

**SIGNATURE PAGE**

**Country: Nepal**

Expected Outcome(s)/Indicator (s): Clear recognition and incorporation of environmental dimension into pro-poor policies

Outcome Indicator: Sectoral policies and plans address the linkage between the poverty and environment

MYFF Goal 3: Energy and environment for sustainable development  
S.L. 3.1: Frameworks and Strategies for Sustainable Development

Expected outputs: 1) Wetland biodiversity conservation values integrated into national policy and planning framework;  
2) Institutional capacity for wetland conservation and sustainable use strengthened;  
3) Collaborative management of wetland resources for conservation and sustainable livelihood enhanced

Government Coordinating Agency: Ministry of Finance / FACD  
Implementing Partner: Ministry of Forest and Soil Conservation (MoFSC) of Government of Nepal (GoN)

Other Partners: The World Conservation Union (IUCN) Nepal, Department of National Parks and Wildlife Conservation (DNPWC), Department of Forests (DoF), District Development Committees (DDCs) and Village Development Committees (VDCs)

Programme Period:	CCF II (2002 – 2006) and beyond
Programme Component:	Energy and environment for sustainable development
Project Title:	Conservation and Sustainable Use of Wetlands in Nepal
Project ID:	00049898, NEP/05/G01
Project Duration:	5 years (November 2006–October 2011)
Management Arrangement:	NIM
ACC Sector/ Sub-sector:	20 Environment/10 Environment Policies Planning and Legislation

Total budget:	4,061,969
GEF	1,964,895
Co-financing:	
UNDP	533,562
IUCN (Cash/in kind)	423,963
GoN (In kind)	1,139,350
Sub-total co-financing	2,097,074

Agreed by (Government): Memarsini  
Coordinating agency

Agreed by (Implementing agency): Banshu

Agreed by (UNDP): Muller



Government of Nepal (GON)

United Nations Development Programme  
Global Environment Facility (GEF)



Other Partners:

Ministry of Forest and Soil Conservation (MFSC)  
The World Conservation (IUCN) Nepal  
Department of National Parks and Wildlife Conservation  
Department of Forests  
District Development Committees and Village Development Committees  
Conservation and Sustainable Use of Wetlands in Nepal (CSUWN)

#### Brief description

The project will build capacity, and legal and policy frameworks (related both to conservation and development) for an ecosystem approach to wetland conservation and sustainable use. The project will ensure that national policies and planning frameworks identify and protect wetlands of global biodiversity significance and protect globally threatened species, including migratory species and improve transboundary cooperation. Awareness on and capacity of Nepal to engage in and to promote international policies and collaborative efforts for wetland conservation will be strengthened. It has been designed to influence two cycles of national and local development plans and to allow adequate time to achieve visible results and proper stakeholder takeover of project activities. Partnerships and capacity will be developed at both national and local levels to effect long-term changes to the perception, value, and sustainable management of wetlands in Nepal to ensure sustainability and replication of project initiated actions even after project end. The project will produce three Outcomes. These include Outcome 1 "Wetland biodiversity conservation values integrated into national policy and planning framework", Outcome 2 "Strengthened national institutional, technical and economic capacity and awareness for wetland biodiversity conservation and sustainable use" and Outcome 3 "Enhanced collaborative management of wetland resources for conservation and sustainable livelihoods".

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## Acronyms

AGRBS	Access to Genetic Resources and Benefit Sharing (draft Bill)
APP	Agriculture Perspective Plan
BRCC	Biodiversity Registration Co-ordination Committee
BS	Bikram Sambat (Nepali calendar)
BZ	Buffer Zone
BZDC	Buffer Zone Development Committee
CNA	Capacity Needs Assessment
CBD	Convention on Biological Diversity
CBO	Community based organization
CECI	Canadian Centre for International Studies
CFDP	Churia Forestry Development Project
CFUG	Community Forest User Group
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CNA	Capacity Needs Assessment
COP	Conference of Parties
CTA	Chief Technical Advisor
DDC	District Development Committee
DFO	District Forest Officer
DDG	Deputy Director General
DDT	Dichlorodiphenyltrichloroethane
DG	Director General
DIO	District Irrigation Office
DNPWC	Department of National Parks and Wildlife Conservation
DoA	Department of Agriculture
DoF	Department of Forests
DoI	Department of Irrigation
DSCWM	Department of Soil Conservation and Watershed Management
ED	Environment Division
EIA	Environmental Impact Assessment
EUS	Epizootic Ulcerative Syndrome
FAC	Field Advisory Committee
FACD	Foreign Aid Coordination Division
FMC	Field Management Committee
FPMU	Field Project Management Unit
GDI	Gender-sensitive Development Index
GDP	Gross Domestic Product
GEF	Global Environment Facility
GGLC	Ghodaghodi Lake Complex
GIS	Geographic Information System
GTZ	<u>Deutsche Gesellschaft für Technische Zusammenarbeit, GmbH</u>
Ha	hectare
HDI	Human Development Index
HH	Households
GoN	Government of Nepal
IAS	Invasive Alien Species
ICIMOD	International Centre for Integrated Mountain Development
INGO	International Non-governmental organization
IPM	Integrated Pest Management
IPRSP	Interim Poverty Reduction Strategy Paper

IUCN	The World Conservation Union
KCA	Kanchanjunga Conservation Area
Km	Kilometers
KMTNC	King Mahendra Trust for Nature Conservation
KT	Koshi Tappu
KTWR	Koshi Tappu Wildlife Reserve
KTWRMP	Koshi Tappu Wildlife Reserve Management Plan
LGP	Local Governance Project
LLBC/NWTC	Landscape Level Biodiversity Conservation in Nepal's Western Terai Complex
LSGA	Local Self Governance Act
MEA	Multilateral Environmental Agreements
MFSC	Ministry of Forests and Soil Conservation
MLD	Ministry of Local Development
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
MoF	Ministry of Finance
MoLD	Ministry of Local Development
MoSTE	Ministry of Science, Technology and Environment
MoWR	Ministry of Water Resources
MP	Management Plan
MPFS	Master Plan for Forestry Sectors
MW	Mega Watt
NABSC	National Agro-biodiversity Steering Committee
NARC	Nepal Agricultural Research Council
NBAP	Nepal Biodiversity Action Plan
NBLP	Nepal Biodiversity Landscape Project
NBS	National Biodiversity Strategy
NBSC	National Biodiversity Steering Committee
NBU	National Biodiversity Unit
NCCBC	National Coordination Committee for Biodiversity Conservation
NCS	National Conservation Strategy
NDF	National Development Forum
NEFEN	Nepal Federation of Nationalities
NEPAP	Nepal Environmental Policy Action Plan
NGO	Non-governmental organization
NIGC	National Indigenous Groups Committee
NPC	National Planning Commission
NPD	National Programme Director
NPM	National Programme Manager
NTFP	Non-Timber Forest Product
NWC	National Wetland Committee
OFMP	Operational Forest Management Plans
OP	Operational Plan
PA	Protected Areas
PCC	Project Coordination Committee
PCP	Participatory Conservation Program
PDDP	Participatory District Development Program
PDF	Project Development Fund
PMC	Programme Management Committee
PMU	Project Management Unit
POPS	Persistent Organic Pollutants

PPP	Parks and People Program
PRA	Participatory Rural Appraisal
PSC	Programme Steering Committee
RTC	Regional Training Center
RUG	Resource User Groups
SCDP	Sustainable Community Development Programme
SNV	Netherlands Development Organization
Spp.	Species
TAL	Terai Arc Landscape
TAR	Tibet Autonomous Region
TCC	Technical Coordination Committee
TK	Technical Knowledge
UG	Users Group
UN	United Nations
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
VDC	Village Development Committee
WTLC	Western Terai Landscape Complex
WWF	World Wildlife Fund
Yr.	Year



## ELABORATION OF THE NARRATIVE

### 1. Situation Analysis

#### Context and global significance

1. Nepal hosts great wetland diversity, including floodplains of snow-melt fed “cold” Himalayan rivers, and “warm” rivers originating in the lower hills; high altitude glacial lakes; marshes; hot springs; ponds; ox-bow lakes; seasonally flooded forests and grasslands, rice fields and swamps. They also harbour 42 globally threatened species (IUCN Red List 2002). Of the 859 bird species found in Nepal, 193 (22.5 percent) are wetland dependent, including several migratory and globally threatened species. Of the 20 endemic vertebrate animals found in Nepal, 17 are wetland-dependant including nine species of herpetofauna and eight fish species. It is believed that 25 percent of Nepal’s estimated 7,000 species of vascular plants are wetland dependent, and 26 of 246 endemic flowering plant species are so dependent. Nepal’s wetlands also hold several species of wild cultivars and wild relatives of cultivated crops, including five species of wild rice and two wild relatives of rice.

2. Whilst wetlands benefit all Nepali people, they contribute significantly to at least 20 wetland-dependent indigenous ethnic and caste groups; who traditionally lived off fishing, the sale of fish and crafts produced from wetland resources and by providing river transportation services. They constitute more than 11% of the country’s population. They are some of Nepal’s poorest communities.

3. Despite being important for both ecosystem condition and human well being, wetlands continue to be lost and degraded. The threats to wetlands and their root causes are summarised in Figure 1.

4. This Project will address the root causes of wetland degradation and loss in Nepal by strengthening national policy and capacity on wetland conservation and by linking national actions with work at two wetland demonstration sites of global importance: the Koshi Tappu Wildlife Reserve and its buffer zone and the Ghodaghodi Lake Complex (outside the protected area system), both of which are wetlands of global importance (Ramsar sites). Activities are also planned to influence policy and plans of the four districts, to integrate wetland conservation values, where the two demonstration sites are located. The Project has also explicitly built in activities to test the relevance of its approaches and tools in other wetlands in Nepal—particularly in the mid-hills and high mountains—through partnerships with institutions and projects working in those areas.

#### Threats, root causes and barriers analysis

5. Major threats to wetland biodiversity in Nepal can be categorised as a) habitat destruction and degradation; b) loss of ecosystem integrity; and c) depletion of species abundance and diversity. These threats are described below, their causes are summarized in Figure 1, and both are described in detail in Annex 1. Details of the threats faced at each of the demonstration sites are given in Annex 2.

#### Destruction and degradation of wetland habitats

6. Geographic inaccessibility, paucity of resources and, more recently, armed insurgency, has hindered economic development in Nepal, particularly in the mountain areas and the mid-western parts of the country. This, coupled with a high population growth rate, and large-scale in-country migration from the hills to the lowland Terai, have radically increased the pressure on the country’s wetland systems and associated biodiversity. At the same time, a range of policy incentives have been provided to stimulate production in the agricultural sector, including subsidies and support to credit, inputs, marketing, research

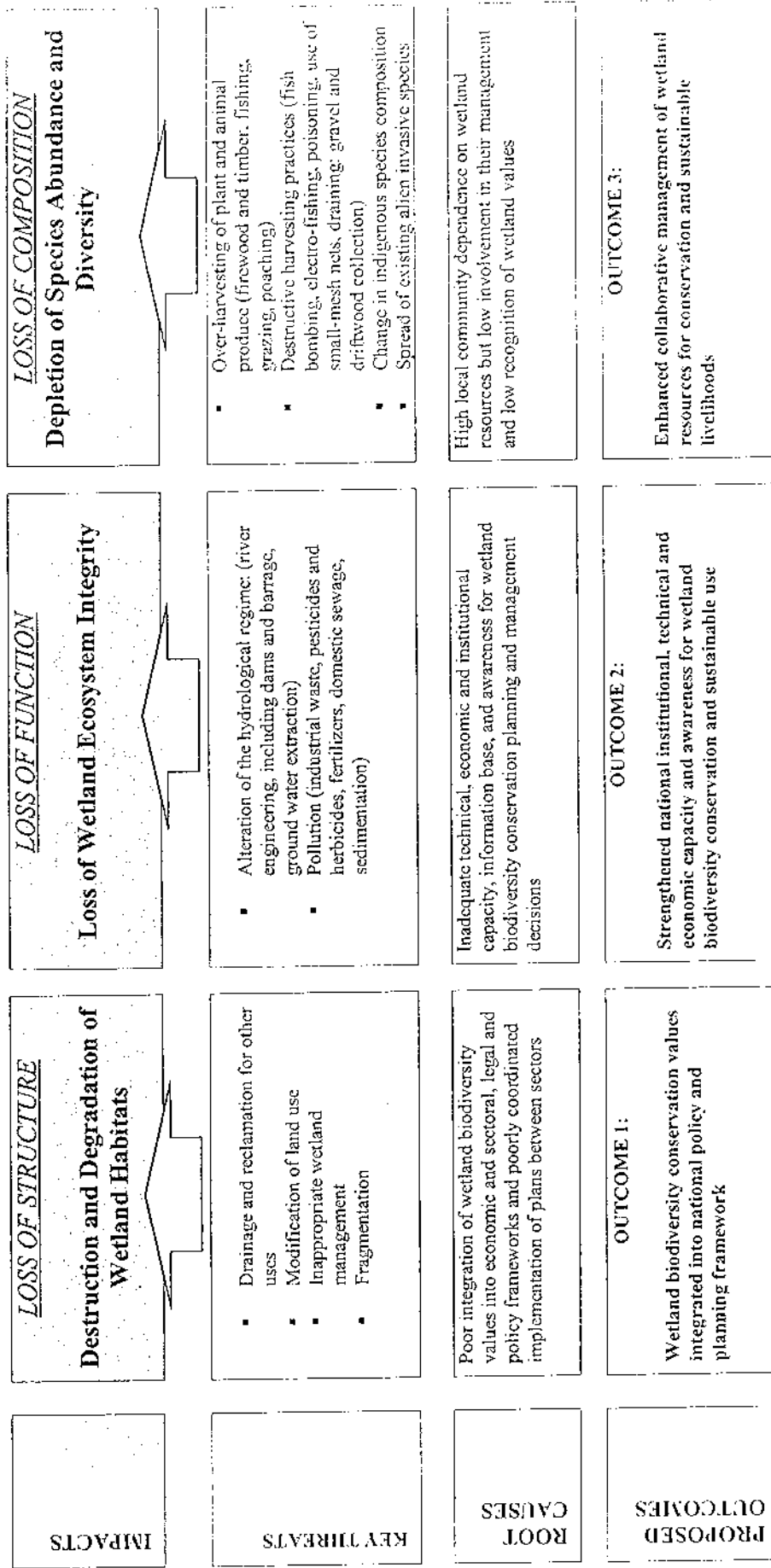
and development. As a result there exist strong financial and price inducements to convert wetlands to other uses. Wetlands are still regarded as a wasteland by much of the population and are often drained or reclaimed for agriculture, industrial and urban use, particularly in the more developed central region of the country. Of the 163 wetland sites inventoried by IUCN (1998), 43 percent had suffered some degree of drainage. With more than 23 million people in the country, and with 81 percent of the population engaged in agriculture, there is huge pressure for the modification of land-use, particularly within the lowland Terai where substantial settlements of migrants from the upland areas has pushed population growth rates up to 3.93 percent in some areas (e.g. in Kailali district). Much of this agricultural development produces a trade-off with the values of the wetlands for fish, wetland products, and the more generalized benefits of wetlands. In addition, inappropriate wetland management often results from wetlands being managed according to single sectoral objectives, e.g. water extraction for dry-season crop irrigation, or pumping wetlands dry to extract fish.

7. This increasing pressure on wetlands and forests has led to increased fragmentation of wetlands and associated forests, which has the effect of reducing previously extensive populations, especially of mammals and large reptiles, into genetically isolated sub-populations, many of which now risk falling below the threshold of population viability.

#### *Loss of wetland ecosystem integrity*

8. Alteration of the hydrological regime: Many wetland areas of Nepal depend upon the annual inundation by wet season water flows and their productivity is dependent on the level and duration of inundation. Changes to flood height and duration can result in some seasonal wetlands not filling up, or in previously permanent wetlands drying out. A number of existing and proposed developments may result in reduced peak flows and/or increases in dry season flow in rivers. The cumulative effects of these developments on biodiversity are unknown, but experience suggests they are detrimental. These include hydropower projects across major rivers in Nepal (including on the Mahakali, Karnali, Gandaki and Saptakoshi) and a number of smaller ones; and a number of low-gated dams or barrages being built, with several more planned for irrigation and flood management (also across the border in India). Nepal has identified a total of 114 potential significant hydro-power projects and, these will pose major threats to wetland biodiversity by inundating important habitats; reducing downstream water flows, altering suspended load sediments, bed load transport, oxygenation, and nutrient dynamics; acting as barriers to migration; leading to associated development; displacing people into new ecologically-sensitive habitats; and changing local temperature regimes and microclimates. These threats will be even more severe if these are badly constructed and managed. They can isolate wildlife populations leaving them particularly vulnerable to the impacts of human development, catastrophic environmental events, demographic changes, and reduced genetic transfer and associated in-breeding.

FIGURE 1: A SUMMARY OF THREATS TO NEPAL'S WETLAND BIODIVERSITY, THEIR ROOT CAUSES AND PROPOSED INTERVENTIONS



9. Growing human population and increasingly polluted surface water make groundwater the main source of potable water and irrigation in many parts of Nepal, particularly in the Terai. But the lack of institutional control over usage to ensure adequate recharge, and lack of monitoring, has resulted in haphazard drilling for commercial and domestic use, which has produced considerable stress on the finite groundwater potentials e.g. Kathmandu's deep aquifer has dropped from 9m to 68m below the surface within past few years. Such reduction in groundwater levels inevitably affects surface wetlands.

10. As in the case of agricultural production, a range of fiscal and market instruments have been used in support of water-based development, often at the cost of downstream wetlands. Another critical factor is that development planning, investment appraisal and product pricing structures have paid little attention to the fact that natural ecosystems form an economic part of water infrastructure. While there has been a move in recent years towards full-cost recovery in pricing and investment in the water and energy sectors both the allocation of investment funds and the calculation of market prices still focus only on the direct costs of establishing and maintaining physical infrastructure. They do not see the costs of ecosystem management as a necessary target for investment or as a component of price calculations. Yet, because wetlands provide both economic uses of water and economic components of the water supply chain, there is an appreciable cost to failing to factor them into investment and pricing decisions, to channel sufficient funds into their management as part of water infrastructure, or to invest in measures to avoid or mitigate downstream ecosystem impacts.

11. Agriculture intensification in Nepal is leading to an increase in the pollution load in its rivers and wetlands, which in the absence of government measures will continue to increase (it is estimated that about 2,600 tonnes of pesticides and about 1.15 million tonnes of chemical fertilizers are dumped annually into the Ganges River system in Nepal and India). IUCN's inventory of Terai wetlands indicates that of the 163 wetlands surveyed, 31 percent were highly affected by pollution. Pollution sources also include untreated industrial effluent and domestic sewage and waste (e.g. 38 million litres of untreated wastewater are discharged daily into the wetlands of the Kathmandu Valley alone, and more than 100kg of soap and detergents daily into Phewa Lake, Pokhara) leading to gross wetland contamination. Such pollution has led to eutrophication and excessive growth of weeds (particularly alien species such as water hyacinth), and contributed to disease (e.g. a virulent fungal disease of fish called Epizootic Ulcerative Syndrome), thereby resulting in decreased numbers, and loss of species diversity and function, e.g. potable water supply. Elsewhere, inappropriate land use activities around wetlands (such as deforestation, over grazing) have exacerbated the problems of already high natural levels of soil erosion and sedimentation. All of Nepal's rivers flow into River Ganges and contribute significantly to its sediment yield; with the Koshi River of Nepal alone contributing an estimated 170 million tons (40 percent) annually. All these threats cause loss of ecosystem function. Again, there has been little recognition of the economic costs to wetlands, and few attempts to factor wetland values into calculations of economic trade-offs or measures of profitability.

#### Depletion of species abundance and diversity

12. Most Nepali communities remain highly dependent on natural resources for their livelihood and over-harvesting of plant and animal products is commonplace. This has led to the steady depletion of resources to fulfil basic needs, in particular food, firewood, fodder, and construction material. This is particularly true for wetlands where unclear tenure arrangements, increasing population and the lack of alternatives are causing over harvesting. The survival of wetlands is also closely associated with forests but these are also under pressure from increasing human populations and their relentless demand for timber and associated products. Felling of Sal (*Shorea robusta*) and riverine forests for trade and domestic uses in the Terai, unsustainable collection of biomass such as leaf litter, fodder, and collection of medicinal and aromatic plants, have led to the depletion of forest cover and availability of resources.

13. The removal of driftwood and associated debris from riverbeds and banks for firewood, and unregulated mining of gravel and rock for road-building, decreases river productivity, alters the hydraulics and substrate composition, and eliminates essential habitat for several fish species during all or part of their life cycle, thereby endangering fish populations already under pressure from unregulated catches. Such habitat disturbance also has adverse impacts on other fauna - including birds, crocodiles, Gharial, otters and turtles. Traditional socio-cultural and agricultural practices in the Terai favour a high cattle population, which has exacerbated grazing pressure on grasslands and forests. Grasslands in the Terai are subject to heavy grazing pressure, which degrades and changes species composition resulting in scarcity of food for ungulates and leads to disturbance and destruction of bird habitat. Poaching is widespread in Nepal, often for subsistence purposes to supplement meagre diets but also for quick cash benefits due to inadequate alternative livelihood opportunities. Ineffective law enforcement and insufficient conservation awareness are contributory factors. The situation is exacerbated by the widespread use of destructive harvesting practices that destroy non-target species. These practices include fish bombing (use of explosives to collect all the fish from a specific area); electro-fishing (use of an electric charge to kill all aquatic organisms within a selected range); poisoning (causing mass-killing and polluting water bodies) use of small-mesh nets (thereby taking immature stock); and draining (removing breeding and feeding sites). 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 Water Hyacinth (*Eichhornia crassipes*), and farming of exotic fish species in natural ponds and lakes. Although significant profits and economic benefits can be gained from such unsustainable resource use levels and harvesting techniques, currently there are still few possibilities to gain in financial and economic terms from sustainable use of wetlands. This also means that there is a high local economic opportunity cost to limiting or curtailing existing unsustainable land and resource use practices. In the absence of alternatives, and in the face of widespread poverty and livelihood insecurity, these are currently costs that wetland-adjacent populations feel themselves to be unwilling, and in many cases economically unable to bear.

