

## 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*

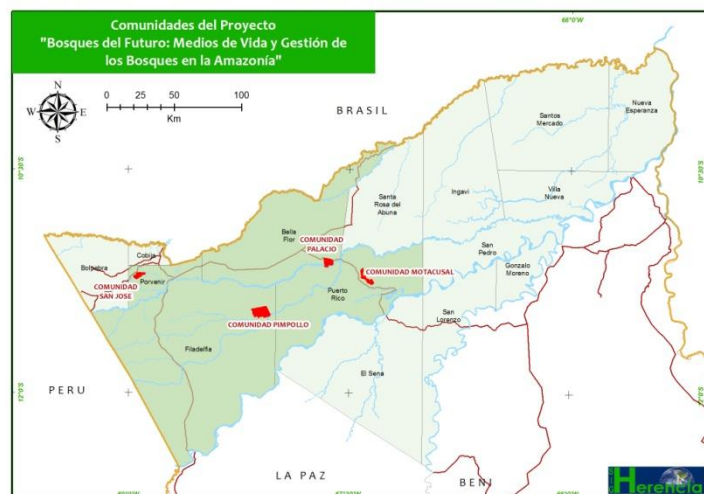
**Submission Deadline: 30 April**

### Darwin Project Information

Project Reference	20-021
Project Title	Forest Futures: Livelihoods and sustainable forest management in Bolivian Amazon
Host Country/ies	Bolivia
Contract Holder Institution	Royal Botanic Gardens, Kew (RBG Kew)
Partner institutions	Herencia, Cobija, Bolivia; Museo de Historia Natural Noel Kempf Mercado (MHNNKM), Santa Cruz, Bolivia; Universidad Amazónica de Pando (UAP), Cobija, Bolivia
Darwin Grant Value	£ 220,063
Start/end dates of project	October 1 <sup>st</sup> 2013 – September 30 <sup>th</sup> 2016
Reporting period (eg Apr 2013 – Mar 2014) and number (eg Annual Report 1, 2, 3)	April 2014 – March 2015, Annual Report 2
Project Leader name	Dr William Milliken
Project website	<a href="http://www.kew.org/science/tropamerica/pando/">http://www.kew.org/science/tropamerica/pando/</a> <a href="http://museonoelkempff.org/museo/antecedentes/">http://museonoelkempff.org/museo/antecedentes/</a> <a href="http://www.herencia.org.bo/index.php?q=noticias_novedades">http://www.herencia.org.bo/index.php?q=noticias_novedades</a>  Project blog <a href="http://tropicalbotany.wordpress.com">http://tropicalbotany.wordpress.com</a>
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## 1. Project Rationale

Sixty-nine percent of the forest-dependent population of Pando Department are unable to satisfy their basic needs and 34% live in extreme poverty. The Millennium Development Goals (MDG) for Bolivia and the Bolivian Amazon aim to reduce extreme poverty to 24% by 2015. Immigration to Amazonia, driven by economic, political and environmental factors, has placed increasing pressure on forests (an issue identified through consultation



with community organisations and governmental/ NGO bodies in Bolivia). Pando forests support a large forest-dependent population (40% of the total), are important for biodiversity and ecosystem services and constitute important buffers for the eastern Andean catchments from predicted impacts of climate-change. Forest loss will reduce Bolivia's ability to meet its CBD/MDB obligations and increase vulnerability to climate change among the poor.

Mitigating these threats demands sustainable practices that reduce forest conversion, coupled with skills and knowledge of forest values for addressing poverty. Based in Cobija and working with 'agroextractive' forest communities in the Department of Pando, the project aims to address these priorities in three principal ways:

1: It is expected that diversification and expansion of NTFP collection/marketing from Pando will see the number and quantity of traded plant species increased, with improved household incomes and financial stability for harvesters. Crucially this will make harvesters' livelihoods less vulnerable to market and productivity fluctuations and climate change. Information on NTFPs will be more accessible to the forest communities constituting 40% of Pando's population, helping harvesters react to market changes and opportunities.

2: Adaptation of *Inga* agroforestry techniques, their promotion and adoption by four pilot communities, and subsequent outreach among the 220 forest communities in Pando, will increase capacity of the rural poor to meet their basic needs sustainably. This will result in reduction in forest conversion through slash-and-burn subsistence agriculture among participating communities, with increased agricultural productivity derived from agroforestry.

3: Awareness of biodiversity and ecosystem service values of natural forest (including carbon stock, forest products) will be raised amongst rural communities and policy-makers. In parallel with increased awareness of options for sustainable forest management and strategic engagement with regional programmes to ensure long-term impact, this will create incentives for reducing deforestation within the region.

## **2. Project Partnerships**

The principal Bolivian partner, Herencia, is a Bolivian NGO with a strong track record delivering sustainable development projects in Amazonian Bolivia and Peru since 1997. Herencia's mission is to work with local communities and stakeholders to promote sustainable development in the Amazon. Development of the project was based on local demands identified by Herencia, which has been engaged in project development from the beginning and has developed the agroforestry, community engagement and schools components of the project. Herencia has existing collaborative relationships with the other Bolivian partners MNHNKM and UAP, which the project is working to strengthen. Our collaboration has continued effectively on the whole, although there have been substantial delays in delivery of activities and outputs, partly due to staff changes at Herencia and the need to recruit new individuals.

The second partner, Museo de Historia Natural Noel Kempf Mercado (MHNNKM), is based in Santa Cruz. MHNNKM is a department under the Autonomous University, Gabriel Rene Moreno in Santa Cruz, and one of Bolivia's leading biodiversity research institutes with experience in delivering applied projects and environmental education. MHNNKM has substantial experience working on the establishment/survey of forest plots in the Bolivian Amazon (RAINFOR), undertook a scoping visit jointly with Kew staff in 2010 and prepared the framework for the forest survey component. MHNNKM is the lead in-country partner for the forest inventory component, and has made positive progress during the reporting year. Fieldwork in the last quarter of 2014 was delayed due to illness (the principal botanist contracted leishmaniasis), but has since recommenced. The challenges facing this partnership as outlined in the last report, relating to new University procedures, have largely been overcome. Research permits and specimen export permits have been secured successfully.

Freeworld Trading is a UK-based commodities trading company specialising in food products. This partner was primarily responsible for the forest product component of the project. However, following staff changes which meant the loss of the individual assigned to the project, following negotiations subsequent to the last annual report FWT has withdrawn from the project. This created substantial difficulties which were reported to the Darwin Commission, and which we have worked hard to resolve through development of complementary funded activities (see below).

Universidad Amazónica de Pando (UAP) in Cobija is part of Bolivia's national network of higher education and is committed to research and economic and social development in the Amazon region. Its School of Forestry has extensive knowledge and experience of applied forest management. Two students are currently carrying out their Licenciado theses projects using project data. Engagement of UAP in the agroforestry component has been more limited than planned (as reported previously) but regular contact was established with the environmental course at UAP and Herencia. This has resulted in a lecture about the project given at the University, and in August 2014 Herencia hosted a joint two-day workshop themed "the importance of the Amazon for the equilibrium of Earth" in the Palacios community. Sixty students and university teachers participated. Several presentations were given to rural communities on Amazonian soils and their impact on land-use. Most recently, in March 2015, we reinitiated contact with the Director of CIPA-UNAM, Amador Cuellar, and are in the process for developing a collaborative agreement for establishment of a monitored agroforest trial close to Cobija.

Of the four forest communities with which the project developed working relationships during Year 1, one (Pimpollo) has withdrawn from the project. However, we are in the process of integrating three additional communities in the project (see below). We are continuing to work with one farm and two cattle ranches to evaluate whether planting Inga in degraded cattle pasture and farmland will add value to these marginal systems.

### 3. Project Progress

#### 3.1 Progress in carrying out project activities

##### ***Output 1 – Increased diversity of traded, sustainably harvested NTFPs***

All activities under this component have been affected by the withdrawal of FWT from the project (under whose responsibility they lay). We have been working to address this (in discussion with the Darwin Committee) through a combined process of fundraising and partial reorientation of our objectives (see section below relating to fruit tree production component). However, we are continuing to explore and pursue opportunities for promotion and development of NTFPs in parallel.

- **Activity 2.1** (NTFP identification and resource inventory). We have undertaken consultation among a range of stakeholders and have identified potential products including wild rubber, wild cacao, asai, forest/cultivated fruit pulps and palm oils (e.g. majo: *Oenocarpus bataua*). In March 2015 William Milliken undertook interviews focused on NTFPs used among community members at Motacusal. This fieldwork (which was undertaken alongside the Mid-Term Review) was supported by funds captured from the Bentham Moxon Trust. We are in the process of recruiting a volunteer at Kew to research information on the principal NTFPs in the region for incorporation on the 'one-stop' fruit tree and NTFP guide. We have also managed to secure funding from the W.A. Cadbury Trust to support research into wild rubber and cacao, including resource inventory work which will be carried out by the MHNNKM team (plot sampling) in 2015.
- **Activity 2.2** (market testing, marketing, promotion and production). Through our ongoing discussions with WWF's Sky Rainforest Project and Manuripi programme in Bolivia, we have made provisional arrangements (pending space) for one or two representatives of the forest communities with which we are working to take part in a tri-national (Bolivia/Peru/Brazil) visit focused on wild rubber production techniques. We evaluated the potential of artisanal latex as a version of the wild tapped rubber which has added value as a potential NTFP. In 2014 we contacted a Brazilian wild rubber latex artisan known as Dr Borracha who is based close to the Bolivian border and has been working with WWF Brazil providing training in the production of artisanal latex. Through him we contacted and met with the developer of the technique Floriano Pastore, Brazilian research chemist

at the University of Brasília. There is a market for artisanal latex but currently it is only active in Brazil. Floriano Pastore estimated the costs of providing training and the infrastructure needed (ca £10K per community) and said that he would be very happy to collaborate, but this currently falls outside of our budget. Through innocent Foundation funding we have been offered an opportunity to host an expert 'scholar' from innocent Drinks in 2015. The aim of this will be to show Herencia staff (and possibly others) how to calculate a minimum profitable price for a NTFP - in this case wild rubber - that would cover all of the farmers' costs and provide an income. This is important as from innocent's experience many farmers underestimate the costs of production and so development initiatives fail despite the farmers being initially enthusiastic. We have consulted an expert in wild cacao based in Cobija (Edil Flores), and are exploring options for training communities in processing of beans to export standards, drawing on expertise that has been developed in the neighbouring Department of Beni (drawing on funds from W.A. Cadbury). We have also established contact with a small specialist chocolate producing company in the UK (Chocolution) who have expressed interest in testing samples from Pando.

