Mr Venkama Avinash, Association des Hotels de Charme
Dr V Dookhun, University of Mauritius
Greening the Mauritian Tourism Industry
Project Background

**PROJECT STARTING DATE**
Nov 2016

**PROJECT END DATE**
Oct 2018

**Funding agency**
- UNEP/UNOPS
- EU

**TARGET AUDIENCE**
MSMEs Mauritius (incl. Rodrigues)

**RELEVANCE TO POLICIES & LAWS**
- The MTPA Act 1996
- Tourism Employees WF Act 2002
- EPA
- MS 165

**BENEFICIARY**
- AHC
Overall Objectives

To support the sustainable development of small and medium hotels and assist them in their greening process.
Specific Objectives

• Improve understanding of environmental issues relative to the tourism sector.

• Disseminate the EMS Best Practices Manual, together with an implementation Guide, based on a Do It Yourself (DIY) principle, to enable MSMEs to implement EMS best practices
PROJECT STAKEHOLDERS

Local Traders, Entrepreneurs, Businessmen & Service Providers
(taxi, restaurants, hawkers, etc.)

Hotels & Tourism Operators

Neighbouring Communities

Greening the Mauritian Tourism Industry
The nine pillars of Sustainable Consumption & Production
Aligning with SDGs

- **SDG Goal 8**: Promote sustained economic growth, productive employment and decent work for all.
- **SDG Goal 12**: Ensure sustainable consumption and production
- **SDG Goal 14**: Conserve and sustainably use marine resources for SD
A gap analysis was been conducted in 2 stages.

• Stage 1: Self-assessment by the hotel participating in the project.

• Stage 2: On-site audit
  [Global Sustainable Tourism Council (GSTC) Criteria for Hotels and Tour Operators]
<table>
<thead>
<tr>
<th>S/N</th>
<th>GSTC Criteria</th>
<th>AVE Score</th>
<th>General Gaps Identified</th>
<th>General Recommendations</th>
</tr>
</thead>
</table>
| 1   | Sustainable Management           |           | • Absence of EMS  
• No Eco Certification in place e.g. Green Globe Certification                   | • Capacity building on developing EMS  
• Assistance for preparation and implementation EMS for certification                   |
| 2   | Social Benefit to Community      |           | • Low participation in social initiatives for SCP  
• Few initiatives regarding inclusive development of community | • Capacity building on effective use of CSR  
• Developing and implementation of projects involvement of community in recycling of waste to create livelihood having an impact on poverty alleviation and higher sustainability |
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<tbody>
<tr>
<td>3</td>
<td>Cultural Heritage</td>
<td></td>
<td>• Some initiatives taken such as SEGA dance, food variety and design promoting cultural heritage</td>
<td>• Capacity building on the use of cultural diversity for providing higher value products including sustainability</td>
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<td></td>
<td>• Capacity building on integration components of the cultural heritage in Marketing of hotels</td>
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<td>• Integration of different cultural elements in services provided by SMH</td>
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<tr>
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<td>GSTC Criteria</td>
<td>AVE Score</td>
<td>General Gaps Identified</td>
<td>General Recommendations</td>
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<tr>
<td>4</td>
<td>Local Purchasing</td>
<td></td>
<td>• Some hotels purchase in bulk as far as possible and target ecology product while</td>
<td>• Capacity building on the local purchasing especially on development of a green purchasing policy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Ensuring quality of the products.</td>
<td>• Inclusion of green purchasing as part of strategy of hotels</td>
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<tr>
<td>5</td>
<td>Disposable Goods</td>
<td></td>
<td>• A few 3 star hotels recycle the used plastic bottles and cans</td>
<td>• Capacity building on developing projects to facilitate recycling of disposable goods</td>
</tr>
<tr>
<td>GSTC Criteria</td>
<td>AVE Score</td>
<td>General Gaps Identified</td>
<td>General Recommendations</td>
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<tr>
<td>Energy Conservation,</td>
<td></td>
<td>• Most hotels’ energy consumption is above the local benchmark as they use inefficient energy equipment and devices.</td>
<td>• Capacity building on different measures for energy conservation</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Most 2 star hotels have relatively old electric appliances that are not energy efficient but the energy consumption is low because of small number of rooms and low occupancy rates.</td>
<td>• Projects to be developed on reduction of energy consumption initiatives for e.g. phasing out of old appliances for newer ones which are energy star rated or A Graded</td>
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<td></td>
<td></td>
<td>• Energy consumption per guest is higher than benchmark value, very few hotels have LED bulbs</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• No energy consumption measurement is conducted in all hotel</td>
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<tr>
<td>7</td>
<td>Water Conservation</td>
<td></td>
<td>• None of the participants do rain harvest</td>
<td>• Capacity building on water conservation practices</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Water use is mainly tap water</td>
<td>• Develop projects to measure water consumption</td>
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<td></td>
<td></td>
<td></td>
<td>•</td>
<td>• Implement initiatives to save water</td>
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<td>8</td>
<td>Carbon Footprint (Estimated from data collected)</td>
<td></td>
<td>• None of the participants calculate their carbon footprints</td>
<td>• Capacity building for calculating the carbon footprint. Hotels must be encouraged to invest in carbon footprint calculator online.</td>
</tr>
</tbody>
</table>
Solution formulation phase
Our tools

