



Darwin Initiative Main Annual Report

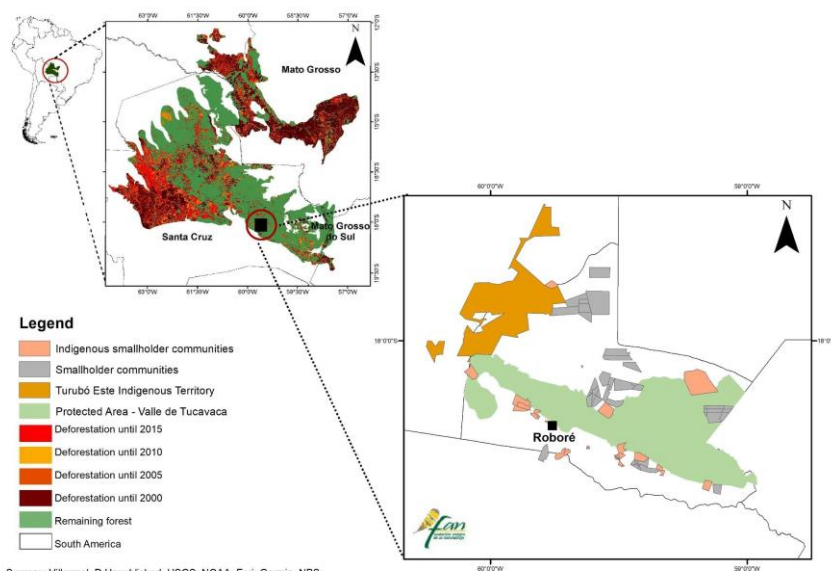
To be completed with reference to the “Writing a Darwin/IWT Report” Information Note: (<https://www.darwininitiative.org.uk/resources-for-projects/reporting-forms-change-request-forms-and-terms-and-conditions/>).

It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2021

Darwin Project Information

Project reference	Main project 26-024
Project title	<i>Improving indigenous Bolivian Chiquitano people’s livelihoods through sustainable forest management</i>
Country/ies	Bolivia and Brazil
Lead organisation	Royal Botanic Gardens, Kew, United Kingdom
Partner institution(s)	NGO Fundación Amigos de la Naturaleza, Santa Cruz, Bolivia Museo de Historia Natural Noel Kempff Mercado, Universidad autónoma, Gabriel Rene Moreno, Santa Cruz, Bolivia
Darwin grant value	Awarded £320.201 Total project value after latest accepted change request March 2021 = £449,479
Start/end dates of project	July 2 nd 2019 – 30 th September 2022 = 39 months
Reporting period (e.g. Apr 2020 – Mar 2021) and number (e.g. Annual Report 1, 2, 3)	April 2020 – Mar 2021, Annual Report 2
Project Leader name	Dr. Bente B. Klitgård
Project website/blog/social media	Facebook: @MuseoNKM, @FANBolivia Twitter: @KewAmericas, @FANBolivia Annex 4 3.4cii Project dissemination and promotion
Report author(s) and date	Bente Klitgård, Ruth Delgado, David Pearson, Maira Martinez, Daniel Villarroel and Marisol Toledo



1. Project summary

The globally unique Bolivian Chiquitano ecoregion is under increasing pressure from expanding soybean agriculture, cattle ranching, logging, and subsistence farming. We will enable the government of Santa Cruz (an autonomous department) to implement an effective conservation strategy by: 1) providing diversification options for livelihoods in sustainable forest management, 2) engaging key stakeholders (indigenous forest communities, soybean farmers, and cattle rangers), 3) building capacity for assessing IUCN extinct risk, and 4) implementing Tropical Important Plant Area (IPA) criteria in Chiquitano forest conservation.

The project is addressing increasing annual net loss of the globally unique Chiquitano dry forest ecoregion, representing the world's largest expanse of intact tropical dry forest, home to 3,500 plant species, of which 200 are endemic. Furthermore, it provides ecosystem services and livelihoods for the rural population and is highly vulnerable to extreme abiotic events, including droughts and large fast-spreading fires, both exacerbated by climate change, unsustainable management practices and deforestation. These problems were identified in Bolivia's 2025 Patriotic Agenda and its National Biodiversity Strategy, "La ley de la Madre Tierra". In the decade 2004-2014, the Bolivian economy grew at an average annual rate of 4.7%, with the extreme poverty rate in the urban indigenous population falling from 37% to 14%, while 52% of the rural indigenous population still suffers extreme poverty. The 145,000 Chiquitano people are Bolivia's lowland ethnic group, whose livelihoods depend on logging and subsistence farming. Agriculture contributes 17% of Bolivia's GDP. Concurrent with economic growth, Bolivian annual net loss of forest rose from 252kha to 463kha from 2010-2016 with 75% affecting the eastern lowlands, mainly the Chiquitano dry forest ecoregion. Bolivian national policy, increased international market demand for soybeans and non-sustainable agricultural models are the main drivers of forest loss, pushing indigenous subsistence farmers off their land, increasing risk of worker exploitation. Soybean alone represents Bolivia's third-biggest source of foreign export, the government plans to boost the area land-cultivation from 2.7mill. ha in 2014 to 4.5mill. ha by 2020.

The project will mitigate the threats to the ecoregion and its indigenous people through sustainable practices to reduce net forest loss from agriculture through:

- 1) addressing poverty in Chiquitano indigenous communities,
- 2) engaging soybean farmers and cattle farmers,
- 3) building capacity in applying practical, scientifically rigorous IUCN species conservation assessment and IPA-tools to identify site-based conservation priorities, and
- 4) equipping decision makers with these tools.

2. Project partnerships

The project leader, RBGKew, and the main partners, FAN and MHNNKM, have been involved in planning, monitoring and evaluation and decision making for the project. A high degree of complementarity between the project partners was recognised at the inception of this project. The two years of the project have proven that this degree of complementarity is bearing fruit for project communication, management, monitoring and ultimately delivery.

A strength of the partnership is that clear communication channels have been established between the partners since inception of the project proposal. There is one person designated by each organisation to coordinate the implementation of project activities. Through these people, regular bi-weekly project monitoring and update meetings are held. To this end, it has been useful to hold meetings in-person, as well as to take advantage of tools for communication and sharing documents remotely such as Microsoft Teams and WhatsApp. Also, the roles of the partners in the project have been clearly defined. This has been important to implement the project actions in ways that efforts complement each other.

In June 2020, the partners met in a ½ day online project workshop to celebrate the achievements made in year 1. In June, the project leader also met with both partners separately to plan and revise year 2 activities in the face of the COVID19 pandemic. The partners met for planning workshops for joint FAN, MHNNKM and Kew activities on August 25th (planning year 2 outputs 3.4, 3.5 and 4), November 4th (update on joint activities), January 29th (IUCN-TIPAs course), February 5th (Output 3.4b centres of useful species) (Evidence, Annex 4.1).

The Darwin project budget allowed us to contract a consultant from MHNNKM for a period of two months in connection with field work and the logistics before and after expeditions in August and October 2019. However, in the meantime an award from the William Cadbury Trust has allowed us to contract a Bolivian biologist, Lic.Biol. Maira Martinez Ugarteche, onto to the project full-time from February 2020 to January 2021 to help Kew deliver the Museum's commitments under Outputs 3 and 4, amongst other things. An additional benefit to this is having a full-time person responsible for project activities based at the MHNNKM has improved communication with that partner.

These strengths, of clear communication and well-defined roles, have facilitated moving forward with the project goals despite the environmental, political, and public health issues of year 1 (see section 3.4 for details).

3. Project progress

3.1 Progress in carrying out project Activities

A.1.3. Acquisition and installation of fruit processing equipment. Activity completed for year 2. Equipment for processing chiquitano almonds has been manufactured. Delivery of this equipment to the communities is planned to just before the start of the almond harvesting season (end of June 2021). This is to motivate the start of the harvest and to coincide with the delivery of the communities' counterpart (wooden handles and wooden supports). The equipment purchased is being used in the best practices training (activity 1.4 and 1.5). A mill and a press have been ordered to help process the pesoé seed and extract oil. All equipment follows the best practice recommendations of activity 1.7. (Evidence, Annex 4: 1.3.a and note * at the end of the section).

A.1.4. Training in sustainable forest management and good NTFP harvesting practices. A cycle of training sessions on good harvesting practices for chiquitano almonds, pesoé and copaibo oil was conducted using the equipment purchased in Activity 1.3. 50 people (52% women) participated in the six project communities. As part of the training, a 70ha harvesting area of chiquitano almond was established. Access trails were opened and a total of 1,473 trees surveyed and mapped. The high density of trees and improved access has left community members more motivated (Evidence, Annex 4: 1.3.b and note * at the end of the section).

A.1.5. Training in good NTFP processing practices. Activity completed for year 2. A cycle of training in good practice for processing chiquitano almonds was carried out using the equipment purchased in activity 1.3. 35 people (51% women) participated in 3 communities of the project. In addition, two groups of women, who extract pesoé oil in an artisanal manner were contacted in two of the project communities. As they are interested in improving their processing practices, it was agreed to provide training when the pesoé harvesting season begins in May 2021. These groups will be able to use the equipment purchased in Activity 1.3. (Evidence, Annex 4: 1.4.a and note * at the end of the section).

A.1.6. Monitoring and technical assistance in good NTFP harvesting and processing practices. Technical assistance was provided to one of the project communities in how to harvest the fruits of two additional wild species: Sinini (*Annona muricata*) and Piton (*Talisia esculenta*). Although they are not prioritised in the project, the harvesting season for these species coincided with the decrease in restrictions due to the pandemic and there was an opportunity to support the community with actions that contribute to the main goal of the project. This experience has generated greater community interest in using the forest in an integrated and sustainable manner and has helped lay the groundwork for good practices for the harvesting of chiquitano almond and pesoé (Evidence, Annex 4: 1.4.b and note * at the end of the section).

A.1.7. Production and dissemination of 2 Best Practice Manuals in the harvesting and processing of 2 NTFP species. Activity completed for year 2. The technical content of the three manuals on best practices in the harvesting and processing of three species: chiquitano almond, copaibo and pesoé has been prepared and revised. A consultant has been hired to improve the presentation and adapt the text to the audience. Final versions are expected to be printed in mid-year 3. In the meantime, the approved technical version of the manuals is being used in activities 1.4 and 1.5 (Evidence, Annex 4: 1.5 and note * at the end of the section).

A.2.2a. Facilitate the organisation and legal constitution of harvesters in a community forest enterprise. Activity completed for year 2. Groups of people interested in forming a community forest enterprise were identified in 5 of the 6 pilot communities of the project. Based on this, a contracted consultant has initiated the first activities to facilitate the organization of these groups (Evidence, Annex 4: 2.2a and note * at the end of the section).

A.2.2b. Specialist consultants to elaborate a market survey and a bio-business plan for the forest enterprise. Activity initiated. The consultant that will assist with the organisation of the harvesters will also prepare their business plans, which will facilitate the process. The business plans are expected to be ready at the beginning of Q2 of year 3, in time to provide technical assistance in business management (activity 2.2c) during the main harvesting season (Note * at the end of the section).

A.2.2c. Technical assistance in business management (associativity, accounting, negotiation, sales and marketing) by FAN. Activity initiated. The progress of this activity is related to the progress of Activity 1.6. Technical assistance has been provided for the negotiation, sale and distribution of profits from sinini and piton in one of the communities. This small-scale activity helps lay the groundwork for the commercialisation of chiquitana almonds, where larger volumes of product and money will be handled. Technical assistance in business management for the harvesting of almonds, copaibo and pesoé will continue between Q1 and Q3 of year 3, to accompany the harvesting season. (Note * at the end of the section).

A.2.3. Exchanges of experience with transboundary communities in Brazil on NTFP harvesting and fair and equitable benefit sharing, facilitated by ECOA. Due to the delays in year 2 and current Covid19 emergency measures, this activity is scheduled to take place once in year 3 and once in year 4. These may have to be virtual events, rather than face-to-face events, due to the delay in vaccination in both countries and the greater severity of the pandemic in Brazil (Note * at the end of the section).

A.2.4. Development of value chain strategy and fair and equitable benefit sharing with stakeholders. Activity completed for year 2. Value chains have been mapped for the three species prioritized by the project (Note * at the end of the section).

A.2.5. Facilitate alliances between the community forest enterprise and companies based on fair and equitable benefit sharing. Activity completed for year 2. Contact has been maintained with companies interested in establishing alliances with *the community forest enterprise*. Despite the economic problems caused by the pandemic, they remain interested in buying the products produced by the communities under fair and equitable conditions for both parties. In addition, the alliance of the San Ceferino community with the San José pulp processing centre has been notified. Both parties have reached an agreement for the sale and purchase of sinini and python fruits for the next harvesting season, as described in activities 1.6 and 2.2.c (Note * at the end of the section).

A.2.6. Summarise the experience and lessons learnt by the 5 indigenous communities and the community forest enterprise in sustainable forest management and produce (short video) to promote uptake in more communities. Activity completed for year 2. The summary of lessons learned has been developed for year 2 of the project (Evidence provided in Section 9).