- **Activity 2.3 (monitoring of trade).** No progress to date (see above).
- **Activity 2.4 (dissemination).** No progress to date (see above).

### **Fruit tree production**

In July 2014 Sanjoy Das, Executive Director of FWT, confirmed that for commercial reasons FWT would not be able to continue with the project. Such commercially-driven decision-making could be seen as a natural risk of partnerships with commercial partners. Since this time we have been trying to plan a course of action to mitigate the withdrawal. Specifically, to increase the diversity of NTFPs traded from the forest communities in the Bolivian Amazon. As there was no budget for this activity (Freeworld Trading's input was all in-kind), we needed to seek external funds and rethink this part of the project.

Through discussion with the communities we are working with, we identified several fruit tree species that could be incorporated into the agroforest system and supply a local market within the Pando itself. Whilst this is different from our initial proposed strategy, we believe that it meets the key objectives of Output 1: the diversification of NTFPs and the generation of increased income from NTFPs. It does not, however, expand the export market to the EU or include NTFPs from undisturbed forest. We strongly feel, however, that we are not as yet in a position to develop an EU-focused approach without a commercial partner that has existing export links to the Bolivian Amazon and the EU NTFP market.

Through the support of the Kew Foundation we contacted a number of potential funders. These included the innocent Foundation and the William A Cadbury Charitable Trust. At the beginning of October we were notified that we were successful with a proposal to the innocent Foundation (£90,000) that will enable the inclusion of fruit trees in the agroforest plots which we are developing as part of the Forest Futures project over a three year period. These will produce fruit for local consumption, export to Brazil and sale to the local market. Clearly we had to match the project's needs with those of our funder, but feel that this meets our aims of demonstrating that income from NTFPs can be generated without the need to destroy forest, thereby reducing the pressure on native biodiversity. This strategy also better supports Output 2 compared to the original proposal.

This work, which began with the employment of a nursery specialist at Herencia in January 2015, will result in the production of six fruit-tree nurseries, ca 12,000 fruit tree seedlings of ca 5 species and the training of the communities in the management of the nursery, production, planting and maintenance of fruit tree seedlings. We will also use these funds to deliver a basic infrastructure for the processing of fruit pulps to access the local market.

### ***Output 2 – Community agroforestry.***

- **Activity 2.1** (establish agreements, infrastructure, pipeline for seed acquisition and propagation): This was established in Year 1. All the agroforest plots are growing well (see <https://tropicalbotany.wordpress.com/2015/03/21/planificacion-de-los-primeros-cultivos/>) and a temporary nursery has been established in Cobija to produce fruit tree seedlings for planting in the agroforest trials later in 2015. Three further community agreements will be established in 2015

(see 2.2 below). Funds captured from the Sabin Family Foundation and innocent Foundation will allow us to meet all requirements for expansion of the Inga community network (below).

- **Activity 2.2** (establish four community and one university agroforest plots): As discussed above, due to the withdrawal of one community and initial difficulties engaging with the University, we were initially able to establish only three community trials. However, with funds captured from the Innocent Foundation we are now able to expand to six forest communities; these demonstration plots will be established in 2015. In addition, following recent conversations with the University (March 2015) we are now working to finalise an agreement to establish the planned experimental plot close to Cobija.
- **Activity 2.3** (Peru experience exchange): As reported in 2014, the year 1 exchange was not deliverable. The year 2 exchange was delayed due to health problems with our counterparts in Peru (malaria). However, at the time of writing this has successfully been delivered, and will be reported on in full in the next report.
- **Activity 2.4** (Analyse data from experimental trials, produce agroforestry guide): We have been collecting systematic data from the trials (see Annex 5 for analysis). However, due to the rate of establishment of the trials we are not yet in a position to produce the guide. This will be developed during 2015-6. Meanwhile we have contracted (with funds captured from the Sabin Foundation) an intern (Lucy Dablin) to collect data on the impact of our agroforest on soil fertility, which will provide valuable additional data and evidence.
- **Activity 2.5** (Participatory monitoring and evaluation based on agroforestry trials): The baseline knowledge survey which was implemented in 2014 has been augmented with additional questions exploring awareness and perceptions and capacity. This survey is under way at the time of writing, and the results will be presented in the next report.
- **Activity 2.6** (monitoring of agroforestry uptake and increase in forest cover): It is still too early in the process for these activities. However, Herencia is seeking funding for two GIS technicians to identify deforestation rate in the communities before the project started and compare it with project data in 2016.

### ***Output 3 – Biodiversity and Ecosystem Services (BESt)***

The field work for this component is slightly behind schedule, but not sufficiently that it causes worry. See also above. Belonging to the Bolivian Civil service system, the structure of the partner MHNKMM was reorganised in spring 2014 with result that our Bolivian employees had to reapply for their positions and sign new contracts. This has slowed down project progress for Output 3. Whilst a field expedition was planned for October, the Bolivian botanist leading the BESt component, Lic. Alejandro Araujo-Murakami, was diagnosed with leishmaniasis in September and was only able to go on field work again in November, when the Kew-based staff were unable to leave the UK due to institutional restructuring.

- **Activity 3.1** (desk-based review of ecosystem services): This has been undertaken, and data have been incorporated into the draft publications as well as draft text for public communication (Annex 6). Work on NTFP values is continuing.
- **Activity 3.2** (quantitative forest surveys): the research and collecting for the project was finally authorized by the Bolivian DGB in June 2014, and in February 2015 the DGB also finally authorized the export of plant collections to RBG, Kew for verification. Both these processes have been unusually protracted and required substantial investment of time and effort. In spite of the challenges presented by illness and exceptional flooding, by the end of March 2015 the BESt team had established a total of five permanent one-hectare plots, tagged 3,030 trees with diameter of 10 cm or larger, collected 1,315 voucher specimens and taken more than 10,000 photos, together with data on life form, crown type and state of decomposition etc. Inventories of biomass and necromass of roots were also conducted in the five permanent one-hectare plots, and a general collecting expedition (March 2015) contributed to the broader knowledge of plant diversity outside and within the plots. By the end of March 2015 the plot and voucher data were entered into the custom-built Access database and the vouchers identified using the Santa Cruz Herbarium (Annex 7). The next step will be to verify these identifications against the Herbarium collections at the RBG, Kew once the voucher collections reach the UK (predicted June 2015). One of the project's two Licenciado

students from UAP, Miss Sahiury Vargas Lucinto, will be defending her thesis in summer 2015. A British MSc student, BSc Sara Edwards is currently conducting her thesis with the project. Her MSc project aims to answer the question: “what are the effects on plot biodiversity and carbon stock data when increasing sampling from trees with DBH between 5 and 10 cm”? Sara will conduct her MSc field work with the project staff in May 2015, when we will also install the sixth permanent hectare plot. Funding for this fieldwork was secured from the Bentham Moxon Trust in November 2014.

- **Activity 3.3** (dissemination): information from this work has been incorporated into community education activities. However, this work is primarily scheduled for Year 3, during which it will be made available to a wide range of audiences through posters, publications and public events. In November 2014 the BES team completed the first drafts of peer-reviewed papers on Biomass and Carbon stock and Biodiversity, respectively. These manuscripts will be completed once the field work has completed and voucher material has been verified in the Kew Herbarium. The project has been presented at the 11<sup>th</sup> Latin American Botanical Congress in Brazil in October 2014 (Annex 10), to DTP PhD student events at the University of Oxford and University College London, and to the general public in the Kew Easter Festival in 2014 and 2015.

