



GEF-Satoyama Subgrantee Highlights Report

Organization Name:	FIDES
Country:	Ecuador
Reporting Quarter:	FY18 Q2 (October to December 2017)
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<Highlight 1>: CHAME PRODUCTION (*Dormitator latifrons*) IN RICE CROPS (PORTOVIEJO RIVER ESTUARY) AND REPOPULATION OF BLUE CRAB (*Cardisoma crassum*). (CHONE RIVER ESTUARY)

Component 1: SOCIO-ENVIRONMENTAL. Activity 1.1.1.5 Repopulation and monitoring of blue crab (*Cardisoma crassum*) and black ark (*Anadara similis*, *Anadara tuberculosa*)

CHAME PRODUCTION (*Dormitator latifrons*) IN RICE CROPS (PORTOVIEJO RIVER ESTUARY)

A proposal that appears in the implementation of the project as an alternative to the reproduction of crab is the production of chame (*Dormitator latifrons*) in the rice crops of the Las Gilces community (within the estuarine zone), this proposal is considered as an alternative, not only to the food security of the families, but also to the generation of economic income for the producers.

Nevertheless, it is necessary to generate sufficient base knowledge that allows, once the results are known, to replicate the activity if it is positive. With this aim a pilot project was implemented on the property of Mr. Jorge Demera in an area of 1.5 hectares. Mr. Demera was selected as he is a producer in transition to organic crops and maintains a production of rice without chemical products.

Rice production in the community is done by flood. This creates conditions so that in the same place it is possible to have a production of fish, and specifically of chame which is a species of wetlands in the center of Manabí (Its highest production is in the La Segua wetland in the Chone River Estuary).

900 chames were bought in the La Segua wetland, which is a traditional chame breeding and consumption site. Before being put into the rice field directly, juvenile chames were placed into ditches that were dug 120 m long with 0.30 m wide and 0.20. The reason for digging ditches was the small size of juvenile individuals, this is because they could suffer bird attacks, especially from herons, which could even compromise the whole fish-stocking. The sowing was carried out on October 7, 2018.

Three fish monitoring were made, with the following results:

- 1) On October 25, it was found that the samples taken were between 7 and 12 cm long.
- 2) On November 20 the size of chames got a range of variation between 13 and 15 cm long.
- 3) On January 16, where the size of chames had reached 18 cm in length.

There are no definitive results. The experience continues to develop and is in its final phase, however, there are some lessons learned:

- The sowing of chames should be synchronized well with the rice crop; rice must be grown to provide protection to the juvenile chames from bird attacks.
- Initially the chame must go to the puddles that are built around the rice and there must be food ready for them (algae or other vegetable from which chame feeds) to avoid a greater exposure to the risk of herons.
- The biology of the chame should be better known, and an upcoming installation should provide more and better systematized information and, as much as possible, interlink the universities to the accompaniment of this process, since more knowledge and information is required.

REPOPULATION OF BLUE CRAB (CHONE RIVER ESTUARY)

Work continues on the repopulation of blue crab (*Cardisoma crassum*). The Community Tourism Center Jóvenes del Manglar (CTC Jóvenes del Manglar) is responsible for this activity, for which they have developed a methodology that aims to sustainably maintain the repopulation in the estuary.

They are organized in groups of three families who receive a seed fund that allows them to buy around 50 crabs, which are acquired from collectors in the area, especially from the Puerto Ébano area. They are delivered to families, and crabs with ova or that do not meet the required size are reinserted into the mangrove. Families raise and fatten up the crabs.

From the profit of the crab sales they save 50% to purchase more crabs, 10% to buy crab food, 10% goes to the organization and 30% remains with the family of the producers. The crab sale is partly done through the touristic cabin "Las Fragatas" that belongs to the CTC Jóvenes del Manglar, where they sell crab dishes to the tourists that visit the area.

This experience is in implementation.

