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*Terai Arc Landscape
Annual Report
10/01/2006 - 09/30/2007*

for

World Wildlife Fund

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Submitted by:
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Acronyms

BNP	Bardia National Park
BZ	Buffer Zone
BZCF	Buffer Zone Community Forest
BZCFUG	Buffer Zone Community Forest User Group
BZMC	Buffer Zone Management Committee
BZUC	Buffer Zone User Committee
BZUG	Buffer Zone User Group
CBAPO	Community Based Anti-Poaching Operation
CBO	Community Based Organization
CFCC	Community Forest Coordination Committee
CFUG	Community Forest User Group
CNP	Chitwan National Park
DDC	District Development Committee
DFID	Department for International Development
DFO	District Forest Office
DNPWC	Department of National Parks and Wildlife Conservation
DoF	Department of Forests
EHEC	Eastern Himalaya Eco-Region Complex
FY	Fiscal Year
Ha	Hectare
HH	Household
HVC	High Value Crop
IDE	International Development Enterprise
IGA	Income Generation Activity
INGO	International Non Government Organization
IPGRI	Institute of Plant Genetic Resources
LIBARD	Local Initiatives for Biodiversity Research and Development
MFSC	Ministry of Forests and Soil Conservation
NARC	Nepal Agriculture Research Council
NFE	Non-Formal Education
NGO	Non-Government Organization
NTFP	Non Timber Forest Products
PA	Protected Area
PWR	Parsa Wildlife Reserve
SNV/N	Netherlands Development Organization - Nepal
SWR	Suklaphanta Wildlife Reserve
TAL	Terai Arc Landscape
UNDP	United Nations Development Program
US	United States
USAID	United States Agency for International Development
USD	United States Dollar
VDC	Village Development Committee
WCN	Wildlife Conservation Nepal
WWF NP	World Wildlife Fund Nepal Program

Terai Arc Landscape

Project Overview

Background

The Terai Arc Landscape (TAL) encompasses one of the most biologically diverse habitats on Earth and is part of the Terai-Duar Savannah and Grasslands Ecoregion. The alluvial grasslands and subtropical deciduous forests of TAL support 86 species of mammals, 550 species of birds, 47 species of herpeto-fauna, 126 species of fish, and over 2,100 species of flowering plants. TAL covers the only remaining natural habitat on the southern slopes of the Himalayas for the Royal Bengal tiger, Asian elephant and one-horned rhinoceros. The TAL vision is a single functioning landscape through the restoration and maintenance of forest corridors connecting 11 protected areas¹ from Parsa Wildlife Reserve and Chitwan National Park of Nepal to India's Rajaji National Park, covering an area of approximately 49,500 km.

The Nepalese portion of the TAL extends from the Bagmati River in the east to the Mahakali River in the west on an area of 23,129 km. TAL – Nepal includes over 75 percent of the remaining forests of the Terai and the foothills of the Churia Range, a network of 4 PAs and 3 Ramsar sites. This alluvial plain of TAL is the rice bowl of the country, and is also home to 6.7 million people from various ethnic and indigenous groups. Conservation of the Churia forests is crucial for preventing soil erosion, flash floods, and for recharging the water table of the Terai, which is the most productive land in the country. Therefore, sustainable management of the TAL will help to maintain biological diversity and also to meet the national demand for forest products and food supplies for its rapidly growing human population.

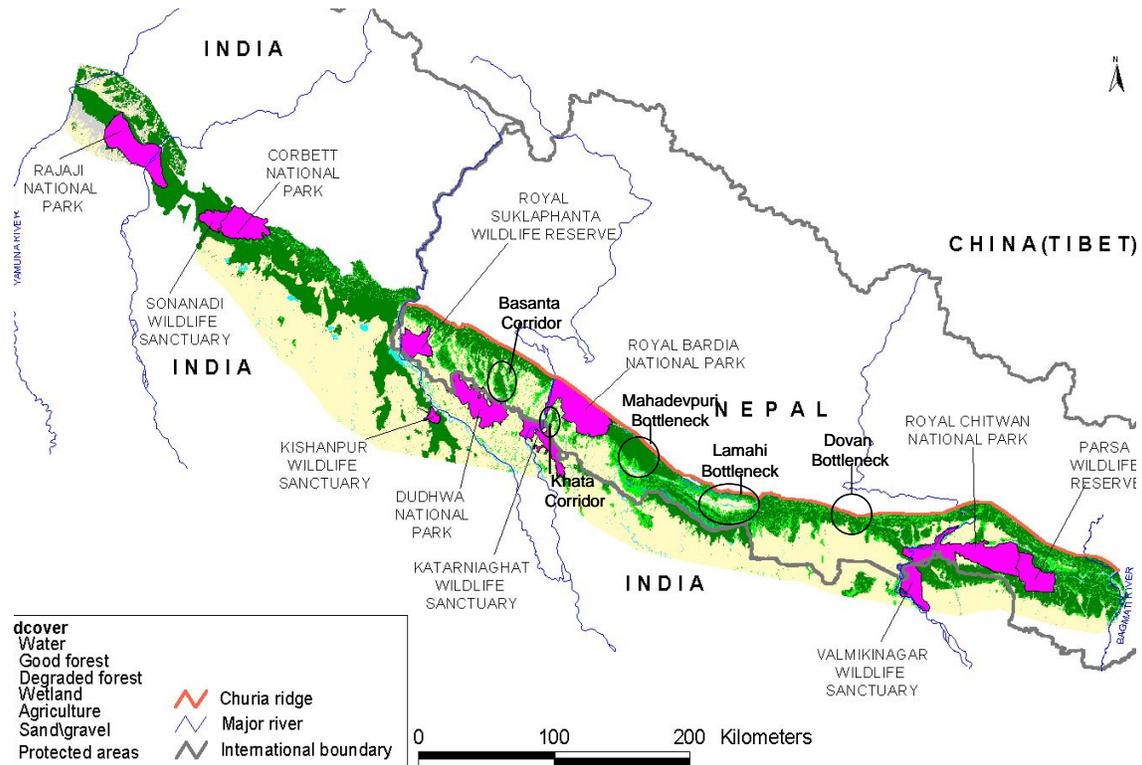
The Terai Arc Landscape – Nepal Strategic Plan (2004 – 2014) was prepared under the leadership of the Ministry of Forests and Soil Conservation (MFSC) and endorsed by His Majesty's Government of Nepal in 2004. This broad strategic plan is key to developing coordination among the agencies and organizations working in the Terai Arc Landscape for the conservation of biodiversity in this vast and complex geographical area. However, these agencies have differing and sometimes conflicting agendas, objectives and working modalities. In order to coordinate these various interventions, the Terai Arc Landscape – Nepal Implementation Plan was developed in coordination with WWF and endorsed by the Government of Nepal. It provides a more detailed framework for implementation in harmonization with various partners working in the region. Currently, WWF's efforts are focused on establishing a mechanism for efficient implementation of this plan in collaboration with the Ministry of Forests and Soil Conservation and other partners such as USAID, UNDP, DFID and SNV Nepal.

Description of Sites

The activities for this project are focused on three critical areas:

1. Basanta Corridor. This corridor connects Dudwa National Park in India with National Forest land in Nepal. Corridors serve as important links between currently distinct populations of rhinos, tigers and other species.
2. Lamahi Bottleneck. This area consists of a narrow and degraded piece of forest that connects a larger continuous stretch of forest.
3. Suklaphanta Wildlife Preserve Buffer zone. This area is critical because it borders India's Lagga Bagga National Forest and poses particular encroachment threats.

¹ Chitwan National Park, Parsa Wildlife Reserve, Bardia National Park, and Suklaphanta National Park in Nepal and Corbett National Park, Rajaji National Park, Sonanadi Wildlife Sanctuary, Kishanpur Wildlife Sanctuary, Dudwa National park, Katarniaghat Wildlife Sanctuary and Valmikinagar Wildlife Sanctuary in India.