### Root Causes

14. Although the direct threats to wetland biodiversity conservation in Nepal are habitat destruction and degradation, loss of wetland ecosystem integrity, and depletion of species abundance and diversity through unsustainable resource use, their root causes are:

- Poor integration of wetland biodiversity conservation values into sectoral, legal and policy frameworks, and poorly co-ordinated implementation of plans between sectors. There is no integrated approach to planning at the national and district levels, and a coherent, co-ordinated institutional framework for wetland management is lacking. Government agencies, organised along single sectoral lines, have overlapping jurisdiction over wetlands, leading to contradiction and conflict in their management. There is little awareness of wetland values and functions and hence these tend to be ignored in development plans leading directly to the loss of wetlands and the biodiversity they sustain. When developments are planned, economic trade-offs balanced, or project profitability assessed there is perceived to be little economic benefit to wetland conservation, and few economic costs to their degradation and loss. Macroeconomic and sectoral policies continue to favour wetland-degrading sectors, and to employ fiscal and market instruments that encourage activities and land and resource uses that lead to wetland modification and conversion. Because markets and prices remain distorted against wetland conservation there are few financial or economic disincentives for wetlands-degrading sectors to modify their activities. Investment in wetland management continues to be seen as an uneconomic use of land, funds and other resources. Until very recently, wetlands did not even receive any attention in conservation planning.
- Inadequate technical, economic and institutional capacity, information base, and awareness for wetland biodiversity conservation, planning and management decisions. Human and institutional

resources are extremely low in the biodiversity and natural resource protection and management sectors, particularly for wetland conservation. There are very few professionals in Nepal with technical or practical skills in wetland conservation and no mechanisms for these professionals to share their skills. A strong information base on wetlands, their values and functions, is also absent. There is a lack of basic information on most wetland biodiversity issues, with data holdings often fragmentary and limited in their coverage of issues, of varying quality, out-dated, unavailable or under-used. Few decision-makers are cognizant of the economic, ecological and hydrological processes that make wetlands so important for mankind, and of the principles of wise-use of natural resources. The under-valuation of wetland goods and services has acted as a pervasive force in hastening their degradation and loss. As well as influencing development and economic sectors, this has meant that conservation efforts have often been based on unsound economic and financial principles. They have largely failed either to set in place the incentive systems that are essential for their economic viability and acceptability, or to secure the funding base that is required for their long-term sustainability.

- High local community dependence on wetland resources but low involvement in their management and low recognition of wetland values. Many local communities, particularly wetland-dependent indigenous communities, have weak, un-diversified, and insecure local livelihoods based on the direct exploitation of natural resources. Lack of access and ownership over the resources, and a lack of opportunities to develop sustainable management practices, means that even though these communities recognise the implications of their unsustainable use, over-harvesting of plant and animal products remains commonplace simply because there are no supportive actions for their involvement in management and their capacity to seek alternatives is low. Due to a poor appreciation and understanding of wetland values, few market mechanisms exist either to capture these benefits as tangible cash values or to price them according to their true scarcity and value—for the environmental agencies that are responsible for formal conservation activities or for local communities who live around and use wetlands.

15. A detailed root cause analysis is presented in Annex 1.

### Sector Issues, Opportunities and Barriers

16. The key issue for wetland biodiversity is the continuing and increasing rate of loss, leading to alteration of ecosystem structure, functions and composition. In Nepal, as elsewhere, the problem has been allowed to grow because national and local government agencies have attached little importance to wetlands, have ignored or under-estimated the economic value of their goods and services, and because biodiversity conservation has been considered a sectoral issue, confined to protected areas, and a luxury that Nepal cannot afford at a larger scale. Even where efforts have been made in wetland conservation, the rights of poor and disadvantaged communities have not received adequate attention.

17. The sectoral approach in policy-making and planning has been particularly detrimental to wetland conservation given the co-ordinated multi-stakeholder approach that is required. Under the opportunities afforded by the recently approved Nepal Biodiversity Strategy (2002) and the National Wetland Policy (2003), it is anticipated that the Project will be able to bring key national government agencies to a forum to co-ordinate wetland management as well as integrate biodiversity considerations into their policies and plans. The main barrier initially will be to convince macroeconomic planners and sectoral line ministries of the benefits of promoting wetland biodiversity conservation. Therefore the Project intends to undertake work on valuation of wetlands to demonstrate that they are not wastelands, and to identify opportunities for capturing these values in support of conservation (through market-based instruments, local economic incentives, and sustainable financing mechanisms).

18. It will also support capacity building and awareness raising of policy makers and practitioners on the international and national commitments already made by the Government. The Local Self Governance Act offers an opportunity to demonstrate inter-sectoral planning and management at the District level (and integrate market-based instruments), and provide the basis to encourage national policy to further decentralize responsibilities to District authorities.

19. Regarding the perception of biodiversity conservation being a luxury that Nepal cannot afford, the Project intends to demonstrate that local livelihoods and biodiversity conservation are inextricably linked, and will attempt to change the commonly-held belief of many sectoral line ministries that "conservation" equates solely with "protection" by demonstrating sustainable use. A key opportunity here is that some of the world's most successful examples of natural resources management have been the community forestry and the buffer zone management programmes in Nepal. These have demonstrated that successful local natural resources management is possible provided that supportive policies, capacity building actions, and long-term tenure securities exist, complemented by proper stakeholder identification and negotiated resource management planning at the local level. The Project will build on such successful examples by promoting collaborative approach to wetland conservation and by demonstrating community development based on sustainable utilisation of wetland biodiversity and natural resource conservation. This will be demonstrated at two project sites with complementary integration into national and local policy and planning frameworks and actions for replication across other wetland sites in Nepal. The focus will be on bringing communities directly into the management planning process, together with public authorities, identifying practical and sustainable alternatives for harvesting and collecting wetland resources and forest products, helping to influence local development policies, developing incentives for community-based conservation activities, and promoting the sustainable use of resources. At the same time, the project will work in key sectors (particularly agriculture and water resources) to identify and develop market-based instruments to price key wetland goods and services according to their full economic value, and to make sure that these values are factored into both development and conservation decisions.

20. The Project also highlights the livelihoods, cultural, spiritual and heritage aspects of wetlands. Such values are mostly ignored, since the focus is often on the production aspects of ecosystems. Though several "specialised" wetland dependent indigenous communities exist in Nepal (such as fisher folk) policies and actions have tended not to distinguish key stakeholders or "special interest groups" from general stakeholders. Thus, the Project's focused activity on documenting wetland dependent indigenous communities' knowledge and linkages with wetlands, and actions to empower them through capacity and coalition building and through understanding and addressing land tenure issues is an attempt to strengthen their access to and control over natural resources for sustainable livelihoods. There are opportunities to learn about community empowerment for natural resources management, particularly from the highly successful examples of community based forest management in Nepal, and to replicate such approaches for wetland conservation.

21. A key barrier for wetland conservation, as for other conservation activities, is the enforcement of existing legal provisions to their full intent, and in particular the EIA. While strengthening national capacity in EIA is beyond the scope of this project, the project will collaborate with existing relevant initiatives. Furthermore, whilst knowledge and capacity can contribute to better enforcement, there needs to be associated incentives for enforcement. At the local level, the Project strategy for strengthening enforcement is to replicate existing successful community enforcement mechanisms in Nepal such as anti-poaching units around protected areas and community based forest management. At the national level, there is a strong emphasis on awareness and capacity building for the judiciary as well as the development of financing strategies.

22. The Project recognises that the vulnerability of local people to natural disasters, poverty, poor overall development infrastructure, poor governance structures and political insecurity form some overarching barriers and that these lie beyond its scope. However, the Project has been designed with an understanding of these complexities and influences.

#### *Institutional, sectoral and policy context*

23. Whilst the Department of National Parks and Wildlife Conservation are the government's designated focal institution for Ramsar Convention, they have no jurisdiction on the management of wetlands outside protected areas. Therefore, there is no effective institutional mechanism for wetland management in Nepal. Under the Local Self Governance Act 1999, locally elected institutions at the Village, Municipal, Metropolitan or District levels are also responsible for the conservation and sustainable use of natural resources. Though some of these bodies have taken up some actions for wetland conservation, their roles in wetland conservation overall has been extremely limited.

24. Nepal's Biodiversity Strategy (NBS) (2002) identifies wetlands as one of the key ecosystems for Nepal. It stresses on the need to clarify institutional arrangements to facilitate wetland wise-use and conservation, to promote collaborative management, and to implement awareness raising programmes. Nepal became party to the Convention on Wetlands (Ramsar) in 1987 and a National Wetland Policy (2003) has been formulated. This Policy outlines the need for a co-ordinated approach to wetland management and stresses the need to conserve, manage and promote the wise-use of national wetlands, particularly through the collaboration of communities in the management and decision-making process. Nepal's Water Resources Strategy (2002) also promotes aquatic ecosystem conservation through integrated water resources management.

25. The National Parks and Wildlife Conservation Act (1973) outlined the establishment of protected areas and wildlife protection in the country. Sixteen protected areas have been created, and they include several wetland sites. The Act also provides legal protection to several wetlands species. The Aquatic Life Conservation Act (1961, recently revised in 2002) also has provisions to protect several fish and other aquatic species. These do not, however, protect all globally threatened species found in Nepal and penalties are minimal and have little deterrence value.

26. The Forest Act (1993) provides a basis for collaborative wetland management inside national forest areas, particularly under community forests. The National Environment Protection Act (1996) and the Environmental Conservation Rules (1997) have provisions for Environment Impact Assessment and pollution control, and thus are also important for wetland conservation. Despite the existence of the EIA processes and procedures envisaged under the Environmental Protection Act (1996) give inadequate consideration for biodiversity conservation. Pesticide Act (1991) and Pesticide Regulations (1993), the use and resulting spread of pesticides, particularly in the aquatic environment, is neither regulated nor monitored.

27. Although the sustainable environment and biodiversity management are emphasised in Nepal's tenth Five Year National Development Plan, actual macroeconomic and sectoral policies are not supportive of wetland conservation. At the same time wetlands have been further discriminated against because they have not been subject to the support or prioritisation that these other sectors enjoy. Wetlands have long suffered from weak levels of investment, low budget allocations and a chronic shortage of longer-term or more sustainable funding sources.

#### *Stakeholder analysis*



28. Key wetlands stakeholders include traditionally wetland dependent communities, farmers, local government agencies, non-governmental organizations, research agencies and government agencies.

29. The key government agency for wetland conservation is the Ministry of Forests and Soil Conservation (MFSC) discharges its responsibilities for wetland conservation mainly under four separate departments, namely the Environment Division, as the focal unit for the Convention on Biological Diversity (CBD); the Department of National Parks and Wildlife Conservation (DNPWC), responsible for management of wetlands within protected areas and their buffer zones, responsible for some of the key programmes in the captive-breeding and reintroduction of aquatic fauna and the focal unit with respect to the Ramsar Convention and CITES implementation; the Department of Forests (DoF), responsible for wetlands that fall within the national forest areas, some of which have been handed over for community management as community forests; and, the Department of Soil Conservation and Watershed Management (DSCWM), whose role is to support land-use planning (including watershed and sub-watershed management planning and technical service for land use development), land productivity conservation and infrastructure protection, and natural hazard prevention. One of the key responsibilities of the Ministry of Science, Technology and Environment (MoSTE) is on promoting effective EIA, pollution control, and enforcement and monitoring of environmental standards. Its responsibilities also include acting as the national agency for international treaties on the environment, including preparing strategies to implement the provisions of such treaties and taking a lead role in co-operation with other ministries to fulfil such international obligations (yet cf. Ramsar above); to study existing laws on various aspects of environmental conservation, amend and establish the legislative framework as necessary by amending existing policies and action plans and formulating national policy and action plans on the main aspects of environmental conservation, and to develop an umbrella law on environmental conservation and formulate rules, regulations and by-laws. The Ministry of Water Resources (MoWR) is responsible for hydropower, irrigation (including groundwater), and water-induced disaster prevention, while the Ministry of Agriculture and Cooperatives (MOAC) is responsible for agriculture development, including rice cultivation and aquaculture in the country. The Ministry also has a unit on agro-biodiversity, which is promoting conservation of wild varieties and wild relatives of the rice plant. The Ministry of Physical Planning and Works is responsible for drinking water supply in urban areas and the Department of Local Infrastructure Development and Agricultural Roads of the Ministry of Local Development is responsible for rural drinking water supply. At the local level, under the Ministry of Local Development, locally elected administrative bodies represented by District Development Committees (DDCs), and Village Development Committees (VDCs), or Municipal or Metropolitan Authorities have growing influence over conservation and sustainable development through a systematic shift towards decentralization of power under the Local Self Governance Act (1999) (LSGA). They are responsible for promoting local socio-economic development and natural resource management. In the process, they are required to draw upon the technical expertise and support of the various government agencies. Also at the local level are Chief District Officers, under the jurisdiction of the Home Ministry, whose duties include among others the enforcement of the Aquatic Life Conservation Act (1961)<sup>1</sup>, under the provisions made in its amendment in 1999. The National Planning Commission and the Ministry of Finance formulate economic policies and allocate budgets. The Poverty Reduction Strategy Paper (PRSP) provides the overarching framework for the country's development, and the Five Year Plans articulate priorities and allocate indicative budgets for this period. These plans are formulated based on the priorities submitted by line agencies. Ministry of Finance allocates budget on an annual basis based on requests by line Ministries. With the introduction of the Local Self-Governance Act (LSGA), District Development Committees (DDCs) now have responsibility for many activities in their districts. Clarifying the institutional overlaps between the responsibilities of the line Ministries and the local development authorities (such as DDCs) for natural resources management remains a key challenge.

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<sup>1</sup> Sections 2(c) & 8 of the Aquatic Life Conservation Act, 1961

### Baseline analysis

30. GoN and non-governmental organizations are currently carrying out a number of activities that relate to wetlands and sustainable development activities at the national level and in and around the Koshi Tappu and Ghodaghodi sites. Foreign donors support many of these baseline activities. There is approximately US\$ fifteen million worth of baseline work relevant to wetland conservation in Nepal for the period 2003-2008. However, baseline work is largely aimed at securing domestic benefits, not global benefits. They are also largely aimed at the use of water and wetland resources for agriculture and fish production, as well as for energy production (hydroelectricity), and on general sustainable development and environmental protection activities at project sites. The primary focus is on economic growth, income generation and employment. With increased political instability caused by the insurgency, development spending has been reduced in recent years and resources for biodiversity conservation, already under funded, have also declined. Despite the apparently favourable macro policy environment, baseline activities (or realities on the ground) largely ignore or give low priority to wetlands and aquatic biodiversity conservation.

31. Given the inadequate attention to and resources for biodiversity conservation in sectoral development plans, including global biodiversity conservation (and specifically, less attention to wetland conservation), it is certain that wetlands will continue to be degraded and converted to other land use, and global biodiversity values will continue to be lost unless significant and targeted actions are taken to supplement or modify this baseline. In particular, the following likely effects and impacts of the baseline on wetland biodiversity of global significance should be noted.

- **Wetland conservation and wise use remain low priority in national policy and planning frameworks and budgets**

32. Under the baseline, it is highly probable that plans and policies of institutions that manage, utilize and otherwise impact on wetland biodiversity will continue to remain uncoordinated, discriminating against biodiversity conservation, and often providing conflicting guidelines for wetland management. It is likely that weak and uninformed policies, planning and development decisions, both within and outside environment and natural resources sectors, will continue. Sectoral policies, particularly those related to agriculture, fisheries, water resources, energy and industries will continue to be driven by development imperatives and goals that do not pay adequate attention to biodiversity conservation or to wetland values. Lack of consideration of wetland values is reflected in a range of economic policy disincentives and market distortions and failures that encourage wetland degradation and loss. The Water Resources Act (1992), for example, does not list conservation of wetlands nor has aquatic biodiversity among its many priorities and the Ministry of Agriculture and Cooperatives been promoting exotic fish farming in natural lakes and ponds, leading to depletion of biodiversity. At the extreme, such unsupportive policy and economic instruments may even continue to contribute to wetland ecosystem and biodiversity losses.

33. It is also likely that environmental sector and biodiversity conservation policy and planning frameworks will accord inadequate priority for wetland conservation, particularly in achieving global conservation benefits. Until very recently, wetlands did not even receive any attention in conservation planning, e.g. the National Conservation Strategy (1989) did not include any provisions for wetland ecosystem conservation or sustainable use. The Nepal Biodiversity Strategy (2002) identifies wetland conservation as a priority but is likely to remain weak and ineffective because of the lack of political will, weak financial base and low support from all concerned sectors. The Strategy will need to be implemented. While the Wetland Policy (2003) advocates collaborative management of wetland resources, there is inadequate institutional structure and intersectoral support for its implementation.

34. Weak inter-sectoral support to sustainable wetland management is also caused by a poor understanding of wetland issues among senior decision-makers and the lack of mechanisms for inter-sectoral co-ordination to bring policy makers, practitioners and community stakeholders to common platforms to discuss issues, share knowledge and undertake joint planning and implementation. Under the baseline, no mechanisms exists for significant inter-sectoral coordination efforts for wetland conservation.

- **Weak institutional, technical and financial capacity for wetland biodiversity conservation and sustainable use**

35. The current poor knowledge, technical skills and tools for wetland conservation planning, particularly on globally important wetlands, are likely to continue. The lack of policy-relevant information and tools, such as poor policy awareness for the legal protection of globally threatened species, low capacity for using economic tools for wetland management, and low recognition and value of indigenous knowledge on sustainable wetland management, will continue to hamper wetland biodiversity conservation. Current information and lessons on wetland issues will remain fragmented, and largely inaccessible to planners, managers and decision-makers due to the lack of dedicated institutional mechanisms and resources for collecting, collating, generating, and disseminating wetland conservation information from Nepal and elsewhere. There is currently very little research on wetland biodiversity issues and under the baseline this is likely to continue. There is little understanding of wetland values and functions, the principles or practical applications of wise use and the global importance of wetland biodiversity at all levels. This lack of information is contributed by the generally poor awareness among planners, managers and policy-makers of the importance of wetland biodiversity issues and this has led directly to the overall poor public awareness of wetland issues and low support for wetland conservation.

36. Under the baseline, low technical and human resource capacity will persist, resulting in ineffective wetland biodiversity conservation. Despite significant budgetary allocation for general training and capacity-building at local and national levels, continued low investment in developing wetland biodiversity management related training resources and programmes will mean that human resources will remain underdeveloped, and government and non-government authorities will continue to lack the expertise to incorporate wetland biodiversity in their planning processes.

37. Funding to wetland conservation is likely to remain weak or non-existent, both at central and local levels. At the central level, there is unlikely to be funding targeted or earmarked for wetland biodiversity conservation or for institutions mandated to carry out such work. The bulk of wetland-related government and donor budgets will focus more on wetland development and exploitation than on their sustainable use and conservation. At the local level, District budgets will continue to omit considerations of wetland biodiversity conservation, and allocations for the management of wetland Protected Areas and critical habitats will remain low or non-existent and will depend almost wholly on limited government funding sources. Little or no financial resources will flow to local communities to support wetland conservation-related activities.

- **There will remain few economic or financial incentives for wetland biodiversity conservation, disincentives and perverse incentives will continue to exist at macroeconomic and sectoral policy levels, and market and price distortions will continue to discriminate against wetlands.**

38. Under the baseline, there will be few positive economic, policy or legal incentives for wetland biodiversity conservation, and significant disincentives and perverse incentives that encourage wetland loss. Both the private sector and local communities will continue to degrade wetlands in the course of their economic activity, because it is perceived to be more profitable to do so because social and

environmental costs have been externalised and are passed on to others. It is also the case that governance and social issues such as access and equity issues will also continue to be ignored.

39. Under the baseline, it is likely that economic policies, planning and development decisions will continue to under-emphasise wetland values. Development planning, project analysis and investment appraisal procedures will continue to pay little attention to the fact that wetland ecosystems form an economic part of water infrastructure, and will perceive few economic benefits from wetland conservation, and few economic costs to their degradation and loss. Macroeconomic and sectoral policies will continue to favour wetland-degrading sectors, and to employ fiscal and market instruments that encourage the activities, land and resource uses that lead to wetland modification and conversion such as (implicit or explicit) subsidies and support to credit, inputs, investment, marketing, research and development in the sectors that impact on wetlands. Because price markets and prices will remain distorted against wetland conservation they will send signals to individual producers and consumers that are in conflict with the real scarcity and social value of wetland goods and services. There will be few financial or economic disincentives for wetlands-degrading sectors to modify their activities, and investment in wetland management will continue to be seen as an uneconomic use of land, funds and other resources.

40. Due to this poor appreciation and understanding of wetland values, few market mechanisms will be developed either to capture these benefits as tangible cash values or to price them according to their true scarcity and value. This will impact on both the environmental agencies who are responsible for formal conservation activities and on local communities who live around and use wetlands. Conservation plans will continue to be founded on weak economic and financial principles. They will largely fail either to set in place the incentive systems that are essential for their economic viability and acceptability, or to secure the funding base that is required for their long-term sustainability. Local communities will continue to find that it is possible to reap significant profits and economic benefits from unsustainable resource use levels and harvesting techniques, while still facing few possibilities to gain in financial and economic terms from wetland sustainable use. There will continue to be a high local economic opportunity cost to limiting or curtailing existing unsustainable land and resource use practices. In the absence of alternatives, and in the face of widespread poverty and livelihood insecurity, these will remain costs that wetland-adjacent populations feel themselves to be unwilling – and in many cases economically unable – to bear.

- **Lack of replicable models of collaborative wetland management linked to local and national capacity and policy strengthening**

41. Under the baseline, “on- the-ground” field testing of policies and linking this with refinement of policies and practices at sub-national and national level is unlikely to occur. The demonstration of how mechanisms for better institutional collaboration can result in better wetland conservation, while not compromising community and national benefits, but achieving additional global benefits, is also unlikely to take place. Hence, wetland biodiversity conservation is likely to remain a low priority in district and local development plans. Little attempt will be made to identify and develop viable alternatives to unsustainable wetland resources utilization practices.

42. Due to overall priority and need for increased food production, employment and income generation in Nepal, little emphasis will be given to sustainable natural resources utilisation or conservation. In fact such priorities are often the reasons for conversion of wetlands into agricultural lands, irrational allocation of water for irrigation or development of natural and biodiverse wetlands into exotic fish farms. Due to the overall marginalisation of indigenous wetland dependent communities (such as those dependent on fish, and other wetland resource based enterprise -- such as wetland plant based handicraft producers like Sardar communities), the potential for biodiversity as a tool to enhance

livelihoods will continue to be ignored. In the absence of alternative, sustainable, livelihood options, such local land and resource use activities will continue to pose a severe, and growing, threat to wetland biodiversity.

## 2. Strategy

### Project Rationale and Policy Conformity

43. The Project promotes an ecosystem approach to wetland management in Nepal, with appropriate capacity building, legal and policy strengthening, which is consistent with the GEF Operational Programme 2 on Coastal, Marine, and Freshwater Ecosystems. The Project's focus on conservation and sustainable use of environmentally vulnerable areas, as well as emphasis on development of replicable models of wetland management and their replication is in total conformity with the Operational Programme. With reference to the GEF's newly established Strategic Priorities; the project design is consistent with the objective of Strategic Priority II, i.e. Mainstreaming Biodiversity in Production Landscapes and Sectors. About 85% of the project budget is allocated to activities supporting this Strategic Priority, of which 28% is directly relevant to capacity building activities. The project is in line with SP2 given its overall objective of integrating biodiversity conservation within the management of wetlands, where wetlands are accorded a high priority (as per National Wetlands Policy 2003) and are seen to function as 'production' systems providing a range of resources, values and services. The project is especially relevant to the sub-objective of SP2 on mainstreaming of biodiversity within production systems, as project outcomes focus on integrating biodiversity conservation within national development and conservation planning frameworks, strengthening institutional capacity and increasing awareness, as well as developing appropriate partnerships between agencies and with local communities and private enterprises to support improved management and sustainable use of wetlands products and services.

