

Illegal Wildlife Trade (IWT) Challenge Fund Annual Report

To be completed with reference to the “Project Reporting Information Note”:
(<https://iwt.challengefund.org.uk/resources/information-notes/>).

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

Submission Deadline: 30th April 2023

Submit to: BCF-Reports@niras.com including your project ref in the subject line

IWT Challenge Fund Project Information

Project reference	IWT109
Project title	Preventing the extinction of Bolivia’s Critically Endangered Redfronted Macaw
Country/ies	Bolivia
Lead Partner	Natura Bolivia Foundation
Project partner(s)	The Mother Earth Authority, Ministry of the Environment, Government of Bolivia and the Municipal Governments of Omereque, Pasorapa, Saipina, Comarapa and Aiquille
IWTCF grant value	£294,900
Start/end dates of project	April 1, 2022-Mar 31, 2024
Reporting period (e.g. April 2022-Mar 2023) and number (e.g. Annual Report 1, 2, 3)	April 1, 2022-Mar 31, 2023, Annual Report 1)
Project Leader name	Nigel Asquith
Project website/blog/ media	n/a
Report author(s) and date	Nigel Asquith April 29 2023

1. Project summary

Once locally common (5,000 individuals in the 1980s), Bolivia’s endemic Red-fronted Macaw now inhabits scattered patches of scrub, nesting and roosting on steep-sided cliffs in the inter-Andean valleys. Chicks and eggs are poached for the pet trade, which, along with persecution by local farmers, has led to a precipitous population decline: our 2021 survey estimated that there are less than 160 breeding pairs. The greatest threat to Red-fronted Macaw is the trafficking of eggs and chicks. Prior to this project, we piloted a new model for Macaw conservation: protection of critical foraging areas and nest sites through the signing of community-based conservation incentive agreements. This project is building on these successful pilots in the Mizque watershed by scaling up our intervention to the Grande and Pilcomayo watersheds, thus covering 85% of the global Red-fronted Macaw population. We are protecting macaws from poachers by forming teams of farmer- stewards to patrol nest sites and

are providing economic benefits to local communities that help them cover the opportunity cost of preventing trafficking. These benefits comprise development projects that prioritize the needs of women. We are institutionalizing the long term management of the species by creating a series of Municipal Macaw Conservation Incentive Programmes.

2. Project stakeholders/ partners

Our primary project partners at the national policy level is the Mother Earth Authority in the Ministry of the Environment. Natura has a formal cooperation agreement with the Mother Earth Authority which commits Natura to provide, amongst other things “Technical and coordination support for the preparation of Bolivia’s Nationally Determined Contributions”. The Mother Earth Authority and Natura are currently in the process of renewing their formal cooperation agreement. In 2022-2023 we had a series of meetings with the Mother Earth Authority, both in La Paz and in visits to our field sites.

Notwithstanding the success of the relationship between Natura and the Mother Earth Authority, it has proved difficult to work with state and national governments in Bolivia’s current political climate. The state of Santa Cruz was at an absolute standstill in the month of November, as a general strike prevented fieldwork, deepened political tensions and further damaged the relations between the state and national governments. We continue to work with the entire Vice Ministry for the Environment and with the Mother Earth Authority specifically, but we are having to significantly invest in political relation building, rather than technical advances.

The Municipal Governments of Omereque, Pasorapa, Saipina, Comarapa and Aiquile are the on-the-ground project partners. These municipal partners are driving the project forward by providing co-financing and technical support for project activities, and deciding in which communities activities are to be undertaken.

The British Ambassador to Bolivia, Mr. Jeff Glekin, visited Natura Bolivia offices at the end of March, and we briefed him on the project. Due to time considerations Ambassador Glekin was unable to visit the field, but we hope to arrange a field visit for him later in 2024.

3. Project progress

3.1 Progress in carrying out project Activities

We detail project advances by discussing progress of groups of inter-related activities.

Output 1: Teams of local Macaw Guardians are formed and are patrolling nest sites and forage areas:

1i) Use results from the 2021 macaw survey to identify and map sites and communities important for conservation

1ii) Select cadre of community volunteers to be Macaw Guardians

1iii) Run training courses to build community capacity for patrolling, data collection, use of GPS receivers and surveying

1iv) Help Macaw Guardians design and undertake monitoring patrols

We decided to limit this work in two municipalites in 2023, with the expectation that once we had tried and tested a working model for collaboration, it will be easy to roll out to other municipalities. The environment units of the municipal governments of Pasorapa and Aiquile helped us identify appropriate technicians to be assigned to working the project, namely Wilson Tapia (Pasorapa) and Elmer Escobar (Aiquile). We trained Mr. Tapia and Mr. Escobar, plus four more municipal staff in the theory and practice of community monitoring of biodiversity and threats through SMART software. These technicians are now able to work with and train community members in biodiversity monitoring. We then prioritized communities where we should pilot the monitoring program, eventually training eight people from five communities: Ceibas (2 people), Ruda Pampa (1 person), Buena Vista (1 person) Molle Pampa (2 people) and Lagarpampa (2 people). These community members have since trained another 35 members of their own communities, and all are now carrying out monitoring with SMART

software, using Smartphones that we provided to the communities. Reports have been systematized and generated from the information collected by the monitors, and in tandem with the municipal authorities, the local communities are leading to community zoning process. The monitors have also installed 10 camera traps to photograph both macaws and humans.

- 1v) Build contacts with law enforcement agencies and provide legal support to communities*
- 1vi) Collaborate with local communities and law enforcement agencies to document and act on results of patrolling activities*

Rather than immediately initiate support at the local level we decided to first work with the Biodiversity Unit in the Vice Ministry to assess the most strategic course of action. To this end we also joined a multi-institutional enforcement task force working on illegal wildlife trade on all species throughout Bolivia, and are part of another task force focusing on the red-fronted macaw. In 2023-2024 we will incorporate our findings into strategic management activities.

