



**CONSERVATION ACTIONS FOR THE CRITICALLY
ENDANGERED *Ateles fusciceps fusciceps*
Esmeraldas-Ecuador**

The Sustainable Matrix Model (SMM)

COMMUNITY LED-DEVELOPMENT PROGRAM
PROYECTO WASHU
2022



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1. Summary

The year 2021 allowed us to resume work with families belonging to the Sustainable Matrix Model (SMM) and give continuity to the processes of community strengthening successfully. Thanks to this, in 2022, 4 cocoa sales were made from the associations with a total of 6439.3 kg of dried cocoa sold, that is, 6 and a half tons which meant \$ 25,435 dollars for families, 100% more than what they would have received in the intermediary market. On the other hand, the infrastructure fund has been implemented by 92% during the period 2021-2022, the fund has benefited farmers with the delivery of materials and tools that have allowed them to improve their agricultural practices, as well as has supported administrative activities and strengthening bonds in the community as an event for children on Children's Day. The remaining 8% of the infrastructure fund will continue to be used in 2023 for activities benefiting the association. In 2022 we also achieved the legalization of the association of farmers of Cristóbal Colón: ASOPROACABOSCA, and the renewal of the organic certification of ASOPROTESCO was achieved.

The technical visits and community workshops with the two associations have maintained participatory planning, and the development of organic agriculture, for this the proposal "Strategic plan for the improvement of technical capacities for the management of cocoa plantations in farmers' associations linked to the conservation of forests of the Ecuadorian Chocó" was generated. This document has been disseminated to cocoa buyers and state institutions to obtain the necessary funds to develop it.

This year a series of trainings and environmental education workshops were also held with ASOPROTESCO families on the main groups of fauna: Birds, Amphibians, Reptiles, and Mammals, the long-term objective is to develop community monitoring activities on the biodiversity they protect.

This 2022 we continue working for the increase of the territory of the Sustainable Matrix Model, so an approach was made to the Union Lojana farmers cooperative, known as La Ganadera, through this approach is expected in 2023 the entry of 5 new families, with this we will add 157 hectares (387.9 acres) of forest into conservation, increasing to 383 hectares (944 acres) of forest protected by farming families in the SMM.



2. Processes developed

The activities developed within this program during 2022 are part of the objectives of the Sustainable Matrix Model and the socio-environmental agreements signed until 2025.

2.1 Monitoring of socio-environmental agreements between PW and ASOPROACABOSCA farmers

Part of the responsibilities and commitments of farmers within the socio-environmental agreements is the non-use of agrochemicals, a fundamental requirement also to obtain organic certifications, so in February a sample of leaves from the cocoa plantation of the Odilia Zambrano Farm was taken to perform laboratory analysis and verify that there are no remains of organochlorines and organophosphates (compounds present in agrochemicals) such as glyphosate), in addition to cadmium levels. Laboratory results showed that both cadmium and pesticide components are within permitted ranges.

During the month of February, the second part of the participatory planning workshop was held together with 10 ASOPROACABOSCA partners. As a result of this workshop, an analysis of opportunities and threats of the association was obtained, in the same way, a schedule of activities for the association was established, it was highlighted the activities regarding the internal regulations of the association and the development of team integrative activities that allow the association to improve bonds between and within families and get to know in the community, At the end of 2022, 60% of the proposed schedule was met. The remaining activities belonging to 40% will be developed in the first months of 2023.



Figure 1. Participatory planning workshop at ASOPROACABOSCA

2.2 ASOPROACABOSCA process towards an independent association administratively and organizationally

This year the work of strengthening the administrative capacities of ASOPROACABOSCA continued, for this the process of legalization of the association was successfully completed before the Superintendence of Popular and Solidarity Economy (SEPS) and the Internal Revenue Service (SRI), thanks to this the "Association of agricultural production of cocoa of the forests of Canandé ASOPROACABOSCA" was officially created. that has a unique taxpayer registration number RUC 0891791835001, thanks to this the association can issue invoices to its clients and start the accounting history that in the future allows them to obtain benefits from private state programs, or with banking entities if necessary. Additionally, the internal regulations of the association were approved and delegated to a partner for administrative management.



