



Making waste work on Zanzibar

Impact Information

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INTRODUCTION

Zanzibar as an archipelago generates over 96,000 metric tons of waste a year, a substantial number that is increasing with approximately 15% each year.

Due to an absence in policy and lack of access for both community and hotels to proper waste management, an equivalent of the weight of a Boeing 747 gets dumped uncontrolled into Zanzibar's environment every day, contaminating the environment and causing serious implications to public health and the tourism industry.

Managing the solid waste situation is identified by ZATI* as the major challenges for Zanzibar's future prosperity and is a necessity for the Island to remain a top holiday destination.

Waste and rubbish is the cause of 1 out of 3 complaints made by tourists and in a recent exit survey 4 out of 5 tourists considered not returning to Zanzibar due to the rubbish they witnessed during their holidays**.

4 of 5 visitors think the island is too polluted to visit again



Approximately 52 000 tons of waste is produced outside of Stone Town*** where the tourism industry accounts for 30 % and as the municipal service only covers Stone Town the majority of this waste is illegally dumped in and around villages, beaches and hotels.

In a recent analysis of informal dumpsites in the North A District more than 30 illegal dumpsites containing waste from the hotel industry was identified. Among the waste was sensitive customer details and credit card information together with other hotel specific waste such as bathroom slippers.



"In Tangier, Morocco, pollution of beaches by solid wastes was cited during the late 1990s as the leading cause of tourism decline that cost hotels in the area US\$23 million per year in lost revenues." UN-HABITAT

Until now, there has only been fragmented programs that support sustainable waste management on the island. As a result it has been hard for hotels to opt for a proper waste service helping the industry to take responsibility.

Zanrec's ambition is to put an end to this and instead put Zanzibar on the map as an eco travel destination. We provide a systemic and long-term solution to the problem and we hope that the hotel-industry is ready to take a giant leap towards sustainability together with Us, the local government, NGOs and communities.

In this document we will specify why becoming a part of Zanrec will help Zanzibar become a globally recognized eco travel destination and at the same time save lives and the environment.

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* <http://www.zati.org/?p=1130>

**Survey undertaken by the Royal Institute of Technology, Sweden, 2013

***Feasibility Study Conducted 2005, issued by The Zanzibar Municipal Council

THE IMPACT OF WASTE

-A human and environmental disaster

In Zanzibar, poor or sometimes complete absence of solid waste management has a direct impact upon health, length of life and the environment.

Hazardous waste is collected and disposed of with little or no control into open dumps close to, or inside, populated areas. The philosophy of 'out of sight, out of mind' have had to rule in the absence of a viable alternative.



Area in Nungwi with more than 30 illegal dumps containing hotel waste

These uncontrolled waste dumps often lead to the contamination of water bodies from which the population normally takes water for consumption, cooking and cleaning. In Zanzibar, the high temperatures and humid conditions accelerate degradation, increase the amount of leachate and directly affect the surrounding ecosystems by penetrating the soil and contaminating groundwater.



Scavanger looking for food amongs sewage and solid waste

They also offer very good conditions for the propagation of germs, insects, rats and other disease vectors. Often, the wastes are burned in order to lower critical hygienic problems; but this

causes the emission of toxic substances to the air, such as dioxins and furans, posing extreme danger to the children and adults who spend whole days at these dumps in search for food and other materials.



Livestock feeding on waste is a common sight

Additionally, animals look for food among wastes, becoming vectors of different diseases and increasing the spread of litter.

The consumption of animals fed with wastes can cause parasitic infestations of the central nervous system and infections of the digestive tract. Alimentary intoxication or food poisoning also poses a high risk when eating contaminated groceries.



Barefoot child scavengers harvesting hotel waste in an uncontrolled dump in Nungwi

ZANRECS SOLUTION

-Ensuring access for all

Zanrec is a socially responsible company with the objectives of maximization of social gains and minimization of adverse health, environmental and ecosystem impacts, resulting from inadequate waste-management on Zanzibar. Zanrec's impact driven actions build on the values of; "A clean Zanzibar, is a rich and healthy Zanzibar".

The more inhabitants and hotels that gain access to waste management and learn about waste and the environment, the more lightly can the deteriorating environmental and social catastrophe be prevented, ensuring the long-term attractiveness of the Island while providing safe, waste-related business-opportunities to socially exposed groups. By building on the strong collective "we-culture", Zanrec's clear awareness strategy is empowering the whole of Zanzibar to be a part of an environmental-movement, pursuing "A clean, rich and healthy Zanzibar".