44. The project supports key objectives under SP2, as follows:

- *Facilitating the mainstreaming of biodiversity within production systems:* The project will support systemic change and institutional capacity building and will create multi-sector, multi-stakeholder coordination bodies aimed at improving planning for wetlands at both national and local levels. This will, in particular, include environment, water resources, agriculture and local development sectors. The project will support review of key policies and implementation plans of these sectors to ensure their harmonisation. Conservation of wetlands will be integrated into land-use planning at national and local levels through improved understanding of wetland values and clarification of tenure of "government" wetlands.
- *Developing market incentive measures:* The project puts strong emphasis on improving understanding on wetland values and to develop incentives nationally and locally through market based measures (please see Financial Sustainability and Economic Sustainability sections below for more details)
- *Demonstration:* The project will demonstrate wetland conservation and wise use at two Ramsar sites, one including a protected area and its proposed buffer zone (production sector) and another outside protected area situation to ensure replicable lessons. In addition, the sister sites will be developed for this project demonstration sites and a project component is devoted to joint learning and catalysing replication.

45. The project is in line with UNDP Nepal's Country Coordination Framework (CCF) and directly contributes to UNDP Nepal's Immediate Objective "*Assist Nepal in conserving and regenerating its environmental assets, enabling the poor to utilize those assets in order to enhance their incomes and well-being*". The project aims at harmonizing sectoral policies and plans to favor wetland management in such a way that the values of wetlands are factored into development planning process at various levels to give due attention to wetland conservation, which is in line with UNDP's Nepal Country Programme Outcome "*Clear recognition and incorporation of environmental dimensions into pro-poor policies*".

46. The project complements other completed and current UNDP/GEF Projects in Nepal. It builds on the Nepal Biodiversity Strategy 2002, which was supported by UNDP-GEF, and which has identified wetland conservation as a priority issue for Nepal. Its implementation structure is complementary to the implementation structure envisaged by the NBS. It complements current landscape level UNDP-GEF biodiversity projects in Nepal such as Landscape Scale Conservation Of Endangered Tiger And Rhinoceros Population In And Around Royal Chitwan National Park (Nep/00/005, Nep/00/G35) and Upper Mustang Biodiversity Conservation Project (Nep/99/021, Nep/99/G35). The proposed Project will work very closely with the King Mahendra Trust for Nature Conservation, the executing agency for both the medium sized projects, to ensure that lessons from these projects are used in the implementation of the proposed Project, and the relevance of project ideas tested in these sites (Activity 3C2.2).

47. Furthermore the proposed Project also complements the GEF Full Size Western Terai Landscape Complex Programme (WTLCP) (Nep/00/G41, Nep/99/030). WTLCP and the proposed Project have a geographic link at the Ghodaghodi Lake Complex, which falls within the overall geographic working area of the Western Terai Landscape Complex, but not fully under the targeted areas of work within the Complex. There are therefore great opportunities to undertake joint planning and action, particularly on capacity building of key stakeholders in Kailali district.

48. The project will also coordinate with, learn from and share lessons with other UNDP-GEF projects such as the Tourism for Rural Poverty Alleviation Programme (TRPAP) (Nep/99/013), Decentralized Local Governance Support Programme (DLGSP) (Nep/04/002), the Participatory District Development Programme (PDDP) (NEP/95/008) and the various initiatives supported under the GEF Small Grants Programme (SGP) Nep/98/G52.

49. The Project directly contributes to achieve at least two of the Millennium Development Goals - *Goal 1: Reducing Poverty* and *Goal 7: Environmental Sustainability*. The Project intends to provide tangible benefits to the wetland dependent communities through secured tenure rights for using wetlands and targeted activities to enhance the local livelihood options. Assessment of income generating opportunities for the poor men and women, and for different ethnic groups will be undertaken and supported by the Project. These actions will be targeted to addressing both sustainable livelihood and poverty alleviation issues - that are fundamental root causes of wetland degradation and loss, as well as important elements of the National Five Year Development Plan. In addition, the Project will promote an ecosystem approach of wetland management at the landscape scale to reduce grazing and poaching activities and promote sustainable harvest of fish, plant materials and timber, thereby ensuring conservation of forest, wetland and rangeland biodiversity in the two pilot sites.

50. The Project has made sufficient provisions and allocated substantial amount of funds for capacity building at all levels and policy as well as institutional strengthening to address the coherent issues related to wetland management, which are generally cross sectoral. The Project will demonstrate successful wetland management models for replication into other areas by creating positive incentives for the local people to protect the wetlands and enhancing institutional capacity to co-ordinate and jointly implement wetland management as well as development activities. The project does not envision direct investments at the local level for community development or poverty alleviation as such; instead, it will support soft activities such as awareness creation and capacity building for wise use of wetland resources to support the livelihood and institutionalizing market based instruments for sustainable wetland management. The activities planned under various components are based on intricate linkage of one component to another.

#### *Project Goal, Objective, Outcomes and Outputs/activities*

51. The Project goal is to ensure the maintenance and enhancement of wetland biodiversity and environmental goods and services for improved local livelihoods in Nepal. The immediate objective is to strengthen national and local capacity in ecosystem management and sustainable use of wetland biodiversity in Nepal. Over the five years of the Project, it will influence two cycles of national and local five-year development plans. Multi-sectoral partnerships will be developed at national and local levels to effect long-term changes to institutional arrangements and actions for sustainable wetland management. The Project will influence sectoral reform through emphasis on applying full cost pricing of the values of wetlands (through development and piloting of market-based instruments) to offset perverse incentives and create positive incentives for their conservation and sustainable use. At the demonstration sites, the Project will build upon Nepal's rich experience in community-based resource management to demonstrate means of achieving sustainable wetland management both within and outside Protected Areas. Methods and approaches tested at the demonstration sites will be replicated in selected mid-hills and mountains wetlands through partnerships with NGOs and government agencies during the project implementation in a unique joint learning and capacity building partnership.

### Project Demonstration Sites

52. As well as building policy and capacity at the national level, the project will demonstrate wetland wise use and conservation at two Ramsar sites and their surroundings: the Koshi Tappu Wildlife Reserve and its buffer zone (referred to in rest of the Pro Doc and Brief as "Koshi Tappu Area"), and the Ghodaghodi Lake Complex. These two were selected as demonstration sites from among the four wetland sites identified by the PDF B document of the project as possible demonstration sites, after approval by the Project Steering Committee. The detailed criteria for their selection are in Annex 2. The key demonstration values of the sites include:

- Global biodiversity value: These demonstration sites support a significant range of globally threatened species. The Koshi Tappu Wildlife Reserve is a Ramsar site and a part of Ghodaghodi Lake Complex is a Ramsar site (see Annex 3 for the Ramsar site in the context of the whole Complex). The key global biodiversity values for the sites are summarised in Table 2 (see Annex 2 for details).
- Different tenure: Since most natural wetlands in Nepal fall either under protected area or national "forest" area, the demonstration sites were selected to reflect situations under both types of tenure. The Koshi Tappu Area includes a protected area and its buffer zone, and the Ghodaghodi Lake Complex falls under a national forest area.
- Different types of wetlands: Koshi Tappu Area is on the floodplain of the Koshi River (riverine wetland) and the Ghodaghodi Lake Complex represents a lacustrine wetland type.
- Strategic geographical locations: Koshi Tappu Area is situated in Eastern Nepal and Ghodaghodi Lake Complex in the Far West, and can be used for demonstration purposes in different parts of the country. Nepal's Far West region has the most number of natural lakes.
- Differences in ethnic diversity: The Koshi Tappu Area has a more diverse ethnic composition (and more wetland dependent groups) than the Ghodaghodi Lake Complex.
- Opportunities for strategic partnership: The Ghodaghodi Lake Complex demonstration site adjoins a critical site under another UNDP-GEF project entitled "Landscape Level Biodiversity Conservation in Nepal's Western Terai Complex" (WTLCP). This project will not overlap with the other GEF Project either in theme or geographic location. The connectivity between the project site and the other GEF project will be essential to maintain populations of larger mammals such as tigers. At the inception of the Project implementation at the site, a joint workshop will be organized to clarify activities of both projects (WTLCP) and the Wetland Project) at the project site to enhance synergies between both projects. The Koshi Tappu area offers opportunities to promote discussions on better river basin management for the whole Koshi River basin.



53. The key common threats to both the demonstration sites include unsustainable use of wetland and other resources by local communities (over fishing, poaching of wild animals, high grazing pressure, unsustainable water extraction from lakes and swamps for irrigation), invasive alien species proliferation (for example, water hyacinth), construction of a river engineering structures (barrage in Koshi, small dam in Ghodaghodi) and encroachment of protected area and government forest areas for farming and settlements. There are also a number of site-specific threats, such as the focus on water buffalo management in Koshi Tappu Wildlife Reserve, which has meant less attention is paid to management of other wetland species, and in Ghodaghodi Lake Complex, pollution of the lake from waste disposal is a key problem. Key threats to the demonstration sites are detailed in Annex 2. Activities are planned to address these threats and also planned to influence the district level policy and plans of the four districts where these two sites are located, especially on integrating wetland conservation into such plans.

54. The Project has also explicitly built in activities to test the relevance of its approaches and tools in other wetlands in Nepal—particularly in the mid-hills and high mountains—through partnerships with institutions and projects working in those areas. There is inadequate information on mid-hill and mountain wetlands to select one or more demonstration sites in these areas.

55. The two demonstration sites have a range of problems affecting both protected and non-protected areas. The human populations of the 16 Village Development Committees falling in the buffer zone of the Koshi Tappu Area number about 106,000, while that of the five Village Development Committees comprising the Ghodaghodi Complex site number about 74,510.

56. The biodiversity, socio-economics, and the threats present at each of the two sites, are given in Annex 2 and maps of the sites in Annex 3.

### Project Outcomes

57. In order to achieve its immediate objective, the Project will undertake activities to produce three project outcomes:

1. Wetland biodiversity conservation values integrated into national policy and planning framework.
2. Strengthened national institutional, technical and economic capacity and awareness for wetland biodiversity conservation and sustainable use.
3. Enhanced collaborative management of wetlands resources for conservation and sustainable livelihoods.

#### Outcome 1: *Wetland biodiversity conservation values integrated into national policy and planning framework.*

58. The lack of a coherent integrated approach to wetland management planning will be overcome by establishing a National Wetlands Committee (NWC). The NWC will include key Government agencies that depend upon, or which heavily impact, wetlands and their biodiversity to ensure adequate provision for wetland biodiversity issues in their actions. Chaired by the Minister of Forest and Soil Conservation (MFSC), or his/ her delegate, it will comprise the Secretaries of the major ministries and other members co-opted as required. The NWC will serve as the policy body, and will create Technical Advisory Committees of professionals from a range of sectoral Ministries. These Technical Advisory Committees will be the entry point for all wetland issues and will provide policy recommendations to the NWC for endorsement and action. The Technical Advisory Committees will be formulated on a needs-basis and are envisioned to address issues such as hydropower plans, agriculture, management of Ramsar sites within and outside of Protected Areas, integration of wetland issues into environmental impact assessment etc.

59. In addition to reviewing specific sector-based policies and plans, the teams will be instrumental in guiding the development of sector-based guidelines and regulations, in order to enhance policy implementation. The Environment Division of the MFSC will act as the secretariat of the NWC. Two national networks --the Wetland Specialist Network and the Wetland Indigenous Communities Network---will be established to identify and promulgate successful approaches to the management of all aspects of wetlands within the country. The Wetland Specialist Network, composed primarily of technical officers, scientists and practitioners from across the country, will be responsible for species-based issues, e.g. species action plans and sharing experiences on wetland management; and, the Wetland Indigenous Communities Network comprising wetland-dependent peoples will work to strengthen their capacity to empower wetland dependent communities for their betterment and to promote wetland conservation and sustainable use. The National Networks will be linked to the Technical Advisory Committees of the NWC in order to channel site-specific experience into policy recommendations and national priorities. The two networks are also expected to strongly collaborate on issues such as indigenous knowledge on sites and species use and management. These networks will also play a critical role in serving the needs and interests of practitioners such as peer-to-peer learning, influencing local policy and practice, and development and implementation of site- or species-specific action plans. Additionally, the Project Steering Committee with support from the Project Management Unit will be a key forum for discussing project progress in the field sites and at national level and identifying means to feed national policy into the District actions and to feed site experience into national programming and policy making.

60. The UNDP-GEF intervention will direct the creation of a supportive legal framework and enabling national policy environment for wetland biodiversity conservation and sustainable use by increasing the knowledge, and producing the tools, necessary for decision-makers to incorporate wetland issues into policies and plans; and by strengthening the institutional and technical capacity to implement wetland issues into a more coherent set of frameworks. The National Wetland Policy (2003), the central plank of the Government's approach to wetland biodiversity conservation, will be clarified to facilitate its implementation. The project will have a two pronged strategy to influence national legal framework: it will work directly on some key legislation and will work to influence other sectors. It will directly work on strengthening implementation of the Local Self Governance Act (1999) in relation to wetland management, refinement of protected area and buffer zone related legislation to update protected species list to include globally threatened wetland species and wetland sensitive demarcation and management, and clarify the scope and implementation of the Aquatic Life Protection Act. The Project will promote wetland sensitive river engineering, agricultural and water resources planning through discussions and increased understanding. Key areas of project interventions to strengthen the regulatory frameworks are presented in Annex 4. Since the national policy framework begets most of the planning initiatives that affect wetland biodiversity conservation, support for, and an understanding of, wetland biodiversity conservation will be built among senior-level policymakers from all sectors that depend, or impact heavily, on wetland species and systems through a range of high-profile, targeted awareness-raising and education methods. The Project will make use of an international network of environmental lawyers to review and make recommendations to the NWC to strengthen the existing legal framework on biodiversity by integrating wetland issues into it, and then by incorporating wetland issues into the sectoral frameworks. This will include both national and local (District) level policies and plans. Compilation of best practice guidelines on how to integrate wetland issues into agriculture, forestry, industry, river engineering and tourism management in order to increase the skill levels of practitioners and land-managers will be done to promote wetland sensitive development planning and work.

61. The project will make significant efforts to ensure that wetland concerns are factored into economic policy and planning. Awareness raising activities will be targeted specifically at macroeconomic and sectoral economic decision-makers, with the aim of promoting consideration of wetland biodiversity principles, and making an economic case for respecting the ecological needs of wetlands.

62. A national-level analysis of existing economic policy disincentives and perverse incentives to wetland conservation will be undertaken for at least three key wetland impacting or related sectors, and will include some quantification of both the economic costs of wetland degradation and the economic benefits of wetland management. This will be used for awareness and advocacy, particularly on policy reforms and positive economic instruments to be integrated into sectoral and cross sectoral strategies and plans (such as the PRSP). It is envisaged that economic policy proposals will focus on economic, fiscal and market-based instruments such as payment for environmental services, user charges and damage fees which can simultaneously meet the objectives of correcting existing price and market distortions, internalise current externalities relating to wetland conservation benefits and degradation costs, and generate finance and incentives for wetland sustainable use and conservation. At the same time, guidelines will be produced for the integration of wetland economic assessment into sectoral project analysis and investment appraisal procedures, and will be used in training and awareness activities.

*Outcome 2: Strengthened national institutional, technical and economic capacity and awareness for wetland biodiversity conservation and sustainable use.*

63. Poor knowledge base is a key problem blighting wetland conservation planning in Nepal, especially for the mid-hill and mountain regions. The Project will develop wetland biodiversity overlays for these regions to identify sites of global importance. Threats to these sites, status, and priority for conservation, and on-going and planned local and national actions at those sites will be assessed. This information will be used for national and district conservation and development planning. As invasive alien species pose a serious and increasing threat to Nepal's wetlands, a review of the species involved, extent of their spread and their impacts will be reviewed, and guidelines and action plans will be developed to minimize their spread and to stop any introduction of additional invasive alien species. Mechanisms will be established to ensure that globally important wetland species are legally protected under relevant Acts (e.g. the Aquatic Life Conservation Act 1961 and the National Parks and Wildlife Conservation Act 1973) through their regular updating and capacity will be built for their use in conservation actions. Guidelines for wetland management in Protected Areas and Buffer Zones will be developed. Traditional knowledge of wetland-dependent indigenous communities in Nepal on values and uses of wetland resources and their sustainable use will be documented and used for developing sustainable management techniques.

64. The Project will strengthen national capacity to incorporate economic and financial concerns in wetland management. Training on wetland valuation techniques and applications will be carried out, including the development of a toolkit detailing methodologies and best practices. Such capacity building will include the practical application of valuation techniques in at least four sites (including the Project demonstration sites), and the results used to identify practical economic and financial instruments to be integrated into site conservation plans and District development plans. Instruments will focus on generating finance and incentives for wetland management, and on using price and market mechanisms to influence wetland degrading land and resource uses. Recognizing that financial sustainability is key to the implementation of wetland policy, a proposal for the development of a national-level financing mechanism for wetland management will be developed. It is anticipated that this will act as an extra-budgetary source of funding for wetland management activities, and will be based on a combination of international and domestic sources. These may include fiscal sources such as user fees and damage charges, market sources such as payment for environmental services, bonds and deposits, and innovative international mechanisms such as debt-for-nature swaps, payment for global public goods, offsets and other market and voluntary sources. It is intended that private financial flows, from both international and national sources, will also make an important contribution to the mechanism. The development of sustainable financing strategies for Project demonstration sites (see below) will be linked to this national

mechanism, and will provide a means of demonstrating how sustainable financing principles and innovative funding sources can be identified, raised and allocated to specific wetland sites.

65. Following an assessment of awareness needs of key stakeholders, wetland issues will be mainstreamed through an extensive awareness raising programme. Additional to a wide range of general multi-media materials, targeted materials will be developed for teachers, policymakers, and others, and incorporation of wetland issues into the school and university curricula will be encouraged. Opportunities to update university and forestry college lecturers on current thinking and approaches to various wetland issues will be sought. A Wetland Information Centre will be established to house the National Wetland Database, including all the results from the wetland inventory, materials produced by the Project, and all wetland materials gathering from throughout the country and from international sources. It will act as the information hub for disseminating materials to the networks and all other interested parties. A comprehensive capacity needs analysis (CNA) will be undertaken in the early stages of Project implementation and a national resource base will be developed through the compilation of wetland training and capacity building materials from global, regional, and national sources, augmented by those produced specifically to address gaps identified by the CNA. Capacity building activities will be implemented as required.

*Outcome 3: Enhanced collaborative management of wetlands resources for conservation and sustainable livelihoods*

66. The Project will demonstrate collaborative wetlands resources management at two Ramsar sites. The two sites include a protected area and its buffer zone (the Koshi Tappu Area in Eastern Nepal) and a non-protected area (the Ghodaghodi Lake Complex- GGLC) in Far Western Nepal. Here, capacity strengthening activities of existing (Koshi Tappu Area) or possible new management institutions (Ghodaghodi Lake Complex) will be supported, including better links with other district and community institutions, including Government line agencies, District Development Committees, and Village Development Committees, to resolve conflicts and undertake effective resource management. The roles, rights and responsibilities of stakeholders will be clarified. The institutional needs of key stakeholder groups will be assessed to identify weaknesses in functional and coordination mechanisms, and in human and technical capacity. The Project will provide for awareness raising, training and other support to ensure that the groups can fulfil their assigned roles efficiently and effectively. Training will be given in best practices on collaborative management. Mechanisms for reviewing and amending management plans will be established to ensure adequate integration of biodiversity conservation and wetland-dependent livelihood issues. Tenure issues will be analyzed and customary practices and rights will be compared to other laws to identify issues and conflicts and propose mechanisms for their resolution. An assessment of the linkages between resource access rights, livelihood security, environmental condition and conflict will be undertaken in the Koshi Tappu Area. Stakeholders' forums will be created to share information and demonstration site technical committees will facilitate multi-stakeholder decision-making. Although the Project focus will be to work with existing community groups, such as forest user groups and buffer zone user groups, other resource-user groups (RUGs) will be established, as needed, based on the type of wetland resources that they depend on for their livelihood (e.g. fish, or plant based products); the networking of these groups will also be facilitated. Capacity building of these networks as well as associated Community Based Organizations (CBOs) and Non Government Organizations (NGOs) will be undertaken. This will include rights training, participatory planning, organization and group function, conflict identification and resolution over resource use conflicts. The project will facilitate increased participation and representation of resource-user groups on decision-making bodies.

67. The Project will pilot targeted local-level economic incentives for wetland conservation and sustainable use, based on the need to generate tangible economic and financial returns for communities, need to find viable alternatives to wetland-degrading activities, and to adequately cover the local

opportunity costs of wetland conservation. These may include activities to enhance local livelihood options by supporting marketing of local wetland and non-wetland products and by promoting eco-tourism opportunities. Participatory assessment of income generating opportunities for local men and women, and for different ethnic groups will be undertaken and supported through local small-scale rotating credit and through mobilization of other government and non-government agencies' support services as well. It should be noted that these actions are also targeted to addressing both sustainable livelihood and poverty alleviation issues – that are fundamental root causes of wetland degradation and loss, as well as important elements of the National Five Year Development Plan.

68. Knowledge and technical capacity will be imparted through a comprehensive training programme on the ecosystem approach to wetland management. Capacity needs assessment of key stakeholders will be undertaken by the resource persons trained under the national training programme. They will also develop and deliver appropriate training. Dialogue with India will be facilitated to explore trans-boundary wetland management issues, especially those at the Koshi Tappu Area.

#### Project Indicators, Risks and Assumptions

69. At the level of the project Objective, ten years after the Project has started the following indicators will have been achieved:

- ✓ Rate of loss in population size of globally threatened wetland species reversed (such as Asian wild buffalo)
- ✓ All globally significant wetlands are conserved and no longer face degradation
- ✓ Wetland-dependent communities maintain access rights to wetland resources and have increased income by 20% through their sustainable use

#### OUTCOME 1: Wetland biodiversity conservation values integrated into national policy and planning framework

- Wetland policy framework is reviewed and revised based on project recommendations and field experience
- Aquatic Conservation Act and National Parks and Wildlife Act and Buffer Zone guidelines revised to integrate wetlands
- Sectoral policies and plans (water resources and agriculture) amended to favour wetland biodiversity (amendments identified & agreed to by year 2, completed by year 5)
- Inconsistencies between Local Self-Governance Act and sectoral policies and laws identified (year 4) and resolutions accepted (year 5)
- Wetlands are integrated into national 11th Five Year Plan and demo site district development plans
- National Wetland Committee is used to discuss and resolve inter-sectoral issues impacting wetlands
- Wetland network members believe decision making of the NWC reflects interests and ideas of stakeholders 75% of the time
- 60% of legal cases impacting wetlands are resolved in favour of wetland conservation and sustainable use
- 5 national level staff of Ministry of Forests and Soil Conservation have wetland conservation related responsibility explicitly in their TOR by year 4.

