

The People4Nature Belong!

An Untapped Economic Front for Africa

The Blue Space

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ISSUE 4

Dying a Slow and Painful Death

Madunguni Forest Reserve

Transforming Lives in Kwale County
Conservation Agriculture

Alternative Reef Restoration Approach
Coral Gardening

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The Year That Was

2018: A Summary Report

There has been a steady growth of the People4Nature Global since 2017, when the network was transformed into a global movement. Our membership has grown to 424 across 16 countries worldwide. These countries are Bangladesh, Benin, Cameroon, Costa Rica, Ethiopia, Ghana, Japan, Kenya, Madagascar, Mozambique, Namibia, Nepal, Tanzania, Uganda, USA and Zimbabwe.

In 2017, the major drive was the operationalization of the network including the establishment of various organs such as the Summit and the People4Nature Platforms. The focus of activities in 2018 shifted towards testing the effectiveness of various network organs and member recruitment.

Platform activities began but were mostly confined to online discussions and sharing of information through social media platforms. The discussions revolved around strategies for effective implementation of Platform activities.

Subsequently, a number of policies, strategies and guidelines were either reviewed or developed. These include the Child Protection Policy (Youth platform), the Communication Strategy (Environmental Education platform), the Tree Planting Strategy (Wildlife and

Forest platform) as well as the Hazina Mazingira/Environment Fund Guidelines (Enterprise-led Conservation).

Our social investment programme activities have continued to generate revenues, although this year there was a dip compared to the previous year (2017).

The Wasini Initiative was dormant this year although plans are at an advanced stage to kick-start activities in the coming year. Meanwhile, the Community Initiatives on Clean Energy (CICE) continued with its operations, enabling members access solar and energy saving cook stoves.

This year we had our first quarterly issue of People4Nature magazine produced in March 2018. The magazine has been distributed in soft copies.

These achievements would not have been possible without your participation and active involvement. We would like to thank you for your support and we look forward to greater achievements next year.

The details of these achievements are captured in our 2018 Annual Report..



2018 Annual Report



Silvanus Kunona,
Chairman,
People4Nature Global
(NAMIBIA).

CONSERVATION AGRICULTURE

Transforming Lives in Kwale County, Kenya.

Intensive crop production has in many instances depleted and rendered soils unproductive. Unproductive soils, coupled with unpredictable weather conditions, makes it difficult for farmers to develop sustainable crop production systems for optimum productivity. To manage these challenges, farmers are turning to conservation agriculture.

The Food and Agriculture Organization (FAO) of the United Nations defines conservation agriculture as a farming system that promotes maintenance of a permanent soil cover, minimum soil disturbance and diversification of plant species.

Conservation agriculture aims at higher crop yields, lower production costs while at the same time conserving and maintaining the soil's productivity in perpetuity.

It is for this reason that many countries are turning to conservation agriculture as a solution to low soil productivity and an adaptation and mitigation measure to the effects of climate change. The Kwale County Government, in 2015, went into partnership with Food and Agriculture Organization (FAO) to implement a Conservation Agriculture project.

The project is part of the Kenya Climate Resilient Agricultural Livelihoods Programme (KCALP), targeting the productive semi-arid areas of Kenya. Besides Kwale County, the project is implemented in Kilifi, Taita Taveta, Makueni, Embu, Laikipia, Meru, Kitui Machakos and Tharaka Nithi counties.

The project focuses on the use of appropriate varieties of drought tolerant crops, minimal tillage, the maintenance of soil cover, crop rotation, timely planting and weeding, and improved post-harvest storage. Cassava, cowpeas, green grams and sorghum are the draught resistant crops being promoted.



FAO demonstration farm in Kikoneni Ward, Lunga Lunga Sub County.



Jairo Ritho working on a farm using ox-drawn plough in Kikoneni Ward, Lunga Lunga Sub County.



Mama Mariam, a Planting Service Provider from Vanga Ward, Lunga Lunga Sub County, using the Job Planter.

So far 9 Master Trainers (MTs), 173 Trainer of Farmers (ToF), 328 farmer groups, with an average of 20 members each, have been trained and 328 demonstration farms established countywide.

