

## Darwin Initiative Main/Post/D+ Project Half Year Report (due 31<sup>st</sup> October 2017)

<b>Project reference</b>	23-016
<b>Project title</b>	Yerba mate – a market-driven model for conserving Paraguay's Atlantic Forest.
<b>Country(ies)/territory(ies)</b>	Paraguay
<b>Lead organisation</b>	BirdLife International
<b>Partner(s)</b>	Guyra Paraguay
<b>Project leader</b>	Dr Nonie Coulthard
<b>Report date and number (e.g., HYR3)</b>	31 <sup>st</sup> October 2017 HYR2
<b>Project website/blog/social media etc.</b>	<a href="http://www.birdlife.org/americas/partners/paraguay-guyra;">http://www.birdlife.org/americas/partners/paraguay-guyra;</a> <a href="https://twitter.com/guyraparaguay;">https://twitter.com/guyraparaguay;</a> <a href="https://twitter.com/BirdLife_News">https://twitter.com/BirdLife_News</a>

### 1. Outline progress over the last 6 months (April – Sept) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up to end September).

This report covers the key achievements in the first Half Year (Yr 2). See more detail if required (<https://www.dropbox.com/sh/sxbdcxi7q7pgpc8/AAAgY89sHFmlj5kZvhu2mKz3a?dl=0>).

**1.3 Training workshops (on technical aspects of tree care and management; harvesting; processing etc.) for technicians, leaders and members of the indigenous and farmer communities:** Seven more training workshops were carried out on crop management and pruning to enhance shade-grown yerba mate development. Trainees included some producers who have mature yerba mate plantations, and new producers who planted shade-grown yerba mate in 2016. Eight producers have already applied the new techniques learnt to their mature plantations. Excellent results were observed during verification visits with producers, where the knowledge gained and applied and the healthy state of the plants were manifest. The workshops also gave the opportunity for wide discussion about the field work challenges and other topics such as product prices, productive capacity, and quality of yerba mate. The producers are very engaged and see shade-grown yerba mate as a viable alternative to improve their quality of life.

**1.4 Development of participatory community business and enterprise plans, with support from the private sector:** The business plan is being elaborated for all producers in the project area and a producers' workshop will be carried out in the last quarter, Yr 2. Two key issues are a) production costs and b) certification. Anticipated yields of shade-grown yerba mate are lower than those of conventional systems so detailed costing and analysis of markets and the supply chain is essential to ensure that producers can sell their differentiated product (organic, shade-grown yerba mate) at a premium and sustainably (post-project). Excellent support has been provided by the private sector. To date, contact has been established with 4 enterprises interested in buying shade-grown organic yerba mate leaves or products (processed leaves, oil) for different markets (tea, cosmetics): Guayaki SRP (in USA); Lush; Abu Khuzam (Lebanon: through the BirdLife International Partner SPNL); and Yerba Mate Pajarito. A cost that was not anticipated in the project plan is certification under the USDA Organic, CCOF Organic, Fair for Life and Non-GMO norms – but this will be necessary to sell the product at a premium.

Another factor in business planning is that the sale price of green leaves is much lower than that for processed leaves. A cost-effective way for producers to achieve better prices (in the long-run) for certified organic yerba mate may be to invest in a local yerba mate processing industry. An initial estimate of this also reflects a high cost (c. 70,000 US\$). The team is in discussions with

the Commercial Manager of an existing enterprise (and key project partner) - Organic Certified Yerba Mate Dryer of Yerba Mate Pajarito - to get quotes for project producers to use their green leaf processing services in the initial years of shade-grown yerba mate production.

**1.5 Training of the communities on farm and business management, focused on marketing and commercialization:** The project team continually provides training and monitoring of the success of yerba mate plantations with producers, which is very important to build capacity and obtain results. Sixteen producers from Oga Ita were trained on yerba mate pruning (see 1.3) – which is key to obtaining more leaves when the plants are mature. Community training (direct project beneficiaries and others) was also addressed at the “Yerba Mate Forum on Native Forests” (in Alto Verá, Itapúa). This was carried out by private enterprise experts, who are achieving profitable shade-grown yerba mate production in other areas and can advise and motivate project producers about international markets, certification and export. (see 3.3).