Figure 2. Sale of ASOPROACABOSCA cocoa in May 2022

Together with the delegate of ASOPROACABOSCA and two young people from ASOPROTESCO in October, a basic Excel workshop was held to digitize the accounts and sales of each group, in this way each association will begin to digitally systematize cocoa sales.



Figure 3. Basic Excel workshop, representatives ASOPROTESCO and ASOPROACABOSCA

2.3 Obtaining and renewing organic certification for ASOPROACABOSCA and ASOPROTESCO

ASOPROACABOSCA received a talk about the importance of organic certification, the objective of the same was that the partners have a new formal approach to start the organic certification process, in addition to solving doubts about this process and also understanding the importance of filling out the harvest and postharvest registration notebooks. After this, one of the requirements for certification was completed, which were individual and group Organic Management Plans to apply for CERES certification, however, the certification process did not continue because in the first half of 2022 production decreased by 30%, in addition to a sale agreement of 1.5 tons that was signed with Río Nuevo Chocolate company that does not ask for organic certification for sale, which meant that with the production of that time they could supply the customer, but they could not supply more customers so it was not necessary to obtain organic certification this year, however, the goal of 2023 is that production rises and can be supplied to more customers, in this way ASOPROACABOSCA must obtain organic certification to benefit from this type of market as well.

During the months of October to December, the ASOPROTESCO association was accompanied in the process of requesting renewal of organic certification, in December the inspection was received by the CERES certifier (Certification of Environmental Standards), the report of this inspection yielded some details to be solved defined as Non-Conformities, Among which the lack of soil analysis to rule out the use of chemical fertilizers and the insufficient separation in post-harvest management due to the fact that two partners share a dryer infrastructure. In response, ASOPROTESCO committed to carry out soil analyses until August 2023 and the additional dryer for the separation of cocoa post-harvest spaces until February 2023. In this way, the certification was successfully renewed and the organic certificates were received, this is the seventh consecutive year of ASOPROTESCO certification.

2.4 Improve the cocoa production of associations committed to the conservation of the forests of the Ecuadorian Chocó

Since mid-2022, the "Strategic Plan for the improvement of technical capacities for the management of cocoa plantations in farmers' associations linked to the conservation of forests of the Ecuadorian Chocó" was designed, the main objective is that through the implementation of the plan, the production of Cacao Nacional Fino de Aroma was improved through organic and sustainable agriculture of the ASOPROTESCO and ASOPROACABOSCA associations. The document was sent to their direct cocoa buyers to execute the project and additional funds are being sought for its implementation.



Figura 4. (L) Meeting Plan for the Improvement of ASOPROTESCO Cocoa Production. (Right) Taking the GPS points for zoning on Marjorie Angulo's farm

2.5 Start of new processes for the increase of SMM, incorporate new partners or start a new organizational process

The agricultural association Unión Lojana or as it is commonly known, La Ganadera, is one of the closest territories to the Cotacachi Cayapas National Park, through Mario Guananga one of the partners of ASOPROACABOSCA, who is also a park ranger of the park, we were informed that in conversations with partners of Unión Lojana they were encouraged to invite a meeting and in this way a new approach was made to the people of the association To begin the organizational process, 4 meetings were held in the months of June, August, October and November, in these meetings the SMM project was explained to the people of the area, we focus on the conservation of their forests and the environmental and economic benefits they would have as partners.



Figure 5. Meeting with members of the cooperative Unión Lojana on the process of integration into the SMM

After this process of meetings, 5 families are interested in being part of ASOPROACABOSCA and benefited through the sale of wet cocoa in the second sale of the association, with these new families the total of hectares that would be added to conservation is 157 hectares of forest and 34 hectares of national cocoa.

2.6 ASOPROTESCO Electricity Project

The farmer families of the community of Tesoro Escondido have owned the land since the 1970s, since then, living conditions have not changed and remain precarious, without basic services such as aqueduct, drinking water, electricity and roads. Local governments have promised this type of action all these years, but they have not complied. From 2013 with the implementation of conservation agreements, the creation of the SMM, and the consequent improvement of local capacities focused on cocoa production, they managed to improve family income and, in this way, families could make arrangements for their houses, and buy power plants to have electricity for hours at night.



