

The environment in focus... sustainability at Kinasi

Conservation is "Preserving and/or restoring the environment by utilizing natural resources, traditional systems and knowledge sustainably". With regard to the 'environment' and the tradition of conservation, what does the word 'sustainable' mean really? After all, if you wish to 'sustain' (to keep the environment 'as it is (or better)') you must be carbon-neutral, which is very difficult indeed. Essentially it implies no tourism at all. Each of us has a negative Carbon footprint every day.

So many words are being applied to business now under ESG commitments, 'nature', biodiversity, ecosystem services, re-wilding and regeneration – especially in the wake of the pandemic – with no reference to definition and criteria, so we have spent a great deal of time analysing how it is we can be more (realistically) responsible for reducing our environmental impact..

We prefer the concept of "climate-friendly tourism" (design, planning and management) as espoused by the SunX Malta programme (www.sunxmalta.com) and we have begun employing their advice and guidelines and have been approved as members of the SunX Climate Friendly Register. A visit to their website will inform the reader of the principles that we follow at Kinasi Lodge.

But rather than seeing ourselves as 'do-gooders' waste management environmental projects as a way of generating business, for transfer of knowledge and upgrading community skills in a mutually beneficial partnership. In doing so we have been able to engage many of our guests over our 30 years so far, helping us with marketing channels for local produce such as honey, funding community waste management, teaching food waste composting, collecting and bringing into our primary schools stationery and educational materials from overseas, 'pre-loved' clothing, greenhouse design and construction, adapting solar electricity and our new goal - to create an early warning weather system for Mafia Archipelago to serve mariners and farmers alike.

Our motto is the three Rs ('recycle, reuse, repurpose') and I pretty much drive everyone mad with hoarding old stuff, broken things and 're-ing' but it is amazing how often you



need one of those 'bits' you were about to throw away. Some of our surplus used material from re-modelling has helped re-roof community houses, put in windows and doors damaged by the 2024 cyclone. Old metal items and plastic (mostly washed-up on our beach or the result of dive-for-debris) go to recyclers in the local business community (dhow nails, for example, are made from melted-down soft iron). Elements of our design ethic are centred upon 'minimalism with comfort' and colours that relax, brighten, match and reflect the tropical and 'beach' style.

Efficiency and focus help

In the last two years we have focused on efficiency in all our systems of work and management, to reduce time lost in tasks and generate less waste such as setting-up for breakfast, garden management using the mantra of 'simplicity, practicality and functionality'. This ties -in closely to sustainability, as we understand it.

The efficiency goal involves some investment on re-arranging places like the kitchen, pool bar and service room/s and especially on quality fittings for bathrooms and lighting but in the long-run it enables us to defray some of the inflation that has been rampant in 2023-24 (yes, Africa has been impacted too) and keep our costs down. Waste management also involved technical assistance, investment and training but is worth every shilling for the compost we produce and the problem solved.

Teamwork is essential to make it work

With staff involvement we practise some *kaizen* as well, to take small steps to better conditions of work and more satisfaction for guests. Climate change is hard to deal with so we are very pro-active in designing for mitigation and adaptation, for buildings, operations and staff care (exposure and physical work conditions). During the pandemic Peter completed the EDGE 'green-building' expert course for practitioners and we have adopted the design and construction principles for remodelling our buildings (with green rooves, shading devices, equipping with the most energy-saving air conditioners, water saving with faucets and showers and light fittings for reduced electricity consumption. Our 'green' rooves are the first of their kind in Tanzania.

What have we done so far ...



All rooms have solar hot water systems, each with 100 litres of storage; the kitchen and spa operate with double that quantity. Our units are now nearly 30 years old, thanks to stainless steel components and good quality water.



We have replaced all boat engines with four-stroke, fuel-saving models to reduce the footprint of any of our boat activities (diving, whale sharks, snorkeling, picnics).



We recycle all organic wastes including food wastes. Tropical fruit produce a lot of inedible material that is excellent for composting. This is mixed with left-overs and garden clippings and recycled for returning to the gardens.



We have banned ALL plastic in the service system of Kinasi and restrict it in our supply chain by using re-usable containers, baskets and paper bags (cardboard and paper is recycled to compost). Plastic is the hardest egg to crack to meet the 3Rs.



