

ATTACHMENT 1. PROJECT MANAGEMENT REVIEW PARTICIPANTS

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ATTACHMENT 2. PROJECT REVIEW PRESENTATION NOTES, KATHMANDU 22 JUNE 2008

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UNDP-GEF Biodiversity Projects in Nepal

PROJECT MANAGEMENT REVIEW

**Western Terai Landscape Conservation
Conservation & Sustainable Use of Wetlands**

**Provisional
Review Findings and
Recommendations**

Peter Hunnam
June 2008
United Nations Development Program, Global Environment Facility
Government of Nepal

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Project Management Review

- ✓ **Problem/ Project Mapping.**
- ✓ **Project logical framework and Component strategies.**
- ✓ **Project management and administration arrangements.**
 - ✓ **Organisational structure, institutional environment, Project team, Project Manager, Project supervision.**
 - ✓ **Overall Project Plan & Budget.**
 - ✓ **Project Annual and Quarterly Work Plans & Budgets.**
 - ✓ **Project Monitoring, Information, Reporting, Evaluation – Objectives, Indicators, Targets, Baselines.**
- ✓ **Projects within Programs or larger Initiatives.**

PARTICIPATORY REVIEW
FINDINGS
RECOMMENDATIONS

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Review Findings and Recommendations

Problem Mapping

- Generated Problem Map/ Root Cause Analysis
- Highlighted range and complexity of substantive issues facing the Projects
- Indicated lack of clarity over strategies to be used by the Project for tackling the main sets of issues..

- ❑ Complete Problem-Solution map for whole 'sector' of interest.
- ❑ Map the Project's "area of interest," plus other projects and any programmatic Initiative.
- ❑ Also use Problem-Solution mapping for planning each Output, each Activity.

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Review Findings and Recommendations
Project logical framework

- Poorly structured and worded – **WTLCP**: 25 pages of RF plus LF; 40 Outcome Indicators (actually Outputs); no Output objectives or Indicators. **CSUWN**: 13 pages; 23 sets of Indicators and 23 Targets at Outcome level, for just three Outcomes; 82 Indicators for 13 Outputs (most are Activity statements not Indicators); no Baselines or Targets below Outcome level.
- Component strategies not clear.
- Little understanding, ownership or use.

- ❑ Restructured and re-worded; needs completing.
- ❑ Clearer Component strategies.
- ❑ Need to ensure that LF is fully understood, owned, and used as the principal guide throughout the Project – Work planning and budgeting; Implementation; Monitoring, Reporting, Evaluation.

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Review Findings and Recommendations
Project Supervision and Execution Arrangements

- No clear project supervisory mechanism; no TPR.
- Large numbers of stakeholder and partner offices and organisations with poorly-defined inter-relationships.
- Poorly unified and integrated Project office and team.
- Unnecessary complicated co-execution/ implementation arrangement with IUCN in CSUWN.

- ❑ Establish TPR as single rigorous supervision mechanism.
- ❑ Develop a strong unified Project office and team, with a full-time dedicated Manager or Executive Director.
- ❑ Avoid co-execution arrangement; empower one Project team, one Work Plan and one Budget, with all implementation under the direct control of the PM.

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Review Findings and Recommendations
Project Annual Work Plan & Budget - 1

- Based on CPAP Output and Targets, not on Project logical framework.
- Entered under two CPAP Outputs as two ATLAS projects.

- ❑ Need first to prepare Overall Project Plan & Budget.
- ❑ Enter whole Project under one CPAP Output, with Project Outcomes (or Outputs) as CPAP Activities “aligned” with 1-2 CPAP Targets. Enter all other Outcomes & Outputs below as Additional CPAP Targets.
- ❑ OR manage GEF Project outside CPAP.

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Review Findings and Recommendations
Project Annual Work Plan & Budget - 2

- UNDP CPAP and ATLAS only include GEF and UNDP funds and Outputs, not Co-financing or Co-funded Outputs.
- PMU is required to prepare and manage two sets of AWP's & Budgets, including even funds and activities for which they are not accountable.

- ❑ Establish **one** system – one AWP, one Budget and one Report, based on the Project LF; including all Output Activities and funds from all sources for which PMU is responsible (GEF, UNDP, GoN, SNV).
- ❑ Do **not** include parallel financing and activities for which the PMU is **not** responsible (e.g. WWF's in current WTLCP) in the LF, AWP, Budget or Reports.

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Review Findings and Recommendations
Monitoring, Information, Reporting, Evaluation

- Need to strengthen Project Monitoring – Information – Reporting – Evaluation system.
- Project is required to produce too many Reports – different formats, periods, content.

- ❑ Operationalise management of each Component Outcome/ Output (and Activity) – by **planning** then **implementing** then **monitoring** and **reporting** on each action : OBJECTIVE-INDICATOR-TARGET-MoV-BUDGET.
- ❑ Set up an integrated Information System to drive M-I-R-E.
- ❑ Produce only one Report, with variations: use a standard base report building block – e.g. an Output-Quarter rather than a Project-Year.

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Review Findings and Recommendations
Projects and larger Initiatives

- Large, complex Projects, but unclear strategic vision for overall long-term initiative, beyond the Project.
- Major opportunity and potential, but unclear ambition, profile, promotion or championing.

- ❑ Develop capacity and confidence for strategic management.
- ❑ Use PMU, TPR and OB to define the strategic vision – for Terai landscape conservation; for Wetlands, waterways & catchment conservation...
- ❑ Use Project Components 2 (and 1) to advocate, establish and operate the necessary institutional framework and legislation – a statutory Authority, Commission, Council...

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ATTACHMENT 3. PROBLEM-SOLUTION MAPPING GUIDANCE NOTES

Slide 1

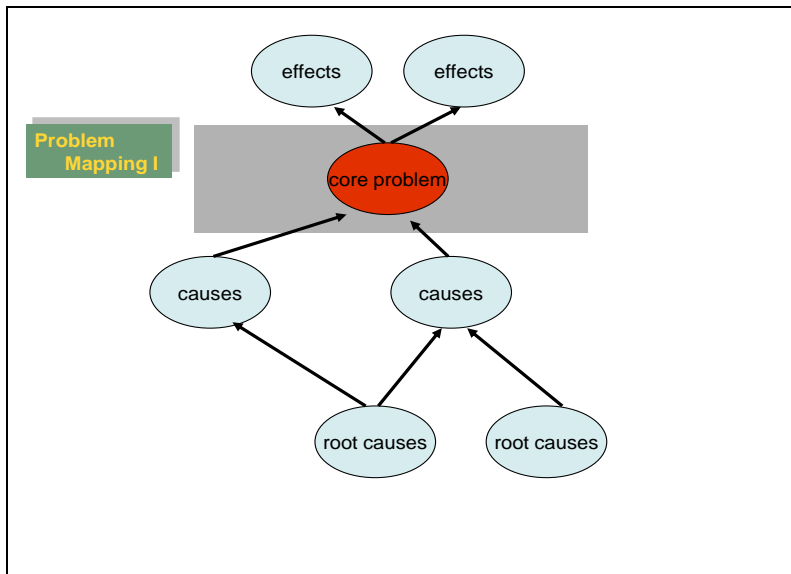
Management Review of UNDP-GEF Biodiversity Projects in Nepal