- MS 165
- ISO 14001
- ISO 50002
- 10 FYP
- ISO 14031
- SCP
phase 2

Capacity building element
Capacity variance identified

- Environmental principles and best practice training
- Energy & Water efficiency
- Waste awareness
- Environmental management
- Resource efficiency training
- Sustainable sourcing measures
- Ecological surveys
- Corporate Social & Environmental policy plan

- Assist participating hotels in implementing the concepts and measures and respond to the Gap analysis conducted
TECHNICAL ASSISTANTS GUIDANCE AND EXPERTISE TO GREEN CHAMPIONS

TRAINING OF TRAINERS

EDUCATIVE SESSIONS TO WASTE MANAGEMENT

BEST PRACTICES & SELF ASSESSMENT MANUAL
IMPLEMENTATION PHASE....
METHOD

- The self assessment guide
Steps for the self-assessment

1. Identify
   inputs/outputs for each section

2. Prepare
   a data collection system

3. Select
   your environmental performance indicators

4. Analyse
   data and trends
Steps for the self-assessment (cont.)

5. Benchmark
   process and look for opportunities for improvement;

6. Review
   environmental performance indicators

7. Establishing programmes
   resource management
Steps for the self-assessment (cont.)

8. Define measures
   start by no cost best practices and then move to low cost measures;

9. Perform cost benefit analysis for higher investment measure before considering implementation.
**SECTION 1: ENERGY**

Energy Checklists: Aim to improve and optimize energy use  
Write ‘YES’ or ‘NO’ where it is applicable. Areas marked with ‘Yes’ will lead to corrective measures.

<table>
<thead>
<tr>
<th>Practices and behaviours</th>
<th>Yes or No</th>
<th>Priority</th>
<th>Remarks/Priorities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.0 LIGHTINGS</strong></td>
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<td></td>
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<tr>
<td>Lights are kept on while room is unoccupied.</td>
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<td></td>
<td></td>
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<tr>
<td>Using incandescent light.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Using fluorescent light</td>
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<td></td>
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<tr>
<td>Dust deposited on fixtures.</td>
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<tr>
<td>Making use of very few natural lighting.</td>
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<td></td>
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<tr>
<td>Not making use of reflective surfaces to increase light.</td>
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<tr>
<td>Lights switched on necessarily.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor light remains on during the day.</td>
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</table>
1. Fix all water leaks around your house to prevent wasting water.

