

COLLABORATIVE ACTIONS FOR SUSTAINABLE TOURISM

5TH QUARTERLY NEWSLETTER

JUNE 2014 / EDITION

**THE COAST PROJECT APPLYING UNIDO'S TEST
METHODOLOGY TO CONTRIBUTE TO**

GREEN ENVIRONMENTAL PRACTICES

**IN THE TOURISM INDUSTRY
IN SUB-SAHARAN AFRICA**



**... and
other stories**

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GLOBAL ENVIRONMENT FACILITY
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MESSAGE FROM THE CHIEF, WATER MANAGEMENT UNIT, ENVIRONMENTAL MANAGEMENT BRANCH, UNIDO, VIENNA

Dear Readers,

I take this opportunity to welcome you to our fifth COAST Project E-newsletter, a special edition dedicated to showcasing our work in applying UNIDO's Transfer of Environmentally Sound Technology (TEST) Methodology, for the very first time, within the tourism industry in Africa.

Sustainability as a Key to Guaranteeing the Tourism Industry's Future

UNIDO is promoting inclusive and sustainable industrial development (ISID) to harness the full potential of industry's contribution to the achievement of sustainable development, and lasting prosperity for all. The Organization focuses on three main thematic priorities to fulfil this mandate: productive capacity-building, trade capacity-building and sustainable production and industrial resource efficiency. UNIDO's strategic response to the need for sustainable production and industrial resource efficiency is the Green Industry Initiative - a global effort to promote industrial production and development that does not come at the expense of the health of natural systems or lead to adverse human health outcomes.

The TEST Methodology is at the very core of UNIDO's Green industry Vision and is driven by the ever rising need to ensure economic growth does not contribute to increased resource extraction and pollution. Indeed, this is an integral element of the global community's commitments as envisioned under both the Millennium Development Goals and the new sustainable development agenda currently being formulated to succeed the MDGs, post-2015, under the Sustainable Development Goals (SDGs). From the outset, it is clear that whichever development framework that emerges from the international governance arena under the SDGs, the issues of sustainable resource use in industry, green growth and the ever rising need to broaden partnerships for demonstrable results



IGOR VOLODIN

must be realistically engendered for posterity.

This is especially critical in the tourism industry, one of the key sectors that are vital in the global quest for greening the global economy. It is acknowledged that for such a critical industry, ill-managed tourism practices exerts enormous pressure on destination areas contributing to soil erosion, increased air, water and coastal marine pollution, natural habitat and biodiversity loss, increased pressure on endangered species and heightened vulnerability to climate change induced pressures. This is even more daunting for society today, considering that in the year 2012, the total global international tourist arrivals reached an astronomical milestone of 1 billion visitors. The general implication of this statistic is that with the current global human population estimated at 7 billion, one in every 7 people is a tourist at one point or another!

Utilizing UNIDO's TEST Methodology in the Tourism Industry

UNIDO's strategic decision to apply the TEST Methodology as a tool for realizing Environmental Management Systems

within the local hotel sector in four African coastal states (Kenya, Tanzania, Mozambique and Senegal) was motivated by the need to ensure the sustainable introduction of green practices in the tourism industry. This is because, popular forms of coastal tourism such as beach tourism, recreational fishing, scuba diving and cultural tourism are all known to utilize sea beaches, landscapes, biodiversity, food, and cultures and built heritage. Hence the TEST Methodology combines 5 essential Management Tools of Cleaner Production Assessments (CPA); Environmental Management Accounting (EMA); Environmental Management Systems (EMS); Environmentally Sound Technology (EST); and Corporate Social Responsibility (CSR) at company/industry level with the aim to change the management practices in a holistic manner and to improve the environmental management and competitiveness of each company/industry.

We cover more on the TEST Methodology on pages 5-22

In this newsletter edition, we also share insights from the Seychelles Sustainable Tourism Label (SSTL), another interesting eco-labeling initiative. These examples demonstrate evidence of the fact that, by and large, a green industry vision for development that enhances economic growth while at the same time reducing excessive resource use and pollution is not just a possibility, but it is indeed achievable!

As the COAST Project begins wrapping up in the nine COAST Project countries, we look forward to sharing more lessons, best practices, and experiences which have emerged from these demonstration sites, through concise legacy publications that will inform the developments in the subject of sustainable coastal tourism in Africa.

Enjoy the Reading!

IGOR VOLODIN



THE COAST PROJECT APPLYING UNIDO'S TEST METHODOLOGY

GREEN ENVIRONMENTAL PRACTICES IN THE TOURISM INDUSTRY IN SUB-SAHARAN AFRICA

OVERVIEW OF THE EMS THEMATIC AREA

The mid-term evaluation (MTE) of the COAST Project was requested by both UNEP and UNIDO in order to objectively assess how project performance could be improved during the remaining period up to the middle of 2014. This evaluation was completed by the middle of December 2012, and resulted in a number of significant recommendations aimed to enhance project delivery and streamline the expected outcomes. One of the main recommendations resulted in the introduction of UNIDO's TEST methodology as a tool of realizing the EMS objectives of the project.

Prior to the MTE, the COAST Projects focus on this thematic area was on international environmental management systems and voluntary eco-certification labeling schemes through two regionally based EMS consultants. Specifically in terms of the EMS thematic area, the MTE concluded that EMS activities focused too much on International Standards (such as ISO) and other forms of eco certification and eco-labeling capacity building. The barrier to the adoption of such measures by the participating hotels was identified as the high cost of introducing these, and especially in the case of the ISO 14001 environmental management standard, to be able to actually attain and maintain such an internationally recognized certification. Such costs and investments are difficult for the small scale hotels in these demo sites, especially if the value in having such a certification is also not nationally recognized given that there are no legal requirements to adopt such mandatory certifications in any of the participating countries. Voluntary certification schemes

would be difficult to implement in the current economic climate if these would not yield any economic benefits per se. Consequently the recommendation was for the project post MTE in the remaining timeline to focus on identification and demonstration of appropriate EMS measures by defining and promoting financial benefits of adopting pollution control, waste treatment and management of other EMS measures.

To accomplish this revised strategy, the MTE recommended to strengthen the initial global EMS BAPs/BATs review and hence UNIDO undertook an analysis that incorporated this EMS thematic best practice cross linkage between the global best practice review and the selected best practices with a localized adoption perspective at the demo site level and as a result it was therefore determined that a suitable best available practice would be to apply a UNIDO developed methodology called Transfer of Environmentally Sound Technology (TEST) that has at its core the introduction of green practices that yield both economic and environmental benefits.

...The TEST Methodology is at the very core of UNIDO's Green Industry Vision and is driven by the ever rising need to ensure economic growth does not happen at the expense of the environment..."

The flexi biogas system at Local Ocean Trust - Marine Turtle Watch, Watamu, Kenya generates biogas for cooking (Photo: COAST Project)





Trainings in Saly on the TEST methodology (Photo: COAST Project)

OVERVIEW OF TOURISM IN AFRICA

In addition to agriculture, industry and trade, the tourism industry is one of the key sectors that are vital in the global quest for greening the global economy. This is particularly important for Africa, a continent that is working in earnest to turn the tide by benefitting from the immense opportunities afforded by the transition to sustainable development; and in the quest

to realize the attainment of the MDGs before the cut-off year of 2015. As the African economies work to transform into mid-level economies, seeking to register double digit economic growth, the place of the tourism industry in providing supplemental revenues to the traditional economic models revolving around the dominant agriculture, industry, trade and service delivery, will become even more pronounced.

THE COAST PROJECT: SEEKING A SUSTAINABLE NEXUS BETWEEN TOURISM AND THE ENVIRONMENT

The COAST Project, a GEF funded and UNEP managed project, executed jointly by UNIDO and UNWTO seeks to integrate environmental management and green best available practices principles within the tourism industry, to ensure the realization of a sustainable nexus between tourism and environment in the 9 coastal states participating in the project. The main aim of the COAST Project is to apply, through a series of practical "Demonstration projects", a number of Best Available Practices and/or Best Available Technologies (BAPs/BATs) within selected coastal tourism destinations in sub-Saharan Africa, which will lead to reduce negative environmental impacts resulting from land based, tourism sector actions and pollutants.

The Project that is now in its final year of implementation is working actively within three thematic, science-based topic areas namely; Eco-tourism, Environmental

Management Systems (utilizing the UNIDO Transfer of Environmentally Sound Technology (TEST methodology) and, Reef and Marine Recreation Management (RMRM). The TEST methodology is being applied in four Demonstration sites (Kenya, Mozambique, Senegal, Tanzania) focusing on the development of sustainable Public-Private-Community Partnerships (PPCP) with the emphasis on 'green technologies' and 'green management and business practices' to firstly reduce pollutant and contamination levels within and around these tourism facilities; secondly to improve resource use and management efficiency on levels of chemicals, energy, waste and water (thereby increasing profitability levels), and thirdly through partnerships (based on CSR models) to improve stakeholder relations (focus on PPCP) and collaborative actions to sustainably manage coastal and marine resources through product recycling and business diversification models.

It is acknowledged that for such a sensitive industry, continued ill-managed tourism practices will subsequently exert enormous pressure on destination areas contributing to more harmful impacts including soil erosion, increased air, water and coastal marine pollution, contaminations, excessive natural habitat and biodiversity loss, increased pressure on endangered species and heightened vulnerability to climate change induced pressures. This is because, popular forms of coastal tourism such as beach tourism, recreational fishing, scuba diving and cultural tourism are all known to utilize sea beaches, landscapes, biodiversity, food, and cultures and built heritage and thereby exert pressures on this biodiversity and ecosystems. These challenges are even more daunting for society today, considering that in the year 2012, the total global international tourist arrivals reached an astronomical milestone of one billion visitors. The general implication of this statistic is that with the current global human population estimated at seven billion, one in every seven people is a tourist at some point or another.



85 Waste bins distributed throughout the Watamu Demo Site, Kenya (Photo: COAST Project)

....Close to 12 tourism related private sector led institutions (hotels, lodges, restaurants) in Kenya, Mozambique, Senegal and Tanzania received the TEST training and committed to applying the five tools of the TEST methodology as part of the EMS thematic component of the COAST Project to introduce environmental management practices....

IMPLEMENTING UNIDO'S TEST METHODOLOGY IN THE TOURISM INDUSTRY IN AFRICA: A MAJOR FIRST

The Transfer of Environmentally Sound Technology (TEST) methodology was developed by UNIDO in 2000 and is aimed at improving the environmental management and competitiveness of businesses in developing countries and transition economies. It is a Best Available Practice (BAP) that has been implemented in many countries with very positive economic and environmental results as a business/environmental management system process. It also has the added benefit of being applicable to a wide range of businesses from micro, small and medium enterprises, to big companies in both industry and service sectors.

UNIDO's strategic decision to apply the TEST Methodology in the COAST Project as a tool for realizing its EMS Thematic Area within the local hotel sector in four African coastal states (Kenya, Mozambique, Senegal and Tanzania) is the first time the TEST methodology has been applied in the tourism industry in sub-Saharan Africa. The application of this methodology under the COAST project aimed to contribute to the reduction of the levels of land based pollution, contamination and environmental degradation associated to tourism in the target countries. Therefore, the UNIDO TEST methodology was adapted to fit the local realities in the four participating countries for the private sector hotels and enterprises so as to cater better to their local realities and to leave in place better partnership models and cooperation mechanisms and embedded national know-how.

Hence the TEST methodology combines five essential Management Tools of: Cleaner Production Assessments (CPA); Environmental Management Accounting (EMA); Environmental Management Systems (EMS); Environmentally Sound Technology (EST); and Corporate Social Responsibility (CSR) at company/industry level with the aim to change the management practices in a holistic manner and to thereby improve the environmental management and competitiveness of each company/industry, as well as to offset positive environmental benefits to the natural surrounding environment.



Environmental awareness raising childrens' football tournament award ceremony, Inhambane, Mozambique (Photo: COAST Project)

BENEFITS OF TEST TO THE TOURISM INDUSTRY

- At the local level, hotels aiming at becoming more sustainable and shrinking their environmental footprint face a range of environmental management issues in their everyday operations, whether externally influenced or internal factors, which can have serious economic and environmental repercussions on their businesses and competitive edge in an already very competitive industry. The TEST methodology is a tool that helps the tourism enterprises meet the increasing demands of their competitive market to deliver greener services and to have an optimal internal operational system to reduce environmental, social and economic inefficiencies.
- Tourism enterprises are often faced with high costs for waste disposal and to have the availability of such resources such as water and energy, especially in coastal areas such as the context of the Demonstration sites in this project. Energy and water resources can have a very high cost, especially in locations where very high or very low temperatures are the norm, such that air conditioning or heating is required, or in remote locations where some percentage of used electricity is produced by diesel generators. The TEST methodology addresses these issues by optimizing the resources used by the hotel to be more resource efficient, and thereby improving to the overall environmental and economic efficiency of the hotel and thereby producing significant economic savings.
- By applying the CPA tool, No Cost, Low Cost and High Cost recommendations are generated. Low Cost improvement options like switching to energy saving light bulbs, can be very beneficial. Utility costs can also be lowered by implementing BAPs/BATs that have a good return of investment. Environmental benefits are equally obtained because the TEST methodology contributes to lower land-based pollution, through the reduction of water use and discharges, reducing solid waste generation as well as use of energy and non-renewable resources. Having a good environmental policy in place also means that hotels will be ahead of impending environmental legislation and other regulations.
- The CSR tool is important in ecotourism, as hotels can obtain certifications for their consideration to the social and environmental impacts of tourism. This can help improve the hotel's image and their competitiveness. However in the context of the COAST project, the CSR activities of the hotels are voluntary and not driven by economic purpose, but rather of great value to the surrounding local community and bringing them great benefits, as will be showcased in the individual country implementation descriptions. In these cases, the hotels have demonstrated their credibility to the local partners through the established private public community partnerships and gone beyond any legal requirements and catered to needs that are important by people who in turn can also influence their business operations and image.
- Hence the TEST methodology is a tool that can assist managers to bring about economic, social and environmental gains by providing them with elements to be more strategic in their planning and operations, and to thereby manage risks through the identification of liabilities and weaknesses.