Farm inputs were issued to the demonstration farms including seeds, fertilizer, ripper, sub-soilers, shallow weeders and job planters. In addition, 17 farmers were given ox drawn planters, which are capable of planting 5 acres per day.

There are 3464 farmers who have put 2178 hectares under conservation agriculture. To support them, the project has also trained service providers. There are 186 sprayer service providers and 20 sub-soiling, planting and ripping service providers. Additionally, to ensure food safety, the project has trained 20 individuals ranging from health sector, agricultural

extension and lead farmers on aflatoxin detection and testing.

CA Service Provider and Farmer James Kieti

James Kii Kieti has a 4-acre farm located in Kikoneni Ward, a semi-arid area of Lunga Lunga Sub County. James is a welder by profession and when the project launched he turned to farming as an additional livelihood option.



Mr. James Kieti at his workshop.

Under the project, he provides planting services, services planters and has been fabricating the shallow weeder. James has fully adopted conservation agriculture practices. He uses herbicides to remove weeds and ripper to break the hard pan during land preparation. He also uses job planter to plant green grams in the farrows and his own fabricated shallow weeder for weed control.

The crop enterprises found in the farm include maize (1 acre), Green grams (1 acre), 1 acre

intercropped with maize and green grams, and cow peas (1 acre).

Through conservation agriculture, he has seen maize yields increase from 4 to 12 bags per acre and the cost of production reduce from Ksh. 10,000 to Ksh. 4,000 per acre. Additionally, green grams yields have increased from 1 bag per acre to 3 bags per acre and the cost of production reduce by half from Ksh. 9,000 per acre.

Equally, his income has drastically increased. Income from maize has risen from Ksh. 45,000 to Ksh. 110,000, green grams from Ksh. 40,000 to Ksh. 120,000 and cow peas from Ksh 20,000 to Kshs 90,000. This is the total income in 3 years of implementing the project. He has also sold 25 pieces of shallow weeders at Ksh. 300.

The improved economic status has enabled him educate his children, renovate his house and expand his welding business.



Mr. John Safari (article writer) is the Deputy County Director, Crop Production, and FAO Field Programme Assistant, Kwale County.

An underwater photograph showing a large colony of yellowish-brown coral in the foreground. Numerous small, light blue fish are swimming in the clear, turquoise water above the coral. The scene is brightly lit, suggesting a shallow depth.

The Blue Space

An Untapped Economic Front that can Power the Africa We Want

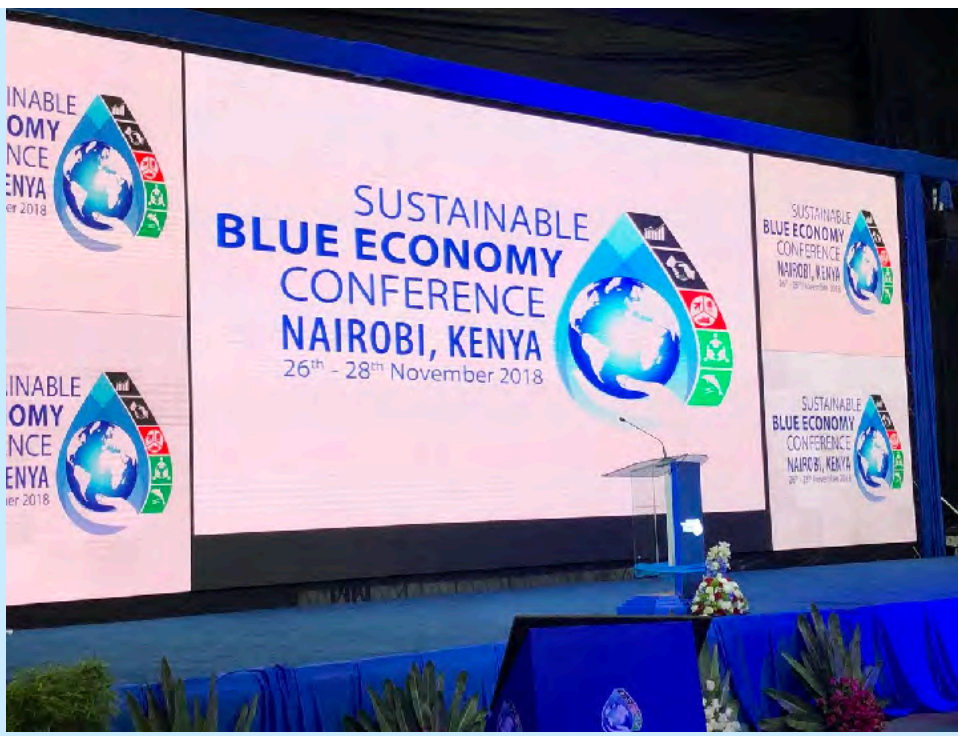
The Blue Space is part of Africa's rich geographical, social, and cultural canvas. It covers the sea and the coast, the lakes, rivers and underground water. Out of the fifty-four African States, thirty-eight are coastal States.

