



WCS

Biodiversity Conservation at the Landscape Scale

**A Program of the Wildlife Conservation Society
Supported by the USAID/Global Conservation Program**

**Northwestern Bolivian Andes Landscape
Conservation Area, Bolivia**

**Semi-Annual Report
October 2000 – March 2001**

I. Summary of Activity Status and Progress

a. Introduction/Summary

The Northwestern Bolivian Andes Biological Conservation at the Landscape Scale (BCLS) Program aims to ensure conservation of the wild lands and wildlife of the greater Madidi area through a landscape conservation approach, working with other conservation and sustainable development projects active in the region. The landscape approach is designed to determine the needs of key wildlife species, assess human activities across the same landscape, and use the intersection of these to focus efforts on those areas and actions which emerge as key conservation conflicts or opportunities. To accomplish the long-term goal of biodiversity conservation at the NW Bolivian Andes Landscape Conservation Area (LCA), we focus on four interrelated objectives: establish baselines and monitor landscape species and the landscape context in which they are found; strengthen local, on-site protection and management of biological resources across the landscape; promote the development of national policies that support the landscape conservation approach; and elaborate a participative, integrated landscape conservation action plan.

In general, the Madidi program is 'on-track'. As in the last reporting period, delayed activities are due in large part to the scheduling/temporal limitations of SERNAP (the National Protected Area Service), which is keen to fully participate in joint activities. Nevertheless, during this reporting period we have continued to develop alliances and prioritization techniques that will allow us to implement a landscape scale conservation strategy. For example, we have begun an environmental dialogue at the municipality level, and although we recognize that success at this level implies a long-term view, we hope that eventually this approach will include inter-municipality coordination. Similarly, we have continued to assist the Tacana indigenous group in their efforts to consolidate their territorial demand and develop innovative participatory techniques designed to ensure the production of a representative sustainable natural resource strategy for the TCO (Territorial Demand: Indigenous Lands). In addition, we have further developed the landscape species approach and are now conducting specific research programs on three selected landscape species.

b. Highlights

- During January 2001 we conducted a Park Guard workshop in the Apolobamba protected area concerning landscape conservation and the distribution of landscape species. This was a major

success with the 20 participants providing over 1300 distribution points for landscape and threatened wildlife species including around 200 distribution points and over 10 probable nesting sites for the Andean Condor. Basic distributional information is critical to the landscape species approach. Apart from providing data the Park Guards were also trained in data collection methods for similar information from local people using questionnaires. The Park Guards also immediately requested further workshops relevant to the ongoing management of the protected area dealing with: a) Monitoring and Investigation, and b) Wildlife: Conflicts vs. Benefits.

- Over the last six months the Community Wildlife Management Program has been steadily growing building on our initial experiences with the Tacana communities currently involved in native honey production in the lowlands. This growth has resulted in projects with highland communities on critical human-animal conflict issues such as crop damage problems. Significantly, these projects were solicited by the communities, and the communities themselves are conducting the studies with technical support from the program. Meanwhile, in the lowlands the program philosophy of asking interested communities to choose project topics is also proving a great success, with a total of 8 Tacana communities presenting ideas for projects over the last six months.
- The Tacana TCO zonification process carried out in February and March 2001 was a great success, and involved an innovative participatory approach designed by project personnel and senior members of the Tacana representative body (CIPTA). Over 100 Tacana (representing 22 communities and 5000 people) gathered in Tumupasa to make the critical first planning step towards a land-use plan for the Tacana TCO. (see III. Success Stories and Appendices).

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II. Detailed Description of Progress

a. Key program objectives for this reporting period (October 2000 - March 2001)

Our goals for this reporting period were to continue our pioneering research efforts regarding biodiversity in northern La Paz, as well as to further develop landscape species studies by implementing standard surveys for spectacled bears and developing methodologies for jaguar. In addition, we aimed to contribute to the Living Landscapes Program drive to refine the Landscape Conservation Approach, particularly by further refining the criteria for the selection of landscape species. We also hoped to build on our initial community wildlife management experiences with the Tacana and extend this effort to highland communities, especially those interested in human-animal conflict issues.

In the context of the development of a 'Strategy for Conservation and Sustainable Use of Natural Resources within the Tacana Indigenous Territory' together with CIPTA (Tacana People's Indigenous Council), our goals during this phase were divided into legal and management aspects. Within the legal component our objective was to accompany the last two public expositions of the field campaign of the land titling process, to present final observations regarding particular properties to the land titling agency (INRA), to prioritize the follow up of those observations of particular relevance to Tacana communities and to the management of the TCO as a whole, and to present CIPTA's observations to the Spatial Needs Study (EINE) carried out by the technical team of the Vice-Ministry of Indigenous and Campesino Affairs (MACPIO). Our management goals were to conclude the Participatory Rural Appraisal (PRA) campaign, to write up the information gathered during the PRAs, conclude transcribing this information into a GIS database and on the basis of this develop a series of maps: a socio-cultural map, a land tenure map, a map of potential resources, and a map of communal resource use areas. Finally, on the basis of these maps we aimed to produce a zonification plan for the proposed Tacana indigenous territory.

The landscape team also intended to consolidate our relationship with several key national and local institutional partners by completing cooperative agreements and where appropriate specific institutional strengthening plans. We also intended to develop our initial participatory threats and opportunities working document into a Landscape Priorities and Actions document to be used by both local stakeholders and actual and potential donors to the region. Finally, as part of this process we also intended to explore the ways local government, in the form of municipalities, can contribute towards the landscape conservation approach, specifically in how to ensure that the environment is taken into account in municipality annual work plans and how to ensure longer term financing mechanisms for conservation initiatives across the landscape.

b. Activity Description

OBJECTIVE 1: Establish baselines and monitor landscape species and the landscape context in which they are found.

Activity 1.1. Biodiversity Surveys

On-track

In February 2001, we conducted one biodiversity survey in the tropical lowland forests between the Tuichi and Hondo rivers in the Natural Area of Integrated Management portion of the Madidi protected area. During this survey we concentrated on birds and large mammals, generating information on biodiversity and relative abundance in a largely undocumented region threatened by the proposed Bala Dam construction. For example, the survey was able to provide one of the first records for the short-eared

dog (*Atelocynus microtis*) in Bolivia, and also produced base-line data on a number of mammalian and avian species that will provide management information to the Madidi protected area administration, including future monitoring programs. Two scientific manuscripts are currently in preparation for publication in ecological journals.

In addition, in conjunction with the American Museum of Natural History and with separate funding from the Center for Environmental Research and Conservation, project staff continued biological surveys in the newly demarcated areas of the Apolobamba Natural Area of Integrated Management. These studies were designed to provide biodiversity information for zonification purposes in the new management plan for the Apolobamba protected area. Together these biodiversity surveys help to attract national and international attention to the northern La Paz, a region that is extremely biodiverse but that to date remains largely undocumented. They are also providing important opportunities to test and hone field methodologies that will later be needed to establish monitoring programs within Madidi and Apolobamba and protected areas nationwide in Bolivia.

Activity 1.2. Landscape Species Research

On-track

In October the project team completed the Landscape Species Selection Criteria analysis for the Northwestern Bolivian Andes LCA. This analysis was initially conducted using 26 Landscape Species candidates. Following an initial cut we repeated the analysis on the top twelve species. This analysis resulted in the final landscape species selection in order of importance: jaguar, white-lipped peccary, spectacled bear, Andean condor and Amazonian Catfish. Over the next six months members of the Bolivian team will be contributing to a peer reviewed publication outlining the Landscape Species Selection Criteria analysis.

In February 2001, during the biodiversity surveys between the Tuichi and Hondo rivers, the project team identified a third long-term study site for research activities on landscape species such as the white-lipped peccary and the jaguar. This site will accompany the two existing long-term sites: a high elevation site for studies involving spectacled bear at Pusupunku/Pasto Grande in the Pelechuco region, and a mid elevation site for spectacled bear, lowland tapir and jaguar in the Pata region.

BCLS researchers have continued ecological studies on spectacled bears across the highland and cloud forest portions of the landscape, visiting three sites to conduct standard vegetation and bear sign surveys. This research has focused on determining habitat preferences and dietary determinants of range use, as well as a genetic analysis of population size. Due to localized political unrest in the highland portion of the Bolivian Landscape, the programmed capturing and satellite collaring of spectacled bears has been delayed to November 2001 when Dr. William Karesh of the WCS Field Veterinarian Program will assist.

Similarly, WCS RFP Fellow Nicole Gottdenker in conjunction with BCLS researchers has continued her efforts to document the feeding ecology of white-lipped peccaries at four sites across the lowland portion of the landscape. These studies collected information on the more specific ecological needs of the landscape species, including keystone resources and habitats, and will serve as baselines for estimates of density and/or relative abundance. A local thesis student, Pamela Avila, completed her field based ecological studies on the lowland tapir and is now beginning the analysis phase of her research.

During the Tuichi and Hondo river biodiversity survey, BCLS researchers also began testing camera trap methodologies for surveys of jaguars and other individually recognizable large mammals. The camera traps performed excellently, providing information on relative abundance for much of the jaguar prey base. During the second half of this fiscal year the BCLS researchers aim to continue refining this methodology at further sites.

Ecological information regarding the above landscape species will help to determine their biological landscape, which in combination with spatial data on human activities and threats will enable us to define the focal landscape and extent, as well as focus our conservation actions in areas of critical conservation importance and conflict.

Activity 1.3. Landscape Species Distribution Questionnaire

On-track

During this reporting period BCLS researchers, in conjunction with Apolobamba Park Guards began an exhaustive questionnaire-based analysis of landscape species distribution. During a workshop in Apolobamba the Park Guards provided over 300 distribution points for the five landscape species, as well as an additional 1000 points for other threatened or socio-economically important wildlife species. These data have provided preliminary distribution maps for the species, and the Park Guards are now carrying out interviews with local communities that will further refine these maps. Apart from the critical management information gathered during this exercise the workshop also provided an invaluable opportunity to establish contact and dialogue with the Park Guards regarding monitoring and natural resource management issues (see Activity 2.2). We will conduct similar activities with Madidi and Pilon Lajas Park Guards in June 2001, as well as with Tacana community representatives.

Activity 1.4. Human-Animal Conflicts

On-track

Over the last six months BCLS researchers, in association with a local biology thesis student (Andrea Morales), began human-animal conflict studies in three communities in the highland portion of the landscape, focusing on documenting and measuring crop damage by wildlife (especially spectacled bears). The study focuses on quantifying damage to a subset of the corn fields of three communities in the Pajan region of Apolobamba, as well as continuing our questionnaires designed to assess crop damage on a wider scale. The focal communities requested assistance from the park administration regarding this sensitive issue and are situated in a valley that is relatively well forested with an apparently intact fauna. The first step to finding solutions to wildlife and human conflicts will be to document the scale of the problem.

Activity 1.5. Complementary Ecological Studies

On-track

Over the last six months the BCLS project has continued to conduct complementary ecological studies on key elements of biodiversity across the landscape, selected because of their interaction with a particular threat or opportunity, or a unique ecological characteristic. Ninon Ríos completed her undergraduate studies on the population status and potential for sustainable harvest of spectacled caiman in the lowland portions of the Tacana TCO. Angela Nuñez, a young Bolivian professional, continued her studies on the highland deer species present in the landscape: the threatened and almost unknown Andean deer and the white-tailed deer. Charles Veitch, a volunteer, focused on the woolly monkeys and mammalian communities in the mid-elevation cloud forests which have proved extremely exciting in terms of biodiversity and are associated with incense, an important non-timber forest product that may be a long-term sustainable natural resource for the region. Finally, across the landscape researchers have continued to collect dietary and ecological information on other species including the puma and Andean fox both associated with livestock loss, the endangered Andean cat, and the poorly known Yungas Brocket deer.

OBJECTIVE 2: Strengthen local on-site protection and management of biological resources across the landscape.

Activity 2.1. SERNAP Institutional Strengthening

On-track

Over the last six months BCLS staff have finalized an institutional strengthening plan for the National Protected Area Service (SERNAP). This plan has been developed with key SERNAP staff including the director and pledges technical support to the Madidi and Apolobamba protected area administrations/staff (see Appendix A). It also promotes the Threats Assessment approach as a critical tool for adaptive strategies, encourages relevant SERNAP staff to consider issues regarding the broader landscape surrounding protected areas, and generally promotes the landscape conservation concept within SERNAP. Over the course of the BCLS project it is hoped that SERNAP will adopt this approach in other threatened Bolivian landscapes. In addition, at the request of SERNAP the plan pledges more general support in the development of guidelines for monitoring across the protected areas of Bolivia. Similarly, the plan promises technical support during the development of SERNAP guidelines for the sustainable management of natural resources within protected areas, particularly wildlife and forestry resources.

Activity 2.2. Protected Area Staff Training

On-track

In January 2001 BCLS staff conducted one protected area-based workshop on landscape conservation for the Park Guards and chief of protection of the Apolobamba protected area. This workshop introduced the concept of landscape conservation, and provided relevant arguments for the importance of wildlife conservation, and focused on how protected area staff can contribute to the landscape approach. In June 2001, at the request of the Apolobamba Park Guards, a second workshop is planned with representation from the Apolobamba, Madidi and Pilon Lajas protected areas which will stress the importance of biological and socio-economic monitoring, as well as how to report and utilize general information regarding biodiversity and GPS data, particularly for landscape species and monitoring or indicator species.

Activity 2.3. Community Wildlife Management Projects

On-track

During this reporting period we have continued our supervision and technical support to three of the four communities that were already involved in wildlife management projects within the landscape. These communities are conducting projects on the feasibility of sustainable native honey production as an alternative livelihood, documenting ecological interactions between native bees and the tree community (Santa Fe, San Pedro and Carmen Pecha). During this period the communities have been identifying natural honey resources in their communal lands, while the project team has been organizing the construction of 50 native bee hives for each community. All three of the communities decided to build two types of native bee hives for two types of native bee, one higher value honey and the other higher production. In the next six months, as this natural resource production experiment continues, the communities will begin transferring native bees to these hives with the assistance of a project hired consultant Eugenio Stierlin, the foremost native bee expert in Bolivia. It is important to recognize that native bee honey production underlines the value of the forest to local communities and also encourages communities to take participatory community decisions regarding natural resources, a critical prerequisite for wider scale and more diverse natural resource management plans. A fourth community (Wawayana), conducting a local assessment of the conservation status of the spectacled caiman in order to assess the potential for a future sustainable harvest of this species, has delayed further activities until the dry season

begins in June. The Director of Biodiversity is currently promoting the sustainable harvest of this previously fully protected species in the Beni Department. These natural resource management community projects are fundamental to the landscape approach as they encourage community planning processes and also provide a hands on opportunity for environmental education at the community level. They are also the start of a long-term strategy to encourage a regional program of community based sustainable natural resource production. A successful example of this approach would be an incredibly powerful model for use in other regions and landscapes across Bolivia by the conservation community.

Activity 2.4. Community Wildlife Workshops

On-track

During this reporting period BCLS staff began community wildlife management projects with three highland valley communities in the Pajan region: Pajan, Sanachi, and Huayrapata. At the request of the communities, these projects are focusing on one of the major human-animal conflicts in the highland portions of the landscape, crop raiding by assorted wildlife species. Specifically, the projects will measure crop damage to the corn fields of the local communities, with a Bolivian undergraduate student accompanying community representatives to measure the number of stems affected by each wildlife type on a monthly basis. The communities are aware that this is a necessary first step in the process of thinking about solutions to the problem of crop damage.

We have also been approached by three Tacana communities for assistance with sustainable hunting issues and five Tacana communities for assistance with a wildlife and natural resource diagnostic in an area the communities have jointly set aside for an ecotourism venture. Over the next six months we will be visiting these communities to hold participatory workshops in order to design a project tailored to meet their wildlife management needs.

Activity 2.5. Wildlife Management, Conservation and Ecology Program (Institute of Ecology)

Delayed

Over the last six months the BCLS project staff have begun the establishment of the Wildlife Management, Conservation and Ecology Program at the Institute of Ecology (IE) through the development of draft agreements regarding the content and scope of the program. This program aims to strengthen the ability of this national research body to conduct focused research on the behavioral ecology of vulnerable wildlife species, as well as more applied studies concerning wildlife conservation and wildlife management issues. Over the next six months we hope to consolidate this initiative by providing introductory seminars on wildlife issues as well as academic and technical support to interested students in the form of a digital library resource and academic journal discussion seminars. This Program will also assist other branches of the IE to develop their capacity as technical advisors to natural resource management initiatives.