THE FIVE TOOLS OF UNIDO'S TEST METHODOLOGY

The 5 TEST management tools applied in combination in an integrated framework are:

TOOL 1: CLEANER PRODUCTION ASSESSMENT (CPA):

The cleaner production assessment focuses on systematically identifying potential applications of preventive techniques for pollution sources (where pollution is seen as a symptom of inefficiency). The adopted pollution prevention measures reduce not only pollution but also operational costs. The cleaner production measures identified are classified in three categories ranging from no to low cost solutions to high investment such as advanced clean technologies. Hence, enterprises should adopt business strategies where they look to maximize resource efficiency and cleaner production to adopt for example where applicable the "4 Rs strategy" – Reduce, Recycle Reuse and Recover.

TOOL 2: ENVIRONMENTAL MANAGEMENT ACCOUNTING (EMA):

EMA is a valuable tool to assist the management of an enterprise in understanding how environmental issues influence their accounting and financial business practices. EMA is defined as the identification, collection, analysis and use of two types of information for internal decision-making:

- 1) physical information on the use, flow and destination of energy, water and materials (including wastes) of the business; and
- 2) monetary information on costs, profits and savings regarding the environment.

It focuses on the optimization of operations by tracking all environmental costs back to their sources, especially costs of pollution that are "hidden" across the process of service provision, through the identification of cost centers that link into the CPA work (as it also helps to identify where the CPA focus can be). The basics of EMA are that everything that the business acquires and that is not part of the final product should be reduced to a minimum. EMA looks into the production level of the management pyramid and is the most helpful tool to ensure buy-in from the manager of a company as it allows for the pinpointing and actual pricing of the inefficiencies in the production process.

TOOL 3: ENVIRONMENTAL MANAGEMENT SYSTEM (EMS):

EMS is the part of the overall management system of a business that includes the organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving and maintaining the environmental policy. It focuses on identification and management of environmental aspects, and it is widely used as a tool to ensure compliance with environmental standards, such as ISO 14001 or any national environmental system requirements. However, to operate properly it must be integrated with the other systems of the company. The EMS affects a lower, and therefore more complex, level of the pyramid: the system level and builds a step by step process to respond and deliver on the CPA recommendations from the CPA level.

TOOL 4: ENVIRONMENTAL SOUND TECHNOLOGIES (EST):

According to Agenda 21, "ESTs encompass technologies that have the potential to significantly improve environmental performance relative to other technologies" These technologies protect the environment, are less polluting, use resources in a sustainable manner, recycle more of their wastes and products and handle all residual wastes in a more environmentally sound manner than the technologies they are designed to replace. This tool builds on the concept of best available practices and can include end-of-pipe solutions after the potential for feasible preventive measures has been explored. The EST typically covers the recommendations from the cleaner production assessment (CPA) measures which require additional investment.

TOOL 5: CORPORATE SOCIAL RESPONSIBILITY (CSR):

CSR is a self-regulation mechanism integrated with a business model that enterprises use to implement voluntary actions as well as to comply with ethical standards and international regulations. It is based on close cooperation with stakeholders (internal CSR with staff; external CSR with surrounding communities) and integrates all sustainability considerations (social, environmental and economic) into business operations.

UNIDO'S TEST METHODOLOGY IMPLEMENTATION

In all four EMS thematic area countries, Kenya, Mozambique, Senegal and Tanzania, TEST trainings were provided over the course of November and December 2012 to the owners / management (inclusive of the financial managers required for the EMA work) of local tourism establishments such as hotels and lodges, to the Demo Project Coordinators (DPCs) and several Demo Site Management Committee (DSMC) members. The implementation of EMS/TEST activities in the four participating countries is now at an advanced stage. In Kenya, Mozambique and Tanzania Tools 1 (CPA), 3 (EMS), and 5 (CSR) are implemented by the National Cleaner Production Centres (NCPCs) of those countries, where this partnership was sealed via MOUs between the NCPCs and the Environment Ministry (in the case of Tanzania the Vice-Presidents Office (VPO)). In the case of Senegal, these three tools were implemented by national EMS experts. Tool 2 (EMA) is being implemented by a remotely based UNIDO EMA expert that has visited all demo sites and participating establishments and is in close cooperation with each of the participating private sector enterprises across the four countries. Tool 4 (EST) is UNIDO led in that the countries had to submit sustainable project proposals for environmentally sound technology equipment that deals with a pertinent environmental issue and that are built around a public private community partnership (PPCP) model.

Table 1. Overview of implementers of the TEST Tools across the four participating countries

TEST TOOL	KENYA	MOZAMBIQUE	TANZANIA	SENEGAL
TEST Tool 1-CPA TEST Tool 3-EMS TEST Tool 5-CSR	Kenya National Cleaner Production Center (http://www.cpkkenya.org/ ;))	Mozambique National Cleaner Production Center (www.mncpc.co.mz)	Cleaner Production Center-Tanzania	Individual national EMS experts trained in TEST methodology
TEST Tool 2-EMA	UNIDO EMA expert			
TEST Tool 4-EST	UNIDO TEST experts/Public Private Community Partnerships			

Table 2. Overview of EST in the four participating countries

COUNTRY	EST	BRIEF DESCRIPTION
Kenya	Rocket Composter (1 unit)	Input: Organic waste Output: Compost Process: Fast process of composting through microbial/fungal growth
	Flexi Biogas System (3 units)	Input: Organic waste Output: Biogas Process: Production of biogas through hotel organic waste inoculated by organic waste from butchery and cow dung
	Waste Bins (85 units)	Process: Use as collecting vessels strategically placed in various waste hotspots (i.e. hotels, tourism enterprises, etc.) to link with the COAST Project supported waste management facility
Mozambique	Artisanal Glass Cutting Equipment (15 units of startup kits and contribution to workshop construction)	Input: Solid waste Output: Various artisanal products Process: Collection and recycling of solid waste
Senegal	Composting Equipment (1 unit)	Input: Organic waste Output: Compost
Tanzania	Solar Street Lamps (20 units)	Input: Solar energy Output: Light



Mr. Ken Ombok, Environmental Officer of the Turtle Bay Beach Club Resort in Watamu posing with plant seedlings that the hotel is giving the local communities at no cost (Photo: COAST Project)



The DG of NEMA, on the left, formally commissioning the rocket composter technology in the Watamu Demo Site, Kenya (Photo: COAST Project)

CONCLUSION AND WAY FORWARD: THE FUTURE OF EMS TEST

The TEST methodology is at the very core of UNIDO's Green industry Vision and is driven by the ever rising need to ensure economic growth does not contribute to increased resource extraction but reduced pollution. Indeed, this is an integral element of the global community's commitments as envisioned under both the Millennium Development Goals and the ongoing discourse on the post-2015 Development Agenda under the Sustainable Development Goals (SDGs). From the outset, it is clear that whichever development framework that emerges from the international governance arena under the SDGs, the issues of sustainable resource use in industry, green growth and the ever rising need to broaden partnerships for demonstrable results must be realistically engendered for posterity. In this regard, it is important to note that the environmental,

economic and social benefits will be monitored throughout so as to have concrete results by the end of the project that are envisaged to serve as indicators for mainstreaming, up scaling and replicating for similar projects elsewhere on the globe.

The TEST methodology implementation demonstrated the feasibility and application of BAPs/BATs involving PPCP at the local level to increase resource use efficiency and offer tangible economic benefits. This resulted in clear reductions on the pressure of the local biodiversity and ecosystems (reduced pollution and contamination). It also resulted in increased capacity at the local level to sustain these efforts. In the next article (Refer Page XXX), selected highlights of these demonstration projects that are ready for up scaling and replication will be shown.



The Watamu Demo Site Management Committee posing for a photo after visiting Kirepwe Island (Photo: COAST Project)

SELECTED HIGHLIGHTS FROM THE TEST IMPLEMENTATION IN FOUR EMS COUNTRIES: KENYA, MOZAMBIQUE, SENEGAL AND TANZANIA

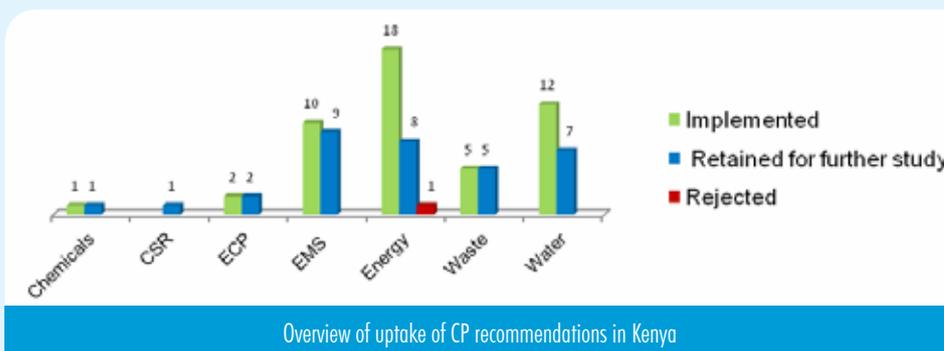
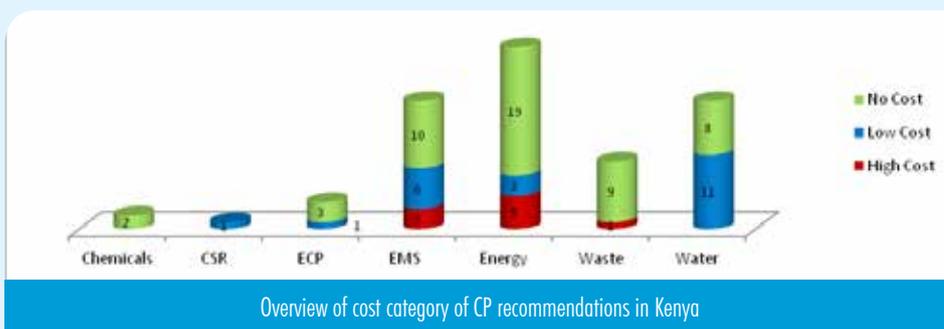
COUNTRY SPECIFIC TEST RESULTS:

1. KENYA - WATAMU DEMO SITE IN KENYA

EMS TEST in Watamu, Kenya: Watamu, an acknowledged biosphere reserve, is located North of Mombasa within the Kilifi County of Kenya. Notable physical features of this demo site are rock platforms, cliffs and sandy beaches, coral reefs and sea-grass beds. It is a part of Mida Creek, an enclosed body of water that comprises tidal mud flats with fringing mangrove swamps provides an important habitat and location for recreation and fishing. This region is one of the main marine recreational centers of Kenya. Major attractions in the area are; boat trips, water sports, SCUBA diving, sport fishing and snorkelling.

The Demo Site falls within a complex of protected areas known as the Malindi Watamu Marine Conservation Area (MWMCA). Here, the Malindi and Watamu Marine National Parks are

The tables below showcase selected highlights of some of the CPA recommendations that were provided to the participating tourism establishments in the Watamu Demo Site, which also demonstrate projected economic and environmental benefits.



OVERVIEW

Initial results have provided invaluable lessons and experiences on how the tourism industry in the coastal area in Sub-Saharan Africa can benefit from the application of the UNIDO TEST methodology, as highlighted below in the four Demo Site countries.

SUMMARY OF KEY RESULTS IN TEST IMPLEMENTATION ACROSS THE FOUR COUNTRIES

We present below, country by country highlights in the implementation of UNIDO’s TEST Methodology. Each country section will have the key CP recommendations and some select recommendations and their projected economic and environmental benefits. As will be realized, the recommendations were varied, from one country to another. The various recommendations are at an advanced stage of implementation across the partner countries with a number of Environmentally Sound Equipments (Rocket composter, biodigester and solar lights) being installed and commissioned in Kenya and Tanzania .

encompassed within the Watamu Malindi Marine National Reserve. The key socio-economic activity within Watamu is tourism and is dependent on the beach and marine resource attractions. Tourism numbers are relatively high compared to the other two Demo Sites and the numerous hotels, guesthouses and lodges feed the associated beach trade and marine recreation activities. The majority of tourists come from Europe in particular.