Africa's total maritime zone is about 13 million square kilometers and includes territorial seas and the Exclusive Economic Zones (EEZ), approximately 6.5 million square kilometers of continental shelf as well as approximately 240,000 square kilometers under lakes. The continent therefore, has a vast blue space that can contribute to sustainable development of African States.

The sustainable use, management and conservation of aquatic and marine ecosystems and associated

resources is what is largely referred to as the Blue Economy. It encompasses a range of productive sectors, including fisheries, aquaculture, tourism, transport, shipbuilding, energy, bioprospecting, underwater mining and related activities.

Additionally, the Blue Economy approach emphasizes interconnectedness with other sectors that provide ecosystem services based on the harvesting of living and non-living resources, benefitting both coastal, island states and landlocked countries. Sustainable Blue Economy also supports important social considerations, such as gender mainstreaming, food and water security, poverty alleviation, wealth retention, and jobs creation.



The first global Sustainable Blue Economy Conference.

Its importance has also been recognized by the United Nations in adopting Sustainable Development Goals (SDGs) and specifically SDG 14 on conservation and sustainable use of the oceans, seas, and marine resources. Africa, too, has identified Blue Economy as an integral part of Agenda 2063, the Africa We Want.

The biotic resources available within the Blue Space allows Africa to expand its fishing, aquaculture, mariculture sectors and feed the pharmaceutical, chemical and cosmetics industries. These biotic resources together with mineral resources and the generation of new energy resources provide the ingredients for a resource-based industrialization. Africa, therefore, is at the centre of global trade, particularly value-added products.

The major driver to the realization of the benefits of these resources remains adoption of appropriate technology, an area that Africa still lags behind. The global market for marine biotechnology is expected to reach USD 5.9 billion by 2022. It is driven by increased investments in marine biotechnology research and growing demand for natural marine ingredients.

Biotechnology is essential for developing new foods, pharmaceuticals, bioenergy, and cosmetics.

Another untapped resource with a huge potential is ocean renewable energy. The International Energy Agency estimates that ocean renewable energy has a power potential sufficient to provide up to 400% of global current energy demand. Currently, approximately 30 percent of world oil and gas production comes from offshore resources, and it is expected to continue to meet our energy needs until the ocean energy potential is tapped.

Despite Africa's rich resource endowments, the continent still suffers from large-scale poverty, with 46 percent of the population living in extreme poverty. Over the past decade, the African Union Commission (AUC) has sensitized its members over the critical role that the Blue Economy can play in generating wealth and reducing widespread poverty in Africa. In recognizing this role, the Africa Union developed the 2050 Africa's Integrated Maritime Strategy (AU 2050 AIMS) and placed the Blue Economy at the center of the AU's Agenda 2063, the Africa We Want. In July 2015, the African Union launched the African Day (25 July) and Decade of Seas and Oceans (2015–2025) to rally action on the Blue Economy.

In response, African States have started to recognize the importance of the Blue Economy, and some are developing Blue Economy strategies. For example, Mauritius and the Seychelles have

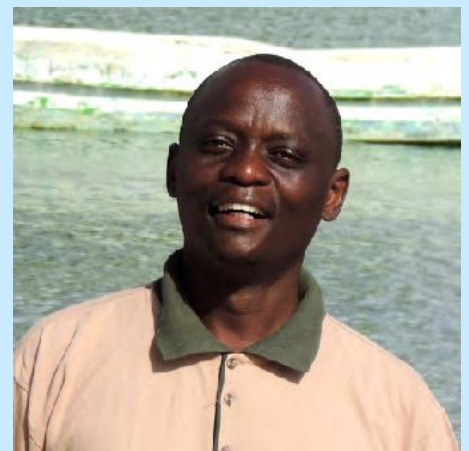
6 advanced Blue Economy policies and institutional frameworks.

