

**COMMUNITY INCENTIVES TO REDUCE
LAND USE CONFLICT AND CONSERVE
BIODIVERSITY IN NEPAL**

External Evaluation Report

July 2005

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Abbreviations

AHCs	Animal Health Centres
AI	Artificial Insemination
BZ	Buffer Zone
BZUC	Buffer Zone User Committee
CAHW	Community Animal Health Worker
CASC	Community Animal Service Center
CBOs	Community Based Organizations
CF	Community Forest
CFUGs	Community Forest User Groups
CM	Community Mobilizer
DADO	District Agriculture Development Office
DDC	District Development Committee
DDG	Deputy Director General
DFO	District Forest Office
DG	Director General
DLSO	District Livestock Service Office
DM	Development Marketplace
DNPWC	Department for National Parks and Wildlife Conservation
FUGs	Forest User Groups
GEF	Global Environmental Fund
INGOs	International Non Governmental Organizations
IUCN	International Union for Conservation of Nature and Natural Resources
JTA	Junior Technical Assistant
KTWR	Koshi Tappu Wildlife Reserve
MC	Management Committee
MFSC	Ministry of Forest and Soil Conservation
MOU	Memorandum of Understanding
NARC	Nepal Agricultural Research Council
NGOs	Non Governmental Organizations
NRM	Natural Resource Management
NRs	Nepalese Rupees
NTFP	Non Timber Forest Product
PAC	Project Advisory Committee
PCP	Participatory Conservation Program
RCNP	Royal Chitwan National Park
ToR	Terms of Reference
UNDP	United Nations' Development Program
UG	User Group
VAHW	Village Animal Health Worker
VDCs	Village Development Committees

Executive summary

The team found that the project “Community Incentives to Reduce Land Use Conflict and Conserve Biodiversity in Nepal” has been successful in most ways and it is providing extremely important services to communities in the Buffer Zone of Koshi Tappu Wildlife Reserve. The project could not make use of wild bull semen, as originally aimed, to cross with domestic buffalos assuming to produce a hardier and more valuable cross. Nevertheless, the project was able to identify, plan and implement a number of innovative activities to reduce domestic animal pressure on KTWR and provide livelihood based incentives to poor farmers.

The evaluation team studied the project reports, visited the project sites and interacted with project implementers and beneficiaries. The team tried to explore the efficiency and effectiveness, relevance and impacts through the key outputs, sustainability of project intervention, contribution to the relationships and partnership, and contribution to the innovative incentive mechanisms identified and adopted to minimize resource conflicts.

The team observed and identified the following:

Key Findings:

- 1. The project’s impact in several areas is impressive and effective.** The project exceeded the original plan and established 217 home nurseries. The evaluation team appreciates the approach of farmer to farmer extension technology being implemented by the project. This has increased farmers’ capacity to produce agro-forestry planting materials in one hand and introduced a number of new varieties of fodder grasses. This eventually would contribute for the changes in livestock raising practices by reducing grazing pressure inside the reserve and encouraging stall-feeding practices thereby reducing land use conflict and conserve biodiversity in the KTWR.
- 2. The establishment of Community Animal Service Center** in Madhuban VDC demonstrates an innovative example of collaboration among local VDC, DLSO, KTWR and communities put forward by the project. The evaluation team observed an outstanding ownership of center among community members. The service that the center is giving will definitely contribute to increase healthier and high yielding livestock boosting local income.
- 3. The project has developed reasonably good skilled human resources** in the form of Community Animal Health Workers. The local communities now not only have door to door animal health services but also can get consultation to treat their livestock easily. It has also generated local employment for 10 young persons from the Buffer Zone.
- 4. The project’s initial idea of innovative use of wild bull semen didn’t take place.** The semen extraction was not permitted by the DNPWC under the ground that local people didn’t show interest in wild bull semen, Department didn’t know the ecological impact and health hazard of semen extraction, and there was no visible benefit to poor farmers. The evaluation team observed that the people keeping lesser number of buffalos wouldn’t be interested in wild bull cross as their interest is in milk production. On this ground, project’s diverting focus of providing other animal

health services and artificial insemination of improved breed is quite reasonable. The inability of using wild bull semen seems to have no significant loss communities even though it was one of the project's key innovative ideas. However, there could have more scientific debates on the use of wild bull semen and generated a useful knowledge on the possibility of using wild genetic materials for local benefits.

5. The **project's approach of strengthening livelihood security through incentive mechanism of fish pond management and land allocation** has introduced a system of benefit sharing of natural resources to the poorest members in the community. Such kind of poor focus activities has not only supported the poor for their livelihood but has also developed their confidence and dignity through the group approach. Moreover, this is the only component that has directly targeted women and poor through their active participation.
6. The team observed an **outstanding shift of people's attitude towards park in the eastern part** of the KTWR. In this part, there is complete stoppage of grazing in the park area and people have started practicing stall feeding. Fencing along the boundary of community forestry in order to stop wild buffalo towards their private farms is an impressive positive shift of people's attitude towards the Reserve.
7. The **project has been implemented in an effective manner in spite of its small scale and its short duration** and has used its resources in an efficient manner. The activities also exceeded the original plan, which were identified through adaptive management mechanism and has satisfactorily achieved all of its intended outputs except the extraction of wild semen. The project has tried to address the issues identified by the KTWR and BZ management plan and the activities were relevant to the need of local communities.
8. The **ongoing political conflict has, in general, affected the project** implementation as there have been numerous bandh (closures), chakka jam (transport closures), curfews, and restricted movements. Due to security concerns, compounded by other big herders' issues, the project could not make much impact in the western sector of KTWR.
9. The project has provisioned a support with seed money for nurseries, community animal health workers, community animal health service center and for the fish ponds. These provisions will assist them to sustain even after the closure of the project. We also **observed a good level of commitment at all levels to continue the project processes**. Nevertheless, a continuous feedback and monitoring support from DNPWC and KTWR will be necessary.
10. The evaluation team observed **some innovative incentive mechanisms that could be well replicated and scaled up**. One is the farmers to farmers knowledge transfer to establish home nurseries and produce fodder seedlings. The other is identifying and reaching poorest of the poor and making provisions of land allocation in community forest areas and fish ponds for their livelihood improvement. The project through these two initiatives has also tried to address gender and social inclusion issue, as emphasized by the HMG/N's 10th five year plan. Establishing community animal health centre with full ownership of community is another innovative approach in the project. Establishment of CAHC and developing community animal health workers

can be undertaken in other buffer zone areas. CFUGs in other parts of the country could also embark on such models if livestock issue is the key. These mechanisms can undoubtedly be replicated in other parts of the country as well.