Community members collecting glasses for Watamu Marine Association (WMA)
(Photo: COAST Project)



Recycling of glass by the WMA in the Watamu Demo Site, Kenya
(Photo: COAST Project)



Hemingways Hotel biodigester launch in the Watamu Demo Site, Kenya
(Photo: COAST Project)

OVERVIEW OF SELECTED CPA RECOMMENDATIONS AND PROJECTED ECONOMIC AND ENVIRONMENTAL BENEFITS FOR KENYA

GROUPING/ CP OPTION	COST TYPE / INVESTMENT (USD)	INCOME / SAVINGS	PAY BACK PERIOD	ENVIRONMENTAL BENEFITS
Turtle Bay Beach Club				
Energy: Energy Management including: <ul style="list-style-type: none"> • De-lamping of excess lighting in the rooms and conferences; replacement of lights with low wattage CFL lights • Rationalizing the use of electrical gadgets to the needs of the guest e.g. switching off the orient fans when guests are not in the restaurant; sensitizing staff about energy and putting up stickers (switch me off); switching off the blower pumps when not in use • Sub metering of electricity at key usage points 	Low Cost: 427	Reduction of about 29% achieved. This translates to a total of 566,970 kwh annually	Immediate	Reduction in the carbon emission in the atmosphere
Water: Water Management including: <ul style="list-style-type: none"> • Full loading of the laundry machines • Installation of meters to gauge water use in different sections especially kitchen and laundry • Routine check of the piping systems to ensure no leaks in the water transfer systems • Use of recycled water for irrigating the gardens and flushing of staff toilets • Use of recycled water for irrigating the gardens and flushing of staff toilets 	No Cost	Reduction of water use from government; the hotel has enough water for garden irrigation and reduced cost of maintaining the gardens	Immediate	Less pollution to the environment as majority of the water is recycled and used within the premises
Waste: Solid Waste Management including: <ul style="list-style-type: none"> • Sorting and recycling of plastic waste • Composting all organic waste • Installation of rocket composter 	No Cost High Cost: 31,161	Income and saving translates to reduction of chemical fertilizer for garden and as CSR inputs to surrounding communities	Immediate	Reduction of total trips done by the municipal truck to the disposal site, reduction of vehicle emissions as well as having limited impact on the open dumping site that the Malindi municipality currently uses. Outputs of the Rocket composter (organic compost) is given to local communities including training in organic farming as a part of the CSR of the TBBC

EMS: Increase efficiency of environmental team within the hotel	No Cost	increase environmental management and communication with other staff	Immediate	Relates to overall coordinated environmental benefits from energy, waste and water conservation
Hemingways Resort				
Energy: Implementation of variable energy CP recommendations	17,647 from baseline value	2 months	Immediate	Reduction in the carbon emission in the atmosphere
EMS: Creation/ improvement of Energy policy; Water Management policy; Purchasing policy; Employee policy; Waste management policy	No Cost/ Management and staff time	Contribute to the over-all CP Recommendation implementation	Immediate	Relates to overall coordinated environmental benefits from energy, waste and water conservation



Rocket Composter installed at the Turtle Bay Beach Club Resort, in the Watamu Demo Site, Kenya (Photo: COAST Project)

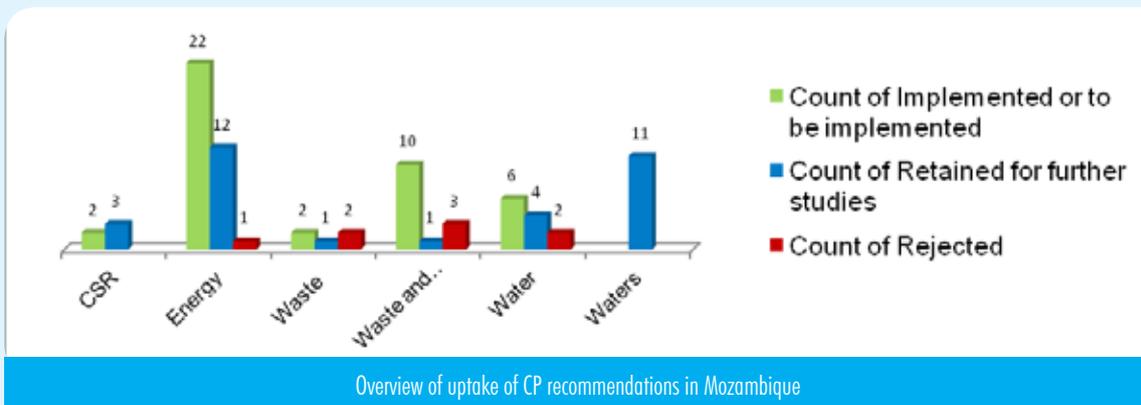
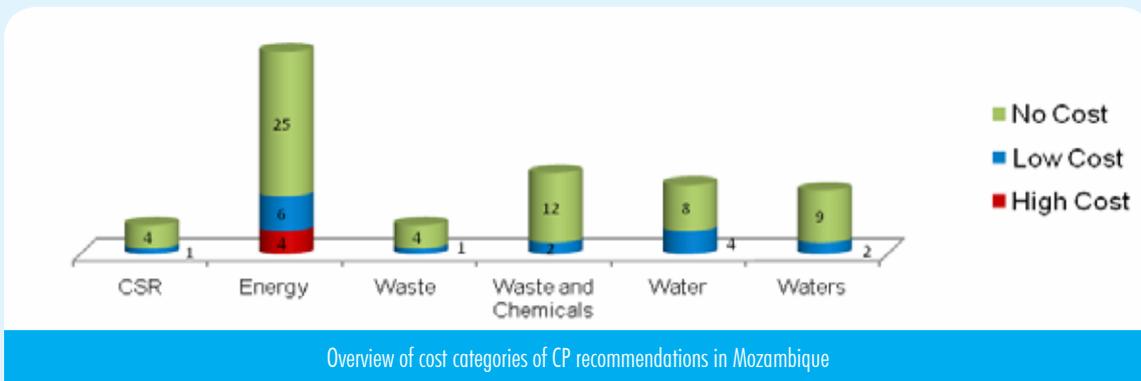
OVERVIEW OF EST IN KENYA

EST	ENVIRONMENTAL ISSUE TO BE ADDRESSED	PARTNERS	ROLE, DELIVERABLES, ACTIVITY
<p>Rocket Composter (1 unit):</p> <p>This technology speeds up the composting process through different shifts in mycofauna I growth through a temperature and moisture controlled environment. This EST is tied to a CSR activity involving the provision of compost and know-how for organic farming to the local communities.</p>	<p>The EST will tackle issues on solid waste management especially with organic waste.</p> <p>The EST through CSR will provide surrounding communities with organic fertilizer and organic farming training. Thereby reducing synthetic fertilizer offloading to the coastal environment.</p>	National Environmental Management Administration (NEMA) COAST project country contract funds); UNIDO/ COAST Project Office	Assist the procurement process; Provides funds and does the procurement; Purchase of the equipment
		Turtlebay Beach Club (TTBC)	Beneficiary of the EST; Training of the local farmers on the use of the compost (TBBC); Commencing the operation of the equipment; Maintenance
		Tidy planet (UK) via Hospitality Procurement Ltd. (Kenya)	Supplier; distributor and installation; Transportation from Port to Turtle Bay Beach Club Installation of the machine
<p>Flexi Biogas System (3 units):</p> <p>This technology collects biogas from manure and other organic material to be used as an alternative to LPG, mainly for cooking. This is tied to a CSR activity involving an education and awareness program. Also, this EST is an identified Best Available Practice by FAO and also has a standing project with IFAD.</p>	<p>The EST through a CSR model will demonstrate the use of organic waste in production of biogas to help economic and household activities, such as cooking.</p> <p>The use of alternative energy for cooking alleviates pressure on mangroves trees which are cut to produce charcoal that is then used as fuel for cooking purposes.</p>	National Environmental Management Administration(NEMA COAST project country contract funds); UNIDO/ COAST Project Office	Assist the procurement process; Provides funds and does the procurement; Purchase of the equipment*3
		Hemmingways/Local Ocean Trust (LOT) /Watamu Marine Association (WMA)	Beneficiary of the EST; Training Beneficiary of the EST; Showcases the Flexi Biogas System to their stakeholders as an alternative energy use; Training of community members in biogas harvesting
		Biogas Ltd (Kenya)	Supplier; distributor and installation
<p>Waste Bins (estimated 85 units):</p> <p>These will be strategically placed in communities and hotels to serve as collection points of recyclable materials such as glass, paper and plastic. This is tied to another COAST Project supported activity which is supporting a recycling facility initiated by WMA. Another alternative use for several bins will be as a sorting vehicle for recycled plastics from the recycling facility.</p>	<p>The EST through a CSR model will help alleviate land based pollution through solid waste management especially the process of waste segregation at point-source as a primary step in the recycling process.</p>	National Environmental Management Administration (NEMA COAST project country contract funds); UNIDO/ COAST Project Office	Provides funds and assist in the procurement process
		Watamu Marine Association (WMA)	Beneficiary of the EST; Maintenance; Provides training of local communities and hotel in waste segregation.
		Kentainers, Mombasa, Kenya	Supplier, distributor and transport

2. MOZAMBIQUE - TOFU, BARRA AND TOFINHO DEMO SITE

EMS TEST in Inhambane Demo Site, Mozambique: The Demo Site of Tofo, Barra and Tofinho (TBT), is located about 15 Km from the historic town of Inhambane. TBT has grown from a small coastal fishing village into a significant tourism destination. The wide sandy beaches, coral reefs, mangroves and extensive lagoon system provide a strong draw card and sustenance for growing local communities. Marine tourist attractions are largely based on the accessibility of large charismatic marine species through whale watching, SCUBA diving with manta rays over diverse coral communities and snorkelling with whale sharks and dolphins on ocean safaris.

The tables below showcase selected highlights of some of the CPA recommendations that were provided to the participating tourism establishments in the Inhambane Demo Site, which also demonstrate projected economic and environmental benefits.



OVERVIEW OF SELECTED CPA RECOMMENDATIONS AND PROJECTED ECONOMIC AND ENVIRONMENTAL BENEFITS FOR MOZAMBIQUE

GROUPING/ CP OPTION	COST TYPE / INVESTMENT (USD)	INCOME / SAVINGS	PAY BACK PERIOD	ENVIRONMENTAL BENEFITS
Bay View Lodge				
Water: Laundry / Kitchen area CP recommendations including: <ul style="list-style-type: none"> • Implement a linen reuse program, based on voluntary guest adherence • Introduce to the laundry area temporary holding tanks to reuse water; Train the workers to load the washing machines and dishwasher machines at full capacity and minimize the washing cycles 	High Cost: 750 USD	Needs further baseline information	3 months minimum	Reduces pollution by reducing the amount of soap used daily; water resource conservation; energy conservation from washing machines and saves water that is used unnecessarily in doing laundry on a daily basis
Environmental Conservation: <ul style="list-style-type: none"> • Coordinate with maritime authorities to grant licenses for guests and ensure that recreational activities of the guests do not disturb the ecosystem • Develop standards of conduct intended for guests of the Bay View Lodge, establishing the conditions of use of vehicles in the coastal area, rights, duties, limits of liability and penalties for non-compliance 	No Cost	Translates to added competitiveness of the establishment in attracting green consumers	Variable	Conservation of ecosystem in the area
Dino's Bar				
Energy: Kitchen recommendations including: <ul style="list-style-type: none"> • Avoid connecting the electric equipment when not in use • Avoid the accumulation of ice on the refrigeration equipment; Turn off the coffee maker after each use • Organize preventive maintenance of the electric network and equipment • Optimize use of natural light instead of artificial lighting 	Low Cost: 100 USD	Variable and dependent on baseline data on actual electricity expenditure	Variable	Reduction in the carbon emissions in the atmosphere



Cleaner Production Assessment with the MNCPC, UNIDO team, hoteliers, DPC and selected DSMC in the Inhambane Demo Site, Mozambique (Photo: COAST Project)

