





#### Darwin Initiative Main and Post Project Annual Report

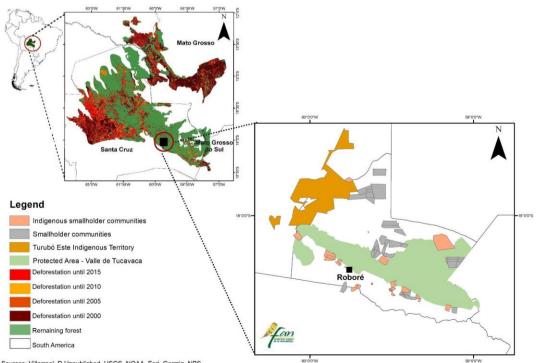
To be completed with reference to the "Writing a Darwin Report" guidance: (<u>http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms</u>). It is expected that this report will be a maximum of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2020

**Darwin Project Information** 

Project reference	Main project 26-024
Project title	Improving indigenous Bolivian Chiquitano people's livelihoods
	through sustainable forest management
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 £220.201; after change request 20191220 £316.599
Start/end dates of project	July 2 <sup>nd</sup> 2019 – March 31 <sup>st</sup> 2022
Reporting period (e.g. Apr 2019 – Mar 2020) and number (e.g. Annual Report 1, 2, 3)	July 2019 – Mar 2020, Annual Report 1
Project Leader name	Dr. Bente B. Klitgård
Project website/blog/social media	Twitter @KewAmericas. See also Annex 4: A.Project dissemination and promotion
Report author(s) and date	Bente Klitgård, Ruth Delgado, Olivia Bogert, Maira Martinez, Karina Sauma, Rosie Clegg, and Marisol Toledo - 14th of May 2020

#### 1. **Project summary**



Sources: Villarroel, D.Unpublished, USGS, NOAA, Esri, Garmin, NPS

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 (TIPA) 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 TIPA-tools to identify site-based conservation priorities, and
 4) equipping decision makers with these tools.

#### 4) equipping decision makers with these to

#### 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 first year of the project has 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 project monitoring 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 August 2019, the partner met and held a two-day project planning meeting in Santa Cruz, including developed an M&E plan (Evidence provided in Section 8 and Annex 4 4.1.PartnerInceptionWkshop).

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.1.1. 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.

The evaluation of the socio-ecological resilience of the indigenous communities was carried out with the participation of the communities. Information was gathered through interviews and surveys of community members to establish the baseline of annual household income (Evidence, Annex 4: 1.1 and \* note at the end of the section).

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. Resource surveys of **three** plant species undertaken - Copaifera langsdorfii Desf. (Copaibo), Dipteryx alata Vogel (Chiquitana almond), and Pterodon marginatus Vogel (Pesoé). This meant that we undertook an additional resource survey. According to the assessments made in the communities at the beginning of the project, the three selected species are abundant in the area, but their distribution is not uniform within communities. In each of the communities participating in the project, it is possible to harvest one and two of the species. It was thus necessary to carry out the additional study to secure a sustainable harvest for the communities (Evidence, Annex 4: 1.2 and \* note at the end of the section).

#### A.1.3. Acquisition and installation of fruit processing equipment.

As planned, the most suitable equipment for the extraction of Copaibo oil was identified, considering the conditions of the communities' infrastructure and the requirements to comply with good harvesting practices. Accordingly, two portable drills were purchased (Evidence, Annex 4: 1.3). Suppliers of equipment for processing Chiquitana almonds were also identified. This will contribute to the implementation of good processing practices.

#### A.1.4. Training in sustainable forest management and good NTFP harvesting practices.

The first cycle of training on good practices in the harvesting of Chiquitana almonds and copaibo oil was carried out in 4 of the 6 communities of the project. 46 people (48% women) participated in the training (Evidence, Annex 4: 1.4 and \*\*, see note at the end of the section).

#### A.1.5. Training in good NTFP processing practices.

This activity is re-programmed for the beginning of year 2, if Covid19 pandemic emergency measures in Bolivia will allow so (\* and \*\*, see notes at the end of the section).

#### A.1.6. Monitoring and technical assistance in good NTFP harvesting and processing practices.

The beginning of this activity is dependent on the progress of activities 1.4. and 1.5, which were delayed due to the forest fires and political problems in Bolivia in Q2 and Q3 of year 1 (\* and \*\*, see notes 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.

This activity was delayed. However, bibliographic reference material has been gathered and a first draft is being developed. In the approved change request of 20.12.2019, we requested to advance this activity, considering that travel and meetings might not be possible during Q4 due to political problems related to the national elections. However, it was proposed to move forward with desk work, if field activities were postponed. In practice, most of Q4 was free from travel restrictions (only the last two weeks due to the COVID 19 pandemic). Thus, field activities could take place. Besides, considering that the progress of activity 1.7 depended on the progress of activities 1.2. and 2.2.b, the final products of these activities are waiting to make better decisions on the topics to be included in the manuals.

### A.2.1. Baseline and final awareness level assessment, against which the project M&E process will be measured.

Activity completed for year 1. Interviews were conducted with key actors in the value chain. A baseline of the level of perception of local actors is available (Evidence, Annex 4: 2.1).

A.2.2a. Facilitate the organisation and legal constitution of harvesters in a community forest enterprise.

This activity was delayed. The progress of this activity depends on the progress activity 2.2.b, which was delayed due to the forest fires and political unrest in Bolivia in Q2 and Q3 of year 1. The activity is rescheduled to start on Q2 of year 2, considering the emergency measures that the national government dictates because of the Covid19 pandemic.

A.2.2b. Specialist consultants to elaborate a market survey and a bio-business plan for the forest enterprise.

Activity completed for year 1. Through a consultancy, market studies have been carried out on three NTFP species (which is an additional species, exceeding the target), so that the communities participating in the project have enough information to achieve Output 1 (Evidence, Annex 4: 2.2).

A.2.2c. Technical assistance in business management (associativity, accounting, negotiation, sales and marketing) by FAN.

Activity delayed for year 1, as it depends on activity 2.2a. The activity is rescheduled to start on Q2 of year 2, after starting activity 2.2.a, considering the emergency measures that the national government dictates because of the Covid19 pandemic.

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 1 and current Covid19 emergency measures, this activity is scheduled to take place once in year 2 and once in year 3. The date scheduled for year 2 will depend on the distancing measures to be established by the governments of Bolivia and Brazil.

*A.2.4.* Development of value chain strategy and fair and equitable benefit sharing with stakeholders. Activity completed for year 1. Key informants have been interviewed and secondary information has been collected (Evidence, Annex 4: 2.4)

A.2.5. Facilitate alliances between the community forest enterprise and companies based on fair and equitable benefit sharing.

Activity completed for year 1. Companies and communities interested in establishing partnerships have been interviewed separately (Evidence, Annex 4: 2.5)

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 1. The summary of lessons learned has been initiated (Evidence provided in Section 9)

A.3.1a. Ten Bolivian botanists trained inTIPA-tools and G-IUCN extinction risk assessment; and 200 assessments of plant species endemic to the Ecoregion verified.

In Q4, the project hosted a successful five-day IUCN certified conservation status assessor course for Bolivian biology professionals - leaders in their fields, using a train the trainer approach to select the **15** participants (7 women and 8 men) from the 164 applicants and from throughout the country, with 12 universities/institutions represented. The course was hosted at the MNHNKM, organised jointly by MHNNKM and Kew project staff and taught in Spanish by Kew's IUCN certified trainers Cátia Canteiro and Raquel Negrao. All 15 participants passed the exam. Also, as a spin-off outcome from the course, the participants agreed amongst themselves to establish a Bolivian plant IUCN conservation specialist group facilitated by the Kew trainers. (Evidence, Annex 4: Project dissemination&promotion and 3.1.IUCN Assessor course).

### A.3.1b. The verified 200 IUCN assessments sent for independent review, followed by submission to the IUCN website.

In August 2019, in addition to the public  $\frac{1}{2}$ -day project inception workshop (morning August 7<sup>th</sup>) (see section A.4.1.), we held two separate workshops:

7<sup>th</sup> August afternoon 1/2- day with 10 specialists in Chiquitano ecoregion. The main objectives
were to maximise on these people attending the morning inception workshop and bring these
specialists together to revise the vegetation classification of the mosaic of the Chiquitano
ecoregion and threats to the region, and review the 15-20 very preliminary TIPAs sites identified

by Kew project staff (linking with activity 3.3 below) (Evidence, Annex 4: A.Project dissemination&promotion and 3.1.SpecialistWkshops\_Aug2019); and

 10<sup>th</sup> -11<sup>th</sup> August, we hosted a three-day workshop with the Bolivian botanical specialists in Chiquitano dry forest ecology and conservation and used this workshop to bring these specialists togetehr to evaluate the 103 first preliminary IUCN species conservation assessments undertaken at Kew, keep revising the vegetation classification of the mosaic of the Chiquitano ecoregion, and reviewing review the 15-20 very preliminary TIPAs sites identified by Kew project staff (linking with activity 3.3 below). We are confident that the finally described TIPAs sites will be submitted to GADSC and uploaded to Kew' newly established TIPA database, available via MHNNKM and Plantlife International websites – by year 1 ½ (September 2020). The workshop was hosted by the MNHNKM, organised and facilitated jointly by MHNNKM and Kew project staff (Evidence, Annex 4: A.Project dissemination&promotion and 3.1.SpecialistWkshops\_Aug2019).

By Q4 year 1, we have evaluated 200 IUCN species assessments, submitted 103 to the IUCN for publication; and the remaining 97 are under review prior to submission. We underestimated the length of this process, mainly because we are keen to involve the Bolivian specialists in the whole process to ensure their engagement and uptake. We are, however, confident that that the review process will be completed by Sept. 2020 and that all 200 assessments will also be submitted to the IUCN for publication by then (Evidence, Annex 4: 3.1.IUCN\_sp\_assessments20200331). We plan to submit a change request application after this annual report, which will include a six-month extension to activity 3.1b.

#### A.3.2. Book titled "Threatened Plants of lowland Bolivia", published and launched - by year 1.

Activity completed for year 1. The book titled "Libro Rojo De Plantas Amenazadas De Las Tierra Bajas De Bolivia" was published and endorsed by Bolivian Ministry for the Environment and Water as a Bolivian Redlist book. It was launched on March 12<sup>th</sup> 2020. The project organised the booklaunch to coincide with British Week in Santa Cruz (12<sup>th</sup>-14<sup>th</sup> March) organised by the British Embassy in Bolivia. Both the Bolivian Minister for the Environment and Water (Mrs María Elva Pinckert Vaca) and the British Ambassador to Bolivia (Mr. Jeff Glekin) were among the speakers, in addition to a representative for the authors, the publisher FAN, and the Pl of this Dl project, which funded the publication of the book. The book was published in 300 hard copies to be distributed to stakeholders and strategically to institutions in the USA and Europe. A pdf is furthermore downloadable from FAN's website (Evidence, Annex 4: A.Project dissemination&promotion and 3.2.RedlistBook)

# A.3.3. Document, map, and identify 15-20 Important Plant Areas (IPAs) in the Chiquitano dry forest ecoregion - by $\frac{3}{4}$ year. Priority TIPAs and habitat maps submitted to GADSC. The 15-20 TIPA sites documented on Kew TIPA database, available via MHNNKM and Plantlife International websites – by year 1 $\frac{1}{2}$ .

In the specialist workshops mentioned in 3.1, the Bolivian Chiquitano dry forest specialists agreed a list of threatened habitats and a revised vegetation classification (Evidence, Annex 4: 3.3TIPASiteAssessments).

In addition, we undertook two periods of ground-truthing field work (August and October) – each three weeks and visited seven TIPAs sites, and the remaining TIPAs sites were planned to be visited between November 2019 and March 2020. Field work has been halted by 1) political unrest in connection with presidential elections in October 2019 (see *change request submitted 20.12.2019 and approved in January 2020*) and 2) lock down in Bolivia due to the Covid19 pandemic. The initial ambitious deadline of this activity was set in time to feed all our data into FAN's consultancy work for GADSC for a revised masterplan of nature reserves in the department of Santa Cruz. FAN's deadline for this project has, however, been push back to September 2020 because of the Covid19 pandemic, making it less urgent for us to feed data into the process. We are, however, still on target by to submit 15-20 priority TIPAs sites and habitat maps to GADSC, in addition to have submitted these sites to the Kew online TIPA portal, and made them available via MHNNKM and Plantlife International websites by year 1 1/2 (September 2020) (Evidence, Annex 4: 3.3TIPASiteAssessments).

### 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.

We have made good progress on this activity. 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 c. 2,000 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. (Evidence, Annex 4: 3.4.UsefulSpecies prioritised).

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

The centres of high floristic diversity of useful plants are being mapped in the process of undertaking activities *A.3.1b., A.3.2., A.3.3.,* and *A.3.4a.* We are on target with this indicator.

A.3.4c. Manuscript of Chiquitano ecoregion priority habitat list and TIPA sites submitted to peerreviewed journal Kempffiana by year 2. 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.

In the August 2019 workshop we revised the classification of habitats connected with the Chiquitano area and identified the threats to these. Working through the descriptions of TIPAs sites, we keep building up the data set working towards submitting a manuscript on the Chiquitano ecoregion priority habitat list and TIPA sites to the peer-reviewed journal Kempffiana (Evidence, Annex 4: A.Project dissimination&promotion).

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

Lectures and handout were developed in a timely manner jointly be Kew and Bolivian project staff; and in March 2020 the project staff organised and taught a two-day course in IUCN species and habitat conservation assessments and TIPAs assessment biology, conservation for undergraduate or graduate students - leaders in their fields, using a train the trainer approach in selecting the 14 participants (eight women and six men) from the 104 applicants. Six universities/ research institutions were represented from throughout the department of Santa Cruz. The course was hosted at the MNHNKM, organised and taught jointly by MHNNKM, FAN and Kew project staff. Course material, presentations and handouts, was shared with the students via Dropbox (Evidence, Annex 4: A.Project dissemination&promotion and 3.5.TIPAs&IUCNcourse\_March2020).

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

Activity completed for year 1. Two thesis projects were supervised, which included project development, field work and writing of reports and draft manuscripts for submission to a peer-reviewed journal (Evidence, Annex 4: 3.6.BSc\_Student\_projects).

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

1. The database of useful 5,500 plant names of the Chiquitania has been cleaned by Kew project staff nomenclaturally and shared with project partners.

2. A database in Brahms software of 5,500 plant occurrences and of 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 IUCN extinction risk assessment.

3. The 103 IUCN extinction risk assessments submitted in IUCN SIS system accessible via IUCN portal. 4. Five full TIPAs site descriptions and accompanying map layers shared with MHNNKM and FAN and available on Kew's TIPAs portal.

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 2.

### A. 4.1. Project inception workshop with partners and all key stakeholders by month 3, involving (stakeholders as per logframe 4.1).

In addition to the partner project planning workshop held in August (see section 2), in July the project was introduced to Kew science, finance and fundraising staff and students and volunteers interested in Bolivia.

FAN, MHNNKM and Kew jointly organised a half-day project inception workshop for stakeholders on August 7<sup>th</sup> in the MHNNKM. Of the 51 invitees, 31 attended the whole event, including a networking lunch provided by the project. Attendees represented 21 institutions (NGOs, private companies, regional government, nature reserves, universities, Museum and Botanic Gardens). While workshop was a useful way to present the project engage with stakeholders and seek their feedback on project plans, it also unintentionally came to function as a networking event for scientists, conservationists and decisionmakers interested in the Chiquitano ecoregion, who met subsequently and established

the platform "Sustainable Chiquitania". The event attracted the attention of national and regional press e.g. with an acticle in the national newspaper el Deber - online and hard copy versions (Evidence, Annex 4: 4.1.StakeholderWorkshop\_Aug2019 and A.Project dissimination&promotion).

A. 4.2. Provide information and recommendations for incorporating TIPAs 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 TIPA site identification.

So far, the project has fed data and map layers into the revision of three major nature reserves. The initial ambitious deadline of this activity was set in time to feed data into FAN's consultancy work for GADSC for a revised masterplan of nature reserves in the department of Santa Cruz. FAN's deadline for this project has, however, been push back to September 2020 because of 1) political unrest in the period October – December 2019, and recently due to the Covid19 pandemic, making the project's TIPAs data less urgent to compile (Evidence, Annex 4: 3.3TIPASiteAssessments).

A. 4.5. Participation in national and international conferences (CBD, CITES, ...) to disseminate TIPAs methodology / approach and promote their adoption. Results disseminated and TIPA tools promoted via international conferences (CBD and CITES, ...) in years 1, 2, 3

17-19<sup>th</sup> June 2019, technically speaking before the Darwin project started, it was promoted in a poster presented at Systematics Association Biannual Conference in Bristol as part of a symposium on Conservation (Evidence, Annex 4: A.Project\_dissimination&promotion and 4.5.Systematics\_Association\_2019).

2<sup>nd</sup> to 4<sup>th</sup> October 2019, four Kew staff participated in the IV Bolivian Botanical congress in Santa Cruz. FAN, Kew and NatureServe organised the symposium "Important areas for plant conservation and tools for monitoring them" within the framework of the congress. The activity took place on October 2<sup>nd</sup> with ca. 50 people attending with two presentations on TIPAs related themes (Evidence, Annex 4 4.5.IVCBB and Project dissimination&promotion). Project staff presented an additional three posters; and the project was promoted on the back of the conference notebook distributed to 220 delegates, and our two TIPAs flyers were included in the conference bag (Evidence, Annex 4: 5.IVCBB and A.Project dissimination&promotion).

**Notes:** (\*) These activities had to be extended to quarter Q4, because the activities could not be carried out normally in quarters Q2 and Q3 due to the forest fires and political problems (see section 3.4 for more information). This was done in accordance with the approved change request of 20.12.2019. (\*\*) This activity had to start in quarter Q4, because the activities could not be carried out normally in quarters Q2 and Q3 due to the forest fires and political problems (see section 3.4 for more information). This was done in accordance with the approved change request of 20.12.2019. (\*\*) This activity had to start in quarter Q4, because the activities could not be carried out normally in quarters Q2 and Q3 due to the forest fires and political problems (see section 3.4 for more information). This was done in accordance with the approved change request of 20.12.2019. See also official reports in Annex 4 on: B) the forest fires, C) on political unrest, and D) Covid19 measures in Boliva.

#### 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 has been made in year 1, considering that some activities could not be carried as planned. First, in Q2 there were problems of severe forest fires, the national political unrest and following lock down in Q3; and quarter Q4 was interrupted by emergency measures to do with the Covid19 pandemic (Annex 4: A, B, C and D for additional information). The actions proposed, in the approved change request of 20.12.2019, generally allowed to mitigate most of the delays of year 1 and to establish the basis for a better progress during year 2.

Most of the indicators have been achieved, in some cases, exceeded what was planned. Thus, the project activities are being carried out for 3 NTFP species, instead of 2; and work is being done with 6 communities instead of 5. These measures seek to give greater flexibility to achieve Outputs 1 and 2, considering a more changing environmental, economic, social and political scenario than it was when the project proposal was designed.

Regarding the delayed indicator: the two best practice Manuals, actions are already being accelerated. While delays have been minimised where possible, an additional quarter will likely be required to complete the Outputs 1 and 2 by the end of the project. To this end, we will evaluate project planning and submit a change request in Q1 of year 2.

*Indicator 1.1.* Assessment of the socio-ecological resilience of the indigenous communities, and poverty alleviation power of project – by year 1 and 3.

A baseline was developed that includes assessment of community resilience and annual household income. The communities prioritised in the project belong to a low income and highly vulnerable population. Although they have access to large natural areas of communally owned forest, their knowledge of sustainable forest management and resilience to climate change is limited. They have some experience with timber management plans, although this activity has been decreasing in importance due to the downward trend in prices in recent years. In general, their own consumption of NTFPs is limited, and they do not carry out commercial harvesting of NTFPs. Local knowledge of recognising native plant species and their traditional uses is being lost (Evidence, Annex 4: 1.1).

#### Indicator 1.2. Resource surveys of the two NTFP species to be harvested - by 1 year.

**Three resource surveys** were conducted on the potential for harvesting. Through these studies, the communities have concretely rediscovered that they have an important potential for harvesting forest products, specifically: chiquitana almond, copaibo oil and pesoé seed (Evidence, Annex 4: 1.2).

### *Indicator 1.3.* 300 smallholders (40% women) trained in sustainable forest management and best harvesting practices of NTFP (50 in year 1 1/4, 100 in year 2, 150 in year 3).

The first cycle of training has been carried out for 46 members (48% women) from four communities. Through the trainings, producers are learning to identify the species and practices that will allow them to take advantage of the priorited forest products in order to contribute to the conservation of the forest and to obtain a quality product. Thus, the interest of the communities in the commercial harvesting of NTFPs is increasing. They see it as important for their resilience to develop a new economic activity based on the resources they already have, which will allow them to receive additional economic income (Evidence, Annex 4: 1.3).