*OUTCOME 2: Strengthened national institutional, technical and economic capacity and awareness for wetland biodiversity conservation and sustainable use*

- Environment division of MFSC has adequate trained staff and budgets allocated to aquatic ecosystem management (budget agreed to by year 3 and 4 and in place in year 5)
- Inventory, assessments, economic valuation and guidelines used to develop and implement national biodiversity, sectoral and development strategies & plans
- 60% of trainees apply their training & capacity building on wetland conservation & sustainable use
- Increased coverage of wetlands issues in media

*OUTCOME 3: Enhanced collaborative management of wetland resources for conservation and sustainable livelihoods:*

- Commitments by relevant government agencies to prevent any actions that would negatively impact demonstration site wetlands (by end of year 1)
- Multistakeholder fora used for local decision-making regarding wetland management (incl. women & indigenous groups)
- 50% reduction in the number of recorded conflicts over wetland resource use
- Increased community support for wetlands (incl. women & indigenous groups)
- Critical wetlands identified (year 2), restored and protected through collaborative approaches (year 5)
- Adequate qualified government staff at demonstration sites (DNPWC & DoF) by year 4
- Increased budget available to line departments and community groups from piloting of demo site financing strategies (agreed to by year 4 and in place by year 5)
- 50 % reduction in number of buffalo and cattle inside KTWR
- 20% reduction of water hyacinth at demo sites
- Strategies for income generation based on sustainable use of wetland resources implemented in demo sites
- 20% increase in income for 15% of wetland-dependent HHs generated through community action & eco-tourism plans
- 15% of wetland-dependent HHs have stopped unsustainable resource use practices
- 20% of demo site communities adopt integrated pest management and organic farming
- 2 sister sites with collaborative mechanisms in place

70. See the project logical framework for more details.

*Main assumptions*

71. The main assumptions are:

- Wetlands and aquatic biodiversity remain a priority of Gon and required funds are forthcoming after the project's completion as identified in the financing strategy
- Macro-economic and sectoral planners are open to developing pro-wetland economic and development policies and instruments
- National Financial Strategy is feasible and identifies diverse options for financing of wetlands conservation
- GoN remains open to the participation of civil society in wetland management
- Sectoral departments adopt the guidelines and ensure their use
- GoN counterpart funding and staff are provided in a timely manner
- Environment division (or another appropriate department in MFSC) maintains responsibility for biodiversity
- Field activities are not unduly hampered by the political situation

- Incentives (social & economic) demonstrated in the two project sites are replicable to other sites and sufficient to cause changes in resource use practices within life of the project

### Risks:

72. Project risks are low to high and depend on how robust the assumptions in the log frame prove to be. Assumptions regarding the willingness of others to cooperate with and support Project objectives, and to assimilate and apply lessons from the Project, are also considered robust based on consultations during the PDF-B and significant co-financing and participation envisioned during the Full Project.

73. Despite the difficult political situation in Nepal, experience of other projects and organizations shows that projects such as the one proposed can be implemented as long as they have strong community support, demonstrate real benefits and operate in a transparent, participatory and equitable way. Keeping in mind the present conflict situations in the country Project implementation arrangements have been modified to ensure access within the project field sites and deliver in a safe and efficient manner.

### Expected global, national and local benefits

74. Nepal's wetlands support a wide range of fragile ecosystems and globally significant biodiversity. Four of these (the Koshi Tappu Wildlife Reserve, Ghodaghodi Lake Area, Beshazari and Associated Lakes and the Jagadishpur Reservoir) are recognised as sites of International Importance and is listed under the Ramsar Convention. The project's two demonstration sites both include Ramsar sites. The global environmental benefits will be secured through developing a sustainable ecosystem approach and support to management of wetlands of global importance, as well as globally important species (including migratory species). The global community will benefit significantly from the protection of direct and indirect use values associated with biological diversity in wetlands and from increased carbon storage as well. The Project provides a vehicle for managing biodiversity at the ecosystem scale (including protected and unprotected areas) and translating integrated ecosystem management into action. It also seeks to promote transboundary wetland management, and the lessons learnt are expected to be of interest and relevance globally.

75. National benefits will include:

- Improved intersectoral coordination and strengthened policy for wetland conservation. Policy makers more aware of wetland values and are more supportive towards wetland conservation.
- Awareness of, information about, and capacity on wetland conservation improved, and integrated into both development and conservation planning Long-term institutional, policy and financing mechanisms for wetland management in Nepal in place and functioning
- Loss of direct and indirect benefits curbed, on- and off-site wetland values maintained or improved. Economic development opportunities from sustainable land and water-based development.

76. At the local level, these global and national benefits will be reflected in improved ecological sustainability for economic development, resulting in improved socio-economic conditions for local stakeholders.

77. See the Incremental Cost Analysis in Section II for more details.

### Country Ownership; Country Eligibility and Country Drivenness

78. Nepal ratified the Convention on Biological Diversity (CBD) in August 1994 and is eligible for UNDP's technical assistance. The Project builds on and supports Nepal's key national and sectoral development plans, policies, and strategies as outlined below in Table 1. These plans, policies and strategies also inform UNDP's Country Cooperation Agreement (CCA), thus ensuring integration of the project into UNDP's own programme in Nepal. Specifically, the Participatory Conservation Programme, supported by UNDP, is supporting the GoN and communities living in the buffer zones or proposed buffer zones of selected protected areas for community development and better collaboration between key stakeholders, including in Koshi Tappu Area. Also, UNDP's Sustainable Community Development Programme has assisted the government of Nepal in building capacities of local communities and local government, and in adopting the local and national policies necessary to ensure sustainable community development, which integrates effective, gender sensitive poverty alleviation strategies with sound watershed management.

*Table 1: Linkages between the Project and National/Sectoral Plans, Policies and Strategies*

Specific National/Sectoral Development Plan, Policy, or Strategy	Consistency of Project with National/Sectoral Development Plan, Policy, or Strategy
<p><b>The Nepal Biodiversity Strategy (2002)</b> guides conservation and wise-use of biological diversity and resources, the maintenance of ecological processes and systems, and the equitable sharing of costs and benefits, thereby fulfilling the country's obligations under the Convention on Biological Diversity (CBD). Its main strategies include landscape level planning; integrating local participation; institutional strengthening; <i>in situ</i> conservation; increasing awareness, knowledge and capacity on biodiversity and indigenous knowledge; fostering cross-sectoral coordination and implementation of policies; promoting environmental impact assessment and other tools for biodiversity conservation; and promoting sustainable financing for biodiversity conservation.</p>	<p>The Nepal Biodiversity Strategy (NBS) has identified wetlands as key ecosystems in Nepal in need of significant conservation efforts. The Project is designed to fully support the implementation of the NBS recommendations on wetland ecosystems, including identification and protection of critical wetland habitats; clarification of institutional responsibilities for resolving land-use conflicts and co-ordination of wetland wise-use and conservation; adoption of a bio-regional approach to wetland habitat and resource management; promoting the participation of user groups and community-based organisations in collaborative management of resources; conducting demonstration projects to promote the wise use of wetlands; and raising awareness on wetland conservation.</p>
<p><b>The National Wetland Policy (2003)</b> outlines the following key objectives: identification and classification of key wetland sites; documentation and utilisation of indigenous and scientific knowledge, skill, practices and innovations; participation of women and implementation of international commitments and obligations. It identifies different modalities for community wetland management approaches and threats to wetlands and their minimization. Special emphasis has been placed on awareness raising and capacity building.</p>	<p>The National Wetland Policy is at the heart of the Project's design since it promotes collaborative management of wetlands and wise-use of wetland resources through meaningful participation of local people, and supports identification or clarification of appropriate institutional arrangement for wetland management, and capacity development.</p>



<p><b>Nepal's Tenth Five Year Plan (2003-2007)</b> lays down the overall national development goal as: significant, positive, and sustainable improvement in the living standard of Nepali citizens. The plan's overall objective is to significantly and sustainably reduce the poverty of Nepali citizens (men and women). The Plan identifies ten focal activities, of which three have most direct relevance to the proposed Project:</p> <ul style="list-style-type: none"> <li>• Agricultural development, sustainable management of natural resources and biodiversity;</li> <li>• Programmes focused on disadvantaged communities; and</li> <li>• Environmental protection.</li> </ul>	<p>The project explicitly links improved wetland management to promoting sustainable local livelihoods of some of the most disadvantaged groups in Nepal -- the wetland dependent ethnic groups. In addition, better wetland management will benefit all communities through provision of clean water, water re-charge, and a host of other direct and indirect benefits such as tourism and recreation. The project's activities will contribute significantly to long term environmental protection, better access to benefits by wetland dependent communities and others as well as to overall sustainable management of natural resources -- including agriculture.</p>
<p><b>The Local Self-Governance Act (1999)</b> invests local government bodies—including District Development Committees, Village Development Committees, Municipalities and Metropolitan Authorities--with responsibilities for local development and natural resource management.</p>	<p>The Project supports the Act's provisions relating to water resource use and environmental protection. It encourages participation of local NGOs in administering or carrying out local developmental projects including protection or conservation of the environment, and provides opportunities for co-ordinated wetland management at the district and community levels. The project has built in actions to work with and support local development authorities to promote wetland management as to their wider district and village development plans, particularly at the demonstration sites.</p>
<p><b>The Water Resources Strategy, Nepal (2002)</b> guides water sector activities towards sustainable use of the resources through 5-year, 15-year and 25-year strategies under which Management of Watershed and Aquatic Ecosystems is one of the key strategy outputs.</p>	<p>One of the Project objectives is demonstration of wetlands resources management for conservation and sustainable livelihoods under which activities for collaborative management of lake and wetland areas, proper management of private and communal wetlands, restoration and management of wetland protected areas, and control of invasive alien species, will be executed. These are in line with the Water Resources Strategy of Nepal.</p>

### Sustainability

#### Institutional Sustainability:

79. Institutional capacity building and clarifying institutional roles for wetlands is a major project objective. Due attention will be given to ensure institutional sustainability right from project inception. The emphasis is to build on existing institutions as far as possible by strengthening them. Where new structures are envisaged, these are within the existing plans of the government. For example, work at the national level will be carried out under the overall involvement of the Ministry of Forests and Soil Conservation, and its field offices at the demonstration sites (the District Forest Office in Ghodaghodi Lake Complex and the Department of National Parks and Wildlife Conservation in Koshi Tappu area). The National Wetland Committee builds on an informal committee in existence, and is within the overall plans of the Nepal Biodiversity Strategy (2002) and the National Wetland Policy (2003). As such, the committee will function largely from government co-finance and has a mandate for continued operation

beyond the life of the project. The Technical Advisory Committees formulated by the National Wetland Committee to address specific needs related to wetland conservation and sustainable use, are expected to continue to be formed as needed beyond the life of the project, and will be funded by government. The two new national networks (Specialists Network and Indigenous Communities Network), formed in response to requests from national and local consultations during PDF B of the Project, are designed to be operated on low cost to avoid their dependence on Project funds beyond the life of the project. Additionally, these networks will be supported to develop financing strategies, including contributions from members, to secure long term funds for their ongoing work (for example to implement species action plans).

80. The Environment Division of the Ministry of Forests and Soil Conservation, which is the focal division for the implementation of the CBD in Nepal, will be the main national government body for the Project. The Project will strengthen its capacity for wetland biodiversity planning and for providing capacity building and information services. As per its mandate accorded by the Biodiversity Conservation Strategy, this Division will continue to lead inter-sectoral coordination and promote wetland conservation after the completion of this project.

81. In the demonstration sites, the Project will work with buffer zone committee and groups supported by the Department of National Parks and Wildlife Conservation, and build strong partnerships with the local District Development Committees and the Village Development Committees. It will support community-based user groups to strengthen community livelihood activities, such as Community Forest Users Groups in the Ghodaghodi Lake Complex (which is supported by the Department of Forest). As the continued existence of these user groups is fully dependent on their financial viability, the project also focuses on economically viable income generation activities that require limited capital by the Project. The piloting of market-based incentives will further strengthen the economic viability of actions related to conservation and sustainable use of wetlands.

82. The emphasis on human capacity building at all levels of project operation also contributes significantly to institutional sustainability. The Project will provide the necessary training, ongoing coaching and support for existing institutions. In addition to technical capacity building, this will include inter alia support to participatory and collaborative management approaches, conflict resolution and integration of gender equity in actions. Local NGOs and CBOs will also receive skills building in proposal writing so that they can independently seek additional funds to support their work. In addition to working in close collaboration with local and national institutions on planning, decision-making and problem solving throughout the project phase, the Project will develop and implement an exit strategy to gradually transfer responsibility to national and local institutions.

83. It will further develop a replication strategy, based on the demonstration experience and feedback from examining the relevance of the project tools and approaches in various sites.

#### Financial sustainability:

84. As a demonstration and capacity building project, it is likely that one-off costs will be incurred in testing ideas, undertaking training and developing tools and strategies. The focus on working with existing institutions, as described above, is one strategy to reduce the scale of recurring costs to finance wetland conservation and sustainable use activities. Overall the recurring costs are expected to be relatively low, as the project does not increase costs to government. Of the new structures being proposed, the National Wetland Committee, is not expected to be costly (mostly government staff time) and the two national networks being proposed are also expected to be institutionally viable and able to generate their own funds by the end of project.

85. Efforts will be made at both the national and local levels to ensure financial sustainability. This will be achieved through a number of actions. Firstly, it is expected that there will be increased allocation of government funds for wetland conservation due to improved understanding among planners and finance decision-makers of the value of wetlands and the economic benefits of their inclusion in national budgets, as well as the design of a national-level financing mechanism for wetland management (Activity 2.1.4). A project milestone has been incorporated to allocate more funds from the government for wetland conservation and sustainable use by year 3 of the project (see Section 2, Part II: Logframe). The Project is also supporting the development of sustainable financing strategies for both national and local levels (Activities 3A.2.4 and 3B.2.4). Recognizing the significant challenge of securing finances for conservation, the Project will build from global experience in developing and implementing financial strategies for and outside of Protected Areas. The strategy will ensure that sufficient, diverse and sustainable financial resources are made available both to cover the direct costs of ecosystem management (staff, equipment, and infrastructure) and also to offset opportunity costs for local communities (including unsustainable land and resource uses and developments foregone). This activity will focus on increasing and diversifying the financial base of conservation operations, and on designing and putting in place a financial mechanism that is sustainable and promotes financial self-sufficiency over the long-term. It will analyse current and future financial status, funding mechanisms; and, develop a site-specific sustainable financing strategy for the medium (five-year) and long (ten-year) terms. The strategy will identify and initiate new opportunities for raising and allocating funds, for improving financial and cost efficiency in the protected area and Buffer Zone operations, and for ensuring that funding is targeted at the full range of socio-economic groups that bear the costs associated with conservation and sustainable use. A key concern will also be to identify pro-poor financing mechanisms that target the most vulnerable sections of the local population, and focus on covering the wide range of indirect costs and opportunity costs associated with ecosystem conservation. Training and capacity building of national counterpart institutions in sustainable financing will also form a key element of this activity.

86. The national and local financing strategies will build on existing studies (such as the GEF-managed study to "Improve Financial Arrangements for the Sustainability of Biodiversity Resources" and particularly from the Nepal case study on the UNDP-GEF "Landscape-scale Conservation of Endangered Tiger and Rhinoceros Populations in and around Chitwan National Park") and collaborate with ongoing assessments, programmes and strategies, such as the UNDP-GEF funded Landscape Level Biodiversity Conservation in Nepal's Western Terai Complex and contribute to the Terai Arc Landscape Strategy.

87. It is also expected that with increased benefits from improved wetland management, most of the community based wetland management activities will become self-sustaining.

#### Economic sustainability:

88. The Project strategy for local-level economic sustainability involves the creation of wetland conservation and sustainable use activities that are economically appealing. Unless conservation is seen to generate tangible economic and financial benefits, which can at least compete with those from unsustainable land and resource uses, project activities will stand little chance of long-term success. The conservation of wetlands needs to be well integrated into local livelihood systems to serve as an incentive for communities to be wetland conservation stewards.

89. This will be achieved by: strengthening existing local institutions (especially resource user groups, community-based organizations and non-governmental organizations) so they have the institutional, technical, management and economic capacities to conserve, sustainably use and monitor wetland resources. The emphasis on supporting community action plans is the main mechanism for linking sustainable livelihoods and conservation. The income generating activities and changes to

resource use (such as conservation farming, grazing and fuelwood use) will be based on low-cost interventions in order to ensure they will be used and can be replicated without significant external intervention. Building on the past and ongoing UNDP supported projects – the Participatory Conservation Programme (and its predecessor the Parks and People Programme) in the Koshi Tappu area and the Sustainable Community Development Programme in Kailali, the Project will assess and support the use of locally managed savings and credit programmes as a means to provide accessible capital for community income generation and conservation activities.

90. The existing mechanisms will be assessed and strengthened as necessary to ensure equitable access to both the savings and credit, and to the technology and knowledge for income generation and sustainable livelihoods opportunities.

91. At the economic policy level, the project is making substantial efforts to ensure sustainability through influencing the way in which macro and sectoral strategies are formulated, projects and economic trade-offs analysed, and investments appraised, and by identifying and promoting a range of economic and market instruments targeted at key wetland-impacting sectors. These aim to affect the economic policy framework which currently discriminates against wetlands and wetland conservation, and to effect long-term changes in the price and market signal that influence the economic activities and sectors that impact on wetlands. It should be emphasised that the concept of sustainability is inherent to using such instruments and market-based approaches, because their basic aim is to internalise wetland values into private and public decision-making, trade offs and economic choices.

#### Social sustainability:

92. The Project has been designed to meet government and community interests. It responds to direct government requests as per the Nepal Biodiversity Strategy (2002) and the National Wetland Policy (2003). Furthermore it has been designed using participatory approaches to ensure that local interests and needs are reflected. This involved frequent consultations in the Project sites with a wide range of stakeholders including local government authorities, community-based and non-governmental organizations, and communities. These consultations were structured to gather information and learn of priorities at the outset, and to seek feedback on the emerging design.

93. Recognizing the heterogeneity within communities and the variable power dynamics, the Project organized consultations with women and disadvantaged groups to specifically seek their ideas. The project design reflects targeted activities geared to further identify and overcome existing inequities. This participatory approach will be further built into the project execution through: the design of multi-stakeholder mechanisms, from central to local levels, to ensure ongoing stakeholder involvement in decision making over project interventions; and direct involvement of stakeholders in project activities (see section 2c for further details on stakeholder participation). Effective communication mechanisms will also be developed to ensure regular information dissemination and feedback channels between stakeholder representatives in project-related structures and their broader stakeholder communities. At the local level, the Project will focus on nurturing user groups and working with them as the main entry points for conservation and compatible development activities.

94. In terms of sustaining capacity built under the project after project end, it is expected that capacity will remain, indeed, improve through the use in their work/ lives. This is because capacity building will focus on issues of direct use to the stakeholders in their work or lives. The Community Based User Groups, once strengthened and incorporated into wetlands management, will be fundamental to sustained activities at the site level. The National Wetlands Committee will be important to sustain interest and policy support/reform at the national level beyond the end of project. In addition, in order to ensure that capacity built will be retained, special efforts will be made to ensure that the TORs of

government or non-government staff, whose capacity is being built, will make it explicit that they are to be assigned to those specific tasks for the duration of the project. In addition, the project will develop partnership and strengthen training and communication.

### Replicability

95. The Project has incorporated numerous means for replicating best practices from international, national and local sources. It will facilitate replicability of its ecosystem approach to biodiversity management through various initiatives to create a supportive legal framework and enabling policy environment for wetland planning, and through strengthened institutions and institutional mechanisms for integrated and inter-sectoral planning in Nepal. Its focus on community-to-community sharing and learning through networks at local and national levels is also designed to facilitate replication of Project lessons, guidelines and approaches. It also incorporates activities designed especially to promote the replicability of its approaches, methodologies and actions at district and national levels through a specific output to test the applicability of Project lessons and policy recommendations by fostering close working relationships with other projects and organizations firstly in other wetlands, secondly in the mid-hills and mountains wetlands, and thirdly in Terai wetland protected areas that share similar ecological zones and socio-economic status in India.

## **3. STRATEGIC RESULTS FRAMEWORK AND GEF INCREMENT**

### **3.1 Incremental Cost Analysis**

#### A. Project Background

96. This project has been developed in line with Nepal's commitments to CBD to conserve and sustainably use wetland biodiversity, in order to achieve both national goals and to international benefits. Please see Project Document above for more details.

#### B. Incremental Cost Assessment

##### Baseline

97. Government of Nepal and several national and international non-governmental organizations are currently carrying out a number of activities that relate to wetlands and sustainable development activities at the national level and in and around the Koshi Tappu and Ghodaghodi sites (the two project demonstration sites). There is approximately US\$ fifteen million worth of baseline work relevant to wetland conservation in Nepal for the period 2003-2008. However, baseline work is largely aimed at securing domestic benefits, not global benefits. They are also largely aimed at the use of water and wetland resources for agriculture and fish production, as well as for energy production (hydroelectricity), and on general sustainable development and environmental protection activities at project sites. The primary focus is on economic growth, income generation and employment. With increased political instability caused by the insurgency, development spending has been reduced in recent years and resources for biodiversity conservation, already under funded, have also declined. Despite the apparently favourable macro policy environment, baseline activities (or realities on the ground) largely ignore or give low priority to wetlands and aquatic biodiversity conservation

98. Given the inadequate attention to and resources for biodiversity conservation in sectoral development plans, including global biodiversity conservation (and specifically, less attention to wetland conservation), it is certain that wetlands will continue to be degraded and converted to other land use, and

global biodiversity values will continue to be lost unless significant and targeted actions are taken to supplement or modify this baseline. In particular, the following likely effects and impacts of the baseline on wetland biodiversity of global significance should be noted.

99. Under the baseline, it is highly probable that plans and policies of institutions that manage, utilize and otherwise impact on wetland biodiversity will continue to remain uncoordinated, discriminating against biodiversity conservation, and often providing conflicting guidelines for wetland management. It is likely that weak and uninformed policies, planning and development decisions, both within and outside environment and natural resources sectors, will continue. Sectoral policies, particularly those related to agriculture, fisheries, water resources, energy and industries will continue to be driven by development imperatives and goals that do not pay adequate attention to biodiversity conservation or to wetland values. Lack of consideration of wetland values is reflected in a range of economic policy disincentives and market distortions and failures that encourage wetland degradation and loss. The Water Resources Act (1992), for example, does not list conservation of wetlands nor has aquatic biodiversity among its many priorities and the Ministry of Agriculture and Cooperatives been promoting exotic fish farming in natural lakes and ponds, leading to depletion of biodiversity. At the extreme, such unsupportive policy and economic instruments may even continue to contribute to wetland ecosystem and biodiversity losses.

100. It is also likely that environmental sector and biodiversity conservation policy and planning frameworks will accord inadequate priority for wetland conservation, particularly in achieving global conservation benefits. Until very recently, wetlands did not even receive any attention in conservation planning, e.g. the National Conservation Strategy (1989) did not include any provisions for wetland ecosystem conservation or sustainable use. The Nepal Biodiversity Strategy (2002) identifies wetland conservation as a priority but is likely to remain weak and ineffective because of the lack of political will, weak financial base and low support from all concerned sectors. The Strategy will need to be implemented. While the Wetland Policy (2003) advocates collaborative management of wetland resources, there is inadequate institutional structure and intersectoral support for its implementation.

