Our Little Island Does Not Have To Become A Rock

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Petite Martinique, the most northerly of the three island state of Grenada is a very unique island with strong cultural heritage and a community based economy. With a population of just under 1000 people and an area of 500 acres, the island has seen serious climatic issues which are slowly reducing the size. Further, due to the loss of tree cover on the north-eastern side of the island of Petite Martinique and negative farming practices over the years, mass erosion is visible in the Madam Pierre area. The boat building industry on the island has seen unsustainable harvesting of cedar over the years and the local custom of only consuming the male sheep and goat has resulted in a spike of the livestock population resulting in many areas being heavily over-grazed.

Dexter Miller, a local environmentalist, who has been living in the Madam Pierre area over 25 years claims that “the sight of tons of soil getting into the sea and destroying the reef system is evident and alarming.” He further stated that “the island has seen the loss of most of its white sand beaches, which is evident in all the other Grenadines islands. Coastal erosion and reef loss is a result of the effects of large amounts of soil deposits from the land and there has been a great reduction in our fish stocks, with the extinction of some species”. All of this can be attributed to the massive land degradation happening on our lovely little island. There are many stories being told of how lush the Madam Pierre area used to be. The women grew a variety of crops like corn, peas, cotton, lime and ground nuts. Unsustainable farming practices and improper designs for road construction lead to the destruction of the area.

Since the island’s main source of income is derived from fishing; addressing the issue of erosion and deforestation was of great concern to every islander. The area to set up the pilot project was identified by the community and the method of approaching the issues were also discussed at the community level. A community forest ranger was hired to work along with the project, spear heading the reforestation and drainage control efforts.

Massive Gully caused by the cutting of land areas for road construction
A consulting firm was contracted to design the project, unfortunately to date they did not come up with a valuable design or approach to address the issues facing the island. The local project team with the help of local engineering skills came up with a design based on local knowledge of the area. Using an ‘A’ frame to highlight the land contour, check dams were built within the gullies to reduce the force of the water and at the same time trap soil that would have been lost. No fixed design was used in constructing the check dams but the basic idea was adapted to the terrain. The entire process was very participatory with workers ideas taken onboard. Within a few weeks of building these dams the rains came and the positive effects of the check dams were evident. However, some check dams had to be raised because of the accumulation of soil after the rains and the community saw the need to build more check dams.

Livestock Management
Another key area is that the issue of over-grazing had to be tackled, which meant providing avenues for farmers to understand the need for proper livestock management and income generation. At first, it was a challenge, but farmers slowly bought into the idea. As a result, farmers could make their stock much more manageable and at the same time earn extra income.
A workshop session was held on the Island, inviting local farmers and others from the neighbouring Island of Carriacou. Topics covered were proper livestock management practices for sustainable living and income generation from themselves and their families.

Workshop Held with livestock Farmers

The Nursery
Local knowledge was used to construct a hoop nursery, which was used to propagate the plants for the reforestation component of the project. Since the island has no natural source of running water, we had to construct a catchment for irrigation of the plants in the nursery. A storage shed was built for the tools and the roof used as the catchment, which fed into a black plastic storage tank. The refurbishment of a public water cistern was done to provide additional storage.

Finish Nursery and Plants been introduced
The education and awareness program, addressed the issues as it relates to climate change on the island. The school and community were actively involved in the awareness, propagation and planting of the trees. The children were very excited and very keen to learn what was being taught. They got the opportunity to play their part too. They were brought on a field trip to the nursery, where they learnt even more about the importance of forest and the effects of erosion on both the land and sea.

The late disbursement of funds saw disruptions in the implementation of some components, and also disgruntled service providers. Since the project was pegged to Euro currency some training components had to be omitted due to currency fluctuations and loss from the exchange rate.

Nevertheless, the results of the project thus far have stirred great interest within the community, with many residents making the request for the Government to give further support once the present funds have been exhausted. This Project brought out local ideas, skills and the ability of the community to develop further environmental initiatives.