the policies and activities of the "productive" or "development" sectors which impact on wetland status. It is unlikely that policies dealing specifically with wetland biodiversity will be developed in the near future, or that a supportive economic environment will be provided for wetland biodiversity conservation, by national governments acting without external support. Therefore, the UNDP-GEF intervention will carry out a cross-sectoral review of environment and development sectoral policies, strategies and plans, and macroeconomic policies. This review will identify existing perverse incentives and disincentives to wetland conservation, scope niches for positive policy instruments; highlight gaps and contradictions in the policies of wetland-impacting sectors; and provide a basis for developing the regional guiding principles (Output 1.3).

Output 2.2 : Wetland Action Plans developed in all four countries ¾ US$ 1.414 million (GEF 0.283; Gov. 0.475 million; Others 0.656 million) contributing to Objective # 2.

1.1.10.1.5.2

The programme will support the four countries in actions necessary to establish and adopt Wetland Action Plans to ensure protection of global biodiversity. Two regional workshops will be convened during the course of the programme to review progress with wetlands action planning in the four countries, document lessons learned, and facilitate exchange of information. In Cambodia a draft Wetland Action Plan is currently before the Council of Ministers and the programme will assist the Ministry of Environment with this endorsement process, and in developing the necessary institutional requirements to implement the plan. Field actions will be funded through separate sources, but the programme will facilitate with resource mobilisation, through a national conference and subsequent donor co-ordination meetings. Lao PDR has not yet ratified the Ramsar Convention, which is seen as a first step in the preparation of a National Wetlands Action Plan. The programme will provide assistance with this ratification (Output 1.5) and subsequently provide the assistance necessary to help the Science, Technology and Environment Agency to develop a National Wetland Action Plan and get this approved by Government. Thailand has a National Wetlands Action Plan and a ministerial National Wetlands Committee. The programme will assist the Government in its review process to update the plan which commenced in August 2001. In Vietnam, the National Environment Agency is developing a National Wetland Programme with technical assistance from IUCN Vietnam. The programme will work with the NEA to provide regional inputs and facilitate exchange of information with neighbouring countries.

To establish a co-ordinated vision and understanding in the programme, all senior programme staff, will partake in specially-designed, short-course training programmes during the inception of the programme. These staff will undertake a study tour to a wetland site recognised internationally as being managed according to best-practice. The National Programme Director, National Programme Co-ordinator, and their deputies will also undertake a tailored short course on effective project management techniques. The Country Wetland Training Officers (CWTOs), included on the first course, will then undertake their specialist training outlined in Output 1.1 above. The National Programme Director and his/her deputy would continue specialist short-course training at selected wetland educational facilities and NGOs throughout the programme lifetime, total period not to exceed 12 months over five years.

1.1.10.1.5.3 Output 2.3 : Changes in policy to favour wetland biodiversity resulting from increased understanding of wetland issues by senior decision-makers ¾ US$ 0.221 million (GEF 0.047; Gov. 0.008 million; Others 0.166 million) contributing to Objective # 2.

1.1.10.1.5.4

Since policies and action plans are based nationally, it is at this level that any changes benefiting wetland biodiversity conservation will be made. Thus, two national workshops will be held in each country for Cabinet Ministers and senior Civil Servants from sectors that depend, or impact, heavily on wetland species and systems (including water, land, agriculture, fisheries, planning, trade, and investment). The first will present the results of the cross-sectoral policy analyses, aiming to raise awareness amongst each country's senior decision-makers of the implications of their sectors' policies, and to consult on wetland action plans, wetland policies and regional guiding principles. The second will seek endorsement of the guiding principles derived from the analyses. Specially targeted materials will be produced including national-language brochures, and technical information sheets, and high-profile, respected, international policy advisers will be invited to provide key-note addresses and lead discussions concerning wetland issues of regional importance.

1.1.10.1.5.5 Component 3 : Ramsar wise-use principles demonstrated using sustainable multiple-use activities at Stoeng Treng, Cambodia

The main threats to biodiversity at this site are summarised in Table 3 of Annex VI. The project will ensure sustainable biodiversity protection by removing the threats from the core area of the Ramsar site and by mitigating the negative impacts over the remainder. Threat removal will be accomplished through the following outputs.

1.1.10.1.5.6 Output 3.1 : Strengthened management of Stoeng Treng Ramsar Site through management planning and enforcement of policies ¾ US$ 1.543 million (GEF 1.474 million; Gov. 0.069 million; Others 0) contributing to Objective # 5.

1.1.10.1.5.7

Recent survey and wetland inventory work by Government ministries and NGOs will be built upon to identify critical habitats, map resources and determine species' management requirements. Precise boundaries for the site will be determined, marked on the ground, and procedures for having them gazetted will be established at national level through the work of the Ramsar Administrative Authority and the National Ramsar Committee and (see Output 1.5). Several areas believed to be important for the critically endangered Irrawaddy Dolphin and Siamese Crocodile lie just outside the current imprecise boundaries of the site and the practicality of their inclusion will need to be reviewed. This information will be used to develop a zoning and management plan using the principles of wise-use; to implement the management policies and activities therein; and to commence patrolling and enforcement actions. Technical support will be provided to the Provincial authorities since it is essential that provincial planning initiatives direct new settlers to areas away from the critical zones of the Ramsar site.

1.1.10.1.5.8 Output 3.2 : Reduction of unsustainable practices at Stoeng Treng Ramsar Site through community outreach and environmental education programmes ¾ US$ 0.489 million (GEF 0; Gov.0.030 million; Others 0.459 million) contributing to Objective # 5.

1.1.10.1.5.9

Lack of understanding of the values of the site and its uniqueness in global biodiversity terms by the local communities is one of the key factors perpetuating the unsustainable use of its resources. Building on preliminary work undertaken by local NGOs, the UNDP-GEF intervention will tackle this through innovative and participatory community outreach and environmental education programmes highlighting the values of the site and the need for sustainable resource use. The final output will be developed only following full consultation with local stakeholders and communities regarding needs and aspirations. However, it is envisaged that support for a floating environmental education unit traveling along the Mekong main river channel, and for village information boards will be included. The traveling education programme will aim to overcome one of the key obstacles to effective distribution of materials – that of remoteness of many of the semi-nomadic families living in the area. Education and awareness materials on the values and threats to the area will stress the audio-visual components, e.g. videos, theatre, etc. to overcome the high rate of pre-literacy, as well as information sheets and newsletters.

1.1.10.1.5.10 Output 3.3 : Replacement of unsustainable resource use at Stoeng Treng Ramsar Site through community involvement in resource management and use ¾ US$ 0.135 million (GEF 0; Gov. 0.023 million; Others 0.113 million) contributing to Objective # 5.

1.1.10.1.5.11

Modifications to existing patterns of livelihood will be developed during the programme through a participatory process involving those most affected by changes in site management. Efforts will be directed at building local organisational capacity within the communities to assist in planning for management activities, assisting local communities to develop and implement plans for the management of critical habitats, developing specific fisheries management plans and rules for villages, and supporting current initiatives and priorities of local groups including the establishment of provincial development committees and community based fisheries management groups. Communities will also be encouraged to work with the Government authorities to boost recent initiatives to crackdown on the possession of fire-arms, and the use of explosives, poison and electricity to catch fish.

1.1.10.1.5.12 Output 3.4: Community-based conservation and sustainable use of wetland biodiversity products at Stoeng Treng Ramsar Site ¾ US$ 0.625 million (GEF 0,100; Gov. 0; Others 0.525 million) contributing to Objective # 5.

1.1.10.1.5.13

Non-timber forest products (NTFPs) or wetland products are generally gathered free of charge to supplement livelihoods earned through subsistence farming. These products are also often important culturally for rural people. Apart from subsistence needs, some NTFPs are an important source of cash income for local people.

While most outputs have a macro-level focus at the demonstration site level, the activities here target the community management of the natural resources at the grassroots level. This output, co-financing from CARE International, will build on considerable experience in sustainable development of upland NTFPs gained particularly in Lao PDR and Vietnam to:

- Develop pilot projects at the village level within the demonstration site to prepare and implement an integrated natural resource management plan.
- Develop financial mechanisms sustainable at local level for conservation and development, for example, establishment of village conservation funds, and a saving and micro-credit programme.
- Undertake a market analysis and development of wetland products used unsustainably to reduce wastage and add value, thus enhancing local economic benefits.
- Develop alternative livelihoods to reduce pressure on unsustainable commercial use of biodiversity products.
- Replicate in adjacent areas the successful activities derived from the pilot projects.
- Document the lessons learnt at the grassroots level, provide information to stakeholders, and facilitate discussions with them to develop recommendations for national policy reform, research and development, and build capacity to support the sustainable use of wetland biodiversity products.

1.1.10.1.5.14 Output 3.5: Economic value of wetlands functions and products at Stoeng Treng Ramsar Site articulated and used to identify incentives and financing mechanisms for conservation and wise use ¾ US$ 0.155 million (GEF 0.079 million; Gov. 0.005 million; Others 0.071 million) contributing to Objective # 3.

The high economic value of the Lower Mekong wetlands provides a basic rationale for their conservation and wise use. Economic forces also constitute major direct and underlying causes of their degradation and loss. However, there is currently little information available about, or understanding of, economic aspects

of wetland management, either among managers or decision-makers, hence little is known about the economic forces that lead to wetland degradation, and few attempts have been made to use economic instruments to overcome these forces. In collaboration with ICLARM, and using methods developed by them for the valuation of aquatic resources, this output will:

- build awareness about, and capacity to calculate, wetland values,
- use this information to identify incentives and financing mechanisms for conservation and sustainable use that can be piloted within the programme, and
- disseminate economic information to decision-makers, policy-makers and managers in wetland-managing and wetland-impacting sectors.

1.1.10.1.5.15 Analyses will focus on quantifying the economic value of wetland goods and services; on identifying existing disincentives and perverse incentives to wetland degradation and loss; and on recommending economic incentives and financing mechanisms to be used in support of wetland conservation and wise use through their incorporation into existing macroeconomic and sectoral policies, wetland programmes, provincial strategies, and site-level activities and plans. The results of these analyses, will be presented through publications and policy-briefs, as well as through site, national, and regional level workshops, as a means of creating awareness, disseminating information and influencing real-world policy and practice. It is anticipated that the results will provide a series of recommendations that will be piloted through continuing activities at the site, as well as forming an important component of post-programme financial and institutional sustainability.

1.1.10.1.5.16 Output 3.6 : Wetland biodiversity conservation training programmes operating at Stoeng Treng Ramsar Site ¾ US$ 0.343 million (GEF 0.202 million; Gov. 0.012 million; Others 0.129 million) contributing to Objective # 4.

1.1.10.1.5.17

The CWTO will be based in the demonstration site, and supported by the Regional Wetland Training Co-ordinator based in the PMU. Using the comprehensive training plan developed from the TNA (see Output 1.1), the CWTO will develop specific training activities to address the training priorities therein. The demonstration site will be the focal point for in-country wetland training which will take various forms including short courses (up to two weeks), longer courses (up to two months), field–based studies, and study tours to demonstration sites and locations within the region. In addition, initiatives from line agencies for specific training of personnel will be supported and integrated into the training programme. Co-operation with national training centres will also be encouraged. Wherever possible, activities will demonstrate applied learning-by-doing approaches to wetland biodiversity issues. Selection of participants for training courses will be rigourous to ensure that it is those persons within the Mekong Basin requiring training who receive it and not those selected by some other criteria.

The main role of the CWTO will be organise the courses, facilitate and co-ordinate the delivery of the course, and incorporate the appropriate international, regional, or national expertise as necessary. To ensure the replicability of the training courses, the CWTO will document the training materials and identify course participants capable, with support, of delivering the training course to fellow nationals in the future. Good regional co-ordination and quality control of the training programmes will be ensured through regular six-monthly review meetings at the PMU office. These will also provide opportunities for exchange of ideas, materials, and approaches to the delivery of the training programme. Close co-operation of CWTOs between countries will be encouraged throughout.

1.1.10.1.5.18 Output 3.7: Dissemination of results and lessons learned ¾ US$ 0.173 million (GEF 0.162 million; Gov. 0.011 million; Others 0) contributing to Objective # 3.

The local dissemination of programme results and lessons learned will be achieved through publication of a local language wetland newsletter and fact-sheets. These will be distributed through the field office and the awareness raising activities. The fact-sheets will cover issues such as local initiatives for wetland management, functions and economic values of wetlands, endangered species in a local context and traditional local uses of wetlands.

1.1.10.1.5.19 Component 4 : Provincial biodiversity planning demonstrated for wetlands in Attepeu Province, Lao PDR

Recent survey and management work in the Xe Pian and Xe Khampho Rivers and Nong Patomkeen (the largest lake in the Annamite Chain) has confirmed the importance of the province for wetland biodiversity, containing as it does some of the few remaining wilderness areas in the Lower Mekong Basin. The main threats to biodiversity at this site are summarised in Table 4 of Annex VI. This component will focus on integrating conservation of wetland biodiversity with development of livelihoods to provide a rational framework for future sustainable development of the province. Since DANIDA's Natural Resources and Environment Programme for Environmental Assistance aims at sustainable use, protection and management of wetlands and biodiversity and improved watershed management in Lao PDR, parallel funding for several aspects of Component 4 is being negotiated with DANIDA.

1.1.10.1.5.20 Output 4.1: Comprehensive provincial wetland conservation strategy and action plan developed for Attepeu Province ¾ US$ 1.470 million (GEF 1.227 million; Gov. 0.068 million; Others 0.175 million) contributing to Objective # 5.

1.1.10.1.5.21

A comprehensive wetland strategy and action plan will be developed which will identify wetland conservation and management intervention priorities throughout the province. The province will be mapped, wetland biodiversity values identified, and land-use plans elaborated in conjunction with the Government's forest classification programme. Reviews, and recommendations for the possible expansion of, the existing National Biodiversity Conservation Areas will be undertaken to ensure adequate representation of wetland ecosystems. Capacity for provincial planning and management in Attepeu will be strengthened. Those five sites identified during development of the strategy as supporting the most significant global biodiversity values will be selected to demonstrate more detailed wetland management approaches and techniques in consultation with provincial authorities and local communities. Local threats to the biodiversity values of the sites will be removed through targeted interventions integrated with the planning support programme (Output 4.2).

1.1.10.1.5.22 Output 4.2: Support to natural resource management for development of sustainable livelihoods in the Xe Kong and Xe Pian Plain ¾ US$ 0.815 million (GEF 0; Gov. 0.097 million; Others 0.718 million) contributing to Objective # 5.

Conservation activities in Attepeu Province will be linked closely to development and livelihood initiatives in keeping with Government Policy as expressed in the *Environmental Action Plan 1994-2000.*

During 2000 and 2001, DANIDA in association with the Lao PDR Government, have undertaken an identification and formulation mission to develop a programme to provide support to the lowland areas of Champasak and Attepeu Provinces with special emphasis on sustainable resource management, biodiversity conservation, and sustainable livelihoods in local communities. The output of this mission will be a draft project proposal emphasising capacity development (mainly at provincial level) and pilot projects (mainly at community level) expected to form the basis for funding by DANIDA in 2002.

1.1.10.1.5.23 Output 4.3: Provincial and local stewardship and community outreach programmes established for selected villages in Attepeu Province ¾ US$ 0150 million (GEF 0; Gov. 0; Others 0.150 million) contributing to Objective # 5.

The global biodiversity values of Attepeu Province are unquestionable, but local people, local authorities, and the national government may not be aware of this. Involvement of local communities in the management and decision-making for wetland biodiversity conservation will be essential if threats and their underlying causes are to be removed around the site. An important method of achieving this will be through innovative and participatory community outreach and environmental education programmes which will be linked closely with outputs under Objective 3. The final output will be developed only following full consultation with local stakeholders and communities regarding needs and aspirations. The following elements are proposed.

- A local stewardship programme will be established by a specialist team to encourage local people to accept the responsibility as "stewards" for these wetlands and the species that move between them, in particular fish and amphibians.
- In-country study tours for village heads and community representatives to other relevant sites in Lao PDR.
- In parallel with this, a community outreach programme will develop educational materials for local communities based on their existing beliefs and will be adapted to suit the needs of the diverse ethnic groups among the population with a high level of pre-literacy. Audio-visual and pictorial stories will be emphasised.

1.1.10.1.5.24 Output 4.4 : Community-based conservation and sustainable use of wetland biodiversity products in Attepeu Province ¾ US$ 0.625 million (GEF 0.100; Gov. 0; Others 0.525 million) contributing to Objective # 5.

Output 4.5 : Economic value of wetlands functions and products in Attepeu Province articulated and used to identify incentives and financing mechanisms for conservation and wise use ¾ US$ 0.155 million (GEF 0.121 million; Gov. 0.005 million; Others 0.029 million) contributing to Objective # 3.

Output 4.6: Wetland biodiversity conservation training programmes operating in Attepeu Province ¾ US$ 0.343 million (GEF 0.202 million; Gov. 0.012 million; Others 0.129 million) contributing to Objective # 4.

1.1.10.1.5.25

1.1.10.1.5.26 Output 4.7: Dissemination of results and lessons learned ¾ US$ 0.173 million (GEF 0.162 million; Gov. 0.011 million; Others 0) contributing to Objective # 3.

1.1.10.1.5.27

Activities carried out under Outputs 4.4-4.7 will be based upon those described under Outputs 3.4-3.7, with variations to take account of differences in physical, governmental, and cultural environments present in Attepeu Province.

1.1.10.1.5.28 Component 5: Biodiversity conservation integrated into a semi-agricultural landscape through inter-provincial land-use planning, habitat rehabilitation, and species re-introduction in the lower floodplain of the Songkram Basin, Thailand

The site covers the floodplain of the Songkram River for 60 km upstream from its confluence with the Mekong River, and includes Boeng Khong Long on the Nam Mao tributary. The main threats to biodiversity at this site are summarised in Table 5 of Annex VI. The programme will seek to develop an integrated strategy for sustaining and enhancing the biodiversity of the Lower Songkram River Basin, focusing on the restoration of the biodiversity values and, if appropriate, will enhance these values though re-introduction of selected species. It will demonstrate an effective and consultative approach to the management of the river basin by involving local communities in throughout the process.

1.1.10.1.5.29 Output 5.1: Integrated wetland protection demonstrated through development of an integrated land-use plan for the Lower Songkram Basin ¾ US$ 1.292 million (GEF 0; Gov. 0.144 million; Others 1.148 million) contributing to Objective # 5.

The mosaic of wetlands remaining in the Lower Songkram River will be identified and mapped. In particular, the large remnants of inundated forest along the four main tributaries - the Yam, Oon, Mao and He Rivers – are likely to be the priorities for conservation and restoration. Through a participatory processes involving the technical departments and authorities of the seven districts with jurisdiction over the area (Tha Utane, Boeng Khong Long, Sri Songkram, and Atkat Na Thom, Na Wa, Kum Ta Kla and Akat Amnuay), plus NGOs active in the vicinity, an integrated water and land-use plan will be developed to identify biodiversity conservation areas in the Lower Songkram Basin. The plan will also assist in zoning different intensities of land use and pollution management measures.

1.1.10.1.5.30 Output 5.2: Biodiversity values of degraded habitats improved through implementation of restorative measures and development of selective species re-introduction programmes in the Lower Songkram Basin ¾ US$ 0.100 million (GEF 0; Gov. 0; Others 0.100 million) contributing to Objective # 5.

1.1.10.1.5.31

Based on the plan developed in Output 5.1, priority sites will be identified for wetland restoration activities. This output will seek to develop and implement specific actions to restore degraded wetland sites and promote local wetland restoration initiatives. Local communities will be involved closely in the development and implementation of these activities. These may include reducing grazing of domestic stock in the inundated forest, forest regeneration and replanting. If deemed appropriate in the plan, fish and reptile species considered capable of maintaining wild populations will be re-introduced into the lower Songkram River. This may include rare and commercially valuable species such as Giant Catfish *Pangasianodon gigas*, Jullien's Barb *Probarbus jullieni*, *Tenualosa thibaudeaui*, and *Catlocarpio siamensis*.

1.1.10.1.5.32 Output 5.3: Community involvement integrated into natural resource planning and management to redress unsustainable resource use in the Lower Songkram Basin ¾ US$

0.518 million (GEF 0; Gov. 0.052 million; Others 0.467 million) contributing to Objective # 5.

To ensure effective management continues beyond the life of the programme, tangible benefits to local people and a sense of ownership of conservation actions will be important. Programme activities will build on strong local initiatives undertaken during the past five years. Over-fishing will be rectified by working with the local communities to develop a number of pilot district and village fisheries plans encompassing guidelines, by-laws, and internal regulations for fishing practices among fishing villages, as an alternative to the traditional river auction practices. Efforts will be made to have these local laws recognised by all levels of government, and enforcement of these laws strengthened by working with Ministry of Interior and line agencies, including the Department of Fisheries. Local Priority conservation-based micro-projects of local groups will be supported.

1.1.10.1.5.33 *Output 5.4: Reduction of unsustainable practices through education and awareness-raising in the Lower Songkram Basin ¾ US$ 0.424 million (GEF 0; Gov. 0.052 million; Others 0.372 million) contributing to Objective # 5.*

1.1.10.1.5.34

The lack of a wider understanding among local officials and resource-users of wetland functions and values is one of the key factors in the unsustainable use of the site's resources. The programme aims to raise awareness by establishing a team to develop a programme on the environmental values of the lower Songkram River and the need for sustainable resources use. The elements of an education and awareness Programme will include:

- establishment of education activities and materials at the Royal Forestry Department Information Centre at Boeng Khong Long, including special lesson plans, videos, and booklets for school children;
- establishment of village information centres for dissemination of information and materials;
- regular broadcasts on local radio programming; and
- information fact sheets, videos, and newsletters on the values of, and threats to, the river, stressing the linkages with the Lower Mekong Basin and the effects of agro-chemicals on wetland resources

1.1.10.1.5.35 Output 5.5 : Community-based conservation and sustainable use of wetland biodiversity products in the Lower Songkram Basin — *US$ 0.625 million (GEF 0; Gov. 0; Others 0.625 million) contributing to Objective # 5.*

Output 5.6 : Economic value of wetlands functions and products in the Lower Songkram Basin articulated and used to identify incentives and financing mechanisms for conservation and wise use ¾ US$ 0.160 million (GEF 0; Gov. 0.008 million; Others 0.152 million) contributing to Objective # 3.

Output 5.7: Wetland biodiversity conservation training programmes operating in the Lower Songkram Basin ¾ US$ 0.354 million (GEF 0; Gov. 0.012 million; Others 0.342 million) contributing to Objective # 4.

1.1.10.1.5.36

1.1.10.1.5.37 Output 5.8: Dissemination of results and lessons learned ¾ US$ 0.173 million (GEF 0; Gov. 0.011 million; Others0.162 million) contributing to Objective # 3.

Activities carried out under Outputs 5.5-5.8 will be based upon those described under Outputs 3.4-3.7, with variations to take account of differences in physical, governmental, and cultural environments present in the Lower Songkram Basin.

Component 6 : Conservation and Sustainable Human Development in the Plain of Reeds, Vietnam

The main threats to biodiversity at this site are summarised in Table 6 of Annex VI. The UNDP-GEF intervention will contribute to sustainable human development and removal of threats to biodiversity through a number of activities which will result in the following outputs.

1.1.10.1.5.38 Output 6.1 : Protected Area site management plans developed and implemented for Tram Chim National Park and Lang Sen Provincial Reserve ¾ US$ 1.451 million (GEF 1.141 million; Gov. 0.022 million; Others 0.288 million) contributing to Objective # 5.

A comprehensive management plans for Lang Sen will be prepared and implemented, in consultation with all stakeholders, and the issue of people living inside Lang Sen wetland will be addressed and dealt with through zoning. The 1998 management for Tram Chim will be reviewed and recommendations for improvement of the management will be provided. Training will be provided for staff in order to improve the operational activities. The wetlands will be zoned in full protection areas and multiple-use zones, and rehabilitation of degraded areas will be undertaken using local labour and native species. Management plans should be based on a sound understanding of the biological resources, which will require micro-habitat mapping and identification of critical species. Specific management requirements for each micro-habitat will be identified and described. Management plans and reviews will be submitted to the Provincial People's Committee and the Ministry of Agriculture and Rural Development for endorsement and formal gazettement**.**

1.1.10.1.5.39 Output 6.2: Eco-tourism programme operating in the Plain of Reeds ¾ US$ 4,600 million (GEF 0.019; Gov. 3.115 million; Others 1.466 million) contributing to Objective # 5.

The programme will assist ecotourism development plans for the whole of the Plain of Reeds, in close consultation with local, district and provincial stakeholders, as well as the Vietnam National Administration of Tourism. Tourism activities will be based on viewing of Sarus Cranes and other bird species in Tram Chim and Lang Sen, but may include trips on the Mekong River from Cao Lanh town and visits to nearby historical sites. Access to Tram Chim will be restricted through a permit system managed by the local people, so that benefits generated by tourism will accrue to the local communities, thus creating direct benefit from wetland conservation. An environmental interpretation centre and hotel accommodation will be provided at Tram Chim through the Government investment plan but the programme will develop tourism trails and other appropriate infrastructure and interpretation facilities. Training will be provided for personnel dealing with tourists, appropriate to their roles under Output 6.7.

1.1.10.1.5.40 Output 6.3 : Outreach and environmental education programme operating for local communities in the Plain of Reeds ¾ US$ 0.479 million (GEF 0.019; Gov. 0.006 million; Others 0.454 million) contributing to Objective # 5.

1.1.10.1.5.41

The prevailing lack of understanding about values of wetlands and benefits to local people will be rectified by developing a wetland awareness campaign, especially for secondary school children in the two provinces. This campaign will include the production of materials in Vietnamese such as posters, guide books, a newsletter, and information leaflets, as well as video and slide shows. Materials will also be developed to enhance the Biology and Geography curricula. Alternative means of awareness raising such as song and theatre will be explored. The programme will work with the local Department of Education and Training as well as the nearest Teacher Training Centre in Ho Chi Minh City, and target all secondary schools in the two provinces.

1.1.10.1.5.42 *Output 6.4 : Support for agro-forestry practices in the Plain of Reeds ¾ US$ 0.251 million (GEF 0; Gov. 0.006 million; Others 0.245 million) contributing to Objective # 5.*

1.1.10.1.5.43

OXFAM International is developing a poverty alleviation programme in the Plain of Reeds aiming at replanting *Melaleuca* woodlands around Tram Chim and Lang Sen. The programme will collaborate with OXFAM in ensuring that replanting activities are ecologically sound and that appropriate species and techniques are followed. The input from the UNDP-GEF intervention primarily will comprise technical assistance. Tree seedlings and labour are covered through OXFAM and local government counterparts.

1.1.10.1.5.44 Output 6.5 : Community-based conservation and sustainable use of wetland biodiversity products in the Plain of Reeds — *US$ 0.625 million (GEF 0.100; Gov. 0; Others 0.525 million) contributing to Objective # 5.*

Output 6.6 : Economic value of wetlands functions and products in the Plain of Reeds articulated and used to identify incentives and financing mechanisms for conservation and wise use ¾ US$ 0.155 million (GEF 0.123 million; Gov. 0.005 million; Others 0.028 million) contributing to Objective # 3.

