



Darwin Initiative Main Project Annual Report

- **Important note:** *To be completed with reference to the Reporting Guidance Notes for Project Leaders:*

it is expected that this report will be about 10 pages in length, excluding annexes

Submission Deadline: 30 April 2015

Darwin Project Information

Project Reference	21-004
Project Title	Sustainable Ranching and Participatory Land Use Planning in Bolivia and Paraguay
Host Country/ies	Bolivia and Paraguay
Contract Holder Institution	Wildlife Conservation Society (WCS)
Partner institutions	Bolivia: Tacana People's Indigenous Council (CIPTA), Lecos Apolo Indigenous Central (CIPLA) of Bolivia, the Bolivian municipalities of (1) Apolo and (2) Ixiamas; Paraguay: Local municipalities of (1) Puerto Casado, (2) Carmelo Peralta and (3) Fuerte Olimpo.
Darwin Grant Value	£ 297,274
Funder (DFID/Defra)	DFID
Start/end dates of project	1 April 2014 – 30 Sept 2016
Reporting period (e.g., Apr 2015 – Mar 2016) and number (e.g., Annual Report 1, 2, 3)	Apr 2014 – Mar 2015 - Annual Report 1
Project Leader name	Lilian Painter, PhD. Maria del Carmen Fleytas
Project website/blog/Twitter	www.wcsbolivia.org y www.wcsparaguay.org
Report author(s) and date	Lilian Painter, Maria del Carmen Fleytas, Rodolfo Nallar, Nuria Bernal H. April 30, 2015

1. Project Rationale

Livestock and derived products are important commodities in Latin America and ranching is a key economic activity. However, ranching is associated with negative environmental impacts including biodiversity loss, wildlife-human conflicts, deforestation, fires, soil degradation, loss of water quality and quantity, and greenhouse gas emissions. Ranching can also exacerbate social inequality by displacing vulnerable rural populations from access to land, natural resources and ecosystem services, and by excluding their interests from being taken into account in land use decisions.

Across Latin America, ranching spreads and intensifies as human populations grow, roads are improved, and meat consumption rises. The large-scale ranching typical of the Paraguayan Chaco, and the small-scale ranching typical of north-western Bolivia, represent the two archetypal patterns of livestock expansion in Latin America.

Because of their distinct contexts, Bolivia and Paraguay provide an ideal setting in which to implement and evaluate best practices for sustainable ranching at different scales. In this project, WCS is working to achieve “win-wins” for conservation and development by (a) improving ranching practices at the scale of the ranch; (b) engaging stakeholders in participatory land-use planning processes at the landscape scale; and (c) evaluating the effectiveness of interventions for future applications at the local and national scales.

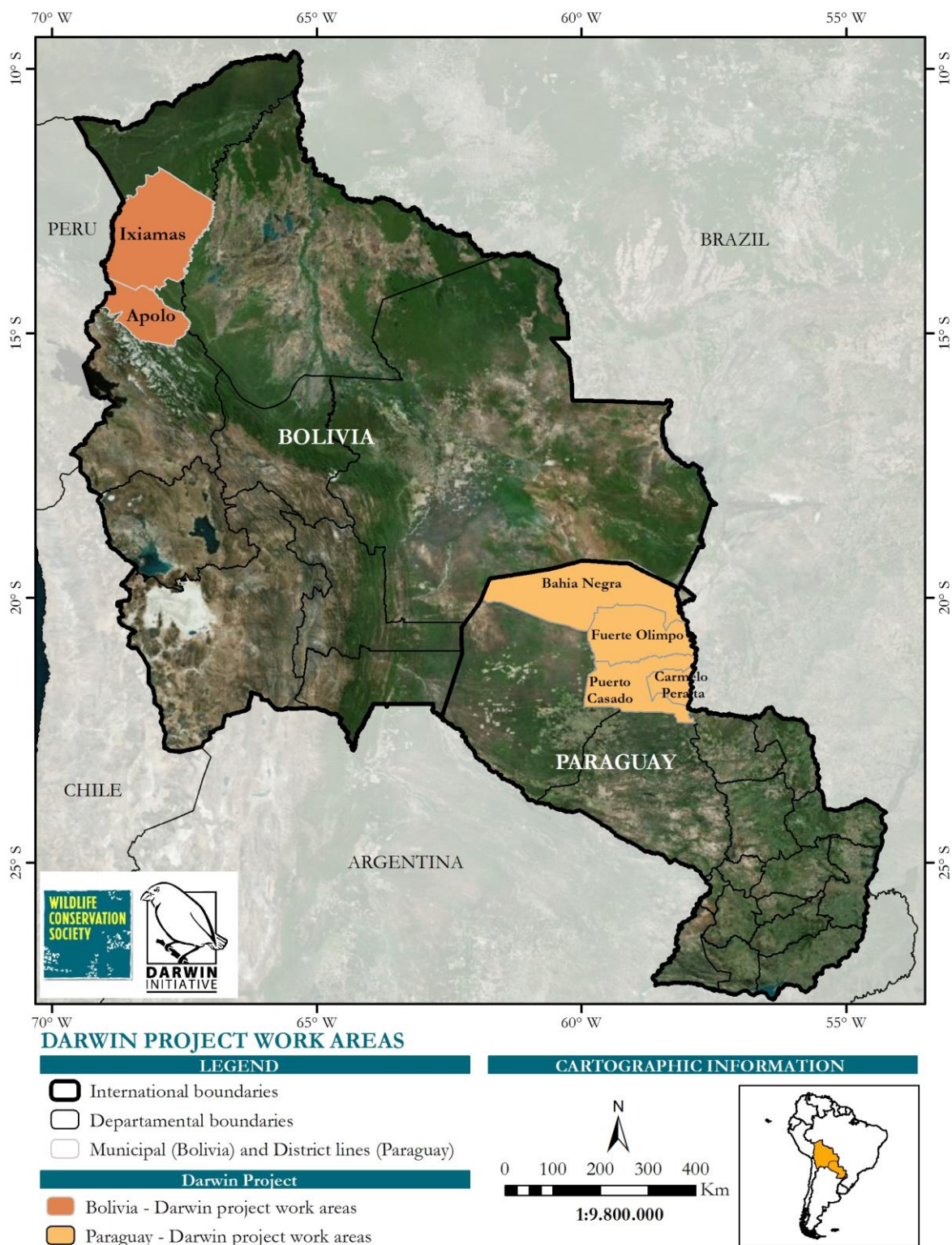


Figure 1 Project Intervention Areas

2. Project Partnerships

WCS designed this Darwin Initiative project to be implemented in coordination with two territorial indigenous organizations in Bolivia and two municipalities in Paraguay. In Bolivia, the Lecos Apolo indigenous organization CIPLA, within the municipality of Apolo, and the Tacana organization CIPTA, within the municipality of Ixiamas. Both organizations are the property right holders of the indigenous lands where activities are implemented in Bolivia and are critical to present indigenous concerns in municipal planning processes. During this first year of the project, representatives of both CIPTA and CIPLA have participated in all community visits. Their role has been to convene community meetings and support in guiding the use of culturally appropriate language. CIPLA has participated actively in project planning and decision-making and an agreement for project implementation has been signed with them (Annex 4.1). However, progress with the CIPTA, the Tacana territorial organization, in project implementation has been slow due to conflicts regarding the use of collective pastures between neighbouring communities.

In Paraguay, the municipalities of Puerto Casado and Fuerte Olimpio have participated fully in project planning and implementation but progress in the Carmelo Peralta municipality has been slower because of contrasting visions between the mayor and the municipal council. Puerto Casado requested and signed an agreement for the delegation of some environmental responsibilities to the municipal jurisdiction by the Secretary of Environment (SEAM) (Annex 4.2) and with support from this project has begun a capacity building process as detailed in Annex 4.2 - Table 1 and shown in Annex 4.3. WCS's partner in this project, the Institute of Environmental Law and Economics (IDEA), has provided its legal expertise to help increase the capacity of municipalities for regulating land use within their jurisdictions.

3. Project Progress

During the first year of the project, WCS has been able to accomplish most of the proposed activities planned for the period and has made advances in some additional activities planned for future periods, as detailed below.

3.1 Progress in carrying out project activities

Activities 1.1, 1.2, 1.3 and 1.4.

In Bolivia, cattle management interviews and workshops were conducted in 14 communities of the Lecos Apolo Indigenous Territory and 3 communities of the Tacana Indigenous Land. A total of 606 local people (359 men and 247 women) participated in these participatory workshops to map cattle management areas and discuss obstacles for improved cattle management practices (Annexes 4.4 and 4.5). Simultaneously, 115 individual interviews were conducted in both Bolivia and Paraguay (Annex 4.6). These workshops and interviews allowed us to collect baseline information on livestock abundance, the current state of available infrastructure for cattle management, distribution and condition of natural pastures, and estimate the area of cultivated pastures in each of the communities. We also identified the main sanitary and health problems currently affecting cattle and analyzed blood samples of 342 domestic animals (152 cattle, 6 horses, 80 pigs, 37 sheep, 1 dog and 66 poultry) to better understand the health status of the domestic animals that share the same habitat (Annex 4.7). With the baseline information generated, we compiled and concluded a *vade mecum* handbook of medicines and treatments in Apolo (Annex 4.8), which includes the vaccines and immunization schedule to prevent the recurring diseases.

Using the above baseline information in a multi criteria analysis (Annex 4.9) and through consultation with the CIPLA leadership (Annex 4.10), the Tupili community was selected for the establishment of a pilot ranching module. This community was chosen principally due to the poor quality of the soils, strong communal organization, and absence of cultivated pastures or cattle management infrastructure. Tupili has some of the most degraded soils in the Lecos Apolo indigenous land and is therefore ideal to show that pastures can be recovered and

managed to maintain cattle without clearing surrounding forests. In this ranching module we have improved the management of 6 ha of pastures and established a rotational grazing system. In consultation with the small-scale indigenous ranchers, we designed a teaching package on sustainable cattle management and developed 3 out of 5 training units (Annexes 4.11, 4.12 and 4.13). We estimate that through the implementation of this technical package we will at least double the carrying capacity of pastures, though not to the degree of the pilot module in Tupili. So far, we delivered the first unit in 14 Leco communities, concurrently with the baseline assessment. The assessment concluded that cattle ranching is not an important economic activity for four of the 14 Lecos communities and that there are conflicts on communal pasture areas within and between the three Tacana communities. Thus, we decided to reduce the number of indigenous communities to be involved in the project from 14 to 10 (please see section 3.2. for further information). So far, we have delivered the second training unit in all ten communities. We will continue assessing the will of the Tacana leadership to facilitate actions to resolve conflicts over pastures in order to re-evaluate the participation of additional communities and we will carry on providing training modules on cattle ranching with 10 Leco communities, as well as small domestic animal husbandry to address the interests of the women in the community.

During this period, WCS Paraguay presented the initiative to nine large landowners located in the Northern Chaco, eight of which have signed on to participate in the project (Annex 4.14). These proprietors have already received a schedule to start the technical assistance provided by the project, which will cover an area of 93,004 hectares. Initial surveys were performed to gather detailed information about the current production practices in place in the target ranches, in order to outline a clear baseline from which to measure progress towards better ranch management practices (Annex 4.15). Additionally, as jaguar existence and movements are indicators of habitat quality for biodiversity, and are also the source of jaguar-human-cattle conflicts, the project staff has trained at least one representative from each ranch to periodically monitor jaguars in the eight properties, in order to identify the most suitable predation mitigation measures (Annex 4.16).

WCS Paraguay has also worked to generate a document that shows the management plans and best practices to be adopted in each private property where the project is being developed (Annex 4.17).

Activities 2.1, 2.3 and 2.5

In Bolivia, we have engaged with the process of updating the municipal development plan of Ixiamas municipality. WCS led a workshop on cattle management and was able to share the data collected last year during the livestock diagnostic in three Tacana communities. The summary of the conclusions of the sustainable cattle ranching municipal discussions are being written up and will include strategic actions such as fire management, pasture management, livestock health, watershed and biodiversity protection. The information provided will be incorporated into the municipal plan and represents an opportunity for channeling government resources to support sustainable ranching practices in the municipality as a whole, and in particular to small/scale ranchers. Additionally, critical areas for forest conservation have been identified and this information will be included in the strategic analysis to develop the municipal plan.

WCS Paraguay got the support of the Ministry of Environment (SEAM) to provide technical assistance, together with IDEA, to the districts of Fuerte Olimpo, Carmelo Peralta and Puerto Casado for the development of participatory land use plans. With the guidance provided by IDEA, this initial proposal has been enriched by the delegation of land use planning competencies from SEAM to the focus municipalities. The delegation of these responsibilities is fundamental to providing the local governments with greater tools for controlling deforestation and promoting greater participation from the local communities. In Bolivia this is not required because these municipal competencies are already included in current municipal regulations. WCS Paraguay has developed a guide for the effective implementation of this process in municipalities interested in improving their municipal administration (Annex 4.18). As a result of this process, 218 local people (48% women) from the three districts municipalities in Paraguay received information about land use planning and participatory processes, setting an important

basis for community inclusion in land use planning. In Bolivia 110 people (19% women) participated in a workshop to discuss the municipal diagnostic for the Municipal Development Plan of Ixiamas. Linked to this process, 12 workshops were held with the participation of 28 indigenous communities, representing 3,255 Tacana, T'simane, Ese Ejas and Araona indigenous groups. We estimate the participation of 400 people in those workshops (Annex 4.19).

Activities 3.1 and 3.2

In both Bolivia and Paraguay, baseline surveys on cattle production and productivity were carried out with 17 indigenous communities and 8 private properties. Results in Paraguay showed important differences between the largest properties (>100,000 hectares) and smaller properties (\pm 4,000 hectares); larger cattle ranches were less efficient with regards to average cattle quantity or stocking rates, annual pregnancy rates, mortality rates and also showed differences in the purpose of the animals produced (reproduction, sales or fattening). Large cattle ranches are more inefficient and tend to have less cattle per hectare. Remote sensing analysis has been carried out to establish both forest cover and historical deforestation rates in Bolivia and Paraguay. Additionally, camera traps have been used in Paraguay to establish wildlife baselines in each private ranch whereas in Bolivia we are carrying out an analysis using a grid system and interviews to generate "occupancy" models for wildlife at the Lecos Apolo indigenous land level. Different methods are being used because in Bolivia the main objective is to recognize critical wildlife corridors at the indigenous land level and in Paraguay the main objective is to evaluate individual ranches for their wildlife abundance.

3.2 Progress towards project outputs

Output 1: 20 projects to improve livestock management

Ranch management plans have been developed and approved by 8 large-scale ranches in Paraguay and are due to be concluded in the first quarter of the Second Year of the project with 10 communities of small-scale ranchers in Bolivia. The baseline assessment resulted in the reduction of target indigenous communities for improved cattle ranching in Bolivia from 14 to 10, based on the current importance of cattle ranching and interest in the project. Nevertheless, the total area of impact will be higher than projected and the number of beneficiaries will be maintained if we include training provided to improve small domestic animal production in three communities. Technical assistance to support the implementation of sustainable ranching techniques has begun and impacts on productivity and biodiversity are being monitored. In Paraguay, WCS installed camera traps and established a baseline of relative abundance of jaguars and their prey for each private ranch in order to allow yearly monitoring (Annex 4.20). On the other hand, in Bolivia, we carried out interviews, camera-trapping surveys and transects to describe the "occupancy" of wildlife in a grid system in the Ixiamas municipality and we are currently replicating this methodology in the Lecos Apolo indigenous land. This information will be used as a baseline to evaluate the effectiveness of the ranch management plans but has also been used to inform the Ixiamas municipal assessment of critical wildlife corridors connecting the protected area and the surrounding indigenous and private lands (Annex 4.21). WCS established baseline deforestation maps for both the Paraguay and Bolivia intervention areas (Annex 4.22).

Output 2: 5 blueprints for municipal land use plans and 8 ranch zoning plans.

During the process of developing the new Municipal Development Plan of Ixiamas, the WCS technical team recently participated in the development of the municipal assessment and helped facilitate the participatory analysis of this document, presenting information on critical conservation areas and sustainable cattle ranching practices. The conclusions and recommendations resulting from this validation are still being processed and will be included in the new Ixiamas Municipality Development Plan. During the second year of the Project, we will provide technical assistance to the municipal office that supports productive projects to increase capacities of small-scale ranchers in Ixiamas and sustainable cattle ranching practices.

All three municipalities in Paraguay were reached with consultation and information workshops to promote the inclusion of local visions and needs in land use planning. Thirty structured interviews with key stakeholders were also carried out to gather more detailed information about local visions of land use (Annex 4.23a and 4.23b). Additionally, we identified critical areas for forest conservation and developed zoning maps in eight private ranches.

Output 3: Report on the impacts of sustainable ranching projects.

This output will be completed in the third year of the project. However, baselines on three aspects of sustainable ranching have been established through interviews and workshops with individual ranchers in both Paraguay and Bolivia: 1) Cattle management parameters including mortality rate, calving rate, off-take and income derived from livestock production; 2) Wildlife abundance and distribution, as well as illegal hunting prevalence; 3) Deforestation rates and level of compliance with the ranch management plans.

Output 4: Outreach materials to disseminate lessons learned

Similarly this output will also be concluded in Year 3. Nevertheless, several training materials have been developed and will be important inputs to develop the manual on sustainable ranching.

Output 5: Policy recommendations, developed jointly with local municipalities to facilitate replication of improved livestock management techniques and participatory land use management processes at the national level.

This output will also be completed in year three. However, the recommendations developed together with the three local municipalities in Paraguay to achieve the “Delegation of Competencies” represent significant progress towards indicator 5.2. This has been particularly successful in the municipality of Fuerte Olimpo and as a result the municipality has begun charging a per-hectare environmental fee to land owners whose properties are controlled by the Municipality. This fee now finances the Municipality EMU (Environmental Management Unit, as part of the competences delegated by SEAM) and its three technical staff. Puerto Casado municipality is replicating this process. In Bolivia, we have engaged with the Bolivian Joint Mechanism for Climate Change Mitigation and Adaptation Mechanism for Climate Change. The Joint Mechanism is one of the most important environmental policies in Bolivia and operates through the Authority of Mother Earth within the Ministry of Environment. This engagement will allow us to share our policy recommendations widely beyond the focus Municipalities in Bolivia.

3.3 Progress towards the project Outcome

The project outcome is “Sustainable ranching techniques and land-use planning processes are successfully implemented in small-scale ranches in Bolivia and large-scale ranches in Paraguay and conservation and development impacts are rigorously evaluated and compared”.

To date we have enabled the participation of 110 people in Bolivia and 208 in Paraguay in municipal planning processes. In Bolivia we have engaged with the formal municipal development plan process that is still underway in Ixiamas. Engagement with Apolo municipality will begin in June 2015, after the change in municipal authorities, enabling us to achieve the anticipated level of participation. We have already surveyed a subset of participants about their involvement in this process, with all responding that they were satisfied with the inclusion of their vision in the planning process. Over the next year, we plan to make additional efforts to evaluate the extent to which land use visions of vulnerable rural poor are included in the final municipal land use policies. Through the initial training on best practices for sustainable ranching, we have reached 159 indigenous families of the Lecos Apolo indigenous land in Bolivia and will be improving management across 122,186.33 hectares. In Paraguay, we are currently on track to improve management across 93,004 hectares of land, making the combined area for both countries around 215,000 hectares.

Through an analysis of existing forest cover in the 8 focal private properties in Paraguay, we estimate that 43,730 hectares of forest will be conserved through the implementation of the

new ranch management plans. Similarly, in Bolivia we estimate that 83,000 hectares of forest in the community managed areas within the Lecos Apolo indigenous land will be conserved. Baselines on productivity, management practices, wildlife distribution and abundance have also been established. Indirect beneficiaries of increased forest conservation include all the inhabitants within the five municipal target areas but impacts on watersheds and ecosystem services have not yet been evaluated.

Overall, considerable advances have been achieved towards the project outcome according to the established indicators despite the accessibility challenges in Paraguay and the reduction in target cattle ranching communities.

3.4 Monitoring of assumptions

During this first year, three of the outcome level assumptions were relevant: extreme climatic conditions will not impede interest in the project; political instability in local municipal governments or within indigenous organizations do not inhibit democratic consultation processes; and governments and authorities are receptive to policy recommendations. All these assumptions have been valid this year but flooding during the rainy season prevented access to the Paraguayan Chaco between May and August 2014 (Annex 4.24), delaying project implementation by three months. Despite this challenge, we were able to get back on schedule and achieved all planned targets. Municipal government changes are due in Bolivia in May 2015 and in Paraguay in November 2015. We do not expect these changes will affect overall project results, although some activities may be delayed slightly.

In terms of output level assumptions, we believe all remain true, but many will not be testable until later in the project. However, we expect to evaluate the inclusion of sustainable ranching management practices in land use planning processes in next year's report. The participant lists from various events can be used to verify the assumption of interest from ranchers and communities.

3.5 Impact: achievement of positive impact on biodiversity and poverty alleviation

Biodiversity impacts cannot be measured at this stage of the project but baselines have been established for deforestation rates and forest cover in the area of intervention. In total, we are covering 215,190 hectares of ranchlands, grasslands and globally significant forests that will be under improved management and have reduced forest loss by the end of the project.

At this relatively early stage in the project, we have not yet measured direct impacts on productivity in the ranches. However, we have begun implementing animal health control measures and we anticipate almost immediate reductions in mortality and increases in productivity in the Lecos Apolo indigenous communities of Bolivia. Additionally, we made great progress in empowering vulnerable local communities through their inclusion in municipal land use and development plans in four out of the five focal municipalities across both countries. Through strengthening the capacity of local governments to control soil and natural resource use within their jurisdictions, we also expect an increase in the ability of civil society to influence management decisions at the municipal level.

4. Project support to the Conventions (CBD, CMS and/or CITES)

This project addresses the CBD through Aichi targets 2, 4, 5, 7, 12, 14 and 19 and all 5 Strategic Goals. It also protects critical habitat of migratory species listed in CMS Appendices I and II. In Bolivia, the project has also been presented to the Vice Ministry of the Environment within the annual work plan of WCS. The Vice Ministry of the Environment will be the initial technical counterpart at the national level, and a draft agreement for collaboration is currently under review and will be signed next quarter (Annex 4.25). They will first clear policy recommendations before presenting the information to the CBD focal point in the Ministry of Foreign Affairs. In Paraguay, WCS has had direct interaction with the focal point of the host country for the CBD, as we have been working directly with the Ministry of Environment

(SEAM) in achieving some of the objectives of the Convention, after signing a cooperation agreement in March 2014 (Please see Annex 4.26 for a press report on the conversations with the focal point on activities to be jointly developed by both institutions within this project).

5. Project support to poverty alleviation

Since the project is concluding its first year of activities, there are no measurable changes or evidence as yet. See 3.5 for project approach to poverty alleviation.

6. Project support to Gender equity issues

Following our commitment to ensuring gender equity during project implementation, and according to our participant lists in the community training workshops, 40.8% of workshop attendees were women, despite cattle management activities being mostly conducted by men. Although cattle management activities are conducted mostly by men in the project area, WCS's training workshops included sessions on good husbandry practices for backyard animals, which generally are responsibility of women. This ensures broader participation of women and consequently, a larger impact on poverty alleviation and wildlife conservation by keeping domestic animals healthier and reducing risk of transmitting diseases to wildlife, as well as reducing hunting pressure through the production of alternative protein sources.

The project strongly supports participation of local women in decision making about natural resource use. Invitations to both men and women were a successful strategy to promote women participants in Paraguay. However, greater efforts to bring decision making to the community level and to engage women's organizations must be made to improve indicators on women's participation in the remaining municipal planning workshops in Bolivia and Paraguay. Future evaluations on the effectiveness of women's participation must look at the results or effectiveness of this participation measured by the inclusion of actions to support women's productive activities within the municipal development plans.

7. Monitoring and evaluation

The legacy of the project will be a robust evaluation and comparison of the relative effectiveness of sustainable ranching interventions in different contexts, which will help conservation and development organizations and host country governments promote sustainable ranching across Latin America and beyond. Therefore, monitoring and evaluation is particularly important for this project in order to demonstrate results and promote adoption of sustainable practices. To assess progress made until this stage of the project, we used primarily indicators at the output level, such as generation of documents, surveys, interviews, lists of attendance, zoning maps, camera trap surveys and others. At this early stage in the project, we collected baseline data for all outcome-level indicators and made plans to continue assessing the project's impacts in the following two years. These indicators will focus on biodiversity, poverty alleviation and changes in management practices, as expressed in the logical frameworks (Annex 1 and Annex 2).

8. Lessons learnt

In Bolivia, difficulties were faced in the Tacana indigenous land because of conflicts around the use of communal pastures. Land use conflicts cannot be addressed without the active participation of the legitimate representatives; in this case the Tacana leadership, and we are therefore in a dialogue with them in order to provide technical support to the conflict resolution process. In both Bolivia and Paraguay, and despite electoral processes, we have been able to work at the municipal government level by engaging with the broader governance bodies, such as the municipal councils, through adequate processes that weather local political conflicts. Finally, integrating governance levels across scales is also an effective strategy for ensuring lasting impact, for example engaging with both the central level environment authorities as well as local government, individual land owners and communities. This approach enabled us to obtain the delegation of environmental responsibilities to the municipal level in Paraguay.

9. Actions taken in response to previous reviews (if applicable)

N/A.

10. Other comments on progress not covered elsewhere

The design of the project has been enhanced in two ways over the last year. First, in Paraguay we worked with the local municipalities to obtain the municipal-level delegation of responsibilities for environmental management from the Ministry of the Environment. This strategy allows municipalities to develop local taxes linked to the fulfilment of these new responsibilities and is therefore financially sustainable. Secondly, we developed a demonstrative ranching module in Tupili, Bolivia, to promote the adoption of best practices nearby. In this community, which presents the most degraded soils in the project area, the intensive module aims to reach carrying capacity of 1 head of cattle / 1-2 hectares. By replicating this model, the other communities will also improve ranching practices and will be able to reach carrying capacity of 1 head of cattle/ 5-10 hectares, in comparison to current densities of 1 head of cattle/30 hectares.

11. Sustainability and legacy

We promoted our work at two levels: at the national level, by presenting the project activities to the environmental authorities in both Paraguay and Bolivia; and at the local level with both municipal government staff and community members. Evidence for increased interest and capacity is documented by the presence of local authorities in the training modules in Paraguay and by the inclusion of sustainable cattle ranching as a priority theme in the Municipal Development Plan of Ixiamas.

In order to provide a sustained legacy, the project must show livelihood and conservation benefits that will engage the interest and commitment of local, national and regional stakeholders. The principal strategy for ensuring a sustained legacy remains threefold: 1) providing technical recommendations to be incorporated into policy at the local, national and regional scale; 2) providing technical capacity to promote sustainable ranching practices that reconcile poverty alleviation and biodiversity conservation objectives; and 3) documenting and communicating both the inclusive land use planning processes and the sustainable ranching practices.

12. Darwin Identity

In Paraguay, Darwin events with local communities on land use planning processes and municipal capacity building were exclusively organized for the objectives of this project and where therefore clearly identifiable as such. NGOs and government officials there have a complete understanding and knowledge about the Darwin Initiative and its goals, both as a result of this project and due to previous grants provided to the country. However, the rural communities and local municipalities are only beginning to be aware of this initiative. In order to help raise awareness among these groups, a banner has been used at training events, showing the Darwin Initiative logo next to WCS logo. Additionally, the Darwin logo has been placed on all training documents, attendance lists and maps and we have added the logo and project details to our local website: www.wcsparaguay.org

<http://www.wcsparaguay.org/en-us/projects/ganaderiasostenible.aspx>

In Bolivia, the cattle management training modules were also clearly identifiable as a new initiative supported by Darwin but the land use planning activities are seen as part of the larger WCS landscape program in the region. Overall, there is less awareness of the Darwin Initiative as compared to Paraguay, with the exception being among conservation NGOs and research institutions. However, we are trying to increase this awareness by adding the Darwin logo to all training documents and outreach materials. We also plan to add the Darwin logo and project description to our WCS Bolivia webpage, and will be sharing details of the project on other platforms including Facebook and Twitter.

13. Project Expenditure

Table 1 Project expenditure during the reporting period (1 April 2014 – 31 March 2015)

Project spend (indicative) in this financial year	2014/15	2014/15	Variance	Comments
	Grant (£)	Total actual Darwin Costs (£)	%	(please explain significant variances)
Staff costs				
Consultancy costs				Beginning of consultancies to support Municipal Territorial Plans were delayed because of rains
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items				
Others (Please specify)				
TOTAL	£ 133,615	£ 133,615		

14. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

I agree for the Darwin Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)

During this first year of this project, we built sufficient capacity within the Municipality of Puerto Casado to empower them to request and obtain delegation of land use planning competencies from the Ministry of Environment (Annex 4.2).

The elaboration of a guide for municipalities: “A CONTRIBUTION TO IMPROVE THE ENVIRONMENTAL MANAGEMENT OF MUNICIPALITIES IN PARAGUAY” could become an outstanding achievement if we disseminate this methodological guide to improve municipal management through the delegation of competencies to other municipalities at the regional and country level. It contains the description of tools established by the “Municipal Organic Law” but which are unknown to local authorities and therefore not applied.

The Lecos Apolo Indigenous Organization and WCS have leveraged important additional funds linked to the Bolivian Joint Mechanism for Climate Change Mitigation and Adaptation from the Danish cooperation DANIDA (Annex 4.27) to support territorial management and productive activities that reduce forest loss, including sustainable ranching. In this new project, activities in Tupili, Munaypata and Chirimayo will be complemented with productive infrastructure, in particular the establishment of paddocks. This support is an important opportunity to strengthen the impact on local livelihoods and engage with a very important environmental policy in Bolivia.

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2014-2015

Project summary	Measurable Indicators	Progress and Achievements April 2014 – March 2015	Actions required/planned for next period
<p>Impact Sustainable ranching techniques and land-use planning processes are successfully implemented across Latin America's lowlands, leading to a reduction in negative environmental impacts, and improved welfare and inclusion of vulnerable communities.</p>		<p>Bolivia: Implementation of animal health control measures to reduce animal mortality due to diseases in comparison to the baseline. Greater awareness amongst indigenous small-scale ranchers on the possibility of managing cattle in existing grasslands through appropriate pasture management. Support to participatory processes of municipal planning in Ixiamas.</p> <p>Paraguay: Inclusion and participation of local stakeholders including local authorities, private landowners and communities, in the initial steps for sustainable land use planning at the district level.</p>	
<p>Outcome Sustainable ranching techniques and land-use planning processes are successfully implemented in small-scale ranches in Bolivia and large-scale ranches in Paraguay and conservation and development impacts are rigorously evaluated and compared.</p>	<p>During the project lifetime, 1000+ indigenous people in Bolivia and 200 rural people in Paraguay (30% of whom are women) will have directly participated in local municipal land use planning processes. At least 60% of sampled participants report satisfaction with inclusion of their vision and local needs in decision-making processes.</p>	<p>To date 110 (19% women) participants in Bolivia and 218 (48% women) participants in Paraguay in municipal planning workshops. A sample of participants (n=30) all expressed their satisfaction with the inclusion of their vision in the planning process.</p>	<p>In Bolivia, further meetings will take place in Ixiamas to conclude the municipal plan by June, including representatives from the Tacana indigenous communities. An evaluation of satisfaction will be carried out when the strategic components of the municipal plan are presented, since to date we have presented only the assessment results. In the next period we will engage with the Municipality of Apolo to support sustainable ranching policies and indigenous participation in land use planning. Additionally, support will be provided to the Lecos leadership to develop proposals to present to the Apolo municipality.</p>

Project summary	Measurable Indicators	Progress and Achievements April 2014 – March 2015	Actions required/planned for next period
	Over 50,000 people in Bolivia and Paraguay will indirectly benefit from the protection of important watersheds and ecosystem services that they depend on.	Baseline established for conservation status of intervention area in Paraguay and Bolivia	In Paraguay, new workshops are planned to develop a shared vision of the use of natural resources in their territory.
	By the end of the project, 800 local people (~200 families) will directly benefit from a 40% increase in income as a result of increased livestock productivity and improved land management.	At present 159 families from Lecos indigenous communities have received training for improved livestock management.	Implement improved management plans and good practices, providing technical assistance to owners. Engage local governments in actions to support sustainable ranching practices and reduce forest loss in all 5 municipalities.
	By the end of the project, 170,000+ hectares in a mosaic landscape of ranch lands, grasslands and globally significant forests, will be under improved management.	At present 93,004 hectares in 8 private ranches in Paraguay and 122, 186 hectares of community lands in Apolo (Bolivia) have begun actions to improve ranching practices.	Continue adjusting and implementing improved and more sustainable management plans and good practices at each property. Increase the amount of hectares under some improved management
	By the end of the project 9,000+ hectares* of forest cover will be maintained without intervention, and that would likely have been deforested for cattle ranching.	On the basis of the baseline land cover change and historical trends of deforestation in the 8 private properties we estimate 43,730.87 hectares of forest will be conserved through the implementation of the ranch management plans. Similarly, in Bolivia we project that 83,000 hectares of forest in the community managed areas within the Lecos Apolo indigenous land will be conserved.	Annual deforestation monitoring and comparisons with projected deforestation rates will permit reporting of this indicator in Yr 2.
	By the end of the project, documented retaliatory killing of jaguars and illegal hunting of peccaries, tapir and deer will have been reduced by 50% in target sites.	Interviews with local ranchers and their staff, as well as with the indigenous ranchers were conducted. Additionally, camera traps, interviews and transects have been used to establish wildlife abundance and distribution in the project intervention areas.	Provide technical support to the private ranchers and communities to implement appropriate management actions that reduce conflicts with jaguars and reduce illegal hunting of their prey.

Project summary	Measurable Indicators	Progress and Achievements April 2014 – March 2015	Actions required/planned for next period
<p>Output 1. 20 projects to improve livestock management, benefitting 800 people and covering 170,000 hectares across Bolivia and Paraguay.</p>	<p>Indicator 1.1 Ranch management plans are developed and approved by 8 large-scale ranches and 12 communities of small-scale ranches, in consultation with ranchers and their families by year 1.</p>	<p>Ranch management plans developed and approved by 8 large-scale ranches and in process with 10 indigenous communities (Lecos Apolo).</p>	
	<p>Indicator 1.2 Sustainable ranching techniques are adopted and implemented by ranchers, with technical assistance from WCS, by year 3.</p>	<p>Technical assistance in process with 8 private ranches and 10 indigenous communities</p>	
	<p>Indicator 1.3 Ranchers report improved productivity and reduced losses by year 3.</p>	<p>Baseline developed on productivity in both private ranches and small indigenous ranches.</p>	
	<p>Indicator 1.4 Forest loss, retaliatory killing of jaguars and illegal hunting of ungulates are reduced by year 3.</p>	<p>Baseline deforestation, guidelines to reduce retaliatory killings of jaguars and baseline wildlife abundance and distribution developed. Baseline wildlife abundance established for Ixiamas, but still in process in Apolo. All baselines completed in three municipalities of Paraguay.</p>	
<p>Activity 1.1 Conduct interviews with ranchers to identify critical obstacles to implement improved practices.</p>	<p>Bolivia: Interviews and workshops in 14 communities of the Lecos Apolo indigenous Territory and 3 communities of the Tacana Indigenous Land. Additionally, individual rancher interviews were carried out in both indigenous lands.</p>		
	<p>Paraguay: Initial surveys and interviews conducted in 8 properties in the Northern Paraguayan Chaco.</p>		
<p>Activity 1.2 Develop specific sustainable cattle management recommendations in consensus with ranchers.</p>	<p>Bolivia: In consultation with the small-scale indigenous ranchers, a teaching package on sustainable cattle management was developed and organized in the form of five training units.</p>		
	<p>Paraguay: Specific management recommendations have been developed for 8 private ranches.</p>		

Project summary	Measurable Indicators	Progress and Achievements April 2014 – March 2015	Actions required/planned for next period
Activity 1.3 Formalize recommendations through ranch management plans that ranchers commit to.		Bolivia: 10 community cattle management plans will be developed in the next quarter.	
		Paraguay: This activity has been completed, and Annexes 4.16a and 4.16b show cattle management plans for each of the 8 private properties.	
Activity 1.4 Implement a technical assistance program to support implementation of the sustainable cattle management plans.		Bolivia: Two training units have been implemented to date and three out of five units designed.	
		Paraguay: Priority technical assistance needs have been established and the technical assistance package has began to be implemented.	
Output 2. 5 blueprints for municipal land use plans and 8 ranch zoning plans developed with the participation of 1200+ local people across Bolivia and Paraguay.	Indicator 2.1 Land use planning meetings (stage 1) involving over 1,200 community members are held in all 5 municipalities by year 3.	More than 200 people from three municipalities participated in land use planning meetings in Paraguay and 510 people (+400 from indigenous communities) from Ixiamas municipality in Bolivia.	
	Indicator 2.2 Land use planning meetings (stage 2) involving all relevant stakeholders – including community representatives – are held in all 5 municipalities by year 3.	N/A for the reporting period.	
	Indicator 2.3 Critical watersheds and community natural resource use areas are identified to guide land use planning processes.	Baseline maps showing critical watersheds and key areas for conservation of biodiversity have been developed for 8 private properties and three municipalities in Paraguay and for Ixiamas municipality.	
	Indicator 2.4 Information and maps are synthesized and 5 blueprints to guide the development of municipal land use plans are completed.	In Paraguay the major and municipal council members of three municipalities received support to identify the legal tools available to them and a guide was developed for delegation of environmental responsibilities to municipal governments.	

Project summary	Measurable Indicators	Progress and Achievements April 2014 – March 2015	Actions required/planned for next period
	<p>Indicator 2.5 At least 1 municipal diagnostic, annual plan or municipal by-law related to sustainable land use is developed in each of the 5 municipalities by year 3.</p>	Ixiamas municipality diagnostic to guide its development plan has included local participation, environmental and sustainable ranching inputs.	
	<p>Indicator 2.6 At least 60% of sampled participants report satisfaction with inclusion of their vision and local needs in municipal diagnostic, annual plan or municipal by-laws.</p>	Initial baseline structured interviews were conducted in Paraguay. These interviews will be conducted in the presentation of the draft strategic document for Ixiamas municipal development plan, once the recommendations proposed by the participants.	
	<p>Indicator 2.7 Ranch zoning plans are developed and approved for 8 large, private ranches, in close consultation with ranchers, by year 1.</p>	Ranch zoning plans have been developed in consensus with 8 private ranchers.	
<p>Activity 2.1 Facilitate stage 1 land use planning meetings, involving over 1,200 community members are held in all 5 municipalities.</p>		WCS provided input to the diagnostic phase of the Municipal Development Plan of Ixiamas in Bolivia and provided biodiversity conservation information as well as inputs on sustainable ranching. In Paraguay, a stakeholder analysis was carried out in the three municipalities and workshops and structured interviews were held to begin a participatory process for municipal land use planning.	
<p>Activity 2.2 Facilitate stage 2 land use planning meetings involving all stakeholder in all 5 municipalities.</p>		N/A for the reporting period.	
<p>Activity 2.3 Conduct interviews with a representative sample of community participants to gauge satisfaction with participatory processes and adapt accordingly.</p>		Initial surveys with local stakeholders from three municipalities in Paraguay.	