**Western Terai Landscape Complex Project
Conservation & Sustainable Use of Wetlands**

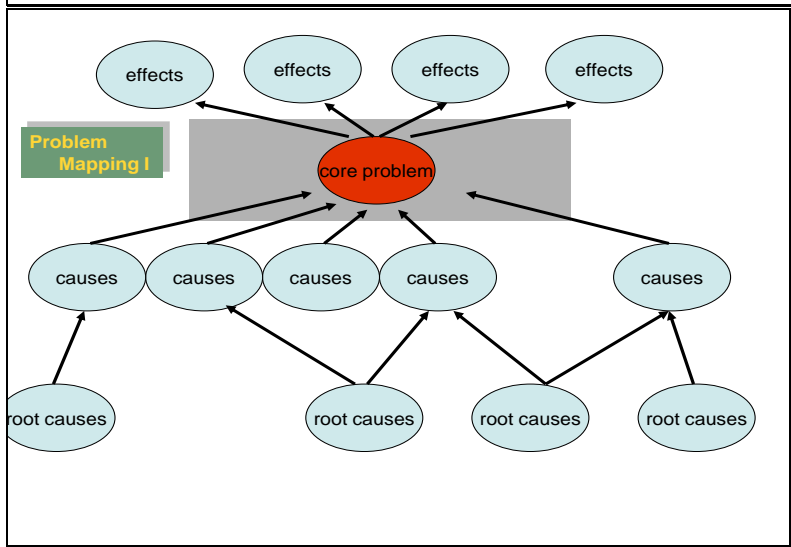
Peter Hunnam, Kathmandu June 2008

**Use of Problem-Solution Mapping
in defining
Project Strategy and Logical Framework**

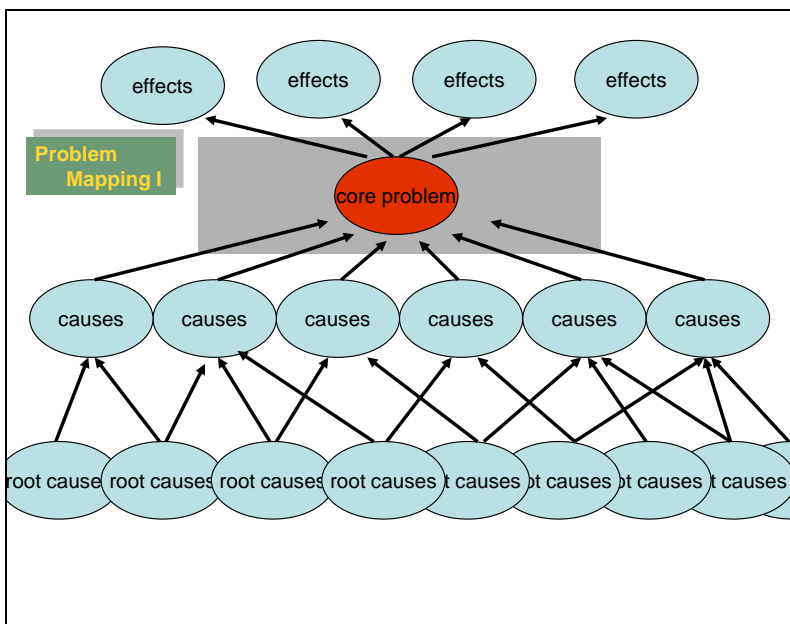
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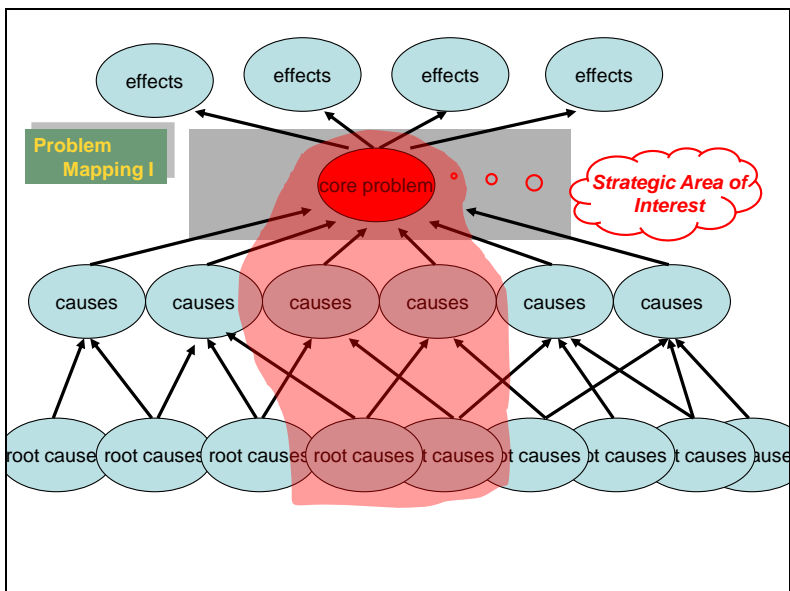
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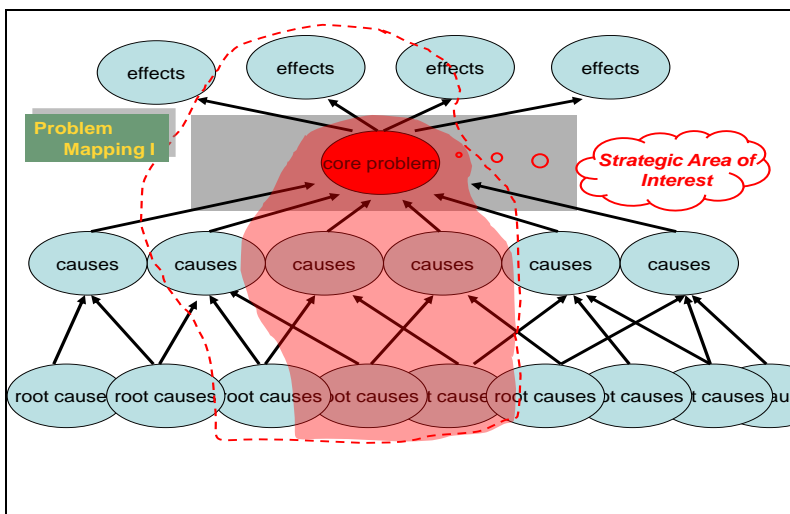
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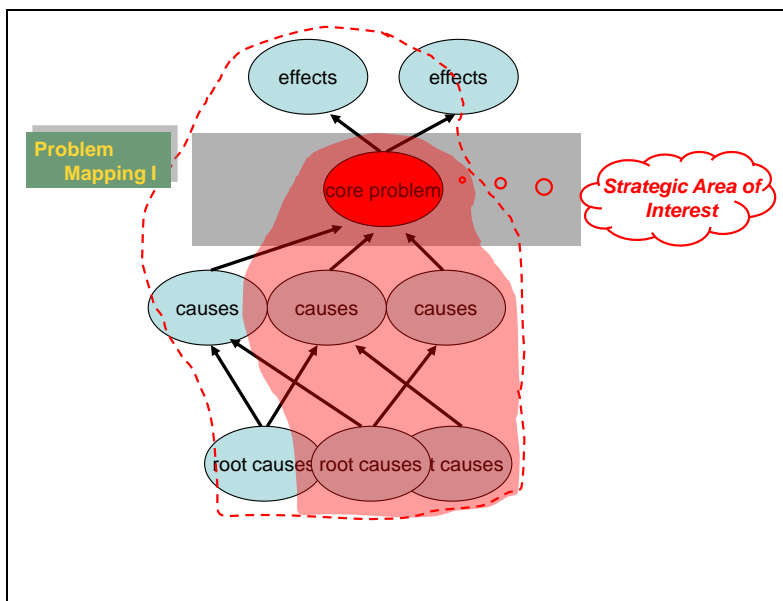
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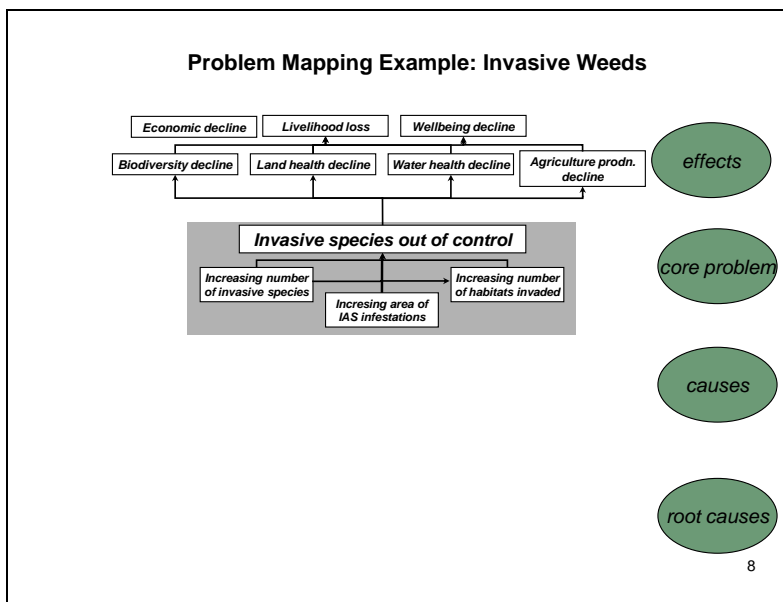
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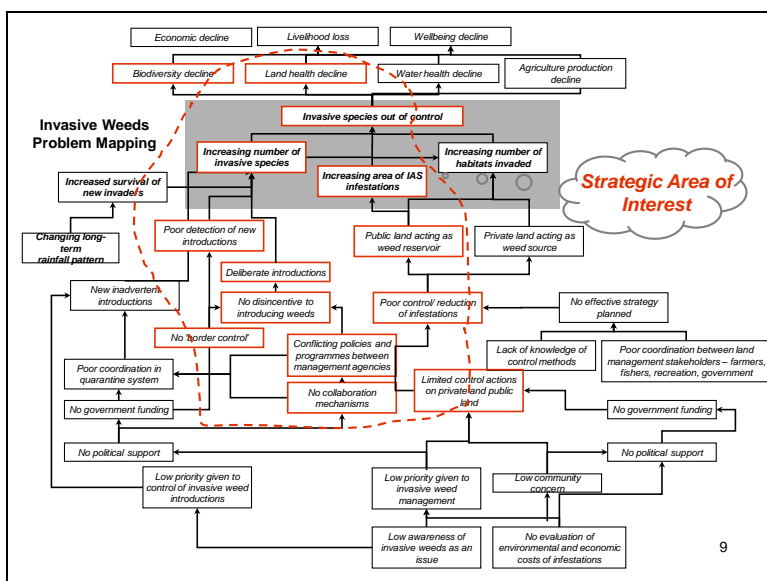
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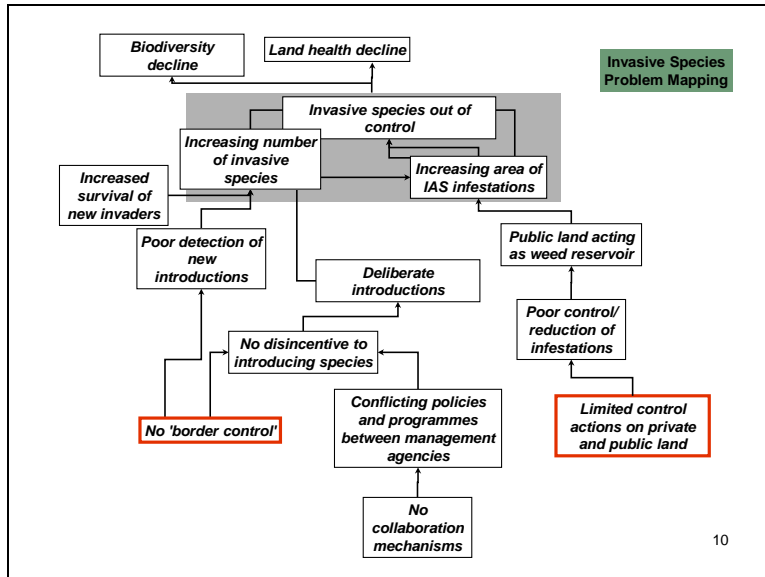
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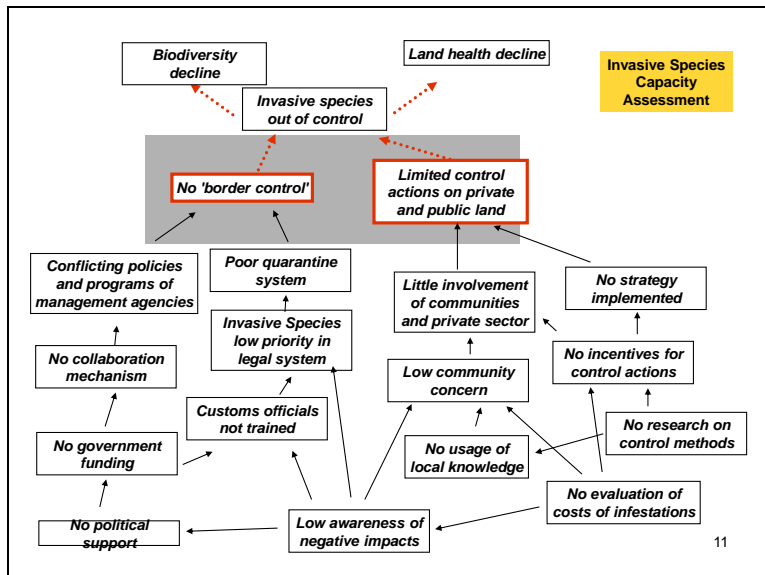
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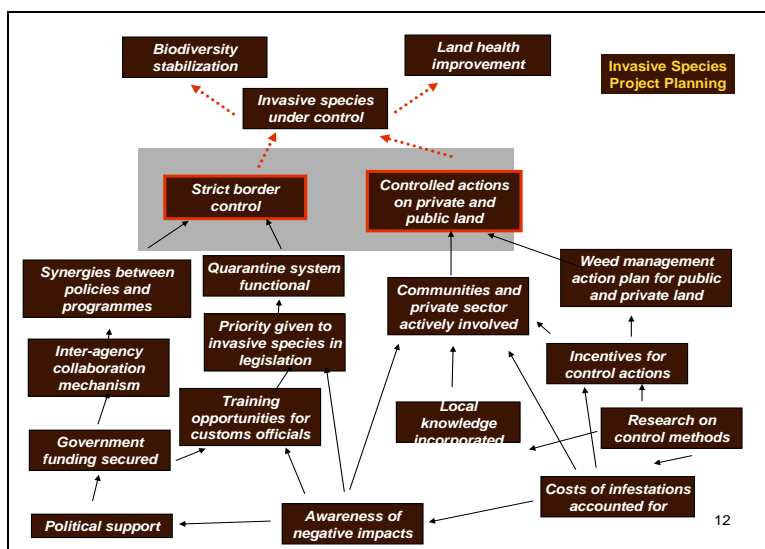
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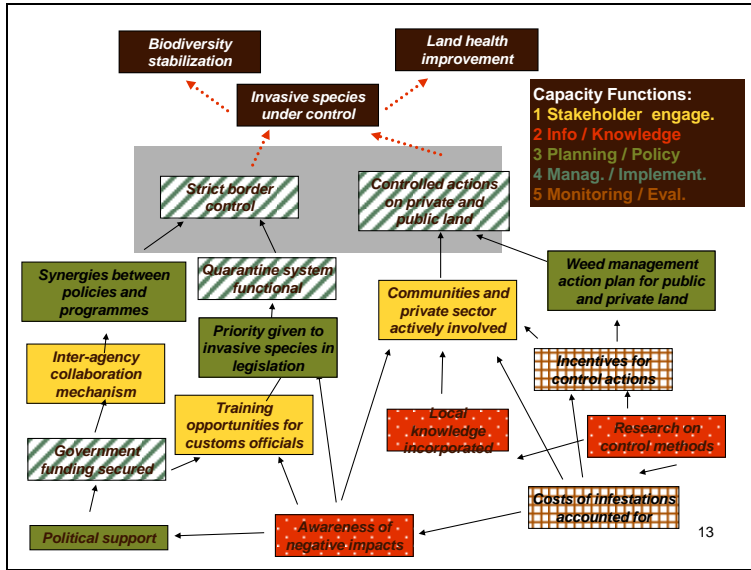
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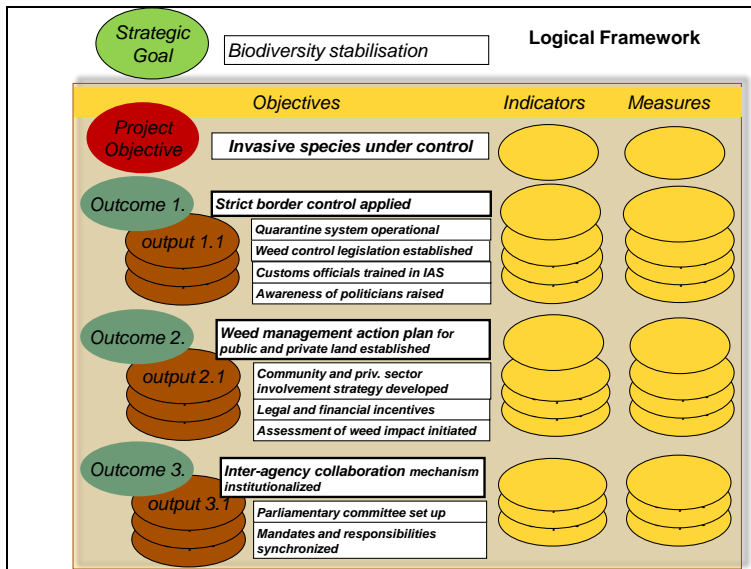
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ATTACHMENT 4. PROBLEM MAPPING – PRELIMINARY DRAFTS FOR WTLCP AND CSUWN