### *Indicator 1.4.* 150 smallholders (60% women) trained in best processing practices of NTFP (75 in year 2, 75 in year 3).

Considering the results of the resource surveys (Activity 1.2) and the market study (Activity 2.2.b), the most appropriate equipment and practices for processing the prioritised species are being identified. In addition, the conditions and prior knowledge of the communities are considered to develop the harvesting activities (Evidence, Annex 4: 1.4).

### *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 1.

The development of the two good practice manuals is delayed. It has started with the collection of relevant literature. In addition, the minimum content and format are being adjusted to the results of the resource surveys (Activity 1.2) and the market study (Activity 2.2.a). A specialist consultant has been hired to support the development of the technical content of the manuals from Q1 of year 2.

**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 2.1. Monitoring the success of output 2 – year 0 and year 3.

A baseline on Output 2 issues was developed based on interviews with key stakeholders. Community leaders and members have limited knowledge of the forest products prioritised in the project, despite being abundant in their territory and having a developing market in neighbouring municipalities. They also have no knowledge of how to sustainably harvest these forest products. Although they have no experience in establishing alliances between producer associations and companies, they are open to the possibility.

The representatives of GADSC have general knowledge of the products of the forest and are less familiar with the products prioritised by the project. They see the sustainable harvesting of forest products as an interesting opportunity to conserve the forest while generating additional economic activity for the communities. The latter is especially important for them considering that they know that these indigenous communities are poor and vulnerable; and that they live in areas with access to natural forests and protected areas. GADSC's opinion is neutral concerning the establishment of alliances between producer associations and companies.

The companies that work with forest products have different levels of knowledge of the prioritised forest products, some have in depth knowledge and have developed products, others only know these products by name. In most cases there is interest in knowing more about these products and the places where they are produced. In many cases, they are interested in the products of the forest being obtained in a sustainable way, as this is part of what their buyers are asking for and a way to differentiate themselves from other similar products. Several companies are interested in establishing alliances with producer associations and some of them have successful experiences of collaboration with communities in other municipalities (Evidence, Annex 4: 2.1).

**Indicator 2.2.** A community forest enterprise established with at least 50 members - by year 1 1/2. As a first step towards the establishment of an association, a market survey was carried out on products of the three plant species prioritised by the project. The information collected will allow better decisions to be made on what types and quantities of products to offer, as well as to identify the most appropriate buyers and their quality requirements (Evidence, Annex 4: 2.2).

*Indicator 2.4.* A value chain strategy and benefit-sharing assessment developed and validated - by year 2.

We began collecting secondary information to develop the value chain strategy. Likewise, analysis of primary information has begun, especially that of the resource surveys (Activity 1.2) and the market study (Activity 2.2.b), in order to draw up a map of actors and develop a matrix of market needs and the current state of the initiatives.

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

Discussions have started with companies identified in the market study (Activity 2.2.b), on the possibility of mutually beneficial alliances. Independently, the first consultations on partnership interest have also been made to four of the project communities. On both sides there is interest in establishing partnerships and motivation to participate in joint meetings to discuss the individuals. Pilot sales have been discussed to test the terms of the business relationship. (Evidence, Annex 4: 2.5).

**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.

*Indicator 3.1.* Ten Bolivian scientists (50% women) trained in IUCN species conservation assessments and TIPA methodology and application; and 200 global IUCN assessments of Chiquitano endemic and/or rare species (compiled prior to Darwin project) verified during the course – by 1 year.

All 15 students passed the exam of the 5-day certified IUCN assessor course held in Q4; and as a spin-off outcome from the course, the participants agreed amongst themselves to establish a Bolivian plant IUCN conservation specialist group facilitated by the Kew trainers. Target exceeded with 15 students rather than 10. As we received 164 applicants, who qualified for the course, we saved on hotel cost to allowing accepting an additional 5 students (Evidence, Annex 3, Annex 4: 3.1.IUCN Assessor course\_Jan2020 and A.Project dissimination&promotion).

By year 1, we have evaluated 200 IUCN species assessments of priority plant species for the Chiquitano ecoregion, submitted 103 to the IUCN for publication on the online IUCN species conservation portal; and the remaining 97 are under review prior to submission by September 2020. These data will soon be published and available for the first time for Bolivian and global stakeholders (Evidence, Annex 4: 3.1.IUCN\_sp\_assessments20200331).

*Indicator 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 TIPA identification. – by 1 year.

The book "Plantas Amenazadas De Las Zonas Bajas de Bolivia" presents the biology, habitat, uses and regional conservation assessments of 285 threatened, mainly tree species native to the Bolivian lowland; and furthermore it contributes valuable published data on priority species and general habitats of the Chiquitano ecoregion.

We collaborated with the national government of Bolivia, through the Ministry for Environment and Water (MMAyA), to have the publication recognised as a Redlist book of threatened species for lowland Bolivia. The book was thus published as the official Redlist book "Threatened Plants of lowland Bolivia" and launched jointly with the MMAyA and the British Embassy. This is an important achievement, as it enables the publication to be considered in public policy decision making contexts (Evidence, Annex 4: A.Project dissimination&promotion and 3.2.RedlistBook).

### *Indicator 3.3.* An estimated 15-20 Important Plant Areas (IPAs) of the Chiquitano ecoregion identified, documented and mapped - by <sup>3</sup>/<sub>4</sub> year.

The project has to-date identified and mapped 15-20 TIPAs priority sites for conservation in the Chiquitano ecoregion. The initial ambitious deadline of this sub-output was set in time to feed all our data into FAN's consultancy work for GADSC for a revised masterplan of nature reserves in the department of Santa Cruz. FAN's deadline for this project has, however, been push back to September 2020 because of the Covid19 pandemic, making it less urgent for us to feed data into the process. We are, however, still on target by to have submitted 15-20 priority TIPAs sites and habitat maps to GADSC, in addition to have submitted these sites to the Kew online TIPA portal, and made those available via MHNNKM and Plantlife International websites by year 1 1/2 (September 2020) (Evidence, Annex 4: 3.3TIPASiteAssessments)

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

We have made good progress on *Indicator 3.4* see above, and we are confident that we can deliver on this by the end of year 2. (Evidence, Annex 4: 3.4.UsefulSpecies prioritised).

**Indicator 3.5.** Six lectures and handouts on IUCN species conservation assessments and TIPA identification tools and application developed for UAGRMs Lic.Biol., Lic.Forestry, and MSc. in Natural Resource Management and Environment - by <sup>3</sup>/<sub>4</sub> year; training 20 students (50% women) per years 1,2,3.

In Q4 the project staff organised and taught a two-day course in IUCN conservation and TIPAs assessment, for 14 undergraduate or graduate students (eight women and six men) selected from the 104 applicants. Six universities/ research institutions were represented from throughout the department of Santa Cruz. The course was a success with students leaving with a grasp of the methods and tools used in global IUCN and TIPAs conservation assessment. Being the first time, we taught the course, it provided us with valuable lessons to be taken onboard, when we teach the course again in Q2 year 2 (Evidence, Annex 4: A.Project dissimination&promotion and 3.5.TIPAs&IUCNcourse\_March2020).

*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 TIPA identification (2 in each of years 1,2, and 3), focussing on socio-economically valuable species.

Two students (100% women) are being supervised while undertaking their Lic.Biol. degree theses. Manuscripts for publication is already drafted from these theses. (Evidence, Annex 4: 3.6.BSc\_Student\_projects 3.6).

**Indicator 3.7**. All scientific datasets, including national TIPA 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.** TIPAs 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 TIPAs and protected areas. In short, this output progressing as expected and activities are being delivered in a timely manner.

**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 TIPAs to national and subnational CBD targets – throughout project.

The contribution of TIPAs to the CBD targets has been presented to the GADSC, which is interested in using the information in its activities. Thus, the data provided by the TIPA project is being used as part of the key information to update the zoning of two protected areas: Tucabaca and Laguna Concepción.

The maps and map memories are being developed by the ECCOS project, which supports GADSC in this undertaking. It is expected to have the first version agreed upon with the management committees and directors of the protected areas on Q3 of year 2. (Evidence, Annex 4: 3.3TIPASiteAssessments).

*Indicator 4.2.* TIPA 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.

Progress is being made in a timely fashion on the documentation and identification of TIPAs sites. We will be undertaking stakeholder events in Q4 year 2, to support the formal designation of sites.

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

The project has fed data and map layers into the revision of three major nature reserves; and are on target to deliver maps, data and recommendations for the remaining 15 sites. (Evidence, Annex 4: 3.3TIPASiteAssessments).

*Indicator 4.4.* Results disseminated and TIPA tools promoted via national forum on Bolivian plant biodiversity, with attendees as per4.1, in addition to representatives of national government institutions, NGOs and national level stakeholders – by year 3. This indicator will only become a priority in year 3.

*Indicator 4.5* Results disseminated and TIPA tools promoted via international conferences (CBD and CITES, ...) in years 1, 2, 3 (Evidence, Annex 4: 3.1, 4.5)

#### 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 TIPAs.

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. The because of the events taking place outside our control: forest fires, political unrest and Covid19 measures, we foresee that an extra three month will be needed to achieve the Outcome by then end of funding. Therefor the partners are planning to submit a change request application by July 2020.

**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.

In San José and Roboré, the municipalities where the project is carried out, practically only one community is trading a few NTFPs in low quantities. Although there is significant potential for several NTFP species that could be harnessed to generate additional income for indigenous families in many communities in the region.

Among the first advances of the project, pilot indigenous communities and plant species with potential were identified that could serve as examples of what is possible in the region in terms of sustainable forest management and commercialisation of forest products.

Thus, six pilot communities have been selected in the Chiquitano dry forest, which are motivated to apply sustainable forest management practices. Also, three plant species have been identified and studied; these are sufficiently abundant for commercial harvesting and have a market with growth possibilities. The selected pilot communities have communal land ownership, and these lands have at least one of the selected species in abundance (Evidence, Annex 4: 1.1, 1.2, 2.1, 2.2).

## **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.

At the beginning of the project, the pilot communities had limited knowledge of the ecosystem services provided by the forest on their communally owned land, as well as of the possibility of economic

benefits arising from its management. Their closest experience is in timber harvesting, which they understand depends on the forest being conserved and is done through a management plan. This activity has lost relevance in recent years due to the fall in the price of wood. In the case of decision makers, there is a general and unspecific knowledge about the ecosystem services provided by the forest and the associated opportunities for economic benefits. They realise that this is a possibility, but they do not have enough information to take concrete action without the support of projects like this one.

Progress has been made in understanding the value of forest ecosystem services by pilot communities and sub-national government representatives and technicians. Both actors are interested in learning more about this and coordinating actions so that the use of the forest provides benefits to indigenous families (Evidence, Annex 4: 1.1, 2.1., 1.4).

**Indicator 0.3.** TIPAs approach combined with IUCN Redlist 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.

A freely available online TIPAs portal is being developed by RBGKew for its entire TIPAs program and planned to go live by end of 2020. We are developing the site descriptions, associated data and maps to be published on the portal. The global IUCN species assessments associated with the TIPAs assessments are being delivered to the IUCN for publication on the online IUCN species portal. The book "threatened Plants of Lowland Bolivia" was published as an official Redlist book with support from the Bolivian Ministry for the Environment and Water and launched in March 2020. The book launch in Santa Cruz was part of the British Week program and the British Ambassador to Bolivia, Mr. Jeff Glekin gave an inspiring speech, as did the Bolivian Minister for the Environment and Water. FAN is consulting for GADSC in the revision of the departmental masterplan nature reserves. Through that process the project has already fed data and maps for three TIPAs sites and will continue to do until the 15-20 documented sites and recommendations have been presented to GADSC by year 2 (Evidence, Annex 4: 3.2.RedlistBook and 3.3TIPASiteAssessments).

*Indicator 0.4.* TIPAs 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.

This indicator is closely linked to Indicator 0.3 and progress is being made as expected.

#### 3.4 Monitoring of assumptions

**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 TIPAs.

**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. The Outcome level of assumption 1 still holds true. The communities remain committed to the sustainable management of the forest. This is evidenced by a good level of community participation in the meetings and trainings organised during year 1 of the project (Evidence, Annex 4: 1.4).

**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.

The results of the market study show that the assumption is still valid. There is a market demand for the selected forest products. In addition, the market standards are identified, and it is feasible for the communities to reach them (Evidence, Annex 4: 2.2). In addition, the results of the resource surveys show that there enough I produced for sustainable management (Evidence, Annex 4: 1.2).

**Assumption 0.3.** Autonomous government of Santa Cruz will incorporate TIPAs within their conservation / resource management strategies as an integral element of their obligations under the CBD.

Given that FAN is actively collaborating with GADSC in the revision of the masterplan for the departmental nature reserves, we are confident that FAN jointly with the other project partners can convince GADSC of the value of the TIPAs approach to nature conservation and resource management.

**Assumption 0.4.** Publicity of the successful application of the TIPA 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.

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 TIPAs and IUCN assessment courses and projects, for example from Colombia, Ecuador, and Chile.

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

**Assumption 1.1.** Smallholders from indigenous communities are engaged in sustainable forest management.

The assumption remains valid. The producers of the indigenous communities are committed to the sustainable management of the forest. This is reflected in their good level of participation in coordination meetings, in training workshops and in the participation in activities to raise information about the potential of forest products.

The project activities are being carried out with six communities, to increase the chances of achieving the result of five communities involved in the project. Since there is a risk that one of the communities will abandon the project for reasons of force majeure (Evidence, Annex 4: 1.4).

**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 is still valid. In Q2 of year 1, communities had to fight forest fires. The population dynamics of the plant species selected by the project were not affected, as the fires were controlled before they reached the areas of greatest abundance. It is expected that since it was the largest event in many years, and most of the accumulated biomass has already been burned, the next two years of fire will be of lower intensity (Evidence, Annex 4: 6.1).

**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.

**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. The assumption is still valid, considering the results of the market study (Evidence, Annex 4: 2.2). However, it will be necessary to monitor how the challenges caused by the COVID 19 pandemic will affect the local and national economy in the coming quarters.

**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.

This assumption holds true. Because FAN already had undertaken a survey of 5,500 useful plants of the Chiquitania, it was relatively simple to priorities these plants by uses. We have occurrence data for several of these species already. And, while there is no project capacity to map 5,500 plant species, there is capacity to prioritise and map the most important species (Evidence: Annex 4: 3.4.UsefulSpecies prioritised).

**Assumption 3.3.** Sufficient students select thesis projects on IUCN extinction risk assessment and TIPA identification, and they are skilled to conduct quality field research following training.

The assumption stands. The call for students to select thesis projects on IUCN extinction risk assessment and TIPA identification was well received. Five applications were received from students of the public university, UAGRM, and students of prestigious private universities such as EMI. (Evidence, Annex 4: 3.6.BSc\_Student\_projects).

**Output 4.** TIPAs 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 TIPAs and protected areas.

**Assumption 4.1.** GADSC, SERNAP, DGBAPAP will incorporate TIPAs 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.

The assumption is still valid. After the political changes in Bolivia at the end of 2019, there has been a greater openness to include strategies such as TIPAs in public policies for conservation and resource management. An example of this openness is that the Ministry for the Environment and Water supported the publication of the book "Threatened Plants of Iowland Bolivia" as a Relist book (Evidence, Annex 4: 3.2.RedlistBook).

**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, the results of the next national (postponed to the second half of 2020) and sub-national elections (postponed to after the national elections) should be monitored to see to what extent the assumption holds.

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

Project Impact statement: 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 natural forest conservation and economic income for poor and vulnerable indigenous communities. It is helping communities to rediscover the potential of forests on their community-owned land and to identify abundant species with market opportunities. In the meetings and workshops, community members have begun to reflect on how little they know about the prioritised species, the importance of conserving these forests and the need to protect them from forest fires, as this can help them develop economic activity to alleviate their most urgent needs.

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 14 Bolivian BSc and MSc students in IUCN and TIPAs conservation assessment methods; 3) providing two BSc thesis project opportunities in plant conservation and natural resource management; and 4) enforcing this training for MHNNKM project staff in on the job learning, while contributing to writing the 200 IUCN species conservation assessments and the 15-20 TIPAs site assessments.

The project is also contributing though: 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 240 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, has given 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 a 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." Also, access to training and technical assistance in harvesting and processing of forest products is being provided to a population that has a low level of education and few possibilities of accessing other means of training to improve their working conditions. The type of activity promoted by the project makes it easier for men and women to participate in an activity to generate cash income. This is especially important in terms of gender equality, in an environment with limited opportunities, since these women face a triple barrier because they are women, they are indigenous, and they are poor.

#### 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):** considering that the indigenous communities live in close relationship with the Bolivian Chiquitano dry forest. We have begun the diversification of economic activities by 1) building capacity in sustainable NTFP harvesting and 2) completed resources surveys of three NTFP candidate species to promoted to harness NTFPs for the fight against poverty.

The foundation has been laid to help develop a new economic activity based on the three species of NTFPs from the Chiquitano dry forest, with potential to provide additional income to indigenous communities. Thus, resource surveys and market studies have been developed so that the communities have information to commercialise products; and training in good collection practices for producers has begun.

**Goal 2 (zero hunger):** the communities are rediscovering species of the Chiquitano dry forest, such as the chiquitana almond. They had lost the knowledge of recognising the tree, the time of harvesting the fruit and its uses in food. With the resource surveys and workshops on harvesting, they have realised that they have this resource in abundance and that they could reincorporate it into their diet.

**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)**: the baseline of resilience and family income of indigenous communities has been developed. Thus, it will be possible to monitor that the harvesting of NTFPs that the project is encouraging is maintained as an activity that does not degrade the forest and that rather supports the communities towards sustainability and responsible production.

**Goal 13 (climate action)**: the importance of the ecosystem services provided by the forest has begun to be disseminated in meetings and workshops with the communities and 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

#### 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 so far contributed 107 global IUCN extinction risk (glUCN) assessments of plant species endemic to the Chiquitano ecoregion. (Evidence, Annex 4: 3.1.IUCN\_sp\_assessments20200331).

4: At least 15% of each ecological region or vegetation type secured through effective management and/or restoration. – 18 globally Important Plant Area (IPA) sites have been identified in the Bolivian section of the Chiquitano ecoregion; and through FAN's joint project with GADSC, we are making make

recommendations for the revised management plan for protected areas in the Santa Cruz department (Evidenced, section 3.2 Indicator 4.1 and Annex 4: 3.3TIPASiteAssessments).

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. – via FAN the site assessments and associated recommendations are being fed to GADSC for consideration for formal protection. So far three sites are being considered (Evidence, Annex 4: 3.3TIPASiteAssessments).

12: All wild harvested plant-based products sourced sustainably. –Throughout the project sustainable sourcing of NTFPs will be reinforced. To enable sustainable supply of prioritised NTFPs, resource surveys have been developed to understand population demographics and calculate sustainable harvest volumes (Evidence, section 3.2 and Annex 4: 1.2.

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. - Indigenous communities are being helped to rediscover and revalue local knowledge about priority NTFP species for use, through training in good harvesting practices. Evidence, section 3.2 and Annex 4: 1.4.

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 built capacity at national and regional level with training in TIPA and IUCN methodologies among academics, university students, conservation NGOs, and policy makers. Using to the train-the-trainers approach their knowledge will be transmitted to their institutions and regions of origin (Evidence, Annex 3 and 4).

In spring of 2020 the UKs 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.

#### 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 the project is providing equipment to the communities so that they can take advantage of these new income opportunities (Evidence, section 3.2, Annex 4: 1.2, 1.3, 1.4 and 2.2).

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 2 plant species, and household income derived from sustainable forest products increased by 10% – by year 3.

The leaders of the indigenous organisation, of which the project's pilot communities are part, are closely following the project's activities and are interested in having them replicated in some way in their other member communities. The leaders identify that the sustainable harvesting of abundant products from the Chiquitano dry forest has significant potential to generate income for the communities in their organisation.

#### 7. Consideration of gender equality issues

The project team has made 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 disaggregated by gender, mainly achieved through Indicators 1.3, 3.1, 3.2, 3.3, 3.4, 3.5, and 3.6 (Evidence, Annexes 4: 1.4, 3.6). The project has indirect impacts on gender equality. It is expected to empower women through more sustainable livelihoods. To this end, a more socially inclusive and gender-sensitive model will be promoted for the community forest enterprise and the value chain strategy of fair and

equitable distribution of benefits. Women and young people with a leadership profile in the community will be identified and encouraged to be more active in organising the productive activity, exchanging experiences, and negotiating trade agreements (Outputs1 and 2). It is also is 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 beginning of the project-implementation, the project Pla of FAN and RBGKew developed a M&E plan 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 one change to the M&E plan, a change request submitted on 20.12.2019.
- 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. 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

In the partner inception workshop in August 2019, we agreed to have regular catch up sessions with all partners and streams of work. While catch up sessions (virtual or in person) have worked with induvial streams of work, we are yet to hold we a full-project meeting. This may mean that the Kew project staff feel detached from the streams of work being led by Bolivian partners and undertaken in country and may thus lack a vision of how their work feeds into the whole project. We are therefore planning full-project day with updated from all project staff in July 2020 – one year into the project.

Community members were involved in the field work of resource surveys of the three selected NTFP species. This helped them to realise in a concrete way that the selected species are abundant in their territory. These representatives then shared their experience in meetings with the whole community. This encouraged more active participation in the project by the whole community, as information on the abundance of the species was reported by the project with confirmation from people in the same community. In project activities where only a few people from the community can participate, it is important to include meetings that allow communication of progress to the whole community.

Good practice trainings are planned to be conducted in several cycles lasting from half a day to one day. This makes it easier for more community members to participate, especially women, as they should not neglect their other activities, as would be the case with workshops lasting three or more days on a continuous basis. Thus, spaced in time and meaningful training sessions maintain interest and prevent other activities that generate income for community members from being neglected. This balances the importance of obtaining more skills with the urgency of obtaining income (this considering that it is a low-income population that has limited savings).

Relevant information was collected on the actual market for three NTFP species abundant in the territory of the indigenous communities participating in the project. This information allows progress to be made with the activities of establishing a producer organisation, developing good practice manuals and developing a value chain strategy. Without this type of information, one could make the mistake that several projects of this type make: supporting communities to collect a species in quantities or presentation that cannot be sold. This generates frustration and truncates the possibility that these vulnerable communities can take advantage of the resources they have in their territories.

Some of the parameters determining the success or otherwise of our project are outside our control. It is thus even more important, and recognised initially, to build maximum flexibility into the project planning and to set realistic goals. For example, working with the indigenous communities in the Chiquitano ecoregion are being buffeted and/or halted by a number of socioeconomic, political and natural forces: first the extreme forest fires in July to September 2019; followed by political unrest in Bolivia after the presidential elections in October 2019, which led to the first lock down until December 2019; and while writing the current lock down as a result of the Covid19 pandemic. All three periods have e.g. resulted in halting most capacity building events planned in the communities.

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. While this Darwin 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 one year (February 2020 to January 2021). We also keep pressuring 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.

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

Not applicable.

#### 11. Other comments on progress not covered elsewhere

Additional funds were raised from the William Cadbury Trust to support the delivery of output 3. And, legacy from Kew Foundation has made it possible to employ an additional person at Kew to assist with the delivering the 200 IUCN assessments of Indicator 3.1 and the 15-20 TIPAs site assessments of Indicator 3.3. See also sections 2 and 9 for further information.

The main difficulties encountered have already been discussed where relevant. Official reports on these challenges are provided in Annex  $4\,$ 

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 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 government, a health safety protocol is being prepared to carry out the activities in the communities with the least possible risk.

#### 12. Sustainability and legacy

An important achievement of the project was the involvement of the Minister for Environment and Water and the Vice Minister for Environment, Biodiversity, Climate Change, and Forestry Management and Development, which are the highest authorities in the national government of Bolivia on environmental issues, in the publication of the book Threatened Plants of the Bolivian Lowlands.

These authorities recognised the importance of the research reflected in this publication and decided to give it the name of Redlist book. A Redlist book is an important scientific tool that provides researchers, authorities and the general public with relevant and up-to-date information on threatened species. Its publication allows for the improvement of public policies and the acceleration of decision-making processes that allow for the management of resources, ensuring development without compromising the sustainability of ecosystems.

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

- Engaging stakeholder organisations and commercial companies with long-term interests in sustainable NTFP trade evidenced in Annex 4: 2.2, 2.5.
- • Training, capacity building and outreach integrated into all components Evidenced in section 3.2 and Annex 4: 1.4.
- Engaging with governmental organisations and policy to improve long-term delivery of CBD obligations (Evidenced in section 4 and Annex 4: 3.2.

#### **13.** Darwin identity

Whenever an opportunity has arisen, the project has taken every opportunity to include the Darwin logo and to promote the mission of the Darwin Initiative. Evidenced in Annex 4: – e.g. 3.1., 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, and 4.5.

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. The project PI visited the Embassy in October 2019, when it was agreed for the project and the Embassy to work closer together on botanical conservation projects in Bolivia.

The funding is a distinct project with a clear identify. We have, however, raised additional funds to support some Output 3 activities, for which the Darwin funding was minimal.

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, organised by the British Embassy in La Paz to take place imminently.

The Darwin Initiative Twitter account is linked, when posting project related posts on @KewAmericas or @KewScience, and tagged on partner Facebook pages (Evidence in Annex 4: Project dissemination&promotion).

#### 14. Safeguarding

There are appropriate safeguarding policies in place, which follows Kew's dafeguarding policy <u>https://kewnet.kew.org/task/safeguarding-at-kew/;</u> and in year 1 there were not safeguarding issues raised.

#### **15.** Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2019 – 31 March 2020)Grant as per change request submitted 20191220, approved 20200207.

Project spend (indicative) since last annual report	2019/20 Grant (£)	2019/20 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 \*** In the change request that we submitted on December 20<sup>th</sup> and which was accepted on February 7<sup>th</sup>, we asked permission to change the budget as follows:

"While waiting for the roadblocks to be lifted hopefully following the national elections in 2020, we propose to move forward with activities that do not require travel, such as

- 1) the publications "the two best practice harvesting and processing manuals",
- 2) maintaining quadbikes for the Tucavaca reserve, and
- 3) purchasing the harvesting equipment.

"Travel and subsistence budget line: If the conditions for travel do not change during the last quarter of yr 1, then we estimate that  $\pounds$  would not be spent on travel and subsistence. That amount

is above 10% of the budget line, we request that we move this to the Capital Equipment line to advance the purchase of the harvesting equipment which is currently assigned  $\pounds$  in yr 2. The  $\pounds$  will thus be released for spending on travel and subsistence in yr 2."

In the meantime, however, it became possible for project staff to travel and work with the communities in January and February, which meant that the change to the budget in effect became redundant. In addition, priority was given to work that included travel to communities, as the political scene and thus travel in Bolivia was likely to become problematic again due to the new presidential elections in Q1 of year 2. This was, however, until Covid19 measure took priority and indeed prevented project staff from travelling.

FAN expenditure on travel and subsistence is therefore more like the budget before the change request, which is unfortunately. However, in year 1 we have moved forward with project activities best possible mitigating against three sets of major events outside our control.

Looking back over the 4th quarter of the 2019-20 financial year, we were unable to spend the total 2019-20 budget due to the outbreak of the Covid19 virus. Looking into the 2020-21 (yr2) year and 2021-22 (yr3), we predict changes to the logframe, implementation timetable and budget for the project to reach its targets. Given the seasonal nature of our project – relying on flowering and fruiting times and the absence of forest fires, we additionally predict that the changed planning will spill into a fourth financial year 2022-23.

#### Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2019-2020

#### Logframe as change request approved 20200207. Changes to the originally presented logframe in red text.

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
<i>Impact</i> Protection, sustainable use and m ecosystems in Latin America are pro- Important Plant Area (IPA) tools		(Report on any contribution towards positive impact on biodiversity or positive changes in the conditions of human communities associated with biodiversity e.g. steps towards sustainable use or equitable sharing of costs or benefits)	
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 TIPAs.	<ul> <li>0.1 Sustainable forest management of natural resources developed and practiced in five pilot communities in Bolivian Chiquitano dry forests.</li> <li>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.</li> <li>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.</li> <li>0.3. TIPAs approach combined with IUCN Redlist book of endemic, rare, threatened and useful plant species are recommended as a tool in best-practice area-selection for intensive</li> </ul>	<ul> <li>(Report against the indicators on progress towards achieving the project Outcome)</li> <li>0.1. Six pilot communities identified in the Chiquitano dry forest Three plant species identified and studied with sufficient abundance for commercial harvesting and market with growth possibilities. Pilot communities interested in harvesting these plants following sustainable forest management practices.</li> <li>0.2. Progress in understanding the value of forest ecosystem services by pilot communities and sub-national government representatives and technicians.</li> <li>0.3. 107 global species IUCN conservation assessments submitted to IUCN for publication; 18 TIPA sites identified, 10 documented. Redlist book supported by the Bolivian</li> </ul>	<ul> <li>(Highlight key actions planned for next period)</li> <li>0.1. Purchase of equipment for the processing of selected plants in the communities.</li> <li>Training in best harvesting and processing practices.</li> <li>Facilitate mutually beneficial alliances between the communities and buyers of the prioritised forest products.</li> <li>0.2. Organisation of the producers, who carry out the harvesting of the prioritised plant species.</li> <li>Development of a value chain strategy with the participation of key actors.</li> <li>03. 97 global IUCN species conservation assessments submitted to IUCN for publication; 50 most useful species native to the Chiquitano ecoregion assessed for</li> </ul>

	<ul> <li>soya bean agriculture, cattle farming and forest logging – by year 2.</li> <li>0.4 TIPAs 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.</li> </ul>	<ul><li>Ministry for the Environment and Water, published and launched.</li><li>0.4. Three sites with conservation recommendations shared with FAN and GADSC for departmental master planning of nature reserves.</li></ul>	IUCN conservation status, and assessments submitted to IUCN for publication; 8 TIPA sites documented, and 18 full site assessments published on free available online TIPAs platform hosted by RBGKew. Assosiated stakeholder workshops held. 0.4. 15 TIPA site assessments with recommendations submitted to FAN and GADSC for consideration and incorporation in departmental masterplan. Associated stakeholder workshops held.
Output 1. Five indigenous smallholder communities in the Chiquitano dry forest ecoregion apply best practices to build climate resilience and sustainable forest management.	<ul> <li>1.1. Assessment of the socio- ecological resilience of the indigenous communities, and poverty alleviation power of project – by year 1 and 3.</li> <li>1.2. Two resource surveys of the two NTFP species to be harvested – by 1 year.</li> <li>1.3. 300 smallholders (40% women) trained in sustainable forest management and best harvesting practices of NTFP (50 in year 1 1/4, 100 in year 2, 150 in year 3).</li> <li>1.4. 150 smallholders (60% women) trained in best processing practices of NTFP (75 in year 2, 75 in year 3).</li> <li>1.5. Two best practice Manuals on harvesting and processing of the two selected NTFP species developed and delivered to 300 smallholders - by year 1.</li> </ul>	masterplan. Associated stakehold workshops held.         (Report general progress against indicators, comment on their appropriateness, and reference where evidence is provided e.g. Evidence provided in section 3.2 of report and Annex X))         ar       1.1. Indicator reached for year 1. Appropriate indicator. Evidence provided section 3.2 and Annex 4: 1.1         vo       1.2. Indicator achieved and exceeded for year 1. Three resource surveys v conducted instead of two. Appropriate indicator. Evidence provided in section 3.2 and Annex 4: 1.2         n)       1.3. Indicator for year 1 ¼ in the process of being reached. Appropriate indicator. Evidence provided in section 3.2 and Annex 4: 1.3         1.4. The first actions have been carried out so that progress can be made with this indicator in year 2. Appropriate indicator.         n)       1.5. Progress delayed. The development of the manuals has begun.         n)       Appropriate indicator, but time adjustment required.	
Activity 1.1. Assessment of the socio-e communities; and establishment of ho project M&E plan, against which to mo	cological resilience of indigenous usehold income baseline, part of	e. (Report completed or progress on activities that contribute toward achieving this Output) (Outline what will be carried out in next period)	