Output 2: Local community members receive direct, continued economic benefits in exchange for conservation activities and for stopping the macaw trade

- 2i) Use results from the 2021 macaw survey to identify and map individual land parcels important for conservation*
- 2ii) Offer incentive packages for community patrolling and on individual land parcels in communities close to all important macaw nesting, foraging and sleeping sites*
- 2iii) Sign conservation agreements with community authorities and volunteer land owners*
- 2iv) Deliver compensation packages (i.e bee hives, irrigation systems, fruit tree seedlings etc.)*

We signed conservation agreements in three communities in Pasorapa (Ceibas, Buena Vista and Ruda Pampa), resulting in 14,559 new hectares under conservation and 55 new beneficiary families, receiving projects worth \$ (all funded by the municipal government). In Saipina, an additional 440 hectares were put under conservation agreements in 2022. In Aiquile, the government has prioritized and made an agreement offer (for ~ \$) in the communities of Lagarpampa and Molle Pampa: this compensation event will be held in May 2023. We have also prioritized 2,245 hectares in Saipina and 1,078 in Comarapa as potential new Red-Fronted Macaw protected areas, and will be exploring this further in 2023-2024.

Output 3: Threat reduction and strategies for long-term sustainable management of the macaw population are institutionalized

- 3.1i) Review and improve "Incentives" component of existing draft Management Plan*
- 3.1ii) Hold facilitated meeting with all relevant stakeholders (communities, municipalities, NGOs, universities, the private sector, water users, and Departmental and National governments)*
- 3.1iii) Draft details of how to implement "Incentives" component of plan, request public comments and revise accordingly*

We detailed a new protocol for undertaking incentive based conservation in the project zone, and discussed with all stakeholders how we could best implement it. Results of these discussions were incorporated into the field interventions.

- 3.1iv) Help National and Departmental Governments and Municipalities publish "Incentives" component of Management Plan*
- 3.2i) Present Municipal Macaw Conservation Incentive Program (MMCIP) proposal to local governments, and where appropriate others (such as the private sector or water users)*
- 3.2ii) Help municipal authorities to design MMCIP and pass appropriate creation legislation*
- 3.2iii) Support municipal implementation of MMCIP fund as the governments purchase development projects and takes on long term project management.*

To further build municipal capacity, we held two workshops about incentive based conservation with the Secretariat of Productive Development and Environment for ten technicians from Aiquile and five technicians from Pasorapa. As a result of this workshop, the municipal

government of Aiquile was able to prepare a proposal for reforestation in water recharge areas and successfully obtained financing from the National Forest Development Fund Program. The design and development of the Municipal Macaw Conservation Incentive Programs has advanced significantly in the municipalities of Saipina, Aiquile, Omereque and Pasorpa, each of which has committed to funding the programs in 2023

Output 4: Macaw population dynamics, community well-being and local perceptions about the importance of macaw conservation are increasingly well understood

4.1i) Design and implement social marketing campaign to explain the project and to promote conservation and anti trafficking activities

4.3i) Design and implement socioeconomic and perceptions survey pre-project

We undertook two social marketing campaigns (in Omereque and Pasorapa Municipalities) and are using the techniques and methodologies of social marketing every time we engage with local government and communities. Indeed, the Red Fronted Macaw “Pride” campaign was so successful in Pasorapa that the municipal government took the campaign’s logo and now uses it on official municipal uniforms! We will continue our social marketing activities and expand into two more municipalities in 2023-2024. We have undertaken baseline data collection in two municipalities to help assess change of economic realities and perceptions about the macaw over the project lifetime.

3.2 Progress towards project Outputs

We have made significant progress towards achieving our project outputs. Nevertheless, we recognize that we have had a slow start to the project – usual teething problems with a new initiative, compounded by political tensions between state and national governments. We expect to continue to build momentum in 2023-2024.

Output	Indicators	Advances in this period
Output 1: Teams of local Macaw Guardians are formed and are patrolling nest sites and forage areas	1.1 300 local Macaw Guardians are trained by June 2024 1.2 50 Macaw Guardian teams are patrolling all important nesting and foraging sites by December 2024 1.1.1 Signatures certifying attendance at Macaw Guardian Training Courses 1.1.2 Patrolling commitments signed by Guardians and their communities 1.1.3 GPS points of patrolling missions	50 local Macaw Guardians have been trained 4 teams are patrolling important nesting and foraging sites

Output	Indicators	Advances in this period
Output 2: Local community members receive direct, continued economic benefits in exchange for conservation activities and for stopping the macaw trade	2.1 800 local landowners in 40 communities, at least 75% of whom are females, receive economic incentives worth \$40,000 from eight Municipal Macaw Conservation Incentive Programmes (MMCIP), and have increased their annual incomes by 30%, by June 2025 2.1.1 Signed agreements detailing delivery of development projects such as honey production, improved irrigation systems 2.1.2. Receipts showing value of delivered incentives (i.e. cost of beehives, irrigation pipes etc.)	We signed conservation agreements in three communities in Pasorapa (Ceibas, Buena Vista and Ruda Pampa), resulting in 14,559 new hectares under conservation, and supporting 55 families, with projects worth \$40,000 (all funded by the municipal government). In Saipina, an additional 440 hectares were put under agreements. In Aiquile, the government has prioritized and made an agreement offer (for ~

		\$5,000) in the communities of Lagarpampa and Molle Pampa.
--	--	--

Output	Indicators	Advances in this period
Output 3: Threat reduction and strategies for long-term sustainable management of the macaw population are institutionalized	<p>3.1 Bolivian National, Departmental and Local Governments implement a detailed "Conservation Incentives" component of the <i>Ara rubrogenys</i> Management Plan that institutionalizes local incentive programmes by June 2024</p> <p>3.2 Six municipalities with resident <i>Ara rubrogenys</i> breeding pairs lead the creation and operation of Municipal Macaw Conservation Incentive Programs (MMCIP) to promote habitat and nest conservation, and to patrol and prevent incursions from traders by December 2023</p> <p>3.1.1 Detailed "Incentives" component of Management Plan Published</p> <p>3.1.2 Signed certification from local authorities that at least three of the recommendations of the Management Plan have been implemented</p> <p>3.2 Municipal records of Founding charters of MMCIP, bank accounts of MMCIP showing transfers of funds in and out, annual MMCIP implementation reports</p>	<p>We have held a series of meetings with all relevant stakeholders (communities, municipalities, NGOs, universities, the private sector, water users, and Departmental and National governments) to pave the way to institutionalize the local incentive programs. We have had especially productive meetings with the Biodiversity Directorate of the Vice Ministry and also within the Mother Earth Authority, and hosted an event with the Santa Cruz Departmental Government (along with Armonia, another NGO working on macaw conservation with IWT Challenge Funds) to launch the <i>Ara rubrogenys</i> Management Plan</p>

Output	Indicators	Advances in this period
Output 4: Macaw population dynamics, community well-being and local perceptions about the importance of macaw conservation are increasingly well understood	<p>4.1 Community members understanding of the importance of Macaw conservation, and their knowledge about what conservation activities they can undertake, has increased by 100%, by December 2024 (baseline, 150 people out of 800 already have such understanding)</p> <p>4.1.1 Pre- and post- project socio-economic surveys</p>	<p>We undertook two social marketing campaigns (in Omereque and Pasorapa) and have used the techniques and methodologies of social marketing when we engage with local government and communities. We will continue these activities and expand into two more municipalities in 2023-2024. We have undertaken baseline data collection in two municipalities to be able to assess change of economic realities and perceptions about the macaw.</p>

3.3 Progress towards the project Outcome

As we end the first year of a three-year project we did not expect to achieve – and would not have been able to measure – progress towards the project outcome. However, we can confirm that we still believe that the indicators are adequate for measuring the intended Outcome, and that we the project is likely to achieve the outcome by the end of funding.

Outcome Trade in wild-caught macaw adults, chicks and eggs is stopped	0.1 Numbers of breeding pairs of <i>Ara rubrogenys</i> increase by 5% between July 2022 and June 2025
--	---

<p>because the species is effectively protected from poachers and traffickers by local farmer-stewards in exchange for economic incentives</p>	<p>0.2 Cases of bird, chick and egg off-take reduced to zero by June 2025</p> <p>0.3 2000 local landowners, at least 75% of whom are females, perceive a 30% increase in their incomes, as a result of Macaw conservation, by June 2025</p>
--	---

3.4 Monitoring of assumptions

We have seen no evidence to suggest that our outcome and output level assumptions (listed below) do not still hold true.

Outcome Assumption: Rural communities in Bolivia are willing and able to undertake significant conservation activities in exchange for relatively low levels of economic support. We assume that such a quid pro quo can work because we have signed contracts with 9,000 farmers across Bolivia to conserve more than 500,000 hectares of watershed forests. Based on piloting the proposed project in two municipalities with macaw populations we calculate that this model can also work for Macaw conservation as there is a similar ratio between the low cost of conservation and the value of economic support the project could provide.

Output 1 Assumption: Communities within the macaw distribution range are able and willing to undertake conservation activities in exchange for development projects, because their cost of conservation activities is less than the benefits of the economic development that the project will bring. We assume this because we have already piloted the incentive programme in five communities.

Output 2 Assumption: Authorities are willing and able to implement the management plan's recommendations. We assume this because we have evidence of interest from all range state municipalities, the Departmental Governments of Santa Cruz, Chuquisaca and Cochabamba and the National Government

Output 3 Assumption: Municipal governments are willing and able to set up the MMCIP local funds. We assume this because we have helped more than 60 Municipal Governments across Bolivia set up similar funding mechanisms for watershed protection. The local water funds that we have helped set up annually transfer more than GBP 300,000 worth of local resources to upstream landowners.

Output 4 Assumption: Targeted information will change behavior. We assume this based on the literature on behavioural economics (e.g. Ariely 2008) and the literature around the Social Marketing for conservation methodology promoted by Rare (we implemented a Rare Pride campaign and were mentored by Rare in 2010)

Output 4 Assumption: Our count methodology provides accurate estimates of breeding pairs and overall populations size. We worked with a local specialist bird NGO, Armonia (the Birdlife partner in Bolivia) who have extensive experience surveying this and other species of macaws and parrots, to comply with survey best practices (the baseline survey occurred in February-March 2021 nesting season before project initiation (results are currently being analyzed and interpreted). We will undertake the endline survey as part of this project.

Output 4 Assumption: Our survey methodology provides accurate estimates of socioeconomic status and well-being. We have undertaken and published the results of a series of socioeconomic surveys elsewhere in Bolivia and will partner with Professors Zhao Ma and Jonathan Bauchelet (Purdue University) who have extensive experience in the project area, to ensure that we comply with survey best practices.

3.5 Impact: achievement of positive impact on illegal wildlife trade and poverty reduction

Impact: Extinction of the Red fronted Macaw (*Ara rubrogenys*)(CR C2a(i)) is prevented and poverty is alleviated in communities across the macaws' geographical range

We still believe that our work across the macaw's range, complemented by the work of our partner Armonia, will allow us to jointly achieve this expected impact. However, it is still early days in the project so we do not yet have further evidence to support this belief.

4. Thematic focus

The theme that our project is focused on is developing sustainable livelihoods to benefit people directly affected by IWT. The greatest threat to Red-fronted Macaws is poaching and trafficking of eggs and chicks. We are reducing this threat by forming teams of local Macaw Guardians and helping them patrol nest sites and forage areas, to prevent poaching by other community members and outsiders.