Map 1: Project Areas in TAL – Corridors, Bottlenecks, and Protected Area Buffer Zones

Threats

The ecological landscape of the Terai is faced with an array of immediate threats endangering the very existence of its wildlife species and habitat. Not only is the long-term viability of wildlife species and their habitat at stake, but also the sustainable future livelihoods of local communities. A Root Causes Analysis (RCA)² conducted in 2002 – 2003 identified seven direct causes and seven indirect causes of environmental degradation and biodiversity loss in TAL. These causes were then analyzed and used to form the TAL-Nepal Strategic Plan. Taking into account the strengths of WWF, along with available funding and long-term goals, we identified the direct and indirect threats that we can most effectively tackle in this GCP project. The direct causes we are addressing include:

- Forest conversion due to agricultural expansion and encroachment
- Unsustainable harvesting of timber
- Unsustainable extraction of fuelwood and other forest products
- Overgrazing in public and private forests
- Wildlife poaching

The indirect causes we are addressing include:

- Lack of off-farm livelihood opportunities
- Inadequate access to and management of forest resources
- Cross border issues

² RCA is an analytical and logical tool that enabled TAL to identify a set of factors that are the main drivers or causes behind environmental degradation and biodiversity loss in the landscape.

The trans-boundary issues involved in TAL are of special concern in this project. Since Nepal and India have an open border, cross border issues such as timber smuggling, wildlife trade, poaching and cross border grazing are rampant. However, there is currently no effective mechanism to regulate and monitor cross border illegal activities in Basanta and Suklaphanta.

Strategic Goals and Objectives

The goal for the entire Eastern Himalayan Eco-region Complex (EHEC) is to maintain ecological integrity in the larger geographical area that encompasses various micro and macro ecosystems in harmony with the local human environment. Ecological integrity in the eco-region is maintained through conserving representative facets of biodiversity within habitat areas that are large enough to support the natural, ecological and evolutionary processes.

The Terai Arc Landscape (TAL) Program is a pioneering initiative in eco-region conservation in Nepal. Since 2001, the Government of Nepal and WWF jointly have taken initiatives for conservation and sustainable livelihoods in the Terai Arc Landscape – Nepal. The Terai Arc Landscape that links 11 protected areas between Nepal’s Parsa Wildlife Reserve and India’s Rajaji National Park has an objective “*to conserve the biodiversity, soils and watersheds of the Terai and Churia hills in order to ensure the ecological, economic and socio-cultural integrity of the region.*” Forests connecting these protected areas are in various stages of degradation and fragmentation due to human population and poverty pressures. Restoring these wildlife corridors will facilitate the dispersal and genetic exchange of wildlife populations, ensure the long-term survival of key endangered species, and provide ecological and socio-economic services necessary for the well being of local communities.

Since fiscal year (FY) 2007, Terai Arc Landscape Program has embarked upon streamlining its planning process and program design to ensure the alignment of its targets and achievements with WWF’s national, regional and global targets. For example, the TAL Program targets contribute to WWF Nepal’s goal, which further contributes to the targets and milestones of the Eastern Himalaya Eco-Region Complex (EHEC). Furthermore, EHEC targets and milestones contribute to WWF’s Global targets on forests and species. WWF’s global forests and species targets are the main impetus of the TAL Program. In addition, sustainable livelihoods, conservation education, coordination/partnerships, and research are major cross cutting targets which are instrumental in achieving forests and species targets. Therefore, the proposal submitted to USAID focused on the following components for this objective:

1. Forests
2. Species
3. Sustainable Livelihoods
4. Conservation Education and Awareness
5. Coordination and Partnerships
6. Research and Monitoring

Collaborators/Partners

In order to meet these objectives, WWF Nepal is working with a number of partners from the government, donors, donor-supported projects and civil society organizations. Some of these partners are:

- Ministry of Forests and Soil Conservation (MFSC), Government of Nepal
- Department of Forest (DoF), MFSC
- Department of National Parks and Wildlife Conservation (DNPWC), MFSC
- District Forest Offices and Protected Area Offices
- USAID Nepal
- SAGUN (CARE Nepal/USAID)
- United Nations Development Program (UNDP)
- BISEP - ST (SNV)

- Livelihood for Forestry Program (DFiD)
- Western Terai Landscape Complex Project (UNDP/Global Environment Facility - GEF, SNV Nepal, WWF Nepal, Local Initiatives for Biodiversity Research and Development – LIBRD, International Plant Genetic Resource Institute – IPGRI, and Nepal Agriculture Research Council – NARC)

National and community level organizations that WWF partner with include:

- National Trust for Nature Conservation (NTNC)
- Nepal Red Cross Society
- Buffer Zone Management Committees (BZMCs)
- Community Forest Coordination Committees (CFCCs)
- Community Forest User Groups (CFUGs)
- Eco clubs and eco club networks

Summary – Period 09/01/06 – 08/30/07

After restoration of democracy in Nepal, the field situation in the Terai Arc Landscape has returned to normalcy. The improved political situation has been instrumental in the smooth implementation of the program. Field staff were able to move swiftly into the landscape to implement technical support and monitoring of activities. However, the emerging insurgency in the Terai, particularly in the Eastern Terai, posed constraints to some of the activities. For example, field level activities for the expansion of TAL Program to the Eastern Terai could not be accomplished due to the dangerous security situation.

WWF TAL Program implemented activities to address threats to forests, focusing on protection, management and restoration. There were two major interventions in forest protection: first, support to national parks and wildlife reserves for effective protection of protected area forests; and second, protection of forests outside the protected areas through mobilization of the Community-Based Anti-Poaching Operations (CBAPOs). Support to protected areas included infrastructure maintenance such as fire lines and bridges for effective patrolling. GCP2 funds were not used in these activities. Instead, these activities were implemented through WWF Network's regular funding. GCP2 funds supported the mobilization of CBAPOs in corridors and bottlenecks. The major objective of mobilizing the CBAPOs was to reduce illegal activities such as forest encroachment, illegal logging, illegal harvesting of forest products and poaching. Currently, there are 22 functional CBAPOs in corridors, bottlenecks and buffer zones. The local communities have perceived significant reduction in illegal activities. But due to a lack of baseline information, there is difficulty to substantiate this reduction in measurable terms. To accommodate this need, a systematic baseline of illegal activities in corridors, bottlenecks and buffer zones will be established in FY 08. In addition, CBAPOs were formed and institutionalized in two new sites. Furthermore, CBAPOs were streamlined through preparation and implementation of a standardized guideline manual in Nepali language. The program made significant achievements in forest management. There were two main targets of forest management activities – promotion of community management of forests and promotion of improved livestock management practices to reduce grazing pressure on the forests. During this reporting period 5,364 ha additional forest in corridors and bottlenecks were brought under community forestry and 600 ha of buffer zone forest brought under community management. The FY07 target established in the GCP work plan for forest protection was the sustainable management of 2,500 ha of forest through community management. Clearly, this target was surpassed. The promotion of sustainable forest management through community management included a set of activities ranging from the formation of Community Forest User Groups (CFUGs) to capacity building of current CFUG executive members to support the networking of different CFUGs. In order to enhance institutional and technical capacity building of CFUGs and CFCCs in sustainable forest management, more than 1,700 officers of CFUGs, CFCCs and Buffer Zone institutions were provided with training, ranging from account keeping to good governance. GCP2 funding was invested in training 521 officers from 150 CBOs. As a result of the CBOs' enhanced capacity, they were able to deliver 98% of the targets supported by the TAL Program.

The promotion of improved livestock management practices was one of the major interventions in sustainable forest management in FY07. A total of 1,620 households were provided assistance in the adoption stall feeding practices. Out of a total 1,620 households, 750 households were supported through GCP2 funding. Activities included the plantation of fodder on private lands and feeding troughs. Similarly, 12 pre-existing community-managed veterinary services were strengthened through additional support in maintaining stocks of medicines and providing castration equipment. As a result of these interventions, communities in Khata, Basanta and Lamahi have perceived that grazing pressure has significantly reduced. There are several evidences of reduction in grazing pressure and improvement in natural regeneration.

In FY07, 6,800 ha of degraded forest patches were placed under restoration through plantation and natural regeneration. In this fiscal year plantation was carried out on only 157 ha of the 300 ha proposed in the FY07 work plan. Past lessons-learned demonstrated that natural regeneration is more effective than plantation. TAL Program proposed the placement of 4,500 ha of forests under natural regeneration in the FY07 work plan. With funding from WWF Finland, approximately 6,663 of forests were placed under natural regeneration in this reporting period. As a result of these activities in the forest corridors, movement of wildlife has increased in the area. The wildlife monitoring report of the TAL Program, funded by WWF UK and AREAS, substantiates an increasing number of tiger prey and a decreased number of livestock in corridors.