Output 6.7: Wetland biodiversity conservation training programmes operating in the Plain of Reeds ¾ US$ 0.343 million (GEF 0.202 million; Gov. 0.012 million; Others 0.129 million) contributing to Objective # 4.

1.1.10.1.5.45

1.1.10.1.5.46 *Output 6.8: Dissemination of results and lessons learned ¾ US$ 0.173 million (GEF 0.162 million; Gov. 0.011 million; Others 0) contributing to Objective # 3.*

1.1.10.1.5.47

Activities carried out under Outputs 6.5-6.8 will be based upon those described under Outputs 3.4-3.7, with variations to take account of differences in physical, governmental, and cultural environments present the Plain of Reeds. One of the particular issues to address under 6.5 will be to eradicate the use of electro-fishing equipment, which is illegal, but still used widely.

RISKS AND SUSTAINABILITY

43. Indications for the sustainability of the programme results are positive:

- The programme has been ratified by GEF focal points in all four countries.
- The programme has been endorsed by the MRCS (see Appendix XIII), which represents the views of the four countries. MRCS will take an active role in the implementation of the programme through a tripartite agreement between UNDP, IUCN and MRCS.
- The programme has been endorsed by the Ramsar Convention Bureau (see Appendix XIII) which has agreed to take a role in project implementation, in particular for Outputs 1.5 and 3.1-3.7. Three of the four countries have ratified the Ramsar Convention.
- IUCN – The World Conservation Union has endorsed the programme and will take an active role in the implementation of the programme through a tripartite agreement between UNDP, IUCN and MRCS. IUCN's Commission network of specialists will be used for technical assistance (Outputs 1.2, and 1.7-1.9). All four countries[§] are State Members of IUCN.
- Two international NGOs have offered cash support for Outputs 6.4 (OXFAM International) and 3.4, 4.4, 5.5 and 6.5 (CARE International), and a number of others have pledged support with the implementation of aspects of the programme. These include Wetlands International (Outputs 1.2 and 1.5), BirdLife International and the International Crane Foundation (Outputs 1.8 and 6.1), WWF and TRAFFIC International (Output 1.10).
- National programme offices will be located within the Government agencies responsible for wetland conservation and project interventions will be integrated into the "normal" programme of these agencies.

The programme risks and their significance, as well as the ways in which the programme aims to counter these risks are outlined below.

44. Collaboration between four nations is never easy. The existence of the MRC demonstrates that the countries of the Lower Mekong Basin are willing and able to work together, but whether this can be extended successfully into regional action on this programme remains to be seen. The necessary political will to implement this programme effectively, particularly those activities requiring regional collaboration, is therefore a medium risk. The programme will overcome this by facilitating cross-border dialogue (Outputs 1.1-1.10 and 2.3).

45. The People's Republic of China is not party to the MRC and, therefore, has no obligations to consult the countries of the Lower Mekong. The PRC is also not a participant of this programme, and yet its involvement is crucial to the programme's success since the downstream consequences of upstream activities can be extremely significant, and hence this is a high risk to the programme's effectiveness. The programme team will have to ensure sufficient consultation and co-operation with the PRC and the authorities in Yunnan Province.

46. Construction of proposed dams for hydropower and irrigation would alter the hydrological regime at a number of the demonstration sites (in order Xe Kong Plain, Lao PDR; Songkram River Basin, Thailand; and Stoeng Treng, Cambodia) to such a degree that a high level of significant global biodiversity would be lost as a result. This represents a high risk for the programme. However, since dams are one of the major threats to wetland biodiversity throughout the Lower Mekong Basin, many of the programme outputs have been designed to address this issue (Outputs 1.3, 1.4, 1.6, 2.1, 2.2, 3.5, 4.5, 5.6, and 6.6).

47. The pool of English-speaking Government staff who can be trained to become wetland managers is limited in all four countries. There is a medium risk that we cannot find the right persons to take on the Government counterpart roles. The programme will use native speaking trainers to provide the training in an attempt to reduce this risk as far as possible. (Outputs 3.6, 4.6, 5.7, and 6.7), and the Government partners will be requested to appoint additional personnel.

[§] Cambodia is a lapsed member, but is currently re-applying for state membership.

48. The absorption capacity of some of the counterpart institutions is limited in all four countries. There is a high risk that the Governments are not able to deal with the advice and support from the project team. The Government partners will be requested to appoint additional personnel in order to minimise this risk.

49. The rate of depletion of natural resources in Cambodia, Lao PDR and Vietnam is extremely high, as highlighted by recent NGO reports. There is an unquantified risk that some of the threatened flagship species may be extinct or that some of the critical wetland ecosystems will have disappeared by the time this programme is initiated. Therefore, it is important to speed up as far as possible the administrative process for programme approval and implementation arrangements. This urgency will be stressed throughout implementation of the programme, especially when interacting with senior decision-makers, for which specific activities have been included (Output 2.2).

STAKEHOLDER PARTICIPATION AND IMPLEMENTATION ARRANGEMENTS

1.1.11. Stakeholder Participation

50. The main stakeholders of the programme will be the managers and users of wetlands throughout the Lower Mekong Basin. This includes the Mekong River Commission at regional level, the four Governments at national level, and provincial and district authorities at the four demonstration sites. National Government is fully involved in the project through the National Steering Commitees and the National Project Offices (see paragraph 59 and Figure 1). Local Governments are involved by establishing the Field Offices with the Provincial administration (see paragraph 61 and Figure 1)

51. International environmental NGO's will be involved in the programme where possible. This will include, but not be restricted to the following that have offices in the Region: BirdLife International, Flora and Fauna International, International Crane Foundation, Wetlands International, Wildlife Conservation Society and World Wide Fund for Nature. Their involvement will mainly comprise technical advice and services.

52. Scientists and technical experts will be consulted and involved in specific activities, either as consultant advisors, trainers or implementers.

53. The participation of local people is essential in the protection and conservation of the biodiversity of the Lower Mekong Basin. Given the diversity of cultures, ethnic backgrounds and over 20 languages used commonly in the region, it is recognised that wide public participation and consultation will not be an easy task. During the preparation of the Project Brief a number of field visits were carried out (See Annex XII). During these visits indigenous people, Cummunity Based Organisations (CBO) and Non Government Organisations (NGO) were consulted, and local needs were assessed through PRA and other techniques. Local languages were used where possible.

54. Participation from local people during project implementation will be encouraged especially in the four demonstration sites, through the creation of working groups and through regular meetings and workshops. Local people will be involved in project planning and implementation wherever possible, and they will be consulted during monitoring and review activities. Wherever feasible, co-operation will be sought with organisations with established records of enabling local participation. Non-government organisations and research institutions in Thailand and Cambodia have been successful in assisting local people organise and represent their views, e.g. Project for Ecological Recovery (Thailand), Thailand Environmental Institute, and Cambodian Development Research Institute. In Lao PDR and Vietnam,

public participation will be facilitated through the mass organisations, in particular the Youth Union and the Woman's Union, and through the Provincial and District Peoples' Committees.

1.1.12. Implementation Arrangements

55. The proposed organisational arrangements for implementation of the programme are illustrated in Figure 1. United Nations Development Programme will be the **implementing agency** for this programme. The programme will be **executed** by IUCN-The World Conservation Union (IUCN) in partnership with the MRCS under a tripartite agreement between UNDP-IUCN and MRCS. The Governments of Cambodia, Lao PDR, Thailand and Vietnam will confirm their agreement by delivering letters of endorsement from their respective GEF focal points.

56. Co-ordination between the four countries will be facilitated through a **Programme Steering Committee** modeled upon that established during the preparation of the programme. This will be chaired by the UNDP Resident Representative for Thailand and comprise two appropriate representatives from each of the four countries, the MRCS Chief Executive Officer, the UNEP Regional Director for Asia-Pacific, the IUCN Regional Director for Asia, up to four regional wetland experts of international standing, and major co-financing organisations if they wish. Additional members may be co-opted. This Steering Committee will meet half-yearly.

57. A **Regional Co-ordination Sub-committee** will also be established to ensure close co-ordination between this programme and other relevant activities taking place in the region. This sub-committee will be chaired by UNDP and will comprise representatives from ASEAN Biodiversity Centre, ADB Environmental Department, ICLARM, MRCS Environment Programme, Oxfam International Mekong Programme, Wetlands International Cambodia and Mekong Programme, WWF Indochina Programme, and others as invited. This Sub-committee will meet half-yearly.

58. The overall programme will be implemented through a regional **Programme Management Unit** (PMU) which will act as a secretariat to the Programme Steering Committee and it's Sub-committees. It will:

- Manage the implementation of all regional activities;
- co-ordinate, facilitate and support the work of the National Programme Offices and the Field Offices;
- supervise technical progress monitoring of each programme component;
- undertake financial management and auditing of funds released to the programme;
- liaise closely with the other donor agencies involved in the programme;
- report regularly to all co-financing agencies.

59. It will be headed by a full-time Regional Programme Director (an English-speaking national recruited from the Region), with an international Chief Technical Advisor, a multi-disciplinary team of regional and national specialists, plus administrative and support staff. The PMU will be located in Phnom Penh.

60: Implementation in each country will be based broadly on the same model, but with minor differences reflecting national institutional frameworks. In view of the emerging role of the National Mekong Committee in each country and continuing UNDP support to strengthen the four committees, the National Steering Committees for the programme in each country will be closely related to the National Mekong Committees:

CAMBODIA: A National Wetlands Committee will be established as proposed under the Draft National Wetland Action Plan and this will act as the **National Steering Committee** for the programme. The

relation between the National Wetlands Committee and Cambodia Mekong Committee needs to be worked out. The **National Programme Office** will be established in the Ministry of Environment. The **Field Office** will be with the Office of the Provincial Governor, located in Stoeng Treng town, and the Provincial Development Committee will co-ordinate technical inputs.

LAO PDR: There will be a **National Steering Committee** chaired by the Director of Cabinet of the Ministry of Agriculture and Forestry; with deputy chairs from Science Technology and Environment Agency (STEA) as the GEF focal point and the Director General of the National Agricultural and Forestry Research Institute (NAFRI). The Lao National Mekong Committee will be represented in the Steering Committee. The **National Programme Office** will be established in LARReC and advised technically by the recently-created Wetland Working Group under NAFRI. The **Field Office** will be with the Cabinet of the Provincial Governor located in Attepeu town.

THAILAND: The statutory Wetlands Committee, a sub-committee of the National Environment Board, will act as the **National Steering Committee**. The **National Programme Office** will be located in the Office of Environment Policy and Planning (OEPP) in the Ministry of Science Technology and Environment. The **Field Office** for the demonstration site will be located in the Provincial Administration Headquarters in the city of Nakhom Phnom. An Inter-provincial Wetlands Working Group for the Songkram Basin Management to assist the field office will be chaired by the Ministry of Interior and comprise the three Provincial Governors, seven District Chiefs, the Regional Director of OEPP, the Provincial Directors of the Departments of Fisheries and Forestry, and two representatives from the Network of Local People.

VIETNAM: A **National Steering Committee** will be established, chaired by the Secretary General of the National Mekong Committee. The **National Programme Office** will be established in the National Environment Agency (NEA) in the Ministry of Science Technology and Environment. The **Field Office** will be located in the office of the Dong Thap Province Peoples' Committee in Cao Lanh, and advised by a technical advisory body co-ordinated by the Sub-institute of Forestry and Planning.

61. Each country will appoint a National Programme Director located in the National Programme Office and assisted by a National Programme Co-ordinator and Deputy. This team's role will be to:

- facilitate the implementation of programme activities in each country
- co-ordinate closely with the PMU in guiding programme implementation;
- mobilize inputs from the various ministries;
- co-ordinate closely with the local government authorities to facilitate efficient programme implementation;
- facilitate foreign travel by nationals on project business
- make strategic decisions, such as endorsing and revising annual work plans and budgets; and
- facilitate the dissemination of the project results.

62. At each of the four demonstration sites, the field offices will be headed by a Field Director and Deputy who will have additional staff according to their mandate.

INCREMENTAL COST AND PROGRAMME FINANCING

63. Total programme costs are estimated at US$ 32.07 million (including project development costs of US$ 0.647 million). Of this amount, GEF is requested to contribute US$ 9.29 million for activities that will provide global environmental benefits. In addition to the project costs, GEF has already provided a

PDF Block B grant of US$ 0.43 million for the preparation of this programme, and administrative and support costs are estimated at US$ 0.61 million. The total GEF funding is US$ 10.33 million (33%). The remainder of the programme costs, US$ 21.72 million (67%), will be met through co-financing from governments US$ 4.4 million (14%) and bilateral donors US$ 17.31 million (53%).

64. A comprehensive Incremental Cost Matrix by programme outputs is presented in Annex I. Below is a summary matrix.

1.1.13. Programme Budget (in US$) – excludes project development and support costs

TOTAL PROJECT	Cambodia	Lao PDR	Thailand	Vietnam	GEF	Other	Total
Component 1	30,606	30,606	30,606	30,606	3,360,575	6,308,450	9,791,450
Component 2	121,075	130,075	121,075	121,075	330,200	1,279,300	2,102,800
Component 3	149,250	-	-	-	2,017,025	1,296,000	3,462,275
Component 4	-	192,750	-	-	1,812,875	1,725,000	3,730,625
Component 5	-	-	277,850	-	-	3,367,675	3,645,525
Component 6	-	-	-	3,176,000	1,766,925	3,133,771	8,076,696
Total	**300,931**	**353,431**	**429,531**	**3,327,681**	**9,287,600**	**17,110,196**	**30,809,371**
Preparatory costs					**432,000**	**200,000**	**652,000**
Admin costs					**610,000**	**-**	**610,000**
Grand total	**300,931**	**353,431**	**429,531**	**3,327,681**	**10,329,600**	**17,310,196**	**32,071,371**

PHASE A	Cambodia	Lao PDR	Thailand	Vietnam	GEF	Other	Total
Component 1	9,975	9,975	9,975	9,975	445,773	2,521,987	3,007,620
Component 2	49,113	49,113	49,113	49,113	254,500	749,550	1,200,500
Component 3	60,225	-	-	-	1,253,281	532,258	1,795,765
Component 4	-	77,625	-	-	909,881	692,425	1,629,931
Component 5	-	-	111,950	-	-	1,487,056	1,599,006
Component 6	-	-	-	1,270,700	986,531	1,417,454	3,624,685
Total	**119,313**	**136,713**	**171,038**	**1,329,788**	**3,849,927**	**7,400,730**	**12,857,507**

PHASE B	Cambodia	Lao PDR	Thailand	Vietnam	GEF	Other	Total
Component 1	20,631	20,631	20,631	20,631	2,914,842	3,786,463	6,783,830
Component 2	71,963	80,963	71,963	71,963	75,700	529,750	902,300
Component 3	89,025	-	-	-	763,744	763,742	1,666,510
Component 4	-	115,125	-	-	902,994	1,032,575	2,100,694
Component 5	-	-	165,900	-	-	1,880,619	2,046,519
Component 6	-	-	-	1,905,300	780,394	1,716,318	4,452,012
Total	**181,619**	**216,719**	**258,494**	**1,997,894**	**5,437,673**	**9,709,467**	**17,951,865**

MONITORING AND EVALUATION PLAN

65. A Quarterly Operational Report will be provided to UNDP by the executing agency. This report will be a short summary of project progress and disbursement progress. The Inception Report, which will be due within the first six months of commencement, will serve as the second operational report.

66. An annual Tripartite Review (TPR) Meeting will be held, chaired by the UNDP Resident Representative. This meeting will coincide with one of the Steering Committee meetings during that year. The TPR is a policy-level meeting of all parties directly involved in the project and aims to assess programme progress based on an Annual Programme Report (APR) and take decisions or make recommendations to improve programme implementation in order to achieve expected results. The budget allocated for TPR covers a meeting in a different national location each year, including a field visit back-to-back with each TPR.

67. The executing agency will prepare an APR at least two weeks prior to the TPR. The APR provides a rating and textual assessment of programme progress, and serves as the basis for the TPR. UNDP will use the APR to prepare an internal Project Implementation Review (PIR) for GEF. The PIR will determine the status of programme, assess performance and derive lessons to improve design and implementation of GEF projects.

68. In addition to the annual TPR, the Programme Steering Committee will meet once more every year to review progress and discuss urgent issues. The first meeting of the Steering Committee will review the Inception Report.

69. A Project Terminal Report will be prepared by the Executing Agency for consideration at the terminal TPR. It provides an overall assessment of the programme by its stakeholders.

70. The budget covers the following independent evaluations:

- Mid-term evaluation: this is a four-week, field-based evaluation by two consultants, with the aim of reviewing progress against impact indicators. The report will be tabled at the TPR following submission.
- Terminal evaluation: this is a four-week field based evaluation by two consultants, which will include comparison of programme achievements against impact indicators. The report will be tabled at the final TPR
- Ex-post evaluation: this is a two-week national capital and provincial site-based evaluation by one consultant to compare achievements against impact indicators, one to two years after project activities end.

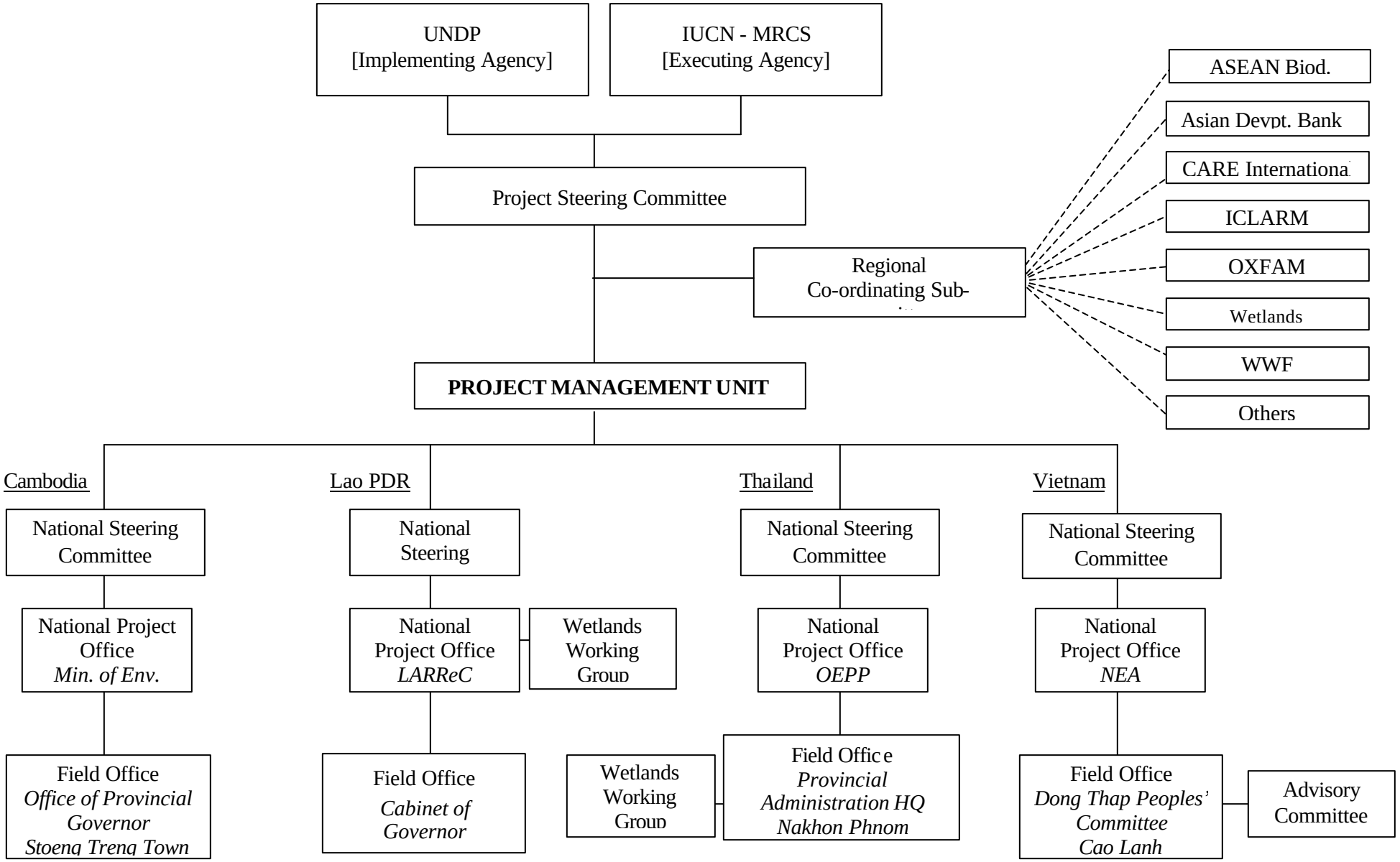
71. Considering that the project only addresses one substantive wetland per country, it is important that lessons learned from the project are replicated elsewhere. This will be achieved through the involvement of the National Steering Committees and the leadership of the National Project Directors (paragraph 59 and 60), the networks established under output 1.2, support to the Ramsar Convention (output 1.5) and the provision of communications materials. A communications plan will be developed during the inception phase, as part of the Training Needs Analysis under output 1.1.

72. The M&E activities described above will examine the impact of the project as measured against carefully defined impact indicators. The precise indicators will be refined in the preparation of a detailed M&E plan, but the following table indicates possible impact indicators.

Impact indicators	Project outputs supporting the impact	Comments
Component 1		
MRC has taken full cognisance of ecosystem functions and values in its core programmes	IUCN and MRC will be working together in the project (overall institutional structure) MRC environment programme will provide co-finance to the project (output 1.1,)	MRC has recently developed an environment programme
Regional wetlands conservation policy has been agreed and is being implemented	Project will develop guiding principles that could form the basis for a policy (output 1.3)	IUCN is working separately with China
Component 2		
All four countries are implementing the obligations of the Convention on	Support for national Ramsar Administrative Authorities (output 1.5 and 2.2)	Lao is not yet signatory to the Convention, and the project will attempt to

Wetlands		facilitate this.
Wetlands conservation is integrated into national development planning	National policy dialogue (output 2.1) National awareness activities (output 2.3) Economic valuation (outputs 3.5, 4.5, 5.6 and 6.6)	
Components 3 – 6		
Local people use and manage wetland resources in a sustainable manner	Sustainable Use components (3.4, 4.4, 5.5 and 6.5) Awareness (3.2, 4.3, 5.4 and 6.3)	
Government accepts community management arrangements in wetlands	Management planning exercises (output 3.1, 4.1, 5.1, 6.1)	

Figure 1 : Proposed organisational arrangements for implementation of the project



Annexes

Annex I :	Incremental Cost Analysis
Annex II :	Logical Framework Analysis and Project Planning Matrix
Annex III :	Project Phasing
Annex III-A:	STAP Review
Annex III-B:	Response to STAP Review
Annex III-C:	Letters of endorsement

Annexes IV-XIV are optional annexes, available upon request.

Annex IV :	Stakeholder and Socio-economic Analysis
Annex V :	A Review of Globally Important Ecosystems and Their Biodiversity of the Lower Mekong Basin
Annex VI :	Demonstration Sites – Their Selection, Biodiversity Values, Descriptions, and Threats
Annex VII :	Threats to biodiversity and analysis of Root Causes
Annex VIII :	Government Institutional Framework
Annex IX :	International Agreements, Regional and National Policies Relevant to Wetlands Biodiversity Conservation in the Lower Mekong Basin
Annex X :	Baseline and Associated Projects
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ANNEX I : Incremental Cost Analysis

1. Broad Development Goals

Macroeconomic development goals in Cambodia, Lao PDR, Thailand and Vietnam lend support to, and are broadly consistent with, the project's goal — the conservation and sustainable use of the biological diversity of the wetlands of the Lower Mekong Basin. Previously centrally-planned, the Lower Mekong States have since the mid-1980s been implementing a series of macroeconomic reforms aimed at achieving transition to market-driven economies. Within a framework of price and market reform, trade liberalisation and increasing privatisation, national development plans and policies in all three countries have the common goals of equitable and environmentally sustainable development, as stated in Cambodia's *Socio-Economic Development Plan for 1996-2000*, Lao PDR's *National Socio-Economic Development Plan*, Thailand's *Eighth Economic and Social Development Plan 1996-2001* and Vietnam's *National Plan for Environment and Sustainable Development 1991-2000*.

In addition to a macropolicy focus on environmentally sustainable development, conservation is also mentioned as a key concern in each country's National Constitution (Articles 58 and 59 of the 1993 Cambodia Constitution, Article 17 of the 1991 Lao PDR Constitution, Sections 46, 49, 50, 56, 59, 69, 79 and 290 of the 1997 Thailand Constitution and Articles 17, 18 and 29 of the 1992 Vietnam Constitution). Each country contains a complex body of policies relating to the conservation of environment and natural resources (including those dealing with environmental co-ordination, forestry, wildlife, protected areas and cultural heritage), most of which were established or have been redrafted during the 1990s. Sectoral policies in fisheries, water, energy, agriculture and land sectors all also stress sustainable development goals.

Reflecting these concerns, Cambodia (1998), Lao PDR (1994), Thailand (1997) and Vietnam (1991) have all, over the last decade, approved National Environmental Action Plans at ministerial levels. Although implied, rather than mentioned explicitly, in National Environment Action Plans and in the associated provisions of National Constitutions and sectoral policies, wetland biodiversity conservation has been identified as a priority issue in all of the Lower Mekong Basin States. In line with the national importance accorded to wetland biodiversity conservation, all countries are at various stages in the preparation of National Wetlands Action Plans.

At the regional level there also exist a number of key policies and agreements which have relevance to the goal of this project. A regional committee concerned with water resources planning and development in the Mekong Basin was first established in 1957. In 1995 the Agreement on Co-operation for the Sustainable Development of the Mekong Basin, and its accompanying protocol, established today's Mekong River Commission (MRC). With the overall goal of promoting co-operation in all fields of water management, the agreement also includes provisions for the protection of environment and natural resources. Cambodia, Lao PDR, Thailand and Vietnam are all members of the MRC. Over the next 3-6 years, MRC member countries plan to draft rules on water utilisation, at the same time as developing a basin-wide development planning process. Other relevant initiatives which are taking place at a regional level, and include Cambodia, Lao PDR, Thailand and Vietnam, include the Environment Working Group of the Greater Mekong Sub-Region (established under the auspices of the Asian Development Bank) and the ASEAN Strategic Plan for the Environment.

The signing and ratification by Lower Mekong Basin countries of a number of international conventions relating to biodiversity conservation also lend support to this project, which specifically aims to strengthen their regional and national implementation. All four countries in this project have ratified the

World Cultural and Natural Heritage Convention (1972), all except Lao PDR have ratified the Ramsar Convention (1971) and CITES (1973), and all except Thailand have ratified the Convention on Biological Diversity (1992). In line with obligations under the Convention on Biological Diversity, Vietnam has finalised a National Biodiversity Strategy and Action Plan (approved by government in 1995), and National Biodiversity Strategies and Action Plans are currently under preparation in Cambodia and Lao PDR. Despite not having ratified the CBD, Thailand prepared a *Policy, Measures and Sustainable Biodiversity Utilisation and Conservation Plan* in 1997. All of these plans target wetlands as a critical area for national biodiversity conservation activities, and earmark significant government budgets towards attaining these goals.