There are, however, challenges that hinder effective harnessing of the Blue Economy potential. These include climate vulnerability, maritime insecurity, tsunamis and hurricanes, rising sea levels, ocean acidification, overfishing caused by illegal, unreported, and unregulated (IUU) fishing and other unsustainable fishing practices, pollution and habitat destruction.

Other challenges include inadequate access to shared resources as well as limited technological innovations, experiences and practices that can lead the transition to Blue Economy. In addition, complex national and international interests, can either favor partnership building and collaborative engagement or create tensions between interested parties.

Africa will quickly realize the full potential of the Blue Economy when it develops its own understanding of prosperity and progress, while promoting innovative thinking and practices. Besides, effective inclusion of all societal groups, especially women, youth, local communities, and marginalized groups and the recognition of the unique and valuable role they can play, can speed up the process.

In the whole process, it is important that the rich African cultural diversity and heritage is preserved. Thousands of indigenous communities continue to maintain their way of life and traditional livelihoods. These livelihoods represent more than income; they are embedded in their very identity.



Mr. Moses Ziro (article writer) is the Secretary, People4Nature Global and Executive Director, Africa Nature Organization.



CORAL GARDENING

A New Approach to Coral Reef Restoration

The ocean and its vast resources are always fascinating. It is believed that its mysteries are yet to be fully discovered compared to what we already know of the terrestrial natural resources. But there is one thing that we all clearly know, that humans have continuously degraded the oceans to alarming levels through various forms of pollution including oil spills and plastics.

Despite the unhealthy state of our oceans, they have continued to produce goods and services that support life on Planet Earth. The integrity and productivity of the oceans has received a major boost with the discovery of a new evolving technique of restoring degraded marine ecological areas through coral gardening.

The Wasini island community are among the first in Africa to pilot coral translating, combining indigenous and scientific knowledge to grow pieces of corals in a nursery set up before transplanting onto degraded coral sites. They were supported by Africa Nature Organization (ANO), the Kenya Marine and Fisheries Research Institute (KeMFRI) and the State Department of Fisheries (SDF).

Healthy coral reefs are among the ocean's most diverse and ecologically important habitats. They provide numerous socio-economic, ecological, aesthetic and cultural values. They also form an important breeding ground and refuge for fish and other living organisms in the ocean.



Coral fragments ready for transplanting.

Corals have, over the years, declined due to human activities such as pollution, unsustainable fishing methods, as well as the effects of global climatic changes.

Corals are easily stressed by increasing ocean temperatures, ocean acidification, shifting of ocean currents, rise in ultraviolet light concentration, silt deposition and wave damage. The impact of these factors is manifested as coral bleaches, coral mortality, reduced reproductive capacity and increased vulnerability to coral diseases.

The coral gardening process bypasses early growth stages, when corals are vulnerable, by growing corals in nurseries that are later replanted on selected degraded coral reef sites. Coral gardening is now being used as an alternative adaptive tool to manage and restore degraded coral reefs.

There are 10 steps used in coral reef restoration programme as was used at Wasini Island. These are: -

1. Sensitization of the community on the need for coral reef restoration;

2. Identification of degraded reefs areas through participatory mapping, zonation and prioritization of actions;
3. Baseline survey of the targeted site to gather biophysical and socio-economic information such as fish types and abundance, fishing and tourism activities;



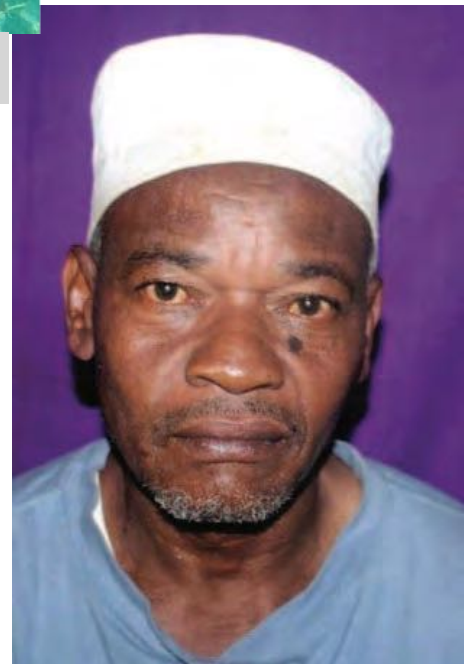
Regular monitoring of coral nursery beds