101. Weak inter-sectoral support to sustainable wetland management is also caused by a poor understanding of wetland issues among senior decision-makers and the lack of mechanisms for inter-sectoral co-ordination to bring policy makers, practitioners and community stakeholders to common platforms to discuss issues, share knowledge and undertake joint planning and implementation. Under the baseline, no mechanisms will exist for significant inter-sectoral coordination efforts for wetland conservation.

102. The current poor knowledge, technical skills and tools for wetland conservation planning, particularly on globally important wetlands, are likely to continue. The lack of policy-relevant information and tools, such as poor policy awareness for the legal protection of globally threatened species, low capacity for using economic tools for wetland management planning, and low recognition and value of indigenous knowledge on sustainable wetland management, will continue to hamper wetland biodiversity conservation. Current information and lessons on wetland issues will remain fragmented, and largely inaccessible to planners, managers and decision-makers due to the lack of dedicated institutional mechanisms and resources for collecting, collating, generating, and disseminating wetland conservation information from Nepal and elsewhere. There is currently very little research on wetland biodiversity issues and under the baseline this is likely to continue. There is little understanding of wetland values and functions, the principles or practical applications of wise use and the global importance of wetland biodiversity at all levels. This lack of information is contributed by the generally poor awareness among planners, managers and policy-makers of the importance of wetland biodiversity issues and this has led directly to the overall poor public awareness of wetland issues and low support for wetland conservation.

103. Under the baseline, low technical and human resource capacity will persist, resulting in ineffective wetland biodiversity conservation. Despite significant budgetary allocation for general training and capacity-building at local and national levels, continued low investment in developing wetland biodiversity management related training resources and programmes will mean that human resources will remain underdeveloped, and government and non-government authorities will continue to lack the expertise to incorporate wetland biodiversity in their planning processes.

104. Funding to wetland conservation is likely to remain weak or non-existent, both at central and local levels. At the central level, there is unlikely to be funding targeted or earmarked for wetland biodiversity conservation or for institutions mandated to carry out such work. The bulk of wetland-related government and donor budgets will focus more on wetland development and exploitation than on their sustainable use and conservation. At the local level, District budgets will continue to omit considerations of wetland biodiversity conservation, and allocations for the management of wetland Protected Areas and critical habitats will remain low or non-existent and will depend almost wholly on limited government funding sources. Little or no financial resources will flow to local communities to support wetland conservation-related activities.

105. Under the baseline, there will be few positive economic, policy or legal incentives for wetland biodiversity conservation, and significant disincentives and perverse incentives that encourage wetland loss. Both the private sector and local communities will continue to degrade wetlands in the course of their economic activity, because it is perceived to be more profitable to do so because social and environmental costs have been externalised and are passed on to others. It is also the case that governance and social issues such as access and equity issues will also continue to be ignored.

106. Under the baseline, it is likely that economic policies, planning and development decisions will continue to under-emphasise wetland values. Development planning, project analysis and investment appraisal procedures will continue to pay little attention to the fact that wetland ecosystems form an economic part of water infrastructure, and will perceive few economic benefits from wetland conservation, and few economic costs to their degradation and loss. Macroeconomic and sectoral policies will continue to favour wetland-degrading sectors, and to employ fiscal and market instruments that encourage the activities, land and resource uses that lead to wetland modification and conversion such as (implicit or explicit) subsidies and support to credit, inputs, investment, marketing, research and development in the sectors that impact on wetlands. Because price markets and prices will remain distorted against wetland conservation they will send signals to individual producers and consumers that are in conflict with the real scarcity and social value of wetland goods and services. There will be few financial or economic disincentives for wetlands-degrading sectors to modify their activities, and investment in wetland management will continue to be seen as an uneconomic use of land, funds and other resources.

107. Due to this poor appreciation and understanding of wetland values, few market mechanisms will be developed either to capture these benefits as tangible cash values or to price them according to their true scarcity and value. This will impact on both the environmental agencies who are responsible for formal conservation activities and on local communities who live around and use wetlands. Conservation plans will continue to be founded on weak economic and financial principles. They will largely fail either to set in place the incentive systems that are essential for their economic viability and acceptability, or to secure the funding base that is required for their long-term sustainability. Local communities will continue to find that it is possible to reap significant profits and economic benefits from unsustainable resource use levels and harvesting techniques, while still facing few possibilities to gain in financial and economic terms from wetland sustainable use. There will continue to be a high local economic opportunity cost to limiting or curtailing existing unsustainable land and resource use practices. In the absence of alternatives, and in the face of widespread poverty and livelihood insecurity, these will remain

costs that wetland-adjacent populations feel themselves to be unwilling – and in many cases economically unable – to bear.

108. Under the baseline, “on- the-ground” field testing of policies and linking this with refinement of policies and practices at sub-national and national level is unlikely to occur. The demonstration of how mechanisms for better institutional collaboration can result in better wetland conservation, while not compromising community and national benefits, but achieving additional global benefits, is also unlikely to take place. Hence, wetland biodiversity conservation is likely to remain a low priority in district and local development plans. Little attempt will be made to identify and develop viable alternatives to unsustainable wetland resources utilization practices.

109. Due to overall priority and need for increased food production, employment and income generation in Nepal, little emphasis will be given to sustainable natural resources utilisation or conservation. In fact such priorities are often the reasons for conversion of wetlands into agricultural lands, irrational allocation of water for irrigation or development of natural and biodiverse wetlands into exotic fish farms. Due to the overall marginalisation of indigenous wetland dependent communities (such as those dependent on fish, and other wetland resource based enterprise – such as wetland plant based handicraft producers like Sardar communities), the potential for biodiversity as a tool to enhance livelihoods will continue to be ignored. In the absence of alternative, sustainable, livelihood options, such local land and resource use activities will continue to pose a severe, and growing, threat to wetland biodiversity.

#### Global Environmental Objective

110. If existing baseline activities are not modified or supplemented, it is clear that Nepal’s wetland biodiversity of global significance will continue to be degraded or lost. Global costs of such a scenario include the loss of values accruing from global resource use, in the values yielded by globally-important ecosystem functions, in the use options of these ecosystems and resources for future global economic gains, and in the global existence values associated with the biodiversity of wetlands in Nepal.

111. In line with GEF’s Operational Programme 2: Marine, Coastal and Freshwaters, the global environmental objective of the proposed Project is to ensure maintenance and enhancement of wetland biodiversity, environmental goods and services for improved local livelihoods in Nepal. The Project has as its immediate objectives to strengthen national and local capacity on ecosystem management of wetland biodiversity in Nepal. The activities of the proposed project aim to complement and build on existing national and global activities to address the underlying causes of wetland loss and degradation arising from an unmodified baseline course of action. Key globally threatened, endangered and endemic wetland species and habitats will be conserved and improved, and global wetland values, including the share of functional benefits accruing to the global community, will be maintained. The risks of extinction of globally threatened, endangered and endemic species and habitats will be reduced and ecosystem integrity, yielding global services protected. Global options to sustainably utilise and benefit from wetland species will exist and lessons of wider international relevance will be identified and disseminated to influence actions globally.

#### Alternative

112. Three possible courses of action that could be applied to conserve globally significant wetland biodiversity in Nepal have been considered. The first is to take no additional action to the baseline, the second is to take a direct and strict protection approach funded by GEF, and the third is to undertake activities proposed by the Project that promote and support policies, awareness, capacity and practices for conservation and sustainable management of globally significant wetland ecosystems.



113. Under the first alternative, without additional action on the existing baseline activities, it is likely that some wetlands of global value, particularly small wetland sites in protected areas may be conserved. This would not require additional financing, and would meet national development goals. However, this option is not considered sufficient for the conservation of the full global biodiversity and ecosystem functions in Nepal. In fact, under the baseline's national, social, institutional, policy and economic conditions and actions, globally significant wetland biodiversity in Nepal will continue to be degraded and lost.

114. A second option is to designate and fund directly by GEF wetland protected areas to afford protection to globally significant wetlands in Nepal and to secure significant global biodiversity benefits. This is considered neither desirable nor feasible. As well as being costly and difficult to implement, it is unlikely to be sustainable after the end of the project given existing financial, human and institutional capacity, or even in socio-economic terms. It has the potential to conflict with national economic development and social equity goals. 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.

115. The third strategy, as laid out in the proposed Project, is to build on and modify the baseline, with an emphasis on building national support, mechanisms, capacity and awareness, (including improving policy and economic frameworks, price and market signals) and demonstrating replicable actions on-the-ground at select sites 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 long-term global benefits, it can also simultaneously meet long-term development goals of Nepal. The Project has also been designed 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. It does not seek 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 to include consideration of wetland biodiversity of global significance. This will be done by producing thirteen Outputs under three Outcomes. These are described below in some detail.

#### Systems Boundary

116. The scope of analysis is defined by the project's immediate objective: to strengthen national and local capacity in ecosystem management and sustainable use of wetland biodiversity in Nepal. The major focus of the Project, therefore, is on the geographical and political units, social and economic structures and institutions that manage, use and influence the status of wetland biodiversity in Nepal. The system boundary of the Project is taken to include:

- Geography and ecology: the Project covers wetlands in Nepal. It includes consideration of flowing water (lotic) and still water (lentic) habitats in the lowland Terai, the mid-hills and the high mountains, and associated habitats such as riverine forests and wet grasslands. It will focus its effort immediately in the Terai. Two demonstration sites have been chosen because of their importance in global biodiversity terms, recognised by being designated Ramsar sites—Koshi Tappu Wildlife Reserve in the eastern Terai, and Ghodaghodi Lake Complex in the western Terai, respectively. 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 Project falls within the recognised international boundaries of the Kingdom of Nepal. The demonstration sites will include Koshi Tappu Wildlife Reserve and its proposed buffer zone, which fall under three administrative districts --Sunsari,

Sapatari and Udaypur Districts in Eastern Nepal; and Darakh, Joshipur, Bauniya, Khilad and Kota Tulsipur Village Development Committees of Kailali District at the Ghodaghodi Lake Complex. It is anticipated that it will result in improved wetland biodiversity conservation within these administrative and political boundaries. Actions are also built into the project to have influence over other wetland sites in the country, as secondary. It is also hoped that in addition, the project will have impacts in transboundary learning, replication and cooperation for wetland conservation. Actions are also built into the project to have influence over other wetland sites in the country, as secondary rather than primary focus.

- Socio-economy: the Project's main stakeholders and beneficiary groups will be the primary users and managers of wetland biodiversity, particularly local leaders, community members and user groups, NGOs and national and local government line agency personnel. Particular attention will be given to targeting the more vulnerable and marginal sections of the rural population, such as women, indigenous wetland-dependent communities and the poor. Additional target beneficiaries are members of the global community who benefit from the wetland biodiversity of Nepal. It is anticipated that this 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. However, it is 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 formal and informal community groups who manage and use wetlands, and on the national and local institutions—government and non-government—that are mandated with the management of wetland biodiversity in Nepal, including national environment and wildlife agencies, and national committees and institutions concerned with coordinating the implementation of the policy and planning framework. 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. 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 mostly outside the system boundary of the project, because they are not primary wetland biodiversity users and managers, although they are included where their actions impact biodiversity. As such, it is intended that project activities will result in increased awareness and capacity in wetland biodiversity issues in these sectors and institutions, and improve the environmental sustainability of their activities.
- Threats and root causes: the Project is focused on overcoming threats to wetland biodiversity relating to unsupportive legal, economic and policy frameworks, a weak funding base and poor co-ordination of plans between sectors; insufficient capacity, knowledge, and awareness for wetland management planning; and high local community dependence on but low involvement in their wetland resources management. An additional set of root causes relating to wetland biodiversity degradation—those relating to the 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 at a single project level. However, it is anticipated that the Project will produce 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.

### Summary of Costs

117. The cost of baseline activities is approximately US\$ 15.19 million for the full project period, 2006-2009.

118. Total project costs are estimated at US\$ 4.06 million (excluding project development and support costs). Of this amount, GEF is requested to contribute US\$ 1.96 million (48 percent) for activities that will provide global environmental benefits. In addition to the costs associated with carrying out these activities, GEF has already provided PDF Block B grants of US\$ 0.25 million for the preparation of this project. The remainder of the Project incremental costs, US\$ 1.14 million will be met through co-financing from His Majesty's Government of Nepal (28 percent) and other donors US\$ 0.96 million (24 percent).

Incremental Cost Matrix

<b>Cost/Benefit</b>	<b>Baseline (B)</b>	<b>Alternative (A)</b>	<b>Increment (A-B)</b>
<b>Domestic Benefits</b>	<p>Globally significant wetland biodiversity of Nepal remain unidentified, their values not understood, policies remain unresponsive of wetland conservation and consequently threatened by bad land use planning, resource over-harvesting, insufficient protection, increase in alien invasive species and threats to migratory species. Wetland management remains uncoordinated at the national level, national institutions continue to lack wetland biodiversity focus and capacity.</p> <p>Weak mechanisms to share wetland technical and management learning between specialists, little or no communication between local communities and national technical experts. Knowledge on wetlands remains weak, and there is little capacity to apply wetland assessment for conservation planning.</p> <p>Economic values of wetlands remain unknown, and the use of economic tools for wetland management, remains unintegrated into development or conservation planning. National-level financing to wetland management remains inadequate. Roles of government agencies, Buffer Zone Council and district and community stakeholders in wetland management continue to be unclear and difficult to fulfil. There are few incentives for communities to conserve biodiversity, and biodiversity conservation remains unattractive at the local level. Insufficient financial resources are available for continued conservation and sustainable use, funding mechanisms remain weak and do not target all the groups involved in wetland management.</p>	<p>Mechanism for networking, joint planning and consideration of wetland issues established and includes wetland-managing and wetland-impacting sectors.</p> <p>Improved communication, and joint planning between different wetland stakeholders, managers and specialists leading to better synergies and the development of support groups for wetland management. National policy on wetlands is reviewed, harmonized with other sectoral legislation and policy, and can be implemented effectively in line with both national and global conservation priorities.</p> <p>Wetlands policy - including conservation and community issues - integrated into, and reflected in, the provisions and guidance given by the policies of both conservation and development sectors. Economic policy reforms and market-based instruments developed to address wetland concerns. Wetlands and wetland biodiversity of national importance are better understood and managed better. Wetland dependent indigenous communities are empowered and are involved in better wetland management. Knowledge base on wetlands conservation planning established and wetlands assessments carried out, leading to identification of critical habitats and threats, and better information for management planning. A awareness of, information about, and capacity to undertake wetland economic valuation improved, and integrated into both development and conservation planning, national funding mechanism established.</p>	<p>Maintenance of global wetland values, including the share of functional benefits that accruing to the global community.</p> <p>Reduced risks of extinction of globally threatened, endangered and endemic species and habitats. Protection of ecosystem integrity, yielding global services. Global options to sustainably utilize and benefit from wetland species and areas kept open. Continued global existence values. Lessons of wider international relevance identified and disseminated.</p>
<b>Global Benefits</b>	<p>National policy omits consideration of global biodiversity priorities and conservation requirements,</p>	<p>Policies and practice for conservation and sustainable management of globally significant</p>	<p>Loss of direct and indirect benefits curbed, maintenance of</p>

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
	<p>and is difficult to implement. Wetlands and wetland biodiversity of national importance continue to be lost, degraded and misutilised. Knowledge and importance of these and institutional set up for their management continue to be uncoordinated. Wetland dependent indigenous communities remain marginalized and are not involved in better wetland management. There are no formal mechanisms for transboundary dialogue on wetland management issues, and there is little exchange of information or knowledge between Nepal and other countries.</p>	<p>wetland ecosystems and their biodiversity prioritised for conservation and are sustainably managed, leading to the maintenance and improvement of global biodiversity, ecosystem services and existence values. Key globally threatened, endangered and endemic wetland species and habitats are conserved and improved. Tools, materials or approaches are developed, or available for sharing nationally or internationally.</p>	<p>improvement of on and off-site wetland values. Enhanced sustainable income, subsistence and employment opportunities for wetland residents, and the national economy. Sustainable economic development opportunities from land and water-based developments.</p>
<p><b>Costs</b>  <b>Outcome 1:</b> Wetland biodiversity conservation values integrated into national policy and planning framework</p>	1,047,567	1,886,412	838,845
<p><b>Outcome 2:</b> Strengthened national institutional, technical and economic capacity and awareness for wetland biodiversity conservation and sustainable use</p>	3,665,449	4,446,799	781,350
<p><b>Outcome 3:</b> Enhanced collaborative management of wetland resources for conservation and sustainable livelihoods</p>	10,476,764	12,918,798	2,442,034
<b>Cost Totals</b>	15,189,780	19,252,009	4,062,229

#### 4. Total Budget and Workplan

119. Outputs and activities will be verified and confirmed during Inception and yearly meetings/workshops, and a workplan prepared on that basis.

##### Programme Budgets and Inputs

120. Total Project costs are estimated at US\$ 4.06 million (excluding Project development and support costs). Of this amount, GEF is requested to contribute US\$ 1.96 million (48 percent) for activities that will provide global environmental benefits. In addition to the costs associated with carrying out these activities, GEF has already provided a PDF Block B grant of US\$0.25 million for the preparation of this Project. The remainder of the Project incremental costs will be met through co-financing from His Majesty's Government of Nepal (US\$1.14 million, 28 percent) and other donors (US\$ 0.96 million, 24 percent).

Table 1: Co-funding sources and amounts committed:

Co-financing Sources				
Name of Co-financier (source)	Classification	Type	Amount (US\$)	Status*
Government of Nepal	EA	In kind	1,139,550	See letters of commitment
United Nations Development Programme Nepal	UN Organization	Cash	533,562	
IUCN Nepal	International Organization	Cash/ In kind	423,962	
Sub-Total Co-financing			2,097,074	

121. This Project has been designed to be cost-effective in the following ways:

- Institutional capacity building activities have been designed to clarify and strengthen existing institutional structures and mechanisms rather than establish new institutions. Its strong focus on multi-sectoral partnership is expected to avoid duplication of work as well as implementation of contradictory activities that can undermine Project activities.
- Interventions will adopt tried-and-tested models, including: social mobilization and support to self-governing people's organizations for socio-economic development and conservation; strengthening women's ability and confidence to participate more actively in the management of natural resources and securing benefits from natural resource use; and linking awareness raising, income generation and conservation interventions.
- Project activities will be planned, where possible, in collaboration with other projects and programmes (e.g. for training programmes, assessments and monitoring).
- Activities designed to encourage replication of Project approaches in sites beyond the demonstration sites will reduce the costs associated with trying to replicate the Project's lessons.
- The Project's focus on using economic and financial instruments to promote wetland conservation is informed by a strong consideration of cost-effectiveness. The economic, fiscal and market-based instruments that are to be developed involve generating budgetary revenues and raising sufficient funds to cover their own costs of operation. It is widely acknowledged that economic instruments potentially present one of the most cost-effective ways to influence people's behaviour because (in contrast to command and control approaches) they work through influencing price signals and private profits rather than relying on costly enforcement and monitoring mechanisms. Overcoming existing policy distortions and perverse incentives (such as

subsidies) that currently discriminate against wetlands also has the potential to save public expenditures. The development of national and site level financing mechanisms for wetland management is also cost-effective, as it will bring in additional funding as well as saving on government expenditures over the long-term.

### Inputs from the Partners

122. GON will provide the services of National Programme Director, who will lead the programme. The contribution in kind and logistic support from the government for programme implementation will be provided by GON through NPD. The working time of line agency staff both at central and district level (particularly Koshi Tappu Warden Office and Ghodaghodi District Forest Office) and local government staff who will implement the programme is calculated as part of the government co-funding. The time of government staff at the central level for participating in the project meetings; workshops and visits as well as their time spent in co-ordination and monitoring is also considered as in-kind contribution from the government.

123. The MFSC will provide full-fledged office space to the exclusive use to the programme staff in Kathmandu for the duration of the programme.

124. Financial inputs from IUCN will be provided through materials, professional inputs from the Nepal country office as well as IUCN's regional and global expertise. Out of total commitments from IUCN to the project, which is US \$ 423,963, almost 27% of contributions have been incurred through two completed IUCN projects - the Community Incentives Project (funded by the World Bank) and the Traditional Knowledge Project (funded by Ford Foundation, British Embassy and IDRC). Because of delay in GEF Project inception, the former Projects have now been completed. Products from these projects will be used by the GEF Project. Financial resources to cover the remaining inputs will be provided through new and ongoing IUCN projects such as programme support (by SDC), Conservation Financing (DFID), South Asia Network on Development and Environmental Economics (various donors) and support from IUCN's global and regional programmes (such as Water and Law).

125. IUCN's contributions will be primarily provided through technical inputs and knowledge. Knowledge from global network of IUCN will provide inputs to develop and provide feedback on project interventions and to share the lessons learnt from the project. Technical inputs, methodologies and knowledge from IUCN are expected in the following areas: valuation of wetland resources, economics, law, water, NTFPs, invasive species, traditional knowledge documentation, monitoring of poverty, gender and social inclusion, communications, GIS and a range of natural resource management and wetland policy issues (for policy-practice links). IUCN will also provide financial and administration services for IUCN's portion.

126. IUCN will also contribute books and reports as well as communication and information materials for the resource centre.

