Climate-Smart Bio-Intensive Agriculture and Insetting Carbon Program

Helping women farmers grow quality & quantity organic crops for direct farm-to-consumer

While earning income for enriching their soil / Insetting Carbon Program Part I, *November 2019*

Partners United

Fundación Tropicalia - The Ocean Foundation - Grogenics SB

The Ocean Foundation Grogenics

Empowering Women by Improving Their Farming Opportunities

Grogenics is committed to advancing gender equality, and to empower women and girls in the Dominican, via sustainable farming.

Our goal is to work with like-minded partners to implement our expertise. At the moment, under the auspice of Fundación Tropicalia, six women have gotten together to grow organic produces from their home garden.

To help them succeed, we have paired them with a small stake farmer, Señor Amaury Severino, whom is born and raised in Miches. Señor Severino has dedicated himself to agricultural tasks for most of his life and has been sharing his knowledge.

To help them succeed, we have been planning to provide them with the best soil preparation. This is when Grogenics comes into play. Grogenics has been deploying efforts towards the cycle of transformation of Sargassum in the Dominican into an organic advanced seaweed compost. This soil preparation is ecologically produced and environmentally friendly. It is also safe, it naturally fights major pests and diseases and it is sustainable. Consequently, it eliminates the need for chemicals and it restores living soils by putting massive amounts of carbon back into them. By growing an abundance of healthy organic food, such as fruits, vegetables, flowers, coffee, nuts, grains, etc. the local women farmers and the economies will be positively striving.

To guarantee a healthy future for years to come in Miches, this core group of women will be the initiator in the concept of Climate-Smart bio-intensive farming. This type of farming will enable both our *Insetting program* and the sustainable initiative of *farm-to-consumer*. The more financially sound this core group of women will become, the more of them in the community will take the leap and will join in.

To empower these women, Grogenics proposes to improve their farming opportunities from the quality of the soil preparation up to the selling of their organic fruits and vegetables. Presently, they harvest the following fruits: tomatoes, passion fruits, eggplants, papayas and watermelons. They also harvest the following vegetables: radishes, carrots, beets, celeries, lettuces, leeks, okras (molondrón), 3 varieties of taro (yautia), cassava (yuca), yams and beans.

Defining the concept of Climate-Smart bio-intensive farming.

1. sustainably increasing farming productivity and incomes.

2. adapting and building resilience to climate change.

3. reducing and/or removing greenhouse gases emissions.

How can a Climate-Smart bio-intensive farming approach in the Dominican be implemented?

To sustainability increase farming productivity & to address climate change:

- Grogenics, whom has partnered in early 2019 with AlgeoNova in Punta Cana, will sell its seaweed compost in order to build up the soil for agricultural crops.
- Our seaweed compost will reduce water consumption and will be building resilience to climate change, including dry spells.

To sustainability increase farming income for these women:

- Grogenics will provide these women farmers with an App. This App will connect them with consumers directly via their phone, making it a direct *farm-to-consumer* transaction.
- The farmers' offers will be instantly matched to the demands from customers in Miches and further districts (residents, markets, hotels, resorts and restaurants).
- The distribution will be ensured by a fleet of small transport vehicles incorporated into our network, similar to the Uber concept.

Step-by-step approach to Insetting Carbon program: Reducing greenhouse gasses emissions.

The Insetting Carbon program is being piloted at the Puntacana Resort & Club as a means to both remove nuisance sargassum seaweed before inundating tourist beaches and to sequester and store carbon through soil building and the cultivation of organic produces using seaweed-derived agricultural inputs. The program also enables farmers to earn Income for enriching their soil. How it works:

Step 1: SIGN UP	Farmer sign up with Insetting Carbon Program
Step 2: GATHER DATA	FGPC and TOF work with growers to gather data, analyze soil samples, and verify carbon has been sequestered.
Step 3: ADOPT PRACTICES	Farmer adopt regenerative practices and reduce inputs. We support with agronomic advice.
Step 4: VERIFY	Collect additional data to verify tons of carbon sequestered or reduced.
Step 5: PAY	We pay the farmer