2. Baseline

Within the context of the national and regional policy goals and development plans specified above, the Governments of Cambodia, Lao PDR, Thailand and Vietnam have already earmarked significant baseline funding (US$ 106 million, see Annex IX) for the management of the Lower Mekong Basin over the project period 2001-2005. These budgets include various sources of external funding, some of which is channelled through the MRC, who play a major role in co-ordinating and implementing sustainable river basin management at the regional level.

A key characteristic of this baseline funding, and of the regional and national strategies, policies and plans that accompany it, is that it is geared primarily towards harnessing the terrestrial and aquatic resources of the Lower Mekong Basin in order to achieve regional and national sustainable development goals. Activities focus especially on fisheries, agricultural, energy and forestry sectors as key sources of national economic growth, income and employment. Although including components dealing with environmental protection (most notably the maintenance of protected areas, implementation of riverbank stabilisation and flood control measures, and rural afforestation), baseline activities largely exclude any explicit consideration of wetland biodiversity sustainable use and conservation.

As they are based on attaining regional and country development goals, existing conservation and development plans focus on securing national, not global, benefits. Thus, although yielding significant national sustainable development benefits, and to some extent meeting national environmental conservation goals, baseline activities are insufficient to ensure that the global benefits associated with the wetland biodiversity of the Lower Mekong Basin are maintained. Because of multiple social, economic, technological and institutional factors, it is probable that wetlands will continue to be degraded, ecosystems modified and converted, and biodiversity continue to be lost unless significant and targeted actions are taken to supplement this baseline. In particular, the following likely effects and impacts of the baseline on wetland biodiversity of global significance should be noted (summarised here, for a more detailed analysis see Annex VI):

- Institutions remain uncoordinated: *Under the baseline, it is likely that the goals and actions of the multiple national institutions who manage, utilise and develop the different resources of the Lower Mekong Basin will remain uncoordinated, while regional institutions and agreements will also continue to pay scant attention to wetland biodiversity. These different regional, country and sectoral goals, and institutional mandates, will continue to place conflicting, and sometimes destructive, demands on wetland biodiversity.*

Although various attempts are currently being made to manage and use the resources of the Lower Mekong Basin, such efforts are spread between different sectors, agencies and countries. In each of Cambodia, Lao PDR, Thailand and Vietnam multiple institutions deal with the Lower Mekong's resources — for example environment, forestry, wildlife, protected areas, water, energy, fisheries,

agriculture and land agencies all touch on wetland biodiversity use and management. The demands, and on-the-ground activities, of these different sectors and institutions are often mutually incompatible and frequently lead to wetland biodiversity degradation (see below, on policy and economic frameworks).

At a regional level, the priorities and demands of different countries on Lower Mekong resources also often compete, and sometimes conflict, with each other, despite the common goals implied by their ratification of international conventions covering wetland biodiversity (such as the CBD, Ramsar and CITES). Simultaneously, regional institutions and agreements that cover the use and management of the Lower Mekong Basin (such as those under the MRC, GMC and ASEAN) contain weak consideration of, and make few attempts to co-ordinate or promote the conservation of, wetland biodiversity.

- Policy and economic frameworks remain unsupportive: *Under the baseline, few policy or economic instruments are likely to be set in place with which to encourage or enforce wetland biodiversity conservation in the Lower Mekong Basin, and existing policy and economic instruments may even continue to contribute to wetland biodiversity loss.*

National governments have set in place a range of policies and economic instruments with which to manage the resources of the Lower Mekong Basin. However, there is currently no wetland policy in any of the Lower Mekong States, and other environment and natural resource policies (such as those relating to forests, wildlife and protected areas) contain little or no consideration of wetland biodiversity. Policies in the so-called "productive" sectors of the economy — such as agriculture, industry, energy and fisheries — provide the dominant influence on ecosystem management, and their development imperatives drive most land and resource use decisions around the Mekong. These policies reflect macroeconomic and sectoral goals, which are based primarily on income, employment and foreign exchange generation, to be achieved through the expansion of activities in the key sectors of industry, agriculture, fisheries and energy. In each country, the activities of these sectors are focused primarily on maximising national development benefits through the extraction and utilisation of the Lower Mekong's natural resources, often in destructive ways and at unsustainable levels.

The economic policy instruments that are used in pursuit of these goals, including fiscal, market and financial incentives, are geared mainly towards achieving economic growth, not towards wetland biodiversity conservation. In some cases they actually contribute to wetland biodiversity degradation, through presenting a series of perverse incentives or disincentives to conservation and sustainable use. In contrast, environment and natural resource sector policies have to date made little or no effort to counteract these negative influences, or to set in place positive economic and financial incentives to encourage wetland biodiversity conservation and wise use.

- Information base remains weak: *Under the baseline, it is likely that information on wetland biodiversity in the Lower Mekong Basin will remain partial, fragmented, and largely inaccessible to planners, managers and decision-makers. This lack of policy-relevant information, and accordingly weak awareness among wetland technicians and policy-makers, will continue to act as a hindrance to wetland biodiversity conservation.*

A wide variety of studies have been carried out on the resources of the Lower Mekong Basin — by governments, national and international research institutes, as well as through NGOs and donor-financed projects. Under the baseline, these studies are likely to be continued. For example, in each of Cambodia, Lao PDR, Thailand and Vietnam national universities and research institutes have specified programmes of work relating to biology, ecology and human use of the Lower Mekong Basin, and the MRC has already developed databases on river basin characteristics and parameters relating to hydrology, geography, environment and fisheries.

However, little of this information, or current research, is targeted explicitly to wetland biodiversity issues. At all levels there is little understanding of wetland values and functions, the principles or practical applications of wise use, or the global importance of the wetland biodiversity of the Lower Mekong Basin. In turn, this lack of information has contributed to the generally poor awareness of wetland

biodiversity issues among planners, managers and policy-makers and has led directly to weak and uninformed policies, planning and development decisions, both within and outside environment and natural resources sectors.

- **Human and technical resources remain underdeveloped:** *Under the baseline, technical and human resource capacity in wetland biodiversity planning, management and policy is likely to remain underdeveloped. As a result, there will continue to be a shortage of the staff, skills and investment required to manage wetland biodiversity effectively.*

Although significant budgets are allocated to training and capacity-building at local, private and government levels (for example within regional bodies such as the MRC, through national universities and vocational colleges, as part of in-service training and through community outreach and extension activities), little investment has been made in developing the human and technical resource skills necessary to manage wetland biodiversity. As well as wetland biodiversity being accorded a low priority, few training programmes exist which deal with aspects of wetland biodiversity management relevant to the Lower Mekong Basin.

Because human resources remain underdeveloped, many national and Provincial development authorities lack the expertise to consider wetland biodiversity in their planning processes, and protected area agencies have little training in either technical or practical aspects of wetland biodiversity management. This weak capacity undoubtedly acts as an obstacle to effective conservation, within and outside environmental conservation sectors.

- Local livelihood options remain limited: *Under the baseline, wetland biodiversity conservation is likely to remain a low priority in Provincial and local development plans, and few attempts will be made by conservation authorities to identify and develop viable alternatives to unsustainable land and resource utilisation activities at the community level. In the face of pressing needs for secure livelihoods, and limited income and subsistence options, local land and resource use practices will continue to result in wetland biodiversity loss.*

Both government and NGO programmes in all of the Mekong Basin States accord a high priority to rural development activities, and significant expenditures continue to be made on improving local income and employment generation in key sectors such as agriculture, industry and fisheries. These plans however give only minor emphasis either to the sustainability of local developments, or to the potential for biodiversity to be used as a tool to strengthen livelihoods. Policy and plans in the environment and natural resource sectors similarly pay little attention to the need to invest in sustainable livelihood activities for the communities who live in wetland areas, and whose activities have the potential to impact on biodiversity.

Meanwhile, throughout the Lower Mekong Basin, population and land pressure continue to increase while local opportunities for income, subsistence and employment remain extremely limited. In many cases, activities such as the spread of irrigated agriculture, aquaculture development, woodland clearance, harvesting of endangered species and high rates of natural resource utilisation are leading directly to wetland biodiversity loss. In the absence of alternative, sustainable, livelihood options, such local land and resource use activities pose a severe, and growing, threat to wetland biodiversity.

3. GLOBAL ENVIRONMENTAL OBJECTIVE

If existing baseline activities are not modified or supplemented as specified in the proposed project, it is clear that wetland biodiversity of global significance in the Lower Mekong Basin will continue to be

degraded. Global costs associated with failing to implement the proposed project include the loss of values accruing from global resource use, in the values yielded by globally-important ecosystem functions, in the options open to use these ecosystems and resources for global economic gain in the future, and in the global existence values associated with the biodiversity of the Lower Mekong Basin wetlands.

In line with the focus of GEF's Operational Programme 2: Marine, Coastal and Freshwaters, the global environmental objective of the proposed project is to conserve and to use sustainably biological diversity in the wetlands of the Lower Mekong Basin. The project has as its immediate objectives to establish a multi-sectoral planning process at national and regional levels, to strengthen macroeconomic and policy frameworks for wetland biodiversity conservation and sustainable use, to provide adequate information to support sound wetland policy, planning and management, to improve human and technical capacity to better conserve and sustainably manage wetlands, and to improve community-based natural resource management of wetlands. These objectives, and the activities they involve, aim to complement and build on existing national and regional activities so as to overcome the threats to wetland biodiversity arising from an unmodified baseline course of action.

Global benefits resulting from the proposed project's implementation are based on the maintenance of wetland biodiversity of global significance, including the share of functional benefits that accrue to global communities. By conserving natural species and areas, the project will preserve the flow of global benefits accruing from their consumptive and non-consumptive utilisation, such as those generated through international trade and tourism. It will also maintain ecosystem integrity, yielding global services such as the regulation of climate. By averting the risk of extinction of globally threatened, endangered and endemic species and habitats, and maintaining a diverse pool of genes and resources, the project will make a significant contribution to the global option values associated with the possible future use and development of wetland biodiversity. It will also maintain a stream of global non-use benefits, including aesthetic, heritage and bequest values, for current and future generations.

4. GEF ALTERNATIVE

There are three major alternative courses of action that could, realistically, be applied to managing the wetland biodiversity of the Lower Mekong Basin. The first is to continue, without taking any additional action, existing baseline activities. Although implying no additional financial cost, and meeting regional and national development goals, this option is not considered sufficient to address current threats to global biodiversity. Under baseline national social, institutional, policy and economic conditions and actions, globally-significant wetland biodiversity in the Lower Mekong Basin will continue to be degraded and lost.

A second option is to supplement the existing baseline with a series of activities that are designed to increase the level of strict protection afforded to wetland biodiversity in the Lower Mekong Basin. Although, if successful, this alternative strategy could secure significant global biodiversity benefits, it is not considered a desirable course of action. As well as being costly and difficult to implement, it is unlikely to be sustainable after the project period given existing financial, human resource and institutional capacity, or in socio-economic terms. It also has the potential to conflict with regional and national economic development and social equity goals, and has been stated to be unacceptable by the Governments of Cambodia, Lao PDR, Thailand and Vietnam. The high opportunity costs associated with the strict protection of wetland biodiversity, including high budgetary costs, losses to local livelihoods and to national economic development, are untenable in practice.

The third strategy, as laid out in the proposed project, is based on building capacity and awareness, improving policy and economic frameworks, and implementing on-the-ground activities to promote wetland conservation and wise use. This alternative is considered to be the most desirable and effective option, in social, economic, financial, development and conservation terms. As well as securing global benefits, it can also simultaneously meet baseline development goals (socially equitable and environmentally sustainable national development in Cambodia, Lao PDR, Thailand and Vietnam).

The proposed project employs an approach which is based on simultaneously enhancing regional and national capacity; building on existing policy, institutions and practice; and generating significant local and national, as well as global, benefits in support of sustainable economic development. Due to limited existing financial, human resources and institutional capacity, and because the maintenance of global benefits is not a priority goal in national macroeconomic or sectoral development, it is unlikely that this course of action would be followed without GEF funding through the proposed project.

The project is cost-effective in terms of the financial expenditures required to achieve its anticipated results, in comparison to the high investment, recurrent and opportunity costs associated with an alternative strategy of strict protection, and relative to the high global economic costs arising from biodiversity degradation implied in the baseline. The project has also been designed in such a way as to ensure that, by strengthening capacity and building on existing institutional arrangements and activities, it will be both financially and institutionally sustainable over the long-term within the context of the Lower Mekong States' existing institutional, social and economic arrangements.

It is important to emphasise that the proposed project will supplement, or add to, existing attempts to manage the Lower Mekong Basin sustainably. It does not aim to replace baseline activities, technologies or institutions, or to diminish any existing economic benefits, but rather to strengthen and consolidate them, and to improve and diversify their scope and operation so as to include consideration of wetland biodiversity of global significance. It should also be noted that the project will make a significant contribution to the regional sustainable development goals articulated under MRC and ASEAN arrangements, and to Cambodia's, Lao PDR's, Thailand's and Vietnam's efforts to meet their obligations under international conventions aimed at conserving biodiversity of global importance.

Specifically, the project will build on existing baseline activities so as to overcome identified threats to, and enhance the conservation of, globally significant biodiversity in the Lower Mekong Basin by:

- Increasing institutional co-ordination through establishing a multi-sectoral planning process operational at national and regional levels;
- Strengthening policy and economic frameworks so that they are supportive of wetland biodiversity conservation and sustainable use;
- Providing adequate information to support sound wetland policy, planning and management decision-making;
- Improving human and technical capacity to better conserve and sustainably manage wetlands;
- Improving community-based natural resource management of wetlands.

5. SCOPE OF ANALYSIS

The scope of analysis is defined by the project's main goal: the conservation and sustainable use of the biological diversity in the wetlands of the Lower Mekong Basin. The major focus of the project is therefore on the geographical and political units, social and economic structures and institutions that manage, use and influence the status of wetland biodiversity in the Lower Mekong Basin. The system boundary of the project is taken to include:

- Geography and ecology: the project covers the Lower Mekong Basin — all points of the catchment downstream from the entry of the Mekong River into Lao PDR. It includes consideration of the upland rivers and associated wetlands, main lowland river channels, floodplains, lakes, flooded forests, deltaic grasslands, *Melaleuca* and mangrove forests of the Lower Mekong Basin. The project will focus its effort immediately in and around the Mekong River and its major tributaries (Nam Mun, Nam Thun, Xe Kong, Xe San, Songkram and Srepok Rivers). Four demonstration sites have been chosen because of their importance in global biodiversity terms: Stoeng Treng in Cambodia, Attepeu Province in Lao PDR, the Songkram

floodplain in Thailand and the Plain of Reeds in Vietnam. It is anticipated that the project will result in improved plant and animal biodiversity conservation and maintenance of ecosystem integrity within this geographical and ecological system boundary.

- Political and administrative boundaries: The Lower Mekong Basin states include Cambodia, Lao PDR, Thailand and Vietnam. Although part of the Mekong Basin, both China and Myanmar are considered to lie outside the project's political and administrative system boundary because they are not members of the MRC. Regions and Provinces in Cambodia, Lao PDR, Thailand and Vietnam which are not contiguous with the Mekong Basin are also excluded from the project's system boundary because their populations are not the primary users, managers or beneficiaries of Lower Mekong Basin wetland biodiversity. It is anticipated that the project will result in improved wetland biodiversity conservation within this administrative and political system boundary.

- Socio-economy: the project's main stakeholder and beneficiary groups will be the primary users and managers of wetland biodiversity, including government personnel, local leaders, community members and researchers. Particular attention will be given in the project to targeting the more vulnerable and marginal sectors of the rural population, such as women and the poor. Additional target beneficiaries are members of the global community who benefit from the wetland biodiversity of the Lower Mekong Basin. It is anticipated that the project will result in significant gains in knowledge, information, awareness, income and non-monetary economic benefits within this socio-economic system boundary. Private sector commercial and industrial interests whose economic activities use or impact on wetland biodiversity lie outside the main socio-economic system boundary of the project, and therefore are considered to form secondary beneficiaries. It is however likely that project activities will also result in gains for these groups in terms of enhancing the supply of wetland biodiversity goods and services which are key to their production processes and economic output.

- Institutions: the project is focused on the formal and informal community groups who manage and use wetlands, and on the provincial and national government institutions that are mandated with the management of wetland biodiversity in the Lower Mekong Basin, including national environment, wildlife and forestry agencies, national committees and institutions concerned with the implementation of international biodiversity-related conventions, and national and regional secretariats of the MRC. It is anticipated that the project will result in a considerably strengthened institutional and human resource capacity, awareness and information base from which these institutions are able to manage and use wetland biodiversity sustainably. Regional, national and local institutions which are concerned primarily with the use and development of wetland areas and biodiversity for water, industry, agriculture and infrastructure lie outside the system boundary of the project, because they are not primary wetland biodiversity users and managers. It is however likely that project activities will also result in some level of increased awareness and capacity in wetland biodiversity issues, and improve the environmental sustainability of the activities, in these sectors and institutions.

- Threats and root causes: the project is focused on overcoming threats to wetland biodiversity relating to uncoordinated institutions, unsupportive policy and economic frameworks, weak information, underdeveloped human and technical resources and limited local livelihood options. One main set of root causes relating to wetland biodiversity degradation — those relating to socio-political context (for example civil unrest, poor infrastructure, widespread poverty, corruption), lie outside the system boundary of this project, because they do not relate to its primary institutions and target beneficiaries. Additionally, overcoming socio-political threats to wetland biodiversity requires action at political and programmatic levels, not a single project level. It is however anticipated that the project will have a number of positive knock-on effects on

both ecosystem integrity and functions, because it will influence economic activities which impact on wetland hydrology and ecological integrity, and on socio-political status, because it will simultaneously improve government institutional capacity and diversify and strengthen rural livelihoods in wetland areas.

6. COSTS

The cost of baseline activities is approximately US$ 108 million for the full project period, 2001-2005. This comprises activities that are already underway or planned in Cambodia, Lao PDR, Thailand and Vietnam, are designed to manage the Lower Mekong Basin so as to secure national sustainable development benefits, and would have been carried out even in the absence of the proposed project. It includes government, donor and NGO-funded activities.

In order to achieve global environmental benefits, additional interventions are needed. This project proposes an alternative strategic intervention. The incremental cost of the new activities required by this alternative strategy is US$ 32.07 million (including project development and support costs). Of this amount, GEF is requested to contribute US$ 9.43 million for activities that will provide global environmental benefits. In addition to the project costs, GEF has already provided a PDF Block B grant of US$ 0.43 million for the preparation of this programme, and administrative and support costs are estimated at US$ 0.61 million. The total GEF funding is US$ 10.47 million (33%). The remainder of the programme costs, US$ 21.58 million (67%), will be met through co-financing from governments US$ 4.4 million (14%) and bilateral donors US$ 16.97 million (53%).

A number of associated projects will be carried out at the same time as the proposed project. These are not considered to form a part of the stated baseline because they are projects which will be implemented as a result of, or whose goals and activities will be substantially influenced by, the existence of the proposed project. They are also not included as part of the alternative strategy because they will operate independently of the proposed project and are primarily aimed at achieving national or regional sustainable development goals, and thus do not meet GEF financing eligibility criteria. These complementary and leveraged projects have a cost of US$ 38.3 million.

The attached matrix provides details of the baseline, alternative strategy and incremental costs associated with the proposed project.

DEVELOPMENT OBJECTIVE: The conservation and sustainable use of the biological diversity in the wetlands of the Lower Mekong Basin			
	BASELINE	**ALTERNATIVE STRATEGY**	**INCREMENT**
Global benefits	Globally significant biodiversity of Lower Mekong Basin wetlands threatened by destruction and degradation of habitats, resource over-harvesting, insufficient protected areas, increase in alien invasive species and multiple threats to migratory species. Global benefits currently high, but decline rapidly as wetland biodiversity and ecosystems are degraded and depleted.	Globally significant biodiversity of Lower Mekong Basin wetlands sustainably managed, leading to the maintenance and improvement of global biodiversity utilisation, ecosystem services and existence values. Key globally threatened, endangered and endemic species and habitats conserved, improved and restored.	Maintenance of global wetland values, including the share of functional benefits that accrue to global communities. Risks of extinction of globally threatened, endangered and endemic species and habitats averted. Protection of ecosystem integrity, yielding global services. Global options to sustainably utilise and benefit from wetland species and areas kept open. Continued global existence values.
Domestic benefits	Nationally and locally significant biodiversity of Lower Mekong Basin wetlands threatened by destruction and degradation of habitats, resource over-harvesting, insufficient protected areas, increase in alien invasive species and multiple threats to migratory species. Continued unsustainable exploitation of wetland resources, and implementation of water and land-based developments, which erode national and local biodiversity and ecosystem values. High and increasing economic costs associated with loss of wetland-based livelihoods, income, employment and contributions to national economic indicators; and with environmental damage caused by loss of wetland ecosystem services.	Nationally and locally significant biodiversity of Lower Mekong Basin Wetlands managed sustainably and used wisely, leading to the maintenance and improvement of domestic biodiversity utilisation, ecosystem services, option and existence values. Natural resource-based income and subsistence products sustainably harvested from wetlands, products and market bases improved and diversified. Wetland ecosystem benefits maintained and even improved. Implementation of sustainable water and land-based developments with necessary environmental mitigation measures.	Loss of direct and indirect benefits curbed, maintenance or improvement of on and off-site wetland values. Enhanced sustainable income, subsistence and employment opportunities for wetland residents, regional and national economies. Sustainable economic development opportunities from land and water-based developments.

COMPONENT 1: Improving capacity for bio-regional planning to rationalise biodiversity conservation and economic development in the Lower Mekong River Basin								
	BASELINE	**ALTERNATIVE STRATEGY**			**INCREMENT**			
	TOTAL	**TOTAL**	**PHASE A**	**PHASE B**		**TOTAL**	**PHASE A**	**PHASE B**
C1.1: Regional and national support structures for all project activities established and operational	Wetland management remains unco-ordinated at national and regional levels, national and regional institutions continue to lack wetland biodiversity focus and capacity.	PMU established and operational, co-ordinating project activities. Guidelines developed to promote management information exchange, technology transfer and mutual assistance projects between countries. Training programmes established, building capacity in wetland biodiversity management.			Increment	$4,852,100	$2,080,700	$2,771,400
					Of which:			
					GEF	$869,600	$261,400	$608,200
					Govts	$9,250	$6,500	$2,750
					Other donors	$3,973,250	$1,812,800	$2,160,450
	$5,903,218	**$10,755,318**	**$4,441,987**	**$6,313,331**				
C1.2: Regional networks of wetland specialists and managers developed to build upon and share wetland management experiences	No mechanisms, formal or informal, through which to share management experiences. Weak information and co-ordination in tackling regional threats and developing common approaches relating to wetland biodiversity.	Regional networks in place which improve regional co-ordination and information exchange, promote common approaches to identifying best management practices and to overcoming threats to wetland biodiversity.			Increment	$313,500	$126,750	$186,750
					Of which:			
					GEF	$227,500	$91,000	$136,500
					Govts	$10,000	$4,000	$6,000
					Other donors	$76,000	$31,750	$44,250
	$100,000	**$413,500**	**$166,750**	**$246,750**				
C1.3: Regional guiding principles developed for conservation of Lower Mekong Basin wetlands	Fragmented and unco-ordinated policy frameworks for wetland biodiversity conservation between Lower Mekong Basin states.	Regional guiding principles for key aspects of wetland conservation developed and endorsed by Lower Mekong states, and proposed as ASEAN Declaration.			Increment	$602,800	$343,520	$259,280
					Of which:			
					GEF	$0	$0	$0
					Govts	$4,000	$2,000	$2,000
					Other donors	$598,800	$341,520	$257,280
	$6,430,000	**$7,032,800**	**$2,915,520**	**$4,117,280**				
C1.4: Potential biological and ecological changes arising from alterations to the hydrological regime of the Lower Mekong Basin assessed	Continuing degradation of Lower Mekong wetland biodiversity due to poor information and awareness of biological and ecological impacts of dams.	Information provided on biological and ecological impacts of dams, appropriate measures to avoid or mitigate these are incorporated into national EIA guidelines and dam management procedures.			Increment	$1,000,000	$0	$1,000,000
					Of which:			
					GEF	$250,000	$0	$250,000
					Govts	$0	$0	$0
					Other donors	$750,000	$0	$750,000
	$620,000	**$1,620,000**	**$248,000**	**$1,372,000**				
C1.5: Ramsar Convention supported throughout the region	Ramsar remains unratified in Lao PDR. In other countries, weak implementation of the Convention and its workplans, especially wetland biodiversity conservation and wise use. Little regional co-ordination in matters relating to Ramsar aims and principles.	Lao PDR ratifies Ramsar Convention. In all countries Ramsar authorities reinforced as focal points for wetland issues, working closely with Mekong Committees and with other sectors, and provide support to fostering regional perspectives and liason in wetland biodiversity management.			Increment	$184,800	$76,000	$108,800
					Of which:			
					GEF	$0	$0	$0
					Govts	$38,800	$18,400	$20,400
					Other donors	$146,000	$57,600	$88,400
	$84,870	**$269,670**	**$109,948**	**$159,722**				

C1.6: Tools developed and used to integrate wetland biodiversity considerations into development planning	Unco-ordinated planning and increasing development pressure continue to result in the extinction of globally signficant and threatened species. Regional, national and provincial development plans (including MRCS BDP) omit consideration of wetland biodiversity.	Biodiversity overlays developed for critical species and groups, feeding into existing regional, national and provincial development plans. Regional species action plans and trans-boundary, sub-regional action plan demonstrated for wetland biodiversity of key global significance			Increment *Of which:* GEF Govts Other donors	$1,643,600 $1,091,600 $16,000 $536,000	$130,000 $33,333 $0 $96,667	$1,513,600 $1,058,267 $16,000 $439,333
	$1,958,667	**$3,602,267**	**$913,467**	**$2,688,800**				
C1.7: Wetland biodiversity assessment and training tools produced for Lower Mekong Basin	Poor information base, and paucity of biodiversity information and training tools, hinder the identification of global priorities and act as barrier to implementing good management, effective species and ecosystem conservation, and sound development planning.	Regional standards for the classification and assessment of wetland ecosystems developed, published and disseminated.			Increment *Of which:* GEF Govts Other donors	$148,750 $110,000 $5,000 $33,750	$98,750 $60,000 $5,000 $33,750	$50,000 $50,000 $0 $0
	$187,933	**$336,683**	**$173,923**	**$162,760**				
C1.8: Regional Red Data Book of threatened plants and animals published	Lack of policy and awareness tools with which to highlight the plight of globally threatened wetland species.	Development, publication and dissemination of Regional Red Data Book of threatened wetland animal and plant species, indentifying threats and providing regional priorities and directions for action.			Increment *Of which:* GEF Govts Other donors	$198,650 $0 $4,000 $194,650	$151,900 $0 $4,000 $147,900	$46,750 $0 $0 $46,750
	$436,000	**$634,650**	**$326,300**	**$308,350**				
C1.9: Regional initiative to address the potential impacts of invasive fish alien species	Invasive fish species continue to be introduced into Lower Mekong, posing a threat to indigenous wetland biodiversity.	Development of native species aquactulture, determination of impacts of escape of alien species and response strategy. Awareness of these issues raised through provision of education and training materials.			Increment *Of which:* GEF Govts Other donors	$170,350 $162,975 $7,375 $0	$0 $0 $0 $0	$170,350 $162,975 $7,375 $0
	$2,600,000	**$2,770,350**	**$1,040,000**	**$1,730,350**				
C1.10: Wetland biodiversity conservation issues, including illegal trade in wetland species, integrated into existing regional training initiatives	MRC and other regional training programmes continue to omit consideration of wetland biodiversity issues. Globally significant biodiversity continues to be threatened by illegal trade in wetland plant and animal species.	Integration of wetland biodiversity concerns into existing regional training initiatives, including training aimed at countering the trade in endangered wetland species.			Increment *Of which:* GEF Govts Other donors	$676,900 $648,900 $28,000 $0	$0 $0 $0 $0	$676,900 $648,900 $28,000 $0
	$6,933,000	**$7,609,900**	**$2,773,200**	**$4,836,700**				
SUB-TOTAL 1	**$25,253,688**	**$35,045,138**	**$13,109,095**	**$21,936,043**		**$9,791,450**	**$3,007,620**	**$6,783,830**