However, we cannot expect trade to disappear without an economic alternative, so are also providing direct, continued economic benefits to local community members in exchange for stopping the macaw trade. These development projects help communities cover the opportunity cost of preventing trafficking. We are also institutionalizing threat reduction and long-term management of the macaw population by creating Municipal Programmes to sustainably finance the initiative.

Currently, macaw trafficking is providing short term income opportunities to perhaps 150 communities. Villagers poach and tolerate outsiders' poaching. Our short-term goal is to make conservation more economically worthwhile than poaching. To achieve this, we are providing develop projects to communities and individuals – especially females – who commit to undertake conservation and anti-poaching activities. In exchange for protecting Macaw habitat and preventing poaching, villagers receive projects that diversify their long-term income sources away from climate- susceptible annual crops, to more resilient perennial crops, such as fruit trees, and other drought-resistant livelihood strategies such as honey production.

Our notable achievement this year is that we signed conservation agreements in three Pasorapa communities, resulting in 14,559 hectares under conservation, and supporting **55 families, with projects worth £40,000 (all funded by the municipal government)**. In Saipina, an additional 440 hectares were put under agreements in 2022, and as of writing this report, another 27 families have committed to put 3,173 hectares of forests for conservation. This conservation agreement will be in exchange for a **water access project with a value of £7,740** of which 70% will be provided by the Municipal Government and 30% by Natura.

5. Impact on species in focus

We expect that we will reduce poaching and trafficking of macaw chicks and eggs to zero in the rural communities where 85% of the Red Fronted Macaw population resides. By collaborating closely with the complementary IWT Challenge Fund project led by Armonia – which focuses on in the Caine watershed, home to 15% of the global macaw population, we will be able to stabilize the species, and initiate the long-term recovery of the Red Fronted Macaw. To assess progress, Natura and Armonia will repeat our 2021 census in 2025, when we will expect to record a population increase of 2% (from the 2021 baseline of 1,160 individuals).

6. Project support to poverty reduction

The development projects we provide, e.g., increasing corn yield through irrigation, will indirectly help mitigate the other threat to the species, persecution by farmers for crop raiding. The macaw is already a source of pride for locals. Our economic support will shift the balance to allow them to support the species, as it will also help them improve their livelihoods.

Our expectation is that by project end, eight municipalities will have created Municipal Macaw Incentive Programs, which will continue the project once IWT Challenge Fund support is over. These Incentive Programs will use municipal funds to continue to support local livelihoods, increase pride in the species, and make the economic case for in situ conservation rather than poaching. In the same way that Natura has “graduated” an increasing number of municipalities where we set up Water Funds, we will then exit the region, leaving behind institutions that are self-financed with well-trained technical staff.

In the communities, the compensation packages comprise development projects such as improvements in village water supplies (“water access”). Experiences so far suggest that the majority of communities request compensation packages to be made to the entire village, because nesting sites and foraging areas are on community land. The selection of the Macaw Guardians will then be a task taken on by the village, and likely rotated. We are promoting the leadership of women and girls, but we embed the decision-making processes within existing community structures, to ensure that the entire village democratically takes the decision about if to enter the project, who in the village will be responsible, and how they will manage and enforce the program. This, we believe will engender long term sustainability at the local level. Sustainability will require us to inculcate a village-wide conclusion, that it is in everyone’s economic interest for the entire village to participate. Such a decision will then activate community institutions to run the program, to make sure all villagers contribute, and to ensure that community structures (and not Natura) monitor and enforce compliance.

7. Gender equality and social inclusion

In the often-male dominated culture of Bolivia, women’s and especially girl’s voices are rarely heard. Many women own land in Bolivia’s Santa Cruz valleys but are unable to use it effectively. Traditional development projects that focus on improving crop yields and productivity invariably benefit men. Our project is different. Women are usually responsible for collecting and managing household water supplies. By enhancing water access, we will immediately improve the living standards of many women.

However, the first year of the project was focused on scoping/developing the idea/testing the concept behind the innovation. We therefore have not yet had any impact, neither generally nor on the specific issue of gender equality and social inclusion.

Proportion of women on the Project Board.	We don’t have a project board
Proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women.	50% of project partners are led by women, Natura has a senior leadership team consisting of at least 50% women

8. Monitoring and evaluation

Over the reporting period there have been no changes made to the M&E plan, which has been, and continues to be led by Natura. We believe that our M&E is robust, and have had a series of recent independent evaluations of our work. We also recently facilitated the publication of a series of studies of a randomized control we implemented from 2010-2015¹. The following lists how we have collected data to measure our indicators so far:

¹ E.g. Wiik, E., Jones, J.P.G., Asquith, N.M., Bottazzi, P., Gibbons, J.M., Kontoleon, A. & Pynegar, E.L., (2020) Exploring

- 1.1 Macaw Guardians are trained (data collected from field staff reports and photos)
- 1.2 Macaw Guardian teams are patrolling (data collected from field staff reports, photos, drone footage and GPS waypoints)
- 2.1 Landowners receive economic incentives MMCIP (data collected in pre field surveys by municipal staff coordinated by Natura)
- 3.1 Management Plan published (data collected from field staff reports and photos)
- 4.1 Community members understanding and knowledge increases (data collected in pre field surveys by municipal staff coordinated by Natura)

9. Lessons learnt

Our primary lesson learnt relates both to the necessity of getting community buy-in to every activity, and the fact that getting such buy-in is extremely time consuming. We thus are running late on achieving many of our indicators. While this is troubling in the short term, we believe the advancing at a pace that communities are comfortable with, will ensure long term sustainability.

We would thus urge that any similar projects take a similar approach: work with communities and local authorities at their own pace.

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

Not applicable, this is our first report

11. Risk Management

No new risks have arisen in the last 12 months that were not previously accounted for. We have made no significant adaptations to the project design related to risk. Below is a copy of the original risk register, there have been no changes to either risks or probabilities.