4. Coral species and donor sites for suitable coral fragments are identified;
5. Community and other stakeholders are trained to establish a pool of skilled local communities for effective and sustained coral reef restoration;
6. After the training, coral nursery sites are selected and the nursery beds and concrete blocks constructed;
7. Coral fragments are gathered from donor sites to the established nursery beds;
8. Regular monitoring of nursery grown coral fragments including cleaning of coral fragments using a brush to improve growth and survival;

9. Nursery grown corals are transplanted to degraded or artificial reefs; and,
10. Regular monitoring of growth and survival of out-planted corals.

There are currently notable improvements and benefits in fish abundance and tourist traffic at Wasini, including interest from learning institutions, researchers and other community groups eager to learn and establish their own coral gardens.

There are efforts to expand the coral gardens within Wasini Island and other suitable areas along the Kenyan coast.



Mr. Abdalla Omar Juma (article writer) is the Secretary to the Wasini Beach Management Unit, a community-based institution established through the Fisheries Management and Development Act in Kenya.

MADUNGUNI FOREST

The Remnant Indigenous Coastal Forest Is Dying a Slow, Painful Death.



Mr. Raphael Ngumbao, Chairman, Friends of Madunguni Forest, on top of the Madunguni land slide, with a second land slide in the background.

The Madunguni Forest is a gazetted forest covering 951.85 (ha). It lies northeast of the famous Arabuko-Sokoke Forest Reserve. It is one of the last remaining tracts of Coastal dryland indigenous forest in Kenya. The Malindi-Sala gate road separates the two forests.

Just like the Arabuko-Sokoke, Madunguni Forest is home to a number of rare and /or endemic species of flora and fauna. In contrast, the Madunguni Forest has been subjected to increased pressure from illegal

settlers (squatters) inside the forest area, loggers, charcoal burners and firewood collectors.

It is estimated that 75% of the forest cover has been lost as a result of human interference, with the most conspicuous effect being soil erosion by water. The loss of vegetation cover has resulted in the detachment and transportation of large tracts of soils evidenced by massive land slides and earth flow in the forest and in the lowlands of Madunguni village.



Dungu

raised the issue with the Provincial Administration. Chief Awadh and chief Athuman Ndurya, in charge of Mikaoni area, were requested to take against residents degrading Madunguni Forest.

The collaboration between Madunguni community and the forester led to the formation of Madunguni Location Environment Committee (LEC).

In the same year, Madunguni Forest was identified as a suitable location for Jilore/Arabuko Sokoke forest research substation by the Forest Department. However, the Madunguni Community, led by Mr. Ngumbao Mwadzili, the LEC chairman, did not agree with the idea. The forest continued to be managed

by the Kilifi County Council, on behalf of the community.

By 1980, forest degradation had continued to an alarming level. Mr. Ngumbao Mwadzili was joined by Mr. Abdalla Ndema and Mr. Kaingu Bindurya, in mobilizing the community in efforts to stop further forest degradation. The community managed to have the few illegal settlers evicted from the forest. The evicted farmers did not settle far from the forest and by 1987, they had returned to the forest to continue farming.

The number of encroachers increased gradually to around 500 and by 1996, the situation within and around the forest became very volatile. The illegal settlers got backing from politicians and new encroachers arrived leading to skirmishes between old and new encroachers. And there were serious casualties including deaths.

The Madunguni forest was named after the Madunguni village, an areas renowned for its fertile soils and a grain basket for Kilifi County. Dungu is a traditional house built on stilts that was used as a shield against lions and other wildlife that used to roam the area. Madunguni was, therefore, the place of houses built on stilts.

The local residents had conserved the forest as a source of firewood as they had no access to the Arabuko Sokoke Forest. But more importantly, the locals used the forest to predict weather patterns. It was, therefore, regarded as sacred.