A3.1b. The verified 200 global IUCN assessments sent for independent review, followed by submission to the IUCN website. By Q3 year 2, we have evaluated, reviewed, and submitted 200 IUCN species assessments to the IUCN for publication (Evidence, Annex 4: 3.3.1b)

A3.2. Book titled “Threatened Plants of lowland Bolivia”, published and launched. After months of lobbying, the Ministry of the Environment and Water has issued the administrative resolution on the Red Book of threatened lowland plants. Thus, the red data book, published with the support of the project at the end of year 1, is approved as a technical standard and its use is mandatory for the national government, subnational governments, academic and research organizations. (Evidence, Annex 4: 3.2.).

A.3.3. Document, map, and identify 15-20 Important Plant Areas (IPAs) in the Chiquitano dry forest ecoregion - by ¾ year. Priority IPAs and habitat maps submitted to GADSC. The 15-20 IPA sites documented on Kew IPA database, available via MHNNKM and Plantlife International websites - by

year 1 ½. By Q4 year 2, we have documented, mapped, and identified 18 IPA sites. The site descriptions and maps are in the process to the MHNNKM site and to the global IPAs portal hosted at Kew following training. More importantly, we have shared the data and maps with GADSC and FAN, who are incorporating our results into a revised masterplan for protected areas in the department of Santa Cruz. In this plan GADSC has adopted IPAs in line with RAMSAR and IBAs (Evidence, Annex 4: 3.3).

A.3.4a. Review information and assess use-status of estimated 1,000 native, useful plant species; and assess the global IUCN extinction risk of the 50 most used species – by year 2. FAN facilitated a list compiled by them of 5,500 plant names (some representing synonymous species) recorded as useful in the Chiquitania. At Kew, we cleaned the list nomenclaturally and prioritised the resulting 1,269 species based on number of uses and common names. These are the best available indicators of usefulness, in countries where comprehensive surveys of useful plants are lacking. We then selected the top 50 most useful species for a full global IUCN extinction risk assessment undertaken by Kew's Plant Assessment Unit. We have completed this activity on time, including submitted global IUCN extinction risk assessments of the 50 most useful plants for publication on the IUCN portal (Evidence, Annex 4: 3.4a).

A.3.4b. Centres of high floristic diversity of useful plant species identified, and these incorporated into already identified IPA sites.

The centres of high floristic diversity of useful plants have been mapped, and the results incorporated into the 18 IPAs site assessments. In the process we mapped the geographic ranges of the 1,269 useful species based on 15,425 records in the study area. We then modelled the areas with highest density of useful species on the subset of 878 species for which we had 5≤ records needed to enter the modelling analyses. Six centres of diversity were identified: 1) las “pampas o arenas del Urubó”, 2) Lomerío and Concepción, 3) the serranía Chiquitana, 4) the serranía de Sansas, 5) the Cerro Mutún and 6) the Noel Kempff National Park (Evidence, Annex 4: 3.4b).

A.3.4ci. Manuscript of Chiquitano ecoregion priority habitat list and IPA sites submitted to peer-reviewed journal Kempffiana by Q1 year 3. In the August 2019 workshop we revised the classification of habitats connected with the Chiquitano area and identified the threats to these. Whilst working through the descriptions of IPAs sites, we keep building up the data set towards a manuscript on the Chiquitano ecoregion priority habitat list and IPA sites to the peer-reviewed journal Kempffiana. As a milestone, we have published a special issue of the journal PATUJU in November 2020. This issue serves as a) translation into Spanish of the IPAs methods and principles, b) teaching material for activity A.3.5, and c) a steppingstone in developing the manuscript. (Evidence, Annex 4: 3.4ci).

A.3.4cii. Submit results to open-access scientific journals, on the website of FAN, MHNNKM, IUCN, PlantLife International, and Kew, and disseminate the information generated in the project on social media: booklets, manual, Facebook, Twitter, blog posts, radio, and video. (Evidence, Annex 4: 3.4cii).

A.3.5. Module for undergraduate and graduate students at UAGRM in IPAs and IUCN methodology, including preparing course material.

For the 1st course held in-person in March 2020, lectures and handout were developed jointly by Kew and Bolivian project staff, who organised and taught a two-day course in Santa Cruz in IUCN species and habitat, and IPAs site assessments for undergraduate or graduate students - leaders in their fields. In March 2021, COVID19 restrictions forced us to move the 2nd course online. This meant much additional time spent adapting the course material to virtual lessons. Using a train-the-trainer approach, we selected 20 participants (14 women and six men) from the 61 applicants. Nine universities were represented from seven Bolivia departments. The course material was shared with the students via Dropbox. Fifteen students completed the course, whilst five had to give up attending due to bad internet connection (Evidence, Annex 4: 3.5).

A.3.6. Develop and supervise at six Lic.Biol. or MSc dissertation projects at UAGRM in IUCN extinct risk assessment and/or IPA methodology.

This activity is progressing as planned for year 2. Considering Bolivian COVID19 measures at the beginning of year 2, we decided to offer four competitive thesis projects and to allow the students two years each to complete their theses. This has given the students flexibility to plan their projects to work around changing COVID19 measures, included project development, field work and writing of

reports and draft manuscripts for submission to a peer-reviewed journal. The four students were selected from 12 applicants; and all four female students from two Santa Cruz Universities. One of the thesis students, who started in year 1, has already defended her thesis and published an article in a peer-reviewed scientific journal. Another is waiting for a date to defend her thesis and has also published her work in a scientific journal. The remaining four thesis students have developed their project plans, undertaken fieldwork, and started analysing the data collected. Year 3 will focus on finishing the analyses and writing the reports for their universities and draft manuscripts for submission to peer-reviewed journals (Evidence, Annex 4: 3.6).

A.3.7. Compile, keep updated, and share project databases with partners and stakeholders.

1. The database of useful plant names of the Chiquitania was cleaned by Kew and FAN project staff nomenclaturally.
2. A database in Brahm's software of 5,500 plant occurrences and threat-to-species data has been compiled by Kew and MHNNKM project staff of the 200 endemic species plus the 50 useful species selected for full global IUCN extinction risk assessment.
3. The 200 IUCN extinction risk assessments submitted to IUCN SIS system are accessible via IUCN portal - <https://www.iucnredlist.org/>
4. Eighteen full IPAs site descriptions and accompanying map layers shared with MHNNKM, FAN and GADSC and will be available on the global IPAs portal: <https://tipas.kew.org/> in due course.
5. Database of image data from field work sites, habitat photos, plant collections, project events, capacity building event, etc. and to be shared with partners by end of Q1 year 3.

A.4.2. Provide information and recommendations for incorporating IPAs into territorial management instruments at the subnational and national levels. The revised GADSC's departmental plan for its protected areas, incorporates the results of our IPA site identification.

In year 1 we shared our data and map layers with GADSC and impacted the revision of four major nature reserves in the department of Santa Cruz. This has continued in 2, when we have shared the data and map layers of the 18 IPAs sites identified and documented with GADSC and FAN for a revised masterplan of protected areas in the department of Santa Cruz. GADSC is considering adopting IPAs sites alongside IBAs (Important Bird Areas) and RMSAR sites (globally threatened wetlands) in the prioritisation of protected areas in the Department of Santa Cruz (Evidence, Annex 4: 4.2).

A. 4.6. Participation in national and international conferences (CBD, CITES, ...) to disseminate IPAs methodology / approach and promote their adoption. Results disseminated and IPA tools promoted via international conferences (CBD and CITES, ...) in years 1, 2, 3. Due to COVID19 this activity has been slower than hoped for. In June 2020 we presented on the project and Kew's work in Bolivia to all Kew staff. On March 25th 2021 we presented the project in the 1st Bolivian congress on reforestation. To make up for cancelled conference opportunities, we produced a special issue of the journal PATUJU focused on IPAs, and we have taken every opportunity to promote the project in social media post online (Evidence, Annex 4: 4.6; and see activities A.3.4ci and A.3.4cii).

Notes:

(*) These activities had to be extended to quarter Q3 and Q4, because the activities could not be carried out as planned in quarters Q1 and Q2 due to Covid19 measures in Bolivia (see section 3.4 for more information). This was done in accordance with the approved change request of 21.12.2020.

(**) These activities had to be rescheduled to quarter Q3 of year 3 and Q1 of year 4, because the activities could not be carried out as planned in year 2 due to Covid19 measures in Bolivia and Brazil (see section 3.4 for more information). This was done in accordance with the approved change request of 21.12.2020.

3.2 Progress towards project Outputs

Output 1. *Five indigenous smallholder communities in the Chiquitano dry forest ecoregion apply best practices to build climate resilience and sustainable forest management.*

Good progress has been made towards outputs 1 and 2 in year 2, considering that some activities could not be carried as planned due to Covid19 measures in Bolivia (Annex 4: A for additional information). The actions proposed, in the approved change request of 21.12.2020, generally allowed to mitigate most of the delays of year 2.

Most of the indicators have been achieved, in some cases exceeding the plan. Thus, project activities continue to be carried out for 3 NTFP species, instead of 2; and work continues with 6 communities instead of 5. These measures, taken since the beginning of the project, are providing greater flexibility

to achieve results 1 and 2, despite the current difficult health scenario and its consequent impacts on the economic and social scenarios.

Indicator 1.3. 300 smallholders (40% women) trained in sustainable forest management and best harvesting practices of NTFP (50 in year 1 1/4, 75 in year 2, 125 in year 3, 50 in year 3 1/2).

A series of training sessions on best practice use of chiquitana almonds, pesoé and copaibo oil was held with the participation of 50 people (52% women) from the 6 project communities. Although the goal of 75 people was not reached, the expected 40% participation of women was exceeded. During year 2, this was the indicator most affected by the measures due to Covid19, as it had to face limitations in travel and meetings during the beginning of the pandemic (Q1 and Q2) and the second wave of coronavirus in Bolivia (Q4). It is estimated that with the 6-month extension of the project, approved in the change request of 12/21/2020, the final indicator can be reached in year 3 1/2 (Evidence, Annex 4: 1.3.a, 1.3.b and A).

Indicator 1.4. 150 smallholders (60% women) trained in best processing practices of NTFP (50 in year 1, 25 in year 2, 50 in year 3, 25 in year 3 1/2)

A cycle of training in best practices for processing chiquitana almonds was carried out with the participation of 35 people (51% women) in three of the project's six communities. Although with a lower proportion of women (the target was 60%), 10 more people participated than planned. As in the case of indicator 1.3, it is estimated that with the 6-month extension of the project approved in the change request of 21.12.2020, the final indicator can be achieved in year 3 1/2 (Evidence, Annex 4: 1.4.a).

Indicator 1.5. Two best practice Manuals on harvesting and processing of the two selected NTFP species developed and delivered to 300 smallholders - by year 3.

The technical content of three best practice manuals on harvesting and processing of three species: chiquitana almond, copaibo and pesoé were prepared and revised. This is one more manual for an additional species, which exceeds the initial plan. The level of progress on this indicator is sufficient to achieve it in year 3, as rescheduled in the change request of 21.12.2020. While incorporating improvements in presentation and illustration, the manuals are already being used for training for indicators 1.3 and 1.4 (Evidence, Annex 4: 1.5).

Output 2. Indigenous smallholder communities of the Chiquitano dry forest ecoregion are organised in a community forest enterprise and sign mutually beneficial agreements with three companies and take measures to share benefits in a fair and equitable way to develop sustainable value chains based on biodiversity products.

Indicator 2.2. A community forest enterprise established with at least 50 members - by year 2 1/2.

Groups of people interested in forming a community forest enterprise were identified in six of the six project pilot communities. The information collected in the market studies and the studies of potential harvesting in year 1 of the project (activities 1,2 and 2.2.b) are guiding the products and quantities that the enterprise will be able to offer to the potential buyers. The level of progress of this indicator is sufficient to achieve it in year 2 1/2, as reprogrammed in the change request of 12/21/2020 (Evidence, Annex 4: 2.2).

Indicator 2.4. A value chain strategy and benefit-sharing assessment developed and validated - by year 3.

Value chains have been mapped for the three species prioritised by the project. Resilience assessments (activity 1.1), harvesting potential studies (activity 1.2) and market studies (activity 2.2.b) developed in year 1 of the project have been used as inputs. The level of progress of this indicator is sufficient to be achieved in year 3, as rescheduled in the change request of 21.12.2020.

Indicator 2.5. A community forest enterprise signed up to mutually beneficial agreements with three companies regarding ethical sourcing - by year 3 1/4.

Despite the difficult economic scenario caused by the pandemic, the companies previously contacted remain interested in buying the products produced by the communities under fair and equitable conditions for both parties. It is planned to resume pilot sales discussions during Q1 and Q2 of year 3 to establish the basis for signed agreements.

Output 3. *Priority species, habitats, and sites for plant conservation in the Chiquitano dry forest ecoregion identified, documented and published; plant dataset shared with Bolivian partners and biodiversity centres; and national capacity to assess plant conservation priorities built through training of scientists and pre- and post-graduate students.*

In short, this output progress is being made and activities are being delivered in a timely manner and some Indicators exceeded. **Indicators 3.1** and **3.2** were completed by year 1.