COMPONENT 2: Strengthening national capacity for conservation and sustainable human development of wetlands								
	BASELINE	**ALTERNATIVE STRATEGY**			**INCREMENT**			
	TOTAL	**TOTAL**	**PHASE A**	**PHASE B**		**TOTAL**	**PHASE A**	**PHASE B**
C2.1: Cross-sectoral policy analysis and formulation of recommendations for wetland management	Impacts of macroeconomic and sectoral policies on wetland biodiversity poorly understood, policies continue to provide disincentives and perverse incentives encouraging wetland biodiversity degradation, few positive incentives for wetland biodiversity conservation and wise use.	Cross-sectoral review of policy impacts on wetland biodiversity carried out in each country and at regional level, identifying negative impacts and proposing niches for the introduction of positive instruments.			Increment	$467,600	$294,000	$173,600
					Of which:			
					GEF	$0	$0	$0
					Govts	$10,500	$6,050	$4,450
					Other donors	$457,100	$287,950	$169,150
	$250,000	**$717,600**	**$394,000**	**$323,600**				
C2.2: Wetland Action Plans developed in all four countries	Wetland Action Plans remain weak, undeveloped or unimplemented. Poor national frameworks for the co-ordination of actions for wetland conservation and wise use.	Wetland Action Plans finalised in Cambodia, Lao PDR, Thailand and Vietnam, and endorsed at senior government levels.			Increment	$1,414,200	$806,000	$608,200
					Of which:			
					GEF	$283,200	$231,000	$52,200
					Govts	$474,800	$186,400	$288,400
					Other donors	$656,200	$388,600	$267,600
	$4,513,574	**$5,927,774**	**$2,611,430**	**$3,316,345**				
C2.3: Changes in policy to favour wetland biodiversity resulting from increased understanding of wetland issues by senior decision-makers	Policies and action plans, and the decision-makers who develop and implement them, continue to omit consideration of wetland biodiversity issues.	Awareness creation workshops for sectoral decision-makers and policy-makers at national and Provincial levels.			Increment	$221,000	$100,500	$120,500
					Of which:			
					GEF	$47,000	$23,500	$23,500
					Govts	$8,000	$4,000	$4,000
					Other donors	$166,000	$73,000	$93,000
	$305,333	**$526,333**	**$222,633**	**$303,700**				
SUB-TOTAL 2	**$5,068,908**	**$7,171,708**	**$3,228,063**	**$3,943,645**		**$2,102,800**	**$1,200,500**	**$902,300**

COMPONENT 3: Ramsar wise use principles demonstrated using sustainable multiple-use activities at Stoeng Treng, Cambodia								
	BASELINE	**ALTERNATIVE STRATEGY**				**INCREMENT**		
	TOTAL	**TOTAL**	**PHASE A**	**PHASE B**		**TOTAL**	**PHASE A**	**PHASE B**
C3.1: Strengthened management of Stoeng Treng Ramsar Site through management planning and enforcement of policies	Weak policy and management implementation in Stoeng Treng, little information about critical species and areas and poor application of wise-use principles.	Recent survey and wetland inventory work built upon to identify critical habitats and species, and determine management requirements. Site boundaries marked and gazetted, zoning and management plan developed and implemented based on wise-use principles.			Increment	$1,543,150	$957,950	$585,200
					Of which:			
					GEF	$1,474,400	$930,450	$543,950
					Govts	$68,750	$27,500	$41,250
					Other donors	$0	$0	$0
	$1,154,959	**$2,698,109**	**$1,419,934**	**$1,278,175**				
C3.2: Reduction of unsustainable practicesat Stoeng Treng Ramsar Site through community outreach and environmental education	Continued lack of understanding of site values and uniqueness, and unsustainable use of resources, by surrounding commuinities.	Innovative and participatory community outreach and environmental education, highlighting values of site and needs for sustainable resource use.			Increment	$488,700	$275,133	$213,567
					Of which:			
					GEF	$0	$0	$0
					Govts	$29,750	$11,900	$17,850
					Other donors	$458,950	$263,233	$195,717
	$447,241	**$935,941**	**$454,030**	**$481,911**				
C3.3: Replacement of unsustainable resource use at Stoeng Treng Ramsar Site through community involvement in resource management and use	Continuation of unsustainable resource use by local residents.	Initiatives to replace unsustainable resource use and to modify existing livelihood patterns.			Increment	$135,000	$54,000	$81,000
					Of which:			
					GEF	$0	$0	$0
					Govts	$22,500	$9,000	$13,500
					Other donors	$112,500	$45,000	$67,500
	$364,371	**$499,371**	**$199,748**	**$299,622**				
C3.4: Community-based conservation and sustainable use of wetland biodiversity products in Stoeng Treng Ramsar Site	Wetland NTFPs continue to be depleted through unsustainable use and through management strategies which are not based on community participation and gain.	Development of pilot projects in Stoeng Treng based on sustainable maximisation of community NTFP values under participatory management regimes, and extension of these activities and information to other wetland areas in Cambodia.			Increment	$625,000	$250,000	$375,000
					Of which:			
					GEF	$100,000	$100,000	$0
					Govts	$0	$0	$0
					Other donors	$525,000	$150,000	$375,000
	$438,741	**$1,063,741**	**$425,497**	**$638,245**				
C3.5: Economic value of wetland functions and products in Stoeng Treng Ramsar Site articulated and used to identify finance and incentives for conservation and wise use	Continued low appreciation of wetland economic values, and poor integration into development and conservation decisions, at site, national and regional levels. Weak economic incentives or funding base for wetland biodiversity conservation.	Articulation of economic value of wetland goods and services in Stoeng Treng and identification of economic incentives and innovative financing mechanisms for wetland management, extension to other wetland areas in Cambodia and incorporation into macreconomic and sectoral policy and practice.			Increment	$155,050	$70,025	$85,025
					Of which:			
					GEF	$78,750	$31,875	$46,875
					Govts	$5,250	$2,625	$2,625
					Other donors	$71,050	$35,525	$35,525
	$54,500	**$209,550**	**$91,825**	**$117,725**				
C3.6: Wetland biodiversity conservation training programmes	Poor capacity to undertake effective wetland biodiversity conservation among site	Targeted training of site and national wetland managers, policy-makers and decision-makers			Increment	$342,875	$169,656	$173,219
					Of which:			

operating at Stoeng Treng Ramsar Site	managers, national policy-makers and decision-makers. **$76,333**	in key aspects of wetland management and wise use. **$419,208**	**$150,190**	**$269,019**	GEF Govts Other donors	$202,375 $12,000 $128,500	$126,356 $4,800 $38,500	$76,019 $7,200 $90,000
C3.7: Dissemination of results and lessons learned	Little information on policy and practical aspects of wetland management in Lower Mekong Basin. Project does not exist to generate, apply or disseminate best practices, experiences and lessons learned. **$0**	Project generates applied, policy-relevant experiences and information and disseminates these to wide audience of wetland managers, decision-makers and policy-makers at local, national, regional and international levels. **$172,500**	**$69,000**	**$103,500**	Increment *Of which:* GEF Govts Other donors	$172,500 $161,500 $11,000 $0	$69,000 $64,600 $4,400 $0	$103,500 $96,900 $6,600 $0
SUB-TOTAL 3	**$2,536,146**	**$5,998,421**	**$2,810,223**	**$3,188,198**		**$3,462,275**	**$1,795,765**	**$1,666,510**

COMPONENT 4: Provincial biodiversity planning demonstrated for wetlands in Attepeu Province, Lao PDR								
	BASELINE	**ALTERNATIVE STRATEGY**				**INCREMENT**		
	TOTAL	**TOTAL**	**PHASE A**	**PHASE B**		**TOTAL**	**PHASE A**	**PHASE B**
C4.1: Comprehensive inter-provincial wetland conservation strategy and action plan developed for Attepeu Province	Unco-ordinated development and conservation planning in Attepeu Province continues to threaten wetland biodiversity, wetlands remain unrepresented in protected areas.	Wetland strategy and action plan for Attepeu Province developed and implemented, protected areas expanded to include representative wetlands.			Increment	$1,470,450	$754,375	$716,075
					Of which:			
					GEF	$1,227,700	$565,775	$661,925
					Govts	$67,750	$27,100	$40,650
	$440,000	**$1,910,450**	**$930,375**	**$980,075**	Other donors	$175,000	$161,500	$13,500
C4.2: Support to natural resource management for development of sustainable livelihoods in the Xe Kong and Xe Pian plain	Provincial development and livelihood initiatives remain unlinked to conservation strategies, donor support continues to underemphasise wetland biodiversity utilisation and conservation.	Draft project proposal developed, as part of Provincial development plans and for submisssion to donors, emphaising sustainable resource management, biodiversity conservation and sustainable livelihoods in lowland areas of Champasak and Attepeu Provinces.			Increment	$814,750	$351,875	$462,875
					Of which:			
					GEF	$0	$0	$0
					Govts	$96,750	$38,700	$58,050
	$385,000	**$1,199,750**	**$505,875**	**$693,875**	Other donors	$718,000	$313,175	$404,825
C4.3: Provincial and local stewardship and community outreach programmes established for selected villages in Attepeu Province	Low awareness among residents and government officials of global biodiversity values in Attepeu Province, and weak community involvement in biodiversity decision-making and management.	Innovative and participatory community outreach and environmental education, highlighting values of site and needs for sustainable resource use and resulting in local stewardship programme.			Increment	$150,000	$15,000	$135,000
					Of which:			
					GEF	$0	$0	$0
					Govts	$0	$0	$0
	$275,000	**$425,000**	**$125,000**	**$300,000**	Other donors	$150,000	$15,000	$135,000
C4.4: Community-based conservation and sustainable use of wetland biodiversity products in Attepeu Province	Wetland NTFPs continue to be depleted through unsustainable use and through management strategies which are not based on community participation and gain.	Development of pilot projects in Attepeu based on sustainable maximisation of community NTFP values under participatory management regimes, and extension of these activities and information to other wetland areas in Lao PDR.			Increment	$625,000	$250,000	$375,000
					Of which:			
					GEF	$100,000	$100,000	$0
					Govts	$0	$0	$0
	$560,000	**$1,185,000**	**$474,000**	**$711,000**	Other donors	$525,000	$150,000	$375,000
C4.5: Economic value of wetland functions and products in Attepeu Province articulated and used to identify finance and incentives for conservation and wise use	Continued low appreciation of wetland economic values, and poor integration into development and conservation decisions, at site, national and regional levels. Weak economic incentives or funding base for wetland biodiversity conservation.	Articulation of economic value of wetland goods and services in Attepeu and identification of economic incentives and innovative financing mechanisms for wetland management, extension to other wetland areas in Lao PDR and incorporation into macreconomic and sectoral policy and practice.			Increment	$155,050	$70,025	$85,025
					Of which:			
					GEF	$121,300	$53,150	$68,150
					Govts	$5,250	$2,625	$2,625
	$54,500	**$209,550**	**$91,825**	**$117,725**	Other donors	$28,500	$14,250	$14,250
C4.6: Wetland biodiversity conservation training programmes	Poor capacity to undertake effective wetland biodiversity conservation among site	Targeted training of site and national wetland managers, policy-makers and decision-makers			Increment	$342,875	$169,656	$173,219
					Of which:			

operating at Attepeu Province	managers, national policy-makers and decision-makers.	in key aspects of wetland management and wise use.			GEF	$202,375	$126,356	$76,019
					Govts	$12,000	$4,800	$7,200
	$76,333	**$419,208**	**$150,190**	**$269,019**	Other donors	$128,500	$38,500	$90,000
C4.7: Dissemination of results and lessons learned	Little information on policy and practical aspects of wetland management in Lower Mekong Basin. Project does not exist to generate, apply or disseminate best practices, experiences and lessons learned.	Project generates applied, policy-relevant experiences and information and disseminates these to wide audience of wetland managers, decision-makers and policy-makers at local, national, regional and international levels.			Increment	$172,500	$69,000	$103,500
					Of which:			
					GEF	$161,500	$64,600	$96,900
					Govts	$11,000	$4,400	$6,600
	$0	**$172,500**	**$69,000**	**$103,500**	Other donors	$0	$0	$0
SUB-TOTAL 4	**$1,790,833**	**$5,521,458**	**$2,346,265**	**$3,175,194**		**$3,730,625**	**$1,629,931**	**$2,100,694**

COMPONENT 5: Biodiversity conservation integrated into a semi-agricultural landscape through inter-provincial land-use planning, habitat rehabilitation and species reintroduction in the lower floodplain of the Lower Songkram Basin, Thailand								
	BASELINE	**ALTERNATIVE STRATEGY**				**INCREMENT**		
	TOTAL	**TOTAL**	**PHASE A**	**PHASE B**		**TOTAL**	**PHASE A**	**PHASE B**
C5.1: Integrated wetland protection demonstrated through the development of an integrated land-use plan for the lower Songkram Basin	Little information available on biology and ecology of Songkram floodplain, and weak protection of critical areas and species. **$7,099,526**	Development of land-use plan for Songkram floodplain, identifying biodiversity conservation areas and being used for zonation of land uses and conservation activities. **$8,391,476**	**$3,526,936**	**$4,864,541**	Increment *Of which:* GEF Govts Other donors	$1,291,950 $0 $144,250 $1,147,700	$687,125 $0 $57,700 $629,425	$604,825 $0 $86,550 $518,275
C5.2: Biodiversity values of degraded habitats rehabilitated through implementation of restorative measures and development of selective species re-introduction programmes in the lower Songkram Basin	Key habitats remain degraded in Songkram floodplain. **$2,366,509**	Key habitats rehabilitated, restored and sustainably utilised, emphasising community participation and gain. **$2,466,509**	**$946,604**	**$1,519,905**	Increment *Of which:* GEF Govts Other donors	$100,000 $0 $0 $100,000	$0 $0 $0 $0	$100,000 $0 $0 $100,000
C5.3: Community involvement integrated into natural resource planning and management to redress unsustainable resource use in the lower Songkram Basin	Local communities continue to gain few tangible benefits from conservation, and have few incentives to conserve or sustainable use wetland resources. **$4,733,018**	Development of community-based management and utilisation plans, implementation and monitoring of these initiatives. **$5,251,468**	**$2,084,432**	**$3,167,036**	Increment *Of which:* GEF Govts Other donors	$518,450 $0 $51,550 $466,900	$191,225 $0 $20,700 $170,525	$327,225 $0 $30,850 $296,375
C5.4: Reduction of unsustainable practices through education and awareness-raising in the lower Songkram Basin	Low awareness among residents and government officials of global biodiversity values in Songkram floodplain, and weak community involvement in biodiversity decision-making and management. **$5,916,272**	Innovative and participatory community outreach and environmental education, highlighting values of site and needs for sustainable resource use. **$6,340,222**	**$2,553,734**	**$3,786,488**	Increment *Of which:* GEF Govts Other donors	$423,950 $0 $51,550 $372,400	$187,225 $0 $20,600 $166,625	$236,725 $0 $30,950 $205,775
C5.5: Community-based conservation and sustainable use of wetland biodiversity products in the lower Songkram Basin	Wetland NTFPs continue to be depleted through unsustainable use and through management strategies which are not based on community participation and gain. **$3,549,763**	Development of pilot projects in Songkram based on sustainable maximisation of community NTFP values under participatory management regimes, and extension of these activities and information to other wetland areas in Thailand. **$4,174,763**	**$1,669,905**	**$2,504,858**	Increment *Of which:* GEF Govts Other donors	$625,000 $0 $0 $625,000	$250,000 $0 $0 $250,000	$375,000 $0 $0 $375,000

C5.6: Economic value of wetland functions and products in the lower Songkram Basin articulated and used to identify finance and incentives for conservation and wise use	Continued low appreciation of wetland economic values, and poor integration into development and conservation decisions, at site, national and regional levels. Weak economic incentives or funding base for wetland biodiversity conservation.	Articulation of economic value of wetland goods and services in Songkram and identification of economic incentives and innovative financing mechanisms for wetland management, extension to other wetland areas in Thailand and incorporation into macreconomic and sectoral policy and practice.			Increment	$159,550	$72,275	$87,275
					Of which:			
					GEF	$0	$0	$0
					Govts	$7,500	$3,750	$3,750
	$54,500	**$214,050**	**$94,075**	**$119,975**	Other donors	$152,050	$68,525	$83,525
C5.7: Wetland biodiversity training operating in the lower Songkram Basin	Poor capacity to undertake effective wetland biodiversity conservation among site managers, national policy-makers and decision-makers.	Targeted training of site and national wetland managers, policy-makers and decision-makers in key aspects of wetland management and wise use.			Increment	$354,125	$142,156	$211,969
					Of which:			
					GEF	$0	$0	$0
					Govts	$12,000	$4,800	$7,200
	$76,333	**$430,458**	**$172,690**	**$257,769**	Other donors	$342,125	$137,356	$204,769
C5.8: Dissemination of results and lessons learned	Little information on policy and practical aspects of wetland management in Lower Mekong Basin. Project does not exist to generate, apply or disseminate best practices, experiences and lessons learned.	Project generates applied, policy-relevant experiences and information and disseminates these to wide audience of wetland managers, decision-makers and policy-makers at local, national, regional and international levels.			Increment	$172,500	$69,000	$103,500
					Of which:			
					GEF	$0	$0	$0
					Govts	$11,000	$4,400	$6,600
	$0	**$172,500**	**$69,000**	**$103,500**	Other donors	$161,500	$64,600	$96,900
SUB-TOTAL 5	**$23,795,921**	**$27,441,446**	**$11,117,375**	**$16,324,072**		**$3,645,525**	**$1,599,006**	**$2,046,519**

COMPONENT 6: Conservation and sustainable human development in the Plain of Reeds, Vietnam								
	BASELINE	**ALTERNATIVE STRATEGY**				**INCREMENT**		
	TOTAL	**TOTAL**	**PHASE A**	**PHASE B**		**TOTAL**	**PHASE A**	**PHASE B**
C6.1: Protected Area site management plans developed and implemented for Tram Chim National Park and Lang Sen Reserve	No effective management plan for Tran Chim and Lang Sen in place. **$47,171,429**	Development and implementation of comprehensive management/zonation plans for Tram Chim and Lang Sen, training of staff in operational issues. **$48,622,679**	**$19,761,671**	**$28,861,007**	Increment *Of which:* GEF Govts Other donors	$1,451,250 $1,141,500 $22,250 $287,500	$893,100 $623,700 $8,900 $260,500	$558,150 $517,800 $13,350 $27,000
C6.2: Ecotourism programme operating in the Plain of Reeds	Ecotourism plans for Plain of Reeds remain unimplemented or weakly implemented with poor consideration of needs for community participation and biodiversity conservation. **$0**	Ecotourism plans further developed and implemented for Plain of Reeds, incorporating conservation and community needs, and including interpretation centre and hotel accommodation. **$4,600,121**	**$1,891,454**	**$2,708,668**	Increment *Of which:* GEF Govts Other donors	$4,600,121 $19,000 $3,115,250 $1,465,871	$1,891,454 $7,600 $1,246,100 $637,754	$2,708,668 $11,400 $1,869,150 $828,118
C6.3: Outreach and environmental education programme operating for local communities in the Plain of Reeds	Continued lack of understanding of site values and uniqueness, and unsustainable use of resources, by surrounding commuinities. **$925,127**	Innovative and participatory community outreach and environmental education, highlighting values of site and needs for sustainable resource use. **$1,404,177**	**$577,826**	**$826,351**	Increment *Of which:* GEF Govts Other donors	$479,050 $19,000 $6,250 $453,800	$207,775 $10,000 $2,500 $195,275	$271,275 $9,000 $3,750 $258,525
C6.4: Support for integrated farming practices in the Plain of Reeds	Initiatives to replant woodlands in Plain of Reeds are implemented, but contain weak consideration of ecological and conservation aspects. **$616,752**	Integration of ecological principles, and promotion of appropriate species and techniques, into woodland replanting initiatives. **$867,602**	**$352,376**	**$515,226**	Increment *Of which:* GEF Govts Other donors	$250,850 $0 $6,250 $244,600	$105,675 $0 $2,500 $103,175	$145,175 $0 $3,750 $141,425
C6.5: Community-based conservation and sustainable use of wetland biodiversity products in the Plain of Reeds	Wetland NTFPs continue to be depleted through unsustainable use and through management strategies which are not based on community participation and gain. **$1,233,503**	Development of pilot projects in Plain of Reeds based on sustainable maximisation of community NTFP values under participatory management regimes, and extension of these activities and information to other wetland areas in Vietnam. **$1,858,503**	**$743,401**	**$1,115,102**	Increment *Of which:* GEF Govts Other donors	$625,000 $100,000 $0 $525,000	$250,000 $100,000 $0 $150,000	$375,000 $0 $0 $375,000
C6.6: Economic value of wetland functions and products in the Plain of Reeds articulated and used to identify finance and incentives for conservation and wise use	Continued low appreciation of wetland economic values, and poor integration into development and conservation decisions, at site, national and regional levels. Weak economic incentives or funding base for wetland biodiversity conservation. **$54,500**	Articulation of economic value of wetland goods and services in Plain of Reeds and identification of economic incentives and innovative financing mechanisms for wetland management, extension to other wetland areas in Vietnam and incorporation into macreconomic and sectoral policy and practice. **$209,550**	**$91,825**	**$117,725**	Increment *Of which:* GEF Govts Other donors	$155,050 $123,550 $3,000 $28,500	$70,025 $54,275 $1,500 $14,250	$85,025 $69,275 $1,500 $14,250
C6.7: Wetland biodiversity	Poor capacity to undertake effective wetland	Targeted training of site and national wetland			Increment	$342,875	$187,656	$155,219

conservation training programmes operating at	biodiversity conservation among site managers, national policy-makers and decision-makers.	managers, policy-makers and decision-makers in key aspects of wetland management and wise use.			*Of which:*			
	$76,333	**$419,208**	**$168,190**	**$251,019**	GEF	$202,375	$126,356	$76,019
					Govts	$12,000	$4,800	$7,200
					Other donors	$128,500	$56,500	$72,000
C6.8: Dissemination of results and lessons learned	Little information on policy and practical aspects of wetland management in Lower Mekong Basin. Project does not exist to generate, apply or disseminate best practices, experiences and lessons learned.	Project generates applied, policy-relevant experiences and information and disseminates these to wide audience of wetland managers, decision-makers and policy-makers at local, national, regional and international levels.			Increment	$172,500	$69,000	$103,500
					Of which:			
					GEF	$161,500	$64,600	$96,900
					Govts	$11,000	$4,400	$6,600
	$0	**$172,500**	**$69,000**	**$103,500**	Other donors	$0	$0	$0
SUB-TOTAL 6	**$50,077,644**	**$58,154,340**	**$23,655,742**	**$34,498,598**		**$8,076,696**	**$3,624,685**	**$4,452,012**

TOTAL COST

	BASELINE	ALTERNATIVE STRATEGY			INCREMENT			
	TOTAL	**TOTAL**	**PHASE A**	**PHASE B**		**TOTAL**	**PHASE A**	**PHASE B**
	$108,523,140	**$139,332,512**	**$56,266,763**	**$83,065,749**	**Increment:**	**$30,809,371**	**$13,007,507**	**$17,801,864**
		Support:				(Excludes Development Phase)		
		$613,097	$259,209	$353,888	Support	$613,097	$259,209	$353,888
		Devt:			Development	$647,000		
		$647,000			**Total**	**$31,422,468**	**$13,266,716**	**$18,155,752**
		Total:				(Excludes Development Phase)		
		$140,553,608						
					Of which:			
					GEF	$9,287,600	$3,849,927	$5,437,673
					Support	$613,097	$259,209	$353,888
					Total	**$9,900,697**	**$4,109,136**	**$5,791,561**
						(Excludes Development Phase)		
					Co-finance:			
					Government	$4,411,575	$1,756,850	$2,654,725
					Other	$17,110,196	$7,400,730	$9,709,467
					Total	**$21,521,771**	**$9,157,580**	**$12,364,192**
						(Excludes Development Phase)		

ANNEX II : Logical Framework Analysis and Project Planning Matrix

Narrative description		Indicators	Means of verification	Assumptions
DEVELOPMENT OBJECTIVE: The conservation and sustainable use of biological diversity in the wetlands of the Lower Mekong River Basin				•
IMMEDIATE OBJECTIVE 1:	**To establish a multi-sectoral planning process operational at national and regional levels**			
Output 1.1:	Regional and national support structures for all project activities established and operational Activities 1.1.1-1.1.4	• Existence of effective and operational regional and national structures for project activities • PMU established and operational and integrated into existing regional institution • NPD and CTA recruited • Inception report produced • Inception workshop held • Guidelines developed • PSC meetings held twice yearly	✓ Signed contracts ✓ Project inception report ✓ Inception workshop reports ✓ Guidelines promoting management information exchange between the four project areas ✓ PMU minutes ✓ PSC minutes	☞ Project is able to be supported by the implementation framework ☞ Clear communication is able to be established between all project components ☞ CTA and NPDs are able to be identified in a timely manner ☞ Suitable staff are identified to fill all positions ☞ Office establishment and recruitment process completed in a timely manner ☞ Project Steering Committee attracts Senior National Government Officials ☞ Staff adhere to relevant guidelines
Output 1.2:	Regional networks of wetland specialists and managers developed to build upon and share wetland management experiences	• Regional network established and operational • Development of newsletters • Training activities conducted • Specialist technical workshops conducted • Exchange visits between the sites.	✓ Network members' list ✓ Network reports ✓ Network newsletter ✓ Meeting minutes ✓ Workshops conducted and evaluated ✓ Training activities operated and evaluated	☞ Language barriers do not limit effectiveness in cooperation ☞ Skills exist at the national levels for input into the specialist networks ☞ Common issues and problems can be identified within the 4 countries of the