In FY07, WWF TAL Program sought to improve the livelihoods of the local communities through NTFP enterprises and micro-credit schemes. Major effort was directed towards establishing linkages between sustainable livelihoods and conservation. In so doing, the local CBO partners were oriented on the sustainable livelihoods framework and concept from planning through implementation stages. During this reporting period, 2,627 households benefited from NTFP enterprises. These enterprises were able to sell USD116,000 in NTFP products. NTFP enterprise promotion included a set of interventions such as skill development, micro-credit services, business development services and marketing linkages. During this reporting period, 400 households' micro-enterprises were financed from micro-credit schemes operated by the communities.

TAL Phase II document could not be finalized in this reporting period. The phase II document should have components to extend program interventions towards the Eastern Terai, but due to the current insurgency in the area, major activities such as field visits, stakeholder consultations and planning could not be carried out. However, the phase II document is still in progress. In addition, a retrospective report of TAL Program is being prepared to document processes, progress, achievements, and lessons learned in the course of implementation of TAL since 2001. Likewise, Buffer Zone management is one of the important strategies in conservation in Nepal. However, the impact of buffer zone management to conservation has yet to be critically assessed. Therefore, TAL Program is in the process of assessing the impact of buffer zone management to conservation in Chitwan National Park. This study has been conducted through GCP funding and will be finalized by 2009.

WWF TAL Program has strengthened the monitoring of the program at various levels ranging from field-level activities to landscape level outcomes. Case studies, monitoring visits, and periodic reviews are key efforts to enhancing monitoring. Likewise, feedback obtained from monitoring, reviews, and lessons learned are incorporated into planning and implementation.

Major Highlights

Rhino Poaching Reduced

Indiscriminate poaching of rhino occurred in Chitwan National Park (CNP) and adjacent areas from July to December 2006. CNP lost 12 rhinos to poaching during that period. Poachers may have taken advantage of the uncertain field situation caused by the political transition in Nepal. As a result, TAL Program took a proactive initiative to curb rhino poaching by mobilizing all concerned agencies and stakeholders. TAL program implemented an emergency operation which was named "Operation

Unicornis.” The operation was focused mainly on vulnerable sites outside the PA because movement of rhinos is increasing outside the PA and incidence of poaching is also increasing within the area.

Major strategies of the operation were to increase patrolling in vulnerable sites through mobilizing concerned enforcement agencies and local communities, to enhance civil society alliance against rhino poaching, to carry out campaigns and social mobilization for awareness raising and intensive use of media to attract attention of the government to the poaching issue. All of these strategies were implemented successfully in collaboration with PA offices and District Forest Offices (DFO). The major output of the operation was the Chitwan Declaration 2006 for Rhino Conservation, which was endorsed by all major political parties, local NGOs, professional organizations, buffer zone, enforcement agencies and conservation partners. Similarly, during a signature campaign organized by the local eco clubs, more than 100,000 people signed demanding proactive actions from the government to control rhino poaching. All these activities successfully generated pressure on the government to protect the rhino population. As a result, rhino conservation issues were strongly raised in the parliament. Patrolling in areas vulnerable to poaching was also significantly increased. The local intelligence system was strengthened, and a series of interactions for conservation actions were conducted with local communities and CBOs. DFO, armed forest guards, and protected area authorities were supported for strengthening anti-poaching operations. As a result, seven notorious poachers and rhino horn traders were apprehended by enforcement agencies such as DFO and the park authority. Rhino poaching has been reduced by 92% in the second half of this fiscal year (1 poaching case compared to 12 in the first half) following the implementation of Operation Unicornis.

Sustainable Financing Mechanism for IGA and Clean Energy Schemes

A micro-finance scheme was initiated to address the issues of sustainability and access of the poorest to biogas plants. This scheme was piloted in seven sites of TAL in FY06. It has been replicated across all project sites during FY07. Community-managed revolving funds equivalent to USD326,000 were allocated to different sites of TAL for biogas promotion, and a total of 1,150 biogas plants were installed in FY07 through this scheme. The local communities will be able to finance the installation of 850 biogas plants from repayment of disbursed loans, without external support in FY08. Our monitoring found that the repayment rate of loans for biogas is 99%. Likewise, the local CBOs are mobilizing a revolving fund equivalent to USD77,000 for financing income generating activities for its members. This fund has multiple results - sustainable financing, increased access to soft loans, decreased dependency on local money lenders, and increased capacity of local CBOs to manage and mobilize resources and increased participation.

Funding Leveraged

Western Terai Landscape Complex Project (WTLCP), a joint project of UNDP, GEF, SNV Nepal, LIBIRD, Biodiversity International, NARC, and WWF Nepal, has been in full-fledged implementation in the three westernmost districts (Kanchanpur, Kailali and Bardia) of TAL since FY06. The project is also contributing to the vision, goals and targets of TAL. With joint implementation of WTLCP, around USD800,000 has been leveraged in this fiscal year. The programmatic and financial contributions of WTLCP will be reflected in progress of TAL.

Progress by Target and Activity

The field situation has returned to normalcy after restoration of democracy in April 2006. Normal field situation has been conducive to accelerate implementation of field level activities. Therefore, more than 95% of the total activity targets have been achieved in FY07.

1. Forest Protection, Management and Restoration through Community Participation

WWF’s work in forests is categorized as – protect, manage and restore. Protect means effective protection of forest under protected area management system, while manage implies sustainable management of forest through community management and reduction of pressure. The third category

– restore, is about restoration of degraded forest areas through plantation and natural regeneration. At the heart of each activity, is mobilization of communities through community forestry so that they restore degraded wildlife corridors, and help reduce and monitor illegal activities while gaining benefits in a win-win scenario. Involvement of communities in restoration and forest management will promote ownership of the forest resources by the communities, thus reducing the threats coming from the communities. Likewise, community participation in carrying out these activities is more cost effective since there will be community labor and monetary contributions. All of these activities for sustainable forest management will be implemented through partnership with CFCCs, CFUGs and Buffer Zone institutions in close coordination with DFOs. CFCCs will support CFUGs in planning and implementation while DFOs will provide technical support as well as legal backing for conservation initiatives of CFUGs.

1.1 Goal: Protect Forests

1.1.1 15% reduction in illegal activities (e.g. felling trees, encroachment, poaching, over grazing) in the national forests compared to the 2006 baseline as a result of mobilization of Community Based Anti-Poaching Operations by October 2007

Note: There is a lack of systematic baseline of illegal activities in the project sites. Therefore, reduction in illegal activities could not be assessed in measurable and quantifiable terms; perceptions of local communities was the only method available to monitor this target.

National forests and wildlife outside the protected areas are highly vulnerable to illegal logging, encroachment and poaching due to lack of effective enforcement and control mechanisms. To improve the situation, TAL Program mobilized local communities to safeguard their natural resources and biodiversity through involving them in Community-Based Anti-poaching Operations (CBAPO). CBAPOs are currently operational in 22 sites in corridors, bottlenecks and buffer zones. As a result of their participation in CBAPOs, communities are taking stewardship of their natural resources and wildlife. CBAPOs keep vigil on illegal activities in their areas, reporting what they see to District Forest Offices (DFOs) and protected area authorities, and occasionally take action in close coordination with these institutions. Major actions taken by the CBAPOs may include the confiscation of illegally logged timber, evacuation of encroached sites, dismantling of traps, confiscating weapons such as guns used in poaching, and penalizing illegal loggers with fines. The CBAPOs also provide information and support to the DFO or protected area offices to arrest poachers and timber smugglers. DFO and protected area offices provide legal support to CBAPOs taking actions against encroachers, poachers and timber smugglers.

Along with anti-poaching activities, the CBAPOs have started to maintain records of human-wildlife conflict incidences such as crop depredation, livestock depredation and property damage by wildlife. Their efforts to record incidences of human-wildlife conflict can be used in a systematic analysis of the human-wildlife conflict trends across the project sites. Furthermore, the CBAPOs are also keeping records of wildlife sightings in their areas. This practice can be very useful in initiating community-based biodiversity monitoring in the future.