2. Fill your washing machine to the maximum capacity.

3. Hot water use production can represent 23% of total energy consumption. Sizable energy savings can be achieved by reducing by at least 40% of that consumption.

4. Fix regulators on shower heads, so they use no more than 40 L per 5 minutes shower, which means to reduce more than 30% of water consumption per day per room.

5. Prefer Energy star washing machines so they allow up to 50% less water used and nearly 30% less energy used.

6. Washing clothes with cold water can save up to 5 times more energy than a warm wash, that is, around 1.9 kWh of electricity can be saved.
Rooms

Kitchen
- Use organic food and probe your guests to follow the hotel’s adherence to not wasting food. Also, replace disposable cups with ceramic cups or glass.

Housekeeping
- Replace all the chemical cleaners with natural ingredients such as citrus oil.

Grey Water Recycling Program
- Water from your bathroom sinks, showers, tub and washing machines can be recycled after proper treatment. Also, keep the swimming pool chlorine free to protect coral and marine life.

Thermostats
- Since half of the energy is used for heating and air-conditioning, use thermostats as they save energy, provide comfort and saves cost.

Laundry
- Replace plastic laundry bags with cloth bags. Replace chemical detergents with natural/organic detergents.

Key Card System
- Switch to key card system that activates lights and air-conditioning.

Grow Trees
- Convert two third of your property into a garden by planting trees. Encourage your guests to adopt environment-friendly programs.

Cloud Property Management Tool
- Cut down on the usage of papers on multiple servers for hotel operations by using a cloud-based property management software.
Utility bills went down by 7% across beneficiary hotels

Above 400 hotel staff trained

15 green champions empowered and followed up thru’ regular refresher courses

3 hotels got access to green finances thru’ AFD/SUNREF

Silver award for project during NPQC 2019

8 MSMEs of the National Women Entrepreneur Council got access to hotel boutiques
Policies to promote Sustainable Tourism

Dr V Dookhun, University of Mauritius
Preamble

01 Goals of the SAG Sustainability Programme

02 Review of enablers of SD in the sector

03 Lessons learnt and critical appraisal
   The case for the Republic of Mauritius

04 Reforms proposal
Creating an enabling environment for sustainable tourism in Africa

- The need for a framework to continuously support, appreciate, develop and implement sustainable tourism policies.
Success of Mauritian tourism industry

Can be attributed to the fact that it made the highest GDP contribution (30%) and received the 2nd highest yearly total budget allocation (16.1%) of countries in the southern Africa.

( Source: Fair Trade in Tourism South Africa [FTTSA], 2009)
Cost of repair of impacts
Coastal erosion in some parts of the island

RS 85.5 Million to pay for repairing the beaches (business.mega.mu 2012/06/01)

Source
https://www.google.mu/search?q=Coastal+erosion+in+mauritius&espv=2&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiHkvW7ndfPAhWJmBoKHYbxCmsQ_AUICCGB&biw=1242&bih=615#imgrc=T68k1jVj3DdXM%3A
Unprecedented adverse weather events

- First time events: 150 mm rainfall has been recorded in Port Louis within few hours
Need to decouple tourism growth and environmental footprints

**Mauritius / CO2 emissions per capita**

**3.21 metric tons (2010)**


*Source: world bank*
Goal of Switch Africa Green Programme

To achieve SD by engaging in the transition towards

GREEN ECONOMY  S C P  Generating Growth  Job creation  Reduced poverty
Specific objectives

Development of green business and entrepreneurship

>1, 300 000 TOURISTS ARRIVALS

Better equipped M& SMES

To seize opportunities for green business development
Mission statement for the Tourism Industry in Mauritius:
To become a greener destination to visit and to remain a sustainable island to live.

Sustainability is key to tourism product
Empowered by innovative solutions.

01

Key stakeholders
TOs, suppliers and stakeholders
Empowered and mobilized to develop, promote and respond to changes in the sector.

