

Introduction to IWEco

My task this morning is to provide an introduction to the IWEco project.

I would prefer not to bore with the obvious details as I gather that a project summary has been provided. Rather, I will quickly touch on a series of experiences which I hope may demonstrate the project's relevance and potential to significantly positively impact, through its multipronged approach, the landscape, seascape and people of Soufriere.

In October 2010, the communities within the upper Soufriere watershed were devastated by Hurricane Thomas. Its ferocious winds and torrential downpours washed away exposed soil from the steep vulnerable hillsides while the rivers burst their banks bringing houses down in its path. 4 deaths were recorded in upper Soufriere watershed: a mother and her two sons; at a separate location the father of one of boys and an elderly man who was washed away, his body was never found.

Go back 16 years from Thomas to Tropical Storm Debby (1994) also in the upper Soufriere watershed. A house was washed away by a land slide and one of the female occupants did not survive. This house was located directly opposite a dasheen farm on a very steep slope. Dasheen is a delicacy in St. Lucia, takes 6-9 months to grow and relatively lucrative for farmers with approximately XCD200.00 a bag (flour sack). Unfortunately, dasheen requires the farmers to strip the land of all vegetation, exposing the soil to the elements and making the slopes extremely vulnerable to landslides. In this particular instance, the soil succumbed.

The loss in life and dollars from these natural disasters were significant.

The preceding paragraphs describes events not confined to Soufriere; not limited to St. Lucia. Caribbean SIDS are normally the ones that receive the brunt of the effects of climate change although they contribute the least towards its effects.

It is with this recognition (that climate change will affect Caribbean SIDS more directly than other regions of the globe in terms of scope and intensity of impact and the need for governments to hasten the process to safeguard the natural resource base so as to make communities and ecosystems resilient to the impacts of climate change) that IWEco was born.

Funded by GEF, implemented by UN Environment it involves 9 participating Caribbean countries.

In St. Lucia, IWEco is very targeted with its main objective being to mitigate the poor biophysical conditions (due in particular to unsustainable land management practices) in the Soufriere Watershed, which have impacted sustainable livelihoods of the population.

Note: So far we have established relevance of the project: it could save lives, property and entire communities. Component 1.1 of the project speaks to *Measurable stress reduction in the Soufriere watershed through appropriate sustainable water, land and ecosystems management interventions that account for climate change.*

At the initial stages of the project, the project team was shown areas where slope stabilization work was carried out through funding by Australian Aid. In some instances, farmers had cut forests tress to return to dasheen cultivation.

Under IWEco, all farmers are given an opportunity to select their crop of choice, once it meets the requirement of being able to stabilize the soil. To date, the project has assessed approximately 100 farms and based on these assessments provided customized restoration plans to approximately 75 farmers. These restoration work has begun with farmers being provided with the plants and labour free of charge. The objective is that in a few years, farmers on steep slopes will be able to replace the cultivation of dasheen with even more lucrative crops; crops that will make the slopes less susceptible to landslides. More on the slope stabilization initiative will be discussed in Learning Station 5.

Note: Conservation is important but will only be successful if beneficiaries/farmers can envisage economic benefits and this is why IWEco continues to work with the Forests officers and the community to identify high value tree crops that would replace some of the plants which tend to degrade the land. Hence Component 1.2: *Enhanced livelihood opportunities and socio-economic co-benefits for targeted communities from improved ecosystem services functioning.*

In the course of slope stabilization efforts, workers from the community had to be contracted and trained in farm assessment, nursery operation etc. After the first 13 were engaged officers were inundated with request by unemployed young men and women from the community for work. An addition 20 individuals for the community were contracted on a short term basis for work during the peak planting season. Their information was captured: most younger than 25 with hardly any job opportunities since leaving school at age 18. Sad to say these 20 were only a fraction of the unemployed interested in working on the project.

Other social issues were evident such as alcoholism, issues of mental health, solid waste management etc.

