



Organization of  
American States

**“BUILDING SUSTAINABILITY OF THE COASTAL  
COMMUNITIES OF VIEUX-FORT, SAINT LUCIA AND THE  
POINT SABLE ENVIRONMENTAL PROTECTION AREA”**

**FROM:** Saint Lucia National Trust

**TO:** Organization of American States

**THROUGH:** Bishnu Tulsie- Director

**DATE:** 26<sup>th</sup> June, 2015

**SUBJECT : JANUARY – JUNE 2015 REPORT**

## **OBJECTIVES**

- To promote energy efficiency by establishing a demonstration site and hosting a program of visits;
- To improve the sustainability of solid waste management by starting a composting pilot project; and
- To build resilience to natural disasters in the face of coastal erosion and climate change by building local community understanding of coastal processes and implementing dune stabilization and beach protection measures.

## **EXECUTIVE SUMMARY**

The Saint Lucia National Trust (SLNT) is a non-profit, non-governmental membership organization established by an Act of Parliament. The role of the SLNT is to conserve the natural and cultural heritage of Saint Lucia. The SLNT is the key partner agency among several agencies that form the management team for the Point Sable Environmental Protection Area (PSEPA). The Trust is able to manage PSEPA through its southern office, the Maria Islands Interpretation Centre, located in Vieux-Fort.

The project titled “Building sustainability of the coastal communities of Vieux Fort, Saint Lucia and the Pointe Sable Environmental Protection Area,” seeks to improve the sustainability of Vieux Fort’s coastal communities, coastal resources (including Pointe Sable Environmental Protection Area, PSEPA) local livelihoods, human health and nationally-significant economic infrastructure. The project also seeks to reduce vulnerability to climate change in the south of Saint Lucia.

This report will highlight through the use of photographs, videos and documentation the achievements of the project for the first six months. The Saint Lucia National Trust successfully completed four products as established within the project agreement, during the period of January to June 2015. These include, according to 3.1 and 3.2 of the project agreement (PO#374380):

Product 2 – Presentations about clean energy and energy efficiency for Vieux Fort Stakeholders;

Product 3 – Community meetings about coastal zone processes, human impacts on the coastal, impacts of climate change and short term mitigation measures;

Product 5 – Pilot compost project implemented by homes and small businesses; and

Product 11 – Stormwater drain from Hewanorra International Airport.

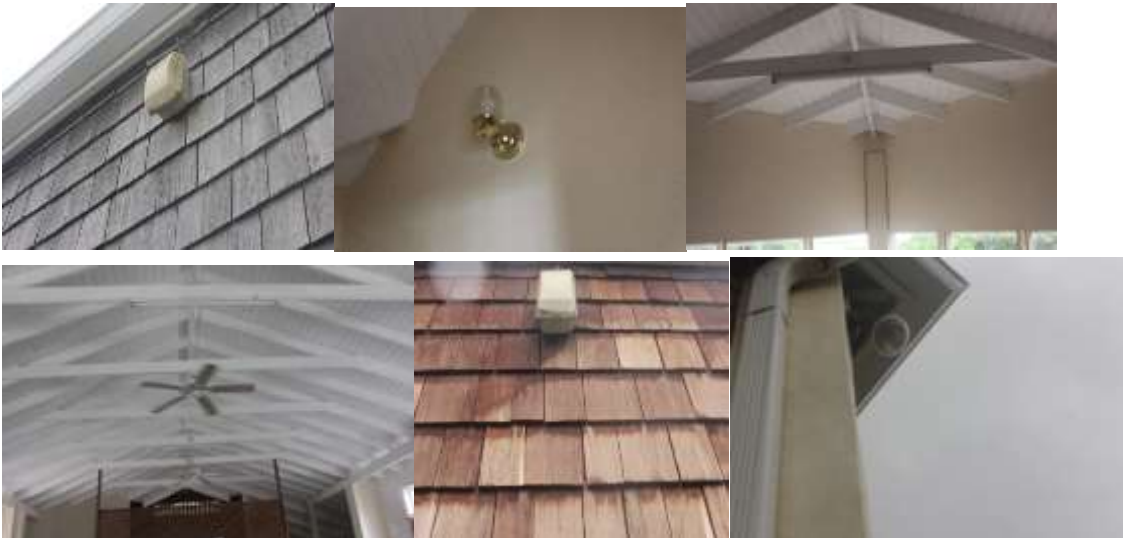
Product 1 which involves the installation of an energy efficient lighting system at the institution's southern office is already in progress, and is scheduled to be complete in the last week of July 2015. The dune revegetation and beach protection measures required for the completion of Product 4 commenced in May and is scheduled for completion in August 2015. The waste collection bins under Product 6 was deferred to phase two due to budgetary constraints. Although the stormwater drain under Product 11 was scheduled to be undertaken in phase two of the project, given that the activities involved required dry weather conditions it was more appropriate for it to be executed during the dry season which ends in June.

## **PRODUCT ONE (1)**

### **Installation of Energy Efficient Lighting System**

The Energy Efficient lighting system is well underway to being installed and will become operational at the Saint Lucia National Trust Southern Office on 25<sup>th</sup> July. Three quotations were obtained for the new lighting system which will replace three (3) screw incandescent bulbs and eight (8) tube lights. The tube lights will be retrofitted and then installed. This will be done at a cost of US\$303.14. There was a slight delay in installation due to the company not having the supplies - seven (7) of the required 18Watt 4Ft tube lights in stock.

The second element of this component identified in Product 1 which is the installation of a solar-wind outdoor lighting for demonstration purposes was deferred to phase 2. The first disbursement of funds did not permit for this component of project activities. However the Trust does anticipate its procurement and installation will be executed in the second phase of the project.



These are some of the existing incandescent lights at the Southern Office which will be replaced with LEDs.

## **PRODUCT TWO (2)**

### **Presentations on Clean Energy & Energy Efficiency**

Expert Agencies involved in this initiative include:

**Ms. Benise Joseph - Energy Officer - Ministry of Sustainable Development, Energy, Science & Technology**

**Mr. Chris Wyatt - Civil Engineer – Design and Construction Solutions (Private Commercial)**

**Ms. Denell Florius – Manager - EcoCarib (Private Commercial)**

**Mrs. Paula Calderon -General Manager - Caribbean Awnings (Private Commercial)**

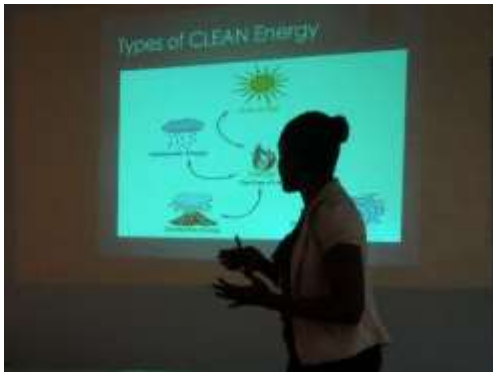
**Mr. Kerne Antoine: Electrical Engineer - John C. Francis Associates Ltd (JCFA) (Private Commercial)**

Twenty two (22) representatives from various stakeholder agencies attended the presentations. They were engaged in topics on;

- I. What is clean energy and energy efficiency?*
- II. Building Design and Construction for High Energy Performing Buildings.*
- III. Practical Solutions for Building Renovations or Additions to Improve Energy Efficiency.*
- IV. Clean Energy Solutions for the Home and Transport.*
- V. Energy Efficient Solutions for the home.*
- VI. Government Policies and Regulations as it relates to Clean Energy and Energy Efficiency.*

Following this presentation the Trust saw the need to have a practical approach to energy efficiency. The institution is in the initial stages of implementing the pilot Energy Efficient component which would focus on replacing fluorescent or incandescent bulbs with LED bulbs in homes within the Vieux Fort community. The SLNT anticipates that as many as

four (4) households will be able to benefit from this venture. Selection of those households are being done with the assistance of Ministry of Social Transformation, Local Government & Community Empowerment, Parish Council and the local town council of Vieux-Fort. The recipients must be willing to make available to the Trust copies of their electricity bills for the two-three months before the installation of the LED bulbs, and two-three months thereafter, so that patterns of electricity consumption could be properly monitored. The report generated will be for public awareness and promotion.



In the above pictures are Ms. Benise Joseph (left) and Mrs. Paula Calderon (right) presenting at the Clean Energy and Energy Efficiency Meeting



Ms. Kerne Antoine doing a practical demonstration with LED lights and Incandescent lights.

## **PRODUCT THREE (3)**

### **Community Meetings**

Three (3) meetings were organized under this component to discuss coastal zone processes, human impacts on the coast, impacts of climate change and short term mitigation measures. The first which took place on March 10<sup>th</sup> 2015 at the Sustainable Development and Environment Division Conference Room of the Ministry of Sustainable Development, Energy, Science and Technology, was an internal briefing which involved presentations by Mr. Richard Huber Chief - Sustainable Communities, Hazard Risk, and Climate Change Section - Department of Sustainable Development

Organization of American States, and Ms. Emma Doyle- Gulf and Caribbean Fisheries Institute (GCFI). Others present at this meeting were three (3) representatives from Ministry of Sustainable Development, Energy, Science and Technology, four (4) representatives from Saint Lucia National Trust, and Mr. Adams Toussaint, Chief Forestry Officer.