Issues and Constraints

- 1. Limited Impact in the western sector of KTWR:** The major problem of park people conflict found to be in the western sector of the Reserve. So, a greater focus is needed from the KTWR with community mobilization, incentives and enforcement programmes in this sector.
- 2. Missed opportunity of scientific debate:** Although, the original idea was to provide wild buffalo semen to local communities as incentives and the idea didn't work out. The evaluation team considers it as a missed opportunity of scientific debate regarding the extraction and use of wild genetic resources. There could have been a more debate and knowledge creation on the use/misuse and benefit /loss of using wild genetic resources as community incentives.
- 3. Capacity development of groups:** Almost all groups that the project worked with are in forming stage of group development. A lot more is needed to do to help them get through storming, norming and performing stage. The project design, by default, less emphasized in developing group's capacity such as in leading, managing, organizing, record keeping, planning and working in teams. Due to the existing socio cultural tradition women and poor are often excluded from decision making and participation. So, it is important to develop capacity of groups to help them understand these issues and address.
- 4. Inadequate Social Mobilization and Inclusion:** The time constraints of project implementation has made project inadequate in social mobilization and inclusion. In the groups where the project is working, who controls the decisions, whose voice is heard, who benefits etc will continually need to be looked at and supported to address.
- 5. Concern over spirit of joint implementation:** The project was proposed and approved for joint implementation by DNPWC and IUCN. The roles of each partners were clearly spelled out in the inception report itself. Nevertheless, DNPWC expressed little reservation in accepting that the project was implemented in a spirit of joint ownership. The evaluation team understood that there was quite strong push from IUCN to finish the project activities as the time was the key constraints. Moreover, the project was following IUCN financial rules which are quite robust with strictness in submitting expenditure bills, clearing advance dues, and auditing in time. There were also times when budget release was delayed due to several reasons. All these could have made IUCN to be perceived leading than facilitating.
- 6. Refreshing skills and knowledge:** The skills and knowledge gained by different people, especially the technical ones, need to be refreshed and enhanced continually. And the social learning through planning, action and reflection is also equally important. As the project is already finished, the KTWR might not be able to organize such refreshment training and may not adequately emphasize the social learning process.
- 7. Addressing the problem perceived by gender:** The perception of problem by women and men is found different as usual. Most women felt that the conflict between park and people still exists in the eastern side regarding the collection of fuel wood. To tackle such problems alternative sources of energy like bio-gas plants were suggested.

Recommendations

- 1. Project initiatives be continued:** A continuous managerial, planning and follow up support from DNPWC and KTWR would be extremely necessary for the continuity of the project initiatives. Future projects designed for the site should build on current initiatives, and the BZ Management Committee should also take lead role on this.
- 2. Give more emphasis on capacity development of groups and on social inclusions:** KTWR need to continue providing coaching, mentoring and monitoring support to the groups that the project worked with. We also recommend KTWR to understand the social exclusion issues in groups, especially on decision making and benefit sharing, and support to address.
- 3. Groups and sectoral activities to be linked with line agencies:** Different groups in the project need to be linked with district line agencies and other service providers. KTWR, in this regard, can play a coordinating role and provide appropriate informational support.
- 4. CASC and CAHWs to be linked with DLSO for technical and support services:** The CASC and CAHW need to be coordinated with DLSO to increase community access to government support services and for other support services.
- 5. Release the budget to pay already implemented activities:** The evaluation team was reported that many of the activities already implemented by KTWR are still to be paid. This is because the final installment is yet to release from the World Bank. A little anxiety was also expressed that the final installment may not be released. So, we recommend that the fund be released to the extent that the activities are already implemented and yet to be paid.
- 6. Future efforts need to be focused towards western side of KTWR:** As the conservation problem is more serious in the western part of KTWR, the evaluation team recommends to DNPWC and KTWR to focus their future conservation and reserve management efforts in the western parts of KTWR. The possibility of shifting the Reserve head quarter to the western part of KTWR could also be explored.
- 7. Ensure the desire and commitment of all partners while exploring implementability of innovative ideas:** Although the project made a good progress in planning and implementing a range of activities, it could not explore much in the core idea of the project. The scientific and expert level consultation was not enough in selecting this project as the community consultation invalidated the idea. Although the DNPWC is one of the key joint partners, the core idea of the project seems to be not fully owned or desired by the department. So, a lesson for World Bank is to ensure the desire and commitment from all the implementing partners before any project gets approved.

1. Introduction

1.1 Project Background

The World Bank's Development Marketplace 2003 chose a theme of "Making Services Work for Poor People" and aimed to provide funding for innovative pilot projects that would explore new ways of providing effective service delivery to those to whom traditional channels have failed. Out of 2700 applications worldwide, and 183 finalists, 47 were given final awards. The project "Community Incentives to Reduce Land Use Conflict and Conserve Biodiversity in Nepal" was one of the global winners and was implemented in Koshi Tappu Wildlife Reserve (KTWR) Buffer Zone area from 15 July 2004 till the end of June 2005.

The project proposed an innovative use of wild genetic resource to increase local income of poor communities, improve relationships between a protected area authority and local communities, and in the longer term change local domestic livestock composition that is better for local livelihoods and biodiversity conservation in Nepal. The resource being proposed for use is wild Asiatic buffalo semen from the Koshi Tappu Wildlife Reserve to produce a hardier and more valuable cross with domestic buffaloes. The project has a goal *to enhance biodiversity by reducing land conflicts through strengthening livelihood security for poor communities*, and has the objective of *demonstrating a system for reducing the number of livestock in the Koshi Tappu Area by providing livelihood-based incentives for poor farmers*.



To achieve the goal and objective, the project implemented a number of activities to reduce domestic animal pressures on the Koshi Tappu Wildlife Reserve and to improve local livelihoods. The project intended to institute a mechanism to provide wild buffalo semen to produce a hardier and more valuable cross with domestic buffaloes, build local capacity and action to develop alternative forage by promoting on-farm production of fodder, improve local income, and strengthen relationship between local communities and the Reserve to support the overall conservation efforts. Lessons from the project are expected to feed into the UNDP-GEF "Conservation and Sustainable Use of Wetlands in Nepal" project as well as build on activities of the UNDP-DNPWC "Participatory Conservation Programme" being implemented in the KTWR and its buffer zone.

1.2 Purpose of the external evaluation

In order to assess the project performance in achieving its goal and objective a participatory external evaluation through a national consultant team was organized. The overall objective of the evaluation is to assess effectiveness of project process and outputs, and the potential impact of this project stated at the purpose level from *community incentive mechanisms* as well as to draw key lessons for future initiatives of DNPWC/KTWR and IUCN.

1.3 Criteria and scope of evaluation

The evaluation sought to assess:

1. The *efficiency* and *effectiveness* of project's processes, outputs and purpose;
2. *Relevance* (including local acceptance, park perspective and national policy issues) and *impacts* through the key outputs achieved by the project. While assessing the impact both present changed and potential change in future will be considered.
3. *Sustainability* of project intervention – perception from local communities, KTWR and other organizations (if there is any)
4. Extent the project is contributing to the component identified by the KTWR Buffer Zone Management Plan

In particular the evaluation will look at the key cross-cutting issues of the project which included:

5. Contribution of project to achieving better relationships and *partnership* between Reserve and local communities and other service providers/ stakeholders
6. Contribution to the *innovative incentive* mechanisms identified and adopted to minimize resource conflicts and learning relevant for national level

The evaluation was done with major community stakeholders residing within the Buffer Zone of the Koshi Tappu Wildlife Reserve, district level stakeholders, KTWR staff, DNPWC and IUCN staff.

1.4 Evaluation process and methodology

The evaluation team consisted of five members-a Natural Resource Management specialist, a social scientist, and two senior staff of DNPWC and IUCN who were not involved in project implementation activities and one member from Buffer Zone Management Committee. The evaluation followed the following process and methodologies:

a) Desk study and interaction: The consultant team interacted with IUCN, DNPWC and KTWR staff and got familiar with project objectives, activities and working modalities. The team read project reports and publications made available by the project to understand the achievements and issues of the project.

b) Field Visits and discussions: The evaluation team visited the project area from July 1-4, 2005. During field visits the team carried out one on one interviews and focus group participatory discussions with local beneficiaries, district stakeholders, KTWR staff and IUCN field staff. The team also discussed, in Kathmandu, with DNPWC, World Bank, and IUCN focal persons and understood their perception of project achievements, issues and their focus for the evaluation.



- c) **Direct observation and triangulation:** The project activities, achievements and changes were directly observed in the project area. Observations were made of Community Animal Services Center, Users groups and their activities, Fish pond, home nurseries and were photo documented. The data from one-one interviews and group discussions were triangulated from field observations, reports and interactions.
- d) **Report Preparation:** Based on the above study, observation, discussions and reflection a report is produced. The report has tried to answer the questions listed in the ToR of the evaluation. The findings were presented in the National Dissemination Workshop held on 12 July 2005 in Kathmandu. The dissemination workshop was participated by about 40 participants from Kathmandu based conservation organizations and KTWR and Buffer Zone beneficiaries. The report has incorporated the suggestions make in the workshop.