### Breakdowns of budget

Breakdown	USD	%
<b>1) Programme vs. administrative cost (cash budget only)</b>		
Programme costs	\$1,923,812	77%
Administrative and operational costs	\$574,645	23%

<b>Breakdown</b>	<b>USD</b>	<b>%</b>
<b>Total (UNDP and GEF)</b>	\$2,498,457	
<b>2) Field vs. central budget</b>		
Field budget	\$1,620,195	60%
Central budget	\$2,441,774	40%
<b>Total</b>	\$4,061,969	
<b>3) Budget per outcome</b>		
Outcome 1: National policy & planning framework	\$838,845	21%
Outcome 2: National capacity & awareness	\$781,350	19%
Outcome 3: Collaborative management of wetland resources for conservation and sustainable livelihoods	\$2,441,774	60%
<b>Total</b>	\$4,061,969	



**Total Budget and Work plan**

Award: 00042939

Award Title: PIMS 1822 BD FSP: Nepal Wetlands

Project ID: 00049898

Project title: PIMS 1822 BD FSP: Conservation and Sustainable Use of Wetlands in Nepal

Implementing Partner: The World Conservation Union (IUCN) Nepal

Project Outcome/Atlas Activity	Responsible Party	Source of Funds	Budget Description (general)	Account code	Year 1 US\$	Year 2 US\$	Year 3 US\$	Year 4 US\$	Year 5 US\$	Total US\$
Outcome 1	MFSC	GEF	International staff	71200	0	0	0	0	0	0
			National staff	71400	32600	32600	32600	32600	32600	163000
			Fieldwork and travel	71600	2600	2600	2600	2600	2600	13000
Wetland biodiversity values integrated			Training, workshops, awareness & publications	74500	13670	12670	12670	12670	13170	64850
			Equipment and materials	72200	43500	0	0	0	0	43500
			Office running and communications	73100	12560	12560	12560	12560	12560	62800
			Sub-Contracts	72100						0
			Grants	72600	2000	2000	2000	2000	2000	10000
			Total		106930	62430	62430	62430	62930	357150
			International staff	71200	0	2062.5	2062.5	2062.5	2062.65	8250.15
	IUCN	GEF	National staff	71400	14005	14005	14005	14005	14005	70025
			Fieldwork and travel	71600	3320	3320	3320	3320	3320	16600
			Training, workshops, awareness & publications	74500	1500	4950	11391	4590	13170	35601
			Grants	72600	0	7625	7625	7625	7625	30500
			Professional services	74100	1882.5	3196.25	3840.35	3160.25	4018.265	16097.615
			Total		20707.5	35158.75	42243.85	34762.75	44200.915	177073.765
			GEF total		127637.5	97588.75	104673.9	97192.75	107130.92	534223.765
			<b>Grand Total Outcome 1</b>		<b>127637.5</b>	<b>97588.75</b>	<b>104673.9</b>	<b>97192.75</b>	<b>107130.92</b>	<b>534223.765</b>
Outcome 2	MFSC	GEF	National staff	71400	9440	9440	9440	9440	9440	47200
			Training, workshops, awareness & publications	74500	8203	6920	6920	1920	1920	25883
			Equipment and materials	72200	13000	0	0	0	0	13000
Wetland mgmt capacity enhanced			Office running and communications	73100	4500	4500	4500	4500	4500	22500
			Sub-Contracts	72100	6000	2163	3000	2000	2000	15163
			Total		41143	23023	23860	17860	17860	123746

Project Outcome/Atlas Activity	Responsible Party	Source of Funds	Budget Description (general)	Account code	Year 1 US\$	Year 2 US\$	Year 3 US\$	Year 4 US\$	Year 5 US\$	Total US\$
	IUCN	GEF	International staff	71200	2200	4950	4950	4950	4950	22000
			National staff	71400	26980	26980	26980	26980	26980	134900
			Fieldwork and travel	71600	0	3860	4860	4860	4860	18440
			Training, workshops, awareness & publications	74500	10160	10160	10160	10160	10160	50800
			Professional services	74100	4234	5095	5095	5095	5095	24614
			Total		43574	51045	52045	52045	52045	250754
		UNDP	National staff	71400	4000	7880	7880	7880	7880	35520
			Fieldwork and travel	71600	5000	11920	8920	6920	10920	43680
			Training, workshops, awareness & publications	74500	6920	6920	6920	1920	13160	35840
			Equipment and materials	72200	800	800	2800	800	800	6000
			Professional services	74100	1672	2752	2652	1752	3276	12104
			Total		18392	30272	29172	19272	36036	133144
			GEF total		84717	74068	75905	69905	69905	374500
			UNDP total		18392	30272	29172	19272	36036	133144
			<b>Grand Total Outcome 2</b>		<b>103109</b>	<b>104340</b>	<b>105077</b>	<b>89177</b>	<b>105941</b>	<b>507644</b>
Outcome 3	MFSC	GEF	Fieldwork and travel	71600	0	2325	2325	2325	2325	9300
			Grants	72600	0	0	0	10000	10000	20000
			total		0	2325	2325	12325	12325	29300
Collaborative mgmt enhanced	IUCN	GEF	International staff	71200	0	1375	1375	1375	1375	5500
			National staff	71400	0	76312.5	76312.5	76312.5	76312.5	305250
			Fieldwork and travel	71600	0	11412	11412.5	11423	11412	45659.5
			Training, workshops, awareness & publications	74500	0	27995	27995	27995	27995	111980
			Equipment and materials	72200	0	94675	6375	6375	6375	113600
			Office running and communications	73100	0	16530	16530	16423	20590	70073
			Professional services	74100	0	28906.83	20076.88	20067.23	22482.825	91533.75
			Grants	72600	0	45768.75	45768.75	45768.75	45768.75	183075
			total		0	302975.1	205845.6	205739.5	212311.08	926871.25
		UNDP	International staff	71200	0	1375	1375	1375	1375	5500
			National staff	71400	2750	6687	9687	9831	9679	38634
			Fieldwork and travel	71600	0	19843	19843	19843	19843	79372
			Training, workshops, awareness & publications	74500	0	12485	12485	12485	12485	49940
			Equipment and materials	72200	0	2500	2500	2500	2500	10000

Project Outcome/Atlas Activity	Responsible Party	Source of Funds	Budget Description (general)	Account code	Year 1 US\$	Year 2 US\$	Year 3 US\$	Year 4 US\$	Year 5 US\$	Total US\$
			Budget Description (general)							
			Office running and communications	73100	0	6830	18830	18830	18830	63320
			Grants	72600	0	13415	13415	13415	13415	53660
			Professional services	74100	275	6313.5	7813.5	7827.9	7812.7	30042.6
			total		3025	69448.5	85948.5	86106.9	85939.7	330468.6
			GEF total		0	305300.1	208170.6	218064.5	224636.08	956171.25
			UNDP total		3025	69448.5	85948.5	86106.9	85939.7	330468.6
			<b>Outcome 3 Grand Total</b>		3025	374748.6	294119.1	304171.4	310575.78	1286639.85
			International staff	71200	0	0	25000	0	35000	60000
			National staff	71400	0	5000	10000	5000	5000	25000
			Fieldwork and travel	71600	0	0	7000	0	8000	15000
Learning, evaluation and adaptive mgmt enhanced										
			<b>Grand Total</b>		0	5000	42000	5000	48000	100000
Monitoring and Security					8031	15808	12984	14666	18461	69950
GEF total					212354.5	481956.8	430749.5	390162.2	449671.99	1964895.015
UNDP total					29448	115528.5	128104.5	120044.9	140436.7	533562.6

**Summary of Funds by Source:**

Name of Co-financier (source)	Type	Amount (US\$)
Global Environmental Facility (GEF)	Cash	1,964,895
Government of Nepal (GON)	In kind	1,139,550
United Nations Development Programme, Nepal (UNDP)	Cash	533,562
The World Conservation Union, Nepal (IUCN)	Cash/ In kind	423,963

## 5. Management Arrangements

127) The Project will be implemented under National Implementation Modality (NIM) as per the UNDP's Results Management Guide (RMG).

128) Chairperson: Secretary, MFSC

Members: Representative, National Planning Commission  
 Representative, Ministry of Environment, Science and Technology  
 Representative, Ministry of Finance  
 Representative, Ministry of Water Resources  
 Representative, Ministry of Agriculture and Cooperatives  
 Representative, Ministry of Local Development  
 Representative, Department of Forest  
 Representative, Department of National Park and Wildlife Conservation  
 Representative, Association of DDC of Nepal  
 Deputy Resident Representative (Programme), UNDP, Nepal  
 Representative, IUCN  
 Representative, KMTNC  
 Representative of NGOs and CSOs

Member Secretary: National Project Director, Joint Secretary, MFSC

The OB will meet twice a year concerning this project or as needed as well as undertake field monitoring from time to time.

129) Project Executive Group: A Project Executive Group (PEG) will be formed at the centre in order to help make necessary executive decisions required for the implementation of project activities. The PEG will be the key body to closely monitor and review project activities, take decision on any change proposed by the National Project Manager (NPM). The PEG will also regularly bring to the notice of OB of all the matters concerning any change that needs to be made in the project.

The composition of the PEG and their roles will be as follows:

S.N.	Agency/Community Representative	Designations	Roles
1	MFSC	National Project Director/Joint Secretary	Executive
2	UNDP	Asst Resident Representative	Senior Supplier
3	DNPWC/DoF/IUCN	Representatives	Beneficiaries

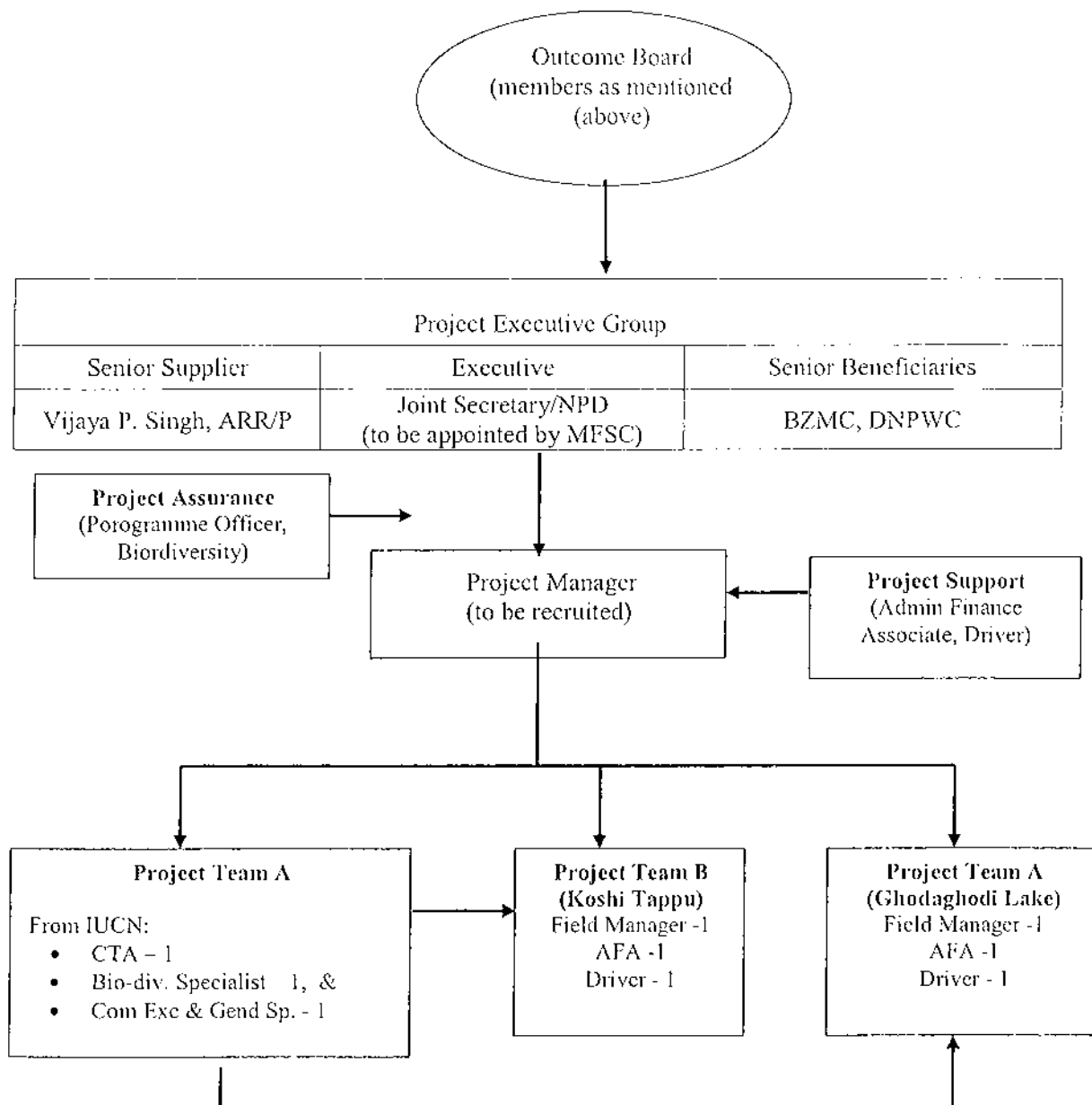
130) Implementing partner: The MFSC is the designated implementing partner for the implementation of the project. The NPD on behalf of MFSC will have the prime responsibility to ensure project objectives and outputs are achieved and activities are implemented in accordance with the agreement stipulated in this project document. Major components of the programme will be implemented by The World Conservation Union (IUCN) Nepal, which will be responsible to MFSC, for programme implementation and achieving outputs and outcomes. The programme implementation will be guided by a Programme Partnership Agreement (Project MOU) between GoN/MFSC and IUCN as well as a Programme Cooperation Agreement between IUCN and UNDP. A Project Management Unit (PMU) will be constituted at the centre by recruiting necessary staff members to support implementing partner (list of staff is provided under the heading Project Support below).

All other partners will be brought on board during the time of implementation as and when necessary by the MFSC as per the agreement made in the PEG.

131. Project Assurance: UNDP Programme Officer responsible for bio-diversity sector will be the Assurance Officer who will conduct independent regular oversight and monitoring activities and provide report to the PEG on the achievement of the key milestones and implementation challenges experienced.

132. Project Support: In order to smoothly implement the project activities the following staff will be recruited for the PMU and field level offices of the project. The National Programme Manager, Admin and Finance Associate and Driver at the PMU will be recruited by UNDP while the Chief Technical Advisor, Wetland Biodiversity Specialist, Indigenous Community and Gender Specialist, Field Manager, Admin and Finance Assistant and the Drivers for the field offices will be recruited by IUCN. All the staff will be recruited as National Staff.

- 1) National Project Manager (NPM) -- 1
- 2) Technical Advisors/Specialists -- 3
- 3) Field Managers -2 (One for Koshi Tappu and one for Ghodaghodi Lake)
- 4) Admin Finance Staff - 3 (1 Centre, 1 Koshi Tappu, and 1 Ghodaghodi)
- 5) Drivers - 3 (1 Centre, 1 Koshi Tappu, and 1 Ghodaghodi)



Schematic diagram of Management Arrangements

133. The PMU will be established in Kathmandu, at a premise designated as part of its' inkind contribution under the guidance of the National Programme Director. The PMU will also house the IUCN Technical Team, under the supervision of a national Chief Technical Advisor. MFSC and IUCN will collaborate closely to ensure coherence of Programme activities and achievement of results and to promote learning from and sharing across the country, including to and from sister sites.

134. Field Units will be established at Ghodaghodi (GG) and Koshi Tappu (KT) areas to undertake the field demonstration work and promote replication in other sites. Field activities will be guided by a multi-stakeholder advisory committee and managed by a Field Management Committee, chaired by the Warden (KT) and the DFO

(GG). Programme activities in the field sites will be facilitated and technically supported by IUCN and implemented by local partners (government and non-government) under output-based contracts.

135. The Programme will foster a strong “learning-by-doing” culture. A system for monitoring, reflection and revision will be established and learning will be captured and disseminated locally, nationally and internationally.

#### Field Advisory Committees (FACs):

136. The Field Advisory Committees will be established at the two field sites - Koshi Tappu and Ghodaghodi. They will serve as the local advisory body in order to provide policy guidance to the field programme activities, promote coordination among all relevant stakeholders and encourage use of site findings to influence local policy and practice. Their role will be instrumental to integrate the project’s work into larger district level conservation and development initiatives, to influence work beyond Programme sites, to obtain additional support and partnerships and to avoid duplication of efforts.

#### Field Management Committee (FMC)

137. Field Management Committees (FMC) will be established at each field site and will consist of key field site implementing partners. The FMC is responsible for the implementation of the field site activities as per the Programme agreements and the guidance of the PMU. In Ghodaghodi it will be chaired by the DFO and members will initially include the Field Programme Manager and Forest User Groups (FUGs). In Koshi Tappu, it will be chaired by the Warden and members will initially include the Field Programme Manager and a representative from the Buffer Zone Management Council (BZMC). Additional implementation partners will be added once local implementation is finalized. The National Programme Manager (NPM) and Chief Technical Advisor (CTA) will attend at least one meeting per year at each site. The FMC will meet quarterly.

138. The roles of the various committees are reflected in the Terms of Reference, included in Part IV of this document. The staff management structure is given in the diagram below:

## KEY ROLES AND RESPONSIBILITIES - KEY PARTNERS

### Roles and Responsibilities of MFSC:

- a. Retain overall responsibility for the execution of the Programme by coordinating it through the Programme Steering Committee (PSC);
- b. Develop and sign an MOU with IUCN that designates IUCN as the Programme implementing agent responsible for implementation and management of specific components of the Programme as per the Programme Document and according to annual work plans and budgets approved by the Programme Steering Committee (PSC);
- c. Coordinate closely with UNDP and IUCN and other GoN's line Ministries and Departments and other partners and stakeholders for effective Programme implementation;
- d. Chair the Programme Steering Committee and coordinate the inputs of other government ministries and departments;
- e. Designate a National Programme Director (NPD) as the focal point to liaise with UNDP and IUCN. The NPD will be responsible for oversight of the Programme on behalf of the government and coordination with other government line agencies. The NPD will also participate in staff and consultant recruitment processes;
- f. Assign additional appropriate government technical staff (nationally and locally) and ensure their timely availability to support Programme implementation as the part of government co-fund;
- g. Coordinate the securing of GoN contribution (co-fund) to the total Programme as per the Programme document;
- h. Represent GoN on transboundary discussions on wetland conservation issues relevant to the project;
- i. Allow disbursement of funds and refund of expenses by UNDP directly to IUCN following joint review of Programme financial reports by MFSC and UNDP and within the limits set out in the Programme Document;
- j. Provide GON with regular updates on the progress of the project;
- k. Facilitate the translation of Programme experience into national policies, strategies and practices within government and through mechanisms such as donor coordination and sectoral working groups; as well as in other "sister" sites;
- l. Implement specific components and produce outputs of the Programme under direct responsibility of GoN/MFSC.

### Roles and Responsibilities of IUCN

- m. Provide co-fund as envisaged in the Programme Document;
- n. Prepare and sign an MOU with GoN that designates IUCN as the Programme implementing agent responsible for implementation and management of specific components of the Programme as per the Programme Document and according to annual work plans and budgets approved by the Programme Steering Committee (PSC);
- o. Sign a Programme Cooperation Agreement with UNDP;
- p. Coordinate closely with the National Programme Director, other staff of GoN's line Ministries and Departments and other partners and stakeholders for effective Programme implementation;
- q. Bring relevant global learning to support conservation and sustainable use of wetlands in Nepal and also promote sharing of learning from Nepal to rest of the world;



- r. Prepare the TORs and identify and hire staff such as the Chief Technical Advisor, technical staff and field staff as per IUCN rules and regulations in consultation with the MFSC and UNDP CO ;
- s. Provide technical support to PMU;
- t. Implement specific components of the Programme under direct responsibility of IUCN.

139. In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF. The UNDP logo should be more prominent -- and separated from the GEF logo if possible, as UN visibility is important for security purposes.

## **6. Monitoring and Evaluation Plan**

### *Work plan*

140. Annual Work Plan: The NPD shall be required to produce an inception report with an annual work plan and budget included in the programme document within 45 days from the start of the programme. This may include the budget revision if necessary, to reflect the activities to be undertaken as per the work plan. This, as well as the subsequent annual workplans and budgets will be developed with full participation from all Project Management Committee members. During the preparation of AWP and budgets, any budgetary adjustments within the outcomes based on the project performance in the previous year, can be made as required. The Field Management Committee will draft an annual plan and budget for the respective site. Those drafts will be first discussed at the field advisory committees and then forwarded to the PMC for finalisation.

### *Quarterly Work Plans:*

141. The Programme manager/CTA will prepare a breakdown of the annual work plan into quarterly work plans and quarterly budgets for submission to UNDP and other partners as appropriate. Quarterly work plans shall form the basis for quarterly releases of funds to the respective project accounts and also the preparation of quarterly progress reports.

142. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures and will be provided by the project team and the UNDP Country Office (UNDP-CO) with support from UNDP/GEF. The Logical Framework Matrix in Section 2, Part II provides performance and impact indicators for project implementation along with their corresponding means of verification. These will form the basis on which the project's Monitoring and Evaluation system will be built.

143. The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The project's Monitoring and Evaluation Plan will be presented and finalized at the Project's Inception Report following a collective fine-tuning of indicators, means of verification, and the full definition of project staff M&E responsibilities.

### *Monitoring and Reporting*

#### *Project Inception Phase*

144. A Project Inception Workshop will be conducted with the full project team, relevant government counterparts, co-financing partners, the UNDP-CO and representation from the UNDP-GEF Regional Coordinating Unit, as well as UNDP-GEF (HQs) as appropriate.

145. A fundamental objective of this Inception Workshop will be to assist the project team to understand and take ownership of the project's goals and objectives, as well as finalize preparation of the project's first annual work plan on the basis of the project's logframe matrix. This will include reviewing the logframe (indicators, means of verification, assumptions), imparting additional detail as needed, and on the basis of this exercise finalize the Annual Work Plan (AWP) with precise and measurable performance indicators, and in a manner consistent with the expected outcomes for the project.

146. Additionally, the purpose and objective of the Inception Workshop (IW) will be to: (i) introduce project staff with the UNDP-GEF expanded team which will support the project during its implementation, namely the CO and responsible Regional Coordinating Unit staff; (ii) detail the roles, support services and complementary responsibilities of UNDP-CO and RCU staff vis à vis the project team; (iii) provide a detailed overview of UNDP-GEF reporting and monitoring and evaluation (M&E) requirements, with particular emphasis on the Annual Project Implementation Reviews (PIRs) and related documentation, the Annual Project Report (APR), Tripartite Review Meetings, as well as mid-term and final evaluations. Equally, the Inception Workshop will provide an opportunity to inform the project team on UNDP project related budgetary planning, budget reviews, and mandatory budget rephasings.

147. The Inception Workshop will also provide an opportunity for all parties to understand their roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff and decision-making structures will be discussed again, as needed, in order to clarify for all, each party's responsibilities during the project's implementation phase.

#### Monitoring responsibilities and events

148. A detailed schedule of project reviews meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Tripartite Reviews, Steering Committee Meetings, (or relevant advisory and/or coordination mechanisms) and (ii) project related Monitoring and Evaluation activities.

149. *Day to day monitoring of implementation progress* will be the responsibility of the National Programme Manager or CTA based on the project's Annual Work Plan and its indicators. The Project Team will inform the UNDP-CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

150. The National Programme Manager and the CTA will fine-tune/finalise the progress and performance/impact indicators of the project in consultation with the full project team at the Inception Workshop with support from UNDP-CO and assisted by the UNDP-GEF Regional Coordinating Unit. Specific targets for the first year implementation progress indicators together with their means of verification will be developed at this Workshop. These will be used to assess whether implementation is proceeding at the intended pace and in the right direction and will form part of the Annual Work Plan. The local implementing agencies will also take part in the Inception Workshop in which a common vision of overall project goals will be established. Targets and indicators for subsequent years would be defined annually as part of the internal evaluation and planning processes undertaken by the project team.

151. Measurement of impact indicators related to global benefits will occur according to the schedules defined in the Inception Workshop and tentatively outlined in the indicative Impact Measurement Template at the end of this section. The measurement, of these will be undertaken through subcontracts or retainers with relevant institutions (e.g. vegetation cover via analysis of satellite imagery, or populations of key species through inventories) or through specific studies that are to form part of the projects activities (e.g. measurement carbon

benefits from improved efficiency of ovens or through surveys for capacity building efforts) or periodic sampling such as with sedimentation.

152. *Periodic monitoring of implementation progress* will be undertaken by the UNDP-CO through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

153. *Quarterly review*: The quarterly review will be held at programme implementation level. For this the PMC will meet regularly at quarterly basis for well co-ordinated programme implementation.

154. UNDP Country Offices and UNDP-GEF RCUs as appropriate, will conduct yearly visits to projects that have field sites, or more often based on an agreed upon schedule to be detailed in the project's Inception Report / Annual Work Plan to assess first hand project progress. Any other member of the Steering Committee can also accompany, as decided by the SC. A Field Visit Report will be prepared by the CO and circulated no less than one month after the visit to the project team, all SC members, and UNDP-GEF.