Indicator 3.3. *An estimated 15-20 Important Plant Areas (IPAs) of the Chiquitano ecoregion identified, documented and mapped - by 2 year.*

We have completed this indicator, having identified, mapped, and documented 18 IPAs sites in the Chiquitania. These are the first IPAs sites ever documented in Latin America. As we write, the data and maps are being uploaded to a dedicated global IPAs portal hosted by RBGKew <https://www.kew.org/read-and-watch/tropical-important-plant-areas-explorer-launch> (Evidence, Annex 4: 3.3)

Indicator 3.4. *The estimated 1000 useful plant species native to the Chiquitano dry forest ecoregion identified and prioritised – by year 2.*

This indicator is completed as per activities A.3.4a and A.3.4b. (Evidence, Annex4: see sections A.3.4a and A.3.4b.)

Indicator 3.5. *Six lectures and handouts on IUCN species conservation assessments and IPA identification tools and application developed for UAGRMs Lic.Biol., Lic.Forestry, and MSc. in Natural Resource Management and Environment - by ¾ year; training 20 students (50% women) per years 1,2,3.*

Our project is the first ever to build research capacity in IUCN and IPAs methodology in Bolivia. The indicator was completed on time for years 1 and 2, training a total of 28 students. In year 1 we realised that 20 students were too many to give attention to in the training space available; and in year 2 six of the 20 selected students had internet issues, preventing them from completing the course. In year 3 we will take these experiences into account (Evidence, Annex 4: 3.5).

Indicator 3.6. *Six Lic. Biol., Lic. Forestry, and MSc. student research projects (50% women) at AGRM University completed on IUCN extinct risk assessment and IPA identification (2 in each of years 1,2, and 3), focussing on socio-economically valuable species.*

In year 1 both students managed to complete their theses and submit manuscripts for publication. However, in year 2, COVID19 measures made it necessary for the projects to be more flexible timewise because of the field work components of the projects. Therefore, we choose to offer all four remaining studentships in year 2, allowing the students two years each to complete their dissertation projects and submit manuscript for publication. The four students (100% female) were selected from 12 applicants, who each presented a project idea. All four are female students from two Santa Cruz Universities (Evidence, Annex 4: 3.6)

Indicator 3.7. *All scientific datasets, including national IPA database and priority species specimen database, shared with all partners, updated each year of project, in line with Nagoya protocol.*

The databases listed in A.3.7 are either developed jointly or will be shared appropriately with the partners and stakeholders in Q1 of every project year (Evidence, Annex 3).

Output 4. *IPAs of Chiquitano dry forest Ecoregion incorporated into subnational action plans on conservation and sustainable development. Local authorities, officials and rangers equipped with strategic knowledge, tools and capabilities for the effective management IPAs and protected areas.*

Indicator 4.1. *Kew, MHNNKM, and FAN to work with the key stake holders: GADSC, SERNAP, DGBAPAP (national government); representatives for the Chiquitano indigenous people; soya bean farmers; cattle rangers; conservation NGOs (FCBC, Natura, WWF); the universities UAGRAM, UPSA, NUR; representative of key industries and productive sectors, throughout the project to highlight the contribution of IPAs to national and subnational CBD targets – throughout project.*

Whilst some of the planned stakeholder workshops, we have shared our results with the sitting regional government. We are also planning a progress workshop with the incoming regional government in Q1 of year 3. Except for conference presentations we have to-date held one stakeholder event with conservation NGOs, representatives for the Chiquitano indigenous people;

soya bean farmers; cattle rangers; representative of key industries and productive sectors. We are, however, planning to focus working with stakeholders in year 3.

Indicator 4.2. *IPA sites are prioritised and designated using best practice with input from all stakeholders including the soya farmers and cattle rangers and Chiquitano indigenous smallholders. – by year 2.*

Caused by COVID19 measure in 2020 and 2021, we have put the activities for this indicator on hold until COVID19 measures have loosened in Bolivia. It is our hope that it will be possible to organise prioritisation activities with the stakeholders in person in year 3.

Indicator 4.3 *Management recommendations provided to departmental and local government for all 15-20 designated IPA sites for future formal protection – by year 3.*

Our maps and data have been shared with GADSC and FAN and informing the revision of four protected areas in Santa Cruz. In addition, we have shared our data and maps for all 18 IPAs sites with GADSC, who are considering accepting IPAs data in line with IBAs and RAMSAR site data for in the prioritisation of protected areas in the department of Santa Cruz (Evidence, Annex 4: 4.2.a and 4.2.b).

Indicator 4.5 *Results disseminated, and IPA tools promoted via international conferences (CBD and CITES, ...) in years 1, 2, 3*

In year 2, COVID19 measures cancelled several conferences nationally and internationally; and we have thus presented the project less than we had initially planned. However, given the opportunity, we revised activity 4.6 accordingly for year 2 in change request 20201221 (Evidence, Annex 4: 4.6).

3.3 Progress towards the project Outcome

Effective conservation prioritisation in the Bolivian Chiquitano dry forest ecoregion is achieved by improving livelihoods of indigenous Chiquitano communities, engaging agricultural producers, and equipping decision makers to designate IPAs.

Progress has been made towards achieving the Outcome and it is likely that it will be achieved by the end of the project. The first actions have been taken to improve the livelihoods of the Chiquitano indigenous communities. The indicators are adequate to measure Outcome. Because of events taking place outside our control: forest fires and political unrest in 2019 and 2020, and Covid19 measures in 2020 and 2021, we foresaw that an additional six months would be needed to achieve the Outcome. Therefore, the three main partners submitted a financial change request in December 2020, which was approved in March 2021. And, we fundraised successfully to part-cover Bolivian project salaries for the additional six months.

Indicator 0.1 *Sustainable forest management of natural resources developed and practiced in five pilot communities in Bolivian Chiquitano dry forests. Collection and trade in forest products increased for 2 plant species, and household income derived from sustainable forest products increased by 10% – by year 3 ½.*

Work has continued with the project's six pilot communities that have participated with interest in training on best practices for harvesting and processing, thus preparing and keeping them motivated to apply sustainable forest management on their communal lands. The bases have been established to collect and trade the three prioritized plant species (chiquitana almond, copaibo and pesoé) in the project communities. This will allow for pilot sales the next harvesting season between Q1 and Q3 of year 3. The 6-month extension of the project, approved in the change request of 12/21/2020, will allow for an additional sales cycle. This will mitigate the delay in conducting pilot sales during year 2, due to most of the harvesting season coinciding with the tighter pandemic measures (Evidence, Annex 4: 1.3.a, 1.3.b, 1.4.a, 1.4.b, 1.5, 2.2a).

Indicator 0.2 *Understanding of forest ecosystem services values and engagement in activities leading to economic benefits from sustainable forest management opportunities. Both will be increased at community and local decision-making levels – by year 3 ½.*

During the end of Q3 of year 2, the opportunity was taken to harvest and sell 2 other plant species that were in fruiting season (sinini and piton) in one of the communities. This small-scale activity helps to establish the basis for the commercialization of the 3 main species. It has been a concrete example for the communities of how sustainable harvesting of forest products can support them in generating income for their families.

At the level of decision makers, it is hoped to involve them more during the next year of the project. In year 2, opportunities were very limited due to the pandemic and elections of sub-national government authorities. Between Q1 and Q3, the efforts of most local government teams have been focused on addressing the problems caused by the pandemic. During Q4, there were closures of the current authorities and the election process for new authorities (Evidence, Annex 4: 1.4.b, 2.2.a, A and B).

Indicator 0.3. *IPAs approach combined with IUCN Red Data book of endemic, rare, threatened, and useful plant species are recommended as a tool in best-practice area-selection for intensive soya bean agriculture, cattle farming and forest logging – by year 2.*

In year 1 we facilitated the publication of the Red data book for threatened plant species of the Lowland Bolivia. In year 2 we have published a guide to IPAs assessment in Spanish. Year 3 activities will focus on stakeholder workshops with indigenous and farming communities. (Evidence, Annex 4: 3.4ci; Annex 3: Standard Measures)

Indicator 0.4 *IPAs integrated into policy and action plans on biodiversity conservation and sustainable development in the autonomous department of Santa Cruz, in line with GSPC and Aichi Biodiversity targets by the end of the project – by year 3 ½.*

We are proud that in year the regional government GADSC has adopted IPAs criteria alongside IBAs (Important Bird areas) and RAMSAR site criteria in the prioritisation of protected areas. Please also see above under Indicator 0.3.

3.4 Monitoring of assumptions

Effective conservation prioritisation in the Bolivian Chiquitano dry forest ecoregion is achieved by improving livelihoods of indigenous Chiquitano communities, engaging agricultural producers, and equipping decision makers to designate IPAs.

Assumption 0.1: *Pilot communities remain committed to sustainable forest management. 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.* This assumption remains valid. The communities remain committed to sustainable forest management. This is demonstrated by an acceptable level of community participation in the activities organized in year 2 of the project, even with the limitations of the Covid19 measures (Evidence, Annex 4: 1.3.b, 1.4.a, 1.4.b, 2.2.a).

Assumption 0.2. *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 minimised through diversification of NTFP options.* Contact has been maintained with the companies identified in the market study developed in year 1 and it is confirmed that market demand continues to exist for forest products of the three species prioritized by the project. Training on best practices for harvesting included monitoring the harvesting areas. It was verified that the forest fires of year 1 did not significantly affect the availability of resources for commercial harvesting under sustainable management (Evidence, Annex 4: 1.3.b).

Assumption 0.3. *Autonomous government of Santa Cruz will incorporate IPAs within their conservation / resource management strategies as an integral element of their obligations under the CBD.* By the end of year 2, we had convinced the sitting regional GADSC to adopt IPAs criteria in departmental conservation prioritisation. However, a new regional government takes office in May 2021. In year 3, we will keep influencing the new government to also apply IPAs criteria in future conservation prioritisation (Evidence, Annex 4: 4.2)

Assumption 0.4. *Publicity of the successful application of the IPA approach in the Chiquitano dry forest ecoregion of Santa Cruz department will promote uptake and use as a means of effective conservation prioritisation in other regions of Bolivia and other Latin American countries.*

Through our three IPAs and IUCN courses, workshops, and conferences presentations, we have generated interest at grass root level in applying IPAs and IUCN criteria in conservation prioritisation; and we are in no doubt that this will happen given funding. We already have expressions of interest from the Bolivian Ministry for the Environment and Water that they would like our project model to be

adopted throughout Bolivia. In parallel, we receive expressions of interest for IPAs and IUCN assessment courses and projects, for example from Colombia, Ecuador, and Chile.

Output 1.

Assumption 1.1. *Smallholders from indigenous communities are engaged in sustainable forest management.* The assumption remains valid. Communities remain committed to building climate resilience and sustainable forest management. This is demonstrated by an acceptable level of community participation in the activities organised in year 2 of the project, even with the limitations of the Covid19 measures.

Work continues with six communities, to increase the chances of achieving the result of five communities involved in the project. There is a risk that one of the communities may be forced to abandon the project due to the difficult health scenario (Evidence, Annex 4: 1.3.a, 1.3.b, 1.4.a, 1.4.b, 2.2.a).

Assumption 1.2. *The population dynamics of the species under management is not affected by fires or extreme climatic events such as drought or El nino.* The assumption remains valid. As part of the best practice harvesting training, the areas with the highest abundance of the three species prioritised in the project were monitored. As expected, the 2020 fire season was less severe than that of 2019, and the population dynamics of the plant species selected by the project were largely unaffected (Evidence, Annex 4: 1.3.b).

Output 2.

Assumption 2.1. *The population dynamics of the species under management is not affected by forest fires or extreme climatic events.* See comments on Assumption 1.2.

Assumption 2.2. *Market conditions remain favourable for forest products prioritised in the project.* This assumption remains valid, despite the difficult economic scenario caused by the COVID 19 pandemic. Contact was maintained with the companies prioritized by the market study and they express their continued interest in purchasing the forest products supported by the project.

Output 3.

Assumption 3.1. *Sufficient data on socio-economically valuable plant species can be amassed to accurately assess their extinction risk and to identify centres of high floristic diversity of socio-economically valuable plant species.* This indicator is completed as per activities A.3.4a and A.3.4b. (Evidence, Annex4: 3.4a, 3.4b.).

Assumption 3.2. *UAGRM incorporate teaching on IPAs and IUCN species conservation assessments into Lic.Biol., Lic. Forestry and MSc teaching modules.*

For the moment, the project staff is the module teaching IPAs and IUCN tools. Three part-time UAGRM lecturers/Darwin project staff are teaching the course jointly with two Kew staff; and we are working towards it that the course will be considered valuable and sustained by the university, once the project ends in September 2022 (Evidence, Annex 4: 3.5)

Assumption 3.3. *Sufficient students select thesis projects on IUCN extinction risk assessment and IPA identification, and they are skilled to conduct quality field research following training.* This assumption stands, as per Activity 3.6 (Evidence, Annex 4: 3.6).

Assumption 4.1. *GADSC, SERAP, DGBAPAP will incorporate IPAs within their conservation / resource management strategies as an integral element of their obligations under the CBD and promote uptake and its use as a means of effective conservation prioritisation in other regions of Bolivia.*

In year 2, we convinced GADSC to adopt IPAs within their conservation / resource management strategies. In year 1, we also convinced the sitting national Minister of the environment of the usefulness of implementing IPAs criteria in. However, the Bolivian national government changed in November 2020. In year 3 we will thus continue to promote IPAs to the new government through lobbying jointly with the British Ambassador in Bolivia and by inviting government representatives to stakeholder events.