#### **Output 4 – Awareness of BES values increased.**

- **Activity 4.1** (publicity and dissemination): regular posts have been made to the project blog <https://tropicalbotany.wordpress.com/category/darwin-initiative-bolivia-agroforest/> during the year, in both English and Spanish (27 blogs, with approximately 2,200 hits). These have been accompanied by the equivalent number of Twitter posts. Two interviews with project staff were broadcast on national television in Bolivia. The TV channel “Amazonía al Día de Boliviana” broadcast a short 6min50 second piece on our DI project based on an interview of Alex Monro and images from our blog. The clip was broadcast on April 13 but went up onto YouTube 28/05/14 (minutes 2.30 to 9.20 on <http://youtu.be/yEpmxcccSKT8>). Project updates were posted on Herencia’s Facebook four times in the year, receiving 459 Likes. Herencia also posted twice on its website. A project poster was developed in Spanish for use by all partners, where appropriate.
- **Activity 4.2** (media reviews): We have reviewed coverage in the press but have not undertaken an independent stakeholder review. The radio audience rating is no longer relevant as it was concluded following consultation during Year 1 that this was not an appropriate medium in the region (see logframe and Year 1 report).
- **Activity 4.3 (workshops and capacity building, guides, talks)**: In July, Alex Monro presented the project to the Governor of the Pando and developed links with the HM Ambassador to Bolivia, His Excellency Ross Denny. Regular contact was established with the environmental course at UAP and Herencia and in August 2014 Herencia hosted a joint two-day workshop themed “the importance of the Amazon for the equilibrium of Earth” in the Palacios community. Sixty students and university teachers participated. Several presentations given to rural communities on Amazonian soils and their impact on land-use. In September 2014 Herencia ran a two-part course for 60 students and lecturers from the Environmental Engineering programme of the Amazonian University of the Pando (UAP). The first part of the course took place at UAP and provided an overview of the ecosystem services that the Amazon provides to the Pando but also at a regional and global level. The second part of the course took part at one of our partner communities, Palacio. This consisted of demonstrating sustainable agricultural practices: aquaculture and the restoration of soils to productivity using Inga agroforestry. A talk by the Director of Herencia was given on 16/12/2014 during a workshop entitled “Adaptation to Climate Change and Post Disaster” at UAP organized by the Plurinational Mother Earth Authority about alternative methods for reforestation and the sustainable production model that the Forest Futures Project is implementing with *Inga* species. In that event a platform (interagency working group) was formed to design a project at the departmental level (Pando) sustainable forest production. On the 16th March 2015 the Director of Herencia participated in an event to propose the development of guidelines for a project entitled “Mechanism set of adaptation and mitigation to climate change for Pando” where he advocated the incorporation of Amazon fruits (see above) and highlighted the *Inga* species’ successful growth in the four communities as an example of using *Inga* for productive systems. **Activity 4.4** (monitoring impact and awareness): Following a baseline survey among communities we are about to commence

a monitoring survey among the communities. The revised protocol and database were finalised in March 2015 (Annex 5).

- **Activity 4.5** (schools programme and educational materials): In February 2015 the team provided Herencia with information to be worked into popular guides on biodiversity and ecosystem services to be distributed to the local policy makers, families and school children. An environmental education plan was developed and implementation has begun. The budget initially accepted by Darwin Initiative contains insufficient funding to ensure the success of Output 4. A (successful) proposal was submitted to the British Ecological Society (BES) to fund a pilot environmental educational scheme (strengthening and supplementing work already proposed) – Annex 8. Amelia Baracat visited the project in November 2014 to finalise the plan for delivery with Herencia, and work began in late March. The activities will run over a period of six months from March to September 2015. Yasmin's replacement at Herencia, Marianella Laura Quisbert, was contracted in February 2015 and will be responsible for delivery together with Juan Fernando Reyes and school teachers in three of the communities (San José, Motacusal and Palacios).

The revised plan for Activity 4.5 is as follows:

- **Activity 4.5.1: Inga Plantation:** Inga seedlings will be planted in a space/plot next to the schools in the three communities, and school children will plant suitable crops in reserved areas of agroforest trials. This activity aims to raise awareness of the value of soil the health functions of plants and other living organisms and to maintain productive and sustainable crop systems. Classroom activities will include the revision of what was learnt in the field days using simple materials.
- **Activity 4.5.2: Biodiversity as Natural Capital:** This activity will run in parallel with the ecology of soil, Inga plantation. This involves concepts of species, identification of the most common economically valuable species and principles that determine their distribution, knowledge of plant character and carbon sequestration both in field and classroom.
- **Activity 4.5.3:** Development and production of booklets and posters promoting understanding of forest biodiversity, ecology and ecosystem services, drawing on workshops held with Forest communities, school teachers and Herencia staff. Booklets to be distributed to rural and urban schools. Posters disseminated in the wider Pando region.
- **Activity 4.5.4: Urban/rural education Exchange:** Two visits from urban Schools to Forest communities engaged in the Project will be organised in 2015: one from Frei y Alegria School in Cobija and another from a school in Puerto Rico. This will include exchange of knowledge and perspectives on biodiversity and ecosystems, visits to agroforest and useful trees in the BONI reserves.
- **Activity 4.5.5: Public event:** Targeted at representatives of local authorities, press and the general public/stakeholders, this event will raise awareness of how the Inga agroforestry system can resolve problems with reforestation.
- **Activity 4.5.6: Monitoring:** Simple questionnaires implemented with school children in May and October 2015 to evaluate impact on knowledge and understanding of biodiversity values, soils, ecosystem and agroforestry among participants.

Through the employment of the project's education/engagement officer in Herencia, the project has been directly supporting community-based environmental education and awareness through its Bosque de Los Niños (BONI) programme, including engagement with school teachers and pupils in forest-based activities, development of education materials and planting of *Inga* trees in school grounds. Herencia is planning to work from a more pedagogical perspective based on the same work which has been carried out in Colombia. It will aim to strengthen the critical capacity for reading-writing and mathematical logic and social participation of children in rural areas and BONI. Herencia will seek funds to contract a consultant to work on a pedagogical methodology to implement this action. This is something outside the project, but if implemented we can capitalise on this action.

In addition, the project has set up a new website ([www.bosquedelosninos.org](http://www.bosquedelosninos.org)) which will be developed as an educational resource incorporating videos made with children in forest communities, discussing

and demonstrating the uses of forest trees and the value of Inga agroforestry. This will be populated and launched in 2015.

### 3.2 Progress towards project outputs

#### **Output 1 – Increased diversity of traded, sustainably harvested NTFPs**

- **Indicator 1:** *Two NTFPs not currently traded from Pando have been traded in the UK for one year (Yr 3).* See discussion of activities in Section 3.1. No new NTFPs brought into trade to date.
- **Indicator 2:** *Awareness of ecosystem and biodiversity values of local Amazonian forest increased among local farming and NTFP harvesting households, school children and local decision makers.* This is to be achieved through the development of the 'one-stop-guide' and the schools programme. Progress towards these indicators (see Section 3.1) has been limited, but we have begun to compile information for the guide and have defined the educational activity plan for this year which incorporates elements focused on use values of forest trees.

#### **Output 2 – Community agroforestry**

- **Indicator 1:** *Number of local livelihoods families incorporating Inga agroforestry strategies on their land increases from 0 to 100 (Yr 3).* The original estimate of 100 communities was based on Herencia's estimate of the number of families at each community being 25. In fact the number is lower, varying from 12 to 25 and of those not all families participate. For this reason this figure should be revised down to 50. Currently we have ca 25 families participating in the establishment of agroforest plots across three communities, and over the coming year this should double as we increase the number of participating communities to six.
- **Indicator 2.** *Area of agroforestry in pilot communities increased from 0ha to 20ha by year Yr 3 and number of participating communities increase from 4 to 16 during the course of the project.* We currently have 8ha as agroforest and anticipate an additional 6ha in the coming year, bringing the total to 14. There is scope for further expansion of the area under agroforest as a result of our exchange visit to Peru and if the innocent-funded fruit tree nurseries are successful. We currently work with three communities, one having withdrawn in January 2015 due to problems of internal governance and transport. By Year 3 this will increase to six but is unlikely to go higher as Herencia does not have the capacity to induct additional communities above this number. We are, however, also working with two farms, restoring degraded pasture to pasture and fruit tree orchard.
- **Indicator 3.** *Surface area of Inga agroforestry in Bolivia Pando increases from current area of 0ha to 80ha.* To date we have 4ha of agroforest outside of our pilot communities. We are hoping that this number will increase as illegally cleared land now needs to be reforested to 10% to avoid punitive fines. Herencia has been presenting our agroforest approach as mechanisms for reforesting such areas in a sustainable manner and there has been interest from the relevant authorities (Autoridad Plurinacional Madre Terra). This may offer potential for very substantial increase in *Inga* agroforest if successful.
- **Indicator 4.** *Agroforestry system successfully adapted and at least six families in each of four communities trained in management and monitoring. Inga agroforest is successfully adapted at two communities where six families are participating in the management and informal monitoring (of weed growth, Inga growth and health) of the plots. Quantitative monitoring is being done by Herencia as there is no interest or capacity for this in the communities. At the third community the plot was established on bulldozed land, useful for evaluating the potential of agroforest but much slower developing and it is not yet possible to evaluate the success of this last plot. Each community is planning an additional plot this year and we hope that they will again wish to do so next year.*

#### **Output 3 – Knowledge of ecosystem services, biodiversity and associated values in Pando forests increased**

- **Indicator 1:** *Value of forest ecosystem services (carbon, NTFP, timber) from plot survey and appropriate metric communicated to Local Government, local families, schools, NGOs and media through printed, online and oral media.* The results from the desk-based reviews, draft text from the quantitative forest surveys for peer-reviewed publications, and text on biodiversity and ecosystem services for the lay-person, have been submitted to Herencia for use in dissemination material to the project audiences: Local Government, local families, schools, NGOs and media. Next



step will to publish the peer-reviewed publications and dissemination materials. The project website at the Museo de Historia Natural in Santa Cruz has received 145 visits.

- **Indicator 2:** *Value of biodiversity of local forests to regional and global conservation plans communicated to Local Government, local families, schools, NGOs and media through printed, online and oral media as appropriate. See Indicator 1.*

#### **Output 4 – Awareness of ecosystem and biodiversity values of local Amazonian forest increased among local farming and NTFP harvesting households, school children and local decision makers**

- **Indicator 1:** *Poverty and environmental sustainability indicators incorporated into the new Sustainable Development Objectives (ODS).* The United Nations will define new indicators (technical definition) and a meeting is planned in September 2015 to approve the new indicators. In the last draft of the document there were some indicators for the Amazon and Herencia can contribute to the discussions.
- **Indicator 2:** *Educational programmes promoting understanding of ecosystem service and biodiversity value of natural forest included in school activities.* See education activities planned in Section 3.1.
- **Indicator 3.** *Annual forest clearance in Pando reduced by 10% from current level in four pilot communities.* No progress to date. It is too early for the agroforest trials to have an impact on community land use.