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 for the year 1. The socio-ecological resilience assessment has been carried out with the participation of the communities. A baseline of annual household income is available. Activity completed for year 1. Resource surveys of 3 NTFP species have been carried out (which is an additional species surveyed, exceeding the target), to ensure that the indigenous communities	The Q1 and Q2 of year 2 will monitor and assesses how the baseline is affected by the economic crisis caused by the COVID19 pandemic. In Q2 and Q3 of year 2, additional information will be collected during the harvesting season (volume harvested, time of harvesting). With this information the resource surveys will be complemented.
	participating in the project have sufficient harvesting opportunities to achieve Output 1.	
Activity 1.3. Acquisition and installation of fruit processing equipment.	Activity completed for the year 1. The purchase of equipment for extracting copaibo oil has been made: 2 portable drills. Suppliers of equipment for processing chiquitania almonds have been identified.	On Q1 and Q2 of year 2, the purchase of equipment for processing chiquitana almonds will be made. Once the social distancing measures are lifted, the equipment will be taken to the communities and training in using it will be undertaken.
Activity 1.4. Training in sustainable forest management and good NTFP harvesting practices.	Activity completed for the year 1. Training on good harvesting practices of copaibo oil and chiquitania almonds has been carried out in 4 communities.	In Q2 and Q3 of year 2, training in good practices for the use of copaibo, chiquitania almonds and pesoé will be held in 6 communities, considering the social distancing measures dictated by the national government.
Activity 1.5. Training in good NTFP processing practices.	This activity is rescheduled for the beginning of year 2.	In Q2, Q3 and Q4 of year 2 the trainings will be programmed, considering the measures of social distancing that the national government dictates.
Activity 1.6. Monitoring and technical assistance in good NTFP harvesting and processing practices.	Activity partially carried out in year 1. The start of this activity depended on the progress of activities 1.4. and 1.5 which were delayed due to the forest	In Q2, Q3 and Q4 of year 2, monitoring and technical assistance will be programmed after the training events, considering the social

		fires and political problems in Bolivia on Q2 and Q3 of year 1.	distancing measures dictated by the national government.
Activity 1.7. Production and dissemination of 2 Best Practice Manuals in the harvesting and processing of 2 NTFP species.		Delayed activity for year 1. Bibliographic reference material has been gathered and a first proposal is being developed.	In Q1 and Q2 of year 2 we will develop and disseminate the best practice manuals.
		The progress of this activity depended on the progress of activities 1.2. and 2.2.b, which were delayed due to the forest fires and lock down due to political unrest in Bolivia in Q2 and Q3 of year 1.	
<b>Output 2.</b> Indigenous smallholder communities of the Chiquitano dry forest ecoregion are organised in a	<ul> <li>2.1. Monitoring the success of output 2 – year 0 and year 3.</li> <li>2.2. A community forest enterprise</li> </ul>	2.1. Indicator reached for year 1. Appro	opriate indicator.
community forest enterprise and sign mutually beneficial agreements with three companies and take measures	established with at least 50 members - by year 1 1/2.		
to share benefits in a fair and equitable way to develop sustainable value chains based on biodiversity	<b>2.3.</b> Two exchange visits focussed on NTFP harvesting with communities and community enterprises in		
products.	bordering Brazil – by year 2 and year 2.4. The first actions h		l out so that progress can be made e indicator. Evidence provided in
	<b>2.4.</b> A value chain strategy and benefit-sharing assessment developed and validated - by year 2.	<ul> <li>2.5. The first actions have been carried out so that progress can be r with this indicator in year 2. Appropriate indicator. Evidence provided section 3.2 of report.</li> <li>2.6. Progress on this indicator has not started as planned. Appropriation indicator.</li> </ul>	
	<b>2.5.</b> A community forest enterprise signed up to mutually beneficial agreements with three companies regarding ethical sourcing - by year 3.		
	<b>2.6.</b> 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.		
Activity 2.1. Baseline and final awareness level assessment, against which the project M&E process will be measured.	Activity completed for year 1. A baseline of the level of perception of local actors is available.	This activity has no actions planned for the next period.
Activity 2.2.a. Facilitate the organisation and legal constitution of harvesters in a community forest enterprise.	Delayed activity for Year 1. The progress of this activity depended on the progress of activities 1.2. and 2.2.b which were delayed due to the forest fires and political problems in Bolivia on Q2 and Q3 of year 1.	The Q2, Q3 and Q4 of the year 2, the organisation of the producers will be programmed, considering the measures of social distancing that the national government dictates.
Activity 2.2.b. Specialist consultants to elaborate a market survey and a bio- business plan for the forest enterprise.	Activity completed for year 1. Market studies have been carried out on 3 NTFP species (which is an additional species, exceeding the target), so that the communities participating in the project have sufficient information to achieve Output 1.	The information generated by this activity will be used for activities 1.7 and 2.2.a
Activity 2.2.c. Technical assistance in business management (associativity, accounting, negotiation, sales and marketing) by FAN.	Delayed activity for year 1. The start of this activity depended on the start of activity 2.2.a (see details above).	On Q2, Q3 and Q4 of year 2, technical assistance to producers will be programmed, considering the social distancing measures dictated by the national government.
Activity 2.3. Exchanges of experience with transboundary communities in Brazil on NTFP harvesting and fair and equitable benefit sharing, facilitated by ECOA.	As planned, this activity has not been initiated.	In Q2 of year 2, an exchange of experiences will be programmed, considering the measures of social distancing dictated by the government of Bolivia and the government of Brazil.
Activity 2.4. Development of value chain strategy and fair and equitable benefit sharing with stakeholders.	Activity completed for year 1. Key informants have been interviewed and secondary information has been collected.	In Q2 of year 2, the key informant interviews will be completed, the information will be systematised and 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 1. Companies and communities interested in establishing partnerships have been interviewed separately.	On Q2 of Year 2, meetings will be facilitated between companies and communities that have been identified as being able to establish a mutually beneficial partnership.

Activity 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 1. Summary of lessons learned has begun.	The Q4 of year 2 will continue to record the lessons learned from the project.
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.	<ul> <li>3.1. Ten Bolivian scientists (50% women) trained in IUCN species conservation assessments and TIPA 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.</li> <li>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 TIPA identification. – by 1 year.</li> <li>3.3. An estimated 15-20 Important Plant Areas (IPAs) of the Chiquitano ecoregion identified, documented and mapped - by <sup>3</sup>/<sub>4</sub> year.</li> <li>3.4. The estimated 1000 useful plant species native to the Chiquitano dry forest ecoregion identified and prioritised – by year 2.</li> <li>3.5. Six lectures and handouts on IUCN species conservation assessments and TIPA identification tools and application developed for UAGRMs Lic.Biol., Lic.Forestry, and</li> </ul>	le       Summary of lessons learned has begun.       record the lessons learned project.         3.1. 15 Bolivian scientists (7 women and 8 men) completed the 1 certified IUCN assessor course. Target exceed by 5 students. App indicator. Evidence provided in sections 3.1.A.3.1a., 3.2.Indicator 3, Annex 4: 3.1.         200 IUCN species assessments of priority plant species for the Cl ecoregion, submitted 103 to the IUCN for publication on the onlin portal, 97 under review. Appropriate indicator.         Evidence provided in sections 3.1.A.3.1a, 3.2. Indicator 3.1, Anne 3.1.         stan         3.2. Indicator achieved for year 1. Appropriate indicator. Evidence section 3.2 and Annex 4: 3.2.         m         3.3. Indicator partly achieved by year <sup>3</sup> / <sub>4</sub> . Indicator unnecessarily from the outset. Will be achieved by year 1 <sup>3</sup> / <sub>4</sub> . Evidence provided a.1.A.3.3, 3.2.Indicator 3.3, Annex 4: 3.3.         3.4 Progress made in a timely manner. Indicator appropriate. Evid provided in section 3.1.A.3.4a, 3.2.Indicator 3.4, Annex 4: 3.3.         o       3.5. The first course developed and held in a timely manner. Indic appropriate. Evidence provided in sections 3.1.A.3.5 and 3.2., and 3.5.         ano       3.6. Indicator reached for year 1. Appropriate indicator. Evidence sections 3.1.A.3.6 and 3.2 and Annex 4: 3.6         3.7. Indicator achieved for year 1. Indicator appropriate. Evidence sections 3.1.A.3.7 and 3.2., and Annex 3.	

<ul> <li>MSc. in Natural Resource Management and Environment - by <sup>3</sup>/<sub>4</sub> year; training 20 students (50% women) per years 1,2,3.</li> <li><b>3.6.</b> Six Lic. Biol., Lic. Forestry, and MSc. student research projects (50% women) at AGRM University completed on IUCN extinct risk assessment and TIPA identification (2 in each of years 1,2, and 3), focussing on socio-economically valuable species.</li> <li><b>3.7.</b> All scientific datasets, including national TIPA database and priority species specimen database, shared with all partners, updated each year of project, in line with Nagoya protocol.</li> </ul>		
Activity 3.1a. Ten Bolivian botanists trained in TIPA-tools and G-IUCN extinction risk assessment; and 200 assessments of plant species endemic to the Ecoregion verified.	Activity partly completed and target exceeded with 15 students trained rather than 10. 200 global IUCN assessments verified.	Activity completed in year 1.
Activity 3.1b. The verified 200 IUCN assessments sent for independent review, followed by submission to the IUCN website.	200 IUCN assessments sent for independent review, 107 of these submitted for publication on IUCN website.	97 IUCN assessments to be submitted for publication on IUCN website following independent review.
Activity 3.2. Book titled "Threatened Plants of lowland Bolivia", published and launched - by year 1.	Activity completed for year 1. The book was published as a Redlist book with support from the Bolivian Ministry for the Environment and Water.	In Q1 and Q2 of year 2 the distribution of copies will be completed. This task was interrupted by social distancing measures due to the Covid19 pandemic.
Activity 3.3. Document, map, and identify 15-20 Important Plant Areas (IPAs) in the Chiquitano dry forest ecoregion.	Activity target unnecessarily ambitious partly completed in year – 18 sites identified, 10 documented and mapped.	Activity to be completed by Q3 year 2, according to change request application to be submitted to the DI in Q1 year 2.