Streamlining CBAPOs across the project area was a difficult process for the TAL Program, resulting in the production of a guideline manual in Nepali language for consolidating and streamlining CBAPOs. The manual details the process of forming CBAPOs, including institutional set ups, methods of operation, financial resource mobilization, and legal matters. Now CBAPOs in all project sites function as per the guideline manual.

There is significant evidence of CBAPOs' success at controlling illegal activities. The local communities around the project sites have noticed significant reduction in encroachment, poaching and illegal logging. But it is difficult to measure achievements of CBAPOs in quantifiable terms because of a lack of baseline information. Thus, the TAL Program will highly prioritize establishing a baseline for poaching, encroachment and other illegal activities in the project site.

Activities:**Conduct training for members of the existing CBAPOs in intelligence gathering, information collection, monitoring and sharing.**

As planned, GCP funds were used to support anti-poaching operations outside the protected areas carried out by CBAPOs. During this reporting period 43 new members of existing CBAPOs were trained in methods and principles of CBAPOs. Financial support from the TAL program mainly covered meeting costs, patrolling costs, awareness generating activities and transportation. Instead of the binoculars and cameras originally planned, CBAPOs at two sites in Khata and Basanta were provided with 48 bicycles for patrolling. After this support, patrolling of CBAPOs has increased and become more effective. CBAPOs have started to maintain records of wildlife sightings and incidences of Human-Wildlife Conflict in their villages. CBAPOs are functional in 22 sites in TAL. In this reporting period, CBAPOs confiscated 287 cubic feet of illegal cut timber, 223 catapults, 80 game nets and 74 fish nets. They also collected USD1,200 in monetary penalties from people involved in illegal logging, poaching and other illegal activities. Money raised from these penalties is used to fund CBAPO operations, such as patrolling, meetings etc. CBAPOs are also carrying out awareness generating activities in villages. CBAPOs use door to door home visits in villages to convince villagers not to participate in poaching and other illegal activities. CBAPOs also organized various functions, including soccer tournaments, to spread conservation messages to the general public. During the tournaments, CBAPOs set up displays and banners convincing people to stop poaching and illegal activities. They also make periodic announcements to the audience and participating teams requesting them to assist CBAPOs in stopping poaching. This is an effective method to disseminate conservation messages to larger audiences.

Prepare a guideline manual for streamlining and consolidating CBAPOs across the project sites.

The WWF field team prepared a draft guideline manual for streamlining and consolidating CBAPOs across the project sites. The draft manual was finalized after incorporating feedback from CBAPOs and DFOs. The manual contains the detailed process of forming CBAPOs, role of CBAPOs in controlling poaching and illegal activities, methods of operation, scope of operation, coordination with DFOs and protected area offices, legal and policy aspects such as CITES. The guideline manual was distributed to all CBAPO members. WWF field team provided orientation to the CBAPO team leaders, mainly on the process of forming CBAPOs, the role of CBAPOs in controlling poaching and illegal activities, methods of operation, scope of operation, coordination with DFOs and protected area offices, legal and policy aspects such as CITES. The team leaders then communicated the guidelines to their respective team members during their regular monthly meetings. Altogether, 769 members of CBAPOs participated in the interaction meetings and orientation programs. Currently, all CBAPOs across the project sites are complying with the guideline manual.

An issue paper containing successes and lessons from CBAPOs will also be prepared and disseminated to the partners.

This activity could not be accomplished in FY07 due to severe time constraints caused by greater involvement of the TAL field team in the implementation of activities. The effectiveness of CBAPOs will be assessed in FY 08, and an issue paper will be prepared based on the effectiveness assessment.

Form and institutionalize 2 new CBAPOs.

New CBAPOs were formed in Mahadevpuri bottleneck and Basanta corridor. Orientation training and other regular support were provided to the new CBAPOs. Support mainly covered meeting costs, patrolling costs, awareness generating activities and transportation, and included group formation, orientation and learning visits. The TAL Program did not provide equipment or direct assistance with logistics because equipment and logistics needs are yet to be assessed. Equipment will be provided if the effectiveness assessment of CBAPOs recommends it.

Identify key forest sector policies where WWF can engage in the analysis, formulation, amendment, advocacy and lobbying processes.

Although GCP funds were not used in policy work, we provide the following update:

The TAL team conducted an analysis of conservation sector policies of Nepal, providing a grant to a national level NGO involved in policy research, to carry out an analysis of conservation sector policy, mainly strengths, gaps and contradiction in existing policies, acts, regulations and guidelines pertaining to conservation and natural resources management sector. The analysis also included identification of key areas or issues where WWF Nepal needs to be engaged in advocacy activities. The researchers have completed the analysis and have oriented WWF Nepal staff on their findings.

1.2 Goal: Manage Forests

1.2.1 2,500 ha forest under community forestry management in TAL Nepal by October 2007

A CFCC is composed of representatives from a network of federated CFUGs in a particular site. The CFCC is then registered with the District Administration Offices as an NGO. These CFCCs facilitate planning of CFUGs, provide CFUGs with financial support channeled from WWF-Nepal and other donors. A CFCC also monitors the activities implemented by CFUGs and coordinates with service delivery agencies and other projects/programs in the areas for ensuring efficient delivery of services to its users.

CFUGs are the main institutional vehicle for mobilization of the communities in corridor restoration activities. CFUGs have also become instrumental in local capacity building in sustainable natural resources through participatory decision making and equitable benefit sharing practices. Likewise, they have also become instrumental in looking after development activities and community affairs at the user level in the absence of the local elected bodies.

The project focused on the formation of CFUGs and their institutional and technical capacity building in sustainable forest management. The creation of CFCC's through networks of CFUGs is imperative for effective implementation of program activities. Thus, CFCCs were strengthened to play a crucial role in planning, implementation and monitoring of program activities at the ground level.

Activities:

Form 30 new CFUGs and support them for preparation of Community Forest Operational Plans.

In FY07, WWF TAL Program surpassed the initial goal of 30 new CFUGs, providing financial support for the formation of 37 new CFUGs. District Forest Office provided technical support in the preparation of Community Forest Operational Plans. DFO approved the operational plans, and 5,363 ha of community forests were handed over to the 37 newly formed CFUGs, more than double what was proposed in the FY07 work plan. WWF Finland and WWF UK also provided financial support to accomplish the handover of the forest to the community.

Provide logistical support for office management to 30 newly formed CFUGs.

WWF TAL Program provided all 37 of the newly formed CFUGs with logistic support for office management. This included stationery, chairs, tables and cupboards. This support was provided to supply the newly formed CFUG offices with basic supplies.

Support 20 existing CFUGs for revision of their Community Forest Operational Plans which are prepared every 5 years.

In FY07, 19 existing CFUGs were supported in the process of renewing operational plans and constitutions. For a CFUG to receive a forest for management, a constitution is required. The document explains: membership in the group, elections and terms of the executive body, roles and authorities of executive members, rules about distribution of or access to forest products, penalties and rewards, and financial management. The constitution is formulated through in-depth discussions among members of CFUGs and is endorsed by the CFUG general assembly. TAL Program provided the financial support and DFO provided the technical support to complete renewal of the operation plans of 19 CFUGs. Renewal of the operational plans is ongoing for the one remaining CFUG. The renewal of the 19 CFUGs' operational plans had been instrumental in the community management of

managing 3,000 ha of forest (1,000 in the proposal to GCP) by communities as community forests. This activity was also implemented in close coordination with DFOs.

Strengthen 15 CFCCs through support for registration and institutional development such as capacity development training and logistics for office management.

WWF's TAL field team conducted a capacity assessment and identified 11 CFCCs in urgent need of and thus prioritized for institutional development support. The remaining 6 CFCCs were determined to be functioning well as a result of the support they received in previous years. Primary support measures included logistical support for office management and record/account keeping. The scale of activities and volume of financial transactions has increased significantly among the CFCCs; so there was urgent need to make their financial transaction more systematic. TAL field team identified and prioritized 9 CFCCs for additional support in account keeping and financial management. TAL Program thus recruited 9 office assistants for CFCCs to manage office needs and account keeping. As a result of this support, management, account keeping, activity implementation and reporting of CFCCs have been notably enhanced. Likewise, the operation of CFCCs has become systematic and efficient. CFCCs were also provided with logistic supports such as stationery, chairs and tables.