155. *Annual Monitoring* will occur through the **Tripartite Review (TPR)**. This is the highest policy-level meeting of the parties directly involved in the implementation of a project. The project will be subject to Tripartite Review (TPR) at least once every year. The first such meeting will be held within the first twelve months of the start of full implementation. The project proponent will prepare an Annual Project Report (APR) and submit it to UNDP-CO and the UNDP-GEF regional office at least two weeks prior to the TPR for review and comments

156. The APR will be used as one of the basic documents for discussions in the TPR meeting. The project proponent will present the APR to the TPR, highlighting policy issues and recommendations for the decision of the TPR participants. The project proponent also informs the participants of any agreement reached by stakeholders during the APR preparation on how to resolve operational issues. Separate reviews of each project component may also be conducted if necessary.

157. The TPR has the authority to suspend disbursement if project performance benchmarks are not met. Benchmarks will be developed at the Inception Workshop, based on delivery rates, and qualitative assessments of achievements of outputs. In the absence of a TPR requirement, the programme will be subject to annual review to be performed by the SC. The NPD will be responsible to prepare and submit, before the TPR/Annual Review meeting, an APR

#### Terminal Tripartite Review (TTR)

158. The terminal tripartite review is held in the last month of project operations. The project proponent is responsible for preparing the Terminal Report and submitting it to UNDP-CO and LAC-GEF's Regional Coordinating Unit. It shall be prepared in draft at least two months in advance of the TTR in order to allow review, and will serve as the basis for discussions in the TTR. The terminal tripartite review considers the implementation of the project as a whole, paying particular attention to whether the project has achieved its stated objectives and contributed to the broader environmental objective. It decides whether any actions are still necessary, particularly in relation to sustainability of project results, and acts as a vehicle through which lessons learnt can be captured to feed into other projects under implementation of formulation.

#### Project Monitoring Reporting

159. The National Programme Manager in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process. Items (a)

through (f) are mandatory and strictly related to monitoring, while (g) through (h) have a broader function and the frequency and nature is project specific to be defined throughout implementation.

*(a) Inception Report (IR)*

160. A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year/ Annual Work Plan divided in quarterly time-frames detailing the activities and progress indicators that will guide implementation during the first year of the project. This Work Plan would include the dates of specific field visits, support missions from the UNDP-CO or the Regional Coordinating Unit (RCU) or consultants, as well as time-frames for meetings of the project's decision making structures. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

161. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.

162. When finalized the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document.

*(b) Annual Project Report (APR)*

163. The APR is a UNDP requirement and part of UNDP's Country Office central oversight, monitoring and project management. It is a self -assessment report by project management to the CO and provides input to the country office reporting process and the ROAR, as well as forming a key input to the Tripartite Project Review. An APR will be prepared on an annual basis prior to the Tripartite Project Review, to reflect progress achieved in meeting the project's Annual Work Plan and assess performance of the project in contributing to intended outcomes through outputs and partnership work.

164. The format of the APR is flexible but should include the following:

- An analysis of project performance over the reporting period, including outputs produced and, where possible, information on the status of the outcome
- The constraints experienced in the progress towards results and the reasons for these
- The three (at most) major constraints to achievement of results
- AWP, CAE and other expenditure reports (ERP generated)
- Lessons learned
- Clear recommendations for future orientation in addressing key problems in lack of progress

*(c) Project Implementation Review (PIR)*

165. The PIR is an annual monitoring process mandated by the GEF. It has become an essential management and monitoring tool for project managers and offers the main vehicle for extracting lessons from ongoing projects. Once the project has been under implementation for a year, a Project Implementation Report must be completed by the CO together with the project. The PIR can be prepared any time during the year (July-June) and ideally prior to the TPR. The PIR should then be discussed in the TPR so that the result would be a PIR that has been agreed upon by the project, the executing agency, UNDP CO and the concerned RC.

166. The individual PIRs are collected, reviewed and analyzed by the RCs prior to sending them to the focal area clusters at the UNDP/GEF headquarters. The focal area clusters supported by the UNDP/GEF M&E Unit analyse the PIRs by focal area, theme and region for common issues/results and lessons. The TAs and PTAs play a key role in this consolidating analysis.

167. The focal area PIRs are then discussed in the GEF Interagency Focal Area Task Forces in or around November each year and consolidated reports by focal area are collated by the GEF Independent M&E Unit based on the Task Force findings.

168. The GEF M&E Unit provides the scope and content of the PIR. In light of the similarities of both APR and PIR, UNDP/GEF has prepared a harmonized format for reference.

*(d) Quarterly Progress Reports*

169. Upon completion of a quarter the programme manager will prepare a brief quarterly progress report. This report should describe actual programme progress against each quarter's work plan and budget, identify any problems encountered, explain the main variances from the work plan and budget, and present plans and recommendations for the next quarter's work.

*(e) Interim Reports*

170. The programme manager will prepare Interim Reports for the PSC to consist of brief summary of progress in relation to work plan and update on financial progress if requested.

171. Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team. See format attached.

*(f) Periodic Thematic Reports*

172. As and when called for by UNDP, UNDP-GEF or the Implementing Partner, the project team will prepare Specific Thematic Reports, focusing on specific issues or areas of activity. The request for a Thematic Report will be provided to the project team in written form by UNDP and will clearly state the issue or activities that need to be reported on. These reports can be used as a form of lessons learnt exercise, specific oversight in key areas, or a troubleshooting exercise to evaluate and overcome obstacles and difficulties encountered. UNDP is requested to minimize its requests for Thematic Reports, and when such are necessary will allow reasonable timeframes for their preparation by the project team.

*(g) Project Terminal Report*

173. During the last three months of the project the project team will prepare the Project Terminal Report. This comprehensive report will summarize all activities, achievements and outputs of the Project, lessons learnt, objectives met, or not achieved, structures and systems implemented, etc. and will be the definitive statement of the Project's activities during its lifetime. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the Project's activities.

*Independent Evaluation*

174. The project will be subjected to at least two independent external evaluations as follows:-

*(i) Mid-term Evaluation*

175. An independent Mid-Term Evaluation will be undertaken at the end of the second year of implementation. The Mid-Term Evaluation will determine progress being made towards the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the UNDP-GEF RCU and UNDP/GEF.

*(ii) Final Evaluation*

176. An independent Final Evaluation will take place three months prior to the terminal tripartite review meeting, and will focus on the same issues as the mid-term evaluation. The final evaluation will also look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. The Final Evaluation should also provide recommendations for follow-up activities. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.

*Audit Clause*

177. The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The programme will be subject to management and financial audit (for UNDP and GEF inputs) at the end of each year as per UNDP requirements.

*Learning and Knowledge Sharing*

178. Results from the project will be disseminated within and beyond the project intervention zone through a number of existing information sharing networks and forums, including those of UNDP/GEF. In addition:

- ◆ The project will participate, as relevant and appropriate, in professional networks, organized for Senior Personnel working on projects that share common characteristics.
- ◆ The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation through lessons learned.

179. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Identify and analyzing lessons learned is an on-going process, and the need to communicate such lessons as one of the project's central contributions is a requirement to be delivered not less frequently than once every 12 months. UNDP/GEF and UNDP CO will provide assistance to the project team in categorizing, documenting and reporting on lessons learned. To this end a percentage of project resources will need to be allocated for these activities.

## 7. Legal Context

1. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the His Majesty's Government of Nepal and the United Nations Development Programme, signed by the parties on 23 February 1984. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.
2. UNDP acts in this Project as Implementing Agency of the Global Environment Facility (GEF), and all rights and privileges pertaining to UNDP as per the terms of the SBAA shall be extended mutatis mutandis to GEF.
3. The UNDP Resident Representative in Nepal is authorized to effect in writing the following types of revision to this Project Document, provided that s/he has verified the agreement thereto by GEF Unit and is assured that the other signatories to the Project Document and co-funding partners have no objection to the proposed changes:
  - Revision of, or addition to, any of the annexes to the Project Document;
  - Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation (for GEF and UNDP inputs only);
  - Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility (for GEF and UNDP budgets only); and
  - Inclusion of additional annexes and attachments only as set out here in this Project Document.

*Table H-1: Indicative Monitoring and Evaluation Work plan and corresponding Budget*

Type of M&E activity	Responsible Parties	Budget US\$ <i>Excluding project team Staff time</i>	Time frame
Inception Workshop	<ul style="list-style-type: none"> <li>▪ National Project Director</li> <li>▪ UNDP CO</li> <li>▪ UNDP GEF</li> </ul>	\$3,000	Within first two months of project start up
Inception Report	<ul style="list-style-type: none"> <li>▪ Project Team</li> <li>▪ UNDP CO</li> </ul>	None	Immediately following IW
Measurement of Means of Verification for Project Purpose Indicators	<ul style="list-style-type: none"> <li>▪ National Project Director will oversee specific studies, and delegate responsibilities to relevant team members</li> </ul>	To be finalized in Inception Phase and Workshop. Indicative cost \$60,000	Start, mid and end of project
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)	<ul style="list-style-type: none"> <li>▪ Oversight by Project GEF Technical Advisor and National Project Director</li> <li>▪ Measurements by regional field officers and local IAs</li> </ul>	To be determined as part of the Annual Work Plan's preparation. Indicative cost 25,000	Annually prior to APR/PIR and to the definition of annual work plans
APR and PIR	<ul style="list-style-type: none"> <li>▪ Project Team</li> <li>▪ UNDP-CO</li> <li>▪ UNDP-GEF</li> </ul>	None	Annually
TPR and TPR report	<ul style="list-style-type: none"> <li>▪ Government Counterparts</li> <li>▪ UNDP CO</li> </ul>	None	Every year,

	<ul style="list-style-type: none"> <li>▪ Project team</li> <li>▪ UNDP-GEF Regional Coordinating Unit</li> </ul>		upon receipt of APR
Steering Committee Meetings	<ul style="list-style-type: none"> <li>▪ National Project Director</li> <li>▪ UNDP CO</li> </ul>	None	Following Project IW and subsequently at least once a year
Periodic status reports	<ul style="list-style-type: none"> <li>▪ Project team</li> </ul>	5,000	To be determined by Project team and UNDP CO
Technical reports	<ul style="list-style-type: none"> <li>▪ Project team</li> <li>▪ Hired consultants as needed</li> </ul>	15,000	To be determined by Project Team and UNDP-CO
Mid-term External Evaluation	<ul style="list-style-type: none"> <li>▪ Project team</li> <li>▪ UNDP- CO</li> <li>▪ UNDP-GEF Regional Coordinating Unit</li> <li>▪ External Consultants (i.e. evaluation team)</li> </ul>	30,000	At the mid-point of project implementation.
Final External Evaluation	<ul style="list-style-type: none"> <li>▪ Project team,</li> <li>▪ UNDP-CO</li> <li>▪ UNDP-GEF Regional Coordinating Unit</li> <li>▪ External Consultants (i.e. evaluation team)</li> </ul>	40,000	At the end of project implementation
Terminal Report	<ul style="list-style-type: none"> <li>▪ Project team</li> <li>▪ UNDP-CO</li> <li>▪ External Consultant</li> </ul>	None	At least one month before the end of the project
Lessons learned	<ul style="list-style-type: none"> <li>▪ Project team</li> <li>▪ UNDP-GEF Regional Coordinating Unit (suggested formats for documenting best practices, etc)</li> </ul>	15,000 (average \$3,000 per year)	Yearly
Audit	<ul style="list-style-type: none"> <li>▪ UNDP-CO</li> <li>▪ Project team</li> </ul>	4,000 (average \$1000 per year)	Yearly
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	<ul style="list-style-type: none"> <li>▪ UNDP Country Office</li> <li>▪ UNDP-GEF Regional Coordinating Unit (as appropriate)</li> <li>▪ Government representatives</li> </ul>	15,000 (average one visit per year)	Yearly
<b>TOTAL INDICATIVE COST</b>			
<i>Excluding project team staff time and UNDP staff and travel expenses</i>		US\$ 212,000	



## 8. Logical Framework Analysis

**Applicable MYFF Service Line:**

Goal 3: Energy and Environment for Sustainable Development, Service Line 3.1: Frameworks and Strategies for Sustainable Development

Core Results: Sustainable management of environment and natural resource incorporated into poverty reduction strategies/key national development frameworks and sector strategies

**Intended Outcome as stated in the Country Results Framework:**

Clear recognition and incorporation of environmental dimension into pro-poor policies

**Outcome indicator as stated in the Country Programme Results and Resources Framework.**

Sectoral policies and plans address the linkage between the poverty and environment

180. As part of the project's adaptive management approach, the LFA will be revisited annually during results-oriented performance assessments and revised based on agreement of all stakeholders according to the changing context. Indicators and targets have been set based on current best estimates according to situation analysis, field realities and available budget. These will be confirmed or revised and specified in year one based on a participatory process to develop both the site level demonstration plans and the overall project monitoring plan/ performance measurement plan.

Narrative description	Key Performance Indicator	Baseline	Target (Year 5 unless specified)	Means of Verification and frequency	Assumptions
<b>Project Goal:</b> To ensure maintenance and enhancement of wetland biodiversity, environmental goods and services for improved local livelihoods in Nepal					
<b>Project Objective:</b> To strengthen national and local capacity on ecosystem management of wetland biodiversity in Nepal	10 years after the project has started: <ul style="list-style-type: none"> <li>✓ Population size of globally threatened wetland species</li> <li>✓ Conservation status of globally significant wetlands</li> <li>✓ Access rights of wetland-dependent communities and income</li> </ul>	<ul style="list-style-type: none"> <li>○ Rate of loss currently not available and will be surveyed</li> <li>• Population size of Asian wild buffalo = 159 (2004)</li> <li>• No globally significant wetland effectively conserved</li> <li>• Access restricted; average annual household income will be surveyed</li> </ul>	<ul style="list-style-type: none"> <li>• Rate of loss = 0</li> <li>• Population size increased by 30%</li> <li>• All globally significant wetlands in Nepal conserved, with no degradation occurring</li> <li>• All wetland dependent communities have clearly defined access rights and average annual household income increased by 20%</li> </ul>	<ul style="list-style-type: none"> <li>✓ monitoring reports of DNWPC management plans</li> <li>✓ biodiversity surveys</li> <li>✓ social surveys</li> </ul>	<ul style="list-style-type: none"> <li>☞ Wetlands and aquatic biodiversity remain a priority of Gon</li> <li>☞ National Financial Strategy developed by project can identify diverse sources of funding for ongoing support to wetlands</li> <li>☞ Social, political and economic situation of the country does not deteriorate significantly</li> </ul>
<b>OUTCOME 1:</b> Wetland	Content of wetland policy framework	National wetland policy	Wetland policy framework is	✓ legal documents,	☞ wetland biodiversity remains an Gon

Narrative description	Key Performance Indicator	Baseline	Target (Year 5 unless specified)	Means of Verification and frequency	Assumptions
biodiversity conservation values integrated into national policy and planning framework		exists but does not fully reflect field realities	revised based on project recommendations and field experience	gazettes and notifications Assessed annually, starting yr 2	priority
	Content of sectoral policies, plans and guidelines	Aquatic Conservation Act and National Parks and Wildlife Act and Buffer Zone guidelines do not adequately integrate wetlands issues Sectoral policies and plans (water resources and agriculture) do not give attention to wetland conservation or sustainable use Inconsistencies between the Local Self-Governance Act and sectoral policies & laws create a confusing policy framework	Aquatic Conservation Act and National Parks and Wildlife Act and Buffer Zone guidelines revised to integrate wetlands Sectoral policies and plans (water resources and agriculture) amended to favour wetland biodiversity (amendments identified and agreed to by year 2, completed by year 5) Inconsistencies between Local Self-Governance Act and sectoral policies and laws identified (year 4) and resolutions accepted (year 5)	✓ new sectoral strategies and plans Assessed annually, starting yr 2	* Sectoral departments adopt the guidelines and ensure their use
	Content of National and Local Development Plans	10 <sup>th</sup> Five Year Plan and demo site District development plans do not adequately integrate wetland conservation and use	Wetlands are integrated into national 11 <sup>th</sup> Five Year Plan and demo site district development plans	✓ 5 year plan Assessed annually, starting yr 2	* wetland biodiversity remains an GoN priority
	Use and relevance of	No forum exists	National Wetland	✓ minutes of NWC and	* adequate inter-sectoral

Narrative description	Key Performance Indicator	Baseline	Target (Year 5 unless specified)	Means of Verification and frequency	Assumptions
	National Wetland Committee (NWC)	to discuss and resolve inter-sectoral issues impacting wetlands No regular mechanism for practitioners to influence national decision-making on wetlands	Committee is used to discuss and resolve inter-sectoral issues impacting wetlands Wetland network members believe decision making of the NWC reflects interests and ideas of stakeholders 75% of the time	sub committees ✓ survey of wetland committee members Assessed annually	participation in National Wetlands Committee (seniority & frequency) * GoN remains open to the participation of civil society in wetland management
	Legal decisions taken regarding wetlands	Current % of wetland cases resolved in favour of wetland conservation and sustainable use will be determined in year 1	60% of legal cases impacting wetlands are resolved in favour of wetland conservation and sustainable use	✓ national reports to CBD & Ramsar Yr 1, 3 and 5	* GoN remains open to the participation of civil society in wetland management * wetland biodiversity remains an GoN priority
	TORs of MFSC staff	No explicit responsibility for wetland conservation in MFSC staff	5 national level staff of Ministry of Forests and Soil Conservation have wetland conservation related responsibility explicitly in their TOR by year 4.	✓ minutes of NWC and sub committees Assessed annually	* wetland biodiversity remains an GoN priority
<b>OUTCOME 2:</b> Strengthened national institutional, technical and economic capacity and awareness for wetland biodiversity conservation and sustainable use	Staff and budget allocation for aquatic ecosystem management	No staff are explicitly responsible for, nor have adequate skills in aquatic ecosystem management No explicit budget for aquatic ecosystem management	Environment division of MFSC has adequate trained staff and increase in budgets allocated to aquatic ecosystem management by year 3	✓ Environment division budgets and staff profile Assessed annually	* GoN counterpart funding and staff are provided in a timely manner
	Scientific and economic tools and methods available	No wetland inventory beyond the	Inventory, assessments, economic valuation	✓ biodiversity & sectoral strategies	* Environment division provides leadership on

Narrative description	Key Performance Indicator	Baseline	Target (Year 5 unless specified)	Means of Verification and frequency	Assumptions
	and used by trained staff	Terai; limited tools for wetland assessment or valuation No training programmes for wetland conservation and use	and guidelines used to develop and implement national biodiversity, sectoral and development strategies and plans 60% of trainees apply their training and capacity building on wetland conservation and sustainable use	and plans Assessed annually	spearheading biodiversity issues
	Public awareness of wetland issues	Media coverage of wetland issues limited and not high quality	Increased coverage of wetlands issues in media	✓ interviews & focus groups ✓ newspaper articles; radio & television programmes Assessed annually	Media retains its independence
<b>OUTCOME 3:</b> Enhanced collaborative management of wetland resources for conservation and sustainable livelihoods	For both demonstration sites unless specified:				
	Sectoral and development actions	Sectoral and development actions (particularly upstream) inadequately consider impacts to wetlands	Commitments by relevant government units to prevent actions that would negatively impact demonstration site wetlands (by end of year 1)	✓ letters by relevant government agencies Assessed annually	Macroeconomic and sectoral planners open to developing pro-wetland economic policies and instruments GoN abides by its EIA laws and guidelines
	Mechanisms for multi-stakeholder local decision-making on wetlands	Buffer zone council for KTWR not operational (and inadequate provisions for women or indigenous groups) No mechanism in GGC	Multistakeholder fora used for local decision-making regarding wetland management (incl. women and indigenous groups)	✓ minutes of BZDC, KTWR & GGLC meetings Assessed annually, starting yr 2	field activities are not unduly hampered by the political situation
	Reduced conflicts over resource use	Number of recorded	50% reduction in the number of	✓ records of conflict	field activities are not unduly

Narrative description	Key Performance Indicator	Baseline	Target (Year 5 unless specified)	Means of Verification and frequency	Assumptions
		conflicts over wetland resource use will be measured in year 1	recorded conflicts over wetland resource use	Assessed annually, starting yr 2	hampered by the political situation incentives (social & economic) applied in 2 sites are replicable to other sites
	Degree of community involvement for wetlands	Poor community involvement for wetlands conservation	Increased community support and participation for wetland conservation and sustainable use (incl. women and indigenous groups)	✓ PRA ✓ perceptions of community & resource use groups Yr 1, 3 and 5	field activities are not unduly hampered by the political situation
	Protection of critical wetlands	Basic assessment of critical wetland sites in the project sites but limited restoration or protection (esp. outside KTWR)	Critical wetlands identified (year 2), restored and protected through collaborative approaches (year 5)	✓ protected area documents ✓ records of wetland disturbance Yr 1, 3 and 5	field activities are not unduly hampered by the political situation
	Capacity of government staff	Inadequate government staff with capacity in wetland issues	Adequate qualified government staff at demonstration sites (DNPWC and DoF)	✓ Environment division budgets and staff profile Assessed annually, starting yr 2	Staff turnover does not impede institutional knowledge & capacity
	Financing	KTWR budget for DNPWC is inadequate. No funds for communities from BZ. No specific budget for DoF or communities in GGC for wetlands.	increased budget available to line departments, local government and community groups from piloting of demo site financing strategies (agreed to by year 4 and in place by year 5)	✓ letters by relevant government agencies Assessed annually, starting yr 3	incentives (social & economic) applied in 2 sites are replicable to other sites
	Number of buffalo and cattle inside KTWR	High number of domestic and feral cattle and buffaloes inside the Reserve	50 % reduction in number of buffalo and cattle inside KTWR	✓ Periodic biological and social surveys Yr 1 and 5	incentives (social & economic) applied in 2 sites are replicable to other sites
	Coverage of water	High water	20% reduction of	✓ Periodic	

Narrative description	Key Performance Indicator	Baseline	Target (Year 5 unless specified)	Means of Verification and frequency	Assumptions
	hyacinth	hyacinth infestation in wetlands	water hyacinth at demo sites	biological and social surveys Yr 1 and 5	
	Implementation of income generation strategies Income generated from community strategies	No income generation strategies exist for wise use of wetland resources focused on poor wetland dependent communities Income levels will be measured and realistic targets set as part of participatory planning mechanisms	Strategies for income generation based on sustainable use of wetland resources implemented in demo sites 20% increase in income for 15% of wetland-dependent <sup>2</sup> HHs generated through community action & eco-tourism plans	✓ Periodic biological and social surveys Yr 1, 3 and 5	✗ field activities are not unduly hampered by the political situation
	Adoption of sustainable resource use practices	Widespread unsustainable use practices	15% of wetland-dependent HHs have stopped unsustainable resource use practices	✓ Periodic biological and social surveys Yr 1, 3 and 5	✗ incentives (social & economic) applied in 2 sites are replicable to other sites ✗ field activities are not unduly hampered by the political situation
	Adoption of integrated pest management and organic farming	Will be measured in year 1	20% of demo site communities adopt integrated pest management and organic farming	✓ Periodic biological and social surveys Yr 1, 3 and 5	✗ field activities are not unduly hampered by the political situation
	Steps toward replication	No mechanisms exist for sharing of strategies among wetland sites	2 sister sites with collaborative mechanisms in place	✓ Project reports Yr 5	✗ Sister sites remain accessible