### **3.3 Progress towards the project Outcome**

So far, for reasons explained, we have made little tangible progress towards NTFP diversification, but hope to have progress on this during Year 3. Adaptation of Inga agroforestry to the regional context is on track, as evidenced by the success to date of the community trials, but it is too early for this to be demonstrating impact on either poverty alleviation or on biodiversity conservation/land use. We are making progress towards knowledge and awareness of incentives for sustainable forest management and maintenance of ecosystem services at a range of levels, and will have considerably greater levels of impact in this areas through the planned activities and outputs of Year 3. With regards to the indicators, these remain appropriate for measuring progress towards the outcome. For reasons outlined above we can provide no evidence against Indicators 1-3 and do not expect to be able to do so for another year. Indicator 4 may prove to be unrealistic given the timeframe involved, and it will be difficult to separate the impact of the project from other drivers for or against forest clearance among the communities involved. Herencia is now part of a network ARA (Articulacion Regional Amazonica) which includes 50 NGOs. They aim to implement many actions to stop deforestation and to find solutions for the sustainability of the Amazon. ARA has produced a document (book) which shows how deforestation is damaging the economy and the environment and part of their plan is to influence public policy. Indicator 5 remains valid, and our forthcoming mid-term community survey will provide some evidence towards this. Our actions in progress or planned in order to maximise progress to the outcome of the project during its lifetime have been reported here, including initiating alternative pathways harnessing forest products for livelihoods benefit (e.g. fruit trees) and engagement with emerging national reforestation frameworks for increasing the impact of agroforest.

### **3.4 Monitoring of assumptions**

We have conducted an analysis of the assumptions as part of the project monitoring procedure. The outcome risk and assumptions remain valid. We do not consider the withdrawal of one community (see 8 Lessons learnt) from the agroforestry pilots, due to a number of case-specific reasons, to invalidate the assumption that pilot communities remain committed to sustainable forest management (Assumption 1). With regard to the output risks and assumptions, Assumption 2.2 holds that 'agroforestry systems are not adversely affected by natural disasters. The Palacios site suffered unprecedented levels of flooding in early 2015, raising some concerns, but the plants appear to have survived.

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

Achieving poverty alleviation and biodiversity conservation through the establishment of agroforestry systems is a long-term process. The pilot agroforestry sites will not be planted with crops and fruit trees until the autumn of 2015, and will not have a significant impact on poverty or food security until some months later. Our contribution towards this goal so far lies in the work that we have done to establish a framework that can deliver significant positive impact over time, both on biodiversity and poverty through its wider uptake in the region. However, we are only approaching the point where there is sufficient evidence from our work on the ground to stimulate such uptake.

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

The project will assist Bolivia in meeting its obligations under the CBD by addressing articles: 8. In-situ Conservation [promoting non-destructive forest management systems]; 10. Sustainable Use of Biodiversity [promoting sustainable forest product development]; 12. Research and Training [building knowledge of forest biodiversity and ecosystem services, and in-country research capacity]; 13. Public Education and Awareness [developing education and outreach programmes], 16. Access to and Transfer of technology [emerging agroforestry systems]; 17. Exchange of Information and 18. Technical and Scientific cooperation. Principal Cross-Cutting Issues addressed by the project include: Biodiversity for Development; Communication, Education and Public Awareness; Ecosystem Approach; and Sustainable Use of Biodiversity. The current Bolivian Government has incorporated sustainable use of natural resources within the country's constitution and developed a new strategy to implement the CBD which was presented at COP 11. This consists of the Integrated Forest Management (IFM) concept that was legislated for within Bolivia in 2012 through the Mother Earth Law. This project is working to provide knowledge (NTFPs, agroforestry techniques, agroforestry species, restoration techniques, forest ecosystem services value, forest biodiversity value), skills (agroforestry techniques) and alternative incomes (NTFPs) that will directly support this strategy. We have not had further contact with the CBD focal point in Bolivia. However, in July 2014 we organised a visit from the UK Ambassador Ross Denny, which included a meeting with the Governor of Pando.

### **5. Project support to poverty alleviation**

*Tools, skills and knowledge to alleviate poverty sustainably are developed and applied in the Bolivian Amazon, improving livelihoods and reducing deforestation*

This project has been designed to contribute directly towards poverty alleviation within forest communities in Pando. Adaptation of *Inga* agroforestry techniques, their promotion and adoption by four pilot communities, and subsequent outreach among the 220 forest communities in Pando, will increase capacity of the rural poor to meet their basic needs sustainably. This will result in reduction in forest conversion through slash-and-burn subsistence agriculture among participating communities, with increased agricultural productivity derived from agroforestry. Following successful 'site capture' of the project's agroforest pilots, planting with crops and fruit trees is about to begin. This will start to have an impact within the next twelve months.

It is expected that diversification and expansion of NTFP collection/marketing from Pando will see the number and quantity of traded species increased, with improved household incomes and financial stability for harvesters. Crucially this will make harvesters' livelihoods less vulnerable to market and productivity fluctuations and climate change. Information on NTFPs will be more accessible to the forest communities constituting 40% of Pando's population, helping harvesters react to market changes and opportunities. The fruit tree production component, which has been initiated with matching funds, will contribute to household incomes and food security through food provision and potential sales of fruit products and saplings.

### **6. Project support to Gender equity issues**

Whilst furtherance of gender equality is not among the project's specific primary objectives, we are working to ensure that equal opportunity for participation in all community project activities is given to women. Both women and men in three communities took part in the initial baseline survey. The result

of the survey and others that are currently being undertaken will reflect the perceptions and values of a mixed gender members of the community. Our analysis of mid-term monitoring questionnaires will provide some further insight into the extent to which we have been successful in engaging women. No direct gender equality impacts are foreseen from the agroforest development. However, evidence suggests (see <http://www.worldagroforestry.org/downloads/Publications/PDFS/OP16988.pdf>) that agroforestry can benefit women in various ways, e.g. through facilitated access to fuelwood or marketable fruit products. In the Biodiversity component two female students are carrying out their Licenciado and MSc projects as part of the Darwin project in forest biodiversity and ecology - a field dominated by men.

## 7. Monitoring and evaluation

Participatory protocol for monitoring community engagement, impact and the project as a whole was developed and adjusted by the team in Bolivia. This participatory reporting structure will capture the less quantitative data which is important to meet the project outcome to increase the value and knowledge of biodiversity among the community we are working in the Pando region. Other methods used to monitor project activities is through a simple form developed to be completed by project staff with agreed timescale for the implementation of the activities. Here project staff populate the form with quantitative data on a 3-monthly basis to collate data on both activities and participation:

- 25 households (ca 100 people) trained in the production of *Inga* seedlings, establishment and planting of an *Inga* agroforest plot and maintenance of a plot.
- 6 households participating in seed collecting (San Jose & Motacusal), ca 20 person days, mainly men.
- 3 households participating in nursery management.
- 25 households participating in planting and maintenance of plots.
- 6 community assembly meetings.

We developed a two-year plan (2015 and 2016) related to the awareness-raising component of the project, with a timescale schedule for completion of activities and outputs. This was discussed with Juan Fernando and project staff at Herencia and adjusted in December 2014 (see Annex 8).

Field visits by the UK team (5 visits 2014/2015) provided ground supervision and adjustment of activities, face-to-face meetings and weekly Skype conversations with counterparts in Bolivia. The project logframe was used to discuss and adjust project activities during Kew staff visits to Bolivia in December 2014. Subsequent discussions, again using the project logframe as a basis, were held during the project Mid-Term Review in March 2015, with representatives of Kew, Herencia and MHNNKM. This resulted in a revised GANTT chart (Annex 9) designed for adaptive management through the rest of the project. The indicators of achievements are covered in the appropriate sections of the report.

There has not been any change made to M&E plan over this reporting period, but the M&E will be adapted to capture the activities relating to crop planting and production mentioned above. Questions exploring engagement in, perspectives on and expectations of project activities have been incorporated into the revised survey protocol (Annex 5).

## 8. Lessons learnt

Feedback and continuous engagement with communities and partners is time consuming, but essential to maintain momentum and motivation. At times energy and resources are spent with little result. For example, despite having received training from project staff in how to set out and plant plots, the Pimpollo community decided not to take part in the project. This is partly as a result of lack of visits from our team due to lack of access to the community (road access cut) and other issues related to change of leadership within the community. However, despite this, the project has managed to involve other communities in an effort to maintain the same number of community the project started with and expand the number of forest communities to six to account for the new activities with NTFPs (see 2.2 above).

There has been some difficulties employing an experienced person to work with the communities in Pando. The departure of Jasmin Daza (community outreach) in Year 1 of the project, due to family circumstances, resulted in delay in the implementation of the school children programme and the application of the protocol that would give us the qualitative data which is essential in adaptive management and the measurement of impact. Despite this, we managed to contract a substitute on a temporary basis until we were able to find a qualified community outreach personnel. Despite Vitalia's lack of experience with community outreach she managed to apply the remaining survey work at San Jose effectively, and developed good rapport with both the Palacio and Motacusal communities. As alluded to above, we have now employed an experienced professional, Marianela Laura Quisbert (from mid-February) and have put in place a solid plan with Herencia to ensure an efficient progress towards project's school programme and community engagement this year.