Assumption 4.2. *The political will of subnational and national authorities is maintained to promote biodiversity conservation actions in the public agendas, during the pre and post electoral process.*

The assumption is still valid. However, combined with lobbying activities and stakeholder workshops we will monitor to what extent this assumption will stay valid.

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

Impact. *Protection, sustainable use and management of globally unique ecosystems in Latin America are promoted through wide adoption of Important Plant Area (IPA) tools.*

The project is establishing clear connections between the conservation of natural forests and the generation of economic income for vulnerable indigenous families. As a result, the communities have identified plant species that are abundant on their community-owned land and have good potential for commercial harvesting. This is something they were previously unaware of and has pleasantly surprised them. Also, the communities have identified that they can learn more about harvesting forest products in a sustainable way and that they can organise themselves to market them under beneficial conditions.

On the other hand, the difficult economic scenario caused by the pandemic has further reduced the work and income possibilities of these rural populations. Due to restrictions to avoid contamination, the possibilities to work temporarily in nearby larger towns have been reduced. Thus, opportunities to generate cash income through activities without leaving their communities are highly valued. Thus, the project's contributions to the development of livelihoods based on forest products have become even more relevant (Evidence, Annex 4: 1.3.a, 1.3.b, 1.4.a, 1.4.b, 1.5, 2.2.a and A).

The project has contributed to building Bolivian capacity for biodiversity conservation through 1) training 15 Bolivian professional botanists/conservationists and leaders in the field, in IUCN species conservation assessment methods accepted worldwide as the gold standard plant conservation; 2) training 28 Bolivian BSc and MSc students in IUCN and IPAs conservation assessment methods; 3) providing six BSc thesis project opportunities in plant conservation and natural resource management; and 4) enforcing this training for MHNK project staff in on the job learning, while contributing to writing the 200 IUCN species conservation assessments and the 18 IPAs site assessments.

The project is also contributing through 1) specialist workshops to document and evaluate the existing habitat classification of the Chiquitania resulting in authoritative standards needed for effective conservation prioritisation and to evaluate the IUCN conservation status of the species endemic to the Chiquitania, provided valuable data and arguments for plant conservation – giving plants a voice!

Publishing, disseminating, and distributing the Redlist book for 285 threatened species with the support of the Bolivian Ministry for the Environment and Water and the British Ambassador in Bolivia, gave a real boost to plant conservation and increased the awareness of Bolivian plant biodiversity among Bolivian decision makers and press.

Citation from the prologue by the Bolivian Minister for the Environment and Water: “The publication of the Redlist Book “Plantas Amenazadas de las Tierras Bajas de Bolivia ” collects useful knowledge generated by an excellent technical team about the state of conservation and threats to our flora. It constitutes an important instrument for the management, protection, and sustainable use of our biological diversity, within the framework of the global agreements to which Bolivia is a signatory and the country's own economic and social development goals. The Redlist book complements the first Redlist book of Bolivia's Threatened Flora in the Andean region published in 2012. With this book, Bolivia has completed its first reference documentation on threatened native plant species, leaving the country in an excellent position to make informed decisions on priorities for the future conservation of endangered plants, habitats, and vegetation types, such as the Chiquitano dry forest.”

Latest in year 2, we have achieved the adoption of IPAs criteria in regional conservation planning and natural resource management.

4. Contribution to the Global Goals for Sustainable Development (SDGs)

Bolivia developed the “2025 Patriotic Agenda”, its own version of the Sustainable Development goals. The project will assist Bolivia in achieving its goals by addressing the following SDGs/Bolivian goals:

Goal 1 (no poverty): the indigenous communities live in close contact with the Bolivian Chiquitano dry forest. We have initiated the diversification of economic activities by 1) creating best practice manuals for harvesting and processing of three NTFP species, 2) purchasing equipment to facilitate harvesting and make processing more efficient, and 3) building capacity in the sustainable harvesting and commercialization of NTFPs to promote their use in the fight against poverty.

Goal 2 (zero hunger): the communities are rediscovering species of the Chiquitano dry forest, such as the Chiquitano almond. They are relearning to recognise the tree, the timing for harvesting the fruit and its uses in food. There is interest in not only selling it, but also reincorporating it into their diet, taking advantage of its pleasant taste and the fact that it exists in abundance on their communal lands.

Goal 5 (gender equality), Goal 8 (decent work and economic growth), and Goal 10 (reduced inequality): the participation of women in all project activities has been encouraged. The process of establishing mutually beneficial partnerships between communities and companies interested in NTFPs has been initiated.

Goal 11 (sustainable cities and communities) and Goal 12 (responsible consumption and production): based on the resilience and baseline of household income in the indigenous communities, we are monitoring NTFP collection and producer organisation activities to promote forest conservation and support communities towards sustainability and responsible production.

Goal 13 (climate action): the importance of the ecosystem services provided by the forest is being disseminated in meetings and workshops with the communities and students, with decision makers and technicians of the sub-national government GADSC.

Goal 15 (life on land): resource surveys have been developed and good practice training has been initiated for communities to ensure that forest products are not harvested beyond the forest's capacity to regenerate. The workshops, courses, book launch and training sessions undertaken in year 1, have been promoted through radio, newspapers articles, manuals leaflets, and social media (Evidence, Annex 4: 1.3.a, 1.3.b, 1.4.a, 1.4.b, 1.5, 2.2).

5. Project support to the Conventions, Treaties or Agreements

The project proposed to support the Convention on Biological Diversity (CBD) and the Nagoya Protocol on Access and Benefit Sharing (ABS)

Bolivia will be supported to achieve its CBD targets through the Global Strategy for Plant Conservation (GSPC), particularly GSPC Targets:

2: An assessment of the conservation status of all known plant species to guide conservation action. The project has contributed 200 global IUCN extinction risk assessments of plant species endemic to the Chiquitano ecoregion and 50 of the topmost used plant species in the region. (Evidence, Annex 4: 3.1b).

4: At least 15% of each ecological region or vegetation type secured through effective management and/or restoration.

Eighteen globally Important Plant Area (IPA) sites have been identified in the Bolivian Chiquitano ecoregion. Through FAN's consultancy with GADSC, the project is making recommendations for the revised master plan for protected areas in the Santa Cruz department (Evidenced, Annex 4: 3.3, 4.2).

5: At least 75% of the most important areas for plant diversity of each ecological region protected with effective management in place for conserving plants and their genetic diversity.

Facilitated by FAN, the site assessments and associated recommendations are being fed to GADSC for consideration for formal protection. (Evidence, Annex 4: 4.2).

12: All wild harvested plant-based products sourced sustainably.

Best practice manuals have been developed for the collection of the three prioritised NTFP species and training is being carried out for the communities to apply these recommendations (Evidence, Annex 4: 1.5).

13: Indigenous and local knowledge innovations and practices associated with plant resources maintained or increased to support customary use, sustainable livelihoods, local food security and health care.

The best practice manuals consider local knowledge of the NTFP species prioritized by the project. They also include the forms of organization of indigenous communities in the formation of groups for harvesting and commercialization of plant resources (Evidence, Annex 4: 1.5 and 2.2.a).

15: The number of trained people working with appropriate facilities sufficient according to national needs, to achieve the targets of this Strategy.

The project has to-date built capacity at national and regional level training 15 academics, and six university dissertation students, 30 undergraduate students, conservation NGOs, and policy makers in IPA and IUCN assessment methods. Using the train-the-trainers approach their knowledge will be transmitted to their institutions and regions of origin (Evidence, 3.6).

In April of 2020 the UK's Ambassador to Bolivia, Mr. Jeff Glekin, met with the Bolivian Minister for the Environment and Water, when they discussed the current Darwin projects in Bolivia, including this one. The main project partner FAN negotiated with the Bolivian Minister for the Environment and Water that the book on threaten plants of lowland Bolivia became the official Redlist book, endorsed by the Minister, who also gave the opening address at the book launch.

In project year 2, Bolivia has had both national and regional elections, which mean that the national ministers changed in November 2020. The regional authorities are similarly changing in May 2021. We are prepared to restart our lobbying campaign with the new governments and are planning to meet with both in project year 3.

6. Project support to poverty alleviation

The expected beneficiaries of the project are 300 households (+1,000 people, at least 40% are women) belonging to five indigenous communities in the Chiquitano dry forest ecoregion. The project is helping these communities to recognise opportunities for new income, by better understanding their potential for harvesting selected NTFP plant species, through resource surveys and market research. Also, the project is helping to build capacity in the communities through training in good harvesting practices and business management; and the project is providing equipment to the communities so that they can take advantage of these new income opportunities (Evidence, Annex 4: 1.3.a, 1.3.b, 1.4.a, 1.4.b, 1.5, 2.2.a).

This project is expected to have a direct impact on poverty. This is reflected in Outcome indicator 0.1: Sustainable forest management of natural resources developed and practiced in five pilot communities in Bolivian Chiquitano dry forests. Collection and trade in forest products increased for two plant species, and household income derived from sustainable forest products increased by 10% – by year 3.

7. Consideration of gender equality issues

The project team are making conscious efforts in the calls and methodologies for meetings and training, as well as in the selection of participants for courses and thesis projects, to increase the percentage of women's participation. This is reflected in the progress of the indicators aggregated by gender, mainly achieved through Indicators 1.3, 1.4, 2.2, 3.1, 3.5, and 3.6 (Evidence, 1.3.b, 1.4.a, 2.2, 3.6). In year 2, like in year 1 most of the students (14 women and six men), who completed the IUCN and TIPAs course, were women. And, all four dissertation students selected in year 2 are women.

The project has indirect impacts on gender equality. It is expected to empower women through more sustainable livelihoods. To this end, it is promoting a more socially inclusive and gender-sensitive model for the community forest enterprise and a value chain strategy of fair and equitable distribution of benefits. Women and young people with leadership qualities in the community have been identified and encouraged to be more active in organising the productive activity, exchanging experiences, and

negotiating trade agreements. This is especially important in an environment with limited opportunities, and major challenges due to the Covid19 pandemic, as these women face a triple barrier of being women, being indigenous and being poor (Outputs 1 and 2).

It is also worth emphasising that the project PI and co-PIs are all women, as is most of the project staff.

8. Monitoring and evaluation

At the start of the project, an M&E plan was developed for the project – particularly considering Gender and the poor and/or vulnerable.

- The M&E plan established participatory mechanisms to support M&E with inputs from partners and key stakeholders, aimed to facilitate learning and adaptive management of the project.
- FAN have been implemented a M&E System that includes a cloud-based platform for information management (INFOFAN), linked to the logical framework and project annual operating plans. In this platform, the progress of the project is continuously reported, and all documentation, data, photos, and relevant information generated and related to the project that contributes to knowledge management are stored.
- There has only been change to the M&E plan, from the change request submitted in December 2020 and approved in March 2021.
- The project partners share the M&E tasks according to the Outputs and activities under their responsibility. Quarterly reports are shared to identify project progress and delays.

The M&E processes have worked well and have allowed for adaptive project management, even though COVID19 measures in Bolivia has made this year particularly challenging. The M&E plan, the regular team meetings and the quarterly reports between partners have allowed to process the information and record the progress, as well as to identify in time the opportunities to mitigate the delays. Monitoring, and being flexible about changing direction and speed is being helped our solid and dynamic M&E plan informed and developed by FAN's vast experience with socio-economic development projects.

9. Lessons learnt

At the beginning of year 2, we had built a momentum around the publication and launch of the book “Plantas Amenazadas” in Santa Cruz. The plan was to also launch the book in the British embassy in La Paz with Bolivian government officials participating. However, COVID19 got in the way and plans were stalled. With a new normality on the horizon in the UK, we are revisiting those plans to work with the British Embassy in La Paz and FAN to launch the book in La Paz and distribute the book to identified recipients (Evidence, Annex 4: 3.2).

In year 2, the project held a virtual all-project event in June 2020 to celebrate achievements in year 1 (Evidence, Annex 4: 4.1). This worked well for the Spanish-speaking side of the project. However, several UK stakeholders did not participate because of the language-barrier and the inexperience at that point of providing simultaneous translation virtually.

In year 3, we are planning to hold an in-person event in RBGKew to launch the “Plantas Amenazadas” book and the 18 TIPAs sites in the UK. To this event we plan to invite all stakeholders, including representatives from the Bolivian and British Embassies, the Darwin Initiative and other funders, project staff and volunteers. And, we hope to be able to host a similar event in Bolivia.

Despite, holding four all-project planning workshops in year 2, there is a wish for all project staff to meet more regularly – to plan, undertaken M&E, and exchange progress and results in the different project components. We are therefore planning quarterly all-project workshops to accommodate this wish.

Due to the high demand by professionals to be able to participate in the courses that the project offers, we are, given time and funding, considering similar courses geared towards professionals and/or graduate students. We would need to expand the content and highlight the themes and aspects that are new to those groups, for example the TIPAs methodology.

The Darwin Initiative Twitter account is linked, when posting project related posts on @KewAmericas and @KewScience. However, this has not been done consistently across all partner and personal social media accounts. To remedy this for year 3, we have distributed a list of accounts to tag and some suggested hashtags to include for each post (Evidence, Annex 4: 3.4cii)

Covid19 measures affected when and how training and field meetings with communities could be conducted. All in-person group activities had to be suspended during the early months of the pandemic when a rigid quarantine was in place in Bolivia. When the stricter measures were lifted, small group meetings could be held outdoors, following protocols to avoid transmission. This has increased the number of meetings and reduced the number of participants at a time, making training more laborious. It helped to maintain regular phone and WhatsApp calls with the communities. However, it should be noted that these were only an effective means of communication because there was a previous relationship of trust with the technicians thanks to the activities of year 1 of the project. Provided that in the short term the restrictions due to the pandemic will be maintained, it has been thought to complement the training approach with the train the trainer technique. In such a way that there is at least one person per community with greater knowledge who can follow up on what is taught in the trainings and technical assistance.