<sup>2</sup> In Koshi Tappu Area, 31% of the households are from wetland dependent ethnic groups and in Ghodaghodi Lake Complex area 51% of households are from a wetland dependent ethnic group

	Indicator	Means of verification	Assumptions
<b>OUTCOME 1: WETLAND BIODIVERSITY CONSERVATION VALUES INTEGRATED INTO NATIONAL POLICY AND PLANNING FRAMEWORK</b>			
<b>Output 1.1:</b> Strengthened Mechanisms for Inter-Sectoral Co-ordination	<ul style="list-style-type: none"> <li>✓ PMU established and operational</li> <li>✓ project gender and social equity strategy (incl. staff &amp; operations) developed &amp; implemented</li> <li>✓ National Wetland Committee and inter-sectoral technical advisory committees operational and meets annually</li> <li>✓ Programme Steering Committee meets semi-annually</li> <li>✓ # &amp; nature of participants at preparatory workshops prior to MEAs (including Ramsar)</li> <li>✓ strategies and action plans developed by national networks of indigenous communities &amp; wetland specialists that complement GoN actions to support wetland conservation &amp; sustainable use</li> </ul>	<ul style="list-style-type: none"> <li>✓ Project Steering Committee minutes</li> <li>✓ project documents (plans, monitoring reports)</li> <li>✓ National Wetland Committee minutes</li> <li>✓ Technical Advisory Committee minutes</li> <li>✓ preparatory workshop reports</li> <li>✓ position statements for MEAs</li> <li>✓ network reports &amp; meeting minutes</li> </ul>	<ul style="list-style-type: none"> <li>☞ adequate inter-sectoral participation in National Wetlands Committee (seniority &amp; frequency)</li> <li>☞ PMU can be established in an accessible location</li> <li>☞ suitable staff &amp; counterparts are identified &amp; available in a timely manner</li> <li>☞ existing wetland specialists &amp; indigenous peoples are interested &amp; able to participate in the networks</li> </ul>
<b>Output 1.2:</b> Strengthened ability to integrate wetland values into national policy and planning framework	<ul style="list-style-type: none"> <li>✓ analysis &amp; recommendations to strengthen policies and acts on wetlands, biodiversity and other sectors (water resources, agriculture, local self governance and protected areas as specified by year 2)</li> <li>✓ analysis of economic policy disincentives and perverse incentives to wetlands in key wetland-impacting sectors (water, hydropower, irrigation and agriculture) and economic instruments/policy reforms for wetland conservation proposed for key sectors (water, hydropower, irrigation and agriculture)</li> <li>✓ guidelines to support implementation of the wetland policy developed &amp; disseminated</li> <li>✓ guidelines for wetland economic assessment developed for integration into economic planning and investment appraisal procedures for key sectors (water, hydropower, irrigation and agriculture)</li> <li>✓ guidelines on best practices to integrate wetland issues into specific sectors (agriculture, forestry, industry, tourism, river engineering, EIA) developed &amp; disseminated</li> </ul>	<ul style="list-style-type: none"> <li>✓ sub-committee reports</li> <li>✓ project reports</li> <li>✓ guidelines</li> <li>✓ awareness raising materials</li> </ul>	<ul style="list-style-type: none"> <li>☞ GoN is open to further analysis &amp; amendment of wetland policy framework based on testing of its application in the field</li> <li>☞ Macroeconomic and sectoral planners open to developing pro-wetland economic policies and instruments</li> </ul>

	<ul style="list-style-type: none"> <li>✓ national workshops, information materials and study tours held to raise awareness of senior policy makers, including macroeconomic and sectoral economic planners</li> </ul>		
<b>OUTCOME 2: STRENGTHENED NATIONAL INSTITUTIONAL, TECHNICAL AND ECONOMIC CAPACITY AND AWARENESS FOR WETLAND BIODIVERSITY CONSERVATION AND SUSTAINABLE USE</b>			
<b>Output 2.1:</b> Knowledge and Tools for Strengthened Development of Planning and Policy on Wetlands	<ul style="list-style-type: none"> <li>✓ toolkit on wetland assessment and inventory methodologies</li> <li>✓ national inventory of wetlands (focus on mid-hills and mountains) including distribution of alien invasive species &amp; available in accessible database</li> <li>✓ guidelines on AIS management &amp; action plan developed &amp; disseminated</li> <li>✓ regular mechanisms established to update list of species under legal protection</li> <li>✓ methodology for &amp; best practices of economic valuation of wetlands for conservation planning developed &amp; disseminated</li> <li>✓ 10 national and site level development and conservation institutions with skills in wetland valuation</li> <li>✓ 4 wetland valuation case studies (incl. project sites) with recommendations for financial and economic measures for conservation management</li> <li>✓ Proposal for national sustainable financing mechanism for wetland conservation.</li> <li>✓ case studies on indigenous knowledge</li> </ul>	<ul style="list-style-type: none"> <li>✓ inventory</li> <li>✓ guidelines</li> <li>✓ project documents</li> </ul>	<ul style="list-style-type: none"> <li>☞ access to mountain sites is maintained</li> <li>☞ planning &amp; sectoral staff are interested in the economic valuation</li> <li>☞ indigenous communities agree to participate in the documentation of their knowledge</li> </ul>
<b>Output 2.2:</b> Enhanced Awareness of Wetland Issues	<ul style="list-style-type: none"> <li>✓ awareness action plan developed and implemented (based on needs assessment)</li> <li>✓ 40 visits monthly to the resource centre</li> <li>✓ 25 fact sheets, posters, brochures and other awareness raising materials developed and disseminated to 100 institutions</li> </ul>	<ul style="list-style-type: none"> <li>✓ needs assessment report</li> <li>✓ awareness raising materials</li> <li>✓ project reports &amp; field visits</li> </ul>	
<b>Output 2.3:</b> Strengthened technical capacity in wetland management	<ul style="list-style-type: none"> <li>✓ increased access to wetland information resources through public information centre</li> <li>✓ database of wetland information</li> <li>✓ capacity building plan developed and delivered (based on needs assessment)</li> <li>✓ 20 government &amp; NGO organizations with skills in ecosystem management approach to wetland management</li> </ul>	<ul style="list-style-type: none"> <li>✓ nature &amp; extent of use of information centre</li> <li>✓ number &amp; diversity of people trained (gender disaggregated)</li> <li>✓ project reports</li> </ul>	<ul style="list-style-type: none"> <li>☞ training can be developed &amp; delivered to both government &amp; non-governmental people</li> <li>☞ information centre is located in an accessible location</li> </ul>
<b>OUTCOME 3: ENHANCED COLLABORATIVE MANAGEMENT OF WETLAND RESOURCES FOR CONSERVATION AND SUSTAINABLE LIVELIHOODS</b>			
Component 3A: Collaborative management of wetland resources in the Koshi Tappu Area demonstrated as a model for wetland protected area management			
<b>Output 3A.1:</b>	<ul style="list-style-type: none"> <li>✓ BZ Development Committee established</li> </ul>	<ul style="list-style-type: none"> <li>✓ BZ Committee</li> </ul>	<ul style="list-style-type: none"> <li>☞ BZ is approved</li> </ul>



<p>Strengthened Co-ordination for Collaborative Management in Koshi Tappu Area</p>	<p>and operational with multistakeholder representation, including women and wetland dependent communities</p> <ul style="list-style-type: none"> <li>✓ regular multi-stakeholder mechanisms for review of BZ and Reserve MPs established and operational</li> <li>✓ field office operational and accessible</li> <li>✓ District water resource committees strengthened to address wetland issues</li> <li>✓ institutional support provided based on needs analysis of government and community stakeholder groups</li> <li>✓ mapping of wetlands and analysis of tenure issues</li> <li>✓ report on linkages between resource access, livelihood security, environmental condition and conflict</li> <li>✓ 20 organizations with increased skills in participatory planning, equity and conflict resolution</li> <li>✓ incentives for wetland conservation identified and piloted including buffalo insemination programme</li> </ul>	<p>minutes and participation</p> <ul style="list-style-type: none"> <li>✓ KT Reserve meeting minutes</li> <li>✓ Project reports</li> <li>✓ User group action plans and minutes</li> <li>✓ Gender &amp; Equity strategy and reports</li> </ul>	<ul style="list-style-type: none"> <li>☞ Field project office and is accessible to all stakeholders</li> <li>☞ artificial insemination is a viable option for buffaloes</li> <li>☞ women &amp; wetland-dependent communities are interested and able to participate</li> <li>☞ resource-based user groups are a useful addition to existing geographical-based user groups</li> </ul>
<p>Output 3A.2: Strengthened Technical Capacity for Wetland Management in Koshi Tappu Area</p>	<ul style="list-style-type: none"> <li>✓ staffed and skilled DNPWC (including % women staff)</li> <li>✓ applied training developed and delivered to DNPWC, BZ, line agency, NGO and community members on ecosystem and collaborative approaches to wetland management, economic valuation and sustainable financing</li> <li>✓ training of NGO and CBOs as resource personnel for communities on wetland conservation and sustainable use</li> <li>✓ all critical wetland habitats identified and restored or protected</li> <li>✓ revised KTWR and BZ management plans and mechanisms for regular review and revision</li> <li>✓ targeted monitoring plan developed and implemented</li> <li>✓ mechanism for reducing cattle in KTWR developed and tested</li> <li>✓ strengthened dialogue with India on transboundary cooperation</li> <li>✓ links established with other projects (including TAI.)</li> <li>✓ Sustainable Financing Strategy for conservation and sustainable use activities in KTWR and BZ developed &amp; piloted, including payment for environmental services, user charges and damage fees, and other market-based mechanisms for wetland management</li> </ul>	<ul style="list-style-type: none"> <li>✓ Training reports &amp; follow-up surveys</li> <li>✓ KTWR management &amp; monitoring plans &amp; reports</li> <li>✓ Minutes of &amp; participation at review meetings</li> <li>✓ PRA surveys and community &amp; park perceptions</li> <li>✓ Minutes and actions identified for transboundary cooperation</li> <li>✓ Minutes and actions for collaboration with other projects</li> <li>✓ Sustainable financing strategy &amp; reports on its piloting</li> <li>✓ Variety of market-based instruments developed for wetland management</li> </ul>	<ul style="list-style-type: none"> <li>☞ Government &amp; community interested to build on participatory process established through Parks &amp; People Programme and extend to wetlands</li> <li>☞ training can be developed &amp; delivered to both government &amp; non-governmental people</li> <li>☞ cost-effective indicators can be identified</li> <li>☞ Other projects &amp; planning &amp; line agencies are willing &amp; able to collaborate (especially for financing strategy)</li> <li>☞ Indian Government is</li> </ul>

<p><b>Output 3A.3:</b> Strengthened Community Support in Koshi Tappu Area for Wetland Conservation and Sustainable Use</p>	<ul style="list-style-type: none"> <li>✓ 20 community action plans developed through participatory planning process and implemented</li> <li>✓ women's &amp; under-represented groups' participation in action plan development and implementation</li> <li>✓ demonstration of conservation farming techniques through enhanced capacity of extension workers and methods to reduce energy consumption</li> <li>✓ eco-tourism plan developed and initially implemented</li> <li>✓ strengthened awareness of wetland values</li> <li>✓ 4 school wetland programmes initiated in demo sites</li> </ul>	<ul style="list-style-type: none"> <li>✓ Community action plans &amp; assessment of their implementation</li> <li>✓ PRA &amp; perception surveys</li> <li>✓ # of HHs visited by extension workers trained in conservation farming</li> <li>✓ Eco-tourism plan &amp; assessment of their implementation</li> <li>✓ Project documents</li> </ul>	<p>interested in trans-boundary cooperation</p> <ul style="list-style-type: none"> <li>☞ Communities are willing to shift to buffalo from cattle</li> <li>☞ communities (incl. women &amp; wetland-dependent people) are interested &amp; able to participate</li> <li>☞ school eco-clubs will be interested in working on wetland issues</li> </ul>
<p><b>Component 3B: Collaborative management of wetland resources in the Ghodaghodi Lake Complex (GLC) demonstrated as a model for wetland management outside protected areas</b></p>			
<p><b>Output 3B.1:</b> Strengthened Local Institutional Capacity and Coordination for Collaborative Management in GLC</p>	<ul style="list-style-type: none"> <li>✓ GLC institution established and operational with multistakeholder representation, including women and wetland-dependent communities</li> <li>✓ regular multi-stakeholder mechanisms for review of GLC Management Plan established and operational</li> <li>✓ field office operational and accessible</li> <li>✓ District Water Resource committees strengthened to address wetland issues</li> <li>✓ institutional support provided based on needs analysis of government and community stakeholder groups</li> <li>✓ mapping of wetlands and analysis of tenure issues</li> <li>✓ 10 organizations with increased skills in participatory planning, equity and conflict resolution</li> </ul>	<ul style="list-style-type: none"> <li>✓ GLC minutes and participation</li> <li>✓ Project reports</li> <li>✓ User group action plans and minutes</li> <li>✓ Gender &amp; Equity strategy and reports</li> </ul>	<ul style="list-style-type: none"> <li>☞ Field project is accessible to all stakeholders</li> <li>☞ women &amp; wetland-dependent communities are interested and able to participate</li> <li>☞ resource-based user groups are a useful addition to existing geographical-based user groups</li> </ul>
<p><b>Output 3B.2:</b> Strengthened Technical Capacity for Wetland Management in GLC</p>	<ul style="list-style-type: none"> <li>✓ applied training developed and delivered to GLC, line agency, NGO and community members on ecosystem and collaborative approaches to wetland management, economic valuation and sustainable financing</li> <li>✓ 10 NGO and CBOs trained as resource personnel for communities on wetland conservation and sustainable use</li> <li>✓ critical wetland habitats identified and</li> </ul>	<ul style="list-style-type: none"> <li>✓ Training reports &amp; follow-up surveys</li> <li>✓ GLC management &amp; monitoring plans &amp; reports</li> <li>✓ Minutes of &amp; participation at review meetings</li> <li>✓ PRA surveys and community &amp;</li> </ul>	<ul style="list-style-type: none"> <li>☞ Government &amp; community interested to use participatory processes</li> <li>☞ training can be developed &amp; delivered to both government &amp; non-</li> </ul>

<p><b>Output 3B.3:</b> Strengthened Community Support in GLC for Wetland Conservation and Sustainable Use</p>	<ul style="list-style-type: none"> <li>✓ restored or protected</li> <li>✓ GLC management plan developed and mechanisms in place for regular review and revision</li> <li>✓ targeted monitoring plan developed and implemented</li> <li>✓ mechanism for reducing cattle in GLC developed and tested sustainable water management practices assessed &amp; recommendations made at sub-catchment level</li> <li>✓ links established with other projects (including TAL)</li> <li>✓ Sustainable Financing Strategy developed &amp; piloted for conservation and sustainable use activities in GLC including payment for environmental services, user charges and damage fees, and other market-based mechanisms for wetland management</li> <li>✓ 5 community action plans developed through participatory planning process and implemented</li> <li>✓ women's participation in action plan development and implementation</li> <li>✓ demonstration of conservation farming techniques through enhanced capacity of extension workers and methods to reduce energy consumption</li> <li>✓ strengthened awareness of wetland values</li> <li>✓ 3 school wetland programmes initiated in demo sites</li> </ul>	<ul style="list-style-type: none"> <li>✓ park perceptions</li> <li>✓ Minutes and actions for collaboration with other projects</li> <li>✓ Water management report &amp; follow-up</li> <li>✓ Sustainable financing strategy &amp; reports on its piloting</li> <li>✓ Variety of market-based instruments developed for wetland management</li> <li>✓ Community action plans &amp; assessment of their implementation</li> <li>✓ PRA &amp; perception surveys</li> <li>✓ # of HHs visited by extension workers trained in conservation farming</li> <li>✓ Project reports</li> </ul>	<ul style="list-style-type: none"> <li>☞ governmental people</li> <li>☞ cost-effective indicators can be identified</li> <li>☞ Other projects &amp; planning &amp; line agencies are willing &amp; able to collaborate (especially for financing strategy)</li> <li>☞ communities (incl. women &amp; wetland-dependent people) are interested &amp; able to participate</li> <li>☞ school eco-clubs will be interested in working on wetland issues</li> </ul>
<p><b>Component 3C: Mechanisms developed to share project experience and promote replication in other key wetland sites</b></p>			
<p><b>Output 3C.1:</b> Project experience, results and lessons learned disseminated nationally and internationally</p> <p><b>Output 3C.2:</b> Relevance of tools and approaches examined in other locations</p>	<ul style="list-style-type: none"> <li>✓ semi-annual newsletter distributed to 100 institutions</li> <li>✓ 10 fact sheets distributed</li> <li>✓ website developed</li> <li>✓ 10 study visits</li> <li>✓ 10 workshops to share experience</li> <li>✓ publications &amp; reports</li> <li>✓ analysis of &amp; recommendations to improve guidelines, training programmes &amp; materials, &amp; other tools</li> <li>✓ 10 study visits to sister sites</li> <li>✓ 10 workshops with sister sites</li> </ul>	<ul style="list-style-type: none"> <li>✓ newsletters</li> <li>✓ fact sheets</li> <li>✓ project documents</li> <li>✓ workshop &amp; meeting minutes &amp; reports</li> <li>✓ project reports</li> <li>✓ study visit reports</li> </ul>	<ul style="list-style-type: none"> <li>☞ it is cost-effective to distribute newsletters &amp; fact sheets</li> <li>☞ other sites in Nepal &amp; India will be interested in collaborating</li> <li>☞ sites remain accessible</li> </ul>
<p><b>PROJECT ACTIVITIES</b></p>			
<p><b>OUTCOME 1: WETLAND BIODIVERSITY CONSERVATION VALUES INTEGRATED INTO NATIONAL POLICY AND PLANNING FRAMEWORK</b></p>			
<p><b>Output 1.1:</b> Strengthened Mechanisms for Inter-Sectoral Co-ordination</p> <p>1.1.1: Establish and operate national support structures for all project activities</p> <p>1.1.2: Support the establishment of a National Wetlands Committee</p>			

<p>1.1.3: Create and support national networks of wetland stakeholders</p> <p><b>Output 1.2:</b> Strengthened ability to integrate wetland values into national policy and planning framework</p> <p>1.2.1: Strengthen the wetland policy and planning framework and integrate market-based incentives and wetland values</p> <p>1.2.2: Enhance senior decision makers' understanding of wetland issues, including valuation</p>
<p><b>OUTCOME 2: STRENGTHENED NATIONAL INSTITUTIONAL AND TECHNICAL CAPACITY AND AWARENESS FOR WETLAND BIODIVERSITY CONSERVATION AND SUSTAINABLE USE</b></p> <p><b>Output 2.1:</b> Knowledge and Tools for Strengthened Development of Planning and Policy on Wetlands</p> <p>2.1.1: Improve technical knowledge base for wetland management planning</p> <p>2.1.2: Develop guidelines for invasive species management</p> <p>2.1.3: Institutionalise regular revision of protected and threatened species lists</p> <p>2.1.4: Build capacity for using economic tools for wetland management planning</p> <p>2.1.5: Document indigenous knowledge on sustainable wetland management</p> <p><b>Output 2.2:</b> Enhanced Awareness of Wetland Issues</p> <p>2.2.1: Raise awareness on wetland issues</p> <p><b>Output 2.3:</b> Strengthened technical capacity in wetland management</p> <p>2.3.1: Establish a wetland information centre</p> <p>2.3.2: Train national government and NGO staff on wetland issues</p>
<p><b>OUTCOME 3: STRENGTHENED COLLABORATIVE MANAGEMENT OF WETLAND RESOURCES FOR CONSERVATION AND SUSTAINABLE LIVELIHOODS</b></p>
<p><b>COMPONENT 3A: Component 3A: Collaborative management of wetland resources in the Koshi Tappu Area demonstrated as a model for wetland protected area management</b></p> <p><b>Output 3A.1:</b> Strengthened Co-ordination for Collaborative Management in Koshi Tappu Area</p> <p>3A.1.1: Support better co-ordination and collaboration between stakeholders</p> <p>3A.1.2: Strengthen the role of communities in wetland decision-making</p> <p>3A.1.3: Design and pilot local incentives for biodiversity conservation</p> <p>3A.1.4: Strengthen equity in wetland management</p> <p><b>Output 3A.2:</b> Strengthened Technical Capacity for Wetland Management in Koshi Tappu Area</p> <p>3A.2.1: Strengthen the implementation of management and buffer zone plans</p> <p>3A.2.2: Training in ecosystem approach to wetland management</p> <p>3A.2.3: Facilitate dialogue on trans-boundary wetland management issues</p> <p>3A.2.4: Formulate sustainable financing strategies and identify market-based instruments for Reserve and buffer zone management plans</p> <p><b>Output 3A.3:</b> Strengthened Community Support in Koshi Tappu Area for Wetland Conservation and Sustainable Use</p> <p>3A.3.1: Facilitate action plans for community sustainable livelihoods</p> <p>3A.3.2: Local-level awareness raising</p>
<p><b>COMPONENT 3B: Collaborative management of wetland resources in the Ghodaghodi Lake Complex demonstrated as a model for wetland management outside protected areas</b></p> <p><b>Output 3B.1:</b> Strengthened Local Institutional Capacity and Coordination for Collaborative Management in GLC</p> <p>3B.1.1: Establish and strengthen institutional and management capacity for collaborative management</p> <p>3B.1.2: Strengthen the role of communities in wetland decision making</p> <p>3B.1.3: Design and pilot local incentives for biodiversity conservation</p> <p>3B.1.4: Strengthen equity in wetland management</p> <p><b>Output 3B.2:</b> Strengthened Technical Capacity for Wetland Management in GLC</p> <p>3B.2.1: Develop and support the implementation of a wetland collaborative management plan for the Ghodaghodi Lake Complex</p> <p>3B.2.2: Training in ecosystem approach to wetland management</p> <p>3B.2.3: Analyse and recommend equitable and sustainable water management practices at the sub-catchment level</p>

3B.2.4: Formulate sustainable financing strategies and identify market-based instruments for wetland conservation and sustainable use

**Output 3B.3** Strengthened Community Support in GLC for Wetland Conservation and Sustainable Use

3B.3.1: Facilitate action plans for community sustainable livelihoods

3B.3.2: Local-level awareness raising

**COMPONENT 3C: Mechanisms developed to share project experience and promote replication in other key wetland sites**

**Output 3C.1:** Project experience, results and lessons learned disseminated nationally and internationally

3C.1.1: Sharing of project lessons and results

**Output 3C.2:** Relevance of tools and approaches examined in other locations

3C.2.1: Examine the relevance of tools and approaches in other Terai wetlands

3C.2.2: Examine the relevance of tools and approaches in wetlands in hills and mountains

3C.2.3: Seek feedback from neighbouring nations on the relevance of project materials and approaches

## 9. ADDITIONAL INFORMATION

### 9.1 Other agreements

SEE ANNEX 7: