Lessons Learnt Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States (IWEco) in Saint Lucia

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The nature of the problem affecting Soufriere

Field crop and vegetable farmers is the most popular job in Soufriere in 2016, from a list of 290 jobs (PROPEL, 2016; Saint Lucia Government Statistics Department, 2016)

Common agricultural practices are unsustainable and have resulted in soil erosion, landslides, turbidity and the contamination of the rivers and reefs in the upper, middle and lower watershed (Hyder Report 2008; Forestry Department and IWECo, 2018).

There is an urgent need for action to reduce the threats associated with use of the environment, to maintain livelihoods and improve the well being people in Soufriere

Source https://www.viator.com/St-Lucia-attractions/Gros-Piton/d38-a2471
Summary

- The lessons learnt under the Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States (IWEco) Project were achieved using participatory processes with three groups in Fond St. Jacques Soufriere: Youth, farmers and the Fond St. Jacques Development Committee
Lesson 1 Use current demographic data to formulate the appropriate management strategies.


- Tables 1 and 2 illustrate the trends in the population of Soufriere, in terms of “Age groups and Gender” and “Employment and Gender”.
### Tables 1 Trends in the population of Soufriere in terms of “Age groups and Gender” (St. Lucia Government Statistics Department, 2018)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-29 Years</td>
<td>Male</td>
<td>363</td>
<td>316</td>
<td>679</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>326</td>
<td>267</td>
<td>593</td>
</tr>
<tr>
<td>Total</td>
<td>Male</td>
<td>4294</td>
<td>4129</td>
<td>8423</td>
</tr>
</tbody>
</table>

There are 165 more males than females in the population of Soufriere; there are 86 more people in the 25 to 29 years age group than the 30 to 34 years age group.
### Tables 2 Trends in the population of Soufriere in terms of “Employment and Gender” (St. Lucia Government Statistics Department, 2018)

<table>
<thead>
<tr>
<th>EMPLOYMENT</th>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>1879</td>
<td>1385</td>
<td>3264</td>
<td></td>
</tr>
<tr>
<td>Not Employed</td>
<td>2415</td>
<td>2744</td>
<td>5159</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4294</td>
<td>4129</td>
<td>8423</td>
<td></td>
</tr>
</tbody>
</table>

There are 1895 more unemployed people compared with employed people in Soufriere; there are 329 more unemployed females than unemployed males; there are 494 more employed males compared with employed females.
Characterization of farmers in the Fond St. Jacques Soufriere according to **Age and Education** from a total of 76 farmers assessed in December 2018 (Forestry Division and IWEco, 2018)

Most farmers from Soufriere in the age groups 36 to 55+ acquired only primary school education; the farmers in the 26-35 age group acquired secondary school education.
Characterization of farmers in the Fond St. Jacques Soufriere according to Age, Education and Gender from a total of 76 farmers assessed in December 2018 (Forestry Division and IWEco, 2018)

Most farmers in Fonds St. Jacques Soufriere are male.
Lesson 2

The conceptualization of the management strategies by the community is key for them to take ownership of the management process of the environment.

The participatory tools applied to: *visioning an ideal future, the identification of key stakeholders, problems and opportunities associated with that future, together with the prioritization of activities by voting*, contribute to the community understanding the actions required to ensure successful implementation of the work program; further this collective action in decision making motivates members to continue to participate in the sustainable development processes in Fond St. Jacques Soufriere.
List of stakeholders developed by the Fond St. Jacques Development Committee

- Spike Waterfall
- L’esperance Water Spring
- Bois D’Enge L’esperance
- Sulphur Spring Trail
- Jimmy Jimmy Estate
- Edmund Forest Cabin
- Micro reflector trail
- Cross country hike
- Morne Penapiee
- Isa Jorriiff
- River Dorée lands
- Interpretation Center (FSJ resource center)
- Agrofarming/Tourism
Figures showing the voting process to prioritize key stakeholders, problems and activities by the Fond St. Jacques Development Committee
Tools used for voting in priorization participatory processes

(CANARI, 2012)
Three figures showing the use of a timeline to sequence activities
Lesson 3

Institutional support from government and non governmental organizations provide technical and financial support so that communities to make the best decisions.

IWEco and GEF SGP, community and governmental and non governmental partnerships have generated synergies in project design and implementation driven by communities.
The key question is how to empower communities to achieve sustainable development using biodiversity.
Theoretical context of the alternatives for sustainable use of forest types

Multilateral Environmental Agreements of the United Nations (UNFCCC, 2016)

Protected Areas (PA) (Oldekop et al., 2015); Agrotourism (Ciglovská, 2016).

Silviculture, GIS and establishment of plantations (Bray et al., 2006; Perez-Verdin et al., 2009; Pirard, Dal Secco y Warman, 2016; Martínez et al., 2016).

Agroforestry and agroecology (Los sistemas agroforestales y la agroecología (Gliessman, 2013; Mazo, Rubiano y Castro, 2016)

Collective action, institutions and leadership (Ostrom, 2011)*

* The work done in Soufriere applies a combination of all of the theories above, with emphasis on Elinor Ostrom’s (2011) framework.
Literature Cited


Department of Forestry, Integrating Water, Land and Ecosystem Management in Caribbean Small Island Developing States (IWEco) (2018.) Rapid Sustainable Land Management (SLM)-related Diagnostic Analysis for the Soufriere Watershed, report prepared by Aretha Darcheville.


Promotion of regional opportunities to promote through Enterprises and Linkages (Propel) (January 22nd, 2016) Market Study for Fresh Produced St. Lucia, Grenada, Dominca and St. Vincent and the Grenadines, World University Services of Canada (WUSC), Caribbean Commissioned report, prepared by: Arnold Babwah & Associates 6
Thank you everyone, especially the Soufriere Community, IWEco, GEF SGP, other agencies and Forestry Division