Activity 3.4a. Review information and as native, useful plant species; and assess 50 most used species.	s the global IUCN extinction risk of the	Year 1 of activity completed and exceeded with 5.500 useful plant species native to the Chiquitano ecoregion prioritised for IUCN conservation assessment and floristic diversity of useful plant species.	50 global IUCN conservation assessments to be submitted for publication on IUCN webportal by Q4 year 2.
Activity 3.4b. Centres of high floristic di identified, and these incorporated into	already identified TIPA sites.	Please see above.	Prioritised useful species mapped, centres of diversity identified and incorporated into TIPAs sites by Q1 year 3.
Activity 3.4c. Manuscript of Chiquitano ecoregion priority habitat list and TIPA sites submitted to peer-reviewed journal Kempffiana by year 2. 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.		Data is continuously being gathered, and manuscript started on Chiquitano ecoregion priority habitat list and TIPA sites. Dissemination of project material and communication and promotion of project happening widely.	
Activity 3.5. Module for undergraduate and graduate students at UAGRM in TIPAs and IUCN methodology, including preparing course material.		Activity completed for year 1. However, going forward 15 students will be more appropriate for the course than 20, ensuring that each students gets the teachers' attention.	Activity to be repeated in Q2 year 2, including lessons learnt from year 1 course, and if Covid19 measures allow us to hold the course.
Activity 3.6. Develop and supervise at six Lic.Biol. or MSc dissertation projects at UAGRM in IUCN extinct risk assessment and/or TIPA methodology.		Activity completed for year 1. 2 thesis projects were supervised, including field work and writing of the document.	On Q1 and Q2 of the year 2, the presentation of the two thesis projects will be accompanied (the times depend on the processes of the university). Two new thesis projects will also be supervised.
Activity 3.7. Compile, keep updated, and share project databases with partners and stakeholders.		Activity completed for year 1.	Databases to be shared with partners by Q1 year 2 and to continue being added to in year 2.
<b>Output 4.</b> TIPAs 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	<b>4.1.</b> 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,	<ul> <li>Indicator appropriate. Evidence provided in sections 3.1A4.1 and 3.2, and Annex 4: 1.</li> <li>r the oya</li> <li>4.2 Indicator will be completed by year 2. Indicator appropriate. Evidence provided in sections 3.1.A4.2. and 3.2., and Annex 4: 3.3.</li> </ul>	

capabilities for the effective management TIPAs and protected areas.	<ul> <li>WWF); the universities UAGRAM, UPSA, NUR; representative of key industries and productive sectors, throughout the project to highlight the contribution of TIPAs to national and subnational CBD targets – throughout project.</li> <li>4.2. TIPA 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</li> <li>4.3. Management recommend- dations provided to departmental and local government for all 15-20 designated TIPA sites for future formal protection – by year 3.</li> <li>4.4. Results disseminated and TIPA tools promoted via national forum on Bolivian plant biodiversity, with attendees as per4.1, in addition to representatives of national government institutions, NGOs and national level stakeholders – by year 3.</li> <li>4.5. Results disseminated and TIPA</li> </ul>	<ul> <li>4.3. Indicator reached for year 1. Indicator via the sections 3.1.A4.2</li> <li>4.4. Indicator to be completed in year 3</li> <li>4.5. Indicator target achieved for year 4</li> <li>Evidence provided in sections 3.2., and 4</li> </ul>	2. and 3.2. 3. Indicator appropriate. 1. Indicator appropriate.
	<b>4.5.</b> Results disseminated and TIPA tools promoted via international conferences (CBD and CITES,) in years 1, 2, 3		
Activity 4.1. Project inception workshop by month 3, involving (stakeholders as	with partners and all key stakeholders per logframe 4.1).	Activity completed in Q1 of year 1.	
	commendations for incorporating TIPAs	Activity part completed in year 1.	Will be completed on target in year 2.

levels. The revised GADSC's departmental plan for its protected areas, incorporates the results of our TIPA site identification.		
Activity 4.3. Progress workshop with the newly elected GADSC government actors, including reiterate the TIPAs identified in output 3.	Activity only relevant to year 2.	This activity will be completed, but timing may change in line with date change to the local elections and in response to Covid19 measures.
Activity 4.4. Workshops with government actors and the productive and indigenous sectors to prioritise TIPA sites, involving (stakeholders as per 4.1).	Activity only relevant to year 2 and 3.	Stakeholder workshops will be hosted once TIPA sites assessments are completed.
Activity 4.5. Project closure workshop/forum/symposium with all stakeholders and press (stakeholders as per 4.4).	Activity only relevant to year 3.	
Activity 4.6. Participation in national and international conferences (CBD, CITES,) to disseminate TIPAs methodology / approach and promote their adoption.	Activity completed for year 1.	In year 2 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 20200207. Changes to the originally presented logframe in red text.

Project Summary	Measurable Indicators	Means of Verification	Important Assumptions						
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.									
Outcome:	0.1 Sustainable forest management of	0.1 Annual trade figures; pilot community	1. Pilot communities remain						
(Max 30 words)	natural resources developed and practiced in	annual collection and trade records.	committed to sustainable forest						
	five pilot communities in Bolivian Chiquitano	Household income monitored through	management. Risk minimised by						
Effective conservation	dry forests. Collection and trade in forest	baseline year 0 and year 3 household income	focus on short-term delivery of						
prioritisation in the	products increased for 2 plant species, and	surveys.	benefits within a long-term strategy						
Bolivian Chiquitano	household income derived from sustainable	0.2 Baseline and final awareness surveys	supporting regional coordination and						
dry forest ecoregion is	forest products increased by 10% – by year 3.	with community members, community	cooperation, and multi-stakeholder						
achieved by improving	0.2 Understanding of forest ecosystem	leaders, local decision-makers and companies	engagement throughout the project						
livelihoods of	services values and engagement in activities	buying up forest products.	life cycle.						
indigenous Chiquitano	leading to economic benefits from	0.3 TIPAs of Bolivian Chiquitano dry forest	2. Options and market demand						
communities,	sustainable forest management	ecoregion published through TIPAs database.	remain in place for available forest						
engaging agricultural	opportunities. Both will be increased at	Book of endemic, rare, threatened and useful	products; resources available in						
producers, and equipping decision	community and local decision-making levels – <b>by year 3</b> .	plant species of the Chiquitano dry forest ecoregion published, informing on TIPA site	commercially viable quantities for sustainable management; products						
makers to designate	0.3. TIPAs approach combined with IUCN	selection. Future area selection for intensive	meet standards for local/-						
TIPAs.	Redlist book of endemic, rare, threatened,	land use change is guided by, and reference	international markets. Risk will be						
	and useful plant species are recommended	made to TIPAs recommendations.	minimised through diversification of						
	as a tool in best-practice area-selection for	0.4 GADSC adopt TIPA tools within its strategy	NTFP options.						
	intensive soya bean agriculture, cattle	for conservation and sustainable	3. Autonomous government of Santa						
	farming and forest logging – by year 2.	development. The GADSC's Departmental	Cruz will incorporate TIPAs within their						
	0.4 TIPAs integrated into policy and action	Plan of Protected Areas and Conservation	conservation / resource management						
	plans on biodiversity conservation and	Units revised, incorporating data on TIPA site	strategies as an integral element of						
	sustainable development in the autonomous	identification. Action Plans (NBSAPs) under	their obligations under the CBD.						
	department of Santa Cruz, in line with GSPC	the CBD includes sections on TIPA designation	4. Publicity of the successful						
	and Aichi Biodiversity targets by the end of	of the Chiquitano region as models to be	application of the TIPA approach in						
	the project – by year 3.	adopted nationwide.	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.
1. Five indigenous smallholder communities in the Chiquitano dry forest ecoregion apply best practices to build climate resilience and sustainable forest management.	<ul> <li>1.1. Assessment of the socio-ecological resilience of the indigenous communities, and poverty alleviation power of project - by year 1 and 3.</li> <li>1.2. Two resource surveys of the two NTFP species to be harvested - by 1 year.</li> <li>1.3. 300 smallholders (40% women) trained in sustainable forest management and best harvesting practices of NTFP (50 in year 1 1/4, 100 in year 2, 150 in year 3).</li> <li>1.4. 150 smallholders (60% women) trained in best processing practices of NTFP ( 75 in year 2, 75 in year 3).</li> <li>1.5. Two best practice Manuals on harvesting and processing of the two selected NTFP species developed and delivered to 300 smallholders - by year 1.</li> </ul>	<ul> <li>1.1. Technical report produced and disseminated to relevant stakeholders, and household income monitored through baseline and year 3 surveys.</li> <li>1.2. Resource survey report of the two selected NTFP species produced. They will include abundance, distribution, phenology, population demography, and optimal harvesting time.</li> <li>1.3. Acquisition and installation of fruit processing equipment – receipts and photos of machinery in-situ. Workshop reports, participant lists, and attendance certificates.</li> <li>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.</li> <li>1.5. Best Practices Manuals on harvesting and processing NTFP produced and disseminated (printed copies and available online).</li> </ul>	<ol> <li>Smallholders from indigenous communities are engaged in sustainable forest management.</li> <li>The population dynamics of the species under management is not affected by fires or extreme climatic events such as drought or El nino.</li> </ol>
2. Indigenous	2.1. Monitoring the success of output 2 –	2.1. Baseline and final awareness surveys	<b>1.</b> The population dynamics of the
smallholder communities of the	year 0 and year 3. 2.2. A community forest enterprise	with community members, community leaders, local decision-makers, and	species under management is not affected by forest fires or extreme
Chiquitano dry forest	established with at least 50 members - by	companies buying up forest products.	climatic events.
ecoregion are	year 1 1/2.	2.2. Legal statues and norms, minutes of	2. Market conditions remain
organised in a	2.3. Two exchange visits focussed on NTFP	meetings of the community forest enterprise	favourable for forest products
community forest	harvesting with communities and community	and business plan document. Reports on	prioritised in the project.
enterprise and sign	enterprises in bordering Brazil – by year 2	market survey and bio-business plan. List of	
mutually beneficial	and year 3.	recipients of technical assistance in business	
agreements with three	2.4. A value chain strategy and benefit-	management.	
companies and take	sharing assessment developed and validated	2.3. Reports from exchange visits, lists of	
measures to share	- by year 2.	participants and attendance certificates.	