**2.2 Planting of 10 ha of yerba mate in the communities of Arroyo Claro and Arroyo Moroti; 40 ha in the *campesino* communities:** So far in Year 2 planting season, the 5-6 ha planted in year 1 in Arroyo Moroti (Mbya community) was cleaned and prepared for the second year, whose successful growth and replanting was duly verified. An additional 3ha were prepared and planted. The total of seedlings planted in Arroyo Moroti is now 28,000 (on nearly 9ha). The leadership of Félix Chaparro (son of Cacique Chaparro) was crucial to this work. The plan to plant additional ha with Mbya families in Arroyo Claro was dropped because their plots are surrounded by intensive soybean plantations, meaning that yerba mate produced there cannot fulfill the requirements of organic certification and premium prices.

In *campesino* areas, 6 new farmers in Santa Ana with suitable (forest) parcels joined the project. A total of 9300 seedlings (2 ha) were planted on these parcels (close to Oga Ita) and are growing well. In Oga Ita, 3 new producers joined in Yr 2, totaling 23 in the community. Nearly 45,000 seedlings were delivered for parcel expansion and for replanting parcels started in Year 1. The total of shade-grown seedlings so far planted in Oga Ita is 74,700 (15 ha). The project team will review overall progress at the end of the current planting season and agree with communities on the areas for planting in year 3 (to complete the total planned hectares, including incorporation of additional areas of well-conserved forest).

**2.5 Monitor biodiversity in the parcels of production of yerba mate:** Biodiversity monitoring continues to provide ‘baseline’ data on how shade-grown yerba mate production contributes to biodiversity conservation. Data were collected for Autumn (March-May) and the final (Winter) data will be collected by November. Data are collected in three different types of sites: shade-grown yerba mate plots, borders of shade-grown yerba mate plots, and open fields and for fauna and flora. When the final season data are available, preliminary synthesis and analysis of results will be carried out by the Guyra Paraguay monitoring team. Students from the National University of Asunción are also working on specific research projects which contribute to the establishment of baselines and future evaluation of the contribution of shade-grown yerba mate production to forest biodiversity conservation. (See also 3.1).

**2.6 Monitor livelihoods and wellbeing impacts, based on participatory indicators identified at household and/or community level, and against a year 1 baseline:** Socio-economic data collection has also advanced. A preliminary Capacity assessment report was completed following a workshop with representatives of all project communities in September. Data collection was carried out with the support of 2 student interns from the National University of Asunción.

**2.7 Monitoring of the forest cover through satellite images; monitor incidences of environmental crimes and other threats:** the initial landscape analysis (using satellite imagery) was carried out in Arroyo Morotí and Óga Ita, to determine current forest cover/ other land use, and monitor change and threat levels (agricultural encroachment and forest fire) at 3 month intervals. Preliminary analyses showed that changes in the forest cover are not significant at 3 month intervals, so the frequency of analyses has been reduced to 6 months. Threat monitoring is also carried out by ranger patrols of the Guyra Reta Reserve Complex and data interpretation from flyovers done monthly by Pro Cosara<sup>1</sup>. A meeting with members of Pro Cosara (a conservation NGO working in the reserve), the Ministry of Environment and Guyra Paraguay established collaboration and data sharing on threats. Rangers will continue to share information

<sup>1</sup> <http://procosara.org/en/san-rafael>

and report illegal activities through regular meetings. A BSc student of Forestry Engineering, (National University of Asunción) is carrying out a study: “Socioeconomic factors that influence forest cover change in the Reserve for National Park San Rafael”.

**3.1 Document the approach used for monitoring of biodiversity:** A first meeting of the Project M+E Steering Committee was held in October by Skype (Guyra Paraguay and National University of Asunción (NUA) in Asunción; Project Manager in Quito; Project Leader in Cambridge). Progress on implementing the M+E Plan was assessed against the Log Frame indicators and a more detailed review of targets is now underway. The Biodiversity Monitoring Plan and progress were discussed in detail (see 2.5). Prof. Lourdes González from NUA, a key project partner, gave an update on the on studies being carried out by 4 Bachelor students which are contributing valuable research information and providing students with professional training in biodiversity monitoring. One student thesis was successfully presented in July and posters on amphibian and reptile research developed under the project were presented at the Herpetology Congress in Salta, Argentina in September. Some preliminary results of the fauna monitoring were presented at the “Yerba Mate Forum on Native Forests” (see 3.3), to demonstrate the species richness in the yerba mate parcels and the importance of conserving biodiversity. Producers responded positively to the concept and expressed interest in finding out what biodiversity exists on their land. The monitoring (especially of birds) at the yerba mate parcels also provoked interest among representatives of the National Institute of Yerba Mate of Argentina. They mentioned that some bird species feed on shade-grown yerba mate which passes through their digestive tract, and then the seeds are ready to germinate in the forest. Thus, birds are working as dispersers and stimulators of the germination of yerba mate seeds. This was very interesting for the project team and a potential research topic was identified.