There isn't much that we would do differently. Many of the difficulties encountered over the last year are to some degree expected when working overseas. We have established some targets and implementation plans which should ensure that the project to progress effectively. We are still largely on target to meet project output and outcomes. Nevertheless, the problems we have had to deal with in the context of FWT's withdrawal from the project bear consideration. Engagement of a trading organisation with specific interests in the region was originally seen as a strength, and likewise their in-kind commitment of resources. However, the interests of such companies are inherently links to market forces and trends and, on reflection, the reliance of a major outcome of the project on such in-kind input made it very hard to fill the gap with no core project resources set aside for the component. But one of the lessons learned is that with perseverance, coupled with a flexible approach to methods and mechanisms towards project outcome (on our part and that of the Darwin Committee), it is possible to address such problems positively.

Local non-governmental organizations sometimes lack appropriate skills and resources to effectively carry out project activities as planned, particularly if staff have responsibilities that cut across multiple projects. It is therefore essential that sufficient time is spent in participatory planning and management, and in consulting on skills and human resources at the project design stage. We would recommend that inter-organizational relationships and project staff continuity over the duration of the project be considered as assumptions at the design stage of projects/logframes, and closely monitored (see also effect of Kew's re-structure with staff change), since any type of change in partnership and staff time/participation could have a negative effect in the project.

Establishing realistic targets for quantitative indicators in the development context is challenging. We have found that some of the estimates provided by our partners, based for example on shifting expectations of capacity for community engagement (in some cases building on relationships established through other projects and thus partly outwith our control), have been over-ambitious. Competitive funding processes inevitably predicate for ambitious targets that may not always be fully achievable in the project timescale, and adaptive management that maintains a clear focus on the outcome whilst being realistic about the measurable is important.

Time is of essence at the moment. We must ensure staff on the ground delivers a monthly short report on the development of the activities (previously on a three monthly basis). This will help us to monitor project development more closely and be able to discuss any problems of implementation quickly such that activities can be adjusted in a timely manner.

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

The review of last year's annual report was positive and pragmatic, and was well received by all partners. The main recommendations made were (in summary):

1. To clarify the livelihoods component of Output 2, and associated monitoring. [This was an error and has been adjusted (see current logframe)].

2. To report more clearly against figures referred to in the logframe. [We have attempted to do this more clearly in the current report].
3. To provide more supporting documents in English. [We have provided some supporting documents in English to aid the review process. However, it should be recognised that the working language of the project is Spanish, and we have not included the time for translating all documents into English into our work programme].
4. To adjust some assumptions to account for changes in expected delivery of field sites. [The assumptions remain the same but we have made some adjustment to the indicators as required].

## **10. Other comments on progress not covered elsewhere**

The main enhancements to the project over this year have been achieved through the capture of funds to strengthen livelihoods-focused activities and to address budget shortfalls resulting from institutional changes in our partner organisations. These adjustments have been outlined in the body of this report. There have been several difficulties faced by the project during the year, some of which have been alluded to already (illness, staff loss, withdrawal of a key partner and community, the highest flooding recorded in the region's history, elections etc.). One additional difficulty has been the total reorganisation of Kew's science, coupled with job and budget cuts. During the second half of 2014 this had an undeniably negative impact on the project. Since December, none of the Kew staff engaged in the project has been in the posts they occupied previously. Amelia Baracat, who was responsible for the monitoring and education/ awareness components of the project, is now in a post that has no room for such activities, and her previous post has been dissolved. We have made every effort to accommodate these changes in order to ensure successful delivery of the project; this has required some adjustment of time input from Kew staff (to be formalised in discussion with the Darwin Committee).

The project faces several risks which, as described, we have taken (and are continuing to take) steps towards addressing to fullest the extent possible. Funds no longer present a significant risk, but the ability of the project partners to maintain their staff and, now, to deliver delayed activities and outputs within a compressed timescale, presents some risk to project success.

## **11. Sustainability and legacy**

The profile of the project has been promoted within Bolivia through a combination of media, meetings and events (see Section 3.1, Output 4). As yet we have no tangible evidence for increasing levels of interest beyond the direct engagement with these activities. We expect this to gain momentum once the outcomes of our activities (e.g. agroforestry production) become more tangible. Meanwhile we have actively worked to build engagement with governmental and non-governmental organisations in Bolivia (e.g. Autoridad Plurinacional Madre Terra, WWF).

Our planned exit strategy is still valid and we do not plan to make significant changes to what was originally proposed. However, we recognise that there are challenges to leaving a sustained legacy in the context of agroforestry systems (and forest product trade), partly due to the time gap between their establishment and fruition. The fact that not all components have stable endpoints was recognised in the original project proposal. Working to influence sustained change in land-use practices is a complex process that requires strong, convincing evidence coupled with positive engagement and sustained support. Our approach to achieving this in the communities with which we are working has been through integration of project activities within a structure (BONI) that is integrated into community statutes. However, this is a time-consuming process (for example, the incorporation of three more communities within this structure is estimated to take three months of dedicated work). Whilst we recognise that in the long-term uptake must become self-sustaining without reliance on such structures, we consider the priority in the short term to be maximising the likelihood of success of the 'demonstration' projects upon which future uptake will be built, and communicating those successes

effectively as they are achieved. We are now working to engage these approaches into governmental programmes with the scope for future large-scale multiplication.

## 12. Darwin Identity

All official communications regarding the project, both in Bolivia and outside, make specific reference to Darwin Initiative funding (as a distinct project), including the project blog posts (<https://tropicalbotany.wordpress.com/category/darwin-initiative-bolivia-agroforest/>). The Darwin Initiative logo is now carried by the project vehicle in Bolivia (Annex 11). The new BONI interpretation panels will also bear the Darwin Initiative logo, as will posters and publications produced over the coming months. Despite the fact that the project has successfully raised to extend its activities, it is clearly recognised by all partners that this project is developed with Darwin Initiative funding, and forms part of the ‘family’ of Darwin Initiative projects in Bolivia. Since its beginning Bolivia has been the recipient of 16 projects funded by the Darwin Initiative. The project partner MNNK in Santa Cruz has experience from two previous projects, and the Bolivian authorities are familiar with research applications from these projects.

## 13. Project Expenditure

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

Current Year's Costs	2014/15 Grant (£)	2014/15 Total actual Darwin Costs (£)	Variance %	Comments (please explain any variance)
Staff costs				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items)				Unexpected computer replacement Herencia
Others				Delayed publication of manual
<b>Total</b>	<b>87,797</b>	<b>87,885</b>		

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

We consider our fund-raising activities during the past year, which have allowed us to compensate for unforeseen increases in in-country costs and the loss of in-kind support from a key project partner, and to incorporate complementary activities in furtherance of the project goal and outcomes, to be an outstanding achievement.

I agree for the Darwin Secretariat to publish the content of this section

## Annex 1: Report of progress and achievements against Logical Framework

Project summary	Measurable Indicators	Progress and Achievements April 2014 - March 2015	Actions required/planned for next period
<p><b>Impact</b></p> <p>Locally viable sustainable forest management systems are adopted by the expanding rural population of the northern Bolivian Amazon contributing to poverty alleviation, maintenance of forest ecosystem services and biodiversity conservation</p>		<p>Continued progress towards development and implementation of sustainable land use practices contributing towards poverty alleviation and biodiversity conservation</p>	
<p><b>Outcome</b></p> <p>Sustainable forest management developed and practised in four pilot communities in Pando, Bolivia including:</p> <ol style="list-style-type: none"> <li>1) diversification of NTFP resource collection and marketing;</li> <li>2) agroforestry adapted to regional socio-economic context, contributing directly to poverty alleviation and biodiversity conservation;</li> <li>3) understanding of economic incentives for sustainable forest management and maintenance of ecosystem service values increased at a range of decision-making levels from community to governmental.</li> </ol>	<ol style="list-style-type: none"> <li>1. Collection and trade in NTFPs through at least two cooperatives and involving at least 160 households increased from one to at least three products by year 3.</li> <li>2. Household income derived from sustainable forest products increased by 10% among 160 NTFP harvester households by year 3, monitored through cooperatives.</li> <li>3. Enhanced agricultural output in 4 pilot communities using Inga agroforestry systems adapted to the region, with proportion of basic food needs met by agroforestry increasing to 15% (from nil) by year 3 among 100 households.</li> <li>4. Annual forest clearance reduced by 10% in four pilot communities by year 3.</li> <li>5. Awareness of forest ecosystem services values and sustainable forest management opportunities and incentives increased at, community, school, NTFP harvester and regional</li> </ol>	<p>No collection or trade in additional products to date. We have identified potential products and are working to advance this.</p> <p>We are working to advance this in the absence of key partner. We have developed an alternative strategy of fruit tree production to help meet this output.</p> <p>Framework established in 3 communities</p> <p>Baseline data. Too early for project to have impact.</p> <p>Awareness raised in three forest communities/schools.</p>	<p>Indicators 1 &amp; 2: undertake wild cacao resource survey and engage with chocolate producers. Provide training in cacao bean processing in communities following consultation. Continue to explore avenues for NTFP market, and develop fruit tree production project in six communities with funding from innocent Foundation (establish nurseries, provide training).</p> <p>Indicator 3: support establishment of productive crops in first agroforest trials and monitor productivity. Expand agroforest area in existing communities and add three new communities to network. NB target revised to 50.</p> <p>Indicator 5: complete mid-term survey and analyse results. Develop and deliver the revised education/awareness plan as outlined.</p>

	decision-making levels by year 3.		
<b>Output 1.</b> Increased diversity of traded, sustainably harvested non-timber forest products (NTFPs) in Pando, supported by locally adapted information resources and delivery mechanisms, promoting sustainable forest management practice.	1 Two NTFPs not currently traded from the Pando have been traded in the UK for one year (Yr 3). 2. Awareness of ecosystem and biodiversity values of local Amazonian forest increased among local farming and NTFP harvesting households, school children and local decision makers.	Indicator 1: No progress to date (see explanation above with regard to withdrawal of project partner FWT). We no longer consider UK trade to be a realistic option and are focusing primarily on local markets. However, we will continue to explore possibilities with wild cacao and rubber.  This has been advanced in community schools through the BONI programme, but has been slower than planned. We will be producing a manual to forest products and fruit trees during Year 3, as well as educational materials and activities focusing on useful forest species.	
Activity 1.1. Identification & resource inventory of potential NTFPs incorporating field, desk-based and market components.		Preliminary inventory undertaken through review of forest species (survey data) and limited interviewing (this was the responsibility of FWT). Data will be incorporated in the manual and have been used to identify species with potential for fruit tree production as well as NTFP development.	
Activity 1.2. Market-testing, marketing, promotion and production pipeline of two selected NTFPs.		We are in the process of exploring options for wild rubber and cacao. However, this is still in a relatively early stage for reasons explained above, and we will continue to attempt to engage markets during Year 3. Our main focus is now on the development of community capacity for fruit tree production (through activities funded by innocent Foundation). The aim is to support communities in the production of resources that can: be integrated into agroforest; provide fruits and fruit pulp for market; provide seedlings for sale.	
Activity 1.3. Monitor diversity & economic value of NTFPs harvested and sold against a baseline.		Due to delays in establishing NTFP development, this activity is not currently relevant.	
Activity 1.4. Disseminate findings through Brazil experience exchange, workshop and production of 'One-stop guide' to sustainable forest products.		We are attempting to set up a Brazil/Bolivia/Peru experience exchange around wild rubber production through our relationship with WWF. We are working on the development of the 'one-stop guide', which will now include fruit trees as well as wild forest species.	
<b>Output 2.</b> Four community agroforestry pilot projects established, supported by technical research, generating increased uptake and agricultural output from locally appropriate	1 Number of local livelihoods incorporating <i>Inga</i> agroforestry strategies on their land increases from 0 to <del>100</del> 50. (Yr 3)	"Indicator 1 needs to be clarified (i.e. livelihoods, please see Darwin's feedback report year 1)". This has been corrected to families in the current logframe. The figure of 100 was based on 100 families spread across four communities. Currently we have 24 families and next year we should have 48 in total. We also have two farmers using agroforest to restore pasture.	



systems promoting livelihoods and biodiversity.	<p>2 Area of agroforestry in pilot communities increased from 0ha to 2014ha by Yr 3 and the number of participating communities increase from 4 to 166 during the course of the project (Yr 3)</p> <p>3. Surface area of <i>Inga</i> agroforestry in Bolivian Pando increases from current area of 0ha to 8032ha. (Yr 3)</p> <p>4. Agroforestry system successfully adapted and at least six families in each of four communities trained in management and monitoring. (Yr 2)</p>	<p>Indicator 2. To be adjusted from 3 to 6 communities. We are currently working with 3 communities and are in negotiation with an additional three communities. We are, however, also working with two pilot farms.</p> <p>Indicator 3. We currently have 8ha of agroforest planted and by next year we will have increased this to 14.</p> <p>Indicator 4. Currently we have ca eight families in each of the three communities with whom we work. We also have two farmers using agroforest to restore pasture. The community families with whom we work have actively been trained in all stages of the <i>Inga</i> seedling production and plot preparation and maintenance. The two farms have been trained in the planting and plot maintenance.</p>
Activity 2.1. Establish agreements, infrastructure and pipeline for the seed acquisition, propagation, and distribution of tree seedlings to supply demo plots and community uptake.		Established with three communities. Have produced >12,000 seedlings and planted ca 3,600 in 8ha of agroforest plot. Now working to establish agreements with three further communities. Plots to be established 2015, together with nurseries that will supply seedlings.
Activity 2.2. Establish four community and one university <i>Inga</i> agroforestry demo plots and experimental growth trials including native <i>Inga</i> species and requisite agreements (prior informed consent, ABS etc).		Have established three plots with plans to produce an additional three community plots in 2015 together with a university plot.
Activity 2.3. Experience exchanges with Peruvian <i>Inga</i> agroforestry programme (yr 1, yr 2).		Was not undertaken within this reporting period but undertaken in April of 2015. Impact of visit to be analysed.
Activity 2.4. Analyse data from experimental trials, combine with experiences in Honduras and Peru to produce agroforestry guide for Amazonian Bolivia.		Data being collected through regular monitoring procedures. Soil monitoring to be established in 2015.
Activity 2.5. Use the agroforestry plots to apply participatory monitoring and evaluation techniques and assess effectiveness of training activities to build local awareness, capacity and uptake in the use of <i>Inga</i> agroforestry techniques.		Questionnaires prepared and half of baseline data collected. Second (enhanced) survey to be undertaken in Q1 of 2015-6. Delays in questionnaire development within Herencia will limit its potential to address short-comings in training/activity during the project lifetime.
Activity 2.6. Monitor uptake of agroforestry practices by local farmer community and increase in forest cover against an initial baseline.		We have a baseline and monitor agroforest establishment through community engagement.
<p><b>Output 3.</b> Knowledge of ecosystem services, biodiversity and associated values in Pando forests increased through eight permanent survey plots, including species diversity, carbon stocks and</p>	<p>1 Value of forest ecosystem services (carbon, NTFP, timber) from plot survey and appropriate metric communicated to Local Government, local families, schools, NGOs and media through printed, online and oral</p>	<p>The results from the desk-based reviews, draft text from the qualitative and quantitative forest surveys for peer-reviewed publications, and text on biodiversity and ecosystem services for the lay-person have been submitted for use in dissemination material to the project audiences: Local Government, local families, schools, NGOs and media. Next step will to publish the peer-reviewed publication and dissemination materials. These are planned for 2015-6.</p>

provisioning services (useful and marketable plants).	media. (Yr 3) 2. Value of biodiversity of local forests to regional and global conservation plans communicated to Local Government, local families, schools, NGOs and media through printed, online and oral media as appropriate. (Yr 2, 3)	
Activity 3.1. Desk based review of ecosystem services (carbon stock related to wood density, wood density related to species, biodiversity value, NTFPs etc).		Reviews were completed and have informed the actions related to the activities 3.2 and 3.3. No further work planned.
Activity 3.2. Quantitative forest surveys of forest species composition, structure and biomass (integrated with 3.1 to generate quantified values for carbon stock, NTFPs etc).		Five permanent 1 hectare plots are established, data collected and analysed and draft manuscript written; one 1 hectare plot to be established and data to be collected in May 2015, followed by analysis; and two additional resource survey plots to be established and data collected in July 2015.
Activity 3.3. Dissemination of above information tailored to project audiences: local communities, local policy makers, scientific community.		The research was disseminated during the anniversary event of the Museo de Historia Natural in Santa Cruz. Preliminary data were presented at the Latin American Botanical Congress (poster). Analyses will be completed by end of September 2015, and manuscripts submitted to peer-reviewed journals, and presented at the 2nd Bolivian Botanical Congress in Sucre in October 2015. Information to be disseminated to project audiences by end of March 2016.
<b>Output 4.</b> Awareness of ecosystem and biodiversity values of local Amazonian forest increased among local farming and NTFP harvesting households, school children and local decision makers.	1. Poverty and environmental sustainability indicators incorporated into the new Sustainable Development Objectives (ODS) which replaces the ODM (Yr 3) 2. Educational programmes promoting understanding of ecosystem service and biodiversity value of natural forest included in school activities. (Yr 2, 3) 3. Annual forest clearance in Pando reduced by 10% from current level of in four pilot communities. (Yr 3)	Indicator 1. United Nations will define new indicators (technical definition) and a meeting is planned in September 2015 to approve the new indicators. In the last draft of the document there were some indicators for the Amazon, and Herencia can contribute to the discussions.  Indicator 2. Slow progress towards this indicator due to change in staff at Herencia and difficulty finding a skilled community outreach replacement. Progress is now under way, following the recruitment of qualified staff to work with communities in the school education programme (see planned activities above).  Indicator 3. Herencia is seeking funding for two GIS technicians to identify deforestation rate in the communities before the project started and compare it with project data in 2016. This indicator is unlikely to be meaningful within the project lifetime.
Activity 4.1. Publicity & dissemination through YouTube, Twitter, other social media, website and local media (print), national press releases, and conference		Two interviews with project staff were broadcast on national television in Bolivia, several blog posts and tweets. The TV channel "Amazonía al Día de