<Highlight 2>: TOURISM INFRASTRUCTURE IN THE PORTOVIEJO RIVER ESTUARY

Component 2: SOCIO-PRODUCTIVE. Activity 2.1.2.1 Improvement of tourism infrastructure

This activity has taken more time and resources than expected, due to two reasons, the first one is that the earthquake affected infrastructure not considered in the project, and the second one is that the activity financing is covered by several partner organizations; However, in this quarter several tourism infrastructure works have been completed: in San Jacinto it was concluded the construction of 42 dining cabins on the coastal edge that were destroyed by the earthquake; tourism ventures managed by youth groups of San Jacinto and Las Gilces have had a significant progress. The UDC of Las Gilces is completing its ecological path which has been called "José Alberto Ecological Trail" which is a route in the interior of the mangrove forest that allows bird watching and information from native guides, also environmental education on the importance of the ecosystem will be carried out. The Young Entrepreneurs of the Mangrove of San Jacinto acquired a vessel for sightseeing tours through the estuary watching birds and informative talks for tourists.

It is important to note that the counterparts were from the Decentralized Autonomous Government of Manabí (GAD Manabí), Decentralized Autonomous Government of Sucre canton (GAD Sucre), and part of the funding came from awards that youth organizations won in the contest on solidarity tourism called by the United Nations.

Now that the infrastructure is already available, the GAD of Manabí is defining the details of the elaboration of a promotional video of tourism in the Portoviejo River Estuary which will be developed in the following quarter and then a campaign will be launched in social networks to its national and international dissemination.

<Highlight 3>: COMMUNITY LEADERS TRAINING SCHOOL (Adaptation Module on Climate Change Based on Ecosystem (EbA)

Component 3: EDUCATION – SENSITIZATION. Activity 3.1.2.3 Implementation of school leadership for 16 months in semi-classroom training with a modular system, with at least 3 days physical presence each month

With the participation of 28 people, (9 women and 19 men), the first part of module II of the Community Leaders Training School was carried out: Adaptation to climate change based on ecosystems, whose general objective is: To train in conceptual and practical aspects on the sustainable management of biodiversity, ecosystems and local ecosystem services within the framework of Adaptation on Climate Change Based on Ecosystems.

This module has 4 thematic units that will be given in two parts:

First part:

Unit 1: Ecosystems, biodiversity and ecosystem services

Unit 2: Climate, climate change and adaptation

Second part:

Unit 1: Ecosystems, biodiversity and ecosystem services

Unit 2: Integration of EbA

The first part of the module was executed, and the second part of the module is planned for February 24 and 25, 2018.

Transversally, work has been done with regard to the formation of leaders and the topic of oratory and discourse has been introduced as part of the education process. The event had a methodological approach based on recreational activities that encouraged participation and from that point, in a reflexive way, we came to deal with the contents and concepts on the units' topics.

In an evaluative manner of the workshop it can be mentioned that:

- The contents, methodology, activities and materials used were adequate for the understanding and interest of the participants.
- The planned schedule was performed on a 95%
- The training site was adequate for the number of participants and there were convenient places for the outdoor activities.
- The work methodology was very appropriate, it encouraged the participation of everyone in the different activities, which guarantees a better and higher level of understanding of the issues.

An intermediate leveling workshop will be held for 10 participants who did not attend the first part of module 2 (Unit 1 and Unit 2) and will be integrated into the second part of the module and will continue in the rest of the training school process.

The post-event tasks and actions are being monitored to better capture both the contents and their application at the level of their ecosystems and community organizations.

- The reports of the two workshops are added (units 1 and 2).

Photos



Photo 1. Santiago Demera, Mayra Reyes y Rosita Aragundi, from the UDC Las Gilces, participants of the process. Communal House of Agua Blanca. ©Fundación FIDES





Photo 2, 3, 4: Group of participants of the Module Adaptation to Climate Change based on Ecosystems. ©Fundación FIDES



Photo 5, 6: Management committee meetings in the Portoviejo river estuary. ©Fundación FIDES



Photo 7, 8: Meeting with the Minister of Environment of Ecuador asking for his support in the declaration of the Portoviejo river estuary as a communal protected area. ©Fundación FIDES





Photo 9, 10, 11, 12: Pruning Technical Assistance In Playa De Oro. ©Fundación FIDES



Photo: 13, 14, 15: Captivity Breeding of Chame Fish. ©UDC Las Gilces





Photo: 16, 17, 18, 19: Young from UDC building the ecological path. ©UDC Las Gilces