OVERVIEW OF EST IN MOZAMBIQUE

EST	ENVIRONMENTAL ISSUE TO BE ADDRESSED	PARTNERS	ROLE, DELIVERABLES/ACTIVITY
<p>Artisanal glass cutting. The activity involves provision of glass cutting equipment, capacity building in the skill of artisanal glass cutting, provision of work space and access to markets to sell the outputs/products.</p>	<p>The EST will demonstrate recycling of glass innovated in a local context. The whole activity supported by the provision of training and glass cutting equipment addresses the issue of decreasing land based pollution, especially glass bottles waste that is largely generated by the tourism industry.</p>	<p>Provincial Directorate for the Coordination of Environmental Activities Inhambane (DPCA-I)/ COAST Project (COAST project country contract funds)</p>	<p>Overall supervision and monitoring of the project/ Key donor and support provided via the VSO volunteer on site</p>
		<p>Dino's Bar/Ms. Natalie Nordine</p>	<p>Supply and collection of waste glass inputs; Provision of suitable land site for project; Provision of Water and Electricity; Provision of labour for construction; Contribution towards purchase of local material for construction; Technical know-how on the artisanal glass cutting; project planner and trainer; revolving fund administration</p>
		<p>Provincial Directorate for Tourism Inhambane (DPTUR-I)</p>	<p>Support in lobbying and advocacy work amongst other Government sectors (i.e. health department) and support in accessing suitable markets</p>
		<p>Municipal Council of Inhambane City (CMCI)</p>	<p>Support in education and awareness raising on the need of garbage separation from the source</p>
		<p>Community members</p>	<p>Receive training on a volunteer basis, as well as supply of waste glass in the future, and replicating the activity</p>
		<p>Private sector partners and Tourism and Hotel Association (ASHT-I)</p>	<p>Support in the identification of markets and possible replication of the activity</p>
		<p>Provincial Directorate of Health (DPS)</p>	<p>Quality control/inspection of the produced glass to ensure its safety</p>



Artisanal glass cutting kit that is being used with waste glass from the tourism establishments in the TBT area, Mozambique (Photo: COAST Project)

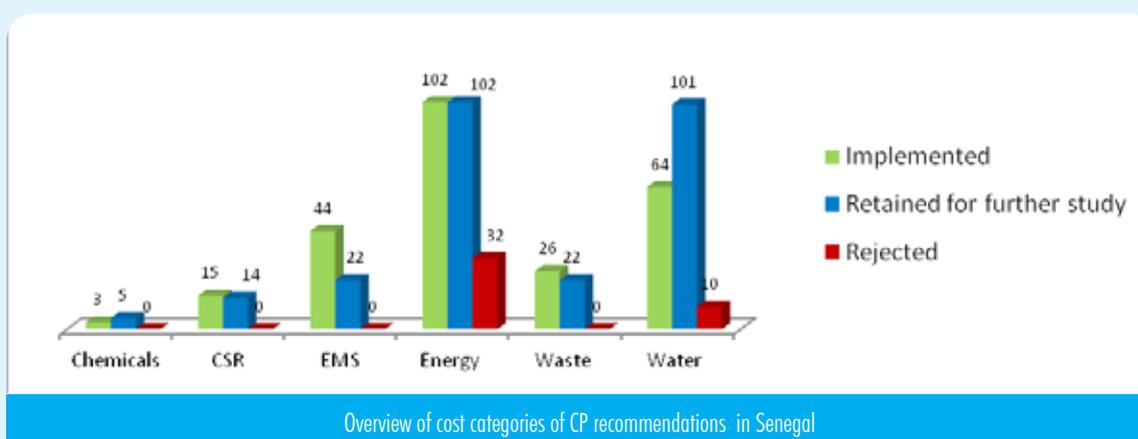


Some of the artisanal glasses prepared from recycled glass in the Inhambane Demo Site, Mozambique (Photo: COAST Project)

3. SENEGAL - SALY DEMONSTRATION SITE

EMS TEST in Saly, Senegal: Senegal is working to implement activities under the Environmental Management Systems (EMS) thematic area using the TEST methodology where it aims at improving the environmental management and competitiveness of the participating hotels. For Senegal, the five hotels that collaborated with the COAST Project in integrating sustainable green practices and technological principles in their operations are Framissima Palm Beach Hotel; Lamantin Beach Hotel Resort & Spa; La Teranga Hotel; Hotel les Bougainvillées; Club Marmara Saly Les Filaos. It is important to note that the COAST Project activities in Saly are complementing other efforts by UN partners to secure the coastline at Saly.

The tables below showcase selected highlights of some of the CPA recommendations that were provided to the participating tourism establishments in the Saly Demo Site, which also demonstrate projected economic and environmental benefits.



OVERVIEW OF SELECTED CPA RECOMMENDATIONS AND PROJECTED ECONOMIC AND ENVIRONMENTAL BENEFITS FOR SENEGAL

ESTABLISHMENT	GROUPING/ CP OPTION	COST TYPE / INVESTMENT (USD)	INCOME / SAVINGS (USD)	PAY BACK PERIOD	ENVIRONMENTAL BENEFITS
Framissima Palm Beach Hote	Energy: Installation of 5000 L solar water heater	40,568	4,952**	8 year	32,057 kg de CO2 offset
Lamantin Beach Hotel Resort & Spa	Energy: Installation of 141 solar water heater (85 liters capacity each)	143,002	20,224**	7 years	22, 267 kg de CO2 offset per year
La Teranga Hotel	Energy: Installation of 100 solar street lights (50 high and 50 low)	73,022	23,465**	3 years	Between 48,400- 53, 800 kg of CO2 offset per year
Hotel les Bougainvillées	Energy: Installation of 86 solar water heaters (85 liters capacity each)	87,221	15,786**	5.5 years	181,837 kg of CO2 offset per year
Club Marmara Saly Les Filaos	Energy: Installation of 120 solar water heaters (85 liters capacity each)	121,704	16,620**	8 years	172,712 kg of CO2 offset

** Projected Value

OVERVIEW OF EST IN SENEGAL

EST	ENVIRONMENTAL ISSUE TO BE ADDRESSED	PARTNERS	ROLE, DELIVERABLES, ACTIVITY	COAST PROJECT AND PARTNER EXPENDITURE (USD)
Composting Station (1 unit): This technology aims to produce mature compost in two months from organic waste from the hotels. This EST is tied to a CSR activity involving a provision of compost to the participating women groups who will sell the final product.	The EST through a CSR model will tackle issues on solid waste management especially with organic waste.	Société d'Aménagement et de Promotion de la Petite Côte (SAPCO)	Provides technology training, ensures access to land, assumes maintenance of the EST and supports waste collection from the partner hotels..	1,500 (training) and In Kind
		UNIDO/COAST Project (COAST Project country contract funds);	Provides fund for the equipment.	11,366
		AGROSEN (Senegal)	Supplier; distributor and Installation of the plate-form.	
		Saly City Hall	Institutional support to women groups; support maintenance of the technology; up scaling.	In Kind
		Hotels (Framissima Palm Beach Hotel, Lamantin Beach Hotel Resort & Spa, La Teranga Hotel, Hotel les Bougainvillées, Club Marmara Saly Les Filaos)	Potential customers; Member of the Management Committee of the EST.	In Kind
		Women's groups	Management and seller of the compost	In Kind



Solar street lamps official commissioning event in the Bagamoyo Demo Site, Tanzania (Photo: COAST Project)



The Bagamoyo Art market will benefit from the solar lighting project in the Bagamoyo Demo Site (Photo: COAST Project)



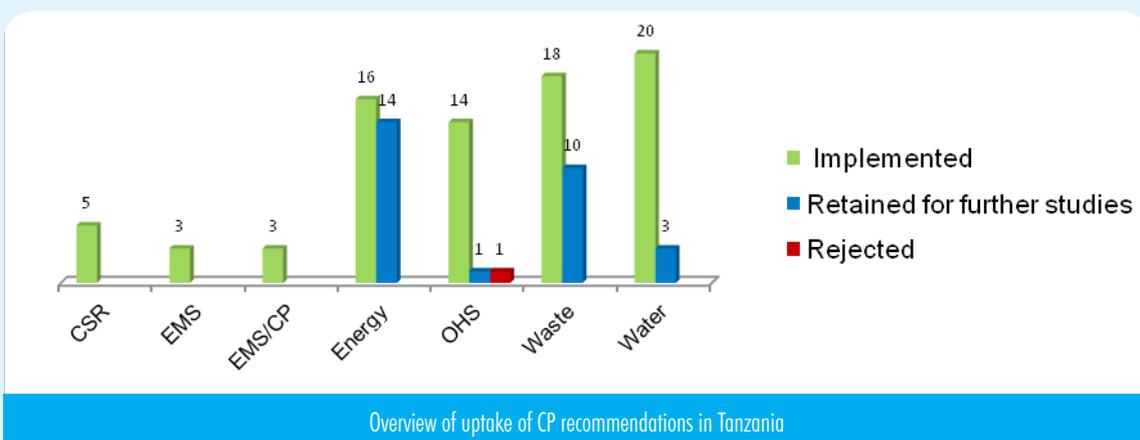
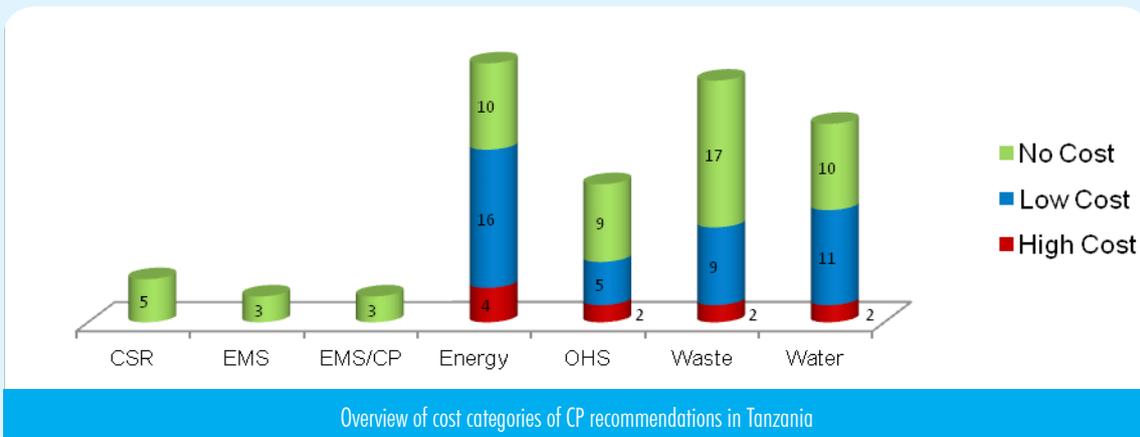
Part of the COAST Project team during the launch of the EST equipment in the Bagamoyo Demo Site, Tanzania (Photo: COAST Project)

4. TANZANIA - BAGAMOYO DEMO SITE

EMS TEST in Bagamoyo, Tanzania: Tanzania's coastal zone harbours a rich abundance of natural and cultural resources. Once a centre for the East African Slave Trade, Bagamoyo is the oldest town in Tanzania and a cultural historical 'hot spot'. Bagamoyo District was recently nominated as Tanzania's seventh World Heritage Site. The Bagamoyo coastline is characterised by important marine habitats including sandy or muddy tidal flats, mangroves, coral reefs, sea grass beds, and a productive estuarine system. These ecosystems play a major role in supporting local people, providing a source of food, income and energy in the form of firewood.

Bagamoyo currently provides a business-based tourism destination with the majority of visitors travelling from Dar es Salaam for meetings and conferences. The town also attracts short-term visitors from East Africa. The tourism industry is mainly land-based while marine recreation (snorkelling) is undertaken through largely ad-hoc arrangements with fisher folks. SCUBA diving and safety equipment for marine tours is currently limited. While infrequent visits reportedly sometimes take place to near shore reefs, the most popular snorkelling reef is Mwamba Kuni reef.

The tables below showcase selected highlights of some of the CPA recommendations that were provided to the participating tourism establishments in the Bagamoyo Demo Site, which also demonstrate projected economic and environmental benefits.



