

CONFERENCE NEWS BULLETIN

Kwale farmers to take lead in tsetse control

Farmers will benefit from research to control tsetse fly as a new centre is established.

The International Centre of Insect Physiology and Ecology (ICIPE) is developing a new Tsetse fly repellent trap technology, as a way of controlling the trypanosomiasis disease. This technology is being developed even as methods to sterilize the male tsetse fly insect – the vector transmitting the disease - remains cumbersome.

Even so, ICIPE researchers see sustainability challenges when it comes to the scientific control of the insect and therefore the disease among herders in the Mcolwa Tangini area, Kwale county of Kenya.

“The project is phasing out even as it registers satisfactory results in developing a tsetse fly repellent and a scientific trap to control the vector that transmits trypanosomiasis,” says Michael Okal, a post-doctoral fellow at ICIPE,

He adds that the absence of agricultural extension workers who will take over the farmers’ training, poses uncertainty. He also cited the Ethiopian example where every village has an extension worker hired by the government to train farmers once a project is phased out.



Michael Okal, post-doctoral fellow at icipe

However, all is not lost. The establishment of a learning center in farmer’s premises used to train farmers who then train their counterparts in the community is raising hope.

Josephine Wayga is one such model farmer. She using her plot of land to train other farmers by demonstrating how the repellent and traps provided to her by ICIPE work.

“I mostly communicate and teach what I know to other members of the community when we meet for our cattle’s blood test every month, organized by the Centre researchers as a way of monitoring the disease,” she says, adding that she also uses her mobile phone to text and teach others.

Both the repellent and the trap are environmentally friendly as it reduces the use of chemicals.



Model Farmer Josephine Wayga

Coast yet to fully exploit lucrative mangrove carbon trade



Mangrove vegetation at Gazi Bay, Mswambweni in Kwale County.
Photo: Charles Mghenyi

By Joyce Chimbi

Scientists at the Gazi Mangrove Station in Kwale County along Kenya's coastline have expressed concerns that the full potential of mangrove forests to capture and store huge carbon stocks is yet to be exploited.

A mangrove is a tropical tree or shrub that grows in swampy areas. Researchers at Gazi station estimate that there are 61,000 hectares of mangrove forests along this coastline.

Fredrick Mungai, a research assistant at the station, says that mangroves can capture approximately eight to 10 times higher carbon compared to terrestrial forests.

"Blue carbon ecosystems such as mangroves can make important impact to Kenya's Nationally Determined Contributions to the Paris Agreement which aims to make a 30 percent reduction in Greenhouse Gas emissions by 2030," he says.

A country's Nationally Determined Contributions (NDCs) are the center that holds the Paris climate agreement of 2015. These documents specify a country's emissions reduction and adaptation targets by 2030 and are reviewed, and updated every five years.

Kenya's NDC is centered on low emission and climate resilient development pathway with ambitious mitigation targets.

Blue Carbon are Key to Paris Agreement Commitments

Mungai says that despite the immense capacity that mangroves have to drastically reduce carbon emission; Kenya is yet to include blue carbon ecosystems in its NDCs.

"There is therefore a great opportunity to influence this policy decision so that mangrove carbon can be included in periodic NDCs revisions. It is all about using blue carbon in realizing Kenya's commitments to Paris Agreement," argues Lilian Mwhaki, a PhD research student specializing in mangrove at Edinburgh Napier University.

Mwhaki is currently undertaking research at Gazi mangrove station, which is one of 10 such stations across the country.

She says that for blue carbon ecosystems such as mangroves to be fully exploited, mangrove restoration projects such as those on going in Kwale and Lamu counties must gain significant momentum.

"More than 60 percent of mangroves occur in Lamu County, followed by Kwale and Kilifi at 14 percent each, followed by Mombasa at six percent and finally Tana River County at five percent," she says. Adding that "Mangroves need fresh water and that is why they can be found in these areas."

Mwangi notes that by using conservative estimates, natural scientists discovered that the total emissions from losses and degradation of blue carbon per annum in Kenya is estimated to be three times higher than the emissions from the transport sector.

Abel Kiprono, also based at Gazi station, decries the fact that mangroves are an endangered species as locals harvest them for wood products and energy.

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Gains and Losses

As a result, during the 1990 to 2019 period, there were gains and losses recorded in Lamu mangroves. These losses were associated with the mangroves very close proximity to Lamu's highly populated village centers like Ndau and Faza.

This notwithstanding, Kiprono says that there is increasing awareness among local communities on the benefit of the mangroves.

Kenya's mangrove restoration projects are a first in the world and carbon trading from mangroves rakes in 1.5 million shillings every year.

As these benefits continue to increase consistently, researchers are convinced that it is only a matter of time before mangroves define the very heart of the country's commitments to the Paris Agreement.

**Sam Kinyanjui,
KEMRI- Wellcome
Trust Head of
Training takes
journalists through
information about
Mental Health
and Sickle Anemia
research. Photo:
Manuel Odeny**



Traditional healers key to ending stigma in mental health

By Manuel Odeny

Traditional and primary health providers should be incorporated in policies to help reduce huge stigma that has been negatively affecting mental health patients in Kenya.

A recent study by Kemri Wellcome Trust facility in Kilifi County and several researchers found that most Kenyans trust the informal providers more to tackle mental health issues than hospitals, despite not having capacity for cure.

While most traditional health practitioners were willing to collaborate with the hospitals to refer patients, their input is always ignored.

Ms Judy Baariu, the Mental Health Programme officer under Difu Simo project at the facility says traditional healers play a big role in identifying and referring mental health patients to health facilities.