Risk Description	Mitigation	Residual Risk
Partners, especially program participants who are not staff, misuse funds or payments are not accounted for	Natura’s accounting and safeguards system has been used with and approved by donors including USAID (5 years \$1.7 M), the European Union (8 years, \$2 M) and the Interamerican Development Bank (5 years, \$1.6 M).	Minor
Participants will travel along potentially dangerous roads, resulting in risk of accidents	Natura’s travel policies require no travel after dark, respect of speed limits, defensive driving, and vehicle tracking in real time using GPS. We will also take out accident insurance policies for all participants.	Minor
Municipal governments do not provide expected funding to the project	Natura annually leverages significant municipal funds for conservation: experience suggests that the municipal commitments are trustworthy	Minor
Sexual or other harassment or abuse of participants and project	All participants will have to read and sign our safeguards policy. We have identified and publicised the contact details of a female project	Minor

mechanisms and impacts of an incentive-based conservation program with evidence from a Randomized Control Trial. Conservation Biology; Asquith, N.M. (2020). Large-Scale Randomized Control Trials of Incentive-Based Conservation: What Have We Learned? World Development; Grillos, T., Bottazzi, P., Asquith, N., & Jones, J.P.G. (2019) In-kind conservation payments crowd in environmental values and increase support for government intervention: A randomized trial in Bolivia. Ecological Economics; Pynegar, E.L., Gibbons, J.M., Asquith, N.M., & Jones, J.P.G. (2019) What role should randomized control trials play in providing the evidence base for conservation? Oryx; Wiik, E., D’Annunzio, R., Pynegar, E.L., Crespo, D., Asquith, N.M., & Jones, J.P.G. (2019) Experimental evaluation of the impact of a payment for environmental services program on deforestation. Conservation Science and Practice

Staff	staff member to be the point of contact for complaints and concerns, to whom anonymous complaints can be made.	
Communities and municipalities do not see the need for investments in reducing the macaw trade	Our objective is to see if this we can reduce the macaw trade through community incentives. If a community or municipality is not interested, then we will invite the next community/municipality. More than 30 communities have already expressed interest, so we believe that we can find enough appropriate communities	Minor
Conflict between upstream and downstream communities	Our negotiation model is a community-based participative process, and so can help resolve such conflicts. Our offer to invest along with our concept of reciprocity has been shown to be a low-cost, local mechanism for conflict resolution	Minor

12. Other comments on progress not covered elsewhere

We developed another innovative project financing mechanism for Red Fronted Macaws, collaborating with a Tarija-based winery. The “Jucamari” bodega launched a limited edition of “Red Fronted Macaw” wine, with a % of sales supporting macaw conservation. At a wine tasting event coordinated with Armonía and the Santa Cruz State Government in October, we launched the Red Fronted Macaw Species Action Plan and celebrated the publication of the census results.

13. Sustainability and legacy

Key to long term sustainability of the project are the Municipal Governments, which are co-leading project implementation in their jurisdictions. Through the creation of eight Municipal Macaw Conservation Incentive Programmes (MMCIP) the Municipal Governments will lead and will finance the initiative in the long term. Their primary role during the first year of the project was to develop the institutional structures required to continue the Incentive Programmes after IWT-Challenge Funding ends. Technicians and lawyers have drafted the required legal mechanisms, based on models developed by Natura over the last 15 years for creation of Municipal Water Conservation Funds. In Years 2 and 3 of the project elected officials (the mayor and councillors) will pass the appropriate legislation to formalize these funding lines. The Municipal governments will also provide counterpart funding to purchase inputs for the development projects (e.g. beehives, irrigation pipes, barbed wire, grass seeds etc.). Municipal technicians have received training in how to implement the development projects, and they are in the process of training community members. Municipal technicians have also be trained in data collection and have collected baseline data. Throughout the project, the Municipal governments will provide political support, helping with the social marketing and community awareness campaigns, and building local ownership of the results.

As far as we can see so far, the intended sustainable benefits are still valid and we do not plan make changes to what was originally proposed.

14. IWT Challenge Fund identity

The first year of the project was focused on initiating relationships with national and local governments and communities. We therefore have not yet had many opportunities to publicize our results. We have run social marketing campaigns in two municipalities and 10 communities, so local people are learning about the macaw, the project and the IWT Challenge Fund. We also had a significant discussion about the IWT project and the UK Government’s contribution to our work with the British Ambassador, Jeff Glekin, who we expect to visit the project later in

2023. In the next year, as results come in from the field, we expect to have much larger social media and other communication presence.

15. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	No
Have any concerns been investigated in the past 12 months	No
Does your project have a Safeguarding focal point?	Yes, Tatiana Torres [REDACTED]
Has the focal point attended any formal training in the last 12 months?	No
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 20 % Planned: 100 %
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.	No
Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.	No

16. Project expenditure.

Table 1: Project expenditure during the reporting period (April 2022-March 2023)

Please note that these are DRAFT numbers and will corrected by May 31

Project spend (indicative) since last Annual Report	2022/23 Grant (£)	2022/23 Total actual Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)	[REDACTED]			
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL				

Table 2: Project mobilising of matched funding 1 April 2022 – 31 March 2023

	Matched funding secured to date	Total matched funding expected by end of project
Matched funding leveraged by the partners to deliver the project.	[REDACTED]	
Total additional finance mobilised by new activities building on evidence, best practices and project (£)		

17. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words max.). This section may be used for publicity purposes

The first year of the project was focused on initiating relationships with national and local governments and communities. We therefore have not yet had any outstanding achievements, but we expect to have some in 2023-2024. However, in terms of innovative publicity, the “Jucamari” winery launched a limited edition of “Red Fronted Macaw” wine, with a % of sales supporting macaw conservation .