Narrative description		Indicators	Means of verification	Assumptions
				region ☞ Effective communication mechanisms can be created with network members ☞ (Are there small grant schemes?). If so, skills exist to manage and implement small grant projects. ☞ Suitable support from external agencies is able to be identified
Output 1.5:	Ramsar Convention supported throughout the region	• Lao PDR ratifies Ramsar Convention • National Ramsar Committees or equivalents established and operating • All relevant senior policy and decision makers understand national commitments under the Ramsar convention • A list of sites representative of the range of wetland habitats in the Lower Mekong Basin identified • Regional and national attendance at Asian Regional Ramsar Convention meetings • Additional national sites are identified as suitable for listing under the Ramsar Convention • Effective participation of member countries at the meeting of contracting parties.	✓ Ramsar listings ✓ Country NRC reports to Ramsar Bureau ✓ Reports of other agencies ✓ Additional Ramsar site listed in each country ✓ Substantial Triennial National Reports to the Ramsar Convention meeting of contracting parties ✓ Committee meeting minutes	☞ National Ramsar Committees are able to be established ☞ Lao P.D.R. is willing to sign the Ramsar Convention ☞ National Wetland Units can be established in each country ☞ Governments are willing to list additional Ramsar sites
IMMEDIATE OBJECTIVE 2: To strengthen policy framework and macro-economic environment supportive of wetland biodiversity conservation and sustainable use				
Output 1.3:	Regional guiding principles developed for conservation of Lower Mekong Basin wetlands	• Draft guidelines prepared through a consultative process • Guiding principles on wetland conservation endorsed by Steering Committee	✓ Publications ✓ Reports on consultation ✓ Letters of endorsement ✓ Legal notice	☞ Agreement can be reached between the 4 countries on a set of regional guiding principles ☞ Countries agree that the

Narrative description		Indicators	Means of verification	Assumptions
		Committee • Guiding principles on wetland conservation endorsed by national governments • Guidelines presented to ASEAN for formal endorsement		principles should be endorsed through ASEAN ☞ ASEAN agrees that its role includes endorsement of the principles
Output 2.1:	Cross-sectoral policy analysis and formulation of recommendations for wetland management	• Policy analysis and recommendations published and disseminated • Analysis of sectoral policies relating to wetlands produced for each country • Recommendations	✓ Report published ✓ Workshop	☞ Governments are willing to allow analyses
Output 2.2:	Wetland Action Plans developed in all four countries	• Wetland Action Plan developed for Lao PDR. • Workshop to review the implementation of the NWAP in Cambodia • Edit NWAP Cambodia • NWAP developed for Vietnam • NWAP reviewed in Thailand	✓ Documents ✓ National meetings ✓ Letters of endorsement	☞ Governments agree to developing/reviewing NWAPs ☞ Governments will endorse NWAPs
Output 2.3:	Changes in policy to favour wetland biodiversity resulting from increased understanding of wetland issues by senior decision-makers	• Senior politicians and civil servants attend meetings • Provincial decision-makers attend meetings	✓ Seminar reports ✓ Background information ✓ Feedback from participants	☞ Cabinet ministers are interested and have time to attend meetings / seminars ☞ Information exchange occurs within national government ensure lessons learnt result in change in policies ☞ Appropriate senior civil servants can be identified ☞ Appropriate provincial staff participate in information sessions
IMMEDIATE OBJECTIVE 3: To generate and disseminate information about wetland functions and values to government decision-makers, managers, and resource-users of wetlands within the Lower Mekong River Basin				
Output 1.1:	Regional and national support structures for all project activities	• Project results and lessons learned disseminated nationally and	✓ Reports ✓ Newsletter and fact-	☞ Results of the project can be effectively disseminated

Narrative description		Indicators	Means of verification	Assumptions
	established and operational Activities 1.1.5-1.1.9	internationally • Awareness materials • Regular review of project activities	sheets ✓ Web-site ✓ Project M&E documentation ✓ Evaluation reports ✓ Project updates ✓ Awareness materials	☞ Results will promote a policy shift ☞ Lessons learnt can be incorporated into on-going project activities
Output 1.4:	Potential biological and economic changes arising from alterations to the hydrological regime of the Lower Mekong Basin assessed	• Biological and associated economic changes arising from potential hydrological alterations assessed and results included in future development plans • Results of assessment disseminated	✓ Research reports ✓ Study results	☞ A suitably experienced organization can be identified to complete tasks ☞ Outputs are produced in a timely manner
Output 1.6:	Tools developed and used to integrate wetland biodiversity considerations into development planning	• Biodiversity overlays produced and used by MRC in the BDP and WUP and by national planning agencies • ,Species action plans for 4 flagship species produced and used • Sub-regional biodiversity action plan for main river between Pakse and Kratjie produced and used	✓ Maps and GIS layers ✓ 4 species action plans ✓ 1 sub-regional biodiversity action plan	☞ Information base exists to develop bio-diversity overlays ☞ Skilled regional staff exist to prepare biodiversity overlays ☞ Agreement can be reached on regional priorities for conservation and protection ☞ Species action plans have full support of government
Output 1.7:	Wetland biodiversity assessment and training tools produced for the Lower Mekong Basin	• Five field guides published in five languages	✓ Publications	☞ Information can be translated ☞ Base-line information exists to develop guides
Output 1.8:	Regional Red List of threatened wetland plants and animals created and maintained	• Regional Red List created and published	✓ Publication	☞ Sufficient baseline information exists for the development of the Red List
Output 1.9:	Regional initiative to address the impacts of invasive fish species	• Biological and economic risks of fish introductions incorporated into decisions on aquaculture • Strategic response devised to negate damage from escapes • Awareness campaign	✓ Reports and notes ✓ Publications ✓ Recommendations ✓ Awareness materials	☞ National policies can be modified to limit culture of exotic species ☞ Sufficient information exists to develop case studies ☞ Awareness activities can be broad enough reach all levels

Narrative description	Indicators	Means of verification	Assumptions
Outputs 3.5, 4.5, 5.6, 6.6: Economic value of wetlands functions and products at [demonstration site] articulated and used to identify incentives and financing mechanisms for conservation and wise use	• Economic values calculated • Financial incentives and other mechanisms for wetland conservation identified	✓ Publications	☞ ICLARM project is developing outputs that are suitable for use in the project activities ☞ Recommendations will be acted upon ☞ Sufficient clarity is present in national policy for an analysis of perverse incentives
IMMEDIATE OBJECTIVE 4: To improve human and technical capacity to conserve wetland biodiversity better in the Lower Mekong Basin:			
Output 1.1: Regional and national support structures for all project activities established and operational Activities 1.1.10-1.1.19	• Senior management and training staff share similar vision and expectations of project goals • Training on International study tour • Operation of short "management" training courses • Operation of specific short "wetlands" training courses • Training needs understood and programme developed to meet needs • Training Needs Analysis report for each country • Consultations with each government • Comprehensive training programme designed • Four national wetland training teams competent in wetland issues, communication skills and English language • Development of regional and national teams for the implementation of training activities (4 National Teams and 1 Regional Team) • Specific training activities to build the skills of regional and national teams	✓ Written reports from all persons on course ✓ Evaluation of study tour ✓ Evaluation of short training courses ✓ TNA report ✓ Training plan ✓ TNA reports ✓ Comprehensive training programme document ✓ Eight fully-trained wetland trainers ✓ Reports ✓ Evaluation of specific training activities ✓ Review resource collections ✓ Evaluations of each training team ✓ Portable displays	☞ Training courses can be suitably tailored to meet the needs of the trainees ☞ All relevant staff are able to participate in training activities ☞ Language differences do not present a barrier in training activities ☞ Training needs are able to be clearly identified ☞ Institutional roles are responsibilities are clear ☞ Sufficient national and regional skills are available to provide inputs into the development of national TNA's ☞ Training courses can be suitably tailored to meet the needs of the trainees ☞ All relevant staff are able to participate in training activities ☞ Language differences do not present a barrier in training

Narrative description	Indicators	Means of verification	Assumptions
	• A information resource collection on wetland training and information in each country • Portable displays developed for each country		activities ☞ Teams have sufficient skills to develop displays ☞ Good communication is established between training teams
Output 1.10: Wetland biodiversity conservation issues including illegal trade in wetland species, integrated into existing regional training initiatives	• Wetland biodiversity conservation training and training materials provided for MRC BDP and WUP personnel and others as requested. • Specific training activities incorporated into other training courses • CITES administrative procedures and databases developed • Network of wildlife trade specialists supported • Training courses developed • Personnel trained in enforcement of wildlife trade controls, identification of species in trade, & systems for monitoring and recording data at provincial level. • Materials disseminated to raise awareness of seriousness of illegal wildlife trade at all levels from decision-makers to consumers.	✓ Training course write-ups ✓ Correspondence ✓ Reports ✓ Evaluation of training ✓ Databases ✓ Network members' list ✓ Training course reports ✓ Awareness materials ✓ Evaluation of trainers ✓ Delivery of training courses ✓ Evaluation of cross-border trade	☞ wetland biodiversity conservation is considered as relevant to incorporate to training ☞ Good links and cooperation can be established with the other programmes ☞ Suitable materials can be developed ☞ Government legislation protects against cross-border trade ☞ Government is able to enforce laws relating to wildlife trade ☞ Increasing awareness is able to change behaviour of enforcement officials at border check points
Outputs 3.6, 4.6, 5.7, and 6.7: National wetland biodiversity conservation training programmes operating at [demonstration site]	• Personnel identified in TNA receiving appropriate training in their national languages • Regional training courses • National training courses • Review of training courses	✓ Training course write-ups ✓ Minutes of twice-yearly training team meetings ✓ Evaluation of each training course ✓ Review of the effectiveness of the training courses	☞ Training courses are the most effective way to deliver training ☞ Training courses are appropriately designed ☞ Appropriate trainees can be identified
IMMEDIATE OBJECTIVE 5: To improve community-based natural resource management at wetlands within the Lower Mekong River Basin			
Output 3.1: Strengthened management of Stoeng	• Management plan for Stoeng Treng	✓ Management plan	☞ Boundaries can be agreed

Narrative description		Indicators	Means of verification	Assumptions
	Treng Ramsar site through management planning and enforcement of policies	produced and implemented • Enforcement measures operating • Habitat maps • Increased numbers of wildlife • Management plan	✓ Project reports ✓ External reviews ✓ Boundaries of sites marked ✓ Habitat maps ✓	upon by all agencies ☞ Management plan is agreed upon by all agencies ☞ Agencies are willing to comply with the management plan ☞ Management plan is enforced by relevant agencies ☞ Enough information exists to develop management plan
Output 3.2:	Reduction of unsustainable practices through community outreach and environmental education programmes	• A floating environmental education unit operating an education programme and disseminating education and awareness materials on the values and threats to the area. • Establishment of an education and awareness team • Village information boards established and operational	✓ Floating education centre ✓ Education and awareness materials ✓ Project reports ✓ Reduced number of illegal activities	☞ Local people are willing to participate in environmental education activities ☞ Education activities are targeted at the appropriate levels ☞ Education components are supported by the province
Output 3.3:	Replacement of unsustainable resource use through community involvement in resource management and use	• Livelihood patterns modified through consultations • Organisational capacity of local communities built to assist in developing and implementing management plans • Local communities' fisheries management plans developed • Current local groups' initiatives supported • Communities encouraged to work with the authorities to boost initiatives over illegal hunting and fishing	✓ Support by government for initiatives ✓ Structures established for community management ✓ Minutes of meetings ✓ Local management plans for species/ habitats ✓ Rules for resource management	☞ Local people are willing to participate in project activities ☞ Acceptable partner agency is identified to facilitate the process ☞ Local people are involved in the management planning process. ☞ Community management regimes are supported by the government ☞ Local initiatives are able to be identified and supported ☞ Powerful economic forces are willing to participate in project activities

Narrative description		Indicators	Means of verification	Assumptions
Outputs 3.4, 4.4, 5.5, and 6.5:	Community-based conservation and sustainable use of wetland biodiversity products in the four demonstration sites	• Integrated Natural Resource Management Plans prepared and implemented • Group of skilled conservation workers trained and in action • Fund for village conservation programmes established • Alternative local livelihoods developed • Marketing analysis undertaken for selected products • Village-level saving and micro-credit programme established	✓ INRM Plan ✓ Training reports ✓ Bank accounts ✓ New enterprises ✓ Marketing analysis reports ✓ Micro-credit scheme	☞ Co-finance is secured from Care International ☞ Local govts. approves INRM Plans ☞ Govts. approve establishment of village conservation funds and micro-credit schemes ☞ Communities can provide personnel for training ☞ Market for wetland products exists
Output 4.1:	Comprehensive provincial wetland conservation strategy and action plan developed Attepeu Province	• comprehensive wetland strategy and action plan developed identifying wetland conservation and management intervention priorities throughout the province • Site management plans developed for priority sites (max. 5)	✓ Provincial plan ✓ Site management plans ✓ Project reports	☞ There are enough skilled staff in the province to undertake provincial level planning ☞ Planning models can be incorporated into the provincial planning process ☞ Wetland values and functions are recognized as important by provincial authorities ☞ Provinces are not responsible for decisions regarding large infrastructure projects within the province ☞ Provincial planning models can be incorporated into the national planning process ☞ Site management plans are able to be developed and implemented with support from all stakeholders
Output 4.2:	Support to natural resource management for development of	• Livelihood initiatives developed in association with DANIDA	✓ DANIDA documentation	☞ Danida support is able to be integrated into meeting

Narrative description		Indicators	Means of verification	Assumptions
	sustainable livelihoods in the Xe Kong and Xe Pian Plain			project objectives
Output 4.3:	Provincial and local stewardship and community outreach programmes established	• Local stewardship programme established encouraging local people to act as "stewards" for wetlands focussing on fish and amphibians. • Community outreach programme operating developing educational materials based on communities' existing beliefs	✓ Local resource use plan ✓ Awareness and education materials	☞ Local people are willing to participate in management of the sites and in the "stewardship programme" ☞ There are local people with established community structures living close to sites ☞ Interventions are able to be agreed upon between the province and local communities ☞ Government policies support the participation of local people in site management
Output 5.1:	Integrated wetland protection demonstrated through development of an integrated land use plan	• Process defined • Establishment of working group • Maps of habitats produced • Hydrology described • Inter-sectoral meetings and agreement • Pollutions sources identified and amelioration measures identified • Production of the land-use plan	✓ Project documentation ✓ Minutes of meetings ✓ Maps ✓ Reports ✓ Minutes of meetings ✓ Technical reports ✓ Land-use plan	☞ Co-finance is secured ☞ A suitable coordination mechanism to be identified ☞ Suitable national consultants can be identified ☞ The process is agreed upon by all stakeholders ☞ The large dam on the river does not go ahead ☞ Modification of the hydrology is agreed upon by relevant agencies ☞ The plan can be agreed upon by all stakeholders
Output 5.2:	Biodiversity values of degraded habitats improved through implementation of restorative measures and development of selective species re-introduction programmes	• Identification restoration sites • Plans and guidelines developed for the management of specific habitats • Specific plans developed for restoration and re-introduction of species • Implementation of specific	✓ Technical reports ✓ Minutes of meetings ✓ Plans and guidelines for management of specific habitats ✓ Habitat restoration (trees	☞ Co-finance is secured ☞ Sufficient land is available for project activities ☞ Priority sites are able to be identified ☞ Legal protection can be

Narrative description		Indicators	Means of verification	Assumptions
		management activates	planted or habitats protected) ✓ Number of reintroduced species able to re-establish viable populations	afforded to sites to undertake restorative measures ☞ Species re-introduction is feasible ☞ Line agencies have technical skills to complete components ☞ Communities will support restoration and re-introduction measures
Output 5.3:	Community involvement integrated into natural resource planning and management to redress unsustainable resource use	• Building of local community organizations to participate in project • Community based fisheries plans in selected areas • Local management plans for specific areas (link with 5.3) • Local initiatives for conservation-based micro-projects supported	✓ Report on assessment of community capacity to implement activities ✓ Technical reports ✓ Fisheries plans ✓ Management plans for community implementation ✓ Evaluation of micro-projects	☞ Co-finance is secured ☞ Communities organizations exists to participate in the process ☞ Communities willing to participate in process ☞ Government supportive of community initiatives ☞ Locations can be identified to develop community based fisheries management ☞ Suitable conservation-based micro-projects can be identified
Output 5.4:	Reduction of unsustainable practices through education and awareness-raising	• Radio shows • Newsletters • Education and awareness materials • Level of community awareness of initiatives	✓ Materials produced ✓ Level of community awareness of initiatives ✓ Questionnaires and surveys	☞ Co-finance is secured ☞ Local people are interested in the management of the Songkram River ☞ Awareness materials are carefully targeted ☞ Local authorities support the initiatives
Output 6.1:	Protected Area site management plans developed and implemented for Tram Chim National Park and Lang Sen	• Management plan produced and implemented Habitat maps produced • Species management plans developed • Consultation process for development of management plan	✓ Habitat maps ✓ Species management plans ✓ Minutes of meetings and discussions	☞ Agreement can be reached on management plans ☞ Provincial authorities understand the importance of managing Tram Chim for

Narrative description		Indicators	Means of verification	Assumptions
		development of management plan • Management plan developed • Annual work plans • Ranger training	discussions ✓ Site management plans ✓ Annual work plans ✓ Evaluation of annual work plans ✓ Ranger training materials	biodiversity conservation ☞ Structures exist in which to develop management strategies ☞ Local concerns can be incorporated into management strategy ☞ Management strategy is supported by national policy framework
Output 6.2:	Eco-tourism programme in operation	• Infrastructure for eco-tourism established • Tourists visiting Plain of Reeds and generating income for local communities • Specific plans developed for the Ecotourism experience • Infrastructure developed for specific eco-tourism experiences • Charging system developed for eco-tourism • Local communities involved in the operation of eco-tourism activities • Local people feel involved in management of the site	✓ Infrastructure ✓ Community development schemes operating ✓ Training reports ✓ Ecotourism Plans ✓ Infrastructure for eco-tourism ✓ Charging system in operation ✓ Number of local people involved in operation of tourism activities ✓ Questionnaires and evaluation	☞ Tram Chim can be marketed as a tourist destination ☞ Government policies support local participation in tourism activities ☞ Transparent fund management system can be developed ☞ Government funds are available to support Tram Chim Investment Plan ☞ Sufficient local resource base is available to implement project activities
Output 6.3:	Outreach and environmental education programme operating for local communities	• Wetland awareness campaign operating in the two provinces • Materials developed to enhance the biology and geography curricula of provincial secondary schools • Increased understanding of importance of protection of site • Schools education materials developed • Environmental awareness programme developed • Environmental awareness materials	✓ Evaluation ✓ Schools Educational materials ✓ Environmental awareness programme document ✓ Environmental awareness materials ✓ Strategy paper for involvement of local people in management ✓ Review of community-based initiatives	☞ Government policy supports the involvement of local communities in management ☞ Schools education materials are able to be incorporated in school curriculum ☞ Community based initiatives are supported by government ☞ Environmental awareness materials and programmes lead to a change in behaviours of local

Narrative description	Indicators	Means of verification	Assumptions
	produced • Strategy developed for the involvement of local people in the management of the Plain of Reeds • Plans for specific community-based initiatives developed and implemented		stakeholders.
Output 6.4: Support for integrated farming practices through alternative livelihood programmes based on sustainable use of wetland resources	• Technical assistance provided to OXFAM poverty alleviation programme replanting Melaleuca woodlands around Tram Chim and Lang Sen	✓ Inter-agency correspondence and reports	☞ Oxfam activities are closely linked to project activities
PROJECT ACTIVITIES			
IMMEDIATE OBJECTIVE 1: To establish a multi-sectoral planning process operational at national and regional levels			
Output 1.1: Regional and national support structures for all project activities established and operational			
1.1.1: Establish a central Project Management Unit (PMU)			
1.1.2: Recruit RPD and CTA and hold inception mission to all sites. RPD and CTA prepare a full Inception Report with detailed, updated work plan and TOR for first year of inputs and activities. Hold Inception workshop.			
1.1.3: Develop guidelines to promote management information exchange, technology transfer and mutual assistance projects between and among the four project areas.			
1.1.4: Twice-yearly meetings of the Project Steering Committee to review and promote project findings and incorporate into policy proposals. The first meeting should take place along with the Inception Workshop.			
Output 1.2: Regional networks of wetland specialists and managers developed to build upon and share wetland management experiences			
1.2.1: Establishment of the networks			
1.2.2: Development of Network Action Plans			
1.2.3: Implementation of the Network Action Plans			
Output 1.5: Ramsar Convention supported throughout the region			
1.5.1: Support Lao in ratifying the Ramsar Convention			
1.5.2: Support a Sub-regional Ramsar Co-ordinator based in Phnom Penh to facilitate a regional perspective on wetland issues			
1.5.3: Support Ramsar Administrative Authority in each country to act as focal points for wetland issues			
1.5.4: Promote the establishment of National Ramsar Committees in each country			
1.5.5: List all demonstration sites as Ramsar sites by end of project			
IMMEDIATE OBJECTIVE 2: To strengthen policy framework and macro-economic environment supportive of wetland biodiversity conservation and sustainable use			
Output 1.3: Regional guiding principles developed for conservation of Lower Mekong Basin wetlands			
1.3.1: Develop draft guiding principles for wetland conservation			

Narrative description	Indicators	Means of verification	Assumptions
1.3.2: Consult with national governments to agree principles, legal language, and terminology and obtain endorsement			
1.3.3: Legalise principles through ASEAN Agreement			
Output 2.1: Cross-sectoral policy analysis and formulation of recommendations for wetland management			
2.1.1: Review of relevant sectoral policies			
2.1.2: Publication of threats, needs and opportunities analysis of policy impacts on wetland biodiversity			
2.1.3 Cross-sectoral national workshops held to disseminate and verify policy findings			
Output 2.2: Wetland Action Plans developed in all four countries			
2.2.1: National conference on Cambodia wetlands action plan			
2.2.2: Prepare revised document and submit to Cabinet of Ministers			
2.2.3: Draft outline for Lao Wetland Action Plan			
2.2.4: National conference on Lao wetlands action plan			
2.2.5: Prepare draft document and submit to Government			
2.2.6: Review Thai Wetland Action Plan			
2.2.7: National conference on wetlands action plan			
2.2.8: Draft recommendations for Govern ment			
2.2.9: National conference on Vietnam wetlands programme			
2.2.10: Prepare action plan and submit to Government			
2.2.11: Senior management team (RPD, NPD, NPC,D-NPD) to undertake a tailored short course on effective project management techniques			
2.2.12: National Project Directors and their deputies would continue specialist short-course training at selected wetland educational facilities and NGOs during the project lifetime			
Output 2.3: Changes in policy to better favour wetland biodiversity resulting from increased understanding of wetland issues by senior decision-makers			
2.3.1: Hold two national information seminars in each country for senior Cabinet Ministers and Civil Servants involved in decision-making involving wetlands and wetland issues.			
2.3.2: Hold two national information seminars in each country for senior Provincial politicians and civil servants involved in decision-making involving wetlands and wetland issues.			
IMMEDIATE OBJECTIVE 3: To generate and disseminate information about wetland functions and values to government decision-makers, managers, and resource-users of wetlands within the Lower Mekong River Basin			
Output 1.1: Regional and national support structures for all project activities established and operational			
1.1.5: Hold bi-annual staff exchange meetings.			
1.1.6: Establish project web-site.			
1.1.7: Produce copies of all project publications for MRCS and UNEP.			
1.1.8: Publish regional project newsletter in five languages and disseminate it.			
1.1.9: Publish regional project fact-sheets in five languages and disseminate them.			