The contract of the only permanent botany staff at the MHNNKM was not renewed. This leaves the botany department and herbarium without a head, future direction, and continuity. For that reason, the Museum's director and co-PI, Dr Marisol Toledo, has been both administratively and technically involved in the project. While the Darwin-funded project provides funding to contract project staff to jointly organise the workshops, courses and field work, we have secured additional funding from the William Cadbury Trust to employ a full-time MHNNKM research staff for 13 months (February 2020 to March 2021) and 12 months 40% (April 2021 to March 2022). We also keep pressuring the MHNNKM to secure long-term funding for at least one permanent botanist post to ensure continuity and future capacity building, in addition to skills retention. Additionally, throughout year 2, the Museum has been undergoing an administrative transition installing a new accounting system (SIGEP), which means that fund transfers and payments are very delayed entering and leaving the Museum's accounting system. Therefore, we only made one transfer to the Museum in March 2021, at the end of year 2.

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

We received two comments with associated actions in our year 1 review:

1. *The Application talks about “empowering GADSC and SERNAP with tools to implement a best-practice approach when selecting forested areas for major land use changes e.g. soybean agriculture and cattle farming”. The report discusses the selection of areas for intensive land use change should be guide by, and reference made to TIPAs. How much further loss in area does the project feel that the native forest can endure?*

The area occupied by native vegetation cover in the Chiquitano ecosystem is 72.4%, with Brazil (52.6% natural cover) most affected by deforestation in relation to Bolivia (80% natural cover). In Bolivia, the deforestation rate is increasing (0.41% in the period 2000 - 2005, to 0.87% in the period 2010 - 2015), and it is projected that by 2025, 25.5% of the total natural vegetation cover will be lost.

Due to the complexity of the deforestation patterns and the mosaic nature of remnants of vegetation approximately 48% of the patches could be susceptible to degradation processes. It is difficult to answer what deforestation carrying capacity the vegetation could support without jeopardising the conservation of biodiversity and ecosystem services. On the other hand, the use of the land in the various types of conservation units is governed by their management plans. These are management instruments in which zonation determines the activities that are and are not allowed within said territories. These also specify the zones of strict protection, which can only be the object of scientific research, as well as other zones that can be used to harvest seeds, fruits, etc.

In 2021, the analysis of the landscape structure and its relationship with the connectivity of the conservation units will be updated with 2020 figures, providing a more favourable scenario to foresee the spatial situation of the TIPAs and their future perspectives.

2. *Setting up a full project meeting as soon as it is safe to do so would be beneficial for the project.*

In response to this we had a full virtual team workshop on June 20th 2020 with presentation by most team members (Evidence, Annex 4: 4.1)

11. Other comments on progress not covered elsewhere

The project faces a risk that the training element of the livelihood's Outputs 1 and 2, will be further delayed due to Covid19. It will still be necessary to allocate some budget to buy sanitary equipment (e.g. face masks, disinfectant, gloves) for the project team and community members so that meetings can be held safely. In addition to following the measures dictated by the national Bolivian government, a health safety protocol was prepared to carry out the activities in the communities to minimise possible risk.

12. Sustainability and legacy

An important achievement of the project was that the Ministry of the Environment and Water has issued the administrative resolution on the Red Book of threatened lowland plants. Thus, the red book, published with the support of the project at the end of year 1, is approved as a technical standard and its use is mandatory for the national government, subnational governments, academic and research organizations (Evidence, Annex 4: 3.2).

Another important milestone is that DICOPAN (Natural Heritage Conservation Directorate) of the departmental government of Santa Cruz is using the results of the TIPAS to update the priority conservation sites of the Master Plan for the Protected Areas in the department of Santa Cruz (Evidence, Annex 4: 4.2b).

For the moment, the project staff is teaching the course for undergraduate students on IPAs and IUCN tools. These are three UAGRM lecturers/Darwin project staff and two Kew staff. We are working towards it that the course will be considered valuable and sustained by the university UGRM, once the project ends in September 2022.

During the IUCN assessor course in year 1. The teachers and course participants agreed to establish a formal IUCN specialist group for Bolivian plants. The main course facilitator and project staff, Cátia Canteiro, took the initiative to form the specialist group. She moved job from RBGKew's IUCN assessment unit in year 2, and she reassures the project that she in her new similar job will keep working with the new cohort of Bolivian IUCN assessors to form the group.

The planned exit strategy is still valid. Progress has been made in:

- Training, capacity building and outreach integrated into all components (Evidence, Annex 4: 1.3.b, 1.4.a and 2.2).
- Engaging with governmental organisations and policy to improve long-term delivery of CBD obligations (Evidence, Annex 4: 3.2, 4.2a, 4.2b).
- Delivering accessible technical information (including reproducible guides) through ongoing programmes beyond the life of the project (Evidence, Annex 4: 1.5).

13. Darwin identity

Whenever an opportunity has arisen, the project has included the Darwin logo and promoted the mission of the Darwin Initiative in written and oral presentations (Evidence, Annex 4: 3.4cii).

The British Ambassador to Bolivia, Mr. Jeff Glekin, promoted this project and Darwin Initiative in meetings with the Bolivian Minister for the Environment and Water. The Embassy also invited the project to launch the Bolivian Redlist book of lowland Bolivian plants as part of British Week in Santa Cruz. At that occasion, it was agreed to work closer with the British Embassy in La Paz on plant conservation projects in Bolivia.

The funding is a distinct project with a clear identify. However, we have raised additional funds to support some Output 3 activities, for which the Darwin funding was minimal; and some activities in Output 4 have been facilitated by the ECCOS project – an EU funded project with FAN as a key partner.

Before this project, there was awareness about the Darwin Initiative at NGO and decision maker level – regional Santa Cruz government in addition to the Bolivian Ministry for the Environment and Water. This project has helped increase the exposure through our workshops, launching the Redlist book for lowland Bolivian plants jointly with British week in Santa Cruz. The book launch in La Paz will be organised by the British Embassy in La Paz to take place, when COVID19 restrictions will allow this to happen.

The Darwin Initiative Twitter account is linked, when posting project related posts on @KewAmericas and @KewScience (Evidence in Annex 4: 3.4cii).

14. Impact of COVID-19 on project delivery

Several factors, including the COVID19 pandemic, led to us submitting a change request in December 2020, which was accepted in March 2021. Below we consider each factor in turn:

- **Chiquitano Ecoregion forest fires** The communities and municipalities, which we are aiming to engage, were in an emergency due to forest fires in the Chiquitania region during the period July - September 2019. The area burnt in the Department of Santa Cruz amounts to 3.9 million hectares and represents 73% of the total areas affected by fires nationwide (5.3 million ha). The municipalities where the project is carried out were significantly affected: San José de Chiquitos (265,943 ha) and Roboré (174,395 ha). With this emergency, some of the project activities were delayed.
- **Political unrest in Bolivia following 20th October 2019 national elections.** After the national election on October 20th 2019, Bolivia entered a situation of national unrest with strikes and roadblocks throughout the country, and clashes between groups of demonstrators belonging to the two main political factions. While we hoped that a solution to the situation was found, and that the Darwin project staff could move freely and safely between the city of Santa Cruz and the indigenous pilot communities – ca. 250 km east of the city, we were not optimistic that this would happen soon; and with good reason as the roads between Santa Cruz and east to Roboré continued to be blocked by violent protesters until January 2020. Similar events happened, during the election campaign for regional elections held at the beginning of March 2021.
- **COVID19 pandemic.** In the meantime, in 2020 the COVID19 crisis put the project out of kilter again, which means that additional changes were requested, as most activities on all outputs were halted or at best slowed down from March 2020 onwards. Given the seasonal nature of our project – relying on flowering and fruiting times and the absence of forest fires, in addition to dealing with COVID19 emergency measures and additional political unrest related to the presidential election in October 2020 and regional elections in February and March 2021, we predicted that the changed planning would spill into a fourth financial year 2022-23 (yr4) to ensure that we have two fruiting seasons to train the indigenous communities.

Virtual meetings

Being forced to think creatively, we began using Windows Team and Zoom for virtual meetings. Whilst this new way of working will never replace face-to-face interactions, it was successful for our annual whole team meeting in June 2020, and extremely successful for our bi-weekly catch ups with partners, and in March 2021 the partners met successfully with the regional government virtually.

In March 2021, we also translated and taught the IUCN and TIPAs methods course virtually. Whilst it allowed us to offer the course across Bolivia, we found it challenging teach this course virtually, as it is based mostly around group exercises with the teachers present. We also found that some of the students – and the teachers had trouble staying connected, because of slow internet connections in parts of Bolivia. Depending on the COVID19 situation in 2022, we may revert to teaching entirely in-person or adopt the course entirely as a virtual course.

15. Safeguarding

Please tick this box if any safeguarding or human rights violations have occurred during this financial year.

If you have ticked the box, please ensure these are reported to ODA.safeguarding@defra.gov.uk as indicated in the T&Cs.

There are appropriate safeguarding policies in place, which follows Kew’s safeguarding policy <https://kewnet.kew.org/task/safeguarding-at-kew/>; and in year 2 there were not safeguarding issues raised.

16. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2020 – 31 March 2021)

Grant as per change request submitted 2020.12.21, approved 2021.03.16.

Project spend (indicative) since last annual report	2020/21 Grant (£)	2020/21 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Monitoring & Evaluation (M&E)				
Others (see below)				
TOTAL				

* Note.

Travel and subsistence

The change request submitted on 2020.12.21 included a reduction in the Travel and subsistence budget. Unfortunately, this reduction was not sufficient due to changing pandemic travel constraints. It was hoped that the technical team based in Santa Cruz would be able to conduct more field trips to the communities in 4Q. However, they could not be made as planned due to the second wave of Covid infections in Bolivia, a situation beyond our control, which was also difficult to foresee when it would occur, how long it would last and with what magnitude it would manifest itself.

Operating costs

A little more was spent on the Operating costs budget. The community extension agent, who is based close to the communities, continued with meetings and mini-workshops following the health safety protocol of the project; and at times when allowed by national and local government. Thus, there were major expenses related to Covid: Covid hospitalisation insurance and regular Covid testing of the community extension agent, and sanitary equipment (e.g., masks, disinfectant, gloves) for the project team and community members who participated in project activities.

Capital items

To balance the fact that less was spent on the Travel and Subsistence item, a higher percentage was advanced for the purchase of fruit processing equipment. This equipment is a priority for the project, as it will be used in Q1 of year 3 for training in best practices in processing with the communities and then delivered in Q2 for use during the harvesting season to process the collected fruits.

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2020-2021

Logframe as change request approved 20201221. Changes to the originally presented logframe in red text.

Project summary	Measurable Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
<p>Impact</p> <p>Protection, sustainable use and management of globally unique ecosystems in Latin America are promoted through wide adoption of Important Plant Area (IPA) tools.</p>		<p>A clear connection is established between the conservation of natural forests and the generation of economic income for vulnerable indigenous families. The communities have learned that they can harvest three forest products sustainably and organize themselves to market them on beneficial terms (Evidence, Annex 4: 1.3.b and 1.4.b).</p> <p>Eighteen TIPAs sites were identified, mapped and documented and shared with GADSC for consideration in the revised masterplan for protected areas in the department of Santa Cruz (Evidence, Annex 4: 4.2b).</p>	
<p>Outcome</p> <p>Effective conservation prioritisation in the Bolivian Chiquitano dry forest ecoregion is achieved by improving livelihoods of indigenous Chiquitano communities, engaging agricultural producers, and equipping decision makers to designate IPAs.</p>	<p>0.1 Sustainable forest management of natural resources developed and practiced in five pilot communities in Bolivian Chiquitano dry forests. Collection and trade in forest products increased for 2 plant species, and household income derived from sustainable forest products increased by 10% – by year 3 ½.</p> <p>0.2 Understanding of forest ecosystem services values and engagement in activities leading to economic benefits from sustainable</p>	<p>0.1 Six pilot communities have participated with interest in training on best practices for harvesting and processing three prioritised plant species (chiquitana almond, copaibo and pesoé), thus preparing and keeping motivated to apply sustainable forest management on their communal lands.</p> <p>0.2. Progress has continued to be made in helping communities understand the value of ecosystem services. A small-scale pilot harvesting activity has served as a</p>	<p>0.1 Training and technical assistance in best harvesting and processing practices. Facilitating mutually beneficial partnerships between communities and buyers. Pilot sales during next harvesting season, between Q1 and Q3.</p> <p>0.2. Involve decision-makers more during year 3. In year 2, opportunities were very limited due to the pandemic and elections of subnational government authorities.</p>

	<p>forest management opportunities. Both will be increased at community and local decision-making levels – by year 3 ½.</p> <p>0.3. IPAs approach combined with IUCN Red Data book of endemic, rare, threatened and useful plant species are recommended as a tool in best-practice area-selection for intensive soya bean agriculture, cattle farming and forest logging – by year 2.</p> <p>0.4 IPAs integrated into policy and action plans on biodiversity conservation and sustainable development in the autonomous department of Santa Cruz, in line with GSPC and Aichi Biodiversity targets by the end of the project – by year 3 ½.</p>	<p>concrete example of how sustainable harvesting of forest products can help them generate income.</p> <p>0.3. Stakeholder workshops were put on hold due to the COVID19 pandemic. However, whilst there will be major push on stakeholder workshops in year3, TIPAs approach to nature conservation was adopted by GADSC in revision of master plan for protected areas in year 2.</p> <p>0.4 Activities connected to this outcome happened in year 2, one year ahead of schedule.</p>	<p>0.3 and 0.4. Year 3 activities will reinforce a TIPAs approach to nature conservation with the newly elected GADSC and hold workshops with the main stakeholders.</p>
<p>Output 1. Five indigenous smallholder communities in the Chiquitano dry forest ecoregion apply best practices to build climate resilience and sustainable forest management.</p>	<p>1.1. Assessment of the socio-ecological resilience of the indigenous communities, and poverty alleviation power of project – by year 1 and 3 ½.</p> <p>1.2. Two resource surveys of the two NTFP species to be harvested – by 1 year.</p> <p>1.3. 300 smallholders (40% women) trained in sustainable forest management and best harvesting practices of NTFP (50 in year 1 1/4, 75 in year 2, 125 in year 3, 50 in year 3 ½.)</p> <p>1.4. 150 smallholders (60% women) trained in best processing practices</p>	<p>1.1. Indicator reached for year 1. Appropriate indicator.</p> <p>1.2. Indicator achieved and exceeded in year 1. Three resource surveys were conducted instead of two. Appropriate indicator.</p> <p>1.3. 50 smallholders (52% women) trained. Target fell short by 25 participants, although the percentage of female participation was exceeded. Appropriate indicator (Evidence, Annex 4: 1.3.b and section 3.2).</p> <p>1.4. 35 smallholders (51% women) trained. Indicator achieved and exceeded by 10 smallholders for year 2. Appropriate indicator. (Evidence, Annex 4: 1.4a and section 3.2).</p> <p>1.5. Good progress. Appropriate indicator. Actions have been taken so this indicator can be achieved in year 3 (Evidence, Annex 4: 1.5 and section 3.2).</p>	

	of NTFP (50 in year 1, 25 in year 2, 50 in year 3, 25 in year 3 ½). 1.5. Two best practice Manuals on harvesting and processing of the two selected NTFP species developed and delivered to 300 smallholders - by year 3.	
Activity 1.1. Assessment of the socio-ecological resilience of indigenous communities; and establishment of household income baseline, part of project M&E plan, against which to monitor increase in household income.	Activity completed year 1.	Activity completed.
Activity 1.2. Resource survey of the 2 NTFP species to be harvested; survey to include abundance, distribution, phenology, population demographics, and an assessment of optimal harvesting time.	Activity completed in year 1.	Activity completed.
Activity 1.3. Acquisition and installation of fruit processing equipment.	Activity completed for year 2. Equipment for processing chiquitana almonds has been manufactured. A mill and press have been ordered to process the pesoé seed and extract oil.	In Q1 and Q2 of year 2, Equipment for processing chiquitana almonds and the mill and press will be delivered and will be used in the best practices training.
Activity 1.4. Training in sustainable forest management and good NTFP harvesting practices.	Activity partially carried out for year 2. Training on good harvesting practices of copaibo oil. chiquitana almonds and pesoé has been carried out in six pilot communities.	In Q1, Q2 and Q3 of year 3, training on good harvesting practices of copaibo, chiquitana almonds and pesoé will be conducted in six communities, considering the measures dictated by the Bolivian national government and the project's health safety protocol.
Activity 1.5 Training in good NTFP processing practices.	Activity completed for year 2. Training on good processing practices of chiquitana almonds has been carried out in 3 communities.	In Q2 and Q3 of year 3, training on good processing practices of copaibo, chiquitana almonds and pesoé will be conducted in 6 communities, considering the measures dictated by the Bolivian national government and the project's health safety protocol.
Activity 1.6. Monitoring and technical assistance in good NTFP harvesting and processing practices.	Activity partially carried out for year 2. Technical assistance was provided to harvest fruits of two additional wild	In Q2 and Q3 of year 3, monitoring and technical assistance will be programmed after the training

	species: Sinini and Piton. It has helped lay the foundation for good practices in NTFP harvesting of the three species prioritised in the project.	events, considering the measures dictated by the Bolivian national government and the project's health safety protocol.
Activity 1.7. Production and dissemination of 2 Best Practice Manuals in the harvesting and processing of 2 NTFP species.	Activity completed for year 2. The technical content of the three manuals on best practices in the harvesting and processing of three species: chiquitana almond, copaibo and pesoé has been prepared and revised.	Technical version of the manuals will be used in trainings in Q1 and Q2. In parallel, a consultant will improve the presentation of the manuals and make them more understandable. By the end of Q2, final versions are expected to be printed.
<p>Output 2. Indigenous smallholder communities of the Chiquitano dry forest ecoregion are organised in a community forest enterprise and sign mutually beneficial agreements with three companies and take measures to share benefits in a fair and equitable way to develop sustainable value chains based on biodiversity products.</p>	<p>2.1. Monitoring the success of output 2 – year 0 and year 3 ½.</p> <p>2.2. A community forest enterprise established with at least 50 members - by year 2 ½.</p> <p>2.3. Two exchange visits focussed on NTFP harvesting with communities and community enterprises in bordering Brazil – by year 3 ¼.</p> <p>2.4. A value chain strategy and benefit-sharing assessment developed and validated - by year 3.</p> <p>2.5. A community forest enterprise signed up to mutually beneficial agreements with three companies regarding ethical sourcing - by year 3 ¼.</p> <p>2.6. One short video documenting the experience of sustainable forest management in the five pilot communities produced and disseminated, for use in promoting</p>	<p>2.1. Indicator reached for year 1. Appropriate indicator.</p> <p>2.2. Good progress. Appropriate indicator. Actions have been taken so this indicator can be achieved in year 2 ½ (Evidence, Annex 4: 2.2 and section 3.2).</p> <p>2.3. According to the change request, the progress of this indicator has been postponed to year 3, whilst adapting to a COVID19 situation. Appropriate indicator. Evidence provided in section 3.2.</p> <p>2.4. Good progress. Appropriate indicator. Actions have been taken so this indicator can be achieved in year 3. Evidence provided in section 3.2.</p> <p>2.5. Good progress. Appropriate indicator. Actions have been taken so this indicator can be achieved in year 3 ¼. Evidence provided in section 3.2.</p>

	and replicating the process - by year 3 ½.		
Activity 2.1. Baseline and final awareness level assessment, against which the project M&E process will be measured		Activity completed year 1.	No activities needed in year 3.
Activity 2.2a. Facilitate the organisation and legal constitution of harvesters in a community forest enterprise.		Activity completed for year 2. Groups of people interested in forming a community forest enterprise were identified in 6 of the 6 pilot communities of the project.	In Q1 and Q2 a consultant will facilitate the organization of these groups.
Activity 2.2b. Specialist consultants to elaborate a market survey and a bio-business plan for the forest enterprise.		Activity initiated for year 2.	In Q1 and Q2, the consultant that will assist with the organisation of the harvesters will also prepare their business plans, which will facilitate the process.
Activity 2.2c. Technical assistance in business management (associativity, accounting, negotiation, sales and marketing) by FAN.		Activity initiated. The progress of this activity is related to the progress of Activity 1.6. Technical assistance has been provided for the negotiation, sale and sharing of profits from sinini and piton.	Technical assistance in business management for the harvesting of almonds, copaibo and pesoé will continue between Q1 and Q3 of year 3, to accompany the harvesting season.
Activity 2.3. Exchanges of experience with transboundary communities in Brazil on NTFP harvesting and fair and equitable benefit sharing, facilitated by ECOA.		Due to the delays in year 2 and current Covid19 emergency measures, this activity was rescheduled to take place once in year 3 and once in year 4.	In Q3, the exchange of experience may have to be a virtual event, rather than a face-to-face event, due to the delay in vaccination in both countries and the greater severity of the pandemic in Brazil
Activity 2.4. Development of value chain strategy and fair and equitable benefit sharing with stakeholders.		Activity completed for year 2. Value chains have been mapped for the three species prioritized by the project.	In Q2, the strategy will be completed. In Q3 and Q4, it will be validated with the main actors in the value chain.
Activity 2.5. Facilitate alliances between the community forest enterprise and companies based on fair and equitable benefit sharing.		Activity completed for year 2. Contact has been maintained with companies interested. Despite the economic problems caused by the pandemic, they remain interested.	In Q2, meetings and pilot sales between companies and communities will be facilitated. In Q3, mutually beneficial partnerships will be established through the signing of documents.
Activity 2.6. Summarise the experience and lessons learnt by the 5 indigenous communities and the community forest enterprise in sustainable		Activity completed for year 2. Summary of lessons learned has continued.	In Q4, the recording of lessons learned from the project will continue.

<p>forest management and produce (short video) to promote uptake in more communities.</p>		
<p>Output: 3. Priority species, habitats, and sites for plant conservation in the Chiquitano dry forest ecoregion identified, documented, and published; plant dataset shared with Bolivian partners and biodiversity centres; and national capacity to assess plant conservation priorities built through training of scientists and pre- and post-graduate students.</p>	<p>3.1. Ten Bolivian scientists (50% women) trained in IUCN species conservation assessments and IPA methodology and application; and 200 global IUCN assessments of Chiquitania endemic and/or rare species (compiled prior to Darwin project) verified during the course – by 1 year.</p> <p>3.2. Book titled “Threatened Plants of lowland Bolivia”, authored by ten Bolivian scientists, published and launched with financial support from this project to make the results of the book available for IUCN threat assessment and IPA identification. – by 1 year.</p> <p>3.3. An estimated 15-20 Important Plant Areas (IPAs) of the Chiquitano ecoregion identified, documented and mapped - by 2 year.</p> <p>3.4. The estimated 1000 useful plant species native to the Chiquitano dry forest ecoregion identified and prioritised – by year 2.</p> <p>3.5. Six lectures and handouts on IUCN species conservation assessments and IPA identification tools and application developed for UAGRMs Lic.Biol., Lic.Forestry, and MSc. in Natural Resource Management and Environment - by ¾ year; training 20 students (50% women) per years 1,2,3.</p>	<p>3.1. 15 Bolivian scientists (7 women and 8 men) completed the 5-day certified IUCN assessor course. Target exceed by 5 students by year 1. Appropriate indicator.</p> <p>200 IUCN species assessments of priority plant species for the Chiquitano ecoregion, verified and submitted for publication on IUCN portal. The verification happened independently of the course (Evidence, Annex 4: 3.1b).</p> <p>3.2. Indicator achieved in year 1. Appropriate indicator.</p> <p>3.3. Eighteen TIPAs sites identified, mapped, and documented by year 2. Appropriate indicator. (Evidence, Annex 4: 3.3).</p> <p>3.4 Indicator achieved in year 2. (Evidence, Annex 4: 3.4).</p> <p>3.5 First and second course developed and taught in a timely manner. Indicator appropriate. (Evidence Annex 4: 3.5).</p> <p>3.6. Indicator achieved for year 1. In year 2, we took on four rather than two students to allow them two years each to develop and complete their projects, whilst adapting to a COVID19 situation. Indicator changed accordingly (Evidence, Annex 4: 3.6).</p> <p>3.7. Indicator achieved for year 2. Indicator appropriate.</p>

	<p>3.6. Six Lic. Biol., Lic. Forestry, and MSc. student research projects (50% women) at AGRM University completed on IUCN extinct risk assessment and IPA identification (2 in each of years 1, 2, and 3), focussing on socio-economically valuable species.</p> <p>3.7. All scientific datasets, including national IPA database and priority species specimen database, shared with all partners, updated each year of project, in line with Nagoya protocol.</p>		
<p>Activity 3.1a. Ten Bolivian botanists trained in IPA-tools and gIUCN extinction risk assessment; and 200 assessments of plant species endemic to the Ecoregion verified.</p>	<p>Activity completed.</p>	<p>Activity completed.</p>	
<p>Activity 3.1b. The verified 200 IUCN assessments sent for independent review, followed by submission to the IUCN website.</p>	<p>200 global IUCN assessments verified, reviewed by independent reviewers, comments incorporated, and assessments submitted for publication on IUCN webportal.</p>	<p>Activity completed year 2.</p>	
<p>Activity 3.2. Book titled “Threatened Plants of lowland Bolivia”, published and launched - by year 1.</p>	<p>Activity completed for year 1. The book was published as the official Red data book for Bolivia with support from the Bolivian Ministry for the Environment and Water. Launched in Santa Cruz.</p>	<p>In year 2 the distribution of copies should have been completed. This task was interrupted by social distancing measures due to the Covid19 pandemic and will be completed in year 3. So will the launch of the book in the British Embassy in La Paz and at Kew Gardens in the UK.</p>	
<p>Activity 3.3. Document, map, and identify 15-20 Important Plant Areas (IPAs) in the Chiquitano dry forest ecoregion.</p>	<p>Documentation and mapping completed in year 2 and shared with GADSC (Evidence, Annex 4: 3.3, 4.2).</p>	<p>The site data and maps to be uploaded to Kew IPA database – when portal training offered and made available via MHNNKM and Plantlife International websites.</p>	