Figure 6. Vereint für Wälder representatives visit ASOPROTESCO

In 2021 Proyecto Washu started a collaboration with the German organization Vereint für Wälder (Unidos Por Los Bosques), managing an economic incentive fund for the protection of ASOPROTESCO forests. This fund has given the opportunity to farmers to carry out the electricity project with their own resources privately, being a unique opportunity for families, this also ensures the commitment that families have had with conservation actions, since through their commitment to the protection of their forests is that they have managed to improve their living conditions. So far, phase 1 of electric posts placement has been carried out, and in 2022, as part of the work of volunteer-researcher Patricia Soutullo, the plan to mitigate the impacts of the electricity project was generated. In the second half of 2022, phase 2 of the electricity project was designed and budgeted, where all the necessary materials are included for the electricity to reach the homes of the families, this phase has a value of \$13495, and it is expected that in 2023 it will be implemented either through the Unidos Por Los Bosques incentive fund or through public funds. If it is by the second way, the incentive

fund can be used in other projects of the association such as the production improvement plan or the wildlife monitoring plan of ASOPROTESCO

2.7 Identify the areas to be reforested within the farms if necessary.

One of the main objectives of the electrical installation project is to reduce any risk to wildlife in the area in order to cause the least environmental impact, one of these mitigation activities is to ensure the connectivity of areas where the electricity project generated a forestry intervention. In this case, the area is approximately 0.5 hectares where it was necessary to locate one of the light poles for the family of Antonio Baluarte. As part of its conservation commitment, it secured a reforestation site equivalent to the deforested area. This site is located in the basin of the river that crosses its property, this reforestation will connect the forest of Antonio Baluarte with the forest of Javier Cedeño, this area will be a biological corridor that will maintain the movement of wildlife between areas. To start the reforestation, we had the support of the forest nursery of the ASOPROACABOSCA association, who donated 312 trees of different native species.



Figure 7. Donation of trees from the native plant nursery of ASOPROACABOSCA for reforestation in ASOPROTESCO

From May to September, Maelle Le Bars, an intern from ISTOM University in France, developed her internship project. Maelle shared experiences with farming families in the reforestation activities of the farms of Javier Cedeño and Antonio Baluarte, and also supported workshops and training on fauna and environmental education for ASOPROTESCO. This is the seventh year that the association receives this type of students or interns, the lodging and food services are offered by the families of the association, helping to diversify the income for the community during the internship periods.

2.8 Realizar Carry out the monitoring of plant and animal species that live in the forests of the associations, ASOPROTESCO

This year, since March, a series of workshops and trainings were implemented on the main groups of fauna present in the forests of the ASOPROTESCO families. These environmental education workshops increase and consolidate farmers' knowledge of the forests they protect in the SMM. The first workshop was an introduction to birds, 16 people attended on average this workshop among young people, adults and children, where they learned the basic knowledge of bird identification, in addition to the main threats and tourism potential.



Figure 8. ASOPROTESCO families in workshops and training on Chocó fauna

In April, a glass frog workshop was held, 15 people attended and learned about their importance in the ecosystem and talked about the role of women in science. Then there was an introductory workshop on amphibians and reptiles, attended by 15 people between adults and children, who together with the biologist workshops Malki Bustos and Michelle Estévez learned to identify and make night observations in tours within the forests of the association.



Figure 9. Introductory workshop to amphibians and reptiles in ASOPROTESCO

A workshop on the impact of human activities on ecosystems was held in June. The objective was to raise awareness about the impact and consequences of how to use natural resources and work the land in a sustainable way.

In the month of July we performed the workshop: Introduction to the Mammals of ASOPROTESCO forests, attended by 17 people, here the participants learned about the main groups of mammals of Ecuador and especially the Chocó diversity in addition to the demystification of myths around these animals.



Figure 10. Workshop of introduction to mammals in ASOPROTESCO, myths and realities.

3. Challenges

The biggest challenge of 2022 was the acquisition of land for the creation of the ASOPROACABOSCA community center. This could not be achieved because the land donated by the community of Cristóbal Colón is in an area of risk for collapse and cannot be done. A new request was sent for another land, but the only available will be donated to the Child Development Center, the president of the community offered

to give an answer, however, so far he has not given it. In 2023 an approach will be coordinated with the local company Verde Canandé, which has several plots of land in its possession and we want to propose the possibility of a donation by the company.