Preliminary Map ~ Western Terai Landscape Conservation

Loss of Biodiversity in Western Terai											
Excessive use of agro-chemicals *	Replacement of local land races by high yielding crops *	Over grazing *	Forest conversion *	Over exploitation of NTFPs *	Over harvesting of timber *	Uncontrolled forest fire	Invasion of alien species	Over fishing (?) Karnali river	Poaching wildlife for food/trade	Human wildlife conflict	Loss of wetland biodiversity
	Development of new crop varieties through participatory plant breeding	Keeping unproductive livestock	Food deficiency	Collection of NTFP without any proper planning	Illegal logging		Uncontrolled growth of Lantana camera, water hyacinth		Coinforce ment approach (comm.-based anti-poaching)	Bio-fencing	
		Grazing practice in forest area	Increasing population pressure (migration)		Illegal collection of firewood		Growth of Simal tree in Grassland			Compensation	
Compensation	Compensation	Feeding trough support	Grassland Management	Alternative livelihood support	Training community users groups	Awareness raising on forest fire	Grassland mgt.	Alternative livelihood support		Watch tower	
Training in organic farming	Awareness raising /advocacy work for local crop varieties	Services for breed improvement	Community nursery development support	Support of technology (distillation plants)	Bio-briquette training/support	Co-enforcement approach				trench	
		Stall feeding promotion	plantation	Market linkage/ ppp	plantation						
		Livestock services, medicine								Electric fencing	
Lack of or poor Policy/strategy	Weak enforcement of law	Weak institutions	Capacity (human and financial)	Lack of technology	Poverty	Lack of cooperation/coordination	Weak Political Commitment	Natural causes (flood, fire, climate change etc)			

Preliminary Map ~ Conservation and Sustainable Use of Wetlands

Central problem statement: Degradation and Loss of Wetland Resources in Nepal

Underlying causes

1. Agriculture Use
 - Conversion of Wetlands by local people for rice field
 - Change of hydrological regime for irrigation
 - Intensive agriculture
 - Introduction of exotic species and varieties
 - Use of chemical fertilizer
2. Excessive Use of Wetland Resources
 - Lack of livelihood opportunities
 - Limited off-farm livelihood options
 - High level of dependence of local people on wetland resources
 - Farming system closely linked with natural resource system
 - Unsustainable harvesting practices
3. Loss of wetland ecological integrity
 - Vegetation succession of wetlands
 - Proliferation of Invasive Alien Species
 - Siltation
 - Loss of forests at the catchment
 - Effluent discharge to wetland
 - Solid waste disposal
 - Urban water use
 - Habitat destruction (both plants and animals)
 - Excessive grazing
 - Natural disasters (flood, drought, landslide, GLOF)
4. Encroachment
 - Encroachment for various purposes (settlement, agriculture and infrastructure)
 - Lack of alternative livelihood options
 - Weak law enforcement
 - Contradictory sectoral policy
 - Lack of political will & determination

Cross-cutting issues

- Lack of cross-sectoral policy in favor of wetland conservation
- Lack of collaboration and coordination between programs and organizations
- Lack of adequate budget to address wetlands issues
- Lack of individual and institutional capacity to take care of the wetlands (technical and financial)
- Lack of sufficient awareness on wetland issues at levels

ATTACHMENT 5. PROJECT LOGICAL FRAMEWORKS FOR WTLCP AND CSUWN

5.1 Revised Logical Framework – WTLCP (28 June 2008 version)

Development Objective: To ensure conservation and sustainable use of biodiversity in Nepal's Terai landscape.

Objectives	Indicators	Baseline/ MoV/ Risks- Assumptions
<p>Immediate Objective: To establish effective and efficient management systems for the conservation and sustainable use of Nepal's Western Terai landscape complex</p>	<ul style="list-style-type: none"> By 2012, forest cover has been maintained or increased across the 3 target Districts, compared to the baseline of 2000 and 2006. By 2012, viable populations of flagship species (elephant, tiger and rhinoceros) have been re-established and maintained in Western Terai. By 2012, the diversity of rice varieties has been maintained in Western Terai, compared to the pre-project baseline. By the end of the project, a Terai Landscape conservation body has been established. 	<i>to be developed</i>
<p>Outcome 1: The national policy and legal framework enables integrated landscape planning in the Western Terai Landscape.</p>	<ul style="list-style-type: none"> By Year 6, legislation is in place for conservation of biodiversity corridors in WT. 	
<p>Output 1.1 National and local policy & regulatory framework to support integrated landscape management in WT</p>	<ul style="list-style-type: none"> By Year 6, an integrated conservation and development planning mechanism has been introduced in all WT Districts and Village Development Committees. Key species and habitat site management plans are in operation in integrated District and Village plans. 	
<p>Outcome 2: The institutional framework for integrated landscape management in Western Terai is established.</p>	<ul style="list-style-type: none"> By Year 5, an effective national focal body is designated for the TAL conservation initiative. By Year 6, District and Village-level institutions for landscape level conservation are in operation. 	
<p>Output 2.1: Institutional mechanisms and capacities in place for integrated management of biodiversity in targeted landscape.</p>	<ul style="list-style-type: none"> By Year 5, model institutions for integrated landscape management are being trialled in 20% of villages and at District and national levels. By Year 5, landscape conservation financing mechanisms are being trialled in 20% of villages and all 3 WT Districts. By Year 4, community-based groups (farmers', buffer zone users', community forest users' groups) are engaged in all conservation actions undertaken outside core protected areas. By 2010, there is equal representation of women, poor and disadvantaged groups in decision-making fora at village level. 	
<p>Output 2.2: Comprehensive information, planning and monitoring system to facilitate landscape management established.</p>	<ul style="list-style-type: none"> By Year 6, conservation plans are prepared for all key species/ taxa and habitat-types through a participatory approach with multiple stakeholders. By Year 4, an effective information, planning and monitoring system for conservation management is in use in WT Districts and villages. 	
<p>Outcome 3: Biodiversity assets in WT landscape are effectively conserved.</p>	<ul style="list-style-type: none"> By 2012, forest cover in the WT corridor and buffer zones is increased by 10% compared to the 2000/ 2006 baseline. By 2012, a 15% increase in use of corridor zones by flagship species (elephant, tiger and rhinoceros) is measured, compared to 2008 baseline. 	
<p>Output 3.1: Strengthen management capacity for conservation in</p>	<ul style="list-style-type: none"> Adaptive capacity building in biodiversity conservation system in place and operationalized² 	