Activity 3.4a. Review information and assess use-status of estimated 1,000 native, useful plant species; and assess the global IUCN extinction risk of the 50 most used species.	Activity completed in a timely manner by year 2.	
Activity 3.4b. Centres of high floristic diversity of useful plant species identified, and these incorporated into already identified IPA sites.	Activity completed in a timely manner by year 2, six months ahead of time.	Because we made such good progress on this activity, we are pondering writing a manuscript on “Sustainable use of plants of the Chiquitania and their conservation status”. Completing this may take priority over activity 3.4ci.
Activity 3.4ci. Manuscript of Chiquitano ecoregion priority habitat list and IPA sites submitted to peer-reviewed journal Kempffiana.	Progress in being made towards submitting a manuscript to Kempffiana by Q1 year 3 as per the implementation table.	This manuscript will be submitted in year 3.
Activity 3.4cii. Submit results to open-access scientific journals, on the website of FAN, MHNNKM, IUCN, PlantLife International, and Kew, and disseminate the information generated in the project on social media: booklets, manual, Facebook, Twitter, blog posts, radio, and video.	This happens continuously throughout the project.	This will continue to happen in year 3.
Activity 3.5. Module for undergraduate and graduate students at UAGRM in IPAs and IUCN methodology, including preparing course material.	This module has been taught in years 1 and 2 in a timely manner.	The module will be taught again in year 3.
Activity 3.6. Develop and supervise at six Lic.Biol. or MSc dissertation projects at UAGRM in IUCN extinct risk assessment and/or IPA methodology.	Six Lic.Biol. dissertation projects at Santa Cruz universities were developed. Two were completed in year 1, and four are currently underway.	Four dissertation projects will be completed in year 3 and manuscripts submitted for publication.
Activity 3.7. Compile, keep updated, and share project databases with partners and stakeholders.	Activity completed for year 2.	Databases to be shared with partners by Q1 year 3 and to continue being added to in year 3.
Output 4. IPAs of Chiquitano dry forest Ecoregion incorporated into subnational action plans on conservation and sustainable development. Local authorities, officials and rangers equipped with strategic knowledge, tools and capabilities for the effective management IPAs and protected areas.	4.1. Kew, MHNNKM, and FAN to work with the key stake holders: GADSC, SERNAP, DGBAPAP (national government); representatives for the Chiquitano indigenous people; soya bean farmers; cattle rangers; conservation NGOs (FCBC, Natura, WWF); the universities UAGRAM, UPSA, NUR; representative of key industries and productive sectors, throughout the project to highlight the	4.1. Indicator considered at every opportunity for stakeholder engagement. Indicator appropriate (Evidence, Annex 4: 3.1b, 3.2, 3.3, 3.4ci, 3.4cii, 3.5, 3.6, 4.2) 4.2 IPAs sites are mapped, documented, and prioritised by GADSC by year 2. Stakeholder workshops will take place in year 3 as per events taking place under activity 4.4. Indicator appropriate (Evidence, Annex 4: 3.3, 4.2). 4.3. Indicator was completed ahead of time in Q4 year 2. Indicator appropriate (Evidence, Annex 4: 4.2).

	<p>contribution of IPAs to national and subnational CBD targets – throughout project.</p> <p>4.2. IPA sites are prioritised and designated using best practice with input from all stakeholders including the soya farmers and cattle rangers and Chiquitano indigenous smallholders. – by year 2.</p> <p>4.3 Management recommendations provided to departmental and local government for all 15-20 designated IPA sites for future formal protection – by year 3.</p> <p>4.4 Results disseminated and IPA tools promoted via national forum on Bolivian plant biodiversity, with attendees as per 4.1, in addition to representatives of national government institutions, NGOs and national level stakeholders – by year 3 ½.</p> <p>4.5 Results disseminated and IPA tools promoted via international conferences (CBD and CITES, ...) in years 1, 2, 3</p>	<p>4.4. Indicator to be completed by year 3 1/2. Indicator appropriate.</p> <p>4.5. Indicator target achieved for year 1. Indicator appropriate (Evidence, Annex 4: 4.6).</p>	
Activity 4.1. Project inception workshop with partners and all key stakeholders by month 3, involving (stakeholders as per logframe 4.1).		Activity completed in Q1 of year 1.	
Activity 4.2. Provide information and recommendations for incorporating IPAs into territorial management instruments at the subnational and national levels.		Activity part completed in year 1.	Activity completed in year 2.
Activity 4.3. Progress workshop with the newly elected GADSC government actors, including reiterate the IPAs identified in output 3.		New GADSC only takes office in May 2021.	Activity planned for Q1 year 3, when the new GADSC will be in place.
Activity 4.4. Workshops with government actors and the productive and indigenous sectors to prioritise IPA sites, involving (stakeholders as per 4.1).		Activities planned for year 3.	Activities planned for year 3 with all stakeholder groups.

Activity 4.5. Project closure workshop/forum/symposium with all stakeholders and press (stakeholders as per 4.1).	Activity only relevant to year 4.	
Activity 4.1. Participation in national and international conferences (CBD, CITES, ...) to disseminate IPAs methodology / approach and promote their adoption.	Activity completed for year 2. Fewer conferences were attended than anticipated because some were cancelled due to COVID19 measures	In year 3 this activity will be completed in accordance with COVID19 measures for social distancing.

Annex 2: Project’s full current logframe as presented in the application form (unless changes have been agreed)

Logframe as change request approved 20211221. Changes to the originally presented logframe in red text.

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions
<p>Impact: (Max 30 words) Protection, sustainable use and management of globally unique ecosystems in Latin America are promoted through wide adoption of Important Plant Area (IPA) tools.</p>			
<p>Outcome: (Max 30 words) Effective conservation prioritisation in the Bolivian Chiquitano dry forest ecoregion is achieved by improving livelihoods of indigenous Chiquitano communities, engaging agricultural producers, and equipping decision makers to designate IPAs.</p>	<p>0.1 Sustainable forest management of natural resources developed and practiced in five pilot communities in Bolivian Chiquitano dry forests. Collection and trade in forest products increased for 2 plant species, and household income derived from sustainable forest products increased by 10% – by year 3 ½. 0.2 Understanding of forest ecosystem services values and engagement in activities leading to economic benefits from sustainable forest management opportunities. Both will be increased at community and local decision-making levels – by year 3 ½. 0.3. IPAs approach combined with IUCN Red Data book of endemic, rare, threatened and useful plant species are recommended as a tool in best-practice area-selection for intensive soya bean agriculture, cattle farming and forest logging – by year 2. 0.4 IPAs integrated into policy and action plans on biodiversity conservation and sustainable development in the autonomous department of Santa Cruz, in line with GSPC and Aichi Biodiversity targets by the end of the project – by year 3 ½.</p>	<p>0.1 Annual trade figures; pilot community annual collection and trade records. Household income monitored through baseline year 0 and year 3 household income surveys. 0.2 Baseline and final awareness surveys with community members, community leaders, local decision-makers and companies buying up forest products. 0.3 IPAs of Bolivian Chiquitano dry forest ecoregion published through IPAs database. Book of endemic, rare, threatened and useful plant species of the Chiquitano dry forest ecoregion published, informing on IPA site selection. Future area selection for intensive land use change is guided by, and reference made to IPAs recommendations. 0.4 GADSC adopt IPA tools within its strategy for conservation and sustainable development. The GADSC’s Departmental Plan of Protected Areas and Conservation Units revised, incorporating data on IPA site identification. Action Plans (NBSAPs) under the CBD includes sections on IPA designation of the Chiquitano region as models to be adopted nationwide.</p>	<p>1. Pilot communities remain committed to sustainable forest management. 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. 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 minimised through diversification of NTFP options. 3. Autonomous government of Santa Cruz will incorporate IPAs within their conservation / resource management strategies as an integral element of their obligations under the CBD. 4. Publicity of the successful application of the IPA approach in the Chiquitano dry forest ecoregion of Santa Cruz department will promote uptake and use as a means of effective conservation</p>

			prioritisation in other regions of Bolivia and other Latin American countries.
<p>1. Five indigenous smallholder communities in the Chiquitano dry forest ecoregion apply best practices to build climate resilience and sustainable forest management.</p>	<p>1.1. Assessment of the socio-ecological resilience of the indigenous communities, and poverty alleviation power of project – by year 1 and 3 ½.</p> <p>1.2. Two resource surveys of the two NTFP species to be harvested – by 1 year.</p> <p>1.3. 300 smallholders (40% women) trained in sustainable forest management and best harvesting practices of NTFP (50 in year 1 1/4, 75 in year 2, 125 in year 3, 50 in year 3 ½.)</p> <p>1.4. 150 smallholders (60% women) trained in best processing practices of NTFP (50 in year 1, 25 in year 2, 50 in year 3, 25 in year 3 ½.)</p> <p>1.5. Two best practice Manuals on harvesting and processing of the two selected NTFP species developed and delivered to 300 smallholders - by year 3.</p>	<p>1.1. Technical report produced and disseminated to relevant stakeholders, and household income monitored through baseline and year 3 surveys.</p> <p>1.2. Resource survey report of the two selected NTFP species produced. They will include abundance, distribution, phenology, population demography, and optimal harvesting time.</p> <p>1.3. Acquisition and installation of fruit processing equipment – receipts and photos of machinery in-situ. Workshop reports, participant lists, and attendance certificates.</p> <p>1.4. Monitoring and technical assistance in good NTFP harvesting and processing practices. Time sheets of hours spent monitoring and/or assisting. Workshop reports, participant lists, and attendance certificates.</p> <p>1.5. Best Practices Manuals on harvesting and processing NTFP produced and disseminated (printed copies and available online).</p>	<p>1. Smallholders from indigenous communities are engaged in sustainable forest management.</p> <p>2. The population dynamics of the species under management is not affected by fires or extreme climatic events such as drought or El nino.</p>
<p>2. Indigenous smallholder communities of the Chiquitano dry forest ecoregion are organised in a community forest enterprise and sign mutually beneficial agreements with three companies and</p>	<p>2.1. Monitoring the success of output 2 – year 0 and year 3 ½.</p> <p>2.2. A community forest enterprise established with at least 50 members - by year 2 ½.</p> <p>2.3. Two exchange visits focussed on NTFP harvesting with communities and community enterprises in bordering Brazil – by year 3 ¼.</p>	<p>2.1. Baseline and final awareness surveys with community members, community leaders, local decision-makers, and companies buying up forest products.</p> <p>2.2. Legal statutes and norms, minutes of meetings of the community forest enterprise and business plan document. Reports on market survey and bio-business plan. List of recipients of technical assistance in business management.</p>	<p>1. The population dynamics of the species under management is not affected by forest fires or extreme climatic events.</p> <p>2. Market conditions remain favourable for forest products prioritised in the project.</p>

<p>take measures to share benefits in a fair and equitable way to develop sustainable value chains based on biodiversity products.</p>	<p>2.4. A value chain strategy and benefit-sharing assessment developed and validated - by year 3.</p> <p>2.5. A community forest enterprise signed up to mutually beneficial agreements with three companies regarding ethical sourcing - by year 3 ¼.</p> <p>2.6. One short video documenting the experience of sustainable forest management in the five pilot communities produced and disseminated, for use in promoting and replicating the process - by year 3 ½.</p>	<p>2.3. Reports from exchange visits, lists of participants and attendance certificates.</p> <p>2.4. Documents of value chain strategy and benefit-sharing assessment developed and validated with value chain stakeholders.</p> <p>2.5. Commercial agreements signed between the community forest enterprise and companies in forest products.</p> <p>2.6. Short video available on relevant websites, incl. YouTube.</p>	
<p>Outputs:</p> <p>3. Priority species, habitats, and sites for plant conservation in the Chiquitano dry forest ecoregion identified, documented and published; plant dataset shared with Bolivian partners and biodiversity centres; and national capacity to assess plant conservation priorities built through training of scientists and pre- and post-graduate students.</p>	<p>3.1. Ten Bolivian scientists (50% women) trained in IUCN species conservation assessments and IPA methodology and application; and 200 global IUCN assessments of Chiquitania endemic and/or rare species (compiled prior to Darwin project) verified during the course – by 1 year.</p> <p>3.2. Book titled “Threatened Plants of lowland Bolivia”, authored by ten Bolivian scientists, published and launched with financial support from this project to make the results of the book available for IUCN threat assessment and IPA identification. – by 1 year.</p> <p>3.3. An estimated 15-20 Important Plant Areas (IPAs) of the Chiquitano ecoregion identified, documented and mapped - by 2 year.</p> <p>3.4. The estimated 1000 useful plant species native to the Chiquitano dry forest ecoregion identified and prioritised – by year 2.</p> <p>3.5. Six lectures and handouts on IUCN species conservation assessments and IPA identification tools and application</p>	<p>3.1. Workshop report. The 200 verified global IUCN assessments sent for independent review.</p> <p>3.2. Book published, and book launch held – by 1 year</p> <p>3.3. Priority IPAs and habitat maps submitted to GADSC. The 15-20 IPA sites documented on Kew IPA database, available via MHNNKM and Plantlife International websites – by year 2.</p> <p>3.4. Global IUCN extinction risk assessments of the 50 top most used plant species verified, reviewed, submitted to the IUCN website; centres of high floristic diversity of useful plant species identified; manuscript on Chiquitania priority habitat list and IPA sites submitted to peer-reviewed journal <i>Kempffiana</i>.</p> <p>3.5. Lecture presentations and hand-outs made available for lecturers and students.</p> <p>3.6. Results of thesis projects submitted to peer-reviewed journal and/or to IUCN website; and thesis students co-author relevant IPA database entries.</p> <p>3.7. Complete datasets held in databases at MHNNKM, FAN, GADSC, National</p>	<p>1. Sufficient data on socio-economically valuable plant species can be amassed to accurately assess their extinction risk and to identify centres of high floristic diversity of socio-economically valuable plant species.</p> <p>2. UAGRM incorporate teaching on IPAs and IUCN species conservation assessments into Lic.Biol., Lic. Forestry and MSc teaching modules.</p> <p>3. Sufficient students select thesis projects on IUCN extinction risk assessment and IPA identification, and they are skilled to conduct quality field research following training.</p>