4. Achievements & Conservation Impact

- The number of direct and indirect beneficiaries (members and their families) of both associations is around 70 people.
- There are currently 40 hectares of Cacao Nacional Fino de Aroma and 226 hectares of forest in conservation.
- More than 6000 kilograms of cocoa were sold from the associations ASOPROTESCO and ASOPROACABOSCA, consolidating the value-added model associated with forest conservation and livelihood improvements of farming families. The income received from these sales was \$ 25435 dollars, although this represents an increase of 100% in comparison with the commercial value of intermediaries, we must be aware that this is the annual value, which means an approximate monthly income of \$ 176.63 dollars for each family, making evident the problems that were experienced during 2022, and the need to improve production by 2023.



Figure 11. Sale of ASOPROACABOSCA cocoa to Río Nuevo Chocolate, November 2022.

- For ASOPROTESCO, in March an increase in the price of cocoa from \$3.68 to \$4.10 per kilo was obtained and agreed with Alex Gareis, representative of Bouga Cacao; In addition, an agreement was reached in which from 2023 the price of cocoa will rise to \$ 4.30 and an additional 10% of the Development Fund, a value destined to organizational activities of the Association.



Figure 12. ASOPROTESCO meeting with Alex Gareis owner of Bouga Cacao.

- In May ASOPROACABOSCA received the visit of the owners of the company Rio Nuevo Chocolate, established in the United Kingdom, as a result of this visit it was possible to sign a commercial agreement between both parties, where Rio Nuevo Chocolate committed to buy annually from 1 to 1.5 tons of dry cocoa at \$ 3.96 per kilo, in addition to covering transportation to the maquila site, this represents the first commercial contract of the ASOPROACABOSCA association. In addition, the association received the visit of Alex Gareis, who committed to the association to buy cocoa once they obtain organic certification, cocoa production must be increased to supply Rio Nuevo and Bouga Cacao in the future.



Figure 13, Visit of Rio Nuevo Chocolate and signing of the first commercial agreement with ASOPROACABOSCA

- In June, two representatives of the organization Unidos Por Los Bosques, Aisse Feldheim and Marcel Proust, visited the SMM area and guarantee to maintain the support of the incentive fund for the protection of ASOPROTESCO forests and to support the implementation of the electricity project in the short term.

- The new members of the Unión Lojana association will add 157 hectares of forest for the conservation of the forests of the Ecuadorian Chocó and the biodiversity that lives there.

5. Conclusions

The lack of confidence and motivation in families generated during the COVID-19 pandemic between 2020 and 2021 has been reduced, farmers have regained confidence in the activities within the Sustainable Matrix Model together with Proyecto Washu. The work with ASOPROACABOSCA should be maintained and focus on improving farmers' capacities and encouraging leadership, union, and strengthening ties as an association to advance in their process of autonomy and self-management. ASOPROTESCO ends 2022 by strengthening its process, with the support of conservation incentives for the forests they protect, they can see an autonomous possibility to bring electricity to their homes and improve their living conditions. Documents were generated about the mitigation of impacts of the electric project, the monitoring plan of ASOPROTESCO forest fauna, and the association's ecotourism potential. Evaluation activities were initiated for the mitigation of the impacts of the electric project, through the reforestation of 5000m² between the forests of the families of Antonio Baluarte and Javier Cedeño, 181 trees have already been planted with the aim of creating a corridor between the two forests to allow a safe passage to wildlife.



Figure 14. Environmental Education Workshop at ASOPROTESCO

6. 2023 Follow Up

In 2023 the workshops on conflict resolution and basic accounting, which were pending from the ASOPROACABOSCA planning, will be completed.

One of the priorities for 2023 is to complete the fundraising to start the development of the training plan for the improvement in cocoa production of the ASOPROTESCO and ASOPROACABOSCA associations, it is expected with this plan a significant improvement in the productivity of farmers' cocoa crops, being one of the most important needs currently.

We will work to meet other priorities of the farmers, such as, for example, obtaining an area for the community center of the ASOPROACABOSCA association and finalizing the installation of electricity in the homes of the families of ASOPROTESCO.



Figure 15. Workshop on mammals of ASOPROTESCO protected forests

7. Acknowledgements

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