1.5 Limitations of the evaluation

At the project site, we were able to see a sample of evidence of changes and results as the field visit was only for three and a half days in the Sunsari side. Similarly, due to security situation we could not observe any of the project implementation activities in Saptari and Udaypur districts.

The evaluation is based on the sample sites that we observed, reports produced by the project and the way different people perceived the result of the project as well as issues they raised. In the project areas, buffer zone initiatives especially UNDP-DNPWC “Participatory Conservation Programme” is being implemented for quite many years and has created an enabling environment of Park People cooperation and collaboration. A limitation of the evaluation is, thus, the difficulty to demarcate a line of influence of different initiatives of this project and other initiatives especially in the social mobilization and behavioral aspect of people.

2. Findings from the Evaluation

2.1 Achievement of project goal and impact of the project

In order to achieve the project goal the project, in the beginning, developed a log frame and identified four key output areas. They include:

- a. Fodder and forage biomass increased in BZ through agro forestry and forestry plantations (private and communal)
- b. Sustainable services for domestic animal health artificial insemination services/facility established.
- c. Alternatives livelihoods to livestock rearing promoted.
- d. Reserve supported for effective project management, governance, learning and strengthening Park People relation for conservation of KTWR.

The evaluation team studied the kind of activities done to achieve these outputs, analyzed the extent of accomplishment and examined the impact that are or would be created. These are discussed under each output headings.

Output # 1: *Fodder and forage biomass increased in BZ through agro forestry and forestry plantations (private and communal)*

The main thrust of this output is to reduce community's dependency on the Reserve's resources through the promotion of forage and fodder plantation in private and community land. For this, the project implemented a number of activities.

Project Activities in Output # 1

Research and study: A study on “Fodder development opportunities in the KTWR Buffer Zone” was undertaken to understand constraints and opportunities for fodder development. The study revealed that 54% of the surveyed households are engaged in livestock rearing and the average fodder deficiency per household is estimated to be 487 kg/month in average. The study also identified two options to improve fodder situation- firstly by promoting better breed and healthier animals that are more productive for unit of fodder use and secondly by increasing fodder production through promotion of agro-forestry and plantations in private and community lands.

Training and awareness raising: 34 leader farmers out of which 7 women farmers were identified from different settlements and Buffer Zone Users Committees and were trained on nursery development and agro-forestry plantations. Two more follow-up trainings were conducted involving more lead farmers and altogether 48 out of whom 25 women farmers were trained. An exposure visit of Dhanusha agro-forestry plots and Royal Chitwan National Park were organized for 11 lead farmers consisting of 1 female.

Establishment of home nurseries and seedling production: The leader farmers were provided support of seed and materials for establishment of home nurseries. Through farmers to farmers extension of knowledge, a total of 217 home nurseries were established with seedling production in polypot ranges from 200 to 1250. In these home nurseries located at various settlements a total of 88,864 fodder tree seedlings and 100,000 grass slips are produced and are ready for plantation.

Community nursery and plantation: The project supported to establish community nurseries in three Community Forest Groups of Simsar, Siddakali, and Shiva. The nursery in Simsar has produced 20,500 fodder tree seedlings and 51,000 of fodder grass called NB-21 and 28,000 of citronella and lemon grass. These seedlings are planned to be planted in various community forest areas. Nurseries in Siddakali and Shiva have produced fodder grass slips. Plantation of fodder grasses and NTFP species is done in the land allocated to the poorer households in each of these three community forest users groups.

The project’s approach of extending agro-forestry knowledge and skills through farmers to farmers seems to be very impressive and effective. The initial project document proposed of 10 demonstration agro-forestry farms. But, the project exceeded the original plan and established 217 home nurseries of agro-forestry planting materials. In one hand this approach has increased farmers’ capacity to produce required planting species in their own farms. In other hand it has introduced a new habit to local people of producing fodder grasses and stall feeding their animals. New varieties of grasses have been introduced in the buffer zone areas such as NB-21, Stylo, Dinanath, Sun hemp and Mollasses. The poorer members of CFUGs are also found motivated to plant these materials in their allocated lands and hope

to sell grasses in local market. As these planting materials are produced at various locations and settlements, the multiplier effect in few years time would be tremendous. The local communities have also planted many fodder and fuel wood species in their community forest areas. All these would reduce the workload of women and children as they are the main collectors of fuel wood and grasses. This eventually would contribute for the changes in livestock raising practices by decreasing grazing inside the reserve and encouraging stall-feeding practices thereby reducing land use conflict and conserve biodiversity in the KTWR.



For the further expansion of production and plantation of fodder materials, the skill and knowledge of home nursery growers need to be retained or further developed. A regular follow-up visits, mentoring and coaching support by KTWR staff would be useful in this regard. These nursery growers could also be linked with other groups like CFUGs inside and outside the buffer zone who would be interested in these kinds of planting materials. Unless local people start paying for the kind of slips/seedlings they

produce, there would be less motivation for home nursery growers to expand seedling production. For this to start happening, it would be important to link them with district line agencies like District Forest Office, District Livestock Service Office and District Agriculture Development Office and provide technical and informational support.

Output # 2. *Sustainable services for domestic animal health artificial insemination services/facilities established*

This output was the main thrust of the project aiming for an innovative use of wild buffalo genetic resource to increase local income of poor communities. The project proposed an incentive programme based on the reliable provision of Wild Asiatic Buffalo semen outside the Reserve to local farmers through creation of Artificial Insemination Centers. The insemination center was also expected to provide some basic animal health services. This mechanism assumed to inspire people to change cattle to buffalos and fetch higher market price.

A number of activities were undertaken for this output.

Project Activities in Output # 2

Research and Study: To start with, a study on "Constraints and Opportunities For Domestic Cattle and Buffaloes Raising in KTWR's Buffer Zone" was conducted to understand the status, constraints and opportunities for livestock rearing in KTWR Buffer Zone. The study estimated the total number of large ruminants (cows, buffaloes and bullocks) in the area to be more than 35,000 animals and grazing pressure to the KTWR is huge. The frequently cited problem for livestock rearing was reported to be lack of veterinarian services, followed by lack of fodder & pasture and diseases & parasites. The study team believed that the responses validated the project's objectives of supporting animal health centers and promoting agro-forestry and fodder production in the area.

Another study was undertaken to recommend for the establishment of community managed animal health and artificial insemination services and strategy for obtaining wild buffalo semen. The study recommended locations for AHCs and Sub centers, identified technical and logistic requirement for the AHCs, institutional management and strategy for obtaining semen from Wild Buffalo. The best strategy suggested was to obtain semen from the captive wild bull at the Central Zoo, Lalitpur and process the sample at the Animal Breeding Division of Nepal Agricultural Research Centre, Khumaltar. The study also revealed that the local communities would opt for high yielding buffalo semen over wild buffalo semen.

A further study was done to elucidate relationship between livestock keeping (buffalo) with fodder availability and household characteristics. An analysis of grass and straw availability and number of buffaloes kept in a household was done to assess the contribution of each in the buffalo holding. Out of 305 households, 72 households had buffaloes in the range of 1 to 6. The daily requirement for an average buffalo as per the study is 20 kg of grass or 12.5 kg of straw. The study also analyzed the factors of households' characteristics of buffalo keepers. These factors are: family size; education level; cattle holding; goats and pig holding; poultry size; land ownership; total agriculture sales and total agricultural buying.