OVERVIEW OF SELECTED CPA RECOMMENDATIONS AND PROJECTED ECONOMIC AND ENVIRONMENTAL BENEFITS FOR TANZANIA

GROUPING/ CP OPTION	COST TYPE / INVESTMENT (USD)	INCOME / SAVINGS (USD)	PAY BACK PERIOD	ENVIRONMENTAL BENEFITS
Millennium Old Post Office Hotel				
Energy: Development and implementation energy management strategies to monitor and minimize energy consumption in the hotel and assign one or a team of staff to spearhead implementation of energy saving programme/plan	No Cost: Management and staff time	3,140**	Subject to the CP recommendation adopted	Reduction of carbon dioxide emissions by 1.5 tones, based on baseline cost of electricity
Water: Development and implementation water management strategies	No Cost: Management and staff time	296**	Subject to the CP	Reduction of waste water generation by 405m3
Water: Modify hand wash basin taps at the public toilets by installing about 12 flow restrictors to minimize water consumption	131	478**	3 months	Water resource conservation
Millennium Sea Breeze Hotel				
Energy: Replace the fluorescent tube lights (19) with energy saver lights.	53.44	81.83**	8 months	Reduction of carbon dioxide emissions

Water: Water Management including: <ul style="list-style-type: none"> • Formulate water management policy, assign one or a team of staff to spearhead implementation of water saving programme/plan, Sensitize staff and guests on proper use of water • Install water sub-meters to monitor water consumption in major water use sections • Modify or install six flow restrictors in hand-wash basin 	179.4	826.45**	2 months minimum	Water resource conservation
Waste: Use of colored waste bins and segregation of waste material at source	100	Variable, based on sale of recyclable materials	1 month	Reduction of waste material through recycle, reuse and recovery
OHS: Disseminate Material Safety Data Sheets (MSDS) to respective personnel and area of operations:	1/4 hour internal training monthly at no cost	Improved safety standards	1 month	Improved staff wellbeing and preparedness in case of accidents
Oceanic Bay Hotel and Resort				
Energy: Energy Management including: <ul style="list-style-type: none"> • Conducting an energy audit • Installation of power correction factor & replacement of capacitors • Replacing fluorescent tube lights (150) with energy saver lights. • Sensitizing guests and workers to switch off lights and other electric appliances when not in use 	Low Cost: 430	4,321	2 months	Reduction in the carbon emission in the atmosphere
Water: Water Management including: <ul style="list-style-type: none"> • Assigning one staff to spearhead implementation of water saving programme/plan • Construction of rain water harvest system along with the construction of 200,000 liters capacity tank • Installing water meters • Modify or install flow restrictors in hand wash basin taps and bathrooms to minimize water consumption • Sensitizing staff and guests on efficient use of water 	Low Cost: 521.4	Estimated 10-20% reduction from baseline value**	Immediate	Reduces resource strain to water sources
EMS: Environmental Policy put into place	No Cost	Serves as a baseline for management in adopting EMS and other CP	Immediate	Relates to overall coordinated environmental benefits from energy, waste and water conservation
** Projected Values				

OVERVIEW OF EST IN TANZANIA

EST	ENVIRONMENTAL ISSUE TO BE ADDRESSED	PARTNERS	ROLE, DELIVERABLES/ACTIVITY
Solar lighting (20 units): This technology involved installation of LED solar street lamps. This is tied to a Public Private and Community Partnership which involves a community watch to be led by hotels and maintenance to be led by the Bagamoyo DED.	This EST links the COAST Project Eco-Tourism Theme activity (i.e. arts/ crafts and food sellers training) to the historical street of Bagamoyo by providing opportunity to conduct their business at night in a safe and well lighted environment.	The District Executive Director and Bagamoyo District Council	Provides funds; Assist in the procurement process of 20 street solar lamps
		Tanzania VPO Office (COAST Project country contract funds); UNIDO/ COAST Project	Goes into an MOU with the Supplier and assist in the procurement process; Beneficiary of the EST; maintains the equipment; Conducts community organizing to identify areas of installation; Responsible for maintenance of the street lamps up to 5 years after installation; Institutionalization of a community watch group with the private stakeholder to provide a monitoring system for the street lamps through an MOU.
		TEMESA	Conduct monitoring activities to ensure that equipment are par to government standards
		Ensol Ltd.	Supplier, Conducts consultation and night survey for identification of installation site; Installation and maintenance; Responsible for maintenance of the street lamps up to 2 years after installation



Installing the solar lights in Bagamoyo, an activity under the EMS/TEST thematic area (Photo: COAST Project)



TEST training (in cooperation with the CPCT) for the Management and selected staff at the Oceanic Bay Hotel (Photo: COAST Project)



TEST training (in cooperation with the CPCT) for the Management and selected staff at the Millennium Hotels (Photo: COAST Project)

KEY LESSONS, RESULTS AND EXPERIENCES FROM TEST IMPLEMENTATION

- **The Hospitality Industry as Catalysts for Green Growth Practices**

The UNIDO TEST methodology was adapted to fit the local realities within the budding tourism industry in the four participating countries, and it is proving to be a useful catalyst for green growth practices within the tourism industry. The TEST Methodology fosters public-private community partnerships and hence ensures that the COAST Project is integrating all key stakeholders into implementation and strengthens the sustainability aspect that goes beyond the life span of the project.

- **Investment in Clean Technology Almost Always Results in Increased Profits**

Investment in UNIDO's TEST methodology does not only result in improved environments around participating tourist facilities, it also makes economic sense, in that a significant amount of savings are made in energy, water, and waste management operations. These economic profits can then easily be re-invested into further environmental management measures and green technologies and practices. It indeed is a wise business idea for private sector players in the hospitality industry to adopt this tool for higher profitability.

- **Recycling, a Time Proven Best Practice for Waste Management**

Waste is a permanent feature of most, if not all production operations, and this is particularly a major concern for hospitality institutions. Every single day, the senior management of hotels worry on how to dispose of the rising mounds of garbage that are a by-product of most hotel operations, especially organic waste from the kitchen. Using the TEST tools, UNIDO have indeed demonstrated that recycling is a time proven best practice for waste management and is also a good way of enhancing profitability. The use of technological equipment such as rocket composter proved to be useful in composting meat products which are often disposed as they generate foul odour if composter using conventional means, this process results in organic manures which are then used within the garden for landscaping purposes. Water recycling is also a worthy venture for consideration by tourism institutions.

- **Community Benefits from the Tourism Industry, actually Benefit Almost Everyone**

The CSR component of the EMS TEST methodology is an important tool for enhancing community engagement into the tourism industry. As many efforts as possible need to be taken to ensure the local communities feel part of and have a buy-in to the tourism cycle. This is why in our working with the 8 hotels across all the 4 EMS countries; we helped to strengthen community initiatives benefitting from the tourist industry. In Tanzania, the provision of solar lighting as part of the EST tool will have remarkable impact, especially in affording the local communities resident in the area more security, increased working hours for the local market and thereby spur increased economic activities in the area. In Saly, Senegal, the hotels are working with local communities to improve the sanitation in the area through plastic bottle recycling and re-use.

- **Working with Local Institutions Enhances Delivery of Results**

In three of the EMS TEST countries (Kenya, Mozambique and Tanzania), UNIDO initiated cooperation agreements with local institutions mandated with overseeing the adoption of clean production practices. The partnership with NCPs was chosen to build upon the national available expertise for resource efficiency, and for the country partners to have suitable national expertise and partners to communicate with beyond the life span of the COAST Project. The agreements were signed with the National Cleaner Production Centres (formerly institutionalized by UNEP and UNIDO) so as to build up on their local Best Available Practices/Technologies (BAPs/BATs) and know-how. The NCPs conducted their cleaner production assessments and produced CPA reports for the private sector partners in each of the above named countries to uptake these recommendations, while for Senegal individual energy saving & waste reduction reports and action plans have been formulated for each of the five participating hotels by a local team of EMS experts.

CONCLUSION AND WAY FORWARD

Many environmental challenges, including climate change currently require fundamental changes to the way the global economy works. In this regard, there is an ever rising need to transform the global economy from a high-carbon economy dependent into a low-carbon paradigm, whose key maxim is improved efficiency. In this regard, it is critical that the tourism industry, as a key motor of driving growth in these African Demo Site countries, continues to grow albeit in a sustainable way. The governments, the private sector and every citizen have a key collective role to play in applying green practices and changing consumption and production patterns on a daily basis. The international community has the important role to play in supporting the evolution in the developing countries in every way possible to enhance access to technical and managerial know-how of best practice models, as well as access to finance to guide a sustainable tourism development that is in harmony with the surrounding natural environment, biodiversity and ecosystems. Given that these are transboundary in nature and hence no longer merely localized but globalized, shifting the responsibility to a collective global partnership is fundamental.

It is clear from the foregoing that through the implementation of the UNIDO TEST methodology, the COAST Project demonstrated the feasibility and application of BAPs/BATs involving private-public-community partnerships at the local level to increase resource efficiency (water, energy, wastes). The TEST methodology also contributes to increased revenues to the institutions, arising from the considerable savings that are recorded across the entire operational chain. This contributed to reduced negative impacts and pressure on the local biodiversity, ecosystems and communities of these four demo sites that now have in place clear demonstration projects that can be replicated and up-scaled.

NEWS FROM THE PRRT WORKSHOPS IN THE COAST PROJECT COUNTRIES

OVERVIEW

The COAST Project is in its final month and it is such a milestone for the project that has now run for over 5 years. It has been a fascinating ride, and our partners in the countries have been actively engaged in finalizing project activities at the Demo Sites. One of the main activities carried out in most of the COAST Demo Site areas was the Participatory Result Reporting Tool. These were participatory workshops that were held in Kartong, Gambia; Ada, Ghana; Watamu, Kenya; Saly, Senegal; and Bagamoyo, Tanzania.

The main objectives of the prrt workshops were to:

- To support stakeholder engagement in preliminary monitoring and evaluation of the COAST Project activities in the demo sites,
- To review the activities conducted in the demo site and contrast against the seven COAST BAPs/BATs criteria,
- To document lessons learned, challenges and recommendations in implementation of the COAST Project Activities.
- Discuss where applicable opportunities for replication, upscaling and sustainability of existing initiatives

PRRT Workshop Methodology

Across all the demo sites that conducted this workshop, the following methodology was applied:

- Opening and introductory remarks by the DPC, Focal Point;
- A round of introduction for the participants, stating their name, organization and an interactive ice breaker element;
- Group work for rating the stakeholders views on which activities were implemented to the satisfaction of the local communities. The ranking was by use of a smiley category, followed by a discussion on the lessons learnt, challenges and recommendations;
- Formal closure by a government representative.

We hereby now share with you some of the key highlights from these PRRT workshops in The Gambia, Ghana, Kenya, Senegal and Tanzania.

1. THE GAMBIA NEWS FROM THE PRRT WORKSHOP IN THE KARTONG DEMO SITE

The COAST Project implemented Eco-tourism activities in close collaboration with UNWTO's ST-EP Initiative at the Kartong Demo Site. These activities were aimed at empowering the local communities in the area to benefit from the tourism industry by generating revenues through the promotion of responsible and sustainable tourism ventures.

Resulting from the PRRT Workshop held in Kartong in April 2014, the following are some of the highlights as presented by the main stakeholders in the area:

Project Activities Rated Highest by Stakeholders:

1. The COAST project activities that were appreciated most by the stakeholders as having had a positive effect include increasing environmental awareness among the local community, providing basic trainings on customer care and tourism support, strengthening the local KART association;
2. Beach cleanup activities, tourism diversification activities were also appreciated during the PRRT workshop;
3. Empowerment of the local KART helped the organization consolidate its leadership role in the Kartong Demo Site. For instance, now KART is maintaining a record of the visitors in the village.

Project Activities Rated Lowest by Stakeholder:

1. Tesito Camp Eco-camp facility requires more concerted efforts to be fully operationalized, including extensive marketing to attract a significant number of visitors who would lead to its sustainability in the short and long term.

Key Future Opportunities in Demo Site:

1. KART seems to need to make improvement in their internal management model, there are some signs that community participation is decreasing. A need to enhance networking with other groups is also needed;
2. Most day-tours and activities in Kartong are not yet consolidated, and no fixed rates have been established (apart from bike tours);
3. Some work needs to be marketing new tourism products developed through the COAST Project initiative including the Tesito Eco-camp,



Participants pose for a photo after a TEST training in Kartong, Gambia (Photo: COAST Project)

home cooking activities and the bike tours;

4. Recycling activities and trainings seem to be appreciated by the community and they could be continued as they also provide income generating options.

Other News from Kartong Demo Site:

1. Technical support to the design of a website for Kartong (<http://kartongtourismgambia.jimdo.com/>);
2. Demo Site maps, showing all the key touristic sites in Kartong, have been produced and validated at the National Project Steering Committee level as well as at the community level.



The Ada Demo Site Liaison Officer posing next to the new tourism information centre (Photo: COAST Project)

2. GHANA

NEWS FROM THE PRRT WORKSHOP IN THE ADA DEMO SITE

Ghana is one of the COAST Project participating countries executing activities in the Eco-tourism thematic area through collaboration with UNWTO at the Ada Demo Site. The PRRT Workshop held in the Ada Demo Site in April 2014 provided the stakeholders in the area a good platform to provide their feedback on project implementation in the area, as summarized below:

Project Activities Rated Highest by Stakeholders:

1. Coconut and mangrove planting and beach cleaning up;
2. Capacity building for a Turtle task force;
3. Capacity building for Hotels and Restaurants.

Project Activities Rated Lowest by Stakeholders:

The stakeholders did not rate any of the project activities as lowest, but they provided the following comments on how to improve the activities:

1. Capacity building for boatmen and tour guides activity - Need to enhance gender balance and involvement among the trainees selected;
2. Capacity building for local gin and

vegetable farmers – There is a need to give women more information and engaging them in trainings;

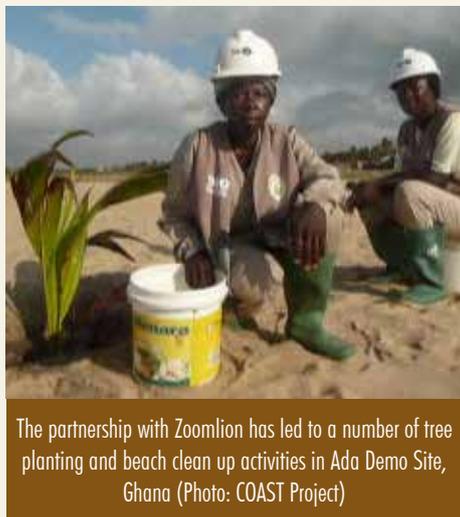
3. There is need to enhance the collaboration between tour operators and boat and tour guides in the Demo Site.