**3.3 Provide training on shade yerba mate to government technicians and development NGOs working around forest in Itapúa.** The first “Yerba Mate Forum in Native Forest” was held in September in Itapúa, Alto Verá to train Project beneficiaries and share experiences with yerba mate production experts. Fourteen lecturers collaborated in the forum, from government institutions, the National Yerba Mate Institute (Argentina), the National University of Asunción, private enterprises and the Yerba Mate Centre. Lectures included the shade-grown yerba mate system, best practices, organic production, yerba mate traceability, and seedling production. The Municipality of Alto Vera supported the forum and were a key collaborator (including the provision of a bus to transport participants to visit shade-grown yerba mate parcels). 112 participants attended, from various cities, from agronomic schools, government institutions, agronomic cooperatives, producers’ groups, universities and NGOs, (89 men, 23 women). Materials with technical information were distributed by the lecturers and by Guyra Paraguay. The forum was a moment to make the Project and the shade-grown yerba mate system known, as evidenced by the numerous publications on shade grown yerba mate, the Project and the forum itself in more than 5 different media outlets<sup>2</sup>. It was also a great opportunity for meetings between small producers, representatives of the Ministry of Farming and Agriculture and large yerba mate enterprises, providing an informal dialogue space for identifying needs between the different groups. It also made the project visible in the yerba mate sector, which will be a great help to effect change with the authorities and encourage business.

**4.2 Meetings with government authorities to promote the farming of shade grown yerba mate as a market-based approach supporting the conservation of Atlantic Forest biodiversity:** Great advances were made under Output 4. Project results and levels of community participation are more visible and there is significant engagement of all project stakeholders, including government. After more than a year of meetings and follow up by the project, the Municipality of Alto Verá passed a resolution and signed a declaration of Municipal Interest in the Project<sup>3</sup>. This is of great importance as it provides greater weight to all project activities and a basis for engaging other institutions and audiences. The Municipality of Alto Verá

<sup>2</sup> <https://www.dropbox.com/home/Half%20Year%20Report%20Project%2023-016/Comms%20media%20list?preview=Comms-Media.Publications+List+.xlsx>

<sup>3</sup> <https://www.dropbox.com/home/Half%20Year%20Report%20Project%2023-016/Declarations%20of%20interest%20Alto%20Ver%C3%A1%20and%20itapua?preview=Declaraci%C3%B3n+de+Inter%C3%A9s+Distrital+Alto+Ver%C3%A1.pdf>

is a key collaborator in the development of activities, (see also 3.3: Shade-Grown Yerba Mate Forum). A second declaration of interest was also signed by the Departmental Board of Itapúa<sup>4</sup>.

At least six meetings were held with different government institutions, including the Ministry of Women, the Itapúa Governance, The Ministry of Agriculture and Farming, the Paraguayan Institute of Agricultural Technology, to present the project and seek declarations of interest. These meetings raise the visibility of the project and ensure that relevant authorities are kept informed of project activities to develop the shade-grown yerba mate model. Support and technical assistance were requested from Ministry of Women representatives, who showed great interest in collaboration and provided contacts of leaders of Alto Vera Municipality's Rural Women Department under the Governance of Itapúa. A Cooperation Agreement between Guyra Paraguay and the Paraguayan Institute of Agriculture (IPTA) is being drafted, covering technical exchange on yerba mate, the implementation of research (on native yerba mate varieties) and communications support for project activities. Strengthening of links with IPTA will support wider engagement with other institutions who are working with yerba mate.

Guyra Paraguay was invited to participate in an informal meeting of the National Interdisciplinary Yerba Mate Joint Commission (by invitation of Cornelio Núñez, director of the Project of Rural Sustainable Development (PRODERS)). The Commission addresses yerba mate issues on the national scale. Guyra cannot be part of the Commission because it is not a government institution but regular attendance by Guyra may be permitted and will provide a very useful collaboration for the project with the Commission and its institutions (Ministry of Agriculture (MAG), the National Institute of Food and Nutrition (INAN), the National Institute of Technology, Standardization and Metrology (INTN), the National Institute of Quality and Health of Seeds (SENAVE).