Training: "Community Animal Health Workers" training was conducted to create and enhance the skills of Community Animal Health Workers (CAHW) in the project area. A total of 10 persons were provided training out of which one is woman. 5 persons from Sunsari, 4 from Saptari and 1 from Udaipur district participated in the training. These health workers who are providing primary services in their locality through home visits. It is estimated that in average one CAHW earns Nrs. 2500 to 3000 per month. In order to sustain the human resource created the CAHW are provided with Nrs15000 as matching seed capital that would be provided on loan basis through the BZ user committee to purchase animal medicine and additional Nrs.15000 for medical equipments.

Establishment of Community Animal Service Center (CASC): A CASC has been recently established in Madhuban of Sunsari district. The center will provide following services – artificial insemination services to local farmers; provide improved animal breed semen from the District Livestock Service Office (DLSO); provide preventive (vaccination and better animal management) and curative (stool, blood and urine test to treat diseased animals) disease services. Furthermore about 50 farmers, in Sunsari, have received high yielding artificial insemination services to their domestic buffaloes with the support of DLSO prior to the establishment of the CASC.

The establishment of Community Animal Service Center in Madhuban VDC of the KTWR's Buffer Zone demonstrates an innovative example of collaboration among local government (VDC), KTWR, DLSO, and community. The center provides services to 6 adjoining VDCs in curative and preventive animal health. The center would also provide technical support to CAHW to enhance their skill and knowledge. The center has recruited one junior technician and two CAHWs.

The evaluation team observed an outstanding ownership of center among community members. On the day of our visit the members were meeting to discuss and fix the service charge that the center would charge for different kind of services. The center is currently managed by an adhoc management committee and is in process of developing a constitution.

They have also developed a 5 year business plan which estimates a loss for the first three years of its establishment. The management committee is discussing a range of options to deal with the loss. Some of these are: distributing annual membership, increasing medicine sales, seeking support for VDC and DDC. They also expressed some endowment fund support from the project. The evaluation team understood a great need of animal services in the center's catchment area and the service that the center is giving will definitely



contribute to increase healthier and high yielding livestock boosting their income. Increase in high breed livestock also means reducing grazing problem inside the Reserve and decreasing the probability of disease transfer to wild animals.

Despite these positive outcomes, the project could not establish another animal service center in the western part of the KTWR as planned. The reasons given were the non-welcoming behavior exhibited by local Maoists, and the local people not able to allocate land on time. The project team also reported financial constraints due to exchange rate losses due to slump of US Dollars against the Nepali rupees and increased financial commitments for other project activities. Similarly, the self-sustenance of already established animal service center in Madhuban looks to be a challenge for local people as the study indicated a loss for another three years. To help community deal with this loss, they need to be supported in their business plan with financial, technical and institutional support until they establish.

The project has developed reasonably good skilled human resources (CAHW) in three districts of the Buffer Zone located at each of the Buffer Zone Users Committee. Out of ten, the project was able to include only one woman in the training, although it deliberately tried to involve more.



The local communities now not only have door to door animal health services but also can get consultation to treat their livestock easily. The training has not only created job opportunity for the local youth it has also developed the confidence of the youth in serving their communities. The provision of seed money of Rs 15,000 for the CAHW at 3% interest through the Buffer Zone User Committee will also help to create small-scale enterprises in the local

community through the establishment of veterinary shop that had been missing in the local communities. The project has further provided Rs 15,000 as grants for Users Committees to purchase some equipments for CAHWs.

The project initially had proposed an innovative use of wild genetic resource (semen of wild water buffalo, *Bubalus bubalis*) that would produce a hardier and more valuable cross with domestic buffaloes and increase the local income of the poor communities. This initiative was not taken forward as the DNPWC didn't authorize to extract semen of wild bull. The reasons given were: local people didn't show interest in wild bull semen, Department didn't know the

ecological impact and health hazard of semen extraction, and there was no visible benefit to poor farmers. The District Livestock Service Officer told the evaluators that he was surprised when he first heard of this idea. He does not believe that the market pays for the cross breed of wild bull. The evaluation team tried to understand the interest of local people about the wild bull cross. The people we talked expressed no interest on wild bull semen. They also informed that the people keeping lesser number of buffalos wouldn't be interested in wild bull cross as their interest is in milk production. However, the interest of large herders who leave a large number of buffalos inside the KTWR couldn't be verified. The idea of wild buffalo cross breeding was then shifted to provide Artificial Insemination support to improve local breed. DNPWC officials supported this idea as the project was meant to provide incentives to poorer farmers not to the rich big herders.

Output #.3. Alternative livelihoods to livestock rearing promoted.

This output aimed to provide livelihood-based incentives for poorer members of the communities. Several activities were implemented to achieve this output.

Project Activities in Output # 3

Establishment of 3 community fish-ponds: 3 fishponds are constructed in 3 community forests to provide livelihood option for the poorest of the poor members in the Simsar, Siddakali and Shiva CFUGs. Poorest of the poor households were identified through PRA exercise using well being ranking. The identified members were formed into groups. The group members constructed the fish ponds laboring at 80% of wage.

Land Allocation for Grass and NTFP plantation: 127 poorest households are identified through well being ranking in three CFUGs. The women members of these households are allocated about 1 katta of land for each in the community forest areas. Some of these members have already planted with improved grasses and NTFP to help them increase their income source. The lands are provided on lease basis for a period of 5 years.

Vegetable Farming Training: 20 participants from 26 settlements of KTWR Buffer Zone area were provided off-season vegetable cultivation training for 3 days. Out of which seven were women. The main objective of this training was to develop knowledge and skill in vegetable cultivation using organic fertilizer; increase awareness on the importance of seasonal and off seasonal vegetable cultivation; develop knowledge and skill on improved vegetable cultivation practices; and increase income through sale of vegetable.

The project's approach of strengthening livelihood security through innovative incentive mechanism of fish pond management and land allocation has introduced a system of benefit sharing of natural resources to the poorest members in the community. This has to some extent addressed the social equity issues in the project area. Such kind of poor focus activities has not only supported the poor for their livelihood but has also developed their confidence and dignity through the group approach. This approach has also introduced sustainable management of unproductive land (from the community forest) and wet lands for biodiversity conservation. This is the only output that has directly geared its activities addressing women, gender and social inclusion.

The fish pond management group will have a MoU with the respective CFUGs and develop a guideline for benefit sharing. The benefit that the CFUGs will obtain from the fish pond is said to be 2-5% of the income. But, this provision was not clearly understood by the women members and no MoU is signed yet. As this is a new initiatives in the KTWR Buffer Zone area, a continuous mentoring and technical support for the production and marketing of the products is necessary.



Similarly, the linkages and coordination with various service providers must be established for the technical and informational support. The support would also be needed to manage conflict within the community members. Maintaining transparency of the group activities is already observed to the issues in two of the groups. So, KTWR will have to continuously facilitate to help the groups maintain transparency. In order to sustain their activities, women and poor must be increased their awareness on their rights and responsibility leading towards the empowerment.

The project extended the skill and knowledge of vegetable farming to potential leader farmers. This activity would not only increase the income of the participating farmers but would also improve the health condition through vegetable intake in the communities. At least 11 persons are found applying vegetable training skills and made income of Rs 2,000 to 5,000 from the sale of vegetables.

Output # 4: *Koshi Tappu Wildlife Reserve supported for effective project management, governance, learning and strengthening Park People relation for conservation of KTWR.*

This output aimed to strengthen the capacity of KTWR and enhance Park community cooperation. The lead role for this output was taken by KTWR authority and several activities implemented.

Project Activities in Output # 4

Human Resource Development: Orientation training were given to KTWR staff and Army commanders on the Buffer Zone (BZ) and 16 farmers with 9 women were orientated on Community Forestry management. Elephant camp staff were made aware on bio-diversity conservation through a orientation training. An exposure visit of well functioning FUGs of Sunsari was organized for the BZ CFUGs members.

Community Supports: Two high schools of Lauki and Haripur were supported with furniture and a scholarship is provided for a disadvantaged student.