Key Future Opportunities in Demo Site:

1. Need for targeted project activity on enhancing the marketing of the tourism products available in Ada;
2. Some community members in Ada have an interest in the vegetable farmer group activities, but they still have difficulty in adopting new methods to due lack of funds.

Other News from the Demo Site

1. The main development in Ada is the successful formation of the new stakeholder network group (add office picture);
2. Technical support to the design of a web presence on trip advisor for Ada, Ghana (http://www.tripadvisor.com/Attractions-g1202779-Activities-Ada_Northern_Region.html); and to the improvement of the website (ada.tourism.wordpress.com);
3. Mapping work for the Ada Demo Site commenced in late 2013, and draft GIS maps are expected in early 2014.



The partnership with Zoomlion has led to a number of tree planting and beach clean up activities in Ada Demo Site, Ghana (Photo: COAST Project)

3. KENYA

NEWS FROM THE PRRT WORKSHOP IN THE WATAMU DEMO SITE

Kenya is executing COAST Project activities under the three thematic areas Eco-tourism, Environmental Management Systems/Transfer of Environmentally Sound Technology (EMS/TEST) and Reef and Marine Recreation Management (RMRM).

Resulting from the PRRT Workshop held in Kenya in April 2014, the following are the key highlights as provided by the stakeholders in Watamu:

Project Activities Rated Highest by Stakeholders:

1. Arts and curio trainings; Bee keeping trainings and activities; Customer care trainings; the Sea-Through the Glass Boat Operators training; and the EMS/TEST Clean Production Assessments in the hotels in Watamu;
2. Bee keeping trainings and activities which have resulted in increased honey production;
3. The Dabaso Boardwalk activity and community restaurant which is now a major tourist attraction.

Project Activities Rated Lowest by Stakeholders:

1. Crab farming activities which lack sustainability measures;
2. Tour operators’ trainings that still need upscaling;
3. Snake park activity which required clearance by the Kenya Wildlife Service on the required standards for the snake cages.

Key Future Opportunities in Demo Site:

1. Increased honey, eco-tourism products, and authentic community driven touristic experiences now requires to be marketed to attract more economic value to the local communities in Watamu;
2. The commissioning of the EMS/EST Equipment (Rocket composter, flexi biogas and glass cutting equipment) provide good opportunities for managing land based pollution in the marine ecosystems of Watamu.



The Kenya DSMC pose for a photo after the PRRT workshop in Watamu, Kenya (Photo: COAST Project)



Women’s group bike hire enterprise sign in Watamu Demo Site (Photo: COAST Project)

4. TANZANIA

NEWS FROM THE BAGAMOYO DEMO SITE

Tanzania is one of the three countries that are implementing COAST Project activities under all the three thematic areas i.e. Eco-tourism, Environmental Management Systems/Transfer of Environmentally Sound Technology (EMS/TEST), and Reef and Marine Recreation Management (RMRM).

The PRRT Workshop in Bagamoyo was held in April 2014, and the following are the key insights from these workshop:

Project Activities Rated Highest by Stakeholders:

1. Mangrove tree planting in Bagamoyo,
2. Mapping of the area and the sea-through the glass bottom boat training under the

RMRM thematic area,

3. Solar street lamps provided in Bagamoyo under the EMS/TEST work of the COAST Project.



Tanzania PRRT Workshop in Bagamoyo (Photo: COAST Project)

Project Activities Rated Lowest by Stakeholders:

1. Workshops with food sellers, soap makers and craft markets,
2. Educational and experiential learning trip in Arusha, Tanzania,
3. Advocacy and signage’s provided in the area under the COAST Project.

Key Future Opportunities in Demo Site:

- The solar lamps project in Bagamoyo introduces more opportunities for food sellers and craft, sellers to display their wares to tourists late into the night, hence generating more revenues;
- The solar lights contribute to enhancing the security in the Bagamoyo Demo Site.



Saly Senegal (Photo: COAST Project)

5. SENEGAL

NEWS FROM THE PRRT WORKSHOP IN THE SALY DEMO SITE

Senegal is executing COAST Project activities under the Environmental Management Systems/Transfer of Environmentally Sound Technology (EMS/TEST) thematic area. This particular thematic area applies the UNIDO's Transfer of Environmentally Sound Technology (TEST) Methodology in working with five hotels at the Saly Demo Site (Les Filaos Hotels, Lamentin Hotels, Bougainvillees Hotels, Palm Beach Hotels and Teranga Hotels) to implement the 5 TEST tools.

The PRRT Workshop in Saly was held in April 2014, and the following were the key highlights from the stakeholders:

Project Activities Rated Highest by Stakeholders:

EMS TEST in the 5 hotels was rated highest with the following feedback being provided:

- Participating hotels acknowledged the importance of the application of EMS systems in the hotels because (1) it is a tool to systematize and simplify environmental management, (2) it is seen as essential to reduce operational costs to adapt to a challenging business environment, (3) hotels are now best placed to respond to the growing sensibility toward environmental conservation in source markets;

Project Activities Rated Lowest by Stakeholders:

- Waste management activities: There is a need to further integrate local communities in the waste management activities in the resort. It is important to continue enforcing partnerships among communities, hotels and the authorities responsible of waste management (SAPCO and the City council) some of which exist already. Hotel staff can serve as ambassadors of a better environmental management in their neighborhoods and villages.

Key Future Opportunities in Demo Site:

- The COAST project has demonstrated innovative forms of cooperation between communities and the private sector. However, more commitment is needed from the hotels in the participation of local awareness raising activities. Several environmental awareness initiatives will be supported by the Saly city hall.
- However, there is a need for up scaling EMS practices to other hotels in the destination especially those that may not have the financial means to invest in the adoption of cleaner technologies, and would therefore need financial instruments to fund it;
- The 'Bureau de mise a niveau', a government-backed fund to help hotels invest in the upscaling of their facilities, could help upscale the COAST project to other hotels in their efforts to adopt EMS solutions.



Coastal erosion management efforts in Saly, Senegal
(Photo: COAST Project)



Coastal erosion is a problem in Saly, Senegal
(Photo: COAST Project)



Erosion affects touristic activities in Saly, Senegal (Photo: COAST Project)

GALLERY



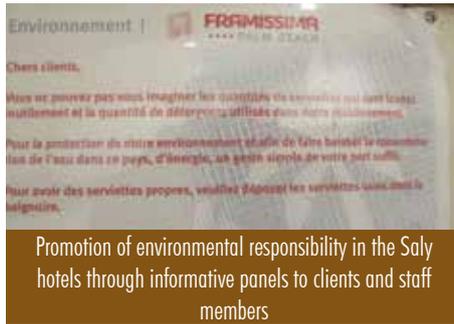
Members of the COAST Project Steering Committee during a field visit in Mahe, Seychelles



Flexi biogas system installed in the Watamu Marine Association, Watamu, Kenya



Waste management sensitization activity with school children, Inhambane, Mozambique



Promotion of environmental responsibility in the Saly hotels through informative panels to clients and staff members



Bagamoyo Waste Bins



The COAST Project's 6th Steering Committee Meeting in Mahe, Seychelles



Plant seedlings that the Turtle Bay Beach Club Resort in Watamu is giving the local communities at no cost, Watamu, Kenya



Promotion of environmental responsibility in the Saly hotels through informative panels to clients and staff members, Saly, Senegal



ALMA recycling station Inhambane, Mozambique



GALLERY



The COAST Project's 6th Steering Committee Meeting in Mahe, Seychelles



Maps showing key touristic sites in Bagamoyo have been distributed in Bagamoyo, Tanzania



Training of youth from local communities on artisanal glass cutting technique led by Dino's Bar at the TBT Demo Site, Mozambique



Women's group with their all terrain bikes, Watamu, Kenya



Waste management practices, Watamu, Kenya



Local artwork on display at the Turtle Bay Beach Club made of marine debris and beach waste, Watamu, Kenya



Watamu Marine Association preparing glasses for artisanal recycling, Watamu, Kenya



Rocket Composter installed at the Turtle Bay Beach Club Resort, Watamu, Kenya



Tree planting in Kribi, Cameroon



INTERVIEW WITH MR. LUDOVIC BERNAUDAT, UNIDO COAST PROJECT MANAGER



Mr. Ludovic Bernaudat is the Project Manager for the COAST Project located in the Water Management Unit of the Environmental Management branch in the UNIDO Headquarters in Vienna, Austria. He has a vast amount of years of experience in implementing the UNIDO Transfer of Environmentally Sound Technology (TEST) Methodology successfully in various countries around the world. He introduced this methodology to the COAST Project's Environmental Management Theme (EMS) after an assessment that was made after the Mid Term Evaluation in 2012 on the necessity to apply a suitable best available practice to the EMS thematic area. This theme focuses on defining and promoting financial benefits of adopting pollution control, waste treatment and management of other EMS measures. Many economic, social and environmental benefits can be attained by decoupling economic growth from resource use, and one of them is the reduction of pollution and contamination on the surrounding biodiversity and ecosystem.

In this interview, Mr. Bernaudat shares with us his perspectives on the value of the application of this methodology to the COAST Project partner countries and the basis that is thereby created to foster future strengthened partnerships in the respective demo sites and for potential future replications of this work

Welcome Mr. Ludovic Bernaudat,

1 Please share with our readers some insights in to why UNIDO chose to apply its TEST Methodology to the EMS thematic area of the COAST project.

- The Transfer of Environmentally Sound Technology methodology (TEST) was developed by UNIDO in 2000 and is aimed at improving the environmental management and competitiveness of businesses in developing countries and transition economies. It is a Best Available Practice (BAP) that has been implemented in many countries with very positive economic and environmental results as an Environmental Management Systems process. It also has the added benefit of being applicable to all types of businesses from micro, small and medium enterprises, to big companies in both industry and service sectors, and to attain fast

positive impact and tangible visible results.

- The TEST Methodology consists of five essential Management tools aimed at improving management practices in a holistic manner in order to ensure the sustainable introduction of green practices. These are Cleaner Production Assessments (CPA); Environmental Management Accounting (EMA); Environmental Management Systems (EMS); Environmentally Sound Technology (EST); and Corporate Social Responsibility (CSR) at company/industry level, as is explained in depth in another article in this newsletter.

- The application of the TEST methodology in the tourism industry is valuable in that the benefits are not only reaped by the enterprises themselves, but these have the potential to have a very positive impact in influencing the local economy around

them to adopt greener practices and to encourage consumers and guests at their establishments, as well as members of the community to adopt more sustainable lifestyles that reduce the negative pressures and impact on the surrounding biodiversity and ecosystem resources.

- UNIDO's decision to apply the TEST Methodology as a tool for realizing Environmental Management Systems within the local hotel sector in four African coastal states (Kenya, Tanzania, Mozambique and Senegal) is the first time the TEST methodology has been applied in the tourism industry in Africa. This decision was motivated by the need to demonstrate the viability and impact of the sustainable introduction of green practices in the tourism industry in Africa, and to evolve a new paradigm in the operations of hospitality institutions that would spur their uptake of green growth practices. Land based pollution reduction occurs through efficient resource use and reduction of waste from the tourism industry and the application of the TEST Methodology has demonstrated this.

- From UNIDO's perspective, we are sure that the application of this Methodology in these hotel establishments will result in the long term in good economic and environmental benefits to the hotels and their environment in terms of increased revenues in savings after the full implementation of the No-Cost and Low-Cost recommendations that were made for each of them. The demonstrated results of this work to date, as shown in this newsletter, speak for themselves already. It is indeed, a win-win position, since TEST portends benefits to the tourism industry!!

2 Since we are now in the final weeks before the COAST Project closure, our readers would like to know some of the key impacts to date and any results that have been emerging from the Project in the EMS/TEST implementation.

- Our EMS/TEST partner countries with the exception of Senegal have successfully signed Memorandum of Agreements with their National Cleaner Production Centres (NCPC), who have been long-standing partners of UNIDO. In the case of Senegal partnerships were fostered with national EMS experts that were trained in the UNIDO TEST Methodology. The rationale of partnering with the NCPCs and national EMS experts to implement the TEST methodology in the four countries was twofold. Firstly, in partnering with nationally established institutions and experts one is ensuring that the best available national and local expertise is being applied and built upon local conditions rather than using only International expertise that may not be so well versed in national and local key information required to obtain more accurate and effective results that have a high replication potential; and secondly to ensure, especially given the very short available implementation timeline, that the beneficiaries have partners and experts to liaise with and go to after the closure of the COAST project.

- The NCPC's and national experts have now finished their Cleaner Production Assessments (CPA) which put forward

a number of No-Cost and Low-Cost recommendations and solutions to resource use and waste production. They are now monitoring the implementation of their recommendations to the partner tourism enterprises and the positive economic and environmental impacts of these are showcased with selected highlight in this newsletter. The important thing to highlight here is that several partner hotels that attained really visible economic savings by putting into place a variety of CPA measures, have re-invested some of these gains into further CPA measures. In some cases, the hotels have now hired a full time EMS staff member that is responsible to implement such measures. This really shows that being environmentally conscious has in effect paid off for these establishments, and it has turned into a win-win situation for the natural environment as well as the finances of the hotel establishments, and as the profits continue to be reaped, the hotels will continue to re-invest a portion of these into new green measures.