Narrative description	Indicators	Means of verification	Assumptions
Output 1.4: Potential biological and economic changes arising from alterations to the hydrological regime of the Lower Mekong Basin assessed			
[Activities to be determined according to technical submission by successful tenderer]			
Output 1.6: Tools developed and used to integrate wetland biodiversity considerations into development planning			
1.6.1 : Undertake comprehensive analysis of current biodiversity information base to determine gaps and information needs			
1.6.2 : Assess and evaluate flagship biodiversity species and critical ecosystems and information gathering through local, provincial, and national networks			
1.6.3 : Formulate agreements on regional priorities for the conservation and protection of species groups and habitats through a consultative process			
1.6.4 : Develop draft biodiversity overlays for the Lower Mekong Basin.			
1.6.5 : Final biodiversity overlays endorsed by, and implemented through, MRCS, National, Provincial and local Governments			
1.6.6 : Develop an initial draft species action plans using biodiversity overlays			
1.6.7 : Undertake wide consultations to determine threats and countermeasures required.			
1.6.8 : Draft final species actions plans and endorse through regional workshop			
1.6.9 : Form working group and develop initial draft of sub-regional biodiversity action plan			
1.6.10: Develop final sub-regional biodiversity action plan through broad consultative process and endorse at bi-lateral workshop			
Output 1.7: Wetland biodiversity assessment and training tools produced for the Lower Mekong Basin			
1.7.1: Prepare field guides for higher plants, reptiles and amphibians, aquatic insects, crustacea, and molluscs			
1.7.2: Translate each guide into four languages			
1.7.3: Publish five field guides each in five languages (four national plus English)			
1.7.4: Distribute through the networks, web site, and other appropriate means			
1.7.5: Provide training in their use at each demonstration site			
Output 1.8: Regional Red Data Book of threatened wetland plants and animals created and maintained			
1.8.1: Selection of the criteria and categories of threat to be applied			
1.8.2: Production of the Book			
1.8.3: Publication in 5 languages and dissemination			
Output 1.9: Regional initiative to address the potential impacts of invasive alien fish species			
1.9.1: Review the number and scale of fish introductions throughout the Mekong River and the species involved			
1.9.2: Determine the potential impacts in the event of escape			
1.9.3: Develop a response strategy			
1.9.4: Raise awareness of the issues through provision of regional and national fora and education and training materials, particularly case studies			
Output 3.5: Economic value of wetlands functions and products at Stoeng Treng Ramsar Site articulated and used to identify incentives and financing mechanisms for conservation and wise use			
3.5.1: Conduct regional and national awareness and training workshops			
3.5.2: Carry out economic valuation studies at Stoeng Treng Ramsar Site			
3.5.3: Run dissemination workshop			

Narrative description	Indicators	Means of verification	Assumptions
3.5.4: Publish and disseminate results			
3.5.5: Pilot economic incentive and financial mechanism at Stoeng Treng Ramsar Site			
Outputs 4.5, 5.6, and 6.6 are identical to 3.5 above.			
Output 3.7: Dissemination of lessons learned			
3.7.1: Publish project newsletter in local language and disseminate it			
3.7.2: Publish project fact-sheets in local language and disseminate them			
Outputs 4.7, 5.8, and 6.8 are identical to 3.7 above.			
IMMEDIATE OBJECTIVE 4: To improve human and technical capacity to conserve wetland biodiversity better in the Lower Mekong Basin			
Output 1.1: Regional and national support structures for all project activities established and operational			
1.1.10: Initial consultations with team to determine level of skills and design of the training programme			
1.1.11: Study tour to a wetland internationally recognized as being managed according to best-practice (22 staff). (4 staff per country + 4 regional coordinators)			
1.1.12: Develop national and regional TNA's			
1.1.13: Design comprehensive training programme			
1.1.14: Specialist training for National and Regional Wetland Training Officers in the region (10 staff)			
1.1.15: Establishment of information and training materials resource base			
1.1.16: Development of portable displays to support training and awareness activities			
Output 1.10: Wetland biodiversity conservation issues including illegal trade in wetland species, integrated into existing regional training initiatives			
1.10.1: Recruit 3 project officers			
1.10.2: Develop administrative procedures and databases			
1.10.3: Development of awareness and educational activities			
1.10.4: Training activities for border controls			
1.10.5: Specialist inputs into training courses of other agencies			
1.10.6: Develop a network of wildlife trade specialists			
1.10.7: Undertake intra-regional exchange visits			
Output 3.6: Wetland biodiversity conservation training programmes operating in four countries			
3.6.1: Establishment of the training Team and functional units in each country			
3.6.2: Operation of regional training courses in selected subjects			
3.6.3: National training courses			
3.6.4: Review of training activities and incorporation of lessons learnt			
Outputs 4.6, 5.7, and 6.7 are identical to 3.6 above.			
IMMEDIATE OBJECTIVE 5: To improve community-based natural resource management at wetlands within the Lower Mekong River Basin			
Output 3.1: Strengthened management of Stoeng Treng Ramsar site through management planning and enforcement of policies			
3.1.1: Identify critical habitats and map resources			

Narrative description	Indicators	Means of verification	Assumptions
3.1.2: Identify species management requirements			
3.1.3: Review and mark boundaries of the site			
3.1.4: Develop management plan for the site according to the principles of wise-use			
3.1.5: Implement management activities			
3.1.6: Implement patrolling and enforcement			
3.1.7: Provide technical support to provincial planning initiatives			
Output 3.2: Reduction of unsustainable practices at Stoeng Treng Ramsar Site through community outreach and environmental education programmes			
3.2.1: Establish a team to conduct and develop education and awareness activities on the values of the site			
3.2.2: Develop focal points for the operation of education and awareness campaigns including the provision of village information boards, a park operations centre and a travelling education programme (boat)			
3.2.3: Produce education and awareness materials about the values of the site (videos, info sheets)			
Output 3.3 : Replacement of unsustainable resource use at Stoeng Treng Ramsar Site through community involvement in resource management and use			
3.3.1: Build local organisational capacity within the community to assist in planning for management activities			
3.3.2: Assist local communities to develop and implement plans for the management of critical habitats			
3.3.3: Develop fisheries management plans and rules for villages			
3.3.4: Support existing activities of government and local groups			
Output 3.4 : Community-based conservation and sustainable use of wetland biodiversity products at Stoeng Treng Ramsar Site			
3.4.1: Assist local organizations to prepare, implement and monitor an Integrated Natural Resource Management Plan at village level			
3.4.2: Facilitate government approval for secure land and resource tenure and/or usufruct rights of local people for implementation of the INRM Plan			
3.4.3: Develop a group of skilled workers for conservation and sustainable use of natural resources			
3.4.4: Establish a fund for long-term financial sustainability of village conservation programmes			
3.4.5: Develop appropriate alternative local livelihoods for cash incomes to reduce pressure on natural resources			
3.4.6: Undertake a marketing analysis and development of selected wetland NTFPs			
3.4.7: Establish a village-level saving and micro-credit programme for regenerating rural livelihoods			
Outputs 4.4, 5.5, and 6.5 are identical to 3.4 above.			
Output 4.1: Comprehensive provincial wetland conservation strategy and action plan developed for Attepeu Province			
4.1.1: Undertake desk study to collate all information on wetlands within Attepeu Province and identify gaps			
4.1.2: Undertake field studies and consultations to rectify gaps in knowledge of wetland biodiversity, threats, and planning proposals			
4.1.3: Produce maps as required by studies			
4.1.4: Draft strategy and action plan			
4.1.5: Undertake consultations on draft strategy and action plan			
4.1.6: Produce final documentation			
4.1.7: Develop management plans (max. 5) for most significant wetland areas			

Narrative description	Indicators	Means of verification	Assumptions
4.1.8: Implement management plans (max. 5) for most significant wetland areas			
Output 4.2: Support to natural resource management for development of sustainable livelihoods in the Xe Kong and Xe Pian Plain			
[Activities: Being developed by DANIDA mission, current at time of drafting]			
Output 4.3: Provincial and local stewardship and community outreach programmes established for selected villages in Attepeu Province			
4.3.1: Consult local communities and record traditional resource management techniques for up to five significant wetland areas as identified under Output 4.1			
4.3.2: Prepare and agree interventions for stewardship programmes for these wetland areas			
4.3.3: Implement interventions for stewardship programmes for these wetland areas			
4.3.4: Establish a team to conduct and develop education and awareness activities of the values of the wetlands of Attepeu Province			
4.3.5: Produce education and awareness materials			
4.3.6: Develop focal areas for the operation of education and awareness campaigns including the provision of village information boards, and a travelling education programme (boat)			
Output 5.1: Integrated wetland protection demonstrated through development of an integrated land-use plan for the Lower Songkram Basin			
5.1.1: Elaborate a process to develop an integrated land use plan through consultation with all stakeholders			
5.1.2: Identify habitats valuable for biodiversity and map resources			
5.1.3: Identify requirements for species management, species monitoring, restocking, and captive breeding			
5.1.4: Identify scheme for re-connecting isolated water bodies to mainstream flow			
5.1.5: Develop and implement pollution management measures in response to integrated plan			
Output 5.2: Biodiversity values of degraded habitats improved through implementation of restorative measures and development of selective species re-introduction programmes in the Lower Songkram Basin			
5.2.1: Based on the land-use plan select specific sites for restoration activities			
5.2.2: Develop specific management plans for selected sites			
5.2.3: Implement habitat restoration/conservation actions in the defined zones			
5.2.4: Species management: restocking, breeding and dissemination			
5.2.5: Mark boundary of the site/zone			
5.2.6: Patrolling and monitoring			
Output 5.3: Community involvement integrated into natural resource planning and management to redress unsustainable resource use in the Lower Songkram Basin			
5.3.1: Organise and build capacity of the community to participate in planning and management of natural resources			
5.3.2: Develop community-based fisheries plans for selected villages and seek enforcement of laws through national agencies			
5.3.3: Assist local communities to develop management plans for selected critical areas			
5.3.4: Support conservation-based micro projects by local groups			
Output 5.4: Reduction of unsustainable practices through education and awareness-raising in the Lower Songkram Basin			
5.4.1: Establish Education Awareness Team in collaboration with local NGOs			
5.4.2: Produce education and awareness materials			

Narrative description	Indicators	Means of verification	Assumptions
5.4.3: Develop channels for the dissemination of information, including strengthening the Boeng Khong Long information centre			
Output 6.1: Protected Area site management plans developed and implemented for Tram Chim National Park and Lang Sen Provincial Reserve			
6.1.1: Implement capacity building activities for provincial and district officials			
6.1.2: Identify key issues, goals, and objectives for site management			
6.1.3: Identify and map the habitat types			
6.1.4: Identify species management requirements, especially hydrology			
6.1.5: Develop specific management regimes for each habitat type			
6.1.6: Incorporate local community considerations and issues into the planning process			
6.1.7: Finalise management plan			
6.1.8: Develop and implement annual work plans from management plan			
6.1.9: Conduct ranger training programme			
Output 6.2: Eco-tourism programme in operating in the Plain of Reeds			
6.2.1: Provide advice and support in the realisation of Government's plans for visitor centre and associated tourism infrastructure			
6.2.2: In conjunction with relevant authorities, develop an eco-tourism plan for the Plain of Reeds			
6.2.3: Construct infrastructure for, and develop specific activities, according to the eco-tourism plan			
6.2.4: Involve local people in the management and execution of eco-tourism activities			
6.2.5: Develop charging system for eco-tourism activities which distributes funds back to local communities			
Output 6.3: Outreach and environmental education programme operating for local communities in the Plain of Reeds			
6.3.1: Develop a participation strategy for involving local communities in the management of the Plain of Reeds			
6.3.2: Develop schools' environmental education materials and integrate into the curriculum			
6.3.3: Develop environmental awareness and information materials on the functions and benefits of the Plain of Reeds			
6.3.4: Develop and implement specific community-based activities as identified in the participation strategy			
Output 6.4: Support integrated farming practices in the Plain of Reeds			
[Activities outlined by OXFAM]			

ANNEX III : Project Phasing

Because there is a need to secure global benefits at both the national and regional level, the programme will be implemented in two phases - Phase A, operating for two years, will establish demonstration conservation sites in each of the programme countries, and lay the groundwork for the development of mechanisms to promote regional cooperation. Phase B, operating for three years, will establish such regional cooperation mechanisms as a tool promoting sustainability of global benefits and increased replicability through information exchange and transfer of lessons learnt.

Implementation of phase B will be subject to approval by the GEF Council, based on an evaluation of progress made in phase A. The independent evaluation will utilize a combination of impact and process indicators to establish whether the enabling environment is suitable for implementation of phase B. The combination of impact and process indicators is necessary because assessing impact after a relatively short period of implementation of national activities will be difficult. Examples of indicators to be used in the evaluation of phase A are:

Impact indicators:

- Institutional arrangements are in place to allow local people to use and manage wetland resources in a sustainable manner
- Government accepts community management arrangements in wetlands
- MRC has recognized the need to take full cognisance of ecosystem functions and values in its core programmes
- Commitment exists to the need for regional wetlands conservation policy

Process indicators (from the logframe matrix):

- Analysis of sectoral policies relating to wetlands produced for each country
- Financial incentives and other mechanisms for wetland conservation identified
- Existence of effective and operational regional and national structures for project activities
- Project results and lessons learned disseminated nationally and internationally

Details of phased activities are given below, firstly by phase, and then in tabular form to provide an overview of the complete programme.

Activities

1.1.14. Phase A

1.1.14.1.1 Component 1

1.1.14.1.2 Improving capacity for bio-regional planning to rationalise biodiversity conservation and economic development in the Lower Mekong River Basin

1.1.14.1.3

Output 1.1:	***Regional and national support structures for all project activities established and operational***
A.1.1.1:	Establish a central Project Management Unit (PMU) and recruit staff.
A.1.1.2:	Hold inception mission to all sites. RPD and CTA prepare a full Inception Report with detailed, updated work plan and TOR for first year of inputs and activities. Hold Inception workshop.

A.1.1.3: Develop guidelines to promote management information exchange, technology transfer and mutual assistance projects between and among the four project areas.

A.1.1.4: Twice-yearly meetings of the Project Steering Committee to review and promote project findings and incorporate into policy proposals. The first meeting should take place along with the Inception Workshop.

A.1.1.5: Hold bi-annual staff exchange meetings.

A.1.1.6: Establish project web-site.

A.1.1.7: Publish regional project newsletter in five languages and disseminate it.

A.1.1.8: Publish regional project fact-sheets in five languages and disseminate them.

A.1.1.9: Initial consultations with team to determine level of skills and design of the training programme

A.1.1.10: Develop regional and country TNA's

A.1.1.11: Design comprehensive training programme

A.1.1.12: Specialist training for Country Wetland Training Officers in the region (10 staff)

A.1.1.13: Establishment of information and training materials resource base

A.1.1.14: Development of portable displays to support training and awareness activities

Output 1.2: ***Regional networks of wetland specialists and managers developed to build upon and share wetland management experiences***

A.1.2.1: Establishment of the networks

A.1.2.2: Development of Network Action Plans

Output 1.3: ***Regional guiding principles developed for conservation of Lower Mekong Basin wetlands***

A.1.3.1: Develop draft guiding principles for wetland conservation

A.1.3.2: Consult with national governments to agree principles, legal language, and terminology.

Output 1.4: ***Potential biological and economic changes arising from alterations to the hydrological regime of the Lower Mekong Basin assessed***

A.1.4.1: Design study in consultation with MRC-WUP and IUCN-Water and Nature Initiative

A.1.4.2: Develop tender documentation and submit study for tender.

Output 1.5: ***Ramsar Convention supported throughout the region***

A.1.5.1: Support Lao in deciding upon ratification of the Ramsar Convention

A.1.5.2: Provide a Sub-regional Ramsar Co-ordinator to facilitate a regional perspective on wetland issues

A.1.5.3: Support Ramsar Administrative Authority in each country to act as focal points for wetland issues

A.1.5.4: Promote the establishment of National Ramsar Committees in each country

Output 1.6: ***Tools developed and used to integrate wetland biodiversity considerations into development planning***

A.1.6.1: Undertake comprehensive analysis of current biodiversity information base to determine gaps and information needs

A.1.6.2: Assess and evaluate flagship biodiversity species and critical ecosystems and gather information through local, provincial, and national networks

Output 1.7: ***Wetland biodiversity assessment and training tools produced for the Lower Mekong Basin***

A.1.7.1: Prepare field guides for higher plants, reptiles and amphibians, aquatic insects, crustaceans, and molluscs

Output 1.8: ***Regional Red Data Book of threatened wetland plants and animals created and maintained***

A.1.8.1: Select the criteria and categories of threat to be applied

A.1.8.2: Prepare text in English
A.1.8.3: Publish and disseminate

1.1.14.1.4 Component 2

1.1.14.1.5 Strengthening national capacity for conservation and sustainable human development of wetlands

Output 2.1: ***Cross-sectoral policy analysis and formulation of recommendations for wetland management***

A.2.1.1: Review of relevant sectoral policies
A.2.1.2: Publication of threats, needs and opportunities analysis of policy impacts on wetland biodiversity

Output 2.2: ***Wetland Action Plans developed in all four countries***

A.2.2.1: Organise national conference on Cambodia wetlands action plan
A.2.2.2: Undertake review and prepare revised wetlands action plan and submit to Cambodian Cabinet of Ministers
A.2.2.3: Assist Government of Lao PDR to draft an outline for national wetlands action plan
A.2.2.4: Provide assistance, as appropriate, to Government of Thailand in its Review of the Thai Wetland Action Plan
A.2.2.5: National conference on Vietnam wetlands programme
A.2.2.6: Prepare wetlands action plan and submit to Government of Vietnam
A.2.2.7: Senior management team (RPD, NPD, NPC,D-NPD) to undertake a tailored short course on effective project management techniques

Output 2.3: ***Changes in policy to favour wetland biodiversity resulting from increased understanding of wetland issues by senior decision-makers***

A.2.3.1: Hold first of two national information seminars in each country for senior Cabinet Ministers and senior national Civil Servants involved in decision-making involving wetlands and wetland issues.

1.1.14.1.5.1 Component 3

1.1.14.1.5.2 Ramsar wise-use principles demonstrated using sustainable multiple -use activities at Stoeng Treng, Cambodia

Output 3.1: ***Strengthened management of Stoeng Treng Ramsar site through management planning and enforcement of policies***

A.3.1.1: Establish a Field Office and recruit staff
A.3.1.2: Identify critical habitats and map resources
A.3.1.3: Identify species management requirements
A.3.1.4: Review and mark boundaries of the site
A.3.1.5: Develop management plan for the site according to the principles of wise-use
A.3.1.6: Provide technical support to provincial planning initiatives

Output 3.2: ***Reduction of unsustainable practices at Stoeng Treng Ramsar Site through community outreach and environmental education programmes***

A.3.2.1:	Establish a team to conduct and develop education and awareness activities on the values of the site
A.3.2.2:	Develop focal points for the operation of education and awareness campaigns including the provision of village information boards, a park operations centre and a travelling education programme (boat)
A.3.2.3:	Produce education and awareness materials about the values of the site (videos, info sheets)

Output 3.3 :	***Replacement of unsustainable resource use at Stoeng Treng Ramsar Site through community involvement in resource management and use***
A.3.3.1:	Build local organisational capacity within the community to assist in planning for management activities
A.3.3.2:	Assist local communities to develop plans for the management of critical habitats
A.3.3.3:	Develop fisheries management plans and rules for villages
A.3.3.4:	Support existing activities of government and local groups

Output 3.4: Community-based conservation and sustainable use of wetland biodiversity products at Stoeng Treng Ramsar Site

A.3.4.1: Assist local organizations to prepare an Integrated Natural Resource Management Plan at village level

A.3.4.2: Facilitate government approval for secure land and resource tenure and/or usufruct rights of local people for implementation of the INRM Plan

A.3.4.3: Develop a group of skilled workers for conservation and sustainable use of natural resources

A.3.4.4: Establish meachanisms for long-term financial sustainability of village conservation programmes

A.3.4.5: Develop appropriate alternative local livelihoods for cash incomes to reduce pressure on natural resources

A.3.4.6: Undertake a marketing analysis of, and develop, selected wetland NTFPs

A.3.4.7: Establish a village-level saving and micro-credit programme for regenerating rural livelihoods

Output 3.5: Economic value of wetlands functions and products at Stoeng Treng Ramsar Site articulated and used to identify incentives and financing mechanisms for conservation and wise use

A.3.5.1: Conduct national awareness and training workshops

A.3.5.2: Carry out economic valuation studies at Stoeng Treng Ramsar Site

A.3.5.3: Run dissemination workshop

A.3.5.4: Publish and disseminate results

Output 3.6: ***Wetland biodiversity conservation training programmes operating at Stoeng Treng Ramsar Site***

A.3.6.1: Establishment of the training team and functional units in Cambodia

Output 3.7: ***Dissemination of lessons learned***

A.3.7.1: Publish project newsletter in Khymer and disseminate it

A.3.7.2: Publish project fact-sheets in Khymer and disseminate them

1.1.14.1.5.3 Component 4

1.1.14.1.5.4 Provincial biodiversity planning demonstrated for wetlands in Attepeu Province, Lao PDR

Output 4.1: Comprehensive provincial wetland conservation strategy and action plan developed for Attepeu Province

A.4.1.1: Establish a Field Office and recruit staff

A.4.1.2: Undertake desk study to collate all information on wetlands within Attepeu Province and identify gaps

A.4.1.3: Undertake field studies and consultations to rectify gaps in knowledge of wetland biodiversity, threats, and planning proposals

A.4.1.4: Produce maps as required by studies

A.4.1.5: Draft strategy and action plan

A.4.1.6: Undertake consultations on draft strategy and action plan

Output 4.2: ***Support to natural resource management for development of sustainable livelihoods in the Xe Kong and Xe Pian Plain***

Activities are being re-designed by formulation mission in November 2001

Output 4.3: ***Provincial and local stewardship and community outreach programmes established for selected villages in Attepeu Province***

A.4.3.1: Establish a team to conduct and develop education and awareness activities of the values of the wetlands of Attepeu Province

A.4.3.2: Produce education and awareness materials

A.4.3.3: Develop focal areas for the operation of education and awareness campaigns including the provision of village information boards

Output 4.4: ***Community-based conservation and sustainable use of wetland biodiversity products in Attepeu Province***

A.4.4.1: Assist local organizations to prepare an Integrated Natural Resource Management Plan at village level

A.4.4.2: Facilitate government approval for secure land and resource tenure and/or usufruct rights of local people for implementation of the INRM Plan

A.4.4.3: Develop a group of skilled workers for conservation and sustainable use of natural resources

A.4.4.4: Establish mechanisms for long-term financial sustainability of village conservation programmes

A.4.4.5: Develop appropriate alternative local livelihoods for cash incomes to reduce pressure on natural resources

A.4.4.6: Undertake a marketing analysis of, and develop, selected wetland NTFPs

A.4.4.7: Establish a village-level saving and micro-credit programme for regenerating rural livelihoods

Output 4.5: ***Economic value of wetlands functions and products in Attepeu Province articulated and used to identify incentives and financing mechanisms for conservation and wise use***

A.4.5.1: Conduct national awareness and training workshops

A.4.5.2: Carry out economic valuation studies in Attepeu Province

A.4.5.3: Run dissemination workshop

A.4.5.4: Publish and disseminate results

Output 4.6: ***Wetland biodiversity conservation training programmes operating in Attepeu Province***

A.4.6.1: Establishment of the training team and functional units in Lao PDR

Output 4.7: ***Dissemination of lessons learned***

A.4.7.1: Publish project newsletter in Lao and disseminate it

A.4.7.2: Publish project fact-sheets in Lao and disseminate them

1.1.14.1.5.5 Component 5

1.1.14.1.5.6 Biodiversity conservation integrated into a semi-agricultural landscape through inter-provincial land-use planning, habitat re habilitation, and species re-introduction in the lower floodplain of the Songkram Basin, Thailand

Output 5.1: ***Integrated wetland protection demonstrated through development of an integrated land use plan for the Lower Songkram Basin***

A.5.1.1: Establish a Field Office and recruit staff

A.5.1.2: Elaborate a process to develop an integrated land use plan through consultation with all stakeholders

A.5.1.3: Identify habitats valuable for biodiversity and map resources

A.5.1.4:	Identify requirements for species management, species monitoring, restocking, and captive breeding
A.5.1.5:	Identify scheme for re-connecting isolated water bodies to mainstream flow
A.5.1.6:	Develop an integrated land-use plan
Output 5.2:	***Biodiversity values of degraded habitats improved through implementation of restorative measures and development of selective species re-introduction programmes in the Lower Songkram Basin***
	All activities to be undertaken in Phase B
Output 5.3:	***Community involvement integrated into natural resource planning and management to redress unsustainable resource use in the Lower Songkram Basin***
A.5.3.1:	Organise and build capacity of the community to participate in planning and management of natural resources
A.5.3.2:	Develop community-based fisheries plans for selected villages
A.5.3.3:	Assist local communities to develop management plans for selected critical areas
Output 5.4:	***Reduction of unsustainable practices through education and awareness-raising in the Lower Songkram Basin***
A.5.4.1:	Establish Education Awareness Team in collaboration with local NGOs
A.5.4.2:	Produce education and awareness materials
A.5.4.3:	Develop channels for the dissemination of information
Output 5.5:	***Community-based conservation and sustainable use of wetland biodiversity products in the Lower Songkram Basin***
A.5.5.1:	Assist local organizations to prepare an Integrated Natural Resource Management Plan at village level
A.5.5.2:	Facilitate government approval for secure land and resource tenure and/or usufruct rights of local people for implementation of the INRM Plan
A.5.5.3:	Develop a group of skilled workers for conservation and sustainable use of natural resources
A.5.5.4:	Establish mechanisms for long-term financial sustainability of village conservation programmes
A.5.5.5:	Develop appropriate alternative local livelihoods for cash incomes to reduce pressure on natural resources
A.5.5.6:	Undertake a marketing analysis of, and develop, selected wetland NTFPs
A.5.5.7:	Establish a village-level saving and micro-credit programme for regenerating rural livelihoods
Output 5.6:	***Economic value of wetlands functions and products in the Lower Songkram Basin articulated and used to identify incentives and financing mechanisms for conservation and wise use***
A.5.6.1:	Conduct national awareness and training workshops
A.5.6.2:	Carry out economic valuation studies in the Lower Songkram Basin
A.5.6.3:	Run dissemination workshop
A.5.6.4:	Publish and disseminate results
Output 5.7:	***Wetland biodiversity conservation training programmes operating in the Lower Songkram Basin***
A.5.7.1:	Establishment of the training team and functional units in Thailand
Output 5.8:	***Dissemination of lessons learned***
A.5.8.1:	Publish project newsletter in Thai and disseminate it
A.5.8.2:	Publish project fact-sheets in Thai and disseminate them

Component 6

Conservation and Sustainable Human Development in the Plain of Reeds, Vietnam

Output 6.1:	***Protected Area site management plans developed and implemented for Tram Chim National Park and Lang Sen Provincial Reserve***
A.6.1.1:	Establish a Field Office and recruit staff
A.6.1.2:	Implement capacity building activities for provincial and district officials
A.6.1.3:	Identify key issues, goals, and objectives for site management
A.6.1.4:	Identify and map the habitat types
A.6.1.5:	Identify species management requirements, especially hydrology
A.6.1.6:	Develop specific management regimes for each habitat type
A.6.1.7:	Incorporate local community considerations and issues into the planning process
A.6.1.8:	Conduct ranger training programme
Output 6.2:	***Eco-tourism programme operating in the Plain of Reeds***
A.6.2.1:	Provide advice and support in the realisation of Government's plans for visitor centre and associated tourism infrastructure
A.6.2.2:	In conjunction with relevant authorities, develop an eco-tourism plan for the Plain of Reeds
Output 6.3:	***Outreach and environmental education programme operating for local communities in the Plain of Reeds***
A.6.3.1:	Develop a participation strategy for involving local communities in the management of the Plain of Reeds
A.6.3.2:	Develop schools' environmental education materials and integrate into the curriculum
A.6.3.3:	Develop environmental awareness and information materials on the functions and benefits of the Plain of Reeds
Output 6.4:	***Support integrated farming practices in the Plain of Reeds***
[Activities outlined by OXFAM]	
Output 6.5:	***Community-based conservation and sustainable use of wetland biodiversity products in the Plain of Reeds***
A.6.5.1:	Assist local organizations to prepare an Integrated Natural Resource Management Plan at village level
A.6.5.2:	Facilitate government approval for secure land and resource tenure and/or usufruct rights of local people for implementation of the INRM Plan
A.6.5.3:	Develop a group of skilled workers for conservation and sustainable use of natural resources
A.6.5.4:	Establish mechanisms for long-term financial sustainability of village conservation programmes
A.6.5.5:	Develop appropriate alternative local livelihoods for cash incomes to reduce pressure on natural resources
A.6.5.6:	Undertake a marketing analysis of, and develop, selected wetland NTFPs
A.6.5.7:	Establish a village-level saving and micro-credit programme for regenerating rural livelihoods
Output 6.6:	***Economic value of wetlands functions and products in the Plain of Reeds articulated and used to identify incentives and financing mechanisms for conservation and wise use***
A.6.6.1:	Conduct national awareness and training workshops
A.6.6.2:	Carry out economic valuation studies in the Plain of Reeds
A.6.6.3:	Run dissemination workshop
A.6.6.4:	Publish and disseminate results
Output 6.7:	***Wetland biodiversity conservation training programmes operating in the Plain of Reeds***
A.6.7.1:	Establishment of the training Team and functional units in Vietnam

Output 6.8:	***Dissemination of lessons learned***
A.6.8.1:	Publish project newsletter in Vietnamese and disseminate it
A.6.8.2:	Publish project fact-sheets in Vietnamese and disseminate them

Immediate Objectives, Outputs and Activities

1.1.15. Phase B

1.1.15.1.1 Component 1

1.1.15.1.2 Improving capacity for bio-regional planning to rationalise biodiversity conservation and economic development in the Lower Mekong River Basin

1.1.15.1.3

Output 1.1:	***Regional and national support structures for all project activities established and operational***
B.1.1.1:	Maintain operation of a central Project Management Unit (PMU).
B.1.1.2:	Twice-yearly meetings of the Project Steering Committee to review and promote project findings and incorporate into policy proposals.
B.1.1.3:	Hold bi-annual staff exchange meetings.
B.1.1.4:	Maintain project web-site.
B.1.1.5:	Produce copies of all project publications for MRCS and UNEP.
B.1.1.6:	Publish regional project newsletter in five languages and disseminate it.
B.1.1.7:	Publish regional project fact-sheets in five languages and disseminate them.
B.1.1.8:	Study tour to a wetland internationally recognized as being managed according to best-practice (22 staff). (4 staff per country + 4 regional coordinators)
Output 1.2:	***Regional networks of wetland specialists and managers developed to build upon and share wetland management experiences***
B.1.2.1:	Maintenance of the networks
B.1.2.2:	Implementation of the Network Action Plans
Output 1.3:	***Regional guiding principles developed for conservation of Lower Mekong Basin wetlands***
B.1.3.1:	Consult with national governments to obtain endorsement
B.1.3.2:	Legalise principles through MRC Agreement
Output 1.4:	***Potential biological and economic changes arising from alterations to the hydrological regime of the Lower Mekong Basin assessed***
B.1.4.1:	Award, and supervise implementation of, contract
Output 1.5:	***Ramsar Convention supported throughout the region***
B.1.5.1:	Continue support for a Sub-regional Ramsar Co-ordinator based in Phnom Penh to facilitate a regional perspective on wetland issues
B.1.5.2:	Continue support for the Ramsar Administrative Authority in each country to act as focal points for wetland issues
B.1.5.3:	Maintain promotion of the National Ramsar Committees in each country
B.1.5.4:	List all demonstration sites as Ramsar sites by end of project
Output 1.6:	***Tools developed and used to integrate wetland biodiversity considerations into development planning***

B.1.6.1: Formulate agreements on regional priorities for the conservation and protection of species groups and habitats through a consultative process

B.1.6.2: Develop draft biodiversity overlays for the Lower Mekong Basin.