Conduct capacity building training activities for 500 participants from 150 CFUGs on institutional development and technical skills in sustainable forest management.

In this reporting period, 112, 351, 67 and 96 members of CFUGs and CFCCs were trained on account keeping, forest management, Conservation-Livelihood Linkage Impact Measurement survey and cooperative management respectively. These training activities were instrumental in enhancing technical and institutional capacity of CFUG and CFCC members. As a result of the enhanced capacity of the CBOs, they were able to deliver 98% of the target activities supported by TAL.

Organize exposure tours for 40 members of CFUGs for sharing and learning best practices in sustainable natural resource management and livelihoods development.

2 CFCCs were supported to organize study tours, or cross site visits, to facilitate learning and sharing among CFUGs of different sites in TAL. Altogether 40 members of CFUGs participated in different study tour programs. The study tours mainly focused learning and sharing on NTFP enterprises, Income Generating Activities (IGA), and CBAPO. After these study tours, CFUGs started to adopt best practices learned.

Promote good governance among CFUGs, CFCCs and Buffer Zone institutions by conducting public hearings and public auditing at the CFCC level.

In FY07, the TAL Program conducted participatory well being rankings among CFUG members to identify and address issues of equity in benefit sharing. This activity was designed to increase the participation of poor and marginalized groups in CFUGs and to increase their representation in executive positions, management of resources and decision making. Target groups, especially poor, marginalized and socio-culturally deprived people were identified in 16 CFUGs of Lamahi and Dovan bottleneck. As a result, CFUGs will effectively target these groups in benefit sharing and program implementation. Furthermore, trainings were organized to increase CBO members' understanding of the importance of good governance to sustainable natural resources management. 97 members from different CBOs participated in the training. As per lesson learned and to ensure transparency, in this reporting period TAL Program highly emphasized compulsory auditing of financial transactions of CFCCs. Altogether 9 CFCCs' financial transactions were audited by registered auditors. Similarly, CFUGs and buffer zone institutions are adopting good governance practices such as improving transparency through public hearings. 20 local people were trained as Local Resource Persons to promote good governance practices among CBOs. With their help, 31 CBOs carried out public hearings regarding their activities and financial transactions.

1.2.2 750 households adopt improved livestock management practices and 1000 households benefit from veterinary extension services by October 2007.

The promotion of improved livestock management practices was a key intervention for reducing grazing pressure on the forest. Activities included strengthening community-based veterinary services and promoting stall feeding through supporting farmers in fodder management. IN FY07, the TAL program supported training for nine local veterinary workers and the establishment of community-run veterinary services. The community-run veterinary centers are now providing services to farmers living in the project sites. Since, the Government's livestock extension services are either non-existent or not effective, these community-run veterinary centers have played crucial roles in providing services.

Our wildlife monitoring results reveal that wildlife-livestock interfaces have been reduced significantly in Basanta and Khata corridor as a result of a reduction in open grazing practices in these areas. This fact indicates a reduction in grazing pressure in corridor forests. Regulatory measures - such as rules and regulations set by the user groups and provisions for monetary penalties for open grazing - adopted by the local communities are instrumental in reducing grazing pressure. Communities are practicing rotational grazing and development of fodder for stall feeding.

Activity:

Strengthen livestock extension services through strengthening community-based veterinary services in 12 sites.

The nine veterinary technicians that were trained the previous fiscal year are now providing services to nine local communities. More time is needed to complete training of the remaining three veterinary technicians written into the FY07 Work Plan. It takes a total of nine months to train a veterinary technician. Community-run veterinary schemes include revolving funds for procurement and stocking of medicines and basic equipment such as castration tools and microscopes. With the help of microscopes, the technicians are able to check stool samples and identify intestinal parasites. 770 households directly benefited from the services of community-managed veterinary services. The community-based veterinary schemes have provided treatment services for a minimal fee to more than 3,653 cattle in this fiscal year. Of the total 3,653 cattle 1,018 were sterilized and 2,735 were vaccinated. Sterilization will help to reduce the growth of unproductive cattle, thereby reducing pressure on the forest. The community-run veterinary centers are providing animal health test facilities such as work test. These veterinary service centers are trying to coordinate with District Livestock Office (DLO). The service centers have organized animal health check camps in collaboration with DLOs. However, there is a need to direct more efforts to establish linkages between DLO and community-run veterinary centers.

Promote agro-forestry for stall feeding. CFUG and Buffer Zone institutions will identify households that have potential to adopt improved livestock management practices.

In FY07, TAL Program promoted stall feeding for cattle by assisting 750 households with fodder development, including the distribution of feeding troughs with 50% subsidy. Distribution of the feeding troughs encourages farmers to adopt stall feeding practices, as opposed to free-range grazing in forested areas. The TAL Program also provided farmers with grass and fodder seedlings with 50% subsidy to be planted on their properties. This will increase farmers' supply of fodder and further reduce grazing pressure on the forests. The increased availability of fodder from private plantations will encourage farmers to adopt stall feeding practices and abandon open grazing. The results of this intervention will be seen in the coming year and will be assessed on the basis of the results chain submitted in the FY07 Terai Arc Landscape GCP2 Work Plan.

Promote marketing linkages of dairy products.

In FY07, TAL Program supported the establishment of milk collection centers in 2 sites. These milk collection centers were equipped with milk cans and bicycles for transportation, and lacto meters to monitor and control milk quality. These collection centers are linked with cooperatives for marketing the milk product. TAL Program had planned to replicate these dairy cooperatives at 10 more sites in FY07. However, only 2 collection centers could be established since feasibility studies were not completed across all of the sites. The program will give high priority to replicating best practices of

dairy production and marketing through a cooperative in the coming year. GCP2 funds will not be used for this activity.

1.3 Goal: Restore Forests

1.3.1 4,800 ha of degraded forests in critical areas in TAL under restoration by October 2007

The major thrust of the TAL Program is to restore critical areas such as corridor and bottleneck forests through community participation. The local communities are actively participating in plantation and natural regeneration in the corridor and bottleneck forests. Through the participation of the local communities 29,500 ha degraded forest areas in corridors and bottlenecks have been put under restoration since 2001. As a result, there has been a net gain of 1,705 ha of forest area in critical areas in the five year period from 2001 to 2006. As a result of increased forest cover, natural regeneration of habitat for ungulates and other flagship species has also improved. For example, the presence of tigers in corridors indicates that the corridor forests are still suitable for dispersion though not yet for breeding. Presence of tiger in corridors also indicates presence of a good population of prey base, further substantiating improvement in habitat as a result of restoration. The TAL Program wildlife monitoring report also supports these indications. The major achievements in forest restoration in FY 07 are as follows:

Activity:

Support plantation activities of CFUGs of Basanta, Lamahi and Suklaphanta that will amount to a total of 300 ha degraded forests.

In FY07, WWF TAL program supported CFUGs in the plantation of only 157 ha of the 300 ha originally planned on degraded forest patches. Recent evidence indicated that natural regeneration is a more effective means of revitalizing degraded forests, and therefore efforts were shifted from plantation to enhancing natural regeneration. The geo-climatic condition of Terai is ideal for the natural regeneration of seedlings, which grow rapidly once grazing is controlled. The survival rate among seeds in natural regeneration is higher than that of plantation, making this method more cost effective. The plantation efforts were mainly carried out in degraded forest patches in Basanta, Khata and Lamahi, where patches of forests that were handed over to the community were heavily degraded land (<10% tree cover). While many areas regenerate naturally, those patches that require plantation for restoration were identified by the CFUGs and verified through a TAL field team technical assessment. Local communities have been managing nurseries of indigenous species to supply for plantation. In some sites, temporary fences/ditches made with materials from the forest and local labor are being used to protect newly planted areas until the trees are large enough to be safe from livestock grazing. The WWF-Nepal field team provided the technical support for these activities in conjunction with the DFO and also provided financial support to manage the nurseries and plantation activities.

Support natural regeneration of 4,500 ha of degraded community forests in Basanta, Suklaphanta and Lamahi.

In FY07, 6,663 ha of degraded forest patches were under restoration through natural regeneration, surpassing the proposed 4,500 ha. Natural regeneration was given heightened priority because it proved to be more effective than plantation methods. TAL field team and CFUGs worked together to identify the degraded area/forest patches to be restored through natural regeneration. WWF Finland provided additional funding to achieve the natural regeneration on 6,663 ha of degraded forest. TAL Program provided financial support to the communities actively involved in laying trenches along degraded forest patches to prevent overgrazing and encroachment. Close observation of the trench system indicates that there has been no evidence of encroachment in forests where communities have dug trenches around degraded land.