Activity 2.6. Schoolyard Ecology Education

On-track

During this reporting period, BCLS staff conducted two EEPE (School Yard Ecology Education) workshops with local schoolteachers. The first workshop was conducted in Tumupasa where all 30 of the local schoolteachers participated as well as 4 Park Guards from the Madidi protected area. The second was conducted in the highland portions of the landscape with participation of 25 schoolteachers from Charazani, Amarete, Chullina and Curva, as well as 4 Park Guards from the Apolobamba protected area. A third workshop is planned, with the participation of Dr. Peter Feinsinger, for June 2001 in the Apolo region. This activity will raise awareness about protected areas and the importance of ecosystem services for the human population around them.

Activity 2.7. Monitoring Strategy Design

On-track

Over the last six months the BCLS staff have begun internal discussions regarding the production of a strategy for monitoring the conservation status of the landscape, and hence of the results of the landscape approach in northern La Paz. This process has included the recruitment of a project monitoring specialist, Imke Oetting, who is also charged with providing more consistent technical support to SERNAP (National Protected Area Service). Once a first draft of the monitoring strategy is produced we will invite the full participation of SERNAP, the protected area administrations, CIPTA, DGB, IE, as well as other institutions working in the landscape such as CARE, CI, WWF, CE (Spanish Cooperation) and AMNH (American Museum of Natural History) in the refinement of the strategy and the coordination of monitoring activities.

Activity 2.8. Tacana Land Titling and Management

On-track

Activity 2.8. a. Development and Implementation of a legal strategy for the titling of the Tacana TCO.

The fourth and final exposition of results of the field measurement campaigns was carried out in March 2001, during which members of all Tacana communities within the territorial demand were able to review the measurements of any contentious property claims. The revision of those properties overlapping with areas of communal resource use and/or of particular relevance to the management of the proposed indigenous territory was prioritized. Progress regarding these observations continues to be monitored in La Paz. Members of all communities in the demand have continued to receive legal advice by the legal team, composed of two lawyers and several Tacana counterparts, promoting tighter coordination between CIPTA and its constituency and strengthening the resolve of the Tacana communities for their territory and its sustainable management. Closer coordination between CIPTA and CIDOB (Confederation of Indigenous People's of Bolivia) was also achieved during this period, securing additional political support for the legal process. This was crucial at a time of national political uncertainty and intense local attack by land speculators, who even attempted to interfere with the legal process through violent acts. CIPTA's support enabled INRA to continue with the legal land titling process.

Activity 2.8.b + c. Provide a technical evaluation of the Spatial Requirement Identification Studies of the Ministry of Indigenous and Campesino Affairs (MACPIO).

On-track

The Ministry of Indigenous and Campesino Affairs (MACPIO) is required by law to advise INRA (National Institute of Agrarian Reform) on the spatial needs of indigenous groups with territorial demands. The Spatial Needs Report for the Tacana TCO was presented to CIPTA in November 2000. The CIPTA/WCS technical team reviewed this report and commented on its content during January 2001. Information collected during PRAs regarding the importance of subsistence hunting, local wood prices, the local conservation status of different natural resources, and the potential of alternative economic activities were presented to MACPIO, in the hope of technically strengthening their study. Furthermore, the census database was also made available to MACPIO, in order to enable them to base their population estimates on more solid data.

Activity 2.8.d. Participatory Rural Appraisals for Communal Planning.

On-track

In December 2000, the last PRAs were carried out by the multidisciplinary team consisting of a biologist, an agronomist, a sociologist, a forester, and Tacana counterparts (see Appendix B). Individual PRAs

were carried out in 21 communities out of the 22 within the territorial demand. It was not possible to carry out a PRA in the small community of Santa Ana because of conflicts with colonists. Preliminary reports based on these PRAs have already been requested by CARE and CI to guide their efforts in the area. Information collected during communal mapping exercises were transcribed into a GIS database and a series of maps were produced: a socio-cultural map, a land tenure map, a map of potential resources, and a map of communal resource use areas. This information will be the basis of a proposed preliminary management strategy for the TCO that will be concluded in June.