Project summary	Measurable Indicators	Progress and Achievements April 2014 – March 2015	Actions required/planned for next period
Activity 2.4 Complete blueprints to guide the development of land use plans, based on what has been agreed upon in the land use planning meetings.		Ixiamas municipal land use plan in progress and guide on “Delegation of Competencies” developed in Paraguay.	
Activity 2.5 Facilitate the process to sign a municipal diagnostic, annual plan or municipal by-law, in each of the 5 municipalities.		Workshops to begin a process of land use planning in three municipalities in Paraguay were held and in Bolivia we are supporting the participatory process for the municipal development plan. An important achievement has been the delegation of land use competencies to Puerto Casado by the Ministry of the Environment.	
	Indicator 3.1 Conservation and development impacts are rigorously analysed and compared at different ranching scales.	Baseline surveys for forest conservation, wildlife distribution and abundance and different aspects of livestock production established for intervention areas in both Bolivia and Paraguay.	
Output 3. Report on the impacts of sustainable ranching projects, evaluating and comparing biodiversity and poverty reduction impacts and value for money in two distinct contexts (Paraguay & Bolivia).	Indicator 3.2 Working paper outlining the effectiveness of sustainable ranching interventions is drafted by year 3.	N/A for the reporting period.	
	Indicator 3.3 Project results are presented to all 5 participating municipalities during last two quarters of project.	N/A for the reporting period.	
	Indicator 3.4 Feedback from the municipalities is incorporated, and a technical white paper is completed by year 3.	N/A for the reporting period.	

Project summary	Measurable Indicators	Progress and Achievements April 2014 – March 2015	Actions required/planned for next period
	<p>Indicator 3.5 White paper is tailored to a scientific audience and peer-reviewed scientific journal article on the conservation and development impacts of interventions at different ranching scales is submitted for publication by year 3.</p>	N/A for the reporting period.	
<p>Activity 3.1 Conduct pre- and post- project surveys on livestock mortality, calving rate, off-take data, and income derived from livestock production.</p>		Baseline surveys have been carried out in 8 private ranches in Paraguay and with 17 communities in Bolivia.	
<p>Activity 3.2 Annually monitor land use change, deforestation, and densities of target wildlife species in project intervention areas.</p>		<p>Bolivia and Paraguay: Baseline deforestation maps have been developed using remote sensing. In Paraguay the forest conservation areas have been mapped. A wildlife distribution and abundance baseline has been established for both Bolivia and Paraguay.</p>	
<p>Activity 3.3 Conduct data analysis of the impacts of interventions on conservation and development.</p>		NA for the reporting period.	
<p>Activity 3.4 Hold workshops with the participating municipalities, community groups, and indigenous organizations to discuss results and get feedback.</p>		NA for the reporting period.	
<p>Activity 3.5 Complete technical white paper.</p>		NA for the reporting period.	
<p>Activity 3.6 Write and submit peer-reviewed scientific article for publication.</p>		NA for the reporting period.	

Project summary	Measurable Indicators	Progress and Achievements April 2014 – March 2015	Actions required/planned for next period
<p>Output 4. Outreach materials to disseminate lessons learned, each uniquely targeted toward a different audience (community cattle managers, large cattle ranchers, local municipal governments, and national agencies in charge of agriculture, forests, and biodiversity conservation) and distributed according to audience (print vs. web-based).</p>	<p>Indicator 4.1 Manual on sustainable ranching is developed by year 3.</p>	<p>NA for the reporting period.</p>	
	<p>Indicator 4.2 Manual on sustainable ranching is uniquely tailored for different audiences (e.g. agriculture government authorities, NGOs) and different mediums of distribution (e.g. social networks, websites, print) by year 3.</p>	<p>NA for the reporting period.</p>	
<p>Activity 4.1 Develop a manual on sustainable ranching.</p>		<p>NA for the reporting period.</p>	
<p>Activity 4.2 Tailor the manual to different audiences.</p>		<p>NA for the reporting period.</p>	
<p>Activity 4.3 Present manual to local authorities, NGOs, and biodiversity and agriculture national government institutions.</p>		<p>NA for the reporting period.</p>	
<p>Activity 4.4 Share manual in electronic form on social networks, websites and partner institution networks.</p>		<p>NA for the reporting period.</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2014 – March 2015	Actions required/planned for next period
<p>Output 5. Policy recommendations, developed jointly with local municipalities to facilitate replication of improved livestock management techniques and participatory land use management processes at the national level.</p>	<p>Indicator 5.1 Policy recommendations for scaling up sustainable ranching interventions are developed.</p>	<p>Policy recommendations on sustainable ranching has been shared with the Ixiamas municipality and in Paraguay a methodological guide to improve municipal management through the “Delegation of Competencies” has been developed and applied in the project intervention area.</p> <p>Policy recommendations on sustainable ranching has been shared with the Ixiamas municipality and in Paraguay a methodological guide to improve municipal management through the “Delegation of Competencies” has been developed and applied in the project intervention area</p> <p>Policy recommendations on sustainable ranching has been shared with the Ixiamas municipality and in Paraguay a methodological guide to improve municipal management through the “Delegation of Competencies” has been developed and applied in the project intervention area</p>	
	<p>Indicator 5.2 Policy recommendations are shared directly with municipalities and national government entities in Bolivia and Paraguay.</p>		
	<p>Indicator 5.3 Policy guidelines for integrating sustainable ranching techniques and land-use planning processes into national and regional biodiversity and poverty alleviation strategies are developed and distributed.</p>		
<p>Activity 5.1 Conduct a thorough review of the national development plans, agriculture sector plans, national biodiversity strategies, and poverty alleviation strategies of Bolivia and Paraguay.</p>	<p>NA for the reporting period.</p>		
<p>Activity 5.2 Draft policy recommendations for implementation of sustainable ranching practices and participatory land use processes at the national level, for both Bolivia and Paraguay.</p>	<p>Bolivia: Sustainable ranching has been included as a strategic action within the diagnostic of the Ixiamas municipal plan.</p>		
	<p>Paraguay: A methodological guide to improve municipal management through the “Delegation of Competencies” has been developed.</p>		

Project summary	Measurable Indicators	Progress and Achievements April 2014 – March 2015	Actions required/planned for next period
Activity 5.3 Finalize policy recommendations, in consultation with the 5 participating municipal governments and national biodiversity and agricultural sector government authorities.		NA for the reporting period.	
Activity 5.4 Submit policy recommendations to national government entities in Bolivia and Paraguay.		NA for the reporting period.	
Activity 5.5 Share general, widely applicable policy recommendations through social networks, websites and partner institution networks, with the goal of reaching similar contexts in Latin America and beyond.		NA for the reporting period.	

Annex 2. Project's full current logframe

Impact: Sustainable ranching techniques and land-use planning processes are successfully implemented across Latin America's lowlands, leading to a reduction in negative environmental impacts, and improved welfare and inclusion of vulnerable communities.

OUTCOME:	Measurable Indicators	Means of verification	Risks and assumptions
Sustainable ranching techniques and land-use planning processes are successfully implemented in small-scale ranches in Bolivia and large-scale ranches in Paraguay and conservation and development impacts are rigorously evaluated and compared.	1. During the project lifetime, 1000+ indigenous people in Bolivia and 200 rural people in Paraguay (30% of whom are women) will have directly participated in local municipal land use planning processes. At least 60% of sampled participants report satisfaction with inclusion of their vision and local needs in decision-making processes.	Pre- and post-interview data with members of vulnerable communities and their representative organizations to evaluate their satisfaction with participation in local land use planning processes; local land use planning processes reflecting the territorial vision and integrating local livelihood concerns of vulnerable communities; attendance lists from participatory land use workshops and meetings; minutes of participatory evaluation meetings with ranchers, indigenous territorial organizations and municipal authorities.	1. Extreme climatic conditions such as droughts or disease outbreaks will not require emergency actions by ranchers, taking up all of their available time and resources 2. Political instability in local municipal governments or within indigenous territorial organizations will not inhibit their capacity to convene and participate in democratic consultation processes. If this occurs, we will work through civil society organizations. 3. Systematization and dissemination of lessons learned will encourage replication of sustainable ranching activities, thus expanding the impact of the project. 4. Governments and other authorities will be receptive to policy recommendations.
	2. Over 50,000 people in Bolivia and Paraguay will indirectly benefit from the protection of important watersheds and ecosystem services that they depend on.	Number of hectares under improved management; maps showing critical watersheds and natural resource use areas	
	3. By the end of the project 800 local people (~200 families) will directly benefit from a 40% increase* in income as a result of increased livestock productivity and improved land management.	Rancher surveys; livestock mortality; calving rate; time to market; records of livestock sales from rancher logs	
	4. By the end of the project 170,000+ hectares in a mosaic landscape of ranchlands, grasslands and globally significant forests, will be under improved management	Project reports and GIS analysis showing the number of ranchers using improved practices and number of hectares under improved management; rancher logs documenting use of improved practices; ranch zoning plans and blueprints of land-use plans	
	5. By the end of the project 9,000+ hectares* of forest cover will be maintained that – without intervention – would likely have been deforested for cattle ranching.	Land change model projections using historical deforestation trends derived from remote sensing analysis as contrasted with actual changes during project duration; ranch zoning plans and land-use plans indicating protected areas	
	6. By the end of the project, documented retaliatory killing of jaguars and illegal hunting of peccaries, tapir and deer will have been reduced by 50% in target sites.	Interviews with local ranchers and personnel to register wildlife hunting events; camera trap wildlife monitoring data in select ranches and community managed areas to independently verify interview data.	