Lesson: Entering into a community to undertake conservation work when there is stark evidence of a lack of basic needs then the project has to re-strategize and develop initiatives, within the ambit of the project of course, that includes the marginalized. People can't conserve when other critical issues such as poverty take presidents.

Therefore, preparation is currently being made for five pilot initiatives encouraging unemployed/underemployed youth into agro forestry through the cultivation of edible mushrooms, orchids, vanilla, chocolate making, Vetiver grass etc. The project has also partnered with the community and agencies such as GEF SGP in the implementation of an Agro Tourism Park more of which will be explained in the Learning Station 1.

In one of the site visits to the upper watershed where the house was destroyed by tropical Storm Debbie in 1994, it was observed that the house was rebuilt but, regrettably, the same unsustainable practices were evident with a dasheen plantation reestablished directly opposite, on the site of the major landslide. A few site visits thereafter the project team was approached by a relative of lady who died in the house, requesting advise form Forests officers on what actions should be taken by him or the Department to ensure that this farmer discontinues the dasheen cultivation directly opposite the property. He voiced his anxiety that every time it rains he is forced to leave the house for fear of another landslide. The answer given by a forests

officer then was that the department's hands were tied as the land in question was privately owned. This brings to light the need for legal amendment that will provide the Department of Forestry with more "teeth" to deal with individuals whose farming practices threaten life and property.

It also revealed that more emphasis needs to be placed on awareness raising and behavioral change.

Note:

- 1. Need to explore legal amendments even though a difficult and politically sensitive matter.**
- 2. Need to increase knowledge to change attitude and change behavior. This process has to be systematic and consistent.**

The transformative process of behavior change that one goes through can be as a result of constant involvement in the project as was the case with some project personnel. Hence, IWeco intends to collaborate with Caribbean Sea to get students and farmers involved in monitoring water quality and soil quality respectively. Learning Station 3 highlights the work of Caribbean Sea and citizen science specifically water quality monitoring with students.

The project, in an effort to increase its presence in the upper Soufriere watershed, sponsors and gets involved in the many community activities. IWeco has sponsored community fairs, Nights of the Arts where the youth display their talent, summer camps for kids, art competitions etc. At some point, consideration was given to sponsoring a carnival band with an environmental theme. Additionally, the project involves the community as much as possible in exploring solutions to their environmental problems. Learning Station 4 will cover this approach which so far seems to be successful under IWeco.

Note:

- 1. the objectives of IWeco are not considered separate from other aspects of community life but rather should be mainstreamed whereby the messages from the project are always at the back of the minds of community residents; and**
- 2. Communities have to be engaged in deriving solutions to their problems in order to get buy-in.**

In March 2018 we were contacted by a Dr. Chantale Bégin, a biologist at the University of South Florida who was in Soufriere for several weeks for research and teaching with 21 students for an elective called Tropical Marine Ecology. They were surveying the coral reefs in and around the SMMA and measuring sedimentation rate on those reefs. Chantale and her class were very interested in seeing IWeco's restoration efforts that were ongoing in the upper Soufriere watershed and to help out. Their keen interest on the work of IWeco demonstrated that land uses such as agriculture has the potential to greatly increase erosion and sediment delivery to downstream waters.

Note: The ridge to reef approach is critical in solving watershed issues. Learning Station 2 will explore the work of the Soufriere Marine Management Association and a landscape approach to the Blue Economy.

Some Cross cutting issues:

In discussions with two female nursery employees, it was revealed that one had 9 children while the other had 7. In fact, in April 2019 one lost her partner to illness. These women indicated that they were happy to be employed with the project since they are now able to earn XCD 70.00 a day while before they made much less, XCD40.00 a day for tending to someone's garden. It was later explained that their wages were that low because in farming, women are normally paid less than men for the same type of work. IWeco does not differentiate pay by sex although some male workers have complained that they should earn more than women since they (the men) are more productive in the field.

Lesson: All work needs to be valued and perhaps women need to be placed where they have the competitive edge