	<p>developed for UAGRMs Lic.Biol., Lic.Forestry, and MSc. in Natural Resource Management and Environment - by ¾ year; training 20 students (50% women) per years 1,2,3.</p> <p>3.6. Six Lic. Biol., Lic. Forestry, and MSc. student research projects (50% women) at AGRM University completed on IUCN extinct risk assessment and IPA identification (2 in each of years 1,2, and 3), focussing on socio-economically valuable species.</p> <p>3.7. All scientific datasets, including national IPA database and priority species specimen database, shared with all partners, updated each year of project, in line with Nagoya protocol.</p>	<p>Herbarium LPB, Kew, and PlantLife International.</p>	
<p>4. IPAs of Chiquitano dry forest Ecoregion incorporated into subnational action plans on conservation and sustainable development. Local authorities, officials and rangers equipped with strategic knowledge, tools and capabilities for the effective management IPAs and protected areas.</p>	<p>4.1. Kew, MHNNKM, and FAN to work with the key stake holders: GADSC, SERNAP, DGBAPAP (national government); representatives for the Chiquitano indigenous people; soya bean farmers; cattle rangers; conservation NGOs (FCBC, Natura, WWF); the universities UAGRAM, UPSA, NUR; representative of key industries and productive sectors, throughout the project to highlight the contribution of IPAs to national and subnational CBD targets – throughout project.</p> <p>4.2. IPA sites are prioritised and designated using best practice with input from all stakeholders including the soya farmers and cattle rangers and Chiquitano indigenous smallholders. – by year 2.</p> <p>4.3 Management recommendations provided to departmental and local government for all 15-20 designated IPA</p>	<p>4.1. Stakeholder feedback sought and documented. Annual reports to GADSC; national and international press releases.</p> <p>4.2. Workshop and feedback reports.</p> <p>4.3. Progress reports submitted to the DGB (Bolivian CBD authority), GADSC integrate reported recommendations within subnational biodiversity action plans.</p> <p>4.4. Newspapers, radio, TV, social media. National forum on biodiversity conservation held for MHNNKM, FAN, GADSC and the MMAyA-DGBAP Forum report; stakeholder feedback sought and documented.</p> <p>4.5 Social media, conference programme and stakeholder feedback sought and documented.</p>	<p>1. GADSC, SERNAP, DGBAPAP will incorporate IPAs within their conservation / resource management strategies as an integral element of their obligations under the CBD and promote uptake and its use as a means of effective conservation prioritisation in other regions of Bolivia.</p> <p>2. The political will of subnational and national authorities is maintained to promote biodiversity conservation actions in the public agendas, during the pre and post electoral process.</p>

	<p>sites for future formal protection – by year 3.</p> <p>4.4 Results disseminated and IPA tools promoted via national forum on Bolivian plant biodiversity, with attendees as per 4.1, in addition to representatives of national government institutions, NGOs and national level stakeholders – by year 3 ½.</p> <p>4.5 Results disseminated and IPA tools promoted via international conferences (CBD and CITES, ...) in years 1, 2, 3</p>		
<p>A.1.1. Assessment of the socio-ecological resilience of indigenous communities; and establishment of household income baseline, part of project M&E plan, against which to monitor increase in household income.</p> <p>A.1.2. Resource survey of the 2 NTFP species to be harvested; survey to include abundance, distribution, phenology, population demographics, and an assessment of optimal harvesting time.</p> <p>A.1.3. Acquisition and installation of fruit processing equipment.</p> <p>A.1.4. Training in sustainable forest management and good NTFP harvesting practices.</p> <p>A.1.5. Training in good NTFP processing practices.</p> <p>A.1.6. Monitoring and technical assistance in good NTFP harvesting and processing practices.</p> <p>A.1.7. Production and dissemination of 2 Best Practice Manuals in the harvesting and processing of 2 NTFP species.</p> <p>A.2.1. Baseline and final awareness level assessment, against which the project M&E process will be measured.</p> <p>A.2.2a. Facilitate the organisation and legal constitution of harvesters in a community forest enterprise.</p> <p>A.2.2b. Specialist consultants to elaborate a market survey and a bio-business plan for the forest enterprise.</p> <p>A.2.2c. Technical assistance in business management (associativity, accounting, negotiation, sales and marketing) by FAN.</p> <p>A.2.3. Exchanges of experience with transboundary communities in Brazil on NTFP harvesting and fair and equitable benefit sharing, facilitated by ECOA.</p> <p>A.2.4. Development of value chain strategy and fair and equitable benefit sharing with stakeholders.</p> <p>A.2.5. Facilitate alliances between the community forest enterprise and companies based on fair and equitable benefit sharing.</p> <p>A.2.6. Summarise the experience and lessons learnt by the 5 indigenous communities and the community forest enterprise in sustainable forest management and produce (short video) to promote uptake in more communities.</p> <p>A.3.1a. Ten Bolivian botanists trained in IPA-tools and G-IUCN extinction risk assessment; and 200 assessments of plant species endemic to the Ecoregion verified.</p> <p>A.3.1b. The verified 200 IUCN assessments sent for independent review, followed by submission to the IUCN website.</p> <p>A.3.2. Book titled “Threatened Plants of lowland Bolivia”, published and launched - by year 1.</p> <p>A.3.3. Document, map, and identify 15-20 Important Plant Areas (IPAs) in the Chiquitano dry forest ecoregion.</p>			

- A.3.4a. Review information and assess use-status of estimated 1,000 native, useful plant species; and assess the global IUCN extinction risk of the 50 most used species.
- A.3.4b. Centres of high floristic diversity of useful plant species identified, and these incorporated into already identified IPA sites.
- A.3.4ci. Manuscript of Chiquitano ecoregion priority habitat list and IPA sites submitted to peer-reviewed journal *Kempffiana* by year 2.
- A.3.4cii. Submit results to open-access scientific journals, on the website of FAN, MHNNKM, IUCN, PlantLife International, and Kew, and disseminate the information generated in the project on social media: booklets, manual, Facebook, Twitter, blog posts, radio, and video.
- A. 3.5. Module for undergraduate and graduate students at UAGRM in IPAs and IUCN methodology, including preparing course material.
- A. 3.6. Develop and supervise at six Lic.Biol. or MSc dissertation projects at UAGRM in IUCN extinct risk assessment and/or IPA methodology.
- A. 3.7. Compile, keep updated, and share project databases with partners and stakeholders.
- A. 4.1. Project inception workshop with partners and all key stakeholders by month 3, involving (stakeholders as per logframe 4.1).
- A. 4.2. Provide information and recommendations for incorporating IPAs into territorial management instruments at the subnational and national levels. The revised GADSC's departmental plan for its protected areas, incorporates the results of our IPA site identification.
- A. 4.3. Progress workshop with the newly elected GADSC government actors, including reiterate the IPAs identified in output 3.
- A. 4.4. Workshops with government actors and the productive and indigenous sectors to prioritise IPA sites, involving (stakeholders as per 4.1).
- A. 4.5. Project closure workshop/forum/symposium with all stakeholders and press (stakeholders as per 4.4).
- A. 4.6. Participation in national and international conferences (CBD, CITES, ...) to disseminate IPAs methodology / approach and promote their adoption

Annex 3: Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
Established codes								
3	10 Bolivian professional biologists and conservationists 5-day certified course in global IUCN assessment.	50% women	Bolivian	10			15	10
3	Lic. Biol., or Lic. Forestry, or a similar degrees related to environment sciences.	50% women	Bolivian	2	4		0	6
4	Two-day course in IUCN and IPAs methodology	50% women	Bolivian	20	15		35	45
6A	Training in sustainable forest management and good NTFP harvesting practices.	48% women	Bolivian	46	50		96	300
	Training in good NTFP processing practices.	50% women	Bolivian	0	36		36	150
6A	Training in basic business management	50% women	Bolivian	-	10	-	10	50
7	Three best practice Manuals on harvesting and processing of the selected NTFP species	-	-		3		3	3
9	15-20 IPAs site assessments and recommendations produced and shared with partners and national and regional Bolivian government.	-	-	8	9		18	15-20
11A	Official redlist book of threatened plant of lowland Bolivia	-	-	1			1	1
11B	Manuscript on Chiquitano ecoregion priority habitat list and IPA sites	-	-		1		1	1

11B	Six manuscripts based on thesis projects to be submitted to peer reviewed journals	-	-	2			2	6
12A	IPA site data base			1			1	1
12A	IPA site data base			1			1	1
12A	Chiquitania image database			1			1	1
12B	Joint Kew and Museo Brahm's Bolivia species distribution database			1			1	1
12B	Chiquitania database of useful species held by FAN			1			1	1
12B	IUCN online webportal			103	147		250	250
13B	Species reference collection from IPAs field work			1			1	1
14A	IPA and Darwin stakeholder workshop			1	1	1	2	5
14A	IPA Criteria workshop for specialists			1			1	1
14A	IUCN assessment review workshop			1			1	1
14A	Book launch - Redlist book of lowland Bolivian plants			1			1	1
14A	"Important areas for plant conservation and tools for monitoring them" symposium in IV Congreso Boliviano de Botánica October 2019			1			1	1
14B	Systematics association 10 th biennial Conference Bristol 17-19 June 2019				1		1	1
14B	Kew Advances in Botany & Mycology seminar June 29 th 2020				1		1	1
14B	1 st Bolivian Restoration Conference March 24 th -26 th 2021 "IPAs as a tool for conservation and restoration"				1		1	1
20B	£ 9.100.- Harvesting equipment, fruit processing equipment and a computer.	-	-	■ ■■■■	■	■	■ ■■■■	■ ■■■■

Table 2 Publications

Title	Type (e.g. journals, manual, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Redlist book of threatened plant of lowland Bolivia	Book	Dr. Gonzalo Navarro Sanchez; MSc. Susana Arrazola Rivero; MSc. Margoth Atahuachi Burgos; MSc. Magaly Mercado Ustariz; MSc. Nelly de la Barra Ricaldez; Dra. Carola Antezana Valera; MSc. Erika Fernandez Terrazas; Dra. Monica Moraes Ramirez; Dr. Alfredo Fuentes Claros, Dr. Milton Fernandez; Ing. Alejandro Araujo-Murakami; Dr. Stephan Beck; Dr. Bonifacio Mostacedo; Lic. Rene Guillen; Lic. Saul Altamirano; Dra. Marisol Toledo; Ing. Abraham Poma; MSc. Modesto Zarate	Male	Bolivian	Fundacion Amigos de la Naturaleza, Santa Cruz, Bolivia	http://www.fan-bo.org/ and downloadable in pdf format from QR code.

El programa Areas Tropicales Importantes de Plantas	Journal issue – PATUJU 34 (October 2020)	Maira T. Martinez, Daniel Villarroel, Bente Klitgaard, Rosemary Clegg and Marisol Toledo	Female	Bolivian	Museo de Historia Natural Noel Kempff Mercado	Downloadable pdf from the Museum website. http://museoelkempff.org/sitio/Informacion/Patuju/Boletin_EIPatuju_34.pdf
Estructura Poblacioneal y especial del Copaibo (Copaifera laIngsdorfii Desf.) en las comunidades de Quitunuquiña y Yororobá (Roboré, Santa Cruz, Bolivia)	Paper, peer-reviewed journal Kampffiana	Fabiola Diaz-Villarroel & Daniel Villarroel	Female	Bolivian	Kempffiana, Santa Cruz, bolivia	https://issuu.com/fundacionamigosdelanaturaleza/docs/diaz-villarroel_villarroel2020_copaibo?fbclid=IwAR1gPZBb7fNTuZHxueOXXuuk4ZxzMhC_0-3NE5S0wR6QU9ktGKjdTr-OMs
Spatial distribution model of the almendra chiquitana (<i>Dipteryx alata</i> Vogel, Fabaceae) in Bolivia	Paper, peer-reviewed journal Ecología en Bolivia	Consuelo A. Pérez-Cruz & Daniel Villarroel	Female	Bolivian	Ecología en Bolivia, La Paz, Bolivia	https://ecologiaenbolivia.com/wp-content/uploads/2020/12/3-Perez-Cruz-Villarroel-553-2020.pdf

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@itsi.co.uk putting the project number in the Subject line.	X
Is your report more than 10MB? If so, please discuss with Darwin-Projects@itsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	X
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	X
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	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.	