The early signs of encroachment were recorded as early as 1969. The residents of the 10-mile coastal area, referred to as Mikaoni area, covering Kakuyuni, Mere and Mida, had a habit of accessing the forest for its timber, charcoal, firewood and subsistence farming.

In 1971, the Madunguni community, in collaboration with a Mr. Tinga, the local forester,



Most parts of the forest have either been settled, turned into farms or cleared by charcoal burners.



have the forest gazetted. The forest was gazetted as a government forest in 2004.

The encroachers, with the support of politicians, went to court to oppose the gazette and their eviction. There was a temporary court injunction. The court granted that they remain in the forest until the case is determined. In that period, no permanent buildings were to be constructed or the forest encroached. The case has been

The illegal settlers have grown to an estimated 2000 people. At the rate at which their population is growing, the forest will be wiped out in less than 5 years. The biggest impact is not only on the loss of the forest but on farms that have turned unproductive in and around the forest. The land slides and water run-off wash down unproductive soils that covers the lowland farms in Madunguni, the grain basket of Kilifi County.

The Provincial Administration was helpless in the face of political interference. They had to change tactics in dealing with the encroachers. Instead of taking them to court, they resorted to evicting them instead.

In 2001, the youth in Madunguni formed and registered the Friends of Madunguni Forest group to support efforts of the Madunguni LEC. Together with Madunguni LEC, and a section of Kilifi County Council, they urged Hon. Abubakar Badawy, Member of Parliament for Malindi, to table a motion in Parliament in 2003 to



pending in court ever since.

Meanwhile, the destruction of Madunguni Forest has continued in spite of the injunction order. Illegal subsistence cultivation and charcoal burning continues unabated inside the forest. Encroachers have been bold enough to build a school, churches and recently a mosque, inside the forest, believing that the government will eventually give in to their demands.

Pictures 1, 2 and 3: Madunguni members of the People4Nature planting trees in degraded sites of Madunguni Forest in 2017.

Article writers:

Mr. Raphael Ngumbao, Chairman, Friends of Madunguni Forest,

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Mr. Weston Mure, (Picture 2) resident and member of People4Nature Global.

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Moses Ziro,
Secretary, People4Nature Global
(KENYA).

People4Nature Global's Steering Team

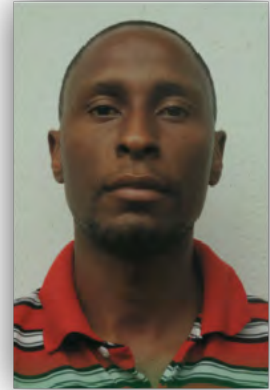
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Dorothy Syallow,
Wildlife and Forest Platform,
(KENYA)



Raymond Mwambire,
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Fadhila Ghikas,
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Gaston Setondji,
Conservation Agriculture
and Fisheries Platform.
(BENIN)



Zelalem Abera
Environmental Education and Awareness
Platform,
(Ethiopia)

Welcome Home!

Our People4Nature Global network has grown to 424 members across 16 countries worldwide. These countries are Bangladesh, Benin, Cameroon, Costa Rica, Ethiopia, Ghana, Japan, Kenya, Madagascar, Mozambique, Namibia, Nepal, Tanzania, Uganda, USA and Zimbabwe.

This year 36 new members were registered from Cameroon (2), Bangladesh (1), Kenya (27), Madagascar (2), Mozambique (1) and Nepal (3). Out of the 36, 5 were Young P4N below the age of 21. In the 4th quarter, 7 new members were registered.



Paul, KENYA



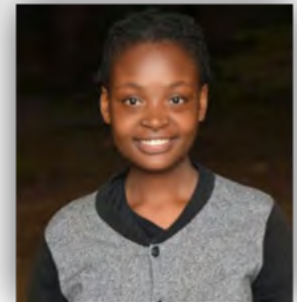
Ram, NEPAL



Sandra, KENYA



Bambo, KENYA



Cynthia, KENYA

Get In Touch!

We are always excited to hear from you. If you have a comment, opinion, question or suggestion on how we can improve this magazine, get in touch with us.

We welcome articles that we can publish in People4Nature Magazine. It could be your opinion on an environmental issue, a report of your home

project, an field event or a workshop that you participated in. Kindly use the links below:



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