<p>participations.</p>	<p>Boliviana” broadcast a short 6 min 50 second piece on our DI project based on an interview of Alex Monro and images from our blog: minutes 2.30 to 9.20 on the following YouTube clip: <a href="http://youtu.be/yEpmxcccSKT8">http://youtu.be/yEpmxcccSKT8</a>. The clip was broadcast on April but went up onto YouTube 28/05/14. Project updates were posted on Herencia’s Facebook four times in the ½ year, receiving 459 Likes. Herencia also posted twice on its website. A project poster was developed in Spanish for use by all partner organisations. There have been 27 project blog posts (Spanish and English). We aim to feature the project in printed media during the coming year as tangible outcomes begin to emerge.</p>
<p>Activity 4.2. Annual press review; independent stakeholder review.</p>	<p>We have reviewed coverage in the press but have not undertaken an independent stakeholder review. This will be carried out at the end of Year 3.</p>
<p>Activity 4.3. Workshops and capacity building of farmers, local government officials, published guides, talks</p>	<p>In July, Alex Monro presented the project to the Governor of the Pando and developed links with the HM Ambassador to Bolivia, His Excellency Ross Denny. Regular contact was established with the environmental course at UAP and Herencia and in August 2014 Herencia hosted a joint two-day workshop themed “the importance of the Amazon for the equilibrium of Earth” in the Palacios community. Sixty students and university teachers participated. Several presentations given to rural communities on Amazonian soils and their impact on land-use. In September 2014 Herencia ran a two-part course for 60 students and lecturers from the Environmental Engineering programme of the Amazonian University of the Pando (UAP). The first part of the course took place at UAP and provided an overview of the ecosystem services that the Amazon provides to the Pando but also at a regional and global level. The second part of the course took part at one of our partner communities, Palacio. This consisted of demonstrating sustainable agricultural practices: aquaculture and the restoration of soils to productivity using Inga agroforestry. A talk by the Director of Herencia was given on 16/12/2014 during a workshop entitled "Adaptation to Climate Change and Post Disaster" at UAP organized by the Plurinational Mother Earth Authority about alternative methods for reforestation and the sustainable production model that the Forest Futures Project is implementing with Inga species. In that event a platform (interagency working group) was formed to design a project at the departmental level (Pando) sustainable forest production. On the 16th March 2015 the Director of Herencia participated in an event to propose the development of guidelines for a project entitled "Mechanism set of adaptation and mitigation to climate change for Pando" where he advocated the incorporation of Amazon fruits (see above) and highlighted the Inga species’</p>

	successful growth in the four communities as an example of using Inga for productive systems.
Activity 4.4. Monitoring impact as awareness of environmental and economic value the forests of Pando amongst the project audiences: local communities, local policy makers, local scientific community.	Following a baseline survey among communities in the beginning of the project, we developed a protocol to measure the impact of awareness level increase among the communities about the value of the local Pando forest. This is currently under way following the recruitment with Marianela Quisbert in February 2015. Results will be analysed by June 2015 in the database that has been established.
Activity 4.5. Development and delivery of schools programme and educational materials.	In February 2015 the team provided Herencia with information to be worked into popular guides on biodiversity and ecosystem services to be distributed to the local policy makers, families and school children. An environmental education plan was developed and implementation has begun. The budget initially accepted by Darwin Initiative contained insufficient funding to ensure the success of Output 4. A (successful) proposal was submitted to the British Ecological Society (BES) to support a pilot environmental educational scheme (strengthening and supplementing work already proposed). Amelia Baracat visited the project in November 2014 to finalise the plan for delivery with Herencia, and work began in late March. The activities will run over a period of six months from March to September 2015. Yasmin's replacement at Herencia, Marianella Quisbert, was contracted in February 2015 and will be responsible for delivery together with Juan Fernando Reyes and school teachers in three of the communities (San Jose, Motacusal and Palacios). We will produce and distribute a poster and develop an educational booklet in 2015-6. Further details of planned work are reported above.

## Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Goal:</b> Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.</p>			
<p><b>Sub-Goal/IMPACT:</b> Locally viable sustainable forest management systems are adopted by the expanding rural population of the northern Bolivian Amazon contributing to poverty alleviation, maintenance of forest ecosystem services and biodiversity conservation</p>			
<p><b>Purpose/OUTCOME</b> Sustainable forest management developed and practised in four pilot communities in Pando, Bolivia including: 1) diversification of NTFP resource collection and marketing; 2) agroforestry adapted to regional socio-economic context, contributing directly to poverty alleviation and biodiversity conservation; 3) understanding of economic incentives for sustainable forest management and maintenance of ecosystem service values increased at a range of decision-making levels from community to governmental.</p>	<ol style="list-style-type: none"> <li>1. Collection and trade in NTFPs through at least two cooperatives and involving at least 160 households increased from one to at least three products by year 3.</li> <li>2. Household income derived from sustainable forest products increased by 10% among 160 NTFP harvester households by year 3, monitored through cooperatives.</li> <li>3. Enhanced agricultural output in 4 pilot communities using Inga agroforestry systems adapted to the region, with proportion of basic food needs met by agroforestry increasing to 15% (from nil) by year 3 among 100 households.</li> <li>4. Annual forest clearance reduced by 10% in four pilot</li> </ol>	<ol style="list-style-type: none"> <li>1. Annual cooperative trade figures; pilot community annual collection and trade records. Baseline data on agricultural output submitted as part of first Half Year Report.</li> <li>2. Annual household economic surveys, focus group reports and records of sales through cooperatives and Freeworld Trading monitoring programme.</li> <li>3. Annual yield records from pilot agroforestry plots maintained by agriculture extension workers, school children, teachers, men and women in the four pilot communities. Households interviewed to establish the proportion of basic food needs met by their community agroforestry plots.</li> <li>4. Mapping and remote</li> </ol>	<ol style="list-style-type: none"> <li>1. Pilot communities remain committed to sustainable forest management; micro-level (community-based) results influence macro-level (municipal/regional) strategies and decision-making. Risk minimised by focus on short-term delivery of benefits within a long-term strategy supporting regional coordination and cooperation, and multi-stakeholder engagement throughout the project life cycle.</li> <li>2. Options and market demand remain in place for available forest products; resources available in commercially viable quantities for sustainable management; products meet standards for local/international markets. Risk will be minimized through diversification of NTFP options.</li> <li>3. Land ownership system and political context continue to allow forest product extraction and agroforestry by</li> </ol>

	<p>communities by year 3.</p> <p>5. Awareness of forest ecosystem services values and sustainable forest management opportunities and incentives increased at, community, school, NTFP harvester and regional decision-making levels by year 3.</p>	<p>sensing/GIS data indicate leverage of agroforestry cover of 3:1 with respect to the four community plots; focus group reports</p> <p>5. Baseline data and results of annual monitoring of awareness of ecosystem value of forest collected through value/culture surveys of communities and their leaders, schools and regional decision-makers.</p>	<p>communities. Maintaining an open dialogue with regional policy and decision makers throughout the project will help minimize this risk.</p>
<p><b>Outputs</b> (add or delete rows as necessary)</p> <p>1: Increased diversity of traded, sustainably harvested non-timber forest products (NTFPs) in Pando, supported by locally adapted information resources and delivery mechanisms, promoting sustainable forest management practice.</p>	<p>1 Two NTFPs not currently traded from the Pando have been traded in the UK for one year (Yr 3).</p> <p>2. Awareness of ecosystem and biodiversity values of local Amazonian forest increased among local farming and NTFP harvesting households, school children and local decision makers.</p>	<p>1.1. Baseline data on collectors' income from NTFPs submitted with first Half Year Report, annual monitoring data submitted with Annual and Final Reports.</p> <p>1.2. NTFP trade figures by product for NTFPs from Pando compiled by project partner Freeworld Trading and submitted in Annual and Final Reports.</p> <p>1.3. Two new (for Pando) NTFPs available from a retailer in Bolivia and or the EU. Samples sent with Final Report.</p> <p>1.4 'One-stop guide' to sustainable forest products. Sample sent with Final Report.</p>	<p>1. Of the potential species selected for initial market testing (<i>Plukenetia volubilis</i>, <i>Bertholletia excelsa</i> shells, wild <i>Euterpe sp</i>, wild <i>Theobroma cacao</i>) two will be successful or substitutable by successful alternatives.</p> <p>2. Functional trade links in the edible NTFP market are maintained between the EU market and Bolivian Amazon processors, wholesalers and cooperatives.</p>
<p>2: Four community agroforestry pilot projects established, supported by technical research, generating increased uptake and agricultural output from locally appropriate systems promoting livelihoods and biodiversity.</p>	<p>1 Number of local livelihoods families incorporating <i>Inga</i> agroforestry strategies on their land increases from 0 to 100. (Yr 3)</p> <p>2 Area of agroforestry in pilot communities increased from 0ha to 2014ha by Yr 3 and the number of participating</p>	<p>2.1. Annual yield from demonstration <i>Inga</i> agroforestry plots documented and submitted as part of Annual and Final Reports.</p> <p>2.2. Mapping and quantification of <i>Inga</i> agroforestry, non-productive disturbed vegetation (e.g. degraded pasture) and natural</p>	<p>1. There remains a need/demand amongst farmers to improve livelihoods (Pando has amongst the highest proportion of people vulnerable to poverty in Bolivia).</p> <p>2. Land remains available for agroforestry plots and trials, and agroforestry systems are not adversely affected by natural disasters.</p>

	<p>communities increase from 4 to 166 during the course of the project (Yr 3)</p> <p>3. Surface area of <i>Inga</i> agroforestry in Bolivian Pando increases from current area of 0ha to 8032ha. (Yr 3)</p> <p>4. Agroforestry system successfully adapted and at least six families in each of four communities trained in management and monitoring. (Yr 2)</p>	<p>forest using remote sensed data. Documented in a peer-reviewed publication, Annual Reports, local workshops and schools programme by Year 3.</p> <p>2.3. Number of families adopting <i>Inga</i> agroforestry techniques recorded as part of annual surveys.</p> <p>2.4. Field training/work attendance records by participating groups.</p> <p>2.5. Observation of practical field work, recordings in diaries, scrap books in projects activities and feedback from participating groups.</p> <p>2.6. Control trial (agroforestry and native <i>Inga</i>) experimental reports.</p> <p>2.6. Community Focus Group reports document awareness, understanding and motivation to adopt agroforestry techniques by Year 2.</p> <p>2.7. Biodiversity value of agroforestry systems documented and disseminated in a peer-reviewed publication, local workshops and schools programme by Year 3.</p> <p>2.8. <i>Inga</i> agroforestry booklet. Sample sent with Year 2 report.</p>	
<p>3: Knowledge of ecosystem services, biodiversity and associated values in Pando forests increased through eight six permanent survey plots, including species diversity, carbon stocks and provisioning services (useful and marketable plants).</p>	<p>1 Value of forest ecosystem services (carbon, NTFP, timber) from plot survey and appropriate metric communicated to Local Government, local families, schools, NGOs and media</p>	<p>3.1. Press releases, project websites and blog, social media, online clips, radio and face to face activities documented and included in Annual and Half Year Reports.</p>	<p>1. Sites remain available for establishment of forest plots.</p> <p>1. Natural forest carbon stocks can be realistically estimated from data on species composition, associated wood anatomy and biomass.</p>