Increased uses of corridors by flagship species (tiger/rhino).

WWF TAL Program's wildlife monitoring report revealed the presence of tiger and movement of other flagship species in the corridors. Likewise, communities around bottleneck forests also reported

a resurgence of wildlife such as spotted deer, barking deer, hare and other species, after restoration of the degraded forests. Therefore, natural regeneration of forests has not only enhanced the forest resource base of the local communities, but also improved habitat for wildlife.

2. Sustainable Livelihoods Development

2.1 Goal: Sustainable Income and Credit

2.1.1 Improve the livelihoods of 2,000 households (including marginalized) in critical areas, while reducing pressure on biodiversity by October 2007

In FY 2007, WWF TAL Program focused on the use of NTFP enterprises and micro-credit schemes to improve the livelihoods of the local communities. The local CBO partners were trained in the sustainable livelihoods framework and concept from the planning to implementation phases, enforcing their understanding of the linkages between sustainable livelihoods and conservation. Likewise, a guideline was prepared in the Nepali language and used to streamline Income Generating Activities (IGAs). Similarly, the capacity of CBOs to manage micro-credit schemes was enhanced through training in record keeping. Currently, the CBOs in TAL are managing a revolving fund worth USD76,000 to operate micro-credit schemes in project sites. The micro-credit schemes have significantly enhanced access of the poor and marginalized to collateral free soft loans to finance their micro-enterprises. The fund has not only increased income generating opportunities, but also reduced dependency of these groups on traditional sources of loans such as local money lenders who provide high-interest loans. It is expected that by reducing the poor and marginalized dependency on local money lenders for high interest loans, indebtedness will be reduced and people will be less dependent on natural resources.

Activity:

Promote NTFP-based IGAs through training and business development.

In FY07, 633 households were trained in basic NTFP cultivation, harvesting and processing skills. 67 farmers participated in study tours on NTFP management and enterprise development. Likewise, 333 persons participated in interaction programs on NTFPs. During the interactions, program experts and resource persons discussed with the local communities different aspects of NTFPs, such as their ecological importance, NTFPs available in the area, management, economic value, market prospects and other related issues. At the same time, the audiences asked several questions about NTFP management and enterprises. The interaction programs were, thus, organized for disseminating information and knowledge about NTFPs. The promotion of NTFP enterprises included skill development, micro-credit services, business development services and marketing linkages. USAID funding has supported the Business Development Services and Marketing and Production Services (BDS MaPS) and helped train Local Resource Persons (LRP) to promote NTFP enterprises. During this reporting period, NTFPs and High Value Crops have been cultivated on 133 ha of private land and community forests. Major emphasis was given to essential oils such as chamomile, citronella, lemon grass and Menthe. Altogether 2,627 households have benefited from the NTFP enterprises in this reporting period. Progress in skill development and enterprise development exceeded that proposed in the FY07 work plan because interventions in this component were scaled up with additional funding from other sources, such as WWF US. Women were major beneficiaries of off-farm income generating activities. The major off-farm IGAs were sewing and cutting, incense making and soap making. Off-farm IGAs targeted women from the poorest households, mainly from families of freed bonded laborers and socio-culturally deprived groups. This activity was promoted through the local cooperatives.

TAL Program began facilitating market linkages for NTFP products following implementation of the BDS MaPS project. TAL Program embarked upon institutionalizing the marketing linkages through the promotion of cooperatives. Currently, one cooperative in the Buffer Zone of Bardia National Park has been successfully marketing NTFP products - essential oil extracted (processed) from Mentha,

Chamomile, lemon grass, etc.- of farmers in the area. TAL program provided initial support to the cooperative to market NTFPs. The cooperative has now become capable enough to find buyers, collect market information, determine product prices and negotiate with traders. This cooperative model of marketing will be replicated in the other project sites in the upcoming fiscal year.

The total sale of NTFP products from project sites during this reporting period was equivalent to USD116,000 - a cumulative figure of income of individual households earned from sale of NTFP products. This income is distributed to households based on their production and collection of these NTFPs. A total of 1,200 households were benefited from these sales. This is a significant amount for poor and marginalized people in the project sites. In addition, there is evidence that people are more able to cope with damages caused by wildlife as a result of the income they have earned from NTFP activities. For example, members of Samjhana and Dalit CFUGs in Khata corridor are economically and socially deprived. Elephants frequently damage crops and houses in the area, and they used to blame TAL Program for bringing the wild elephants. In FY06, farmers in the area started Mentha cultivation and were provided two distillation plants. This year, a single household earned USD250 from Mentha in three months. The communities were unaware that they could earn that much cash income from traditional crops. Because of these profits, the communities are very interested in scaling up cultivation of Mentha in the area. As a result of the cash income at hand, people worry less about possible damage caused by elephants. The people are cooperating much more closely with WWF and are less hostile towards the elephants. In essence, the income generating activities have been instrumental in changing the attitudes of the local communities towards conservation and wildlife.

Support communities in managing a revolving fund for micro-credit schemes at the user group levels.

TAL Program established a revolving fund for a community-managed micro-credit scheme. The revolving fund is complimented by a saving scheme. A guideline manual has been prepared and implemented to streamline micro-credit and IGAs across the project sites. As per the manual, beneficiaries of micro-credit schemes are identified on the basis of a participatory well being ranking. Poor and marginalized people are given first priority for participation in IGAs. Requests for loans are approved during meetings of the respective CFUGs. During this reporting period, 668 households were provided with micro-credit loans by CBOs using the revolving fund to initiate IGAs. Out of the 668 households, more than 400 households received micro-credit for NTFP-related IGAs. Loans taken from the revolving fund were invested mainly in purchases of NTFP seedlings and in the preparation of fields, harvesting and processing. As a result of the income generated from NTFP enterprises from micro credit schemes, the attitudes of farmers towards the TAL Program and conservation have been changing for the better.

In addition, WWF has developed and applied a Conservation-Livelihood Linkage Impact Measurement (CLLIM) survey. This method will be applied to monitor the results of micro credit lending and NTFP enterprises as per the result chain in the FY07 GCP work plan.

3. Learning Component and Program Development

TAL Program has highly emphasized adaptive management since 2005. The program has two strategies to enhance adaptive management. First, strengthen monitoring and database management; and second, research studies. Major activities carried out in FY07 under the learning component were as follows:

Conduct regular monitoring of progress, quality and effectiveness of the interventions of the TAL Program including changes induced by the interventions.

In FY07, WWF TAL Program embarked upon improving database management at the field project office level. The database includes progress of activities at the site level, including the progress of beneficiaries across sex, economic status and ethnic background. A standardized format has been developed for database management. The database has also been integrated into a GIS database. The

GIS database will be helpful in analyzing outcomes and achievements of the program over the years. Likewise, it will provide information useful in planning and designing programs in the future.

Due to improved security situation, monitoring visits by Project Managers and other staff from field as well as Kathmandu were more frequent and regular. Monitoring by Project Managers and other field staff was mainly focused on activity level progress, problems, constraints and solutions, while monitoring from Kathmandu was focused on achievements of annual target, direction of projects towards achieving targets and feed back to planning and implementation. At the same time, periodic reviews and lessons learned/reflection workshops were instrumental in providing feedback to program management, identifying programmatic and operational issues and assessing the status of activities. These workshops were helpful in sorting out issues related to implementation, planning and management. These workshops provided an opportunity for in-depth discussion among project staff on issues pertaining to planning, implementation and management. Furthermore, the discussions helped formulate collective decisions to identify the issues, develop solutions and take action. Several actions were taken to improve planning and implementation as suggested by these workshops. Furthermore, these workshops were also instrumental to share learning, understanding and experiences which further helped to develop a common understanding on issues related to program.

The field offices also strengthened the monitoring of activities on the ground. This was exhibited by increased visits by field staff, the development of checklists and formats to document information during monitoring visits by field offices, and strong involvement of local communities in participatory monitoring.

Two case studies conducted on biodiversity (forest flora and fauna) and socio-economic status in order to determine the change caused by WWF's activities.