**4.4 In line with advocacy plan, provide information to and lobby the National Forestry Institute to have the project's lessons and approach included in the next five-year plan (2019-2024):** Reports and letters requesting declarations of interest were sent to 4 institutions (the National Forestry Institute (INFONA), the National Institute of the Indigenous (INDI), the Government of Itapúa and the Alto Vera Municipality) in April. To declare an interest, INFONA requested a Forest Management Plan for the project area specifying the yerba mate farming programme, a study of the floristic composition, the legal title of the property, a copy of the Identity Card of the tenant, maps and other documents. The project team will complete the floristic inventory of the parcels as part of the biological monitoring, however to get the other specific documents a consultancy is needed (see 2a.) A total of 2,100 native tree seedlings were donated by INFONA to Guyra Paraguay. This was fewer than the request from Guyra Paraguay made in April (for 7,200) and more seedlings are still needed for the parcels in Oga Ita.

**2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.**

**Transport and travel around the project area** (for delivery of seedlings to farmers and for project monitoring) was more difficult than expected due to the poor condition of the dirt roads and uncharacteristically heavy rains (planting seasons, years 1 and 2). Monitoring methods and sample sites were chosen to minimize travel distances between sites and the team constantly adapts (frequency of visits and sample sites) to conditions to make sure that data collection is sufficient for monitoring and to provide evidence for continuing development of the shade-grown yerba mate model. **Biological/ climate conditions** (unusual rain patterns and low temperatures) also seem to have diminished reptile and amphibian activity in the project area, with very few records. Such an effect has been observed elsewhere under similar climatic conditions. Active searches at night are problematic due to security concerns so the team is planning to set funnel traps in all study sites to try to obtain baseline data on the presence of this group.

<sup>4</sup> <https://www.dropbox.com/home/Half%20Year%20Report%20Project%202023-016/Declarations%20of%20interest%20Alto%20Ver%C3%A1%20and%20itapua?preview=Declaraci%C3%B3n+de+Inter%C3%A9s+Itap%C3%BAa.pdf>



**The INFONA requirement for a Forest Management Plan** before declaring an interest in the Project (see 4.4) has cost implications (and no available project budget). Guyra Paraguay can prepare some elements but requires an external consultancy (quoted at 18,000US\$) to put forth a plan. Guyra are assessing whether INFONA, (a project partner) can find another way to declare an interest or help prepare the plan. This is likely to be a topic for future discussion during a visit to San Rafael by BirdLife Secretariat staff (Project Manager and Leader) later in Yr 2.

**Project M+E Committee and project staff:** The Committee met (see 3.1) and will meet again this year to finalize the review of Log Frame indicators and targets. Targets relating to income may be unrealistic as the first harvests from shade-grown yerba mate planted under the project are likely to be 4 to 6 years after planting. Revisions to these and some other Log Frame targets will be submitted as a Change Request (no budget implications). The arrangements for maternity cover (for Project Manager, Cath Tayleur) and secondment cover (for Project Leader, David Thomas) were subject to some changes during the period due to staff changes and departures in BirdLife Secretariats (Regional and Global). The interim Project Manager (Ana Inigo in Quito) and Project Leader (Nonie Coulthard in Cambridge) both took on additional roles to cover these changes and ensure continuity of support to Guyra Paraguay and the project in the field. As Cath Tayleur is not returning from maternity leave, we now propose to confirm these as ongoing changes (also with additional input from a new bilingual Project Officer in Quito which will help communication between the regional and global team). These changes (and new CV) will be submitted as a Change Request after this report. (No budget implications).

**2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?**

Discussed with LTS: Yes/No *forthcoming Change Requests*

Formal change request submitted: Yes/No *staff changes: with or immediately after Half-Yr Report*

Received confirmation of change acceptance Yes/No

**3a. Do you currently expect to have any significant (e.g., more than £5,000) underspend in your budget for this year?**

Yes  No  Estimated underspend: £

**3b. If yes, then you need to consider your project budget needs carefully.** Please remember that any funds agreed for this financial year are only available to the project in this financial year.

**4. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures?**

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document. Additionally, if you were funded under R23 and asked to provide further information by your first half year report, please attach your response as a separate document.

**Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request.**

Please send your **completed report by email** to Eilidh Young at [Darwin-Projects@ltsi.co.uk](mailto:Darwin-Projects@ltsi.co.uk). The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: 22-035 Darwin Half Year Report**