B.1.6.3: Develop initial draft species action plans in concert with biodiversity overlays

B.1.6.4: Undertake wide consultations to determine threats to flagship species and countermeasures required.

B.1.6.5: Final biodiversity overlays endorsed by, and implemented through, MRCS, National, Provincial and local Governments

B.1.6.6: Draft final species actions plans and endorse through regional workshop

B.1.6.7: Form working group and develop initial draft of sub-regional biodiversity action plan

B.1.6.8: Develop final sub-regional biodiversity action plan through broad consultative process and endorse at bi-lateral workshop

Output 1.7: ***Wetland biodiversity assessment and training tools produced for the Lower Mekong Basin***

B.1.7.1: Translate each field guide into four languages

B.1.7.2: Publish five field guides each in five languages (four national plus English)

B.1.7.3: Distribute through the networks, web site, and other appropriate means

B.1.7.4: Provide training in their use at each demonstration site

Output 1.8: ***Regional Red Data Book of threatened wetland plants and animals created and maintained***

B.1.8.1: Translate English text into 4 local languages and disseminate

Output 1.9: ***Regional initiative to address the potential impacts of invasive alien fish species***

B.1.9.1: Review the number and scale of fish introductions throughout the Mekong River and the species involved

B.1.9.2: Determine the potential impacts in the event of escape

B.1.9.3: Develop a response strategy to address the potential impacts of invasive alien fish species

B.1.9.4: Raise awareness of the issues through provision of regional and national flora and education and training materials, particularly case studies

Output 1.10: ***Wetland biodiversity conservation issues, including illegal trade in wetland species, integrated into existing regional training initiatives***

B.1.10.1: Recruit 3 project officers

B.1.10.2: Develop administrative procedures and databases

B.1.10.3: Development of awareness and educational activities

B.1.10.4: Training activities for border controls

B.1.10.1: Undertake specialist inputs into training courses of other agencies

B.1.10.2: Develop a network of wildlife trade specialists

B.1.10.3: Undertake intra-regional exchange visits

1.1.15.1.4 Component 2

1.1.15.1.5 Strengthening national capacity for conservation and sustainable human development of wetlands

Output 2.1: ***Cross-sectoral policy analysis and formulation of recommendations for wetland management***

B.2.1.1: Cross-sectoral national workshops held to disseminate and verify policy findings

Output 2.2: ***Wetland Action Plans developed in all four countries***

B.2.2.1: Organise national conference on Lao wetlands to discuss national wetlands action plan

B.2.2.2: Prepare draft document and submit to Government

B.2.2.3: Assist with the implementation of national wetland action plans in Cambodia, Thailand, and Vietnam as appropriate

B.2.2.4: National Project Directors and their deputies would continue specialist short-course training at selected wetland educational facilities and NGOs during the project lifetime.

Output 2.3: ***Changes in policy to favour wetland biodiversity resulting from increased understanding of wetland issues by senior decision-makers***

B.2.3.1: Hold second of two national information seminars in each country for senior Cabinet Ministers and senior national Civil Servants involved in decision-making involving wetlands and wetland issues.

1.1.15.1.5.1 Component 3

1.1.15.1.5.2 Ramsar wise-use principles demonstrated using sustainable multiple-use activities at Stoeng Treng, Cambodia

Output 3.1: ***Strengthened management of Stoeng Treng Ramsar site through management planning and enforcement of policies***

B.3.1.1: Implement management activities according to management plan

B.3.1.2: Implement patrolling and enforcement

B.3.1.3: Maintain provision of technical support to provincial planning initiatives

Output 3.2: ***Reduction of unsustainable practices at Stoeng Treng Ramsar Site through community outreach and environmental education programmes***

B.3.2.1: Maintain focal points for the operation of education and awareness campaigns including the provision of village information boards, a park operations centre and a travelling education programme (boat)

B.3.2.2: Continue production of education and awareness materials about the values of the site (videos, info sheets)

Output 3.3 : ***Replacement of unsustainable resource use at Stoeng Treng Ramsar Site through community involvement in resource management and use***

B.3.3.1: Assist local communities to implement plans for the management of critical habitats

B.3.3.2: Maintain support for existing activities of government and local groups

Output 3.4: ***Community-based conservation and sustainable use of wetland biodiversity products at Stoeng Treng Ramsar Site***

B.3.4.1: Assist local organizations to implement and monitor an Integrated Natural Resource Management Plan at village level

B.3.4.2: Maintain mechanisms for long-term financial sustainability of village conservation programmes

B.3.4.3: Operate a village-level saving and micro-credit programme for regenerating rural livelihoods

Output 3.5: ***Economic value of wetlands functions and products at Stoeng Treng Ramsar Site articulated and used to identify incentives and financing mechanisms for conservation and wise use***

B.3.5.1: Pilot economic incentive and financial mechanism at Stoeng Treng Ramsar Site

Output 3.6:	***Wetland biodiversity conservation training programmes operating at Stoeng Treng Ramsar Site***
B.3.6.1:	Operate regional structured training courses in selected subjects
B.3.6.2:	Undertake national training courses
B.3.6.3:	Review training activities and incorporate lessons learnt
Output 3.7:	***Dissemination of lessons learned***
B.3.7.1:	Publish project newsletter in local language and disseminate it
B.3.7.2:	Publish project fact-sheets in local language and disseminate them

1.1.15.1.5.3 Component 4

1.1.15.1.5.4 Provincial biodiversity planning demonstrated for wetlands in Attepeu Province, Lao PDR

Output 4.1:	***Comprehensive provincial wetland conservation strategy and action plan developed for Attepeu Province***
B.4.1.1:	Produce final documentation
B.4.1.2:	Develop management plans (max. 5) for most significant wetland areas
B.4.1.3:	Implement management plans (max. 5) for most significant wetland areas
Output 4.2:	***Support to natural resource management for development of sustainable livelihoods in the Xe Kong and Xe Pian Plain***
	Activities will be de-defined during formulation mission in November 2001
Output 4.3:	***Provincial and local stewardship and community outreach programmes established for selected villages in Attepeu Province***
B.4.3.1:	Consult local communities and record traditional resource management techniques for up to five significant wetland areas as identified under Output 4.1
B.4.3.2:	Prepare and agree interventions for stewardship programmes for these wetland areas
B.4.3.3:	Implement interventions for stewardship programmes for these wetland areas
B.4.3.4:	Continue production of education and awareness materials about the values of the site (videos, info sheets)
B.4.3.5:	Maintain focal points for the operation of education and awareness campaigns including the provision of village information boards, a park operations centre
Output 4.4:	***Community-based conservation and sustainable use of wetland biodiversity products in Attepeu Province***
B.4.4.1:	Assist local organizations to implement and monitor an Integrated Natural Resource Management Plan at village level
B.4.4.2:	Maintain mechanisms for long-term financial sustainability of village conservation programmes
B.4.4.3:	Operate a village-level saving and micro-credit programme for regenerating rural livelihoods
Output 4.5:	***Economic value of wetlands functions and products in Attepeu Province articulated and used to identify incentives and financing mechanisms for conservation and wise use***
B.4.5.1:	Pilot economic incentive and financial mechanism in Attepeu Province
Output 4.6:	***Wetland biodiversity conservation training programmes operating in Attepeu Province***
B.4.6.1:	Operate regional structured training courses in selected subjects

B.4.6.2: Undertake national training courses

B.4.6.3: Review training activities and incorporate lessons learnt

Output 4.7: ***Dissemination of lessons learned***

B.4.7.1: Publish project newsletter in local language and disseminate it

B.4.7.2: Publish project fact-sheets in local language and disseminate them

1.1.15.1.5.5 Component 5

1.1.15.1.5.6 Biodiversity conservation integrated into a semi-agricultural landscape through inter-provincial land-use planning, habitat rehabilitation, and species re -introduction in the lower floodplain of the Songkram Basin, Thailand

Output 5.1: ***Integrated wetland protection demonstrated through development of an integrated land use plan for the Lower Songkram Basin***

B.5.1.1: Implement integrated land-use plan

Output 5.2: ***Biodiversity values of degraded habitats improved through implementation of restorative measures and development of selective species re-introduction programmes in the Lower Songkram Basin***

B.5.2.1: Based on the land-use plan select specific sites for restoration activities

B.5.2.2: Develop specific management plans for selected sites

B.5.2.3: Implement habitat restoration/conservation actions in the defined zones

B.5.2.4: Species management: restocking, breeding and dissemination

B.5.2.5: Mark boundary of the site/zone

B.5.2.6: Patrolling and monitoring

Output 5.3: ***Community involvement integrated into natural resource planning and management to redress unsustainable resource use in the Lower Songkram Basin***

B.5.3.1: Seek enforcement of laws underpinning community-based fisheries plans through national agencies

B.5.3.2: Assist local communities to implement fisheries and management plans for critical areas

B.5.3.3: Support conservation-based micro projects by local groups

Output 5.4: ***Reduction of unsustainable practices through education and awareness-raising in the Lower Songkram Basin***

B.5.4.1: Implement education and awareness-raising programme, including strengthening the Boeng Khong Long information centre

Output 5.5: ***Community-based conservation and sustainable use of wetland biodiversity products in the Lower Songkram Basin***

B.5.5.1: Assist local organizations to implement and monitor an Integrated Natural Resource Management Plan at village level

B.5.5.2: Maintain mechanisms for long-term financial sustainability of village conservation programmes

B.5.5.3: Operate a village-level saving and micro-credit programme for regenerating rural livelihoods

Output 5.6: ***Economic value of wetlands functions and products in the Lower Songkram Basin articulated and used to identify incentives and financing mechanisms for conservation and wise use***

B.5.6.1: Pilot economic incentive and financial mechanism in the Lower Songkram Basin

Output 5.7: ***Wetland biodiversity conservation training programmes operating in the Lower Songkram Basin***

B.5.7.1: Operate regional training courses in selected subjects

B.5.7.2: Undertake national training courses

B.5.7.3: Review training activities and incorporate lessons learnt

Output 5.8: ***Dissemination of lessons learned***

B.5.8.1: Publish project newsletter in local language and disseminate it

B.5.8.2: Publish project fact-sheets in local language and disseminate them

Component 6

Conservation and Sustainable Human Development in the Plain of Reeds, Vietnam

Output 6.1: ***Protected Area site management plans developed and implemented for Tram Chim National Park and Lang Sen Provincial Reserve***

B.6.1.1: Finalise management plan

B.6.1.2: Develop and implement annual work plans from management plan

Output 6.2: ***Eco-tourism programme operating in the Plain of Reeds***

B.6.2.1: Construct infrastructure for, and develop specific activities, according to the eco-tourism plan

B.6.2.2: Involve local people in the management and execution of eco-tourism activities

B.6.2.3: Develop charging system for eco-tourism activities which distributes funds back to local communities

Output 6.3: ***Outreach and environmental education programme operating for local communities in the Plain of Reeds***

B.6.3.1: Develop specific community-based activities as identified in the participation strategy

B.6.3.2: Implement specific community-based activities as identified in the participation strategy

Output 6.4: ***Support integrated farming practices in the Plain of Reeds***

[Activities outlined by OXFAM]

Output 6.5: ***Community-based conservation and sustainable use of wetland biodiversity products in the Plain of Reeds***

B.6.5.1: Assist local organizations to implement and monitor an Integrated Natural Resource Management Plan at village level

B.6.5.2: Maintain mechanisms for long-term financial sustainability of village conservation programmes

B.6.5.3: Operate a village-level saving and micro-credit programme for regenerating rural livelihoods

Output 6.6: ***Economic value of wetlands functions and products in the Plain of Reeds articulated and used to identify incentives and financing mechanisms for conservation and wise use***

B.6.6.1: Pilot economic incentive and financial mechanism in the Plain of Reeds

Output 6.7: ***Wetland biodiversity conservation training programmes operating in the Plain of Reeds***

B.6.7.1: Operate regional training courses in selected subjects

B.6.7.2: Undertake national training courses

B.6.7.3: Review training activities and incorporate lessons learnt

Output 6.8: ***Dissemination of lessons learned***

B.6.8.1: Publish project newsletter in five languages and disseminate it

B.6.8.2: Publish project fact-sheets in five languages and disseminate them

		Phase A	Phase B
1.1.15.1.6 Component 1 **Improving capacity for bio-regional planning to rationalise biodiversity conservation and economic development in the Lower Mekong River Basin**			
Output 1.1:	***Regional and national support structures for all project activities established and operational***		
A.1.1.1:	Establish and maintain a central Project Management Unit (PMU) and recruit staff.	✓	✓
A.1.1.2:	Hold inception mission to all sites. RPD and CTA prepare a full Inception Report with detailed, updated work plan and TOR for first year of inputs and activities. Hold Inception workshop.	✓	
A.1.1.3:	Develop guidelines to promote management information exchange, technology transfer and mutual assistance projects between and among the four project areas.	✓	
A.1.1.4:	Twice-yearly meetings of the Project Steering Committee to review and promote project findings and incorporate into policy proposals. The first meeting should take place along with the Inception Workshop.	✓	✓
A.1.1.5:	Hold bi-annual staff exchange meetings.	✓	✓
A.1.1.6:	Establish and maintain project web-site.	✓	✓
A.1.1.7:	Publish regional project newsletter in five languages and disseminate it.	✓	✓
A.1.1.8:	Publish regional project fact-sheets in five languages and disseminate them.	✓	✓
A.1.1.9:	Initial consultations with team to determine level of skills and design of the training programme	✓	
A.1.1.10:	Develop regional and country TNA's	✓	
A.1.1.11:	Design comprehensive training programme	✓	
A.1.1.12:	Specialist training for Country Wetland Training Officers in the region (10 staff)	✓	
A.1.1.13:	Establishment of information and training materials resource base	✓	
A.1.1.14:	Development of portable displays to support training and awareness activities	✓	
B.1.1.5:	Produce copies of all project publications for MRCS and UNEP.		✓
B.1.1.8:	Study tour to a wetland internationally recognized as being managed according to best-practice (22 staff). (4 staff per country + 4 regional coordinators)		✓
Output 1.2:	***Regional networks of wetland specialists and managers developed to build upon and share wetland management experiences***		
A.1.2.1:	Establishment of the networks	✓	
A.1.2.2:	Development of Network Action Plans	✓	
B.1.2.1:	Maintenance of the networks	✓	✓
B.1.2.2:	Implementation of the Network Action Plans		✓
Output 1.3:	***Regional guiding principles developed for conservation of Lower Mekong Basin wetlands***		
A.1.3.1:	Develop draft guiding principles for wetland conservation	✓	
A.1.3.2:	Consult with national governments to agree principles, legal language, and terminology.	✓	
B.1.3.1:	Consult with national governments to obtain endorsement		✓
B.1.3.2:	Legalise principles through MRC Agreement		✓

Output 1.4:	***Potential biological and economic changes arising from alterations to the hydrological regime of the Lower Mekong Basin assessed***

		Phase A	Phase B
A.1.4.1:	Design study in consultation with MRC-WUP and IUCN-Water and Nature Initiative	✓	
A.1.4.2:	Develop tender documentation and submit study for tender.	✓	
B.1.4.1:	Award, and supervise implementation of, contract		✓
Output 1.5:	***Ramsar Convention supported throughout the region***		
A.1.5.1:	Support Lao in deciding upon ratification of the Ramsar Convention	✓	
A.1.5.2:	Provide and support a Sub-regional Ramsar Co-ordinator to facilitate a regional perspective on wetland issues	✓	✓
A.1.5.3:	Support Ramsar Administrative Authority in each country to act as focal points for wetland issues	✓	✓
A.1.5.4:	Promote the establishment of National Ramsar Committees in each country	✓	✓
B.1.5.4:	List all demonstration sites as Ramsar sites by end of project		✓
Output 1.6:	***Tools developed and used to integrate wetland biodiversity considerations into development planning***		
A.1.6.1:	Undertake comprehensive analysis of current biodiversity information base to determine gaps and information needs	✓	
A.1.6.2:	Assess and evaluate flagship biodiversity species and critical ecosystems and gather information through local, provincial, and national networks	✓	
A.1.6.3:	Formulate agreements on regional priorities for the conservation and protection of species groups and habitats through a consultative process		✓
A.1.6.4:	Develop draft biodiversity overlays for the Lower Mekong Basin.		✓
A.1.6.5:	Develop initial draft species action plans in concert with biodiversity overlays		✓
A.1.6.6:	Undertake wide consultations to determine threats to flagship species and countermeasures required.		✓
B.1.6.1:	Formulate agreements on regional priorities for the conservation and protection of species groups and habitats through a consultative process		✓
B.1.6.2:	Final biodiversity overlays endorsed by, and implemented through, MRCS, National, Provincial and local Governments		✓
B.1.6.3:	Draft final species actions plans and endorse through regional workshop		✓
B.1.6.4:	Form working group and develop initial draft of sub-regional biodiversity action plan		✓
B.1.6.5:	Develop final sub-regional biodiversity action plan through broad consultative process and endorse at bi-lateral workshop		✓
Output 1.7:	***Wetland biodiversity assessment and training tools produced for the Lower Mekong Basin***		
A.1.7.1:	Prepare field guides for higher plants, reptiles and amphibians, aquatic insects, crustaceans, and molluscs	✓	
B.1.7.1:	Translate each field guide into four languages		✓
B.1.7.2:	Publish five field guides each in five languages (four national plus English)		✓
B.1.7.3:	Distribute through the networks, web site, and other appropriate means		✓
B.1.7.4:	Provide training in their use at each demonstration site		✓
Output 1.8:	***Regional Red Data Book of threatened wetland plants and animals created and maintained***		
A.1.8.1:	Select the criteria and categories of threat to be applied	✓	
A.1.8.2:	Prepare text in English	✓	
A.1.8.3:	Publish and disseminate	✓	
B.1.8.1:	Translate English text into 4 local languages and disseminate		✓
Output 1.9:	***Regional initiative to address the potential impacts of invasive alien fish species***		
A.1.9.1:	Review the number and scale of fish introductions throughout the Mekong		✓

		Phase A	Phase B
	River and the species involved		
A.1.9.2:	Determine the potential impacts in the event of escape		✓
B.1.9.1:	Develop a response strategy to address the potential impacts of invasive alien fish species		✓
B.1.9.2:	Raise awareness of the issues through provision of regional and national flora and education and training materials, particularly case studies		✓
Output 1.10: Wetland biodiversity conservation issues, including illegal trade in wetland species, integrated into existing regional training initiatives			
A.1.10.1:	Recruit 3 project officers		✓
A.1.10.2:	Develop administrative procedures and databases		✓
A.1.10.3:	Development of awareness and educational activities		✓
A.1.10.4:	Training activities for border controls		✓
B.1.10.1:	Undertake specialist inputs into training courses of other agencies		✓
B.1.10.2:	Develop a network of wildlife trade specialists		✓
B.1.10.3:	Undertake intra-regional exchange visits		✓
Component 2 ***Strengthening national capacity for conservation and sustainable human development of wetlands***			
Output 2.1: Cross-sectoral policy analysis and formulation of recommendations for wetland management			
A.2.1.1:	Review of relevant sectoral policies	✓	
A.2.1.2:	Publication of threats, needs and opportunities analysis of policy impacts on wetland biodiversity	✓	
B.2.1.1:	Cross-sectoral national workshops held to disseminate and verify policy findings		✓
Output 2.2: Wetland Action Plans developed in all four countries			
A.2.2.1:	Organise national conference on Cambodia wetlands action plan	✓	
A.2.2.2:	Undertake review and prepare revised wetlands action plan and submit to Cambodian Cabinet of Ministers	✓	
A.2.2.3:	Assist Government of Lao PDR to draft an outline for national wetlands action plan	✓	
A.2.2.4:	Provide assistance, as appropriate, to Government of Thailand in its Review of the Thai Wetland Action Plan	✓	
A.2.2.5:	National conference on Vietnam wetlands programme	✓	
A.2.2.6:	Prepare wetlands action plan and submit to Government of Vietnam	✓	
A.2.2.7:	Senior management team (RPD, NPD, NPC,D-NPD) to undertake a tailored short course on effective project management techniques	✓	
B.2.2.1:	Organise national conference on Lao wetlands to discuss national wetlands action plan		✓
B.2.2.2:	Prepare draft document and submit to Government		✓
B.2.2.3:	Assist with the implementation of national wetland action plans in Cambodia, Thailand, and Vietnam as appropriate		✓
B.2.2.4:	National Project Directors and their deputies would continue specialist short-course training at selected wetland educational facilities and NGOs during the project lifetime.		✓
Output 2.3: Changes in policy to favour wetland biodiversity resulting from increased understanding of wetland issues by senior decision-makers			
A.2.3.1:	Hold first of two national information seminars in each country for senior Cabinet Ministers and senior national Civil Servants involved in decision-making involving wetlands and wetland issues.	✓	
B.2.3.1:	Hold second of two national information seminars in each country for		✓

		Phase A	Phase B
	senior Cabinet Ministers and senior national Civil Servants involved in decision-making involving wetlands and wetland issues.		
1.1.15.1.6.1 Component 3 **Ramsar wise-use principles demonstrated using sustainable multiple-use activities at Stoeng Treng, Cambodia**			
Output 3.1: Strengthened management of Stoeng Treng Ramsar site through management planning and enforcement of policies			
A.3.1.1:	Establish a Field Office and recruit staff	✓	
A.3.1.2:	Identify critical habitats and map resources	✓	
A.3.1.3:	Identify species management requirements	✓	
A.3.1.4:	Review and mark boundaries of the site	✓	
A.3.1.5:	Develop management plan for the site according to the principles of wise-use	✓	
A.3.1.6:	Provide technical support to provincial planning initiative	✓	
B.3.1.1:	Implement management activities according to management plan		✓
B.3.1.2:	Implement patrolling and enforcement		✓
B.3.1.3:	Maintain provision of technical support to provincial planning initiatives		✓
Output 3.2: Reduction of unsustainable practices at Stoeng Treng Ramsar Site through community outreach and environmental education programmes			
A.3.2.1:	Establish a team to conduct and develop education and awareness activities on the values of the site	✓	
A.3.2.2:	Develop and maintain focal points for the operation of education and awareness campaigns including the provision of village information boards, a park operations centre and a travelling education programme (boat)	✓	✓
A.3.2.3:	Produce education and awareness materials about the values of the site (videos, info sheets)	✓	✓
Output 3.3 : Replacement of unsustainable resource use at Stoeng Treng Ramsar Site through community involvement in resource management and use			
A.3.3.1:	Build local organisational capacity within the community to assist in planning for management activities	✓	
A.3.3.2:	Assist local communities to develop plans for the management of critical habitats	✓	
A.3.3.3:	Develop fisheries management plans and rules for villages	✓	
A.3.3.4:	Support existing activities of government and local groups	✓	✓
B.3.3.1:	Assist local communities to implement plans for the management of critical habitats		✓
Output 3.4: Community-based conservation and sustainable use of wetland biodiversity products at Stoeng Treng Ramsar Site			
A.3.4.1:	Assist local organizations to prepare an Integrated Natural Resource Management Plan at village level	✓	
A.3.4.2:	Facilitate government approval for secure land and resource tenure and/or usufruct rights of local people for implementation of the INRM Plan	✓	
A.3.4.3:	Develop a group of skilled workers for conservation and sustainable use of natural resources	✓	
A.3.4.4:	Establish a mechanism for long-term financial sustainability of village conservation programmes	✓	
A.3.4.5:	Develop appropriate alternative local livelihoods for cash incomes to reduce pressure on natural resources	✓	

		Phase A	Phase B
A.3.4.6:	Undertake a marketing analysis of, and develop, selected wetland NTFPs	✓	
A.3.4.7:	Establish a village-level saving and micro-credit programme for regenerating rural livelihoods	✓	
B.3.4.1:	Assist local organizations to implement and monitor an Integrated Natural Resource Management Plan at village level		✓
B.3.4.2:	Maintain the mechanism for long-term financial sustainability of village conservation programmes		✓
B.3.4.3:	Operate a village-level saving and micro-credit programme for regenerating rural livelihoods		✓
Output 3.5:	***Economic value of wetlands functions and products at Stoeng Treng Ramsar Site articulated and used to identify incentives and financing mechanisms for conservation and wise use***		
A.3.5.1:	Conduct national awareness and training workshops	✓	
A.3.5.2:	Carry out economic valuation studies at Stoeng Treng Ramsar Site	✓	
A.3.5.3:	Run dissemination workshop	✓	
A.3.5.4:	Publish and disseminate results	✓	
B.3.5.1:	Pilot economic incentive and financial mechanism at Stoeng Treng Ramsar Site		✓
Output 3.6:	***Wetland biodiversity conservation training programmes operating at Stoeng Treng Ramsar Site***		
A.3.6.1:	Establishment of the training team and functional units in Cambodia	✓	
B.3.6.1:	Operate regional structured training courses in selected subjects		✓
B.3.6.2:	Undertake national training courses		✓
B.3.6.3:	Review training activities and incorporate lessons learnt		✓
Output 3.7:	***Dissemination of lessons learned***		
A.3.7.1:	Publish project newsletter in Khymer and disseminate it	✓	✓
A.3.7.2:	Publish project fact-sheets in Khymer and disseminate them	✓	✓

1.1.15.1.6.2 Component 4

Provincial biodiversity planning demonstrated for wetlands in Attepeu Province, Lao PDR

Output 4.1:	***Comprehensive provincial wetland conservation strategy and action plan developed for Attepeu Province***		
A.4.1.1:	Establish a Field Office and recruit staff	✓	
A.4.1.2:	Undertake desk study to collate all information on wetlands within Attepeu Province and identify gaps	✓	
A.4.1.3:	Undertake field studies and consultations to rectify gaps in knowledge of wetland biodiversity, threats, and planning proposals	✓	
A.4.1.4:	Produce maps as required by studies	✓	
A.4.1.5:	Draft strategy and action plan	✓	
A.4.1.6:	Undertake consultations on draft strategy and action plan	✓	
B.4.1.1:	Produce final documentation		✓
B.4.1.2:	Develop management plans (max. 5) for most significant wetland areas		✓
B.4.1.3:	Implement management plans (max. 5) for most significant wetland areas		✓
Output 4.2:	***Support to natural resource management for development of sustainable livelihoods in the Xe Kong and Xe Pian Plain***		
[Activities: Being developed by DANIDA mission, current at time of drafting]			
Output 4.3:	***Provincial and local stewardship and community outreach programmes established for selected villages in Attepeu Province***		
A.4.3.1:	Establish a team to conduct and develop education and awareness activities of the values of the wetlands of Attepeu Province	✓	
A.4.3.2:	Produce education and awareness materials	✓	✓

