| GEF-Satoyama Project | GEF-Satoyama Report | Subgrantee | Highlights |
|---------------------------|------------------------|------------|------------|
| Organization Name: | FIDES | | |
| Country: | Ecuador | | |
| Reporting Quarter: | FY17 Q1 & Q2 | | |
| Person submitting Report: | María Dolores Vera | | |

<Highlight 2>: Training boys and girls from schools.

This training aimed at improving the knowledge about the importance of the mangrove ecosystem as well as making the kids participate in its preservation and protection and transmit this message to the adults in their families.

The program consisted of 4 events, 3 in-school workshops and a visit to the mangrove. The 3 activities that took place in the classrooms were leaded using a booklet called "Friends of the Mangrove" and each child was given one. (Please, find attached the booklet in digital format)

The schools and kids that received this training are described in the following chart:

| School | Community | District | Boys | Girls | Total |
|---------------------------------------|--------------|-------------|------|-------|-------|
| Primero de Junio Elementary Education | San Felipe | San Vicente | 9 | 2 | 11 |
| Montero Larrea Elementary Education | Larrea | Tosagua | 19 | 10 | 29 |
| Fiscal Salinas School | Salinas | San Vicente | 29 | 33 | 62 |
| Sucre Mieles García School | Portovelo | San Vicente | 25 | 33 | 58 |
| José Saltos Ormaza School | Quemadito | San Vicente | 16 | 18 | 34 |
| Gonzalo Vera Santos School | Las Gilces | Portoviejo | 25 | 23 | 48 |
| 10 de Agosto School | Santa Teresa | Sucre | 16 | 15 | 31 |
| Gran Colombia School | El Blanco | Sucre | 36 | 31 | 67 |
| Rodolfo Chavez School | Las Gilces | Portoviejo | 67 | 81 | 148 |
| Sucre School | San Jacinto | Sucre | 70 | 63 | 133 |
| Total | 312 | 309 | 621 | | |

The last training activity, consisting in a visit to the mangrove, was suspended since the educational authorities have banned all extracurricular activities during this academic year. The reason is the lessons began 2 months later than usual due to the post-earthquake emergency situation, since many of the educational buildings were destroyed and thus needed to be repaired.

This process will continue during the next academic year (begining in April 2017), and it will be extended to other schools as well.

<Highlight 1>: Environmental recovery for salt pools (Commune Las Gilces)

Previously to the start of the production and sale of gourmet salt for human consumption (AS A RESULT OF THE PROJECT), it was necessary to start a process of environmental recovery in some contaminated salt pools which were considered to be potencial sources of environmental pollution and contamination for production pools.

Due to the earthquake consequences on 16 April, the Program for Pequeñas Donaciones (PPD) supported an emergency budget for Proyecto COMDEKS in order to help with the activities taking place in the affected areas. Some support for this activity (environmental recovery) was also requested and with this help together with the management of the Commune Las Gilces, the volunteering support of the Chemical Engineer Maria Elena Delgado (humanitarian work after the earthquake) and the volunteering support from Fundación FIDES and the technical team of Satoyama project, it was possible to make some progress in the following areas:

- 1) Hydrilogical study with the following results:
 - It was determined that this area is highly vulnerable to pollution due to the presence of all kinds of waste and excavation residues left there, as well as the poor sanitary conditions due to the lack of safe drinking water and sewage services in the area.
 - The superficial drainage produced during the rainy season, including drainages in some track sections, reach the salt extraction zone. This may flood the pools and contaminate them by transporting materials and waste deposited in the area.
 - Regarding the consultant requirements and criteria, every pool should be systematically cleaned up and monitored. In the same way, some measures should be introduced in order to avoid pollution in the salt extration zone.
 - This task of cleaning up the pools shall be supported by a campaign aiming to raise awareness about the correct dispose of solid waste among people in the whole commune.
 - Clearly, the process of salt production is handcrafted and empirical. Therefore, it would be highly
 advisable to combine the knowledge acquired by the population with the scientific technical analysis
 used to enhance this process and ensure the production sustainability. To this effect, from a
 hydrological point of view, it is crucial to maintain a continuous monitoring of the water in space and
 time.
- 2) In addition, after some extra water analysis was performed by the municipal safe drinking water company (PORTO AGUAS), it was discovered that the standing water of some salt pools exceeded the level of pollution, making it impossible for the water to be transferred to the municipal oxidation ponds. For this reason, it was necessary to rely on the support of Porto Aguas so they could provide on-site treatment of this water and seal the pools with filling material and fertile soil aiming at its later reforestation. Therefore, the following activities are taking place:
- Several pools have shown a lower degree of pollution and they are being restored. This restoration requires
 physical work since the working team uses shovels to remove the slodge. Despite the hard work and
 expenses involved, this process has already started in order to recover these pools.
- According to the report created by the Hydrologist Engineer Edison Heredia, some areas were selected for treatment. With winter approaching, it was decided that those areas closer to people's houses were the first to be treated since they were dry and shown a lower degree of pollution. Furthermore, useful material has been saved to be used once all the pools have been decontaminated.
- The readjustment of the pools is already taking place as well as the placement of filling material. However, due to the large area affected (10 hectare) and regarding the available funds, we will approximately cover the 70% of the area.

FIDES Foundation is looking for more support in order to continue with this process and thus start a new phase in the Commune Las Gilces in collaboration with Asociación de Productores de Sal (Salt Producers Association) to produce and trade gourmet salt and salt to elaborate cosmetics. Due to the above explained reasons, this activity was delayed in regard with the project schedule. However, a great effort was made to work in these activities and reinforce the process.

Photos



Photo 1: Children are in training workshops about the importance of the mangrove ecosystem - Portoviejo River estuary



Photo 2: Children are in training workshops about the importance of the mangrove ecosystem - Portoviejo River estuary



Photo 3: Children are in training workshops about the importance of the mangrove ecosystem - Chone River estuary



Photo 4: Blue crab monitoring in the Chone River Estuary



Photo 5: Aperture of channels to achieve the flow and reflux of water in the mangrove - Portoviejo river estuary



Photo 6: Preparation of microorganisms for environmental remediation in salt pool – Portoviejo River Estuary.



Photo 7: Cleaning and placement of microorganisms in salt pool - Portoviejo River Estuary