Participatory Habitat Management: *Water hyacinth* was cleared from one of the wetland area. Two community forest user groups cleared *Mikania micrantha* (an exotic weed) from the KTWR forest and in exchange they were provided barbed wire worth Rs 80,000 to fence the park boundary. A study was made of food habits, ranging and habitat use by wild buffalo. Several community activities implemented for feral cattle control.

Infrastructure Development: A sewage system in the office complex is repaired. Motor garage, store room, water supply and guest house were repaired. A telephone

intercom system is installed in the office complex. Several equipments like computers, printers, and photocopier and two motor bikes are provided to KTWR.

The proposed KTWR and Buffer Zone management plan has also identified the need of enhancing conceptual understanding and practical skill of KTWR staff on community based bio-diversity conservation. In this regard, projects initiatives to increase awareness of KTWR staff, army commanders and elephant camp staff on BZ and community forestry is an important step in enhancing Reserve's capacity. Furniture support and scholarship support to schools and student has contributed to enhance relationship of park with local communities.

We observed an outstanding shift of people perception towards park in the eastern part of the KTWR. There is complete stoppage of grazing in the park area and people have started practicing stall feeding. Two of the CFUGs in Prakashpur and Madhuban have fenced their 7 km long community forest boundary hoping to stop wild buffalo towards their private farms. They have used the barbed wire from the exchange support they provided for grassland management in the forest of the reserve. A little further south there is about 10 km of previous fencing done by the KTWR about 15 years ago. The fence is without any barbed wire. People told us that the angry villagers demonstrated their anger by stealing barbed wire. The team is impressed from the paradigm shift in the way local people perceived the reserve then and now. The gray barren forests strips a year ago are now seen green and well stocked with grasses. The evaluation team appreciates the contribution made by the project towards the joint effort in developing the positive attitude of people towards KTWR. However, this is not at all a case in the western sector of the KTWR.

The team appreciates that the activities for this output were owned and led by the KTWR staff. However, there are not well written reports as there are with other outputs and IUCN staff knew much less about the activities implemented under this output. So, the joint planning and implementation, and the technical support if sought from IUCN staff and DNPWC would have further added value and quality in producing further more impacts.

2.2 Effectiveness and Efficiency

The evaluation team found the project very effective, especially given its small scale and its short duration. The project employed a participatory approach of involving local people in all of its activities. People were encouraged and facilitated to form groups and take responsibility of implementations. Construction and management committee of Community Animal Service Center, Home nursery groups, Fish pond construction and management groups and community forestry users groups are the major groups that the project facilitated and worked with. Community forestry users groups along the eastern border of the KTWR have become so effective in managing their resources and mobilizing people that they started fencing their community forests through voluntary contributions. Community people proudly told us that they have completely stopped grazing inside the reserve area and started stall feeding.

The project was steered by a Project Advisory Committee at central level chaired by Director General of DNPWC and members from IUCN, World Bank, and a representative from the Ministry of Forests and Soil Conservation. The committee met two times during the project period and agreed on different strategic issues. The DNPWC also appointed a focal person to oversee the project implementation and coordinate necessary support from the department. In the beginning of the project a project logframe was prepared through a participatory

process which was periodically reviewed based on experiences and studies. Based on the logframe a monitoring plan was also developed. The plan consisted of community monitoring, monthly monitoring, quarterly monitoring, PAC field monitoring, financial monitoring and evaluation. The project also made use of self monitoring by encouraging lead farmers to submit monthly progress reports.

At the field level, a project implementation team was formed of KTWR, IUCN and PCP members. Every other month the implementation team met, planned the field activities, and reviewed the progress. We observed implementation team's effectiveness in the selection of training participants for leader farmer's training on on-farm fodder and grasses demonstration, which was done in an extremely effective way. The team made criteria for selection as: pro-active farmer, women or disadvantaged group to be preferred, should be buffalo raiser or have previous experience in buffalo raising, should be trusted by the group, and should have a spirit of volunteerism. The Buffer Zone Users Committees were made responsible for identifying candidates based on above criteria. In implementing these trainings project has effectively coordinated with other organizations in the district like District Livestock Service Office and District Agricultural Development Office.

The project has used its resources in an efficient manner. The project was following IUCN financial rules which were in many ways robust and effective. About the wise use of the money invested, the community evaluator and a local person Mr Puspa Adhikari cited an example of CASC building construction. The activities also exceeded the original plan, which were identified through adaptive management mechanism, and were implemented through a small number of project staff supported by IUCN core staff.

The project has satisfactorily achieved all of its intended outputs except the extraction of wild semen to be provided as incentive to the local community. Although, the semen provision was thought to be an innovative idea in project approval, the local people were found not much interested towards it. Big herders in the western part of the reserve might be interested in wild bull semen, which project didn't explore. But the project was meant for poor communities than for rich big herders. On this ground, project's diverting focus of providing other animal health services and artificial insemination of improved breed is quite reasonable.

The ongoing political conflict has, in general, affected the project implementation as there have been numerous bandh (closures), chakka jam (transport closures), curfews, and restricted movements. Some KTWR/PCP staff were physically assaulted by the Maoists and were warned not come again. These led to suspension of many activities in the western sector and also delay in implementing certain activities in the eastern sector.

2.3 Relevancy of the Project

The project has tried to address local needs through the implementation of various activities benefiting the local communities. The most important one that the local communities found appreciating is the locally availability of animal health services thorough service center and through locally trained community animal health workers. One of the CAHW, that we talked with, Mr Dharmendra Biswas expressed satisfaction over the training and was found enthusiastic in this new veterinary profession. He told us that he has treated 50 cases within two months of his services. Similarly, the home nurseries expanded through farmers to farmers approach and plantation of fodder species is beginning to increase fodder availability for local people.

The Draft Management Plan of KTWR and Buffer Zone has identified several issues for Buffer Zone management. Some of these are:

- Inadequate forest and grazing land in the Buffer Zone for reducing pressure in the Reserve resources.
- Inadequate initiatives and interest among UGs and CBOs to produce fuelwood, fodder, and forage in farmland.
- Bulk of livestock is unproductive and programmes to coordinate and promote breed improvement and stall feeding is inadequate.

The management plan has also suggested with several strategies to address these issues. The project approach and activities were in line with the management plan's strategies and were geared towards addressing the identified issues. The Reserve warden also accepts that the project has tried to address the management issues through CF approach.

The Deputy Director General of DNPWC Mr Narayan Pd Poudel believes that the success of the Buffer Zone concept is "the extent people become the guard of the park". "How far people are motivated for this and to what extent the Reserve builds relationship with people determines the success". We observed a significant shift in the way people perceive about the Reserve and the relationship that they have with Reserve staff. One of the community member said, with pride, that a single goat is not allowed to enter the Reserve now. However, this is not the case in the western sector of the Reserve.

2.4 Sustainability of Project Initiated Activities

The evaluation team looked at how the initiatives taken by the project will continue once the project finishes and also the sustainability issue of the Animal Health Center. The Warden expressed that "the project activities are done under the umbrella of Buffer Zone Management Committee, so support will undoubtedly be continued".

The project has provisioned a support with seed money for nurseries, community animal health workers, animal health service center and for the fish ponds. This However, these activities need to be closely monitored and supported by the KTWR till the mechanisms starts functioning well. In some of the groups the issue of transparency and inclusive decision making surfaced during our meetings too. The women group members in Simsar Fish Pond group questioned their exclusion while making decision of putting fingerlings. These kinds of issues would be more when there is some benefit coming. The evaluation team feels confident that the groups would get continuous support from KTWR, PCP and BZUC as they were well involved in planning, implementing and monitoring. Warden of KTWR also thinks that supporting CFUGs is Reserve's current priority and will continue supporting groups initiated under the project.