		Phase A	Phase B
A.4.3.3:	Develop and maintain focal areas for the operation of education and awareness campaigns including the provision of village information boards	✓	✓
B.4.3.1:	Consult local communities and record traditional resource management techniques for up to five significant wetland areas as identified under Output 4.1		✓
B.4.3.2:	Prepare and agree interventions for stewardship programmes for these wetland areas		✓
B.4.3.3:	Implement interventions for stewardship programmes for these wetland areas		✓
Output 4.4:	***Community-based conservation and sustainable use of wetland biodiversity products in Attepeu Province***		
A.4.4.1:	Assist local organizations to prepare an Integrated Natural Resource Management Plan at village level	✓	
A.4.4.2:	Facilitate government approval for secure land and resource tenure and/or usufruct rights of local people for implementation of the INRM Plan	✓	
A.4.4.3:	Develop a group of skilled workers for conservation and sustainable use of natural resources	✓	
A.4.4.4:	Establish a mechanism for long-term financial sustainability of village conservation programmes	✓	
A.4.4.5:	Develop appropriate alternative local livelihoods for cash incomes to reduce pressure on natural resources	✓	
A.4.4.6:	Undertake a marketing analysis of, and develop, selected wetland NTFPs	✓	
A.4.4.7:	Establish a village-level saving and micro-credit programme for regenerating rural livelihoods	✓	
B.4.4.1:	Assist local organizations to implement and monitor an Integrated Natural Resource Management Plan at village level		✓
B.4.4.2:	Maintain the mechanism for long-term financial sustainability of village conservation programmes		✓
B.4.4.3:	Operate a village-level saving and micro-credit programme for regenerating rural livelihoods		✓
Output 4.5:	***Economic value of wetlands functions and products in Attepeu Province articulated and used to identify incentives and financing mechanisms for conservation and wise use***		
A.4.5.1:	Conduct national awareness and training workshops	✓	
A.4.5.2:	Carry out economic valuation studies in Attepeu Province	✓	
A.4.5.3:	Run dissemination workshop	✓	
A.4.5.4:	Publish and disseminate results	✓	
B.4.5.1:	Pilot economic incentive and financial mechanism in Attepeu Province		✓
Output 4.6:	***Wetland biodiversity conservation training programmes operating in Attepeu Province***		
A.4.6.1:	Establishment of the training team and functional units in Lao PDR	✓	
B.4.6.1:	Operate regional structured training courses in selected subjects		✓
B.4.6.2:	Undertake national training courses		✓
B.4.6.3:	Review training activities and incorporate lessons learnt		✓
Output 4.7:	***Dissemination of lessons learned***		
A.4.7.1:	Publish project newsletter in Lao and disseminate it	✓	✓
A.4.7.2:	Publish project fact-sheets in Lao and disseminate them	✓	✓

1.1.15.1.6.3 Component 5

Biodiversity conservation integrated into a semi-agricultural landscape through inter-provincial land-use planning, habitat rehabilitation, and species re-introduction in the lower floodplain of the Songkram Basin, Thailand

		Phase A	Phase B
Output 5.1:	***Integrated wetland protection demonstrated through development of an integrated land use plan for the Lower Songkram Basin***		
A.5.1.1:	Establish a Field Office and recruit staff	✓	
A.5.1.2:	Elaborate a process to develop an integrated land use plan through consultation with all stakeholders	✓	
A.5.1.3:	Identify habitats valuable for biodiversity and map resources	✓	
A.5.1.4:	Identify requirements for species management, species monitoring, restocking, and captive breeding	✓	
A.5.1.5:	Identify scheme for re-connecting isolated water bodies to mainstream flow	✓	
A.5.1.6:	Develop an integrated land-use plan	✓	
B.5.1.1:	Implement integrated land-use plan		✓
Output 5.2:	***Biodiversity values of degraded habitats improved through implementation of restorative measures and development of selective species re-introduction programmes in the Lower Songkram Basin***		
B.5.2.1:	Based on the land-use plan select specific sites for restoration activities		✓
B.5.2.2:	Develop specific management plans for selected sites		✓
B.5.2.3:	Implement habitat restoration/conservation actions in the defined zones		✓
B.5.2.4:	Species management: restocking, breeding and dissemination		✓
B.5.2.5:	Mark boundary of the site/zone		✓
B.5.2.6:	Patrolling and monitoring		✓
Output 5.3:	***Community involvement integrated into natural resource planning and management to redress unsustainable resource use in the Lower Songkram Basin***		
A.5.3.1:	Organise and build capacity of the community to participate in planning and management of natural resources	✓	
A.5.3.2:	Develop community-based fisheries plans for selected villages	✓	
A.5.3.3:	Assist local communities to develop management plans for selected critical areas	✓	
B.5.3.1:	Seek enforcement of laws underpinning community-based fisheries plans through national agencies		✓
B.5.3.2:	Assist local communities to implement fisheries and management plans for critical areas		✓
B.5.3.3:	Support conservation-based micro projects by local groups		✓
Output 5.4:	***Reduction of unsustainable practices through education and awareness-raising in the Lower Songkram Basin***		
A.5.4.1:	Establish Education Awareness Team in collaboration with local NGOs	✓	
A.5.4.2:	Produce education and awareness materials	✓	
A.5.4.3:	Develop channels for the dissemination of information	✓	
B.5.4.1:	Implement education and awareness-raising programme, including strengthening the Boeng Khong Long information centre		✓
Output 5.5:	***Community-based conservation and sustainable use of wetland biodiversity products in the Lower Songkram Basin***		
A.5.5.1:	Assist local organizations to prepare an Integrated Natural Resource Management Plan at village level	✓	
A.5.5.2:	Facilitate government approval for secure land and resource tenure and/or usufruct rights of local people for implementation of the INRM Plan	✓	
A.5.5.3:	Develop a group of skilled workers for conservation and sustainable use of natural resources	✓	
A.5.5.4:	Establish a mechanism for long-term financial sustainability of village conservation programmes	✓	
A.5.5.5:	Develop appropriate alternative local livelihoods for cash incomes to	✓	

		Phase A	Phase B
	reduce pressure on natural resources		
A.5.5.6:	Undertake a marketing analysis of, and develop, selected wetland NTFPs	✓	
A.5.5.7:	Establish a village-level saving and micro-credit programme for regenerating rural livelihoods	✓	
B.5.5.1:	Assist local organizations to implement and monitor an Integrated Natural Resource Management Plan at village level		✓
B.5.5.2:	Maintain the mechanism for long-term financial sustainability of village conservation programmes		✓
B.5.5.3:	Operate a village-level saving and micro-credit programme for regenerating rural livelihoods		✓
Output 5.6:	***Economic value of wetlands functions and products in the Lower Songkram Basin articulated and used to identify incentives and financing mechanisms for conservation and wise use***		
A.5.6.1:	Conduct national awareness and training workshops	✓	
A.5.6.2:	Carry out economic valuation studies in the Lower Songkram Basin	✓	
A.5.6.3:	Run dissemination workshop	✓	
A.5.6.4:	Publish and disseminate results	✓	
B.5.6.1:	Pilot economic incentive and financial mechanism in the Lower Songkram Basin		✓
Output 5.7:	***Wetland biodiversity conservation training programmes operating in the Lower Songkram Basin***		
A.5.7.1:	Establishment of the training team and functional units in Thailand	✓	
B.5.7.1:	Operate regional training courses in selected subjects		✓
B.5.7.2:	Undertake national training courses		✓
B.5.7.3:	Review training activities and incorporate lessons learnt		✓
Output 5.8:	***Dissemination of lessons learned***		
A.5.8.1:	Publish project newsletter in Thai and disseminate it	✓	✓
A.5.8.2:	Publish project fact-sheets in Thai and disseminate them	✓	✓
Component 6			
Conservation and Sustainable Human Development in the Plain of Reeds, Vietnam			
Output 6.1:	***Protected Area site management plans developed and implemented for Tram Chim National Park and Lang Sen Provincial Reserve***		
A.6.1.1:	Establish a Field Office and recruit staff	✓	
A.6.1.2:	Implement capacity building activities for provincial and district officials	✓	
A.6.1.3:	Identify key issues, goals, and objectives for site management	✓	
A.6.1.4:	Identify and map the habitat types	✓	
A.6.1.5:	Identify species management requirements, especially hydrology	✓	
A.6.1.6:	Develop specific management regimes for each habitat type	✓	
A.6.1.7:	Incorporate local community considerations and issues into the planning process	✓	
A.6.1.8:	Conduct ranger training programme	✓	
B.6.1.1:	Finalise management plan		✓
B.6.1.2:	Develop and implement annual work plans from management plan		✓
Output 6.2:	***Eco-tourism programme operating in the Plain of Reeds***		
A.6.2.1:	Provide advice and support in the realisation of Government's plans for visitor centre and associated tourism infrastructure	✓	
A.6.2.2:	In conjunction with relevant authorities, develop an eco-tourism plan for the Plain of Reeds	✓	
B.6.2.1:	Construct infrastructure for, and develop specific activities, according to the eco-tourism plan		✓

		Phase A	Phase B
B.6.2.2:	Involve local people in the management and execution of eco-tourism activities		✓
B.6.2.3:	Develop charging system for eco-tourism activities which distributes funds back to local communities		✓
Output 6.3:	***Outreach and environmental education programme operating for local communities in the Plain of Reeds***		
A.6.3.1:	Develop a participation strategy for involving local communities in the management of the Plain of Reeds	✓	
A.6.3.2:	Develop schools' environmental education materials and integrate into the curriculum	✓	
A.6.3.3:	Develop environmental awareness and information materials on the functions and benefits of the Plain of Reeds	✓	
B.6.3.1:	Develop specific community-based activities as identified in the participation strategy		✓
B.6.3.2:	Implement specific community-based activities as identified in the participation strategy		✓
Output 6.4:	***Support integrated farming practices in the Plain of Reeds***		
[Activities outlined by OXFAM]			
Output 6.5:	***Community-based conservation and sustainable use of wetland biodiversity products in the Plain of Reeds***		
A.6.5.1:	Assist local organizations to prepare an Integrated Natural Resource Management Plan at village level	✓	
A.6.5.2:	Facilitate government approval for secure land and resource tenure and/or usufruct rights of local people for implementation of the INRM Plan	✓	
A.6.5.3:	Develop a group of skilled workers for conservation and sustainable use of natural resources	✓	
A.6.5.4:	Establish a mechanism for long-term financial sustainability of village conservation programmes	✓	
A.6.5.5:	Develop appropriate alternative local livelihoods for cash incomes to reduce pressure on natural resources	✓	
A.6.5.6:	Undertake a marketing analysis of, and develop, selected wetland NTFPs	✓	
A.6.5.7:	Establish a village-level saving and micro-credit programme for regenerating rural livelihoods	✓	
B.6.5.1:	Assist local organizations to implement and monitor an Integrated Natural Resource Management Plan at village level		✓
B.6.5.2:	Maintain the mechanism for long-term financial sustainability of village conservation programmes		✓
B.6.5.3:	Operate a village-level saving and micro-credit programme for regenerating rural livelihoods		✓
Output 6.6:	***Economic value of wetlands functions and products in the Plain of Reeds articulated and used to identify incentives and financing mechanisms for conservation and wise use***		
A.6.6.1:	Conduct national awareness and training workshops	✓	
A.6.6.2:	Carry out economic valuation studies in the Plain of Reeds	✓	
A.6.6.3:	Run dissemination workshop	✓	
A.6.6.4:	Publish and disseminate results	✓	
B.6.6.1:	Pilot economic incentive and financial mechanism in the Plain of Reeds		✓
Output 6.7:	***Wetland biodiversity conservation training programmes operating in the Plain of Reeds***		
A.6.7.1:	Establishment of the training Team and functional units in Vietnam	✓	
B.6.7.1:	Operate regional training courses in selected subjects		✓
B.6.7.2:	Undertake national training courses		✓

		Phase A	Phase B
B.6.7.3:	Review training activities and incorporate lessons learnt		✓
Output 6.8:	***Dissemination of lessons learned***		
A.6.8.1:	Publish project newsletter in Vietnamese and disseminate it	✓	✓
A.6.8.2:	Publish project fact-sheets in Vietnamese and disseminate them	✓	✓

ANNEX III-A: STAP REVIEW

Mekong River Basin Wetland Biodiversity Conservation and Sustainable Use Programme

30 September 2001
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Introduction

This is an important, ambitious and challenging project. The design has recognizes and gives specific attention to the challenges and is clearly built on substantial preparatory work. I found the logical framework analysis particularly helpful.

The Mekong River system and its associated wetlands are under severe pressure. Environmental flows are potentially compromised by upstream dams. Drainage schemes are providing for conversion of unprotected wetlands for cropping. Poverty is driving natural resource use for subsistence and a high price, if illegal, market is imposing additional demands on the indigenous fauna and flora. The issues of conservation and sustainable use are particularly acute in this situation.

Many of the sites are remote and achieving effective interactions between national, regional and local roles in management will be critically important for effective conservation and sustainable use of wetlands in the broader sectoral and economic contexts of the four countries.

This project is essential and urgent if the viable samples of the distinctive biological diversity and ecosystems of the Mekong are to have a chance of surviving the next 2 decades of social and economic development.

I am not familiar with the area or the people and agencies involved. However, given the apparent social complexity it seems likely that for some if not most of the sites it will require more than 5 years to implement management and achieve and consolidate the necessary accompanying social, cultural and attitudinal changes to be confident that it can survive.

I consider that the project should be supported and that this should be done with recognition that, if successful, there is likely to be need for medium to long term follow up to secure the ongoing success of management of the critical wetland sites of the Mekong.

Scientific and technical soundness

I have no special expertise in the fauna, flora and ecology of freshwater systems but on the basis of my experience with marine systems the scientific basis of the project is sound. There is a useful range of scientific literature cited which provides a solid basis for management planning and implementation.

The project is technically sound and the proposal recognises the importance of community and decision maker involvement. I have provided a list suggesting numerous and generally minor modifications to the Log Frame Matrix.

The key issue is to develop plans which are implementable and are implemented effectively. A critical issue will be to identify and involve, and achieve government and community acceptance of, people who

represent, can negotiate for, and can "sell" behavioural change to, all of the local stakeholders whose activities impact the wetland sites. The proposal recognizes this and has measures to address it.

The issues of training and public/community information are critical. The provisions for these appear adequate in terms of personnel and other resources. Some suggestions relating to targeting in order to maximize effectiveness are included in modifications proposed to the logframe matrix

Global environment benefits and costs

If it achieves its objectives the project will have clear global environmental benefits in securing the conservation of the biological diversity of the wetlands of a major tropical riverine system. The lessons learned in implementing this project will be of considerable interest and importance to others involved in conservation and management of the ecosystems of major rivers which flow through the jurisdictions of several countries. There are no apparent global costs beyond the investments sought in this proposal but there may be local costs in terms of economic opportunities foregone in order to maintain the functional integrity of the protected wetlands.

The context of GEF goals and guidelines

The project clearly addresses the Biological Diversity focal area and the integrated land and water components of the International Waters focal Area. It addresses the objectives of providing a basis for achieving sustainability and it applies the guidelines with respect to incremental costs and the log-frame.

Regional Context

The project is important in the biodiversity and regional technical cooperative networks for South East Asia. The biodiversity of the wetlands of the Mekong River system has very high regional and global significance.

Replicability

There are now several projects in different regions of the world addressing the issues of achieving conservation of distinctive biological diversity and ecosystems of international freshwater systems and meeting the social and economic needs of people who live by and depend on those systems. The collective lessons learned through this project will contribute to the global sum of experience and knowledge and certainly provide some guidance for replication of such activities in other areas with different biophysical and socioeconomic characteristics.

Sustainability

The design makes provision with an appropriate time frame for planning, initial implementation, institutional strengthening and capacity building in national, provincial and local governments and communities..

I am not familiar with the area or the people and agencies involved. However, given the apparent social complexity it seems likely that for at least some of the sites it will require more than 5 years to implement initial management and achieve the necessary accompanying social, cultural and attitudinal changes to be confident that it can survive.

To maximize the likelihood of sustainability it is particularly important that the first stage of establishment and developing the trust and involvement of all the key stakeholders is achieved before

commitments are made to the content of the plan. Once trust and involvement have been secured it is important to move smoothly to the planning stage. I would therefore urge some management discretion in implementation so that in the event that criteria for trust and involvement are met in less than 2 years, stage 2 planning for the area in question can proceed early. Conversely stage 1 should be extended where it has not proved possible to meet the prerequisites by the end of year 2. The proposal can address these situations but it is desirable to minimise calendar driven pressures and to focus management on the outcomes of practical, implementable and implemented plans for year 6 and beyond.

Contribution to future strategies and policies

The project has important potential to contribute to the establishment of the concepts and application of conservation and sustainable use of natural resources in the policy frameworks of the countries. The documented experience of project implementation should contribute to the development of concepts, capacity and practice in the countries and also contribute to achieving international technical cooperation, effective assistance and sound sustainable investment projects.

Involvement of stakeholders

Some of the major challenges for this project are likely to arise from the complex socioeconomic settings in the areas of each of the protected sites. In and around the prime sites in all 4 countries there are apparently complex mixed communities of local people and immigrants, and of people with ownership or usage rights for land and those with no such rights.

Under such situations it can take time to identify and achieve the involvement of all the actual stakeholders. In particular marginalised immigrant people may have significant impacts on wildlife and resources but may not be accepted by longer term residents or regional officials as stakeholders whose uses and interests must be addressed if effective management is to occur. Committees or working groups are often predominantly comprised of people from distant national or state capitals with limited local knowledge. It can take many months but it is essential to build the necessary understanding and trust to be able to involve all stakeholders whose activities affect the design and effective implementation of the management system.

There has clearly been considerable social and economic analysis in the preparation of the proposal. The two staged project design provides a good approach for addressing these issues. The initial establishment stage which has to provide the basis for effective stakeholder involvement is projected to take 2 years while the second stage – delivering and realising all outcomes is projected to take 3 years. It would be a substantial achievement for this to occur in all 4 countries in a 5 year program. Without detracting from the design concept I would again reflect that the decision to proceed from stage 1 to stage 2 should be performance rather than calendar based. If successful this project will presage a need for some form of longer term support to consolidate a culture of biodiversity conservation and sustainable use for the Mekong River Basin Wetlands.

Conclusion

This is a well designed project tackling difficult issues in ways appropriate to the complex situation of the Mekong River Basin. I recommend support.

Addendum: Specific comments on the log-frame matrix

Logical Framework Matrix – specific suggestions and comments

Narrative description	Suggestion	Comment
IMMEDIATE OBJECTIVE 1: Output 1.1, tasks 1.1.1 –1.1.4	Additional Indicator • Work program with objectives and performance indicators updated and reported twice yearly • MoV Reports against half yearly work program	Suggest indicator based programming and reporting provided the indicators are chosen to reflect achievement of the purpose of the project and not just "countables" for the purpose of the reports.
Output 1.2	Same	Same
Output 1.5	Add Indictor: • Regional report on constraints and opportunities for listing and management of sites under the convention??	I don't know the field situation so this may already exist but in my experience there can be a cultural reluctance to identify constraints unless specifically asked. Under such circumstances strategies can be seriously impractical.
Output 2.1	Amend 2nd Indcator: • Analysis of sectoral stakeholder interests and of policies relating to wetlands produced for each country Add assumption: • Analyses reflect sectoral use, behaviour and expectations	Page: 113 It is important to specify sectoral interest analysis because if it isn't conducted there is a serious risk of impractical outcomes
Output 2.2	Add indicator: • NWAPs address practicality of implementation Add Mov: • Documents include constraints, opportunities and framework for practical implementation Add assumption: • NWAP development involves and addresses the needs of stakeholders	Likewise it is important to specify that development Action Plans must involve explicit consideration of feasibility of and commitments for their implementation otherwise there is a significantly greater risk of a plan that is never implemented
Output 2.3	Add assumption: • Appropriate economic and community interests are interested and have time to attend meetings / seminars	It is important that the class of decision makers includes appropriate community and economic interests
IMMEDIATE OBJECTIVE 3 Outputs 1.1 , 1.4 and 3.5 – 6.6	Amend Indicators: • Awareness materials targetted to key audiences • Regular review (6 monthly? To feed into twice yearly PSC meeting cycle?) of project activities Additional MoV: • Awareness materials used in education and information program	It is unfortunate but all too often true that awareness materials don't target or reach the key audience so it is important to have a process for identifying specifically the target groups and the key messages which are relevant to their sphere of activity or influence
IMMEDIATE OBJECTIVE 4 Output 1.10	Amend Indicator: • Network of illegal wildlife trade control? specialists supported	A pedantic point but otherwise it could be perversely interpreted as generally promoting wildlife trade

	Add Indicator: • Decline in illegal cross-border trade? Amend assumption: • Government is willing and able to enforce laws relating to wildlife trade	
Outputs 3.6 – 6.7	Add assumption: • Trainees are or will be in positions to apply their training	Targetting training can be very difficult where training, particularly training off-site, is regarded as a perquisite of status and an opportunity to benefit from travel. It is important as far as possible to structure training selection so that the people trained are likely to apply the knowledge gained.
IMMEDIATE OBJECTIVE 5 Output 3.1	Add Indicator: • Performance indicators established. Add Mov • Reports against performance indicators	
Output 3.2	Add Indicator: • Priority target groups and messages defined Amend MoV: • Education and awareness materials address priority target groups and messages Add MoV: • Community inputs to planning and management reflect messages of education program	
Output 3.3	Add Indicator: • Plans reflect local history of use and access rights and management provide alternative resources/employment where historic rights are terminated Add MoVs: • Local management plans for use and access • Plan performance or compliance regularly reported against objectives or performance criteria	It is desirable to be specific about this because otherwise a "local group" may not report and reflect the range of all local interests and strategies to address them.
Outputs 3.4 –6.5	Add Indicator: • Fund or small grant scheme for alternative livelihoods established? Add assumption: • Creation of alternative livelihoods reduces demand for continuing unsustainable use	From the wetlands conservation perspective the object of alternative livelihoods is to remove or reduce pressures on wetland resources. It is therefore important to ensure that those who transfer to alternative livelihoods are not immediately replaced by others continuing and increasing the level of pressure.
Output 4.2	Add Indicators: • Priorities address provision of alternatives for people whose current	Again from the wetlands conservation perspective it is desirable to treat as a priority those whose activities are most

	activities are most damaging to wetland biodiversity. • Regular coordination meetings with DANIDA team	damaging even if they are not the easiest to transfer to alternatives!
Output 4.3	Amend Indicator: • Community outreach programme operating developing educational materials that address issues in ways which reflect the local communities' existing beliefs interests and culture Add MoV • Active stewardship groups using education materials and reporting back to management on community views and activities	
Output 5.1: Amend to read: Integrated wetland protection demonstrated through development and implementation ?of an integrated land use plan	Add Indicator: • Informed local community involvment	It is important that there is Commitment to implement plans that are developed.
Output 5.2	Add Indicator; • Implementation of plans, guidelines and specific management activities Add MoV: • Reports against performance criteria	
Output 5.4	Amend Indicator: • Education and awareness materials which address target groups with appropriate messages Amend MoV: • Materials produced and used	
Output 6.1	Add MoVs: • Annual work plans with performance criteria • Evaluation of reports of performance of annual work plans	
Output 6.2	New Indicator: • Specific information interpretive materials developed to manage and enhance the experience, behaviour and expectations of ecotourists New MoV: Information/interpretive materials for ecotourists produced and used	While a significant proportion of ecotourists has advanced biological knowledge and training there is generally a need for specific materials for the interested amateur who is also quite likely to become an ambassador/donor- in this case for Mekong conservation
Output 6.3	Amend Indicator: • Materials developed to enhance the biology and geography (what about culture/history/economics- are they covered in Geography?) curricula of provincial secondary schools	As far as possible it is desirable to mainstream the educational message into the broad curriculum and particularly the economic, professional curricula. Limiting it to science and geography marginalises the message to those least likely to need persuading.

	Amend Assumption: • Schools education materials are designed to be incorporated in school curriculum Add Assumption: Education officials agree to include the materials into the curriculum	
Output 6.4	Add Indicators: • Priorities address provision of alternatives for people whose current activities are most damaging to wetland biodiversity • Regular coordination meetings with OXFAM team	

ANNEX III-B: RESPONSE TO STAP REVIEW

The efforts of the STAP reviewer are gratefully acknowledged. While the reviewer's comments were, for the most part, very complimentary, several observations require a response.

1. Ambitiousness of the time frame, and phasing.

In several places the reviewer notes that the specified 5-year time frame is ambitious, and that the basis for moving from phase 1 to phase 2 of the project should be related to success of phase 1, rather than time. However, the reviewer also notes that phasing of the project is the correct approach, given the social and institutional complexity of the region.

We agree with these comments. The 5-year time frame, and the 2-year proposed time frame of phase 1 are indicative only. A request for funding of phase 2 will be made once performance indicators under phase 1 indicate that conditions have been met for phase 2. We anticipate that this could be after approximately 2 years, but the timing could change. At the time of the request for phase 2 funds, a clearer picture should have emerged as to the total time-scale to secure global environmental benefits, and the envisaged 5-year horizon may be altered accordingly.

2. Need for effective interactions, given the social and institutional complexity.

The reviewer notes that, given the social and institutional complexities of the region, and the diversity of stakeholders, the building of effective relationships, and stakeholder involvement will be essential to meeting the goals of the project.

We agree with these comments. The creation of the Mekong River Convention Secretariat was in response to the complexities of managing this multi-national river system. UNDP has invested substantial amounts of funding in helping to build the institutional capacity of the MRCS to engage all stakeholders in building relationships necessary for wise use of the system. The close involvement of the MRCS in execution of the project will build on progress already made.

Furthermore, the period of time taken for completion of the PDF-B was longer than usual, reflecting the need to establish local, national and regional commitment to the specific goals of this project. Recognizing that the time between completion of the PDF-B-funded preparatory phase, and implementation of the full project can often be quite long, especially for regional projects, thus endangering momentum created during the preparatory phase, UNDP and IUCN have sought to engage in a "bridging phase", with generous financial support from the Government of the Netherlands, to consolidate relationships established by the PDF-B activities, and to strengthen the basis for the implementation of the full project.

3. Suggested modifications to the log-frame matrix.

As noted by the reviewer, numerous, mainly minor, changes are proposed to the log-frame matrix. The proposed changes generally appear to the valuable, and will be incorporated into the log-frame matrix, where possible, during preparation of the project document.

ANNEX III-C: LETTERS OF ENDORSEMENT

The letters, in Acrobat Reader format, are submitted as a separate file.