Annex 1: Report of progress and achievements against logframe for Financial Year 2022-2023

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
Impact Extinction of the Red-fronted Macaw (<i>Ara rubrogenys</i>)(CR C2a(i)) is prevented and poverty is alleviated in communities across the macaws' geographical range		No advances recorded so far	
Outcome Trade in wild-caught macaw adults, chicks and eggs is stopped because the species is effectively protected from poachers and traffickers by local farmer-stewards in exchange for economic incentives	0.1 Numbers of breeding pairs of <i>Ara rubrogenys</i> increase by 5% between July 2022 and June 2025 0.2 Cases of bird, chick and egg off-take reduced to zero by June 2025 0.3 2000 local landowners, at least 75% of whom are females, perceive a 30% increase in their incomes, as a result of Macaw conservation, by June 2025	0.1. No advances recorded so far 0.2. No advances recorded so far 0.3. 55 families have received projects worth \$40,000 from the municipal government of Pasorapa.	As per activities in full log frame
Output 1: Teams of local Macaw Guardians are formed and are patrolling nest sites and forage areas	1.1 300 local Macaw Guardians are trained by June 2024 1.2 50 Macaw Guardian teams are patrolling all important nesting and foraging sites by December 2024	50 local Macaw Guardians have been trained 4 teams are patrolling important nesting and foraging sites	
Activity 1i) Use results from the 2021 macaw survey to identify and map sites and communities important for conservation		Complete	No more actions needed
1ii) Select cadre of community volunteers to be Macaw Guardians		Complete in two municipalities	Continue in two other municipalities
1iii) Run training courses to build community capacity for patrolling, data collection, use of GPS receivers and surveying		Complete in two municipalities	Continue in two other municipalities
1iv) Help Macaw Guardians design and undertake monitoring patrols		Complete in two municipalities	Continue in two other municipalities

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
1v) Build contacts with law enforcement agencies and provide legal support		We spent the first year working with the Biodiversity Directorate in the Vice Ministry to develop a joint strategy.	Working down from the Vice Ministry we will start with state and then municipal authorities.
1vi) Collaborate with local communities and law enforcement agencies to document and act on results of patrolling activities		As an initial step we joined a multi-institutional enforcement task force working on illegal wildlife trade.	Continue working with task force and initiate collaborations with local communities.
Output 2: Local community members receive direct, continued economic benefits in exchange for conservation activities and for stopping the macaw trade	2.1 800 local landowners in 40 communities, at least 75% of whom are females, receive economic incentives worth \$40,000 from eight Municipal Macaw Conservation Incentive Programmes (MMCIP), and have increased their annual incomes by 30%, by June 2025	We signed conservation agreements in three communities in Pasorapa (Ceibas, Buena Vista and Ruda Pampa), resulting in 14,559 new hectares under conservation, and supporting 55 families, with projects worth \$40,000 (all funded by the municipal government). In Saipina, an additional 440 hectares were put under conservation agreements. In Aiquile, the government has prioritized and made an agreement offer (for ~ \$5,000) in the communities of Lagarpampa and Molle Pampa: this compensation event will be held in 2023.	
2i) Use results from the 2021 macaw survey to identify and map individual land parcels important for conservation		Complete in two municipalities	Continue in two other municipalities
2ii) Offer incentive packages for community patrolling and on individual land parcels in communities close to all important macaw nesting, foraging and sleeping sites		Complete in two municipalities	Continue in two other municipalities
2iii) Sign conservation agreements with community authorities and land owners		Complete in two municipalities	Continue in two other municipalities
2iv) Deliver compensation packages (i.e bee hives, irrigation systems, etc.)		Complete in two municipalities	Continue in two other municipalities
Output 3: Threat reduction and strategies for long-term sustainable management of the macaw population are institutionalized	3.1 Bolivian National, Departmental and Local Governments implement a detailed "Conservation Incentives" component of the <i>Ara rubrogenys</i> Management Plan that institutionalizes local incentive programmes by June 2024 3.2 Six municipalities with resident <i>Ara rubrogenys</i> breeding pairs lead the creation and operation of Municipal Macaw Conservation Incentive Programs (MMCIP) to promote habitat and nest conservation, and to patrol and prevent incursions from traders by December 2023	We have held a series of meetings with all relevant stakeholders (communities, municipalities, NGOs, universities, the private sector, water users, and Departmental and National governments) to pave the way to institutionalize the local incentive programs. We have had especially productive meetings with the Biodiversity Directorate of the Vice Ministry and also within the Mother Earth Authority, and hosted an event with the Santa Cruz Departmental Government (along with Armonia, another NGO working on macaw conservation with IWT Challenge Funds) to launch the <i>Ara rubrogenys</i> Management Plan	

Project summary	SMART Indicators	Progress and Achievements April 2022 - March 2023	Actions required/planned for next period
3.1i) Review and improve "Incentives" component of existing Management Plan		Complete	No more actions needed
3.1ii) Hold facilitated meeting with all relevant stakeholders (communities, municipalities, NGOs, universities, the private sector, water users, and Departmental and National governments)		Complete	No more actions needed
3.1iii) Draft details of how to implement "Incentives" component of plan, request public comments and revise accordingly		Complete	No more actions needed
3.1iv) Help National and Departmental Governments and Municipalities publish "Incentives" component of Management Plan		In process in two municipalities	Continue process in two municipalities, expand to two more, and re-engage with state and national governments
3.2i) Present MMCIP proposal to municipal governments, and where appropriate other stakeholders (such as the private sector or water users)		Complete in two municipalities	Continue in two other municipalities
3.2ii) Help municipal authorities design MMCIP and pass appropriate legislation		Complete in two municipalities	Continue in two other municipalities
Output 4: Macaw population dynamics, community well-being and local perceptions about the importance of macaw conservation are increasingly well understood	4.1 Community members understanding of the importance of Macaw conservation, and their knowledge about what conservation activities they can undertake, has increased by 100%, by December 2024 (baseline, 150 people out of 800 already have such understanding)	We have undertaken two social marketing campaigns (in Omereque and Pasorapa Municipalities) and use the techniques and methodologies of social marketing every time we engage with local government and communities. We will continue these activities and expand into two more municipalities in 2023-2024. We have undertaken baseline data collection in two municipalities to be able to assess change of economic realities and perceptions about the macaw over the project lifetime.	
4.1i) Design and implement social marketing campaign to explain the project and to promote conservation and anti trafficking activities		Complete in two municipalities	Continue in two other municipalities
4.3i) Design and implement socioeconomic and perceptions survey pre-project		Complete in two municipalities	Continue in two other municipalities