Objectives	Indicators	Baseline/ MoV/ Risks- Assumptions
both protected and productive areas of the WT landscape. ¹		
Output 3.2: Integrate conservation and sustainable management of biodiversity. ³	<ul style="list-style-type: none"> Wildlife poaching is reduced by X% across all WT Districts by Year X. By 2010 there are no cases of encroachment of protected forest areas. Biodiversity friendly forest management practiced⁴ Biodiversity conservation component integrated into district periodic plan and under implementation⁵ 	
Outcome 4: Local communities practice sustainable, biodiversity-friendly natural resource and land use and pursue diversified livelihoods.⁶	<ul style="list-style-type: none"> Eco-clubs formed and functional in at least 30% of schools in the project area.⁷ 	
Output 4.1: Sustainable community management of land and natural resources to reduce pressures on wild biodiversity assets. ⁸ Unsustainable uses of biodiversity are reduced or ceased.	<ul style="list-style-type: none"> 15 percent additional households have access to forest resources and involved in sustainable forest management. By 2010, 50% of households in WT have ceased using firewood for cooking. <i>OTHER UNSUSTAINABLE USES?</i>⁹ 	
Output 4.2: Agro-biodiversity in WT is maintained and enhanced. Agrobiodiversity-oriented community management of Agricultural Lands to Maintain Traditional Crops and Landraces.	<ul style="list-style-type: none"> The diversity of rice varieties in cultivation in WT remains at the pre-project baseline. Agro-biodiversity resources conserved/maintained at the current baseline level. Improved delivery services for higher production and maintenance of agro -biodiversity as compared to baseline.¹⁰ 	
Output 4. 3: Household incomes from biodiversity-friendly livelihoods are increased. Local Communities Empowered to Pursue Diversified Livelihoods that Reduce Pressures on Wild Biodiversity Assets.	<ul style="list-style-type: none"> By Year XXXX, average household income has increased by X% above XXX baseline. By Year XXXX, the number of households supported by biodiversity-friendly livelihoods has increased by X% compared to XXX baseline. Project alternative livelihood support activities increased per-capita income of local communities by at least 10 percent. Best practices in local capital generation and biodiversity conservation replicated and mainstreamed 	

² Think about exactly WHAT capacity, WHOSE capacity will be built? Perhaps should target a) capacity of communities and user groups; and b) capacity of government officers. What Indicators that these capacities have been built by what year?

¹ Output 3.1 seems similar or identical to 2.1. May be better to include all capacity building under Outcome 2.

³ This does not say anything useful. WHAT exactly are the 2-3 Outputs that are going to be achieved under this Outcome 3? All the practical conservation/ site/ forest/ resource use management activities should be inserted here. WHO are all the resource users whose behaviour you need to change?

⁴ This is too vague: what are good Indicators that FARMERS, HOUSEHOLDS, BUSINESS OPERATORS, LOCAL GOVERNMENT are changing their practices so that they contribute to conservation, rather than ecological damage?

⁵ This is the same as Indicators for Output 1.1: all your planning and policy activities and impacts should be under Outcome 1.

⁶ The Outcome you seek here is Increased household incomes and community development in WT Districts..... What would be 1-2 Indicators of success for this? How much, by when?

⁷ This is 'institutional capacity' and therefore should be under Outcome 2.

⁸ Perhaps all aspects of biodiversity conservation management – by all stakeholders – should go under Outcome 3. Outcome 4. should then concentrate on eco-friendly developments and livelihoods.

⁹ What are the other unsustainable uses of biodiversity that you hope to reduce or cease – especially in the “corridor zones”? Killing wildlife for food? Collecting “wild” plant products? NTFPs?

¹⁰ What exactly does this mean? Who is going to do what?

5.1 Revised Logical Framework - Conservation & Sustainable Use of Wetlands in Nepal (CSUWN)

PROJECT LOGICAL FRAMEWORK - REVISED WITH COMMENTS (5 JULY 2008)

yellow highlights suggest completion/ further revisions needed

Project Activities	Indicators of Achievement	Means of Verification	Targets	Baseline	Assumptions
Project Goal: To maintain and enhance wetland biodiversity, environmental goods and services for improved local livelihoods in Nepal					
Project Objective: To strengthen wetland biodiversity conservation in Nepal through the ecosystem approach	Country-wide system for wetlands conservation under implementation with government funding	National budget documents	by 2012		
OUTCOME 1: WETLAND BIODIVERSITY VALUES INTEGRATED INTO NATIONAL POLICY AND REGULATORY FRAMEWORK¹¹	National Wetlands conservation policy, strategy and action program integrated with new National 5 Year Development Plan	Xth National 5-Year Development Plan	Xth NDP for years XXXX to XXXX	Wetland policy exists but does not fully reflect field realities	
Output 1.1: Strengthened Mechanisms for Integrated Management of Wetlands and Catchments	Legislation enacted for integrated planning and management of wetlands and catchments ¹²	Legislation passed by GON	By year 2	No such committees exist currently	
Act 1.1.1: Operate the PMU to facilitate as a national support structure for national wetland conservation ¹³	Wetland policy framework developed Results and lessons learned disseminated nationally and internationally	Policy framework, report, publication Progress report, trip report & annual report	From year 3-4	No framework exists except National Wetland policy Dissemination practice not in place	
Act 1.1.2: Support the establishment of a National Wetlands Committee & networks of wetland stakeholders	NWC and networks of stakeholders established	Minutes, meetings and status report	By year 2	No forum & network exist	
Output 1.2: Strengthened ability to integrate wetland values into national policy, planning and regulatory framework	Sectoral policies and plans revised to favour wetlands	Revised sectoral policies & plans	From year 3-4	Current sectoral plans not in favour of wetlands	

¹¹ The project design is unnecessarily complicated, with potential confusion between Outcomes 1, 2 and 3: it is best to limit Outcome 1. to Policy and regulatory framework development; 2. to a national program of wetland conservation, based largely on CD; Outcome 3. is then focused on the two demo areas.

¹² A new Committee is too easy a result; for this Output a more meaningful result would be legislation. The legislation should provide for, inter alia, a "committee" or similar mechanism.

¹³ It is rather awkward or contrived to place the PMU in the log frame here. The alternative is to have an additional explicit Component/ Outcome under which core aspects of project management and operation are inserted. This would enable more appropriate Indicators to be used.

Project Activities	Indicators of Achievement	Means of Verification	Targets	Baseline	Assumptions
Act 1.2.1: Recommend reforms of current policies, legislation and physical and development planning processes to strengthen conservation of wetlands and catchments	Publication of analysis of current framework and of recommendations for reform	Reports and documents	Year 3-4	Inconsistencies in sectoral policies & plans	
Act 1.2.2: Promote improved recognition of economic values of wetlands and catchments	Publication of analysis of economic valuation of wetland and catchment conservation and use	Publication	Year 2	No study on economic aspects of wetlands exist	
Act 1.2.3: Enhance senior decision makers' understanding of wetland values /issues. ¹⁴	60% of Parliamentarians and departmental heads have sound knowledge of wetland issues and conservation options	Targeted poll of Parliamentarians and departmental heads	Year 5	Baseline poll data :	
OUTCOME 2: STRENGTHENED NATIONAL, INSTITUTIONAL AND TECHNICAL CAPACITY AND AWARENESS FOR WETLAND CONSERVATION AND SUSTAINABLE USE	REVISE Institutional and technical capacity enhanced at all levels	REVISE	By year 5	Current capacity not adequate	Wetland conservation remains GON priority
Output 2.1: Conduct national wetland Survey, develop knowledge base for national wetland conservation planning and management	National Wetland Resource Center (NWRC) established	Survey report & Database	From year 3-4	No comprehensive database on wetlands exist	Subject to availability of funding
Act. 2.1.1: Develop management strategy and guidelines for IAS affecting wetlands and catchments	National adoption of strategy and guidelines	Specific Ministerial or Cabinet endorsement	By year 2&3	No guidelines on wetland IAS	
Act. 2.1.2: Identify and register threatened wetland species under relevant national statute	Updated threatened species list	Updated list	By year 2&3	No regular updating of threatened species	
Act. 2.1.3: Build capacity for using economic tools for wetland and catchment management planning (also refer Act. 3.1.3)	Economic valuation included in all planning affecting wetlands and catchments ¹⁵	Analysis of published plans	From year 2-5	No adequate capacity on using economic tool	
Act. 2.1.4: Incorporate traditional and indigenous knowledge in wetland and	Traditional and indigenous knowledge incorporated in wetland management	Analysis of published plans	By year 1	Traditional and indigenous knowledge not documented	

¹⁴ Place this Activity under Output 2.2. or merge with Activity 2.2.1

¹⁵ In all the Indicators, it is important to focus on the substantive impact beyond the immediate effect of the planned actions

Project Activities	Indicators of Achievement	Means of Verification	Targets	Baseline	Assumptions
catchment management	plans				
Act. 2.1.5: Develop national strategy and guidelines for integrated wetland and catchment management country-wide ¹⁶	National adoption of strategy and guidelines	Specific Ministerial or Cabinet endorsement	By year 2&3	No guideline in place	
Output 2.2: Enhanced awareness of wetland values/issues	5-fold increase in media articles on wetland issues	Press cuttings & news clippings	From year 1-5	Little coverage of wetland issues in media	
Act. 2.2.1: Implement wetlands awareness programs targeting formal education sector, public service, public media, planners and policy makers, and development agencies.	60% of Parliamentarians and departmental heads have sound knowledge of wetland issues and conservation options	Targeted poll of Parliamentarians and departmental heads	From year 1-5	Few systematic awareness programs	
Output 2.3: Strengthened technical capacity in wetland management	Management & technical capability enhanced		From year 1-5	Current technical capacity not adequate	
Act. 2.3.1: Establish a National Wetlands Resource Centre	Management information and resource materials on wetlands conservation accessed regularly by wide range of users	Users visitation Use of resource materials	From year 3-5	Information not readily accessible	
Act. 2.3.2: Provide in-service training for government and NGO staff involved in wetland and catchment conservation	Priority capacity needs of each national and local government office for wetlands management are met	Annual line agency reports	From year 2-5	Inadequate trainings	
Act. 2.3.3: Assess capacity needs of national and local government offices responsible for regulating wetland and catchment use and development	Participatory needs assessment completed and published	CNA Report	By year 3	No capacity assessment undertaken	Subject to availability of funding
OUTCOME 3: STRENGTHENED COLLABORATIVE MANAGEMENT OF WETLAND RESOURCES FOR CONSERVATION AND SUSTAINABLE LIVELIHOODS	A management strategy is under implementation for all wetland areas	Annual Plan of line departments & community groups	By year 5	No resources & financing strategies exist currently	
OUTPUT 3.1: Support establishment of model collaborative management system for conservation and sustainable development of two demonstration	50% reduction in the number of recorded conflicts related to wetland resource use	Government record & Survey reports	By year 3	Baseline will be established in year 1	

¹⁶

This Activity is the broadest under Output 2.1 and could encompass the other four. It should perhaps be placed first, as Act.2.1.1.