Micro level case studies were carried out to monitor the impacts of project interventions on biodiversity and socio-economic status in project sites. In this reporting period, in-depth and micro-level case studies were conducted on 4 themes: corridor restoration through community participation, NTFP enterprises, institutional development and micro-finance scheme for biogas promotion. These studies were carried out by external consultants. Major findings of the case studies were:

- Benefit from TAL program as perceived by local communities,
- Local CBOs are not financially sustainable yet,
- Corridor restoration has been successful in terms of increased forest cover, movement of wildlife and enhanced supply of forest products
- Social assets such as institutional development, group cohesion, capacity development, and ownership of natural resources were enhanced as a result of community forestry in corridors
- Local communities perceived benefit from conservation albeit conflict with wildlife is increasing
- NTFPs have shown greater prospects for enhancement of the livelihoods of local communities
- Increasing capacity of the local communities or institutions
- Scientific management of corridors is a must

In addition, TAL Program carried out internal case studies on linkages between livelihoods development and conservation. These case studies have provided useful insights about strengths and lesson learned in major interventions. These case studies have revealed that TAL Program interventions have been successful at enhancing natural, social, physical, financial and human capital in the project sites. But there is need to sensitize the local communities about the linkages of livelihoods and conservation right from the planning phase. For example, if communities are implementing biogas they should be made aware of the purpose of biogas promotion. Therefore, the TAL field team should instruct the local communities about the purposes of the activities and their linkages to conservation. After doing so, the local communities will start planning and implementation, with conservation results in mind. The local communities should also be made aware and capable of monitoring conservation results of the activities which they have implemented.

TAL Program sponsored a study on impact of Buffer Zone management on conservation in Chitwan National Park. This study will be completed by 2009.

A five-year Retrospective Report of TAL is currently in progress. The retrospective report will document the inception of the TAL program, progress, achievements, impacts, lessons learned, processes of management of landscape level conservation, issues and priorities. This report will be helpful in sharing TAL Program's experience in landscape level conservation. This report will be published by October 2007 with the USAID logo.

A database of biodiversity, socio-economic and project activity data will be maintained at the central level at the WWF-Nepal Office in Kathmandu.

Satellite images of corridors, bottlenecks and protected areas have been updated through support of SNV Nepal (Western Terai Landscape Complex Project). The latest satellite images have been purchased to analyze changes in forest cover, vegetation etc. Forest cover, vegetation and other geographical information are being analyzed regularly through GIS. The analysis is carried out with respect to program interventions. Likewise, other socio-economic data of TAL and project sites are integrated into a GIS database. Currently, there is a full-fledged GIS and database unit at WWF Nepal. The GIS database is being used in analyzing outcomes and achievements and planning and designing programs.

Program Development

The first phase of TAL Program ended in June 2005, and a project document for the second phase of TAL Program is being prepared. This document will build upon achievements, experiences and lessons learned from the previous phase. It will include a section detailing the expansion of the program interventions into the Eastern Terai. Due to the insurgency in the Eastern Terai, field activities such as stakeholder consultation, reconnaissance visits for site identification and verification could not be done for phase I. Therefore, preparation of the second phase document has been delayed. It is expected to be completed by December 2007.

Next Steps

Based on lessons learned and experience from previous years, TAL program will prioritize the following activities in coming years:

- Proactive actions to mitigate human-wildlife conflict
- Scientific management of restored corridors
- Improve cross sectoral coordination with district level line agencies and local level elected bodies such as DDCs and VDCs
- Strengthen partnerships with the local NGOs and co-implement specific activities
- Strengthen conservation education and awareness activities

Success Stories

Community Forestry in Khata Corridor: A Local's Perspective

"Had TAL program not been implemented in Khata, the area would have been barren and we would have had very difficult time", says Krishan Pariyar, 37, and secretary of Community Forest Coordination Committee (CFCC), Khata. Krishna Pariyar stands as a representative of a marginalized section of the community. He belongs to a so-called lower caste in the Hindu caste system. He himself worked for 16 years as Bali Damai (a system in which a tailor collects grain from the community for his service on an annual basis). After the eradication of malaria and improvement in access to land in the Terai region, migrants from the hills, mountains and others parts of country came to settle in the Khata area and other parts of the Terai. The Khata area was an ideal place for poor migrants, since the area was remote and forested areas could easily be converted into agriculture lands. This migration,

combined with poverty and illiteracy, contributed to massive and rapid deforestation. In most cases, local communities became the scapegoats for the deterioration of the forest. “I was always asked to cut down large trees for timber because I was strong, but I never got opportunity to sleep in a wooden bed”, says Bhadai Tharu, who had worked as a bonded-laborer for seven years.

Deforestation of areas for agriculture lands and timber smuggling contributed to the depletion of forests in Khata. “You could see a village in three kilometer distance from Khata”, says Jagai Tharu. Forests were almost destroyed with no chance for seedlings to regenerate. People had to invest a lot of time to collect adequate supplies of fodder and firewood. People had to grapple with forest officials to collect fodder and firewood – very basic necessities. In most cases, people had to travel to forests in India. Communities began to hear about community forests, but were not fully aware of the benefits associated with community forest management. People of Khata began to discuss among themselves community forests, which sensitized the communities gradually. Meanwhile, Shiva CFUG of Dalla served as a model. “We found that users of this community forest were collecting Khar (thatch grass) from their CF for which we were dependent on in Bardia National Park (BNP)”, says Dharma Bahadur Tharu, Treasurer, Ganeshpur Sisiniya CF, Pattharbhojhi. But it was not easy to collect this grass. People had to obtain permission to go into the park. The journey usually lasted for at least three days. Since this was the best option to collect thatch grass, entire households would travel to harvest it.” Meanwhile, TAL Project staff started to visit Khata and discuss conservation with the people. TAL Program supported the formation of CFUGs. At the same time, TAL Program effectively coordinated with the District Forest Office to support community forestry in Khata. After that community forestry gained momentum in Khata.

With Shiva CFUG as a model, people began to understand the inherent benefits of community forests and began to conserve the areas lying in the immediate periphery of settlements – setting them aside as their community forests. One person said there was a fear of not having forest areas for future use. Since women had been facing hardships associated with collecting firewood and fodder, they played an important role in taking stewardship for conservation.

TAL provided support in constitution preparation, boundary delineation and registration of community forests, as well as other social and economic activities. TAL worked as a bridge between the district forest office and local people. This helped to expedite the formation of community forests and the registration process. Now, most of the people acknowledge and appreciate TAL’s contribution in community forest movement in the area. Kul Bahadur Buda is one of them. He adds, “CF support is the most remarkable contribution of TAL”.

Interestingly, people reported some changes in livestock rearing practices. “We, Tharu people, used to keep a large herd of cows for dung (manure) and draft. Now this practice is almost absent. Stall feeding practice is being adopted”, says Gopi Lal Chaudhary, 55, a resident of Pattharbhojhi.

Apart from firewood and fodder, people have good access to timber. A woman, reluctant to tell her name, said “You could not expect wooden furniture in a poor Tharu house few years back, which is now common in our community”. This indicates that people are happy with the benefits they are deriving from forests.

“One of the most significant benefits we got in the last five years is the community forest”, says Dhansara Nepali, 35, a user of Dalit Mahila CFUG. She adds, “CFUG enabled us to better address our social problems”. She further enunciates, “We had no options other than to request money from a lender and landlord to take loans. Now we can borrow from our CFUG in case of emergency and need.” Thus, CFUG is emerging as a dynamic social group that takes care of the needs and aspirations of people. Danda Bir Nepali, who had migrated to Kothiyaghat from Bajura district of the far western mountainous region of Nepal, is very optimistic about the prospects that a community forest can bring. He had faced a lot of discrimination from so called high caste people. Then he filed a lawsuit against prejudicial higher caste people for justice, which ended up without results. “I sold everything

that I could to cover the expenses”, said Nepali. He finally migrated to Kothiyaghat and started a tailoring business with a rented machine. Later, he learned about the CF revolving fund and took a loan to buy a sewing machine. Encouraged, he now plans to pay back the money and then take another larger loan of money to expand his business.

“I used to apply insecticides to control aphids. Now birds eat this pest”, says Ram Gopal, 31, Kothiyaghat. Previously, he was unaware about the roles of forests in agriculture, and he got this knowledge through experience.