OBJECTIVE 3: Promote the development of national policies that support the landscape conservation approach.

Activity 3.1. Technical and Policy Support

On-track

During this reporting period BCLS staff have continued support to SERNAP (see above institutional strengthening plan for SERNAP) and their internal policy initiatives, including technical advice and support in the development of a series of regulations regarding natural resource management within protected areas, specifically, a wildlife and natural resource management regulation and an investigation and science regulation within protected areas. BCLS staff have also continued to support the Inter-institutional Committees of the Apolobamba protected area administration, including a joint meeting in October 2000 with the local representative body for the protected area – the ‘Comite de Gestion’ or Management Committee.

Activity 3.2. Financing Mechanisms

On-track

During this reporting period BCLS staff have held preliminary discussions with Dr. Carlos Quintela of WCS New York regarding long-term funding possibilities and strategies for the Northwestern Bolivian Andes Landscape and a financial analysis is being developed, in conjunction with SERNAP, for the Landscape Conservation Priorities and Actions document currently in preparation (see Activity 4.5).

Activity 3.3. Threats Assessment Working Group

On-track

During this reporting period the BCLS team has continued to monitor immediate infrastructure development projects in the landscape that represent serious threats to conservation and natural resource management initiatives. For example, whilst the projected road to Pando remains a plan, the spontaneous and mass organized colonization along the San Buenaventura to Rio Madidi road is increasingly a real and current issue. The monitoring is further facilitated by the informal Threats Assessment Working Group (SERNAP, CI, ORMSTROM, Conservation Strategy Fund, WWF). In addition, we have been refining the existing threats and opportunities analysis responding to the dynamic political and social climate. An updated version will be included in the Landscape Conservation Priorities and Actions document currently in preparation (see Activity 4.5).

OBJECTIVE 4: Elaborate a participative, integrated, landscape conservation action plan.

Activity 4.1. Cooperative Agreements

On-track

Over the last six months BCLS staff have finalized a cooperative agreement with SERNAP which, at their suggestion, includes WCS conservation activities on a national basis. In addition, WCS and CARE have also signed a cooperative agreement that encompasses the Madidi Management Plan project that both institutions are currently implementing. These agreements will ensure important input in strengthening national governmental and non-governmental bodies, as well as promoting maximum synergy of efforts among different institutions.

Activity 4.2. Landscape Stakeholder Workshop

Delayed

This activity has been further delayed due to delays regarding the necessary and desired SERNAP input regarding this workshop and the accompanying document (see Activity 4.5). Nevertheless, we anticipate that this activity will be completed in the second half of this fiscal year when we will also be able to draw on the pilot experience with the Apolo municipality (see Activity 4.4). The central theme of the workshop will be mechanisms to integrate conservation and natural resource management with the needs of local governments. Members of all international, national and grass roots institutions working in the landscape will be invited as well as relevant national and local government officials. This workshop will also provide an excellent opportunity to further refine the landscape threats and opportunities analysis by consulting local government bodies and grass roots organizations. One product of this meeting will be an initial draft of the Landscape Conservation Action Plan for northern La Paz (see Activity 4.5).

Activity 4.3. Land Use Plan

On-track

At the end of March and on the basis of the land tenure and communal resource-use maps, a zoning proposal was developed for the Tacana territorial demand (see Appendix C). This zonification proposal was developed taking into account the land use aptitude certification issued by the Agrarian Superintendent (Superintendencia Agraria). It was developed with representatives of all communities within the territorial demand. On the basis of the zoning map ensuing from the above process and from the information gathered during the PRAs a land use plan will be developed. A first draft of this plan was presented to the CIPTA directory in March 2000. This plan focuses on: (1) zoning of the area for productive activities that will provide new or improved livelihood options for Tacana families, while being consistent with the objectives of conservation and sustainable resource utilization in the region, (2) an investment plan for how productive activities defined in the zoning plan can be funded and implemented, and (3) a governance plan to build the capacity of CIPTA to respond to the technical and administrative challenges of managing the TCO .