Project Activities	Indicators of Achievement	Means of Verification	Targets	Baseline	Assumptions
wetland areas					
Act 3.1.1: Support establishment and capacity development of appropriate collaborative management institutions at the two demo sites.	Management plan in force at each demo area provides for multi-stakeholder decision-making ¹⁷ All involved government staff and community members trained in management plan implementation		REVISE	REVISE	
Act 3.1.2: Support development of model planning and regulatory system for collaborative management of the two demo areas (tenure issues..) ¹⁸	Wetland site management plan prepared in line with District planning system	Annual district development Plan	By year 2	Currently no supportive mechanism in place	
Act 3.1.3: Development and demonstration of tools for knowledge management, planning and decision making (ecological assessment, economic valuation, financial mechanism...)	Completion of wetlands management tool-kit	Toolkit	By year 3	Such tools do not exist currently	
Act 3.1.4: Support integrated catchment management planning (wetland-land use-conservation and sustainable development) ¹⁹	Management plan in place	Action plan & letter of commitment Management Plan	By year 2	lack of integrated conservation planning No management plan at sub-catchment level	Commitment by government agencies
Output 3.2: Implementation of collaborative conservation programs	Wetland habitats improved & enhanced with increase number of flagship species	Annual action plan, census & survey reports	From year 2-5	Inadequate protection of habitats	
Act 3.2.1: Support implementation of conservation management programs (AIS, EIA, wetland habitat, anti-poaching, forest, grazing) in each of the two demo areas	50% reduction in number of feral buffalo and cattle inside KTWR 50% reduction of water hyacinth infestation area at demo sites after 4 years 20% of demo site communities adopt integrated pest management and	Survey report and annual site management score card	From year 2-5	Limited restoration or protection of habitat No attempts undertaken Inadequate management	

¹⁷ Again, specify the higher level impact, beyond the immediate change resulting from the action

¹⁸ Activities 3.1.2 and 3.1.4 could easily be the same, and should be merged.

¹⁹ Merge entirely into Act.3.1.2

Project Activities	Indicators of Achievement	Means of Verification	Targets	Baseline	Assumptions
	organic farming				
Output 3.3 Implementation of sustainable development & livelihood programs	85% of wetland-dependent HHs have stopped unsustainable resource use practices ²⁰	Survey report & Progress report	By year 4	Unsustainable resource use practices exist	
Act. 3.3.1 Participatory assessment of livelihood & development options & possible mechanisms (resources based options, alternative livelihood options, marketing, micro-credit, cooperative systems)	Report on livelihood options and development strategies is formulated and accepted by all user groups	Report & strategies User group survey	By year 2	No such strategy exist	
Act 3.3.2 Pilot livelihood initiative on reducing critical pressures on wetland resources at the two demo sites (based on assessment of options) ²¹	20% increase in income of 15% of wetland-dependent HHs ²²	Community action & eco-tourism plans, livelihood plans & survey report	From year 2-5	No such initiative started	
Act 3.3.3 Support wetland friendly development and planning process (AE..) ²³	Wetland friendly development interventions are assessed	Public opinion, participatory assessment report	By year 3	Currently wetland sensitive development activities do not take place	

²⁰ The 15% reduction you had proposed seems a very low target; hardly worth having a major project for such a small impact; I have suggested 85% reduction, by end of year 4.

²¹ I do not think that this Activity 3.3.2 should specify any particular livelihood option here, e.g. eco-tourism. I think that this (major) Activity should be to initiate and then institutionalise support mechanisms (credit scheme, advisory service, etc) for local user groups and HHs to trial alternative livelihood ventures, based on the technical assessment made under Act 3.3.1.

²² Your proposed Indicator seemed far too un-ambitious an objective; see footnote 10 above.

²³ This is the same as Activity 3.1.2 and 3.1.4, which I have suggested above that you merge into one, including this one 3.3.3.

5.2 Original Logical Framework – WTLC

Project Document Annex 2A: Logical Framework Matrix for the Western Terai Landscape Project

Objectives/Outputs	Objectively Verifiable Indicators	Means of Verification	Risks and Assumptions
Development Objective:			
To ensure the conservation and sustainable use of globally significant biodiversity in Nepal's Western Terai landscape.			
Immediate Objective: To establish effective management systems and build capacity for the conservation and sustainable use of Nepal's Western Terai landscape complex	<ul style="list-style-type: none"> -Vegetation cover across the targeted landscape area remains at least 90% of present by Year 4 - Proportion of total vegetation cover in blocks>500ha remains at least 80% of present by Yr 4 - Presence of multiple connections of continuous forests maintained across landscape complex by Yr 4 - Population of flagship species (tigers and elephants) in both protected areas and productive areas of project sites maintained or increased by Year 4 - 75% existing landraces identified in project sites maintained by Year 4 	Measurements by satellite imagery & field ground-truthing results at beginning and end of project <ul style="list-style-type: none"> - GIS maps of land use - Field records Environmental monitoring studies and sampling surveys	<ul style="list-style-type: none"> - Communities are willing to adapt their land-use practices in order to facilitate biodiversity conservation - No significant increase in environmental threats (global warming, wildfires, etc) - Nepal maintains political and economic stability -Sufficient and high-quality human resources can be mobilised in order to implement the project
Outcome 1: The national policy environment and legal framework enable integrated landscape planning in the Western Terai Landscape Complex	<ul style="list-style-type: none"> - Ministerial level mechanism for intersectoral planning and coordination for WTLC functioning by Year 2 - Legislation in place for conservation and sustainable management of biodiversity covering biological corridors/habitat networks in the WTLC by Year 6 - Agrobiodiversity conservation components incorporated in Agriculture Perspective Plan by Yr 5 	<ul style="list-style-type: none"> - Legal documents, gazettes, and notifications 	<ul style="list-style-type: none"> -Political support for policy and regulatory change will be forthcoming -Institutions willing to carry out policy and regulatory reform
Outcome 2: The institutional framework for integrated landscape management of biodiversity in the Western Terai Landscape Complex is established	<ul style="list-style-type: none"> - An operational plan for institutionalization of landscape management prepared by MFSC by end of Year 4 - Institutionalized coordination mechanisms for landscape planning and management functional by Year 6 - Biodiversity conservation criteria integrated into the DFO operational forest management plans (OFMPs) in project districts and under implementation by Yr 6 - Agrobiodiversity conservation components incorporated into the District Agricultural Office plans in project sites and under implementation by Yr 6 - Areas previously occupied by squatters in RSWR and Basanta forest remain unencroached and other forestlands in project sites remain unaffected by Yr 4 - <i>District level trust funds to manage recurrent costs of project-related interventions in productive landscape established by</i> 	<ul style="list-style-type: none"> - Government documents - Project technical progress and monitoring reports - Management plans - Project technical progress and monitoring reports - DAO plans - Field records and verification -Legal documents - Periodic DDC plans (5-year plans) - Official maps - Official management plans - Project technical progress and 	<ul style="list-style-type: none"> - HMG/Nepal remains committed to landscape approach to biodiversity conservation -The geographic spread of the targeted landscape complex will not impede effective co-ordination of conservation efforts -Institutional rigidities to cross-sector collaboration can be overcome -Local political and community are supportive and committed to resolving illegal settlements in productive landscape - Government has minimum infrastructure and human resource

Objectives/Outputs	Objectively Verifiable Indicators	Means of Verification	Risks and Assumptions
	<p>Year 6</p> <ul style="list-style-type: none"> - Biodiversity and agrobiodiversity conservation programs incorporated into district level periodic plans by Year 5 - Key core areas and corridors for biodiversity conservation identified and mapped in project's protected areas and productive landscape by Yr 4 - Landscape level management plan prepared for WTLC by Year 6 - Integrated Churia management plan under implementation in 80% of project area VDCs in Churia range/foothills by Year 6 - Standardized monitoring protocols developed and under implementation in project sites by Year 3 - <i>A centralized monitoring and information management system for landscape planning and management in place and managed by a government department by Year 6</i> 	<p>monitoring reports</p>	<p>capacity to support centralized information management</p>
<p>Outcome 3: Biodiversity assets in government-managed lands are conserved and sustainably managed</p>	<ul style="list-style-type: none"> - RBNP and RSWR staff applying participatory and scientific protected area and buffer zone management tools by Yr 4 - Training modules in participatory and scientific management incorporated into existing training institution's curriculum by Year 6 - DFO staff in WTLC districts applying biodiversity-friendly and sustainable forest management practices by Year 4 - Training modules in biodiversity-friendly, sustainable land/resource use offered by existing training institution as regular program by Year 6 - At least 3 demonstration sites in government-managed forests of productive landscape under biodiversity-friendly activities by Year 4 - At least 50% of user groups in WTLC's protected area buffer zones actively involved in conservation-related activities by Year 4 - Cases of poaching and killing of endangered species declined at least 10% and 20% in government-managed forests of productive landscape and protected areas respectively by Year 4; decline increased to 20% and 40% in government-managed forests and protected areas respectively by project end - Trust fund to manage recurrent costs of biodiversity management in protected areas established by Year 6 	<ul style="list-style-type: none"> - Training curricula and programs - Project technical progress report - User groups' records - Parks and DFO records - Legal documents 	<ul style="list-style-type: none"> - Government staff, service providers, and local community leadership remain committed to biodiversity conservation - Existing training institution and HMG/Nepal support incorporation of new training modules