And removing plastics from our everyday life means we buy our very popular organic bathroom amenities from a certified source (Inaya...made in Zanzibar) in bulk and refill to dispensers in your bathroom.



All our lighting is now LED, which saves power and is softer on the eyes. The night landscape looks so much better with the new soft white LED walkway lights. Wall lighting has been selected for architectural features, safety on steps and durability.



Our water supply comes from our own borehole and wells, is filtered, UV-treated and filtered again before it reaches our guests. We do not buy water nor soft drinks in plastic bottles.

What is on the drawing board



Solar power is the big one coming up in 2025. The first stage is to make the kitchen independent of the grid using solar located on the kitchen roof and this should go into effect by August

2025.



We will complete the green rooves programme with the rest of our buildings (six done so far) and integrate the solar on the buildings without the new flat roofing system. In all we will have at least 600 m² of green

rooves. Our green roof design is home-grown from locally-available building materials.

(acknowledgement: with thanks to https://www.flaticon.com/free-icons/download for use of all icons)





The closed season months of April and May give us a chance, through our Blue World waters ports centre, to conduct a dive for debris operation under PADI and Project Aware guidelines and supervision. This is underwater but we also mobilise partners for a cleanup on beaches and mangrove forests and islets of Chole Bay after the rains.



The problem of solid waste - especially plastic bottles and containers - is growing rapidly, so one principle of the strategy this year is education as to the whys and wherefores of removing plastic

from our living spaces (being an eyesore alone does not gain converts to the effort of cleanups and proper disposal in Tanzania). We are also members of Green Fins and provide education under their banner from our PADI dive centre and during cleanups.



On a more ambitious scale we are developing a business and seeking finance for bottling water locally in glass returnable bottles, for distribution by local small business enterprises.

Building & Operations ... going for more C benefits

EDGE & TRUE Certifications

We do all our own design and construction together with local professionals and have adapted all our buildings to be cyclone-strong and installed the green rooves. Kinasi is now pursuing its **EDGE** green building certification and has now joined the TRUE process

to tap into advisory and assistance for implementation of waste management and to eventually achieve certification. https://edgebuildings.com/

TRUE (Total Resource Use and Efficiency) strives to change the way materials flow through society so that all products are eventually re-used and diverted from landfill, incineration (waste-to-energy) and the environment. https://www.gbci.org/about-true

TRUE helps facilities define, pursue and achieve zero waste goals while becoming more resource efficient. TRUE-certified businesses are 'environmentally responsible' and achieve a minimum of 90 percent waste diversion.

Administered by Green Business Certification Inc. (GBCI), the TRUE Zero Waste certification system (formerly known simply as Zero Waste certification) is a complement to LEED and EDGE other green rating systems. As countries continue to urbanize and industrialize, governments, institutions and businesses are faced with a rapidly increasing amount of waste that puts enormous strain on ecosystem communities. There are strong links between GBCI and EDGE that have evolved from embracing reductions of carbon footprints in the construction and operation of buildings, that led logically to dealing with waste generated within buildings once operational and during the building process itself.

Engaging guests over personal action on 'sustainability'

Food and other waste

This year I have sworn to tackle an 'edgy' problem, addressing guest behaviour towards the environment. It is a difficult task emerging from what one might see as the 'age of entitlement' - we don't want to be 'preachy' and we don't want to upset or be confrontational but we see wastage on a daily basis in many ways: the use of water and the number of showers and how long they are (we depend on a borehole and underground water), the use of up to 3 beach towels a day, the (over)use of amenities, the food taken but left half-eaten, the glass of juice filled and half-consumed. We are sometimes devastated by the behaviour of careless wastefulness (of the minority, it must be said).

Is it the result of feeling entitled'? Or just a lack of awareness? After all, this is Africa, where wasting food is a serious social impropriety.

So, to find a way we approached the **Climate Friendly Travel** services group of **SUNx** to help us to frame a programme to reduce waste in as many ways as possible by making our guests more 'aware' of what their footprint is and how little of an effort it is to 'reduce'. We are also in contact with the **PLEDGE** so that both can mentor us through the 'good green practices' process.