Most of the people involved with community forests helped to resuscitate greenery in the forest areas. Hari Prasad Tharu, 38, Dhanaura, who had supported a researcher to carry out a forest inventory in 2003, says, “I can not cross the whole forest area through the same transect that I had crossed for his support”. This shows a remarkable change in regeneration and forest cover of forest within 3.5 years. People are happy at having wildlife in their CF. “We had to go to the national park to see birds, spotted deer, and elephants. Now we can see them in our forests”, says Ram Kumari Chaudhary, a student of grade 6 of Nepal Rastriya Nimna Madhyamik Bidyalaya. Elderly people are very pleased by the restoration of forests. “I often visit Gol Ghar (rounded house—a meeting place of users which is usually constructed inside community forest) in morning and evening. It gives me immense pleasure to hear the tinkling sound of the forest and it reminds me of my youth days”, shares Ram Tharu, a resident of Dhanaura.

Turning Waste into a Resource

The concept of establishing a Bael Juice factory was conceived to promote sustainable community based use of forest products. TAL staff discussed the possibility of a bael juice factory with local people interested in IGAs. With the support of TAL, some key local leaders of community forests visited Lahan to assess the possibility of a bael juice factory in Khata. “We got confidence from Lahan”, says Dhiki Ram Chaudhary, Manager of the bael juice factory. A complete inventory of bael (*Aegle marmelos*) was carried out in both community forests and government forests to assess the availability of raw materials. Dhiki Ram further adds, “We (Gur Din Tharu, Gita Prasad Bhattarai, Maheshor Bohora, and Krishna Pariyar) realized the feasibility of this effort and we worked hard with the full support from TAL staff”.

The factory was registered as a Small and Cottage Industry in Guleria, the District Headquarters of Bardia district]. Initial capital of this factory was around USD 9,500. The capital was collected from CFCC and CFUG funds in the form of shares. Most of the CFUGs and CFCC purchased shares ranging from USD76 to USD2,300. TAL Program provided financial support to purchase and transport the machine/equipment. TAL supported the development of a factory business plan too. Similarly, Mahila Laxmi CF supported the construction of a shed house. With support of all multiple stakeholders, the factory finally started to operate commercially in 2005. The total production capacity of factory is 1,100 bottles per day which requires approximately 500 kg of raw material.

Diki Ram recalls some of the problems associated with running the factory, “We were not experienced in running a factory technically and administratively. We established the factory, but managing the financial resources to buy sugar and other chemicals was very difficult. To protect the factory from failing, I took a risk to run the factory on contract basis.” [The statement implies that the factory was supposed to be a failure because it was run by community. Therefore, Dhiki Ram made a venture to run on contract basis. No one was sure that he would be successful. Thus he said he was taking a risk. Because this enterprise was new for them] Dhiki Ram is optimistic about the future of the factory. He has got enough confidence from his past experience and field visit to Lahan.

The factory has provided benefits to local people in various ways. Mostly, poor people collect this previously neglected fruit and earn up to USD140 per year per person. Besides, students who come from poor backgrounds are able to use their leisure time to make some money, which has not only helped to cover their stationery and books expense but also supported their families. Rajesh

Chaudhary and Ram Kumari Chaudhary, who study in Nepal Rastriya Nimna Madhyamik Vidhyalaya, Dhanura, use their leisure time to collect bael and earn some money. “I give money to my father. He gives me some pocket money out of that”, says Ram Kumari. Ram Kumari seems to be jubilant to be able to contribute to her family though in small scale. Like Rajesh and Ram Kumari, hundreds of other students are involved in collecting bael for income.

Apart from collectors, altogether fourteen people have benefited from direct employment at the factory. Most of the employees are from poor economic backgrounds. Sangita Bista and Hira Chaudhary are two of them. Twenty-seven-year old Sangita Bista does not own land. Before the factory, she and her three daughters were struggling to survive. She moved to India with her husband, but life in India was harder than that in Nepal. She came back to Nepal and started a hotel business in Orali bazaar, but could not earn sufficient money to feed the family. Finally, she got a job in this factory. “I earn up to NRs 4500 per month, including overtime allowance”, says Mrs. Bista, “Now I am supporting my family and I don’t have to ask husband for money, which pleases me very much”, she adds smilingly. Twenty-year-old Hira Chaudhary has the same socio-economic status that of Mrs. Bista. “My husband works in India, and he doesn’t remit money regularly. I have to take a loan frequently to meet family expenses. Had this factory not been established here, I would have worked as an agriculture laborer”, says Mrs. Chaudhary, “Last year I bought a bicycle by saving some money from family expenses”.

Lessons Learned

- New activities and processes can also be successful if the communities perceive tangible benefit from that particular activity. For example, micro-finance for biogas installation was a completely new scheme in project areas of TAL. But the scheme received an overwhelmingly positive response from the local communities. Therefore, adequate research to identify interventions that could generate quick results is very important for successful implementation.
- Conservation is a social and political process. But political commitment for conservation in a country like Nepal is always low. The development agenda always overshadows the conservation agenda in poor and developing countries. Therefore, conservation organizations like WWF Nepal need to play a stronger role in advocacy. A strong alliance with civil society could strengthen WWF’s role in advocacy. A civil society alliance, both at local and national level, could provide a greater opportunity for effectively safeguarding and pursuing a conservation agenda.
- Landscape level conservation requires the establishment and development of coordinated systems and practices. The systems must coordinate institutions, policies, guidelines and mechanisms at both central and local levels, which are necessary for landscape level conservation. The practices must include adaptation, and undertaking actions in line with principles, guidelines and the vision of landscape level conservation by stakeholders or partners at all levels. Systems and practices could be put in place through inculcating vision, goals, knowledge and methods among partners at all levels from local CBOs to regional level NGO partners to national level government agencies. Convincing facilitation and strong catalyst role is essential in doing so. Diversification of partnerships beyond the conservation sector could be a good strategy for broad-based participation in landscape level conservation. There is also a need to groom NGO partners at the regional level to advocate and practice landscape level conservation.

Future Challenges

Major challenges of the program for next fiscal year will be as follows:

Political Transition: A Constitutional Assembly election has been scheduled for November 2007. The election is an opportunity for Nepal to institutionalize, mandate and achieve the peoples’ movement of April 2006. However, Nepal has bitter experience that illegal activities such as encroachment, tree

falling, timber smuggling and poaching tend to increase during times of political transition and major political upheavals. Since efforts and attention of the government and enforcement agencies are focused on the election, the period of time during the election is ideal for poachers and timber smugglers. Likewise, political parties and leaders are not sensitized to the importance of biodiversity conservation. Conservation issues and priorities are generally overshadowed by humanitarian and development agendas. For example, post conflict reconstruction; rebuilding and sectoral restructuring has been highly prioritized in the 3-year interim plan (2007 – 09) of the government of Nepal. Therefore, as a leading conservation organization, WWF and its programs like TAL has to direct more efforts towards strengthening conservation efforts at the field level and advocacy at the central level. In addition, restructuring of the state has become a key agenda in the upcoming constitutional assembly. Issues on the rights of indigenous peoples to land, water and forest resources have been strongly emphasized by indigenous people's organizations, activists and academics, and must be addressed during the restructuring of the state. We can assume that major policy changes in natural resources management will take place soon after the election of the constitutional assembly. The policy changes will have tremendous implications for biodiversity conservation. Therefore, conservation organizations like WWF Nepal are preparing to respond as well as adapt to the policy changes.

Large-scale Infrastructure Development: There are serious challenges ahead for conservationists to minimize the impact of large-scale infrastructure development projects including oil exploration in critical areas and around protected areas. Several infrastructure development projects, ranging from road development to electricity transmissions lines, are likely to be implemented inside and outside the protected areas of TAL in the near future. Keeping up with peoples' desire for development, while ensuring minimum impact on biodiversity, is a great challenge. This requires strong networking and advocacy with the business and industry sectors as well as policy level work.

Sub-grants

None

List of Annexes

- Guidelines for community-based anti-poaching operations (CBAPO's) (in Nepali language) - pending finalization
- Guidelines for income-generating activities (in Nepali language) – pending finalization
- Guidelines for micro-credit schemes (in Nepali language) - pending finalization