The evaluators observed a good level of ownership of Community Animal Service Center among the local community members. People's participation during the construction of the CASC building is well appreciated by the project implementation team. The adhoc management committee has taken incharge of managing and sustaining the center. They have developed a business plan are preparing a constitution as well. We are impressed from the community participation in a meeting of fixing service charge that we also participated. Participants expressed deep commitment to make the center sustainable. They are found

adopting various strategies to mobilize resources such as renting out space for which the construction is going on, from the services charges and profit from sales of medicine. However, the estimated profit is not enough to sustain itself for the first three years. So, other options for support also need to be explored. These options could be linking them with VDC and DDC support, linking them with DLSO services, and supporting them through Buffer Zone revenue sharing mechanism. The evaluation team appreciates the decision of IUCN to seconding a veterinary doctor to support the center for another one year. In our opinion, his support in coming one year should focus more on building the capacity of management committee and institutionalizing and sustaining the center.

2.5 Contribution towards Improved Relationship and Partnership

The project has well established its relationship with related government and non-government organizations outside KTWR. In implementing training activities it has used skills and services of district line agencies. The community animal health workers training was conducted in close collaboration with DLSO. Even in selecting candidates for the training the experience of DLSO was used by involving them in the interview process. In delivering other trainings like vegetable training, and agro-forestry and nursery establishment training the skills and expertise of DLSO, DADO was used. The project also organized stakeholder consultation meetings to promote greater local involvement and ownership of the project activities and share the lesson learnt.

In the eastern side of the KTWR, the relationship between park authority and people has found to be greatly improved with the implementation of Buffer Zone activities. The project's contribution in the process of relation building is enormous. The animal health services, fodder development services and CF activities have contributed to build a positive image of the KTWR among local people. The project has further introduced a system of benefit sharing on natural resources with women and poor who are mainly considered as the user of forest and forest product for their livelihood. This has improved the relationship of the park and poorer communities. The multiplier effect of fodder production in the BZ areas will reduce the resource conflict people and the Reserve and hence improve the relationship. The project's approach of involving and mobilizing Buffer Zone Users Committee and Buffer Zone Management Committee has also brought Reserve and BZ committees closer.

The Warden shared the story of how people used to run away when he used to patrol in the Koshi barrage bund area a year ago. Several times he called running people and tried to influence for a cordial relationship that the Reserve wanted to create with local communities. He expresses a great satisfaction over the changes at people's behavior, now, as they lend a hand of support. Project's contribution to bring the Reserve and the people closer is significantly high. However, the tension between park and people in the Western side of the KTWR is more or less the same as before.

2.6 Innovative incentive mechanism

Provision of wild bull's semen for the cross breeding with local buffalos could not be materialized due to various reasons as already discussed. Instead, other activities were introduced in the due course of project implementation through participatory adaptive process. The evaluation team observed some innovative incentive mechanisms being practiced in the project. These are:

- a) Agroforestry development through farmers to farmers knowledge transfer: Starting with 34 lead farmer trainees, the project expanded the home nurseries in 217 farmers and produced 88,000 seedlings of fodder trees and thousands of fodder slips. The multiplier effect of these newly introduced varieties of grasses and fodder should be tremendously high in few years of time. The farmers to farmers approach can be replicated and scaled up in many buffer zone areas to increase the fodder production and reduce the pressure in the park.
- b) Reaching women and poor for livelihood improvement: The identification of poorest of the poor women and allocating them pieces of land to plant fodder and NTFP and handing over of fish ponds for income generation is an excellent example of reaching poorest of the poor for the livelihood improvement. This modality of reaching poor can be scaled up in many of the CFUGs in the buffer zone areas.
- c) Community animal health center: The CAHC has been established with different processes, steps and has developed different rules and regulation within it. During this process of establishment, the community has taken full responsibility and ownership. It has its own management committee and business plan. This model of establishing CAHC can be practiced in other parts of buffer zone areas and also by many Community Forestry Users Groups.

Another interesting incentive mechanism observed during the evaluation by the team was the participatory fencing of the community forest by the locals to safeguard their livestock and crop deprivation from wild buffalos. This is an important lesson that can reduce conflict between park, people and wild animals for revenge killing. These mechanisms can undoubtedly be replicated in other parts of the country as well.

3. Issues and Constraints

Project achievements, as discussed earlier, clearly indicates the success of the project contributing to strengthen livelihood security for poor communities, reducing land use conflict and enhance biodiversity conservation. However, the evaluation team identified several issues and constraints that came up during the course of project implementation. These issues and constraints need to be considered in the upcoming “Conservation and Sustainable Use of Wetlands” project and other similar projects in Nepal.

Limited Impact in the western sector of KTWR:

In the western sector of the reserve the impact of project is limited. The practice of grazing livestock and leaving buffalos by the community inside the reserve has not changed. According to the study commissioned by the project it is estimated about 15,000 livestock are grazed inside the reserve and about 3000 animals, as per the estimation of draft Management Plan 2001, are purposely left inside the reserve for cross breeding with the wild bulls from which born calves are sold for higher price. The local communities also reported a large number of livestock from across the Indian border using the reserve for grazing. In the given situation, the project has limited impact in dealing with these problems. Reasons given are: lack of interest of local people in project activities; and present political conflict and possibility of big herders’ connection with local Maoist groups to safe guard their grazing interest.

The KTWR has tried several times to control feral cattle but has not been effective in permanently removing them from the reserve. Enforcement is also difficult as the army patrolling by boat is not enough to control such a huge animal intrusion in the reserve. These issues clearly indicate that there is a need to focus program in the western side. Such programs must have strong social mobilization components with incentives to the community members in protecting and conserving the reserve and effective enforcement.

Missed opportunity of scientific debate: Due to various reasons (lack of data on demand for wild buffalo semen for local communities, department's unwillingness to authorize extraction of wild semen) the planned provision of the project to provide wild semen to local communities could not be initiated. Although, the key innovative idea couldn't move forward the project could have initiated scientific debates on the use of wild bull semen, which would generate a useful knowledge for the use of wild genetic materials as an incentives for local communities. The evaluation team considers it as a missed opportunity. A participant in the dissemination workshop, however, did not consider this as a missed but a future opportunity to explore further possibility of research even establishing a "Arna Research Center". The DG of DNPWC also expressed departmental interest in further exploring and researching on wild bull, including the use of wild bull semen.

Capacity development of groups: The project had facilitated to form a number of groups in implementing project activities such as Community Forestry Groups, Fish pond Groups, Home Nursery Groups, CASC Management Committee, Buffer Zones Groups and Committees. Most of these groups due to short period of project intervention are in the forming stage of group development. These groups still would go through storming, norming and performing stages in the process of group dynamism. It is therefore, essential to develop group's capacity in term of leadership, management, organization, record keeping, planning & implementation. Due to limited capacity of the group and the existing socio-cultural tradition, women and poor are often excluded from decision making and participation. So it is important to develop capacity of the groups to identify the existing problem and take actions to solve them.

Inadequate Social Mobilization and Inclusion: The project initially did not focus on social mobilization process as its main objective was to reduce land use conflict and conserve biodiversity. The project aimed to achieve this through specific outputs as discussed earlier. In order to achieve its objective the project sought to increase the participation of local community members, women and poor in project activities. For their effective participation, an appropriate social mobilization process has to be undertaken that would address the issue of women, gender and social inclusion. For this purpose the project was provided support from the PCP's community mobilizers but was constrained by project duration. The evaluation team has an impression that the social mobilization process undertaken was not adequate enough. This was reflected in the fish pond groups where some women were excluded from the decision making. Some women members were also not clear on planning, implementing and benefit sharing from fish ponds. In broader term, the project has tried to address equity and social inclusion through provision of fish pond and community forest land allocation to the poorest of the poor. But, in these groups too, who controls the decisions, whose voice is heard, who benefits etc must be continuously monitored for effective group functioning.