The second session engaged various stakeholders such as environmental students, the Marine Unit of the Royal Saint Lucia Police Force, Officers from the Crowns Lands and Fisheries departments respectively, Eco South Tours etc. Approximately forty (40) persons were in attendance including Mr. Augustine Dominique Protected Areas Manager who gave the opening remarks on behalf of the Permanent Secretary in Ministry of Sustainable Development, Energy, Science and Technology. Presenters included:

**Mr. Christopher Hylton - Senior Coastal Engineer/ Director of Construction Smith Warner International Ltd** –*“Vulnerability reduction for coastal infrastructure and Best Practices*

**Mr. Cassian Henry - Zonal Supervisor, Saint Lucia Solid Waste Management Authority** - *“Recycling solutions-Composting”*

**Mr. Michael Skeete - Water Resources Officer, Ministry of Sustainable Development, Energy, Science and Technology,** *“Water Quality-Casual Factors/Urban Impact”*



**Ms. Emma Doyle - GCFI – “Intro to *Coastal Sustainability*” & “*Assessing Actions for Managing Coastal Change Urban Sustainability*”**

**Mr. Richard Huber – OAS - “Urban Sustainability”**

**Ms. Benise Joseph - Energy Officer - Ministry of Sustainable Development, Energy, Science Technology - *Energy Efficiency - Practical Options for residents/commercial spaces***

On 12<sup>th</sup> March 2015, community members were invited to the Maria Island Interpretation Center to participate in presentations made by Ms. Emma Doyle who spoke on coastal rehabilitation solutions and sargassum seaweed phenomenon. Mr. Christopher Hylton presented a case study on mitigation measures and also vulnerability reduction for coastal infrastructure and best practices. This component came to a close on March 13<sup>th</sup> with a field visit of Point Sable Environmental Protection Area (PSEPA). The visit highlighted beach erosion and a road wash from flooding, deforestation and the effects of vehicular damage to beach vegetation.



Internal briefing for relevant agencies at the Sustainable Development & Environment Division Conference Room on 10<sup>th</sup> March 2015



Participants at the stakeholders meeting on 11<sup>th</sup> March 2015 which took place at the National Skills Development Center (NSDC)



Public community meeting at Maria Island Interpretation Center (MIIC) on 12<sup>th</sup> March 2015



Field Visit of Point Sable Environmental Protection Area (PSEPA)

## **PRODUCT FIVE (5)**

### **Pilot Composting Project**

This took the form of a two (2) day meeting. It was very well attended with between 25-30 persons including restaurant owners, school students and teachers, farmers and grounds caretakers, on each day. Saint Lucia Solid Waste Management Authority (SLSWMA) assisted in providing overall technical support. The lead presenter was Mr. Cassian Henry, Zonal Supervisor, SLSWMA gave an extensive overview of composting in general and composting practices in particular on 6<sup>th</sup> May 2015. The second day involved practical demonstrations where the participants were able to use their knowledge from the previous day.

This was a very successful component. Three (3) compost sites were established within Vieux-Fort. The first site was created at the Saint Lucia National Trust Southern Office grounds, the other at the Vieux-Fort Primary School to be overseen by their environmental club, and the last one at the Reef Restaurant and Bar operating at Sandy Beach, within PSEPA. The compost generated will be used as fertilizer in the gardens of the establishments.

Mr. Cassian Henry not only facilitated the meetings but he also availed himself to provide support at all three established sites. On 13<sup>th</sup>, 19<sup>th</sup>, 21<sup>st</sup>, 22<sup>nd</sup> May and 4<sup>th</sup>, 10<sup>th</sup>, 11<sup>th</sup>, 16<sup>th</sup> June 2015, he was able to visit and provide further technical advice to those who would be taking responsibility for the compost site. SLNT was able to purchase and equip the Vieux-Fort Primary School with a rake, watering can and plastic cover to be used for their compost site. The Trust also anticipates in the new school term another compost site to be established, at the Vieux-Fort La-Ressource School by the agricultural students.



The above pictures are of the pilot compost meeting on the 6<sup>th</sup> of May 2015 where participants were actively engaged in discussion on composting



The above pictures were taken on 7<sup>th</sup> May 2015 at the second pilot composting meeting. The group participated in a practical demonstration outside the Maria Island Interpretation Center



These four (4) pictures are of the compost site established at the Reef restaurant & bar which operates within PSEPA



This is the second visit to Vieux-Fort primary where the compost site was demarcated and Mr. Cassian Henry was explaining to the students of the environmental club the process of composting and the steps to be taken before his next visit





June 10<sup>th</sup> 2015, Mr. Cassian Henry actively engaged the environmental club students in composting.





June 10<sup>th</sup> 2015, the top picture shows the students covering their compost. In the bottom picture Saint Lucia National Trust staff handed over a rake, watering can and plastic cover to the environmental club students for their compost site.