	<p>through printed, online and oral media. (Yr 3)</p> <p>2. Value of biodiversity of local forests to regional and global conservation plans communicated to Local Government, local families, schools, NGOs and media through printed, online and oral media as appropriate. (Yr 2, 3)</p>	<p>3.2. Ecosystem and biodiversity value of natural forests documented in peer-reviewed publication.</p> <p>3.3. Forest biodiversity and ecosystem services booklet. Sample sent with Year 3 report.</p>	<p>2. NTFP and timber value can be realistically estimated from species composition and biomass.</p> <p>3. Research and specimen export regulations allow Kew to support species diversity, sampling and mapping component.</p>
<p>4: Awareness of ecosystem and biodiversity values of local Amazonian forest increased among local farming and NTFP harvesting households, school children and local decision makers.</p>	<p>1. <del>Output 3 results cited and incorporated into updated Bolivian Amazon Millennium Development Plan and conservation plans</del> Poverty and environmental sustainability indicators incorporated into the new Sustainable Development Objectives (ODS) which replaces the ODM (Yr 3)</p> <p>2. Educational programmes promoting understanding of ecosystem service and biodiversity value of natural forest included in school activities. (Yr 2, 3)</p> <p>3. Annual forest clearance in Pando reduced by 10% from current level of in four pilot communities. (Yr 3)</p>	<p>4.1. Pre-project and annual awareness and value/culture surveys with schools, community leaders and regional decision-makers.</p> <p>4.2. Annual press review; independent stakeholder review; radio audience rating.</p> <p>4.3. Copy of education materials and activity timetables included in Annual and Final Reports.</p> <p>4.4. Assessment of remote-sensed data published in peer-reviewed publication and included in Final Report.</p> <p>4.5. <del>Updated draft of 'Millennium Development Goals for the Bolivian Amazon'</del> published Poverty and environmental sustainability indicators incorporated into the new Sustainable Development Objectives (ODS) which replaces the ODM submitted as annex to the Final Report.</p>	<p>1. The "<i>El Bosque de los Niños</i>" programme and participating communities remain active and in collaboration throughout the project; community members (male and female), school children and NTFP harvesters happy to pass on knowledge. [Risk minimised by engagement workshops to define/agree shared vision/priority/product and the implementation of an integrated participatory monitoring and evaluation techniques as a learning tool].</p> <p>2. Herencia's role in local community engagement and regional development strategy through Articulación Regional Amazonica (ARA) maintained (ARA is a transnational regional network of NGOs which seek to conserve Amazonian forests and ecosystems, biotic and cultural diversity, and the welfare of its inhabitants).</p> <p>4. Deforestation in Pando is driven by poverty and lack of existing alternative forest-based incomes.</p>



Activities (details in workplan)

### **Output 1**

Increased diversity of traded, sustainably harvested non-timber forest products (NTFPs) in Pando, promoting sustainable forest management practice.

- 1.1. Identification & resource inventory of potential NTFPs incorporating field, desk-based and market components.
- 1.2. Market-testing, marketing, promotion and production pipeline of two selected NTFPs.
- 1.3. Monitor diversity & economic value of NTFPs harvested and sold against a baseline.
- 1.4. Disseminate findings through Brazil experience exchange, workshop and production of 'One-stop guide' to sustainable forest products.

### **Output 2**

Four community agroforestry pilot projects established, supported by technical research, generating increased understanding, uptake and increased agricultural output from locally appropriate systems promoting livelihoods and biodiversity.

- 2.1. Establish agreements, infrastructure and pipeline for the seed acquisition, propagation, and distribution of tree seedlings to supply demo plots and community uptake.
- 2.2. Establish four community and one university *Inga* agroforestry demo plots and experimental growth trials including native *Inga* species and requisite agreements (prior informed consent, ABS etc).
- 2.3. Experience exchanges with Peruvian *Inga* agroforestry programme (yr 1, yr 2).
- 2.4. Analyse data from experimental trials, combine with experiences in Honduras and Peru to produce agroforestry guide for Amazonian Bolivia.
- 2.5. Use the agroforestry plots to apply participatory monitoring and evaluation techniques and assess effectiveness of training activities to build local awareness, capacity and uptake in the use of *Inga* agroforestry techniques.
- 2.6. Monitor uptake of agroforestry practices by local farmer community and increase in forest cover against an initial baseline.

### **Output 3**

Knowledge of local forest ecosystem services, biodiversity and associated values assessed through eight permanent survey plots, including species diversity, carbon stocks and provisioning services (useful and marketable plants).

- 3.1. Desk based review of ecosystem services (carbon stock related to wood density, wood density related to species, biodiversity value, NTFPs etc).
- 3.2. Quantitative forest surveys of forest species composition, structure and biomass (integrated with 3.1 to generate quantified values for carbon stock, NTFPs etc).
- 3.3. Dissemination of above information tailored to project audiences: local communities, local policy makers, scientific community.

### **Output 4**

Awareness of ecosystem and biodiversity values of local Amazonian forest increased among local farming and NTFP harvesting households, school children and local decision makers.

- 4.1. Publicity & dissemination through YouTube, Twitter, other social media, website and local media (print & radio), national press releases, and conference participations.
- 4.2. Annual press review; independent stakeholder review; radio audience rating.
- 4.3. Workshops and capacity building of farmers, local government officials, published guides, talks.
- 4.4. Monitoring impact as awareness of environmental and economic value the forests of Pando amongst the project audiences: local communities, local policy makers, local scientific community.
- 4.5. Development and delivery of schools programme and educational materials.

## Annex 3 Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Year 3 Total	Year 4 Total	Total to date	Number planned for reporting period	Total planned during the project
2	UK MSc student to undertake Masters project [in progress]	0	(1)			(1)	(1)	0
4 A	Capacity building of Bolivian UAP undergraduate students	2	62			64	2	4
4B	Training in plot survey and plant identification skills of UAP students	6				6	0	0
4C	UK MSc student to receive training	0	1			1	1	0
4D	Training in data analysis methods of forest plot data for BES evaluation	0	3			3	0	0
5	Training of project technical staff (agroforestry, plot surveys)	6	1			7	0	6
6 A	Number of trainees in agroforestry techniques, forest plot research	114	114			114	48	48
6 B	Training weeks as above	342	200			542	144	432
7	Training materials produced (3 manuals, one poster, one survey methodology)	1	0			1	1	5
8	Weeks spent by project staff in host country	19	13			32	16	64
11A	Papers published peer review journals	0	0			0	0	3
11B	Papers submitted peer review journals	0	0			0	0	3
12A	Specimen and plot databases established in Bolivia	2	0			2	0	2
12 B	Specimen databases enhanced in Bolivia	3	3			3	3	3
13 B	Bolivian species reference collections enhanced (botanical collections)	3	3			3	3	3
14A	Conferences/seminars/workshops organised to disseminate findings	3	1			4	1	6
14B	Conferences/seminars attended to disseminate findings	1	4			5	2	8
15	National press releases in Bolivia and UK	2	0			2	2	8
16	Newsletters (including web-based blog posts, and website news items)	12	28			40	14	56
18	National TV programmes Bolivia and UK, including YouTube video clip)	1	2			3	1	4
20	Estimated value (£'s) of physical assets to be handed over to host country	3,500	700			4,200	0	3,500
22	Permanent field plots established	2	3			5	4	6
23	Value of resources raised  Bentham Moxon Trust Innocent Foundation Sabin Family Foundation William A Cadbury Charitable Trust  Total							










In Table 2, provide full details of all publications and material produced over the last year that can be publicly accessed, e.g. title, name of publisher, contact details, cost. Mark (\*) all publications and other material that you have included with this report.

**Table 2 Publications**

<b>Title</b>	<b>Type</b> (e.g. journals, manual, CDs)	<b>Detail</b> (authors, year)	<b>Gender of Lead Author</b>	<b>Nationality of Lead Author</b>	<b>Publishers</b> (name, city)	<b>Available from</b> (e.g. website link or publisher)
Futuro de Bosques	Poster	A. Araujo-Murakami, A. Baracat, A. Carrion, P. Herrera, B. Klitgaard, W. Milliken, A. Monro, J.F. Reyes, R. Velarde	Alphabetical by last name	Bolivian		
Documenting Bolivia's bountiful botany	Science blog	Gwilym P. Lewis & Bente B. Klitgaard	Male	British	RBG, Kew	www.kew.org

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

See attached Zip file

-  Annex 5 Reporting and monitoring forms and guidelines
-  Annex 6 Biodiversity & Ecosystem Services draft outputs
-  Annex 7 Forest inventory and plot data
-  Annex 8 Education and awareness programme outlines
-  Annex 9 Project planning
-  Annex 10 Posters
-  Annex 11 Photos
-  Annex 12 Examples of field reports
-  Annex 13 Example of action plan from community engagement process

**Checklist for submission**

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.	
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
<b>Do you have hard copies of material you want to submit with the report?</b> 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.	