Concern over spirit of joint implementation: The project was proposed and implemented jointly by DNPWC and IUCN. The roles of each partner were also clearly spelled out in the

original inception report. However, DNPWC expressed some reservation in accepting the spirit of joint implementation. The evaluation team was not surprised to learn that there was quite strong push from IUCN to complete the project activities due to time constraint of the project. Moreover, the project was following IUCN financial rules which are quite robust with strictness in submitting expenditure bills, clearing advances dues and auditing in time. There were also times when fund disbursement from IUCN was delayed due to several reasons. Under these situations and financial strictness, it is natural to perceive IUCN as taking lead role than facilitating.

Refreshing skills and knowledge: The project has provided various training to local farmers on animal health, nursery management, agro-forestry and vegetable cultivation. As these training are of technical nature, the skills and knowledge gained need to be refreshed and enhanced continually. As the project is already completed, KTWR may not be able to organize any refreshment training to these participants.

Addressing the problem perceived by gender: Women and men have different needs so their perceptions of problems are also different. This was evident in a discussion with women in Madhuban VDC. Most women felt that the conflict between park and people still exists in the eastern side regarding the collection of fuel wood from the park. They also felt that fodder supply in their area is not adequate to sustain their livestock throughout the year. To tackle such problems, alternative sources of energy like bio-gas plants were suggested.

4. Recommendations

The evaluation team noticed quite impressive initiatives of animal health services, community forestry activities and pro-poor focused programmes, and agro-forestry activities and we believe that these initiatives have added a brick to strengthen park people relationship and people's livelihoods at buffer zone areas. There should not be a break in these effective processes initiated at field level. The proposed UNDP-GEF project "Conservation and Sustainable Use of Wetlands in Nepal" should also take up through the on going processes and also address the range of issues and constraints as identified earlier.

Based on our observations, discussions and reports analysis the evaluation team recommends the following:

- 1. Continue project initiatives:** Within the short period of one year, the project has started several activities that have worked well and have a long term impact in contributing to people's livelihood. The financial and managerial sustainability of Community Animal Service Center is critically important for a long term impact. Although local people expressed a sincere commitment to sustain it, a continuous managerial, planning and in extreme cases the financial support from KTWR would be extremely necessary. Some of the innovative activities initiated by the project are worth scaling up. Such as: farmers to farmers knowledge transfer to expand agro-forestry and forage development; identification of poorest of poor and implementing activities to address their livelihood needs; and the establishment of CAHC to be owned and managed by community itself. The key processes of these initiatives could be expanded in other parts of the Reserve or in other projects being implemented by DNPWC and/or IUCN. It is therefore, the team recommends that a continuous managerial, planning and follow up support be provided by DNPWC, KTWR and BZMC to those groups and committees.

- 2. Give more emphasis on capacity development of groups and on social inclusions:** The capacity of the groups, that the project worked with, are to be continually developed to make them more effective in group work. So, the team recommends KTWR to provide regular coaching, mentoring and monitoring support. The KTWR also needs to understand the social exclusion issues in groups, especially on decision making and benefit sharing, and support to address them.
- 3. Development of linkages with sectoral line agencies:** The participatory resource management is multi sectoral. KTWR cannot provide all the technical and institutional services that the different groups demand. They must be linked to other service providers and sectors. Different groups in the project need to be linked with existing line agencies such as District Forest Office, District Livestock Service Office, District Agricultural Development Office, and other related non-governmental or private agencies. KTWR, in this regard, can play a coordinating role and provide appropriate informational support.
- 4. Coordination and linkages with DLSO:** The effectiveness of CASC and CAHW depends on the type of animal health services that they can provide in the communities. It is, therefore, essential for CASC and CAHW to be linked and coordinated with DLSO for technical and other service support. This would also increase community access to government support services. The team recommends that KTWR play a coordinating role and create an environment of mutual support.
- 5. Release of allocated budget to pay already implemented activities:** Interaction with KTWR during the evaluation visit found out that there is some pending budget to be released from IUCN to KTWR for activities that has been completed. As the final installment from the World Bank is yet to be released, the team recommends that the pending budget be released to pay the already implemented activities.
- 6. Future efforts to be focused on western side of KTWR:** As already discussed the conservation problem is more serious in the western part of KTWR than in the eastern part. So, the evaluation team recommends to DNPWC and KTWR to focus their future conservation and reserve management efforts in the western parts of KTWR. The possibility of shifting the reserve head quarter to the western part of KTWR could also be explored. However, the DG of DNPWC, in the dissemination workshop, opined that the shifting of reserve head quarter would not solve the problem in the west unless communities are mobilized.
- 7. Ensure the desire and commitment of all partners while exploring the implementability of innovative ideas:** Although the project made a good progress in planning and implementing a range of activities, it could not explore much about the use of wild genetic resources, which was the key innovative idea of the project. The scientific and expert level consultation was not enough in selecting this project as the community consultation invalidated the idea. Although DNPWC is one of the key joint partners, the key innovative idea of the project seems to be not fully owned or desired by the department. So, a lesson for World Bank is to ensure the desire and commitment from all the implementing partners before the approval of any innovative projects for joint implementation.

Annex 1: Persons and organizations consulted/visited

Name and organization	Name and organization
<p><u>DNPWC, Kathmandu</u> Dr. Tirtha Man Maskey, DG Mr. Narayan Poudyal, DDG Mr. Gopal Upadhya Mr. Surya Bahadur Panday</p>	<p>20 Male and 8 Female members of Madhuban and Prakashpur Users Committee, CAHC Adhoc Management Committee and observation of CAHC in Madhuban.</p>
<p><u>KTWR, Sunsari</u> Mr. Ram Chandra Kandel, Warden Mr. Rom Adhikari, Nayab subba Mr. Yogananda Jha, Ranger Mr. Gopal Raut, Accountant Mr. Karna Ghimire, CM (PCP) Mr. Ashok K Shah, CM (PCP) Mr. Hasan Ansari, CM (PCP)</p>	<p>Mr. Md. Hadish Minya (Chairperson), Mr. Gopi Yadav (Secretary) and other member of Shiddakali CFUG, observation of nursery, land allocation and fish pond. Focus Group Discussion with: Ms. Oshila Devi Yadav; Ms. Somni Devi Sardar; Ms. Rabia Devi Chaudhari; Ms. Malia Devi Sardar; Ms. Jayeda Khatum Ms. Bunti Devi Sardar; Ms. Parma Shree Sardar.</p>
<p>Dr. Shyam Ranjitkar Sr. Irrigation Specialist World Bank Focal Person</p>	<p>Discussion with about 20 members of Simsar CFUG and observation of their nursery and fish pond.</p>
<p><u>IUCN Kathmandu and Sunsari</u> Mr. Sameer Karki, Coordinator Dr. Bishnu Hari Pandit, Project Advisor Dr. Vivekananda Jha, Field Coordinator</p>	<p>Home Nursery of Mr. Rudra Pd Khanal Home Nursery of Mr. Teeka Ram Raut Home Nursery of Mr. Lekhnath Dahal Home Nursery of Mr. Raj Kumar Singh</p>
<p>Mr. Puspa Bhattarai, Community Evaluator Mr. Dhrmendra Biswas, CAHW Mr. Indra Dev Yadav, CAHW Mr. Naresh Shah, CAHW Mr. Manoj K Chaudhari, CAHW Mr. Sanjay K Charudhari, CAHW</p>	<p><u>Individual and Group discussion with:</u> Ms. Renu Shah, Chairperson, BZMC Mr. Ganesh Mandal, Chairperson, Bairba-Barmeja UC Mr. Feroed Seikh, VC, Bairba-Barmeja UC Mr. Balaram Yadav, C, Udraha-Kamalpur UC Mr. Chandra Kanta Jha, Secretary, Barmeja VDC Mr. Guneshor Jha, Local person, Barmeja Mr. Badri Chaudhari, Local person, Barmeja</p>
<p>Mr. Rishi Ram Tripathi, DFO, Sunsari</p>	<p>Dr. Keshav Pd Premi, Chief, DLSO, Sunsari</p>

Annex 2: Consulted Reports and Documents Produced by the Project.