Activity 4.4. Municipal Development Planning

On-track

Over the last six months we have begun conversations with technical representatives of the Apolo municipality regarding a 20 year preliminary environmental plan for a municipality that includes parts of the Madidi, Apolobamba and Pilon Lajas protected area. The intention is to provide technical and financial support for a participatory workshop in Apolo in June where local community representatives and relevant institutions will attend. The BCLS project has also drafted cooperative agreements with the

Apolo and Charazani municipalities. It is hoped that these initial experiences will provide a model for further municipality development planning processes in a landscape that includes seven municipalities.

Activity 4.5. Landscape Conservation Priorities and Action Plan

Delayed

Again, due to delays in SERNAP reviewing and input, this activity has been delayed and will now be completed during the second half of this fiscal year. A final draft of the Landscape Conservation Priorities and Actions document will be ready for discussion at the workshop detailed in Activity 4.2 scheduled for late August 2001. During early September this draft will be adapted according to the input at the workshop, finalized, and then published, although we hope this will remain a working document. This guide will serve to identify key gaps that must be addressed in order to achieve effective conservation in the landscape and will be a useful planning tool for SERNAP, local government offices such as municipalities, other conservation organizations, and the donor community.

In order for our landscape conservation actions to be sustainable in the longer term and replicable across other landscapes centered around protected areas, it is critical to involve SERNAP personnel in all aspects of the project, especially those concerning planning and policy. Furthermore, the perspective and input of government representatives will help ensure that our ideas and initiatives are realistic and workable within the Bolivian context. The director of SERNAP and his technical staff are excited about these initiatives but are also extremely busy, however we feel that for activities such as 4.2 and 4.5 it is fundamental to wait for necessary SERNAP input rather than proceeding without them. Hence the delays reported here.

III. Success Stories and Appendices

TCO Tacana Zonification Proposal

An analysis of communal mapping exercises carried out in 21 out of the 22 Tacana communities within the territorial demand culminated in a three-day workshop with representatives of all 22 communities, totaling over 100 people. This workshop had the objective of developing a preliminary zonification proposal for the territorial demand, which because it was based on the individual community maps guaranteed a bottom up, participatory vision. Furthermore the zonification proposal aimed to contribute to national initiatives in land-use planning, represented by existing laws such as the Forestry Law, Environment Law, Land Planning Law, Agrarian Reform Law, as well as national policies regarding indigenous peoples.

Information collected in the communal mapping exercises was translated into satellite images and complemented with forest inventory data, demographic data, and the problem and opportunity analyses developed with the communities. Other important tools used within the zonification workshop were a land tenure map, a map of soil aptitude certified by the Agrarian Superintendent, and a matrix of land use compatibility.

Overall a total of 575,759 hectares were zoned, including the following land use categories: historical-cultural, tourism, hunting and fishing reserves, watershed protection, non-timber forest products, logging, agricultural, agro-silvipastoral, extensive livestock grazing and subsistence hunting areas. This process represented a big step for CIPTA and its member communities, as it signified the beginning of supra-communal land use planning which will be critical for the management of the indigenous territorial demand once it is titled. Neighboring communities were able to resolve conflicts regarding areas of joint use and came up with compromises acceptable to both and which made sense for the management of the territorial demand as a whole. The workshop was also attended by a representative of the Agrarian

Superintendent, who after participating in the workshop, informed us that this process is enough to guarantee that CIPTA is able to present a land use plan for their approval in the very near future (POP-Plan de Ordenamiento Predial). In Bolivia, at present only the Yuqui TCO has a certified land use plan. The development of a zonification proposal which represents the vision of over 5,000 Tacanas within the TCO is a crucial step towards securing appropriate land use in the eastern border of Madidi National Park. Only with sound land-use will wildlife conservation succeed outside the boundaries of the neighboring protected areas.

Appendices

- A. Plan de Fortalecimiento al Servicio Nacional de Areas Protegidas (SERNAP)
- B. Proyecto Elaboración de Una Estrategia de Manejo Sostenible de Los Recursos Naturales del Pueblo Tacana: Diagnóstico Participativo de la Comunidad Cachichira
- C. Proyecto Elaboración de Una Estrategia de Manejo Sostenible de Los Recursos Naturales del Pueblo Tacana: Zonificación preliminar de la demanda de TCO Tacana