Objectives/Outputs	Objectively Verifiable Indicators	Means of Verification	Risks and Assumptions
<p>Outcome 4: Local communities are empowered to practice sustainable, biodiversity-friendly natural resource and land use management and pursue diversified livelihoods</p>	<ul style="list-style-type: none"> - Biodiversity-friendly livestock management demonstrated by 2-3 grazing user groups in both protected area buffer zones and productive landscape by Year 4 - Biodiversity-friendly community forest management demonstrated by 2-3 community forest user groups in both protected area buffer zones and productive landscape by Year 4 - On-farm agrobiodiversity conservation and use demonstrated by 2-3 farmers groups in both protected area buffer zones and productive landscape by Year 4 - At least one project-promoted biodiversity-friendly practice adopted by 30% of both grazing user groups and community forest user groups in project sites by Year 4 At least one project-promoted good practice in on-farm agrobiodiversity conservation adopted by 30% of farmers' groups in project sites by Year 4 - Community biodiversity registers (CBR) developed and maintained by at least 10% of VDCs in project area by Yr 4 - Biodiversity conservation components incorporated into 30% of community forest operational plans and under implementation in project sites by Year 4 - The proportion of households using alternative fuels or more efficient cooking facilities increased by 10% of baseline by Year 4 -Biodiversity conservation education imparted in 30% of schools in project area by Year 4 - As a result of the project's alternative livelihoods development activities, per capita income of local communities improved by at least 10% by Year 4 - Women and members of disadvantaged groups represented in 50% membership of user groups by Year 4 - Number of both women entrepreneurs and entrepreneurs from disadvantaged groups increased by 10% by Year 4 	<ul style="list-style-type: none"> - Project technical progress report and monitoring studies - User groups' records - Field records and verification of community biodiversity register - User groups' records and CFOPs - Project technical progress and monitoring reports - Field records and verification - School curricula - Socioeconomic surveys and monitoring studies - User groups' records - Field records and verification 	<ul style="list-style-type: none"> - Communities support and collaborate with the project -Impact of population growth within sites remains manageable -Partner agencies will continue to provide supporting investments for sustainable livelihoods -Audience is receptive to conservation awareness -Education and media institutions willing to collaborate with project education and awareness activities - VDCs/DDCs are committed to create community level databases on biodiversity and communities receive benefits from the exercise

Outcome 1: Enabling National Policy Environment and Legal Framework for Integrated Landscape Management of Biodiversity in WTLC
Activities
<p>1.1 Reinforce the policy framework for integrated landscape planning by incorporating it as a cross-sectoral strategy for biodiversity conservation and sustainable resource management in Nepal's Tenth Five Year Plan.</p> <p>1.2 Institutionalize intersectoral planning and coordination for the Western Terai Landscape Complex (WTLC) in the central-level policy-making arena through the Ministerial Level Progress Review Committee in the Ministry of Forest and Soil Conservation (MFSC).</p> <p>1.3 Work with MFSC to put in place legislation for conservation and sustainable management of biodiversity covering biological corridors/habitat networks across protected and productive areas in the WTLC</p> <p>1.4 Integrate biodiversity (including agrobiodiversity) conservation criteria in Nepal's Agriculture Perspective Plan.</p> <p>1.5 Reorient government agricultural subsidies and credit policies towards inclusion of cultivation/management of native varieties.</p> <p>1.6 Build policymakers' and central-level stakeholders' support for landscape management of biodiversity through education, awareness-raising, and information dissemination.</p>
Outcome 2: Institutional Framework for Integrated Landscape Management of Biodiversity in the Western Terai Landscape Complex
Activities
<p><i>Component 1: Enabling Regional/District Policy Environment and Regulatory Framework for Landscape Management of Biodiversity</i></p> <p>2.1 Amend and/or establish legislation to facilitate intersectoral and interdistrict land use planning in the WTLC.</p> <p>2.2 Strengthen the mandates of district technical agencies (District Forest Office, District Agriculture Office, and District Livestock Office) in biodiversity conservation by integrating biodiversity conservation criteria in operational management plans.</p> <p>2.3 Build regional/district/village authorities and stakeholders' support for landscape management of biodiversity through education, awareness-raising, and information dissemination.</p> <p><i>Component 2: Institutional Mechanisms and Capacities for Integrated Planning and Management of Biodiversity in Targeted Landscape</i></p> <p>2.4 Work with MFSC and Regional Directorate of Forests to establish intersectoral and interdistrict coordination mechanisms for integrated planning and management of biodiversity in the WTLC.</p> <p>2.5 Enhance the capacity of local authorities (District Development Committees, Municipalities, and Village Development Committees) to mainstream biodiversity conservation and sustainable use with social and economic development objectives in local plans and programs.</p> <p>2.6 Strengthen regional land review and distribution mechanisms to ensure long-term prevention of re-encroachment into areas previously occupied by squatters and encroachment into other forestlands of WTLC.</p> <p>2.7 Establish a framework for transboundary coordination and collaboration between Nepal and Indian government land agencies (including parks and forestry agencies) in deterring transboundary poaching and illegal trade of biological resources.</p> <p>2.8 Establish a mechanism for on-going cross-project information sharing and learning among programs, including between protected areas and productive areas within WTLC and other relevant programs.</p> <p>2.9 Establish district-level trust funds under the management of the District Development Committees in the WTLC to sustainably manage recurrent costs of biodiversity conservation interventions within the productive landscape of the WTLC.</p> <p><i>Component 3: Information and Planning Tools to Facilitate Landscape Management of Biodiversity</i></p> <p>2.10 Complete baseline inventories, mapping, and documentation on biodiversity and agrobiodiversity resources and practices in WTLC.</p> <p>2.11 Carry out targeted research to fill in knowledge gaps in wild biodiversity and agrobiodiversity conservation and sustainable use in the WTLC.</p> <p>2.12 Develop and implement a coordinated monitoring and information management system to support landscape level management.</p> <p>2.13 Develop and implement landscape level plan to support integrated land use planning and management of biodiversity resources in WTLC.</p> <p>2.14 Formulate and implement habitat and species conservation plans for the WTLC.</p> <p>2.15 Formulate and pilot integrated management plan for Churia range which integrates biodiversity conservation with watershed protection and landslide/flooding control.</p>

<p>Outcome 3: Biodiversity Sustainably Managed and Conserved in Government-Managed Lands</p> <p>Activities</p> <p><i>Component 1: Strengthened Management of Protected Areas</i></p> <p>3.1 Develop and implement training in participatory and scientific management of protected areas and buffer zones for protected areas staff and service providers in WTLC.</p> <p>3.2 Enhance capacity of protected areas staff in anti-poaching planning and operations.</p> <p>3.3 Institutionalize buffer zone support units, internal support and communication structures between buffer zone groups and protected areas staff.</p> <p>3.4 Strengthen local community participation in conservation activities in protected areas and buffer zones, including prevention of illegal activities (poaching, timber-felling, and forest fires), maintenance of biodiversity hotspots, and rehabilitation of degraded habitats.</p> <p>3.5 Build infrastructure facilities to support effective management of protected areas, including improved communication systems between protected areas in WTLC and park patrolling facilities.</p> <p>3.6 Develop and implement plan for prevention of future re-encroachments and habitat restoration and management in RSWR.</p> <p>3.7 Establish revolving fund to cover recurrent costs in biodiversity conservation interventions in WTLC's protected areas.</p> <p><i>Component 2: Integrated Conservation and Sustainable Management of Biodiversity in Government- Managed Forests</i></p> <p>3.8 Develop and implement training in integrated biodiversity conservation and sustainable forest management for government field staff and service providers.</p> <p>3.9 Enhance capacity of District Forest Office staff in anti-poaching planning and operations.</p> <p>3.10 Survey and demarcate government-managed forests and internal biodiversity hotspots/critical habitat linkages nested within these zones to facilitate enforcement and management of biodiversity resources.</p> <p>3.11 Develop and implement plan for prevention of future re-encroachment and management of areas evacuated of squatters.</p>
<p>Outcome 4: Local Communities Empowered to Practice Sustainable, Biodiversity-Friendly Natural Resource and Land Use Management and Pursue Diversified Livelihoods</p> <p>Activities</p> <p><i>Component 1: Sustainable Community Management of Land and Natural Resources to Reduce Pressures on Wild Biodiversity Assets</i></p> <p>4.1 Develop and implement training and pilot demonstrations for local grazing user groups in sustainable livestock management and grazing practices, including alternative fodder production, stall feeding, and breed improvement strategies.</p> <p>4.2 Provide targeted training to livestock extension and service providers and involve them directly in developing and implementing training of locals to strengthen on-going technical support to local communities in sustainable livestock management practices.</p> <p>4.3 Develop and implement training and pilot demonstrations for community forest user groups in sustainable and biodiversity-friendly community forest management, including integration of biodiversity conservation criteria in Community Forest Operational Plans.</p> <p>4.4 Provide targeted training to DFO staff and service providers and involve them directly in developing and implementing training of locals to strengthen on-going technical support to local communities in sustainable and biodiversity-friendly community forest management.</p> <p>4.5 Develop a cadre of local trainers/expertise for dissemination and replication of biodiversity-friendly and sustainable practices in livestock management and community forestry.</p> <p>4.6 Work with DADO, DFO, and DLO and service providers to promote best practices among user groups in preventing/mitigating crop/livestock depredation and human casualties by wildlife.</p> <p>4.7 Work with local authorities, extension staff, and service providers to mobilize high impact communities in Churia hills to implement measures in watershed protection and flood/landslide control.</p> <p><i>Component 2: Agrobiodiversity-Oriented Community Management of Agricultural Lands to Maintain Traditional Crops and Landraces</i></p> <p>4.8 Develop and implement training and pilot demonstrations for farmers groups in improving productivity and agrobiodiversity-centered agriculture.</p> <p>4.9 Provide targeted training to agriculture extension and service providers and involve them directly in developing and implementing training of locals to strengthen on-going technical support to local communities in agrobiodiversity management.</p> <p>4.10 Provide and implement best practices for strengthening partnerships between formal and informal institutional and farming communities, multi-institutional and interdisciplinary teams, and rapport building with local communities.</p>

- 4.11. Promote participatory plant breeding (PPB) and participatory variety selection (seed of choice) in order to encourage farmers to select and maintain diversity that address local seed supply
- 4.12 Strengthen community seed networks and nodal farmers roles in searching new diversity, select, maintain and exchange the germplasm and knowledge with community.
- 4.13 Enhance local management and decision making capacity of local institutions in managing and using agrobiodiversity for community benefits through information systems (ie, Community Biodiversity Registers).
- 4.14 Develop decentralized small scale ex situ facilities at commodity level to preserve landraces that are endangered and under threat.