This is the small garden created at the Reef Restaurant & Bar. They have used the compost as fertilizer.

## **PRODUCT ELEVEN (11)**

### **Storm Water Drain Clearance**

The Saint Lucia National Trust (SLNT) completed the process of de-silting a major storm drain in Vieux Fort near Sandy Beach. The project was geared at reducing threats to the coastline line within the Pointe Sable Environmental Protection Area (PSEPA). The storm drain, which runs diagonally from the airport fence to the Sandy Beach shore line, had been clogged for many years. The drain runs 28 meters beneath the road. The two trenches where the backhoe operated measured 56 yards. Fifty (50) yards of sand was extracted on either end of the storm water drain, including what was removed by the manual labourers.

This activity has restored functionality to this infrastructure which is one of many serving as excess water relief points in the area. Most of the extracted sand was used to replenish sand dunes which suffered damage as a result of the Christmas Eve trough in 2013.

All works were supervised by engineers from the Ministry of Infrastructure, Port Services and Transport. The Vieux Fort South Constituency Council, Saint Lucia Air and Sea Ports Authority (SLAPSA) and the National Conservation Authority also provided institutional support for this activity which was completed on 29<sup>th</sup> May 2015.

During the implementation of this component of the project it was observed that the right drainage hole of the storm water drain was completely blocked, the sand was very compacted, and a tree had either grown or got lodged in it. This caused great difficulty for manual unclogging. Following this observation, a suggestion was made to install a steel trap to prevent recurrence of this issue in future. Although not part of the initial scope of works, there was sufficient funds to permit the

installation of the steel trap. It will be maintained the National Conservation Authority (NCA), grounds crew.



Above are pictures of the inlet and outlet of the storm water drain before clearance, located in the vicinity of the airport and the sandy beach



Works in progress on storm water drain clearance



The inside of the drainage hole of the storm water drain. The picture on the left shows one of the manual labourer removing water filled, sand from the drain. The picture on the right shows the drain after complete clearance.



The picture above shows some of the sand extracted from the trenches. This sand was used to commence the other project component- dune rehabilitation



This is the steel trap which was installed at the inlet of the storm water drain. This steel trap will be maintained by the National Conservation Authority (NCA)

## STAKEHOLDER MEETING

A meeting was convened at the Maria Island Interpretation Center on 14<sup>th</sup> May 2015 at 10:00am. Agencies present were:

**National Conservation Authority (NCA)**

**Crown Lands**

**Vieux-Fort Constituency Council**

**Ministry of Infrastructure Port Services & Transport (MIPST)**

Representatives:

Ian McAllister- Field Supervisor NCA [ianm.mcallister@gmail.com](mailto:ianm.mcallister@gmail.com) 713-5536

Harold Lashley-Crown Lands- [lasleeh@hotmail.com](mailto:lasleeh@hotmail.com) 285-2519

Winall Joshua- Mayor VF C.C- [winallj@yahoo.com](mailto:winallj@yahoo.com) 460-2228/722-7180

Helena Rueben- Assistant Town Clerk VFCC

Eddie Parsade- Engineer MIPST- [eparsade@gosl.lc](mailto:eparsade@gosl.lc) 722-2705

Waitson Charlery-Technical Dept MIPST

Meeting Points:

- Storm water drain clearance briefing
- Zoning of specific areas on the beach, making it inaccessible to vehicular traffic in particular. The zoning will not limit recreation activities. The area of interest begins from southern boundary of the Cassius Elias' property and reaching the red bench along the stretch of beach.

At that meeting, which was chaired by Mr. Craig Henry-SLNT, the Vieux-Fort Constituency Town Council guaranteed to contribute its human resource during the activity. In addition permission would be sought form Crown Lands to proceed with the project component. All stakeholder agencies present lamented that the entire stretch of beach needed to be addressed.



Stakeholder meeting which was held at Maria Island Interpretation Center to discuss beach rehabilitation

## CONCLUSION

During the implementation of the various components, suggestions and observations were recorded.

It is suggested that:

More community members should be targeted to attend consultations or workshops. This will allow for the projects targeted population to be gainfully engaged. Given that within PSEPA the major resource users are the community members.

Enough time should be allowed between activities or meetings. It is not effective when too many components are put into implementation at once. Usually the same agencies and persons are targeted for most activities and so it creates a problem for attendance and may result in a low meeting attendance. The resource pool is small and most of the expertise required comes from this small pool. If project components are properly placed in terms of timeframes it will allow for a better distribution of the already constrained resources.

The time spent getting approval from the relevant authorities to proceed in project implementation should always be considered. Planning and submitting requisite documents to relevant agencies in a timely manner can prevent unnecessary delays.

It was observed that there significant stakeholder interest in what goes on within PSEPA which has facilitated the engagement of relevant agencies during project implementation.