By joining a conscientious, international movement we hope to meet our goals of lowering Kinasi's impact on the environment from its kitchens, more tactfully and amicably. Carefully worded messages at the food service, or in the rooms, help but may also appear to be cost-cutting to some and can make our home (which is how we want guests to embrace Kinasi, look like a classroom. So, we now move forward in 2025 (in the wake of a pandemic and a cyclone) to work with our guests and make some converts to the cause.

Mosquito Control

Mosquitoes are always a worry for all of us and have to be tackled at the community level for their ability to fly and adaptability. In 2001 and again in 2021 we funded a survey of the habitats that generate mosquito populations in a local community and the actions that work easily and cheaply to prevent and reduce the dangers.

There are three species that are of concern in Mafia: Anopheles gambiae, Aedes aegypti and Culex quinqefasciatus. We deal with each type by destroying their habitats for breeding (clean water for Aedes and Anopheles, septic or organically polluted water for Culex) and/or interrupting the larval life cycle. Unfortunately we cannot stop mosquitoes reaching us from neighbouring areas so to deal with these live mosquitoes and shoreline midges we have two machines which attract s the insects by using carbon dioxide as an attractant.

And as part of our community business partnerships model

Where do our fruit, vegetables & herbs come from?

A question we are often asked.... but - alas - we don't pretend to be farmers growing everything organically .. We are too busy being hoteliers! In the past we did try to grow some of our needs – and even sponsored a local women's group - but found it a distraction from the prime goal of taking care of guests ... And we found we make a better, fairer, more diverse impact supporting small local business folk to supply our needs. As a matter of course we buy as much as possible grown in Mafia, including fruit, fish and other seafood (crab and oysters too, which you are unlikely to find elsewhere). Growing food for a hotel demands reliability and requires separate management, a specialist team, an insect-proof greenhouse, irrigation and a benefit-cost analysis (which is sure to find it's a nice idea but does not pay).

Mafia is not an easy place to grow greens but we do get a lot of local spinach, tomatoes in season as well as fruit,,,, but it is all very seasonal. In the future, we expect our community agriculture work will generate much more produce, which is what has happened in Zanzibar in the 30 years we have been resident there too and watched the tourism industry grow and provide enormous demand.

We are especially interested in the potential of Asian greens for local farmers and conducted two seasons of research on our farm in Zanzibar (where we are mainly protecting a vital Coastal Forest habitat and now farm vanilla). Success there has shown a way forward and these versatile and fast-growing hybrid varieties are so good for cuisine.

Our main source of temperate vegetables is the Morogoro area, south-west of Dar es Salaam. These are delivered to markets in Dar es Salaam where for 30 years we have worked with the same family of traders, get our vegetables and special fruits packed in local baskets and flown over to Mafia.

With these efforts front of mind we have turned our attention to land use in Mafia and renewed efforts to develop better horticulture.

Slash & Burn Farming

The slash and burn system of land use is still practiced widely in the north of Mafia where natural forest and bush is clear-felled for annual crops of maize, cassava, pigeon peas, sweet potato, pumpkins and fruits. The result is erosion and rapid leaching of nutrients as there is no ground cover when the rains arrive. To make matters worse there has been die-off of coconut palms along the dry humid coast of Tanzania since 2005; as the result of a combination of drier conditions, the age of the palms and disease in the north of Mafia household incomes have been reduced.

We are now working with the people of Bweni and Kanga villages in the north of Mafia to alter the system away from the destructive use of fire by introducing permanent tree crops such as oranges, grapefruit, tangerine, pumelo, pomegranate, passionfruit, mulberry and some spices including cinnamon, black pepper and vanilla that will grow well in Mafia, where the soils are generally poor and there is a long dry season. Some farmers will also adopt honey production that we first initiated in the south of Mafia in 1993 (a project later taken over by WWF-Mafia Island Marine Park).

This is a commercial business partnership programme that was initiated in 2023 and delayed by the cyclone in May 2024. We expect to create local production of fresh vegetables and "greens" with seeds developed for the costal humid tropics (helping to solve our veg and salad supply constraints) and increase value added for farmers with vanilla and higher value vegetable hybrid improved seeds and a greater "mix" of produce in an integrated mixed-farming, agro-forestry system based upon ICRAF and UNEP recommendations for East Africa's coastal areas and from our own experience with our farm in Zanzibar.