Component 3: Local Communities Empowered to Pursue Diversified Livelihoods that Reduce Pressures on Wild Biodiversity Assets

- 4.15 Provide technical support for formation of viable community user groups (in particular, grazing user groups, community forest user groups and farmers groups) in buffer zone of Royal Suklaphanta Wildlife Reserve and high-impact communities in productive areas (with particular focus on women and disadvantaged groups).
- 4.16 Strengthen the Buffer zone/community institutions within protected areas of WTLC through targeted training and technical inputs.
- 4.17 Support local authorities (DDCs, Municipalities & VDCs) in developing and implementing ecotourism management plans and mainstreaming ecotourism planning into DDC and VDC planning process.
- 4.18 Develop a social mobilization and training program for undertaking community-based ecotourism development.
- 4.19 Develop and implement local strategies for alternative energy and fuel to reduce local pressures on biodiversity resources.
- 4.20 Develop and implement integrated skills training and enterprise development programs (targeting women, disadvantaged groups, and fuelwood sellers, small farmers groups) which reduce pressure on biodiversity resources.
- 4.21 Implement best practices in local capacity in capital generation and credit mechanisms to support livelihood improvements and productive investments for high impact communities in critical bottleneck areas of productive landscape.

Component 4: Biodiversity Conservation Values and Practices Mainstreamed Among Local Communities

- 4.22 Formulate and implement strategies for on-going education and awareness raising among local stakeholders for biodiversity conservation, including conducting conservation awareness education in local schools and mobilizing support of local religious leaders and traditional/cultural organizations.
- 4.23 Foster community ownership of biodiversity resources in landscape by linking community awareness building with information display devices in villages and land management units which identify responsible parties and conservation role within overall landscape.

5.2 Original Logical Framework – CSUWN

Narrative description	Key Performance Indicator	Baseline	Target (Year 5 unless specified)	Means of Verification and frequency	Assumptions
Project Goal: To ensure maintenance and enhancement of wetland biodiversity, environmental goods and services for improved local livelihoods in Nepal					
Project Objective: 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"> ✓ Population size of globally threatened wetland species ✓ Conservation status of globally significant wetlands ✓ Access rights of wetland-dependent communities and income 	<ul style="list-style-type: none"> • Rate of loss currently not available and will be surveyed • Population size of Asian wild buffalo = 159 (2004) • No globally significant wetland effectively conserved • Access restricted; average annual household income will be surveyed 	<ul style="list-style-type: none"> • Rate of loss = 0 • Population size increased by 30% • All globally significant wetlands in Nepal conserved, with no degradation occurring • All wetland dependent communities have clearly defined access rights and average annual household income increased by 20% 	<ul style="list-style-type: none"> ✓ monitoring reports of DNWPC ✓ management plans ✓ biodiversity surveys ✓ social surveys 	<ul style="list-style-type: none"> ☞ Wetlands and aquatic biodiversity remain a priority of HMG ☞ National Financial Strategy developed by project can identify diverse sources of funding for ongoing support to wetlands ☞ Social, political and economic situation of the country does not deteriorate significantly
OUTCOME 1: Wetland biodiversity conservation values integrated into national policy and planning framework	Content of wetland policy framework	National wetland policy exists but does not fully reflect field realities	Wetland policy framework is revised based on project recommendations and field experience	<ul style="list-style-type: none"> ✓ legal documents, gazettes and notifications Assessed annually, starting yr 2	☞ wetland biodiversity remains an HMG 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)	<ul style="list-style-type: none"> ✓ 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 th Five Year Plan and demo site District development plans do	Wetlands are integrated into national 11 th Five Year Plan and demo site district	<ul style="list-style-type: none"> ✓ 5 year plan Assessed annually, starting yr 2	☞ wetland biodiversity remains an HMG priority

Narrative description	Key Performance Indicator	Baseline	Target (Year 5 unless specified)	Means of Verification and frequency	Assumptions
		not adequately integrate wetland conservation and use	development plans		
	Use and relevance of National Wetland Committee (NWC)	No forum exists to discuss and resolve inter-sectoral issues impacting wetlands No regular mechanism for practitioners to influence national decision-making on wetlands	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	✓ minutes of NWC and sub committees ✓ survey of wetland committee members Assessed annually	☞ adequate inter-sectoral participation in National Wetlands Committee (seniority & frequency) ☞ HMG 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	☞ HMG remains open to the participation of civil society in wetland management ☞ wetland biodiversity remains an HMG 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 HMG priority
OUTCOME 2: 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	☞ HMG counterpart funding and staff are provided in a timely manner
	Scientific and economic tools and methods available and used by trained staff	No wetland inventory beyond the terai; limited tools for wetland assessment or valuation No training programmes for wetland conservation and use	Inventory, assessments, economic valuation 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	✓ biodiversity & sectoral strategies and plans Assessed annually	☞ Environment division maintains responsibility for biodiversity
	Public awareness of wetland issues	Media coverage of wetland issues limited	Increased coverage of wetlands issues in media	✓ interviews & focus groups	☞ Media retains its independence

Narrative description	Key Performance Indicator	Baseline	Target (Year 5 unless specified)	Means of Verification and frequency	Assumptions
		and not high quality		✓ newspaper articles; radio & television programmes Assessed annually	
OUTCOME 3: 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 ☞ HMG 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 conflicts over wetland resource use will be measured in year 1	50% reduction in the number of recorded conflicts over wetland resource use	✓ records of conflict Assessed annually, starting yr 2	☞ field activities are not unduly 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	increased budget available to line departments, local government and community groups from piloting of demo	✓ letters by relevant government agencies Assessed annually,	incentives (social & economic) applied in 2 sites are replicable to other sites

Narrative description	Key Performance Indicator	Baseline	Target (Year 5 unless specified)	Means of Verification and frequency	Assumptions
		DoF or communities in GGC for wetlands.	site financing strategies (agreed to by year 4 and in place by year 5)	starting yr 3	
	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 hyacinth	High water hyacinth infestation in wetlands	20% reduction of water hyacinth at demo sites	✓ Periodic 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 ²⁴ 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

	Indicator	Means of verification	Assumptions
OUTCOME 1: WETLAND BIODIVERSITY CONSERVATION VALUES INTEGRATED INTO NATIONAL POLICY AND PLANNING FRAMEWORK			
Output 1.1: Strengthened Mechanisms for Inter-Sectoral Co-ordination	<ul style="list-style-type: none"> ✓ PMU established and operational ✓ project gender and social equity strategy (incl. staff & operations) developed & implemented ✓ National Wetland Committee and inter-sectoral technical advisory committees operational and meets annually 	<ul style="list-style-type: none"> ✓ Project Steering Committee minutes ✓ project documents (plans, monitoring reports) ✓ National Wetland Committee 	<ul style="list-style-type: none"> ☞ adequate inter-sectoral participation in National Wetlands Committee (seniority & frequency) ☞ PMU can be established in an

²⁴ 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

	<ul style="list-style-type: none"> ✓ Programme Steering Committee meets semi-annually ✓ # & nature of participants at preparatory workshops prior to MEAs (including Ramsar) ✓ strategies and action plans developed by national networks of indigenous communities & wetland specialists that complement HMG actions to support wetland conservation & sustainable use 	<ul style="list-style-type: none"> minutes ✓ Technical Advisory Committee minutes ✓ preparatory workshop reports ✓ position statements for MEAs ✓ network reports & meeting minutes 	<ul style="list-style-type: none"> accessible location ☞ suitable staff & counterparts are identified & available in a timely manner ☞ existing wetland specialists & indigenous peoples are interested & able to participate in the networks
<p>Output 1.2: Strengthened ability to integrate wetland values into national policy and planning framework</p>	<ul style="list-style-type: none"> ✓ analysis & 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) ✓ 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) ✓ guidelines to support implementation of the wetland policy developed & disseminated ✓ guidelines for wetland economic assessment developed for integration into economic planning and investment appraisal procedures for key sectors (water, hydropower, irrigation and agriculture) ✓ guidelines on best practices to integrate wetland issues into specific sectors (agriculture, forestry, industry, tourism, river engineering, EIA) developed & disseminated ✓ national workshops, information materials and study tours held to raise awareness of senior policy makers, including macroeconomic and sectoral economic planners 	<ul style="list-style-type: none"> ✓ sub-committee reports ✓ project reports ✓ guidelines ✓ awareness raising materials 	<ul style="list-style-type: none"> ☞ HMG is open to further analysis & amendment of wetland policy framework based on testing of its application in the field ☞ Macroeconomic and sectoral planners open to developing pro-wetland economic policies and instruments
OUTCOME 2: STRENGTHENED NATIONAL INSTITUTIONAL, TECHNICAL AND ECONOMIC CAPACITY AND AWARENESS FOR WETLAND BIODIVERSITY CONSERVATION AND SUSTAINABLE USE			
<p>Output 2.1: Knowledge and Tools for Strengthened Development of Planning and Policy on Wetlands</p>	<ul style="list-style-type: none"> ✓ toolkit on wetland assessment and inventory methodologies ✓ national inventory of wetlands (focus on mid-hills and mountains) including distribution of alien invasive species & available in accessible database ✓ guidelines on AIS management & action plan developed & disseminated ✓ regular mechanisms established to update list of species under legal protection ✓ methodology for & best practices of economic valuation of wetlands for conservation planning developed & disseminated ✓ 10 national and site level development and conservation institutions with skills in wetland valuation ✓ 4 wetland valuation case studies (incl. project sites) with recommendations for financial and economic measures for conservation management ✓ Proposal for national sustainable financing mechanism for wetland conservation. ✓ case studies on indigenous knowledge 	<ul style="list-style-type: none"> ✓ inventory ✓ guidelines ✓ project documents 	<ul style="list-style-type: none"> ☞ access to mountain sites is maintained ☞ planning & sectoral staff are interested in the economic valuation ☞ indigenous communities agree to participate in the documentation of their knowledge