benefits in a fair and equitable way to develop sustainable value chains based on biodiversity products.	<ul> <li>2.5. A community forest enterprise signed up to mutually beneficial agreements with three companies regarding ethical sourcing - by year 3.</li> <li>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.</li> </ul>	<ul> <li>2.4. Documents of value chain strategy and benefit-sharing assessment developed and validated with value chain stakeholders.</li> <li>2.5. Commercial agreements signed between the community forest enterprise and companies in forest products.</li> <li>2.6. Short video available on relevant websites, incl. YouTube.</li> </ul>	
Outputs: 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.	<ul> <li>3.1. Ten Bolivian scientists (50% women) trained in IUCN species conservation assessments and TIPA 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.</li> <li>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 TIPA identification. – by 1 year.</li> <li>3.3. An estimated 15-20 Important Plant Areas (IPAs) of the Chiquitano ecoregion identified, documented and mapped - by <sup>3</sup>/<sub>4</sub> year.</li> <li>3.4. The estimated 1000 useful plant species native to the Chiquitano dry forest ecoregion identified and prioritised – by year 2.</li> <li>3.5. Six lectures and handouts on IUCN species conservation assessments and TIPA identification tools and application developed for UAGRMs Lic.Biol., Lic.Forestry, and MSc. in Natural Resource Management and</li> </ul>	<ul> <li>3.1. Workshop report. The 200 verified global IUCN assessments sent for independent review.</li> <li>3.2. Book published, and book launch held - by <sup>3</sup>/<sub>4</sub> year</li> <li>3.3. Priority TIPAs and habitat maps submitted to GADSC. The 15-20 TIPA sites documented on Kew TIPA database, available via MHNNKM and Plantlife International websites - by year 1 <sup>1</sup>/<sub>2</sub>.</li> <li>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 TIPA sites submitted to peer-reviewed journal Kempffiana.</li> <li>3.5. Lecture presentations and hand-outs made available for lecturers and students.</li> <li>3.6. Results of thesis projects submitted to peer-reviewed journal and/or to IUCN website; and thesis students co-author relevant TIPA database entries.</li> <li>3.7. Complete datasets held in databases at MHNNKM, FAN, GADSC, National Herbarium LPB, Kew, and PlantLife International.</li> </ul>	<ol> <li>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.</li> <li>UAGRM incorporate teaching on TIPAs and IUCN species conservation assessments into Lic.Biol., Lic.</li> <li>Forestry and MSc teaching modules.</li> <li>Sufficient students select thesis projects on IUCN extinction risk assessment and TIPA identification, and they are skilled to conduct quality field research following training.</li> </ol>

4. TIPAs 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	<ul> <li>Environment - by ¾ year; training 20 students (50% women) per years 1,2,3.</li> <li>3.6. Six Lic. Biol., Lic. Forestry, and MSc. student research projects (50% women) at AGRM University completed on IUCN extinct risk assessment and TIPA identification (2 in each of years 1,2, and 3), focussing on socio- economically valuable species.</li> <li>3.7. All scientific datasets, including national TIPA database and priority species specimen database, shared with all partners, updated each year of project, in line with Nagoya protocol.</li> <li>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 TIPAs to national and subnational CBD targets – throughout</li> </ul>	<ul> <li>4.1. Stakeholder feedback sought and documented. Annual reports to GADSC; national and international press releases.</li> <li>4.2. Workshop and feedback reports.</li> <li>4.3. Progress reports submitted to the DGB (Bolivian CBD authority), GADSC integrate reported recommendations within subnational biodiversity action plans.</li> <li>4.4. Newspapers, radio, TV, social media. National forum on biodiversity conservation held for MHNNKM, FAN, GADSC and the MMAA DODAD Forum meant at a back and the MMAA DODAD Forum meant at a back and the MMAA DODAD.</li> </ul>	<ol> <li>GADSC, SERNAP, DGBAPAP will incorporate TIPAs 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.</li> <li>The political will of subnational and protement of the subnational and protement of the subnational and</li> </ol>
5		5	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.

government institutions, NGOs and national	
level stakeholders – by year 3.	
4.5 Results disseminated and TIPA tools	
promoted via international conferences (CBD	
and CITES,) in years 1, 2, 3	

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.

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.

A.1.3. Acquisition and installation of fruit processing equipment.

A.1.4. Training in sustainable forest management and good NTFP harvesting practices.

A.1.5. Training in good NTFP processing practices.

A.1.6. Monitoring and technical assistance in good NTFP harvesting and processing practices.

A.1.7. Production and dissemination of 2 Best Practice Manuals in the harvesting and processing of 2 NTFP species.

#### A.2.1. Baseline and final awareness level assessment, against which the project M&E process will be measured.

A.2.2a. Facilitate the organisation and legal constitution of harvesters in a community forest enterprise.

A.2.2b. Specialist consultants to elaborate a market survey and a bio-business plan for the forest enterprise.

A.2.2c. Technical assistance in business management (associativity, accounting, negotiation, sales and marketing) by FAN.

A.2.3. Exchanges of experience with transboundary communities in Brazil on NTFP harvesting and fair and equitable benefit sharing, facilitated by ECOA.

A.2.4. Development of value chain strategy and fair and equitable benefit sharing with stakeholders.

A.2.5. Facilitate alliances between the community forest enterprise and companies based on fair and equitable benefit sharing.

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.

A.3.1a. Ten Bolivian botanists trained in TIPA-tools and G-IUCN extinction risk assessment; and 200 assessments of plant species endemic to the Ecoregion verified.

A.3.1b. The verified 200 IUCN assessments sent for independent review, followed by submission to the IUCN website.

A.3.2. Book titled "Threatened Plants of lowland Bolivia", published and launched - by year 1.

A.3.3. Document, map, and identify 15-20 Important Plant Areas (IPAs) in the Chiquitano dry forest ecoregion.

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 TIPA sites.

A.3.4c. Manuscript of Chiquitano ecoregion priority habitat list and TIPA sites submitted to peer-reviewed journal Kempffiana by year 2. Submit results to openaccess 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 TIPAs 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 TIPA 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 TIPAs 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 TIPA site identification.

A. 4.3. Progress workshop with the newly elected GADSC government actors, including reiterate the TIPAs identified in output 3.

A. 4.4. Workshops with government actors and the productive and indigenous sectors to prioritise TIPA 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 TIPAs methodology / approach and promote their adoption

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 planne d during the project
Establishe d 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			0	6
4	Two-days course in IUCN and TIPAs methodology	50% women	Bolivian	20				45
6A	Training in sustainable forest management and good NTFP harvesting practices.	48% women	Bolivian	46			46	300
	Training in good NTFP processing practices.	50% women	Bolivian	75			0	150
6A	Training in basic business management	50% women	Bolivian	-		-	0	50
7	Three best practice Manuals on harvesting and processing of the selected NTFP species	-	-	3			0	3
9	15-20 TIPAs site assessments and recommend- dations produced and shared with partners and	-	-	8			15-20	15-20

	-	-					1	
	national and regional Bolivian government.							
10	Illustrated checklist of the Plants of the	-	-			1		1
	Chiquitania							
11A	Redlist book of threatened plant of lowland Bolivia	-	-	1			1	1
11B	Manuscript on Chiquitano ecoregion priority habitat list and TIPA sites	-	-		1		0	1
11B	Six papers based on thesis projects to be submitted to peer reviewed journals	-	-	2	2	2	0	6
12A	TIPA site data base			1			1	1
12A	TIPA site data base			1			1	1
12A	Chiquitania image database			1			1	1
12B	Joint Kew and Museo Brahms Bolivia species distribution database			1			1	1
12B	Chiquitania database of useful species helf by FAN			1			1	1
12B	IUCN online webportal			103	147		103	250
13B	Species reference collection from TIPAs field work			1			1	1

							-	1
14A	TIPA and Darwin			1	1	1	2	5
	stakeholder							
	workshop							
14A	TIPA Criteria			1			1	1
	workshop for							
	specialists							
14A	IUCN			1	1		1	1
	assessment							
	review							
	workshop							
14A	Book launch -			1			1	1
	Redlist book of							
	Iowland Bolivian							
	plants							
14A	"Important			1			1	1
	areas for plant							
	conservation							
	and tools for							
	monitoring							
	them"							
	symposium in IV							
	Congreso							
	Boliviano de							
	Botánica							
	October 2019							
14B	Systematics			1		1	1	2
THD	association 10 <sup>th</sup>			<b>–</b>		-	<b>–</b>	2
	biennial							
	Conference							
	Bristol 17-19							
000	June 2019							
20B	£ 9.100	-	-					
	Harvesting							
	equipment, fruit							
	processing							
	equipment and							
	a computer.							

#### **Table 2 Publications**

Title	Туре	Detail	Gender	Nationality	Publishers	Available from
	(e.g.	(authors, year)	of Lead	of Lead	(name,	(e.g. weblink or
	journals,		Author	Author	city)	publisher if not
	manual,					available
	CDs)					online)
Redlist	Book	Dr. Gonzalo	Male	Bolivian	Fundacion	http://www.fan-
book of		Navarro Sanchez;			Amigos de	bo.org/ and
threatened		MSc. Susana			la	dowloadable in
plant of		Arrazola Rivero;			Naturaleza,	pdf format from
lowland		MSc. Margoth			Santa	QR code.
Bolivia		Atahuachi			Cruz,	
		Burgos; MSc.			Bolivia	
		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		

#### Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting	V
the project number in the Subject line.	
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk	V
about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You need not submit every project	V
document, but the main outputs and a selection of the others would strengthen the	
report.	
Do you have hard copies of material you want to submit with the report? If so, please	V
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.	
Have you involved your partners in preparation of the report and named the main	V
contributors	
Have you completed the Project Expenditure table fully?	
Please remember that your report will be made public. If there are specific sections	V
that you would like treated in confidence, please ensure these are clearly identified as	
we can remove sensitive material before posting on the website.	
Do not include claim forms or other communications with this report.	·