Annex 2: Project's full current logframe as presented in the application form

Project summary	SMART Indicators	Means of verification	Important Assumptions
Impact: Extinction of the Red-fronted Macaw (<i>Ara rubrogenys</i>)(CR C2a(i)) is prevented and poverty is alleviated in communities across the macaws' geographical range			
Outcome: Trade in wild-caught macaw adults, chicks and eggs is stopped because the species is effectively protected from poachers and traffickers by local farmer-stewards in exchange for economic incentives	<p>0.1 Numbers of breeding pairs of <i>Ara rubrogenys</i> increase by 5% between July 2022 and June 2025 (baseline 130 pairs)</p> <p>0.2 Cases of bird, chick and egg off-take reduced to zero by June 2025 (baseline 70 cases per year)</p> <p>0.3 2000 local landowners, at least 75% of whom are females, perceive a 30% increase in their incomes, as a result of Macaw conservation, by June 2025 (baseline \$2000 annual incomes)</p>	<p>0.1 Pre- and post- project biological surveys</p> <p>0.2 Post- project biological and social surveys</p> <p>0.3 Pre- and post- project socio-economic surveys</p>	Rural communities in Bolivia are willing and able to undertake significant conservation activities in exchange for relatively low levels of economic support. We assume that such a quid pro quo can work because we have signed contracts with 9,000 farmers across Bolivia to conserve more than 500,000 hectares of watershed forests. Based on piloting the proposed project in two municipalities with macaw populations we calculate that this model can also work for Macaw conservation as there is a similar ratio between the low cost of conservation and the value of economic support the project could provide.
Output 1: Teams of local Macaw Guardians are formed and are patrolling nest sites and forage areas	<p>1.1 300 local Macaw Guardians are trained by June 2024 (baseline 0 Guardians)</p> <p>1.2 50 Macaw Guardian teams are patrolling all important nesting and foraging sites by December 2024 (baseline 0 teams)</p>	<p>1.1.1 Signatures certifying attendance at Macaw Guardian Training Courses</p> <p>1.1.2 Patrolling commitments signed by Guardians and their communities</p> <p>1.1.3 GPS points of patrolling missions</p> <p>1.1.4 Records of cases of poachers and traffickers detained by Guardians</p>	Community patrols can effectively patrol discourage poachers and traffickers, either through community pressure on locals, or by reporting outsiders to law enforcement officials. We assume this based on published data and our own records that suggest that economic gains from poaching are not extremely high
Output 2: Local community members receive direct, continued economic benefits in exchange for conservation activities and for stopping the macaw trade	2.1 800 local landowners in 40 communities, at least 75% of whom are females, receive economic incentives worth \$40,000 from eight Municipal Macaw Conservation Incentive Programmes (MMCIP), and have increased their annual incomes by 30%,	2.1.1 Signed agreements detailing delivery of development projects such as honey production, improved irrigation systems	Communities within the macaw distribution range are able and willing to undertake conservation activities in exchange for development projects, because their cost of conservation activities is less than the benefits of the economic development that the project

Project summary	SMART Indicators	Means of verification	Important Assumptions
	by June 2025 (baseline 168 families in Pasorapa Municipality pilot)	2.1.2. Receipts showing value of delivered incentives (i.e. cost of beehives, irrigation pipes etc.) 2.1.3 Measures of income in pre and post- project socio-economic surveys	will bring. We assume this because we have already piloted the incentive programme in five communities.
Output 3: Threat reduction and strategies for long-term sustainable management of the macaw population are institutionalized	3.1 Bolivian National, Departmental and Local Governments implement a detailed "Conservation Incentives" component of the Ara rubrogenys Management Plan that institutionalizes local incentive programmes by June 2024 (baseline, draft management plan is currently being discussed by stakeholders) 3.2 Six municipalities with resident Ara rubrogenys breeding pairs lead the creation and operation of Municipal Macaw Conservation Incentive Programs (MMCIP) to promote habitat and nest conservation, and to patrol and prevent incursions from traders by December 2023 (baseline 0 municipalities)	3.1.1 Detailed "Incentives" component of Management Plan Published by governments 3.1.2 Signed certificaton from local authorities that at least three of the recommendations of the Management Plan have been implemented 3.2 Municipal records of Founding charters of MMCIP, bank accounts of MMCIP showing transfers of funds in and out, annual MMCIP implementation reports	Authorities are willing and able to implement it the management plan's recommendations. We assume this because we have evidence of interest from all range state municipalites, the Departmental Governments of Santa Cruz, Chuquisaca and Cochabamba and the National Government Municipal governments are willing and able to set up the MMCIP local funds. We assume this because we have helped more than 60 Municipal Governments across Bolivia set up similar funding mechanisms for watershed protection. The local water funds that we have helped set up annually transfer more than GBP 300,000 worth of local resources to upstream landowners.
Output 4: Macaw population dynamics, community well-being and local perceptions about the importance of macaw conservation are increasingly well understood	4.1 Community members understanding of the importance of Macaw conservation, and their knowledge about what conservation activities they can undertake, has increased by 100%, by December 2024 (baseline, 150 people out of 800 already have such understanding) 4.2 One peer-reviewed academic journal article is published about Macaw	4.1.1 Pre- and post- project socio-economic surveys 4.2.1 Published articles	Targeted information will change behavior. We assume this based on the literature on behavioural economics (e.g. Ariely 2008) and the literature around the Social Marketing for conservation methodology promoted by Rare (we implemented a Rare Pride campaign and were mentored by Rare in 2010)