1. Fodder Development Opportunities in the KTWR Buffer Zone, October, 2004
2. On-Farm Agro-forestry Demonstration Establishment in KTWR Buffer Zone, October, 2004.
3. Follow up Training on On-Farm Agro-forestry Demonstration and NTFP Nursery Establishment, January, 2005 and March, 2005.
4. The First Progress Report submitted to World Bank, Kathmandu, Nepal.
5. The Second Progress Report submitted to the World Bank, Kathmandu, Nepal.
6. The Third Progress Report submitted to the World Bank, Kathmandu, Nepal.
7. Constraints and Opportunities for Domestic Cattle and Buffaloes Raising in the KTWR Buffer Zone, October, 2004.
8. Recommendations for the Establishment and Operation of Community Managed Animal Health and Artificial Insemination Centers in the KTWR' Buffer Zone.
9. Some Factors Determining Buffalo Keeping in the Villages Around KTWR.
10. A Report on the "Community Animal Services Centre".
11. A Report on "Community Animal Health Workers' Training, March-May 2005.
12. Meeting minutes of the First Project Advisory Committee, July 2004.
13. Meeting minutes of the Second Project Advisory Committee, January 2004.
14. Minutes of "Community and District Level Stakeholders' Consultation Meeting", January 2005.
15. Inception report of the "Community Incentives to Reduce Land use Conflict and Conserve Biodiversity in Nepal"
16. Project Monitoring and Evaluation Plan.
17. Final Community Evaluation, May-June 2005.
18. Koshi Tappu Wildlife Reserve and Buffer Zone Management Plan (2004-2008), DNPWC.
19. Report on "Vegetable Cultivation Training" October 2004.
20. Report on "Community Representatives' Exposure Visit from Koshi Tappu Wildlife Reserve Buffer Zone to Dhanusha and the Royal Chitwan National Park", March 2005.
21. Report on "Buffer Zone Community Forestry Orientation Workshop", April 2005

Annex 3: One-one interview check list for Beneficiaries

(to be made specific for specific groups of people)

1. What have you done/ received in the last year under the project support?
2. How have you expressed your needs in the project and how they are addressed or tried to address?
3. Please explain how you were selected to become trained or to become a member of committee. Who decided?
4. Tell me about the objective of your group or organization and how project is contributing to achieve your group's goal or organizational goal? (if they are affiliated with group or organization)
5. What project activities worked well in contributing your org /group's goal? And what factors contributed for those successes?
6. What did you like about this project and why? What did you not like or feel could have been strengthened and why”?
7. Who is being benefited from the project and how? What are the potential benefits? Who and how?
8. How are poor, marginalized and women involved and benefited in your activities? How they can benefit in the future?
9. How the activities initiated in your group/org will be continued from now on? Who will be responsible? How will you ensure transparency, accountability and financial/ social/ environmental sustainability?
10. Is there any improved relationship between people and park authorities? what was your interaction like with KTWR authorities before the project and now? What changes have occurred at all? Why have the changes occurred if they have occurred.
11. How the current political conflict has affected the activities in your group/org? (with specific examples)

Annex 4: One-one interview check list for Implementer/supporting partner
(to be made specific for specific groups of people)

1. In what way project has tried to address the national priorities or conservation & development priorities (including DNPWC's/ KTWR's/ Local people's)? If yes, how? If no why?. Thinking about the future, how a project like this can contribute to address the national priorities?
2. Tell me about the DM project. What do you think about this project? Who owns the project?
3. In your opinion, what worked well in the project? And what factors contributed for those successes?
4. What didn't work well in the project? And Why?
5. What do you think about the process and implementation modalities of the project?
6. Project planning, implementation and monitoring:
 - a. How project activities were planned, implemented and monitored?
 - b. What were the strengths and areas needing improvement?
7. What initiatives of the project have contributed to address KTWR's core management issues?
8. How has the project tried to address the local needs?
9. Do you see any innovative mechanisms in the project? What are they and why they are innovative?
10. What are the community incentive mechanisms followed by the project to provide benefits to people and reduce pressure on the reserve?
 - c. How these mechanisms could be further improved?
 - d. How are poor involved and benefited from the project?
 - e. What could be the future benefits?
11. How project initiatives could be continued once the project finishes?
 - f. What is worked out to finance and manage AHCs?
12. Is there any positive change in the relationship of park and stakeholders? What project activities have fostered dialogue among KTWR stakeholders?
13. Is there any improved relationship between park authorities and people? If yes, what activities helped and how?
14. How the current political conflict has affected the project initiatives? (with specific examples)
15. Has there any policy level influence by the project? What and how? Any policy lessons? Why the project couldn't influence for wild buffalo artificial insemination?

Annex 5: One-one interview check list for Central People

(to be made specific for specific groups of people)

1. What was the nature of your involvement with the DM Project and since when?
2. In what way project has tried to address the national priorities or conservation & development priorities (including DNPWC's/ KTWR's/ Local people's)? If yes, how? If no why?. Thinking about the future, how a project like this can contribute to address the national priorities?
3. Tell me about the DM project. What do you think about this project?
4. In your opinion, what worked well in the project? And What didn't work well in the project? And Why?
5. What do you think about the process and implementation modalities of the project?
6. How do you assess the impact of the project?
7. Has it been able to achieve its purpose (demonstrate a system for reducing no. of livestock in the project area by providing livelihood-based incentives or poor farmers)?
8. Reason for the project not been able to initiate wild buffalo insemination activities?
9. In what way project has tried to address the national priorities? If yes, how? If no why?. Thinking about the future, how a project like this can contribute to address the national priorities?
10. How has the project tried to address the local needs? And foster park people relationship.
11. How project initiatives could be continued once the project finishes?
12. How the current political conflict has affected the project initiatives? (with specific examples)
13. Has there any policy level influence by the project? What and how? Any policy lessons?

Annex 6: IUCN Nepal’s Response to External Evaluation of the Community Incentives to Reduce Land Use Conflict and Conserve Biodiversity in Nepal

IUCN Nepal is grateful to the external evaluation team for their excellent evaluation of the Development Marketplace 2003 funded project “Community Incentives to Reduce Land Use Conflict and Conserve Biodiversity in Nepal”.

We believe that despite the fact that wild buffalo semen could not be made available to local communities, the project has more than adequately demonstrated several innovative community incentives to reduce land use conflicts in the Koshi Tappu area. Our study on wild buffalo semen had clearly shown the low demand for wild buffalo semen by local farmers and thus even if it had been made available locally it would have been only a minor local incentive. Should the semen have been made available, it would have been extremely difficult to demonstrate in one year that this could be a strong local economic incentive. However, the fact that we could not field test one of the key proposed ideas during the project period is highly regrettable.

IUCN believes that the project was implemented in a true spirit of partnership, and as was presented in the project implementation plan that had been jointly developed with the Department of National Parks and Wildlife Conservation. We believe that for true partnership, both parties need to abide by agreed principles throughout the project.

We note that the external evaluation team has identified “Reaching women and poor for livelihood improvement” as an innovative incentive mechanism but at the same time considered “inadequate social mobilization and inclusion” as a constraint or issue for the project. The project increased its target of supporting demonstration fish ponds from one to three ponds due to overwhelming local demand; but quite late in project implementation. Whilst we agree that the involvement of women, poor and disadvantaged groups has not been to a desired level in all project activities, we consider that the progress that we made in a very short duration in organising some of the most disorganised groups as a major project achievement.