02

A sector that is sensitive to local challenges
As Small island state our vulnerability to smallest changes in ecosystem can have irreversible consequences. Climate change effects are considerable with ASLR, loss of biodiversity and other threats. SIDS are at the end of line and are ‘sinks’ to consumer products.

03

Positive influence on the economy
Focus of products that generated positive economic, societal, environmental and cultural impacts.
Enablers

1. Policy Support
   - Enabling environment that allows it to be led by private sector

2. Green Business Development
   - Grants to intermediary organizations

3. Network facility component
   - To distill and share knowledge, lessons learned and best practices.
Supported by

- Incentive structures
- Clear Policies
- Green Tax
- Other market based instruments
- Strong Legal framework
- Standards and certification system
Lessons learnt

Clear Policies
Well defined missions and vision statement by political leaders
Grouping of Medium Hotels (Sun Resorts)
MSMEs regrouped under AHC
Pro-handprint innovations (MauPhi)
A well established sustainability criteria

Incentive structures
Support to companies to implement sustainable projects
(afd, dbm, mtpa, sme, research grants CRICG from MRC)
Loans at preferential rates from local banks.
Support from other ministries (management of waste, renewable energy and water resources)

Green Tax
Environmental tax applicable to hotels. Revenue generated from Tax on fuel, single use plastics, rubber tyres, other earmarked product goes to the national fund for infrastructural development.

Standard policies
Tourism Act,
Environmental Protection Act
Occupational safety
Resource conservation
Marine protection
Protected areas
Biodiversity protection
Banning of single use plastic

Other market based instruments
Deposit refund schemes
Subsidies on fuel
Exempted duties on vehicles for TO CSR programmes

Standards
MS 165, Upcoming standard on circular economy,
Green Globe, EMAS & MS ISO 14001:2015, BREEAM
Existing product standards for food, chemicals, electrical, civil and mechanical and textile Eco-labels
Recognition and rewards

❖ Awards to recognize positive contribution to local economy
❖ Rewarding the key stakeholders and maintaining good relationship
❖ Recognizing the key decision making companies and seeking their participation in re-engineering the sector
❖ Rewarding innovative solutions
Strong regional networks and value addition (e.g. facilitates trade and for example can help to reducing food miles)

- Positive work environment and collaborations among main entities in the sector and academia
- Local infrastructure promoting the growth in the sector
- Digitalization of the sector (e.g., SCADA System to monitor energy consumption)
- Sharing of best practices to promote Mauritius as a destination through NGOs, AHC, Business Mauritius and
- Social and political stability
- Good relationship with authorities facilitates networking process
- Benefit from North-South cooperation to promote technology transfer and support to market the tourism products at international level
- International reputation maintained over the past three decades
Proposals Areas of improvement

Republic of MAURITIUS

Short term measures

✓ Suppliers assessment
✓ Maintaining a database of sustainable suppliers
✓ Mainstream gender
✓ Developing Resource sharing platforms to promote circular economy
✓ Adaptation of financial incentives to needs of TOs and suppliers
✓ Integrating environmental cost in Tourist Projects
✓ Address other physical disturbances such as noise

Medium and long term measures

✓ Training and capacity building
✓ Review of the existing laws
✓ Regional standards on Tourism
✓ Ensuring an economy for the poor and avoid marginalization
✓ Instilling the SD culture among the young generation of workers
✓ Aligning the Hotel rating system with SGDs
✓ Green Tax reforms
✓ Benchmarking and sectoral EPIs

P r o p o s a l
Thank You

Contact details: v.dookhun@uom.ac.mu
Credits

Special thanks to all the people who made and released these

UNDP
UNOPS
Switch Africa Green
Ministry of Tourism
European Union
Association des hotels des charmes
Thank You for your kind attention.

Contact details: v.dookhun@uom.ac.mu
Behind the curtains!
Sharing with you the joy of working with the tourism sector!