OUTPUTS	Measurable Indicators	Means of verification	Activities	Risks and assumptions
1: 20 projects to improve livestock management	1.1.Ranch management plans are developed and approved by 8 large-scale ranches and 12 communities of small-scale ranches, in consultation with ranchers and their families by year 1	Ranch management plans; notes of meetings with ranchers	1.1.Conduct interviews with ranchers to identify critical obstacles to implement improved practices	Ranchers and vulnerable communities will be interested and incentivized to participate in project activities
	1.2.Sustainable ranching techniques* are adopted and implemented by ranchers, with technical assistance from WCS, by year 3	Field visit reports and photos; rancher logs documenting use of improved practices	1.2 Develop specific sustainable cattle management recommendations in consensus with ranchers	
	1.3.Ranchers report improved productivity and reduced losses by year 3	Rancher surveys; livestock mortality; calving rate; time to market; records of livestock sales from rancher logs	1.3 Formalize recommendations through ranch management plans that ranchers commit to	
	1.4. Forest loss, retaliatory killing of jaguars, and illegal hunting of ungulates are reduced by year 3	Field visit reports and photos; GIS analysis of forest change, recorded events of hunting events; interviews with ranchers and personnel; camera trap photos	1.4 Implement a technical assistance program to support implementation of the sustainable cattle management plans	
2: 5 blueprints for municipal land use plans and 8 ranch zoning plans	2.1. Land use planning meetings (stage 1) involving over 1200 community members are held in all 5 municipalities by year 3.	Minutes and attendance lists of participatory meetings.	2.1 Facilitate stage 1 land use planning meetings, involving over 1200 community members are held in all 5 municipalities	During land use planning processes, due consideration will be given to all stakeholder viewpoints
	2.2. Land use planning meetings (stage 2) involving all relevant stakeholders – including community representatives – are held in all 5 municipalities by year 3.		2.2 Facilitate stage 2 land use planning meetings involving all stakeholder in all 5 municipalities	
	2.3. Critical watersheds and community natural resource use areas are identified to guide land use planning processes	Maps identifying critical areas for conservation; minutes of participatory meetings; land use plans	2.3 Conduct interviews with a representative sample of community participants to gauge satisfaction with participatory processes and adapt accordingly	
	2.4. Information and maps are synthesized and 5 blueprints to guide the development of municipal land use plans are completed	Land use plans; municipal diagnostics, annual plans or by-laws	2.4 Complete blueprints to guide the development of land use plans, based on what has been agreed upon in the land use planning meetings	
	2.5. At least 1 municipal diagnostic, annual plan or municipal by-law related to sustainable land use is developed in each of the 5 municipalities by year 3	Interviews with community participants in land-use planning meetings; blueprints for municipal land use plans	2.5 Facilitate the process to sign a municipal diagnostic, annual plan or municipal by-law, in each of the 5 municipalities	

OUTPUTS	Measurable Indicators	Means of verification	Activities	Risks and assumptions
	2.6. At least 60% of sampled participants report satisfaction with inclusion of their vision and local needs in municipal diagnostic, annual plan or municipal by-laws	Ranch zoning plans; notes of meetings with ranchers		
	2.7. Ranch zoning plans are developed and approved for 8 large, private ranches, in close consultation with ranchers, by year 1	Landsat images; blueprints for municipal land use plans; ranch zoning plans		
3: Report on the impacts of sustainable ranching projects	3.1. Conservation and development impacts are rigorously analysed and compared at different ranching scales	Data analysis; working paper draft	3.1 Conduct pre- and post- project surveys on livestock mortality, calving rate, off-take data, and income derived from livestock production.	Projects will be successful in increasing income, improving inclusion in decision-making processes, and mitigating environmental harm Results from this project will be applicable and scalable to other similar contexts within lowlands in Latin America
	3.2. Working paper outlining the effectiveness of sustainable ranching interventions is drafted by year 3		3.2 Annually monitor land use change, deforestation, and densities of target wildlife species in project intervention areas	
	3.3. Project results are presented to all 5 participating municipalities during last two quarters of project.	Minutes of meetings with municipalities and stakeholders; evaluation reports from the 5 municipalities	3.3 Conduct data analysis of the impacts of interventions on conservation and development	
	3.4. Feedback from the municipalities is incorporated, and a technical white paper is completed by year 3	Revised working paper draft	3.4 Hold workshops with the participating municipalities, community groups, and indigenous organizations to discuss results and get feedback	
	3.5. White paper is tailored to a scientific audience and peer-reviewed scientific journal article on the conservation and development impacts of interventions at different ranching scales is submitted for publication by year 3	Submission or acceptance letter of peer-reviewed article	3.5 Complete technical white paper 3.6 Write and submit peer-reviewed scientific article for publication	
4: Outreach materials	4.1. Manual on sustainable ranching is developed by year 3	Sustainable ranching manual	4.1 Develop a manual on sustainable ranching	Outreach materials will be effective in reaching intended audiences
	4.2. Manual on sustainable ranching is uniquely tailored for different audiences (e.g. agriculture government authorities, NGOs) and different mediums of distribution (e.g. social networks, websites, print) by year 3	Digital manuals; print manuals; social networks; websites	4.2 Tailor the manual to different audiences	
			4.3 Present manual to local authorities, NGOs, and biodiversity and agriculture national government institutions 4.4 Share manual in electronic form on social networks, websites and partner institution networks	
5: Policy Recommendations	5.1. Policy recommendations for scaling up sustainable ranching interventions are developed	List of recommendations for municipal and national authorities	5.1 Conduct a thorough review of the national development plans, agriculture sector plans, national biodiversity strategies, and poverty alleviation strategies of Bolivia and Paraguay	Policy recommendations will be given due consideration by

OUTPUTS	Measurable Indicators	Means of verification	Activities	Risks and assumptions
	5.2. Policy recommendations are shared directly with municipalities and national government entities in Bolivia and Paraguay	Meeting minutes; photos of policy sharing events	5.2 Draft policy recommendations for implementation of sustainable ranching practices and participatory land use processes at the national level, for both Bolivia and Paraguay.	decision-makers
	5.3. Policy guidelines for integrating sustainable ranching techniques and land-use planning processes into national and regional biodiversity and poverty alleviation strategies are developed and distributed.	Policy guidelines; direct communications with government officials	5.3 Finalize policy recommendations, in consultation with the 5 participating municipal governments and national biodiversity and agricultural sector government authorities.	
			5.4 Submit policy recommendations to national government entities in Bolivia and Paraguay	
5.5 Share general, widely applicable policy recommendations through social networks, websites and partner institution networks, with the goal of reaching similar contexts in Latin America and beyond				