Output 2.2: Enhanced Awareness of Wetland Issues	<ul style="list-style-type: none"> ✓ awareness action plan developed and implemented (based on needs assessment) ✓ 40 visits monthly to the resource centre ✓ 25 fact sheets, posters, brochures and other awareness raising materials developed and disseminated to 100 institutions 	<ul style="list-style-type: none"> ✓ needs assessment report ✓ awareness raising materials ✓ project reports & field visits 	
Output 2.3: Strengthened technical capacity in wetland management	<ul style="list-style-type: none"> ✓ increased access to wetland information resources through public information centre ✓ database of wetland information ✓ capacity building plan developed and delivered (based on needs assessment) ✓ 20 government & NGO organizations with skills in ecosystem management approach to wetland management 	<ul style="list-style-type: none"> ✓ nature & extent of use of information centre ✓ number & diversity of people trained (gender disaggregated) ✓ project reports 	<ul style="list-style-type: none"> ☞ training can be developed & delivered to both government & non-governmental people ☞ information centre is located in an accessible location
OUTCOME 3: ENHANCED COLLABORATIVE MANAGEMENT OF WETLAND RESOURCES FOR CONSERVATION AND SUSTAINABLE LIVELIHOODS			
Component 3A: Collaborative management of wetland resources in the Koshi Tappu Area demonstrated as a model for wetland protected area management			
Output 3A.1: Strengthened Co-ordination for Collaborative Management in Koshi Tappu Area	<ul style="list-style-type: none"> ✓ BZ Development Committee established and operational with multistakeholder representation, including women and wetland dependent communities ✓ regular multi-stakeholder mechanisms for review of BZ and Reserve MPs established and operational ✓ field office operational and accessible ✓ District water resource committees strengthened to address wetland issues ✓ institutional support provided based on needs analysis of government and community stakeholder groups ✓ mapping of wetlands and analysis of tenure issues ✓ report on linkages between resource access, livelihood security, environmental condition and conflict ✓ 20 organizations with increased skills in participatory planning, equity and conflict resolution ✓ incentives for wetland conservation identified and piloted including buffalo insemination programme 	<ul style="list-style-type: none"> ✓ BZ Committee minutes and participation ✓ KT Reserve meeting minutes ✓ Project reports ✓ User group action plans and minutes ✓ Gender & Equity strategy and reports 	<ul style="list-style-type: none"> ☞ BZ is approved ☞ Field project office and is accessible to all stakeholders ☞ artificial insemination is a viable option for buffaloes ☞ women & wetland-dependent communities are interested and able to participate ☞ resource-based user groups are a useful addition to existing geographical-based user groups
Output 3A.2: Strengthened Technical Capacity for Wetland Management in Koshi Tappu Area	<ul style="list-style-type: none"> ✓ staffed and skilled DNPWC (including % women staff) ✓ 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 ✓ training of NGO and CBOs as resource personnel for communities on wetland conservation and sustainable use ✓ all critical wetland habitats identified and restored or protected ✓ revised KTWR and BZ management plans and mechanisms for regular review and revision 	<ul style="list-style-type: none"> ✓ Training reports & follow-up surveys ✓ KTWR management & monitoring plans & reports ✓ Minutes of & participation at review meetings ✓ PRA surveys and community & park perceptions ✓ Minutes and actions identified for transboundary cooperation 	<ul style="list-style-type: none"> ☞ Government & community interested to build on participatory process established through Parks & People Programme and extend to wetlands ☞ training can be developed & delivered to both government & non-governmental people ☞ cost-effective indicators can be

	<ul style="list-style-type: none"> ✓ targeted monitoring plan developed and implemented ✓ mechanism for reducing cattle in KTRW developed and tested ✓ strengthened dialogue with India on transboundary cooperation ✓ links established with other projects (including TAL) ✓ Sustainable Financing Strategy for conservation and sustainable use activities in KTRW and BZ developed & piloted, including payment for environmental services, user charges and damage fees, and other market-based mechanisms for wetland management 	<ul style="list-style-type: none"> ✓ Minutes and actions for collaboration with other projects ✓ Sustainable financing strategy & reports on its piloting ✓ Variety of market-based instruments developed for wetland management 	<ul style="list-style-type: none"> ☞ identified ☞ Other projects & planning & line agencies are willing & able to collaborate (especially for financing strategy) ☞ Indian Government is interested in trans-boundary cooperation ☞ Communities are willing to shift to buffalo from cattle
Output 3A.3: Strengthened Community Support in Koshi Tappu Area for Wetland Conservation and Sustainable Use	<ul style="list-style-type: none"> ✓ 20 community action plans developed through participatory planning process and implemented ✓ women's & under-represented groups' participation in action plan development and implementation ✓ demonstration of conservation farming techniques through enhanced capacity of extension workers and methods to reduce energy consumption ✓ eco-tourism plan developed and initially implemented ✓ strengthened awareness of wetland values ✓ 4 school wetland programmes initiated in demo sites 	<ul style="list-style-type: none"> ✓ Community action plans & assessment of their implementation ✓ PRA & perception surveys ✓ # of HHs visited by extension workers trained in conservation farming ✓ Eco-tourism plan & assessment of their implementation ✓ Project documents 	<ul style="list-style-type: none"> ☞ communities (incl. women & wetland-dependent people) are interested & able to participate ☞ school eco-clubs will be interested in working on wetland issues
Component 3B: Collaborative management of wetland resources in the Ghodaghodi Lake Complex (GLC) demonstrated as a model for wetland management outside protected areas			
Output 3B.1: Strengthened Local Institutional Capacity and Coordination for Collaborative Management in GLC	<ul style="list-style-type: none"> ✓ GLC institution established and operational with multistakeholder representation, including women and wetland-dependent communities ✓ regular multi-stakeholder mechanisms for review of GLC Management Plan established and operational ✓ field office operational and accessible ✓ District Water Resource committees strengthened to address wetland issues ✓ institutional support provided based on needs analysis of government and community stakeholder groups ✓ mapping of wetlands and analysis of tenure issues ✓ 10 organizations with increased skills in participatory planning, equity and conflict resolution 	<ul style="list-style-type: none"> ✓ GLC minutes and participation ✓ Project reports ✓ User group action plans and minutes ✓ Gender & Equity strategy and reports 	<ul style="list-style-type: none"> ☞ Field project is accessible to all stakeholders ☞ women & wetland-dependent communities are interested and able to participate ☞ resource-based user groups are a useful addition to existing geographical-based user groups
Output 3B.2: Strengthened Technical Capacity for Wetland Management in GLC	<ul style="list-style-type: none"> ✓ 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 ✓ 10 NGO and CBOs trained as resource personnel for communities on wetland conservation and sustainable use ✓ critical wetland habitats identified and restored or protected ✓ GLC management plan developed and mechanisms in place for regular review and revision ✓ targeted monitoring plan developed and implemented ✓ mechanism for reducing cattle in GLC developed and tested sustainable water management practices assessed & recommendations made at sub-catchment level 	<ul style="list-style-type: none"> ✓ Training reports & follow-up surveys ✓ GLC management & monitoring plans & reports ✓ Minutes of & participation at review meetings ✓ PRA surveys and community & park perceptions ✓ Minutes and actions for collaboration with other projects ✓ Water management report & follow-up 	<ul style="list-style-type: none"> ☞ Government & community interested to use participatory processes ☞ training can be developed & delivered to both government & non-governmental people ☞ cost-effective indicators can be identified ☞ Other projects & planning & line agencies are willing & able to collaborate (especially for financing strategy)

	<ul style="list-style-type: none"> ✓ links established with other projects (including TAL) ✓ Sustainable Financing Strategy developed & 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 	<ul style="list-style-type: none"> ✓ Sustainable financing strategy & reports on its piloting ✓ Variety of market-based instruments developed for wetland management 	
Output 3B.3: Strengthened Community Support in GLC for Wetland Conservation and Sustainable Use	<ul style="list-style-type: none"> ✓ 5 community action plans developed through participatory planning process and implemented ✓ women's participation in action plan development and implementation ✓ demonstration of conservation farming techniques through enhanced capacity of extension workers and methods to reduce energy consumption ✓ strengthened awareness of wetland values ✓ 3 school wetland programmes initiated in demo sites 	<ul style="list-style-type: none"> ✓ Community action plans & assessment of their implementation ✓ PRA & perception surveys ✓ # of HHs visited by extension workers trained in conservation farming ✓ Project reports 	<ul style="list-style-type: none"> ☞ communities (incl. women & wetland-dependent people) are interested & able to participate ☞ school eco-clubs will be interested in working on wetland issues
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	<ul style="list-style-type: none"> ✓ semi-annual newsletter distributed to 100 institutions ✓ 10 fact sheets distributed ✓ website developed ✓ 10 study visits ✓ 10 workshops to share experience ✓ publications & reports 	<ul style="list-style-type: none"> ✓ newsletters ✓ fact sheets ✓ project documents 	<ul style="list-style-type: none"> ☞ it is cost-effective to distribute newsletters & fact sheets
Output 3C.2: Relevance of tools and approaches examined in other locations	<ul style="list-style-type: none"> ✓ analysis of & recommendations to improve guidelines, training programmes & materials, & other tools ✓ 10 study visits to sister sites ✓ 10 workshops with sister sites 	<ul style="list-style-type: none"> ✓ workshop & meeting minutes & reports ✓ project reports ✓ study visit reports 	<ul style="list-style-type: none"> ☞ other sites in Nepal & India will be interested in collaborating ☞ sites remain accessible

Project Activities
OUTCOME 1: WETLAND BIODIVERSITY CONSERVATION VALUES INTEGRATED INTO NATIONAL POLICY AND PLANNING FRAMEWORK
Output 1.1: Strengthened Mechanisms for Inter-Sectoral Co-ordination
1.1.1: Establish and operate national support structures for all project activities
1.1.2: Support the establishment of a National Wetlands Committee
1.1.3: Create and support national networks of wetland stakeholders
Output 1.2: Strengthened ability to integrate wetland values into national policy and planning framework
1.2.1: Strengthen the wetland policy and planning framework and integrate market-based incentives and wetland values
1.2.2: Enhance senior decision makers' understanding of wetland issues, including valuation
OUTCOME 2: STRENGTHENED NATIONAL INSTITUTIONAL AND TECHNICAL CAPACITY AND AWARENESS FOR WETLAND BIODIVERSITY CONSERVATION AND SUSTAINABLE USE

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

- 3B.2.3: Analyse and recommend equitable and sustainable water management practices at the sub-catchment level
- 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