Project summary	SMART Indicators	Means of verification	Important Assumptions
	<p>population dynamics by June 2025 (baseline 0 articles published)</p> <p>4.3 One peer-reviewed academic journal article published about community socio economics and perceptions by June 2025 (baseline 0 articles published)</p>	<p>4.3.1 Published article</p>	<p>Our count methodology provides accurate estimates of breeding pairs and overall populations size. We worked with a local specialist bird NGO, Armonia (the Birdlife partner in Bolivia) who have extensive experience surveying this and other species of macaws and parrots, to comply with survey best practices (the baseline survey occurred in February-March 2021 nesting season before project initiation (results are currently being analyzed and interpreted). We will undertake the endline survey as part of this project.</p> <p>Our survey methodology provides accurate estimates of socioeconomic status and well being. We have undertaken and published the results of a series of socioeconomic surveys elsewhere in Bolivia, and will partner with Professors Zhao Ma and Jonathan Bauchelet (Purdue University) who have extensive experience in the project area, to ensure that we comply with survey best practices. We will base our income estimates on respondents' recollections and our best analysis of how much produce they sold after the most recent harvest.</p>
<p>Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)</p> <p>1i) Use results from the 2021 macaw survey to identify and map sites and communities important for conservation</p> <p>1ii) Select cadre of community volunteers to be Macaw Guardians</p> <p>1iii) Run training courses to build community capacity for patrolling, data collection, use of GPS receivers and surveying</p> <p>1iv) Help Macaw Guardians design and undertake monitoring patrols</p> <p>1v) Build contacts with law enforcement agencies and provide legal support to communities</p> <p>1vi) Collaborate with local communities and law enforcement agencies to document and act on results of patrolling activities</p> <p>2i) Use results from the 2021 macaw survey to identify and map individual land parcels important for conservation</p>			

Project summary	SMART Indicators	Means of verification	Important Assumptions
<p>2ii) Offer incentive packages for community patrolling and on individual land parcels in communities close to all important macaw nesting, foraging and sleeping sites</p> <p>2iii) Sign conservation agreements with community authorities and volunteer land owners</p> <p>2iv) Deliver compensation packages (i.e bee hives, irrigation systems, fruit tree seedlings etc.)</p> <p>2v) Monitor compliance and, if appropriate, renew agreements</p> <p>3.1i) Review and improve "Incentives" component of existing draft Management Plan</p> <p>3.1ii) Hold facilitated meeting with all relevant stakeholders (communities, municipalities, NGOs, universities, the private sector, water users, and Departmental and National governments</p> <p>3.1iii) Draft details of how to implement "Incentives" component of plan, request public comments and revise accordingly</p> <p>3.1iv) Help National and Departmental Governments and Municipalities publish "Incentives" component of Management Plan</p> <p>3.2i) Present MMCIP proposal to municipal governments, and where appropriate other stakeholders (such as the private sector or water users)</p> <p>3.2ii) Help municipal authorities to design MMCIP and pass appropriate creation legislation</p> <p>3.2iii) Support municipal implementation of MMCIP fund as the governments purchase development projects and takes on long term project management.</p> <p>4.1i) Design and implement social marketing campaign to explain the project and to promote conservation and anti trafficking activities</p> <p>4.2i) Design and implement macaw population survey at project end</p> <p>4.2ii) Draft, review and finalize publication of second set of results</p> <p>4.3i) Design and implement socioeconomic and perceptions survey pre-project</p> <p>4.3ii) implement the same survey post project</p> <p>4.3iii) Draft, review and finalize publication of results</p>			

Annex 3 Standard Indicators

Table 1 Project Standard Indicators

IWTCF Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with IWTCF Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
IWTCF-A01	Number of people who received training in sustainable livelihood skills	People who attended training on skills related to use of compensation packages	People	Gender; males and females Stakeholder group: Local Communities; training on skills related to use of compensation packages	110			110	800
IWTCF-A02	Number of people reporting they are applying new capabilities (skills and knowledge) 6	People who applying training on skills related to	Number	Gender; males and females Stakeholder group: Local Communities; training on skills	0			0	350

IWTCF Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with IWTCF Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
	(or more) months after training.	use of compensation packages		related to use of compensation packages					
IWTCF-B21	Number of policies and frameworks developed or formally contributed to by projects and being implemented by appropriate authorities.	Bolivian National, Departmental and Local Governments publish a detailed "Conservation Incentives" component of the <i>Ara rubrogenys</i> Management Plan	Number	Typology of policy (Community/sub-national/national)	0			0	3
IWTCF-D01	Number of trainers trained reporting to have delivered further training by the end of the project.	Number of people trained in macaw/wildlife monitoring and patrolling delivered further training	People/ Number trained	Gender; male female Age Group; adults/ adolescent Stakeholder group: Local Communities, Type of training: wildlife monitoring	3			3	20
IWTCF-D03	Number of local/national organisations with improved capability and capacity as a result of the project.	Number of local organisations with improved capability and capacity for macaw/wildlife monitoring and patrolling	Number of organisations	Organisation Type.	2			2	20

We have not yet published any documents

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

We have attached a series of documents and photos as supplementary material as evidence of project achievement. They are also available by link.

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	Yes
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the Subject line.	Yes
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the Subject line.	
Have you included means of verification? You should not submit every project document, but main outputs and a selection of others would strengthen report.	Yes
Do you have hard copies of material you need to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	No
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 16)?	Yes
Have you involved partners in preparation of report and named main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	