- With regards to TEST Tool 4 - Environmentally Sound Technology, the Kenya and Tanzania country teams, with technical support from the UNIDO team, have successfully procured and installed green technologies such as solar street lamps, rocket composters and bio-digesters. The positive impact and benefits of these green technologies are already being observed. Another key aspect is that the EST tool was tied to the local stakeholders jointly designing the partnership model for the implementation and long-term operation of these technologies and equipment. This has demonstrated the partnership models that link the private sector, local communities and local governments through a sustainable business model. In several cases, it is the first time for these stakeholders to have jointly implemented a project that brings about an array of benefits to the local communities and natural environment, thereby fostering collaborative ownership and responsibility.

- These strengthened private-public-community partnerships (PPCPs) and dialogue platforms amongst the Demo Site stakeholders that are now in place, can yield replication and up scaling of current activities, as well as new business opportunities, investments and cooperation models in the future.

- Therefore, I would like to reinforce that the COAST Project through the implementation of the UNIDO TEST Methodology demonstrated the feasibility and application of BAPs/BATs

With regards to TEST Tool 4 - Environmentally Sound Technology, the Kenya and Tanzania country teams, with technical support from the UNIDO team, have successfully procured and installed green technologies such as solar street lamps, rocket composters and bio-digesters.

involving private-public-community partnerships at the local level to increase resource efficiency (water, energy, wastes) and economic benefits. Resulting to reduced negative impacts and pressure on the local biodiversity, ecosystems and communities of these four Demo Sites that now have in place clear demonstration projects that can be replicated and up-scaled. The reader will see these in the showcases throughout this newsletter and we hope that this acts as a motivation for such work in the reader's vicinity.

3 Please, highlight any challenges that have arisen during the implementation phase of the EMS/TEST activities.

There are a few challenges that have emerged during the implementation of our work across the four countries, and I would wish to highlight a few herewith:

- The seasonality of the tourism industry is a key challenge to ensure the continuous application of the TEST methodology recommendations and this is coupled by the high turnover of staff and personnel in this industry.
- Limited staff resources in smaller establishments affect the absorption of the TEST methodology work as well, as small hotels and lodges are often faced with daily survival issues that simply have to have precedence.
- There are also challenges in the time it takes for procurement processes of the green technologies.

4 Please share with us your thoughts on how the issue of sustainability of the project initiatives will be achieved, even after the formal end of the COAST Project activities in June 2014;

especially for the EMS/TEST thematic area

- We chose to work with the local institutions and partners, and in this way transferred significant technical knowhow and skills to them. Indeed, we recognise the NCPC's and nationally trained experts as vital in sustaining the local absorption of the TEST Methodology and in ensuring that TEST is up-scaled to other industries.
- In terms of the technology transfers that took place across the participating countries, the partnerships models that were devised are pivotal in sustaining these pieces of equipment and the positive impact of their outputs for all beneficiaries and stakeholders. An example of this model is the Kenya's National Environmental Management Authority (NEMA) who procured the state-of-the-art Rocket Composter and placed it in the Turtle Bay Beach Club hotel grounds to reduce the hotels organic waste; in return, the compost which is the output of this machine will be given to farmers in Watamu at no cost, and will be further reinforced with trainings to these beneficiaries on organic farming by the hotel's environmental office.

5 As the Project Manager, what is your message to the COAST Country Teams as they complete their work plans and try to ensure successful delivery of Project objectives in their respective countries?

To be honest, the COAST Project has had an eventful five years, and as we approach its expected end date, I wish to reflect on the following as a message to our partners and the key stakeholders:

- The subject of collaborative actions in the quest for sustainable coastal tourism

is very important to Africa and beyond, especially now that most countries seem to be focusing on how to increase tourism numbers in their destination sites. It is important that the lessons that have emerged in the COAST project inform the developments in this area, to ensure the preservations of these tourist destinations as economic activities grow, especially the fragile coastal ecosystems and their associated biodiversity, whose sustainable use will in turn ensure continued tourism.

- The work of the COAST Project in the three thematic areas (Eco-tourism; EMS, and Reef and Marine Recreation Management) needs to be continued, at the local demo site level and at the national level. We have contributed to imparting many necessary skills and expertise to the countries and our expectations are that these will be applied fully and built-upon, for the benefit of these coastal areas. Collaborative partnerships are a key element to driving sustainability. The project has demonstrated the effectiveness of building and fostering public-private-community partnerships and I would like to encourage the replication and strengthening of these, as well as the continuation of the Demo Site Management Committees meetings, dialogues and work, that were started as part of this project in each Demo Site.

- The key lessons, results and experiences from the COAST Project are being documented, and will be showcased on our project website even after the project closes, as well as within the final project reports. We will disseminate this information widely, and save these in a repository to ensure the demonstration value of the project is accessible to all, even after project closure.

For more information, please contact Mr. Bernaudat on L.Bernaudat@unido.org

“The work of the COAST Project in the three thematic areas (Eco-tourism; EMS, and Reef and Marine Recreation Management) needs to be continued, at the local demo site level and at the national level. We have contributed to imparting many necessary skills and expertise to the countries”



Prof. Cleophas Migiro, the Cleaner Production Centre Tanzania's Director (Photo: COAST Project)

SHARING LESSONS FROM THE COAST PROJECT'S TEST PARTNERSHIP

WITH THE CLEANER PRODUCTION CENTRE OF TANZANIA (CPCT)

OVERVIEW

Under the EMS thematic area, the COAST Project partnered with the National Cleaner Production Centers (NCPCs) in Kenya, Mozambique and Tanzania and herewith is a showcase of one of these partners, namely the CPC-Tanzania. It is instrumental to note here that the decision to utilize the national NCPCs was not just of important strategic partnership value, it led to the use national expertise to ensure that once the COAST Project was over the local stakeholders have a nationally recognized partner to assist them with further initiatives.

BACKGROUND ON THE CPCT

The Cleaner Production Centre of Tanzania (CPCT) was initiated in October 1995 under the UNIDO-UNEP National Cleaner Production Centres (NCPCs) Programme. In April 2005, it was legally registered as a not-for-profit Trust under the Trustees Incorporation Ordinance, Cap 375. Since then, the Centre has been coordinating and playing a catalytic role in the promotion of the cleaner production concept in the country by providing policy advice on environmental management, supporting demonstrations of cleaner production techniques and technologies, training industry and professionals in resource efficient and cleaner production, being a source of information on resource efficient and cleaner production in the country and networking at the local, regional and global levels.

The CPCT also hosts the Secretariat of the African Roundtable on Sustainable Consumption and Production (ARSCP), a regional coordinating institution that was established by a Charter adopted by the 3rd African Roundtable on Sustainable Consumption and Production (ARSCP-3) in Casablanca, Morocco, on 18 May 2004. It was registered as a not-for-profit non-governmental organization (NGO) under the laws of the United Republic of Tanzania on 6 September 2004. The main objective of ARSCP is to promote sustainable consumption and production in Africa.

STRATEGIC NICHE OF THE CPCT

The Cleaner Production Centre of Tanzania (CPCT) has a wide experience in cleaner production and sustainable production and consumption issues. These include organizing and carrying out demonstration projects in industrial and business establishments; conducting assessments such as resource efficient and cleaner production (RECP) assessments; environmental impact assessments (EIAs); Technology Transfer assessments; E-waste assessments; Occupational Health and Safety audits/assessments; conducting environmental and technical audits for industrial processes; monitoring and evaluation of projects; and assisting companies to establish Environmental Management Systems among many other functions related to sustainable consumption, pollution prevention and control and waste management.

To facilitate this, the CPCT has established and nurtured a good and long-term working relationship with the Vice President's office (VPO), responsible for the environment portfolio). This relationship was cemented



The Cleaner Production Centre's Director Prof. Cleophas Migiro (Centre) with the rest of the CPCT team in Bagamoyo (Photo: COAST Project)

at the Centre's inception, when the Centre, as a project, was inaugurated by the First Vice President, the late Dr. Omary Ali Juma in 1996. Since then the Centre has been working closely with the VPO in various activities and projects. For instance, the Centre implemented a NORAD funded five-year project on "Cleaner Production for Ecologically Sustainable Industrial Development in Tanzania" under the coordination of the VPO. The CPCT was also assigned to coordinate the Country Programme under the Montreal Protocol on Ozone depleting Substances (ODS) from 1997 to 2005. It also serves on the Steering and Technical Committees on Development/Review of the National Implementation Plan (NIP) of the Stockholm Convention on Persistent Organic Pollutants (POPs).

THE CPCT'S PARTNERSHIP WITH THE COAST PROJECT

Since the COAST Project activities in the Bagamoyo Demo Site are coordinated by the VPO, the CPCT was assigned through a Memorandum of Understanding with the VPO to implement the UNIDO Transfer of Environmentally Sound Technology (TEST) Methodology in participating hotels in the area. This was to specifically cover the TEST Tool 1: Cleaner Production Assessments, TEST Tool 3: Environmental Management Systems and TEST Tool 5: Corporate Social Sustainability tools to as a guide to the hotels on how to adopt sustainable practices in their entire operational chain. It is important to note here that sustainability of the

CPCT depends solely on income generated from the services it provides to its clients. The Centre works creatively in providing high quality and reliable services to the customers. This business model facilitates workers from various hotels and institutions undergoing trainings in the RECP concept upon request. To support such efforts, the Centre recently acquired a mobile laboratory which can be used for analysis of various parameters including water analysis (domestic and industrial), indoor and outdoor air quality, meteorological data (humidity, wind velocity, pressure, wind direction and temperature), and others (fluid flow, energy efficiency, etc).

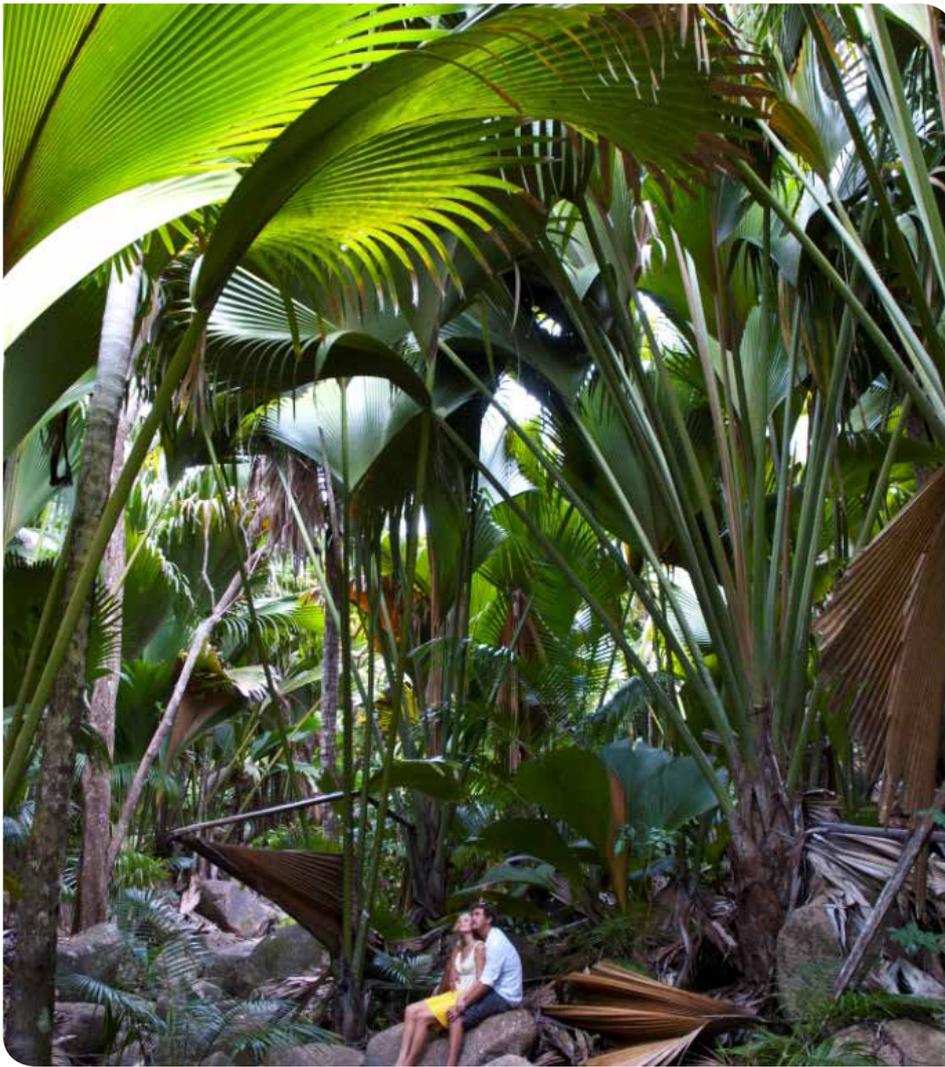
INITIAL RESULTS FROM CPCTS WORK IN THE BAGAMOYO DEMO SITE

It is now well acknowledged that hotels consume considerable amounts of resources, especially energy and water and also generate a high volume of wastes. This contributes to the pressure on the biodiversity and ecosystem of the area, as well as having economic implications. This implies that, there is great potential for cleaner production (CP) opportunities in the hotel industry that will not only aide the hotels but also contribute to the surrounding natural environment and population. The CPCT has demonstrated that promotion and implementation of CP in hotels eventually results into significant cost savings in terms of reduced costs on resource utilization (i.e. water, energy and materials) and waste disposal. This was effectively

demonstrated through our work in the hotel establishments in the Bagamoyo Demo Site. For instance, one of the partner Hotels in Bagamoyo made a monthly saving of more than USD 2,000 on their electricity bill after implementing a few No-Cost and Low-Cost energy saving measures recommendations. The pay-back period on the total investment was a year.