Difu Simo, is derived from Giriama language that meaning breaking free.

The project involves engaging in public awareness campaign and participation in schools and barazas to help end stigma associated with mental health.

"We need to have traditional healers take part in identifying patients and helping them access medication. This is because most patients trust them more as fuelled by myths," Ms Baariu said.

At KEMRI Wellcome Trust's Neurology and Epilepsy Clinic in Kilifi town, mental health patients get free or subsidized treatment drawn from across coastal counties as explained by Gilbert Katana, a clinical officer.

"Most patients first stop are traditional healers and prayers as they believe mental health sickness and epilepsy are caused by witchcraft, dead relatives and jealous neighbours which is not always the case," Katana said.

The two were speaking to journalists drawn from Media for Environment, Science, Health and Agriculture (Mesha) at the facility.

Their sentiments are supported by a research 'Prioritymental, neurological and substance use disorders in rural Kenya: Traditional health practitioners' and primary health care workers' perspectives,' by Mary Bittal and others done at the facility in Kilifi area.

The research was done between February and April 2018.

"Optimizing treatment and care for people with mental health requires utilization of all available resources within a health care system," the report stated after analyzing eight focus groups of primary, traditional health practitioners and faith healers.

The World Health Organization's Mental Health Gap Action Program (mhGAP) noted that over 75 per cent of people with mental sickness live in low and middle-income countries where the informal group forms major step of care givers.

"Most patients seek services when their condition is always severe after taking longer at traditional healers, we found that those we work with often refer patients faster," Katana said.

Makao, a 56-year-old traditional healer said most of them are willing to refer patients to hospitals.

"I will give you my medication for 3 days and if there is no improvement on the fourth day, then you have to go to hospital," Makao said.

Mental Illness is a manageable condition and can be treated on time when symptoms are detected on time and traditional healers are incorporated on time, the research states.

"When you get unprovoked seizure several times within 24 hours or suffer from depression the best cure is seeking medical help. Most extreme cases of suicide can be treated on time," added Katana.



Many fish species can be viewed at the Marine Park. Photo: Geoffrey Kamadi

Mombasa Marine Park rolls out red carpet for festive season

By Allan Obiero

Mombasa marine park seeks to tap into the high tourism season. The park run by the Kenya Wildlife Service (KWS) is seeking to increase revenue collections from both local, regional and foreign tourists.

Droves of people are expected to visit Mombasa town and its environs to spend the long holiday, with KWS now positioning the park as a must-visit destination.

Julius Ngeti, the Tourism Warden at the park says that close to 300 people will visit the park daily in this season.

He adds that they expect that such visits to the park and to the nearby coral reef will boost the revenue collections.

"On such peak seasons, the Park collects around Kshs 1 Million in a month and we expect the same this season," says Ngeti.

Speaking during a tour of journalists and scientists at the park, Ngeti said the park is well known for parties, picnics and even weddings.

"Our rates are very affordable because for example Kenyan citizens only pay Kshs 130 to visit the park while non-citizens pay Kshs 17 US dollars (Ksh 1,700)," Ngeti says.

He says the park also known as "Allure of Beauty" lies between the Mtwapa and Tudor Creeks and its blue waters are ideal for wind surfing, water skiing, snorkeling and diving.

"The coral reef here at the park also provided a home to a colourful variety of marine species including crabs, starfish, stone fish, cucumbers sea urchins, corals and turtles as well as sea grasses in addition to interesting migratory birds including crab plover," he said.

Ngeti says KWS is also working closely with the local community to help conserve the park by allowing locals to operate boats for ferrying tourists which helps them generate income.

"They charge around Kshs 6500 (USD 65) for the boats that take people around something that instills a sense of ownership of the park and help us take care of it," Ngeti says.

He affirmed that the park is a no fishing zone and is under a 24-hour surveillance from KWS officers to deter poaching and improve security of visitors.

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Mesha journalists take dive into Mombasa Marine Park

By Suzgo Chitete

Seeing is believing so they say. True to this old adage, Rwandan Journalist Julius Bizimungu dared to experience snorkeling into the deep waters of the Indian Ocean to see for himself marine biodiversity.

This was his first time and it was after a brief lecture to all the team of eight journalists who were in the marine tour of the popular Malindi Marine Park. This was a field tour which was part of this year's edition of Kenya Science Journalists Congress organized by the Media for Environment, Science, Health and Agriculture (MESHA).

"Science journalists must feel, taste and live the science. Oftentimes we report without experience. I went into the water to see for myself what the park official was telling us. We must not always believe without trying too hard to get the evidence," said the Kigali based Journalist working with New Times.

Malindi Marine Park is home to over 200 species of fish and it attracts an average of 300 visitors everyday, both from within and outside Kenya. It has existed since 1986.

The journalists had a rare opportunity to ride a customized – boat which has a glass floor to allow passengers see for themselves the beauty under water.

Scribes drawn from eastern and southern Africa enjoyed the ride as they took turns to either capture nature under water or take pictures which will remind them of the exotic experience of this year's edition of the conference.

"This was awesome. I have watched people snorkeling on television and after the Marine official gave us a brief, I felt like having an experience. Scaring as I was I still wanted to give it the view of the fish inside the water was a beautiful sight. I am happy I did it" added Julius in an interview that took place immediately he came out of the sparkling but salty water of the Indian ocean.



Suzgo Chitete, a Rwandanese journalist at the Mombasa Marine park.

Though it boasts of a variety of fish seen in abundance – this is a protected zone where fishing is