Annex 3 Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people	Nationality of people	Year 1 Total	Total planned during project
6A	39 representatives from Municipalities of Puerto Casado, Carmelo Peralta, and Fuerte Olimpo were trained on “tools provided in the municipal organic law for environmental management in municipalities”	6 women 33 men	Paraguayan 100%	39 local authorities	39 local authorities* *Beneficiaries are the same group of people every year
7	Number of (ie. Different types – not volume – of material produced) training materials to be produced for use by host-country.			Module 1: on the 4 pillars of cattle production by indigenous communities Module 2: Livestock husbandry infrastructure Training manual for municipal staff in Paraguay	15
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country.			1 diagnostic on cattle management by indigenous people in Ixiamas municipality	4 documents
11A	Number of papers to be published in peer reviewed journals.				1 paper published for a scientific audience
11B	Number of papers to be submitted to peer reviewed journals.				2 papers submitted at the end of the project
14A	5 informative workshops on “Participation in territorial planning” (3-4 hours each). Organized by the project for the project.	105 women (48%) 113 men (52%)	Paraguayan 100%	218 local people	400 local people
14A	14 CIPLA communities Module 1: “The 4 pillars of cattle production”. (1 day of 8 hours per community). Organized by the project for the project.	Women: 113 (39,5%) Men: 173 (60,5%)	Bolivian 100%	285 local people	285 local people
14A	10 CIPLA communities Module 2: “Livestock husbandry infrastructure”. (1 day of 8 hours per community). Organized by the project for the project.	Women: 75 (39,9%) Men: 113 (60,1%)	Bolivian 100%	188 local people	188 local people
14A	9 CIPLA communities Module 3: “Animal health”. (1 day of 8 hours per community). Organized by the project for the project.		Bolivian 100%		150 people per module

14A	9 CIPLA communities Module 4: "Animal feeding and grassland management" Module 5: "Animal husbandry and genetic management" (1 day of 8 hours per community). Organized by the project for the project.		Bolivian 100%		300 local people. At least 150 people per module
14A	1 three-day workshop on the assessment of cattle production in the Municipality of Ixiamas (GAMIX)	Women: 21 (19,1%) Men: 89 (80,9%)	Bolivian 100%	110 local people	110 local people
14A	Community workshops on municipal land use and strategic planning		Bolivian 100%	+400	400 Tacana people
14B	Number of conferences/ seminars/workshops attended at which findings from Darwin project work will be presented/ disseminated.				At least one presentation at a Conference
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased.				20 hectare plot of cultivate grass at the experimental cattle ranch
23	Value of resources raised from other sources (ie. In addition to Darwin funding) for project work.				£392.484

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. website link or publisher)
Module 1: The 4 pillars of cattle production	Manual	Author: WCS Bolivia Year: 2014	Not applicable (institutional publication)	Bolivian	WCS Bolivia	Digital and printed document (available as Annex 4.11)
Module 2: Livestock husbandry infrastructure	Manual	Author: WCS Bolivia Year: 2014	Not applicable (institutional publication)	Bolivian	WCS Bolivia	Digital and printed document (available as Annex 4.12)
Module 3: Animal health	Manual	Author: WCS Bolivia Year: 2015	Not applicable (institutional publication)	Bolivian	WCS Bolivia	Digital and printed document (available as Annex 4.13)
Diagnostic of the cattle management activities in the communities of San Pedro, Carmen Pecha and Macahua from the Tacana I TCO.	Report	Author: WCS Bolivia Year: 2014	Not applicable (institutional publication)	Bolivian	WCS Bolivia	Digital and printed publication (available as Annex 4.4)
Report on training events and diagnosis	Report	Author: WCS Bolivia	Not applicable (institutional)	Bolivian	WCS Bolivia	Digital and printed document (available as Annex 4.7)

of the health conditions from the sampling on domestic animals from Lecos Apolo TCO.		Year: 2014	publication)			
Vade mecum handbook of medicines and treatments for livestock in Apolo.	Manual	Author: WCS Bolivia Year: 2015	Not applicable (institutional publication)	Bolivian	WCS Bolivia	Digital and printed document (available as Annex 4.8)
Methodological guides to improve the municipal management through the delegation of environmental competencies	Manual	Author: WCS Paraguay Year: 2015	Not applicable (institutional publication)	Paraguayan	WCS Paraguay	http://www.wcsparaguay.org/ (Section Publications) Digital and printed publication
Cattle management plan in 8 private properties in the Paraguayan Chaco, Alto Paraguay department	Manual	Author: WCS Paraguay Year: 2015	Not applicable (institutional publication)	Paraguayan	WCS Paraguay	Digital and printed publication (available as Annex 4.17)

Annex 4. Onwards – supplementary material (optional but encouraged as evidence of project achievement)

All documents included as part of the report are listed below and can be found in the Annexes folder in Google Drive at:

<https://drive.google.com/a/wcs.org/folderview?id=0B68BqxewfaH5fkNHOGU4ZE1TZDM1bThTVmNyZkIXM0d1ZXI4NWwhGhHQ4cmlmN18yV01wcmM&usp=sharing>

Annex 4.1. Agreement between CIPLA and WCS Bolivia for conducting the project

Annex 4.2 Note to SEAM from Puerto Casado Municipality (Paraguay) regarding delegation of environmental competencies

Annex 4.3 Pictures of the training sessions at local municipalities in the Paraguayan Chaco

Annex 4.4a Document on the diagnostics of cattle management in three communities of the Tacana I TCO

Annex 4.4b Diagnostic map of cattle management in the Tacana I Indigenous Territory (CIPTA) in the Municipality of Ixiamas (Bolivia)

Annex 4.5 Diagnostic map of cattle management in the Leco Apolo Indigneous Territory (CIPLA) in the Municipality of Apolo (Bolivia)

Annex 4.6 Interview form applied for the diagnostics on cattle management in the Municipalities of Apolo and Ixiamas (Bolivia)

Annex 4.7 Report on diseases diagnosed from the biological samples from cattle in the Leco communities of Apolo (Bolivia)

Annex 4.8 The vade mecum handbook of medicines and treatments for cattle in Apolo (Bolivia)

Annex 4.9 Summary of multicriteria analysis conducted for selecting participant Leco communities in the Leco Apolo TCO (Bolivia)

Annex 4.10 Letter from the community of Tupili from the Leco Apolo TCO (Bolivia)

Annex 4.11 Training module 1 “The 4 pillars of cattle production” applied in Bolivia

Annex 4.12 Training module 2 “Livestock husbandry infrastructure” applied in Bolivia

Annex 4.13 Training module 3 “Animal health” applied in Bolivia

Annex 4.14 Agreements signed between WCS and ranch proprietors in Paraguay

Annex 4.15 Baseline survey for ranchers in the Paraguayan Chaco

Annex 4.16 Sample of the self-monitoring sheet used by ranch employees in Paraguay

Annex 4.17a Cattle management plan in 8 private properties in the Paraguayan Chaco, Alto Paraguay department.

Annex 4.17b Baseline maps for each of the 8 properties of the project in Paraguay

Annex 4.18 Guide to improve the municipal environmental management in the participating municipalities in Paraguay

Annex 4.19 Workshop minutes of the 12 workshops with 28 Tacana, T'simane and Araona indigenous communities from the Ixiamas Municipality

Annex 4.20 Registration of wild felids and prey species in the working ranches in Paraguay by installing camera traps as part of the yearly biodiversity monitoring

Annex 4.21 Occupancy maps of small wild cats (*Leopardus* sp) and peccaries (*Pecari tajacu* and *Tayassu pecari*) in the Municipality of Ixiamas, Bolivia.

Annex 4.22a Maps on historical trends of deforestation in the areas of intervention in Paraguay

Annex 4.22b Maps on historical trends of deforestation in the areas of intervention in Bolivia

Annex 4.23a Consultancy report on community workshops and consultation on local land use processes in Paraguayan Chaco

Annex 4.23b Workshop photos in three districts of Alto Paraguay Department (Municipality of Puerto Casado and the indigenous community of Maskoi)

Annex 4.24 Press reports on weather status in Paraguayan Chaco- April to June 2014

Annex 4.25 Letter from the Vice Ministry of Environment in Bolivia annexing the draft agreement

Annex 4.26 Press report on the conversations with the focal point on activities to be developed jointly by Paraguayan institutions in the project

Annex 4.27 Letter from FOSC DANIDA to WCS Bolivia requesting full proposal

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	Yes
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	No
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	