Moreover, the adoption of good environmental and social management practices in hotels creates a good image of the hotel among the surrounding society and is also considered to be an effective marketing tool within the growing international tourism market of guests seeking environmentally and socially responsible hotels. The work of the CPCT with the hotels in Bagamoyo contributed greatly in helping the hotels develop environmental policies to strengthen their environmental management work.

Hence in conclusion, based on the demonstration of the successful uptake of several No-Cost and Low-Cost recommendations for chemicals, energy, wastes, water and CSR and the resulting economic and environmental benefits attained, CPCT plans to extend this type of work to other hotels in the country. The future outlook for the CPCT and the sustainable development industry in Tanzania is indeed bright, and the CPCT will remain at the forefront of this work.



SEYCHELLES SUSTAINABLE TOURISM LABEL (SSTL)

Seychelles is one of the countries that have adopted a local voluntary eco-labeling award scheme for its hotels, the Seychelles Sustainable Tourism Label (SSTL). As a premier tourist destination in Africa, this is a bold move that seeks to ensure that the ever rising number of tourists do not cause ecological catastrophes in this coastal state. article presents the key elements of the SSTL and how it has advanced the quest for sustainable tourism in Seychelles.



Seychelles Sustainable Tourism Label
Safeguarding Seychelles for Tomorrow



AN OVERVIEW OF THE TOURISM INDUSTRY
IN SEYCHELLES

Tourism is one the main pillars of the Seychelles economy. The sector contributes at least 25% to the Gross Domestic Product and provides approximately 15% of direct employment . During the past decade, the industry has grown substantially with new tourism products coming online and achieving record numbers in terms of tourist arrivals. Over the recent years, the sector has increasingly recorded the highest number of visitors. For instance, statistics for 2012 shows a record with just over 208,000 visitors, the majority from France, Germany, Italy and Russia which account for 60% of the total visitors to the country.

BALANCING SEYCHELLES' TOURISM GROWTH AND PRESERVING ITS FRAGILE BIODIVERSITY

The growth in tourism during the past ten years has also resulted in more pressure on the local resources of the country. As a result of this, the Seychelles Government has had to balance between needs of economic development and the ever rising need to lessen and mitigate the negative impacts of such developments on the environment and its natural resources. This has led the country to shift its focus to market Seychelles as an Eco-tourism destination. As a result of this

initiative, the tourism industry in Seychelles has become more conscious of sustainability principles and practices resulting in the discovery of more nature-based attractions, products and services within the tourism attractions.

As a fragile ecosystem, the Seychelles archipelago belongs to one of the major biodiversity hotspots in the world. Approximately 47% of the country's landmass, and some 228km² of its ocean territory, are under some form of protected status. However, Seychelles' biodiversity remains at risk from a variety of human induced pressures; making the conservation and sustainable use of biodiversity to be of vital importance for the country's sustainable development. In this regard, the Seychelles Government's decision to adopt the Seychelles Sustainable Tourism Label (SSTL) sought to ensure continuous sustainability of the country's most vital

sectors; tourism and the natural resources it depends on, the environment.

So far, five hotels have been certified with the SSTL label, they are the Constance Ephelia Resort and Spa; the Berjaya Beau Vallon Bay Resort and Casino; the Hanneman Holliday Apartment. Two other hotels, the Kempinski Seychelles Resort and the Banyan Tree Seychelles successfully assessed and received their certification on 21st September, 2013. There are also a number of hotels that have expressed interest in the label and are at various stages of preparation of accessing the label. Getting hotels to apply for the label involves various correspondence, meetings, and explaining the criteria and their benefits. As a form of encouragement, the smaller establishments are provided with free technical assistance by the Government.

The concept behind the development of the

Seychelles Sustainable Tourism Label (SSTL) originated from the Tourism Department, Ministry of Tourism and Transport work in the preparation of Vision 21, a national blueprint, which entailed a comprehensive Tourism Master Plan 2001-2010 and the Seychelles Eco-tourism Strategy for the 21st Century (SETS-21). The Seychelles Ministry of Tourism and Transport adopted the SSTL project in 2004 (and later the Seychelles Tourism Board in 2007) and conducted preparatory research on sustainable tourism Labels. As a follow up, a committee of key stakeholders was established and a set of preliminary criteria developed. The draft criteria were piloted by the STB but the SSTL award scheme could not be implemented due to lack of financial resources. After some 5 year lull, the SSTL project gathered steam towards the end of 2009 through a UNDP-GEF supported initiative to mainstream biodiversity management into production sector activities.

THE SEYCHELLES SUSTAINABLE TOURISM LABEL – HOW IT WORKS

The SSTL aims to have participating hotels operate under the following basic principles:

- a. Develop and implement a sustainability policy;
- b. Monitor energy, water, and waste over time;
- c. Take steps to conserve resources;
- d. Promote local and small-scale businesses;
- e. Treat staff fairly and be in compliance with all laws and regulations;
- f. Contribute to community development and conservation activities;

Expected benefits for Participating Hotels

1. Marketing Related benefits

- Certification provides operators with a competitive advantage over other uncertified enterprises for marketing purposes;
- Certified properties are highlighted in the Seychelles Tourist Board stay guide;
- Certified properties have the right to use the Label on their website and marketing materials;
- Responsible hotels are promoted at periodic trade fairs;
- Certified properties are listed on the SSTL website;
- Guest satisfaction is likely to increase with the communication of sustainability achievements of the enterprise;

2. Cost savings Related benefits

- Utility costs are likely to decrease due to increase awareness, monitoring and use of improved technology;
- Staff replacement costs are likely to decrease as research shows sustainability initiatives build staff motivation and increase retention rates;

THE SSTL LABEL PROCESS

STEP 1: COMMUNICATION

The first step towards uptake of the SSTL is to communicate the label Message and its benefits of the certification process to accommodation managers and owners. This involves communication, stakeholder engagement, and awareness-raising. This process Started in September 2011 with the launching of the logo and branding is ongoing.



STEP 2: APPLICATION

The interested hotels should apply to SSTL by way of letter or email, and attach a copy of Their internal audit results. This self-assessment form is the same form used by assessors only Instead of points, the hotel notes Yes/No for each criterion. An application fee applies. Small Hotels (1-24rooms):400€, Medium size hotels (25-50 room) 800€ and large hotels (51+rooms) 1000€ The SSTL will officially opened applications on 1st of June 2012.



STEP 3: ASSESSMENT

The application and statement of compliance from the hotel is reviewed and if It is deemed complete, an assessor identified and an assessment date is set with the hotel.



STEP 4: VERIFICATION

Assessment forms are verified for completeness and scoring of each section is reviewed. Once satisfied that the hotel has scored the required number of points the hotel is recommended for an award with an "approved" status. Should the hotel not score the minimum required points, it will be recommended for re-assessment within six months with a "pending "status.



STEP 5: AWARD

An award panel meets at least every two months to review the recommendations made by SSTL. The panel confirms the award recommendation unless some irregularity is identified or further information is required. A written appeal may be made to the SSTL and will be reviewed by Awards panel. If an irregularity is identified, the hotel will be reassessed by a different assessor.

MAIN ENVIRONMENTAL ISSUES UNDER THE SSTL

1. MANAGEMENT

This section includes policy, monitoring, health and safety. It requires some sustainability documentation that will ensure the hotel's sustainability initiatives are undertaken systematically.

2. WASTE

Waste has a number of potentially serious environmental impacts including posing risks to the health of guests, staff and local communities. Waste reduction is therefore a widely understood and visible form of sustainable practice and presents a good opportunity to foster support from all the stakeholders. Reducing, Reusing and Recycling are effective ways of cutting business costs.

3. WATER

The broad aim of good practices in water use is to reduce the amount of fresh water used by hotels. This reduces the impact on fresh water supplies as well as the potential for water pollution. As with waste, the first step is to reduce water use through conservation and rainwater collection, and then to explore options for water reuse and recycling.

4. ENERGY

Energy typically comprises up to 50% of a hotel's utility operating costs. Reducing energy use is the area that is likely to have the most significant financial benefits to an enterprise. Energy reduction practices can consist of 'management' practices that change staff and/or guest behavior in order to reduce energy use.

5. CONSERVATION

Most sustainability practices focus on reducing the negative impact of a business on the environment or the community in which they operate. The community and conservation criteria reflect the fact that an important part of sustainable tourism is to make a positive contribution toward the local community and toward local conservation activities.

6. STAFF

Staff and guest-related practices are of significant importance to the sustainability of a hotel enterprise and of tourism in the Seychelles. The Staff criteria aim to recognize fair treatment of staff and staffing opportunities given to local people to reduce staff turnover and encourage loyalty.

7. COMMUNITY

A hotel can get recognition for its community participation and conservation practices, only if it keeps all the record of such activities. This may include receipts or letters of gratitude from community groups, photos of conservation work, or testimonials from community members.

8. GUESTS

The guest criteria recognize the importance of guest satisfaction to the sustainability of the business. Satisfied guests go home and recommend Seychelles to their friends. Word of mouth is one of the most effective forms of tourism marketing.

THE BERJAYA BEAU VALLON BAY RESORT & CASINO: A SEYCHELLES SUSTAINABLE TOURISM LABEL HOTEL

Being a seasoned establishment of sustainable practices located in Mahe Seychelles, Berjaya Beau Vallon Bay Resort & Casino was the first resort to be accredited under the SSTL for its bold decision to integrate sustainability practices in its operations by the Seychelles Tourism Board (STB) and the Seychelles Sustainable Tourism Label (SSTL). Berjaya was awarded because it adopted and customized the full range of criteria covering areas such as management, waste, water, energy, staff, conservation, community and lastly guests.

Among others, the hotel prides itself of promoting the following key sustainability principles:

1. Targeting trainings to hotel staff and awareness raising initiatives for hotel guests on how to enhance sustainability issues in hotel e.g. efficient water and energy use, re-use of towels, local food sourcing, etc.
2. Harvesting of rain water for use in cleaning operations of the hotel areas and recycling the water for gardening and on-site farming purposes;
3. Using flowers and fruits in the hotel operations that are grown on site and purchasing only local produce from the local community rather than importing goods;
4. Supporting a local school to manage an agricultural farm that also supplies produce to the hotel.

Website: <http://www.berjahotel.com/mahe/>



Mr. Gulab Rai, the Area General Manager for Berjaya Hotels & Resorts shares the key sustainability practices at the hotel (Photo: COAST Project)

CONSTANCE EPHELIA'S ENVIRONMENTAL COMMITMENT WITH A UNIQUE PASSION FOR PRESERVATION

The Constance Ephelia Resort in Seychelles is a premier holiday vacation resort on the Western Coast of Seychelles. It is one of the hotels that received the SSTL certification from the Seychelles Tourism Board (STB) and the Seychelles Sustainable Tourism Label (SSTL) in 2012. This resort which neighbors a protected park area has endeavored to fully blend its hotel infrastructure with the environment, to leave minimum interference with the environment. To work

with an international standard, Constance Ephelia is on its way to getting GREEN GLOBE certified in 2014.

In May 2011, Constance Ephelia benefited from a grant of USD 40,000 from UNDP/GEF/ Government of Seychelles for a project titled "Enhancing Conservation of Biodiversity at Port Launay". The main objective of the project was to improve the coordinated management of the Port Launay mangrove adjacent to the hotel site by all community



Mr. Cedric from the Constance Ephelia Seychelles Resort explaining to a visiting team from the COAST Project the results of the mangrove regeneration programme (Photo: COAST Project)

1. A water desalination plant, that converts saline water into potable water that is stationed within the hotel premises, thereby resulting in significant economic savings and reduced environmental impact on the Island landfill as reusable glass bottles are used rather than procuring 200,00 plastic water bottles per year;
2. Given that drinking water is such a precious resource on the Island, the water plant also ensures that drinking water resources are not depleted from the needs of the surrounding community given the large needs that the hotel has given its size;
3. The chemicals used for the laundry, housekeeping and kitchen are all mild, biodegradable with non-eutrophication potential;
4. Regular beach awareness and cleaning activities involving the hotel staff, guests, local communities and schools

Website: <http://epheliareort.constancehotels.com/>;

COAST

COLLABORATIVE ACTIONS FOR SUSTAINABLE TOURISM

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