Impact Driving Actions

A part from Zanrec's core business as a sustainable waste-management provider and environmental-information catalyst, Zanrec continually works to develop and manage a range of impact driven actions that can enhance the Zanzibar's environment.



What is waste and what is not?

Education and Awareness

By targeting children, Zanrec focus on empowering a new generation of environmentally aware young ambassadors that spreads knowledge into the households of Zanzibar. 43 % of Zanzibars population is under the age of 15.



Zanrec staff wearing protective gear during a dumpsite cleaning

*Zanrec's "Clean School Program" is providing schools with environmental education and access to sustainable waste-management

*Zanrec's "Inter-school competition" campaign encourages schools to compete in recycling is activating students, teachers, friends and family's.

*Zanrec's "Teach-a-Teach" system allows for rapid education of the whole population on Zanzibar.

Environment

*Zanrec is phasing out and cleaning illegal dumpsites

*Zanrec enables access to sustainable waste management for hotels and local communities, preventing waste from being dumped into the environment

*Zanrec recycle or upcycle up to 85 % of the waste collected and strengthen local and regional production.

*Zanrec dispose of non-recyclable waste (15%) in environmentally assessed landfills

*Zanrec regularly organizes village and beach cleanups in the most polluted areas.

Social

*Zanrec's recruit, train and equip entrepreneurial individuals around the island to become community waste-agents, enabling the local village to make an income based on recycling.

*Zanrec donates organic waste as fertilizer to local farmers who are often struggling with soil-depletion, allowing for improved yields.

*Zanrec stimulates micro-entrepreneurs to make a living from upcycling waste to products that are sold to tourists, telling an amazing story

ZANRECS IMPACT

-Together we can achieve it

Environmental impacts

The environmental impacts of waste-management can be measured as the differences between the scenarios with sustainable-management or with an inadequate waste management. When materials and products are dumped they not only pollute the air, land and water bodies, but also result in a net loss of natural resources that can no longer be utilized.

By providing a sustainable waste-management infrastructure based on The “Reduce, Reuse, Recycle-concept”, Zanrec is able to generate remarkable positive environmental impact while reducing the associated energy and resources spent in processing new materials.

Zanrec’s vision is to ensure that 100% of Zanzibars waste is managed based on “EU Waste Framework Directive” and that no illegal or inadequate dumping is taking place.



Without proper collection and management the opportunity to recycle 85 % of the waste is lost and instead part of a growing problem

Social impacts

Poorly managed waste can adversely impact human health and safety of both waste workers and the wider public in many ways. By collecting waste and containing it in an area away from the public, Zanrec brings considerable health and safety benefits. Secondly, Zanrec is helping to combat extreme poverty by the establishment of a reuse and recycling industry leading toward substantial job creation and employment opportunities.

The social impact of Zanrecs activities can be observed on four levels:

- *Delimiting general concerns such as nuisance, poor environmental quality, poor hygiene and odor.
- *Delimiting social concerns such as food safety, health and welfare, impaired quality of life and loss of income.
- *Delimiting Natural resource concerns such as pollution of vital water resources, loss of fish and wildlife.
- *Delimiting socio-economic concerns in relation to declining tourism-industry due to pollution.

Impact prognosis

In 2014, Zanrec aim is to collect and manage hotel waste equal in volume to 13 062 African elephants.

Of that, 500 tons is paper which saves 8500 new trees from being cut down in new production.

A part from removing non-degradable plastic and glass from the environment, recycled plastic consume 88% less energy than new production.

By 2016, our aim is to have environment and waste on the public school curriculum and thus island-wide awareness reaching out to over 1 000 000 inhabitants.

Activity	2014	2015
	Target	Target
Environment		
No of hotels waste handled	40%	70%
No of villages with waste system	40%	70%
Tons of cardboard recycled	9000	12000
Tons of waste recycled	9000	14000
Tons of waste disposed from dump	12000	14000
SOCIAL		
Community Agents	30	50
Students in Program	1500	3000
No of collected business	30	80
Full time workers generated in local community	100	500
Collected Tons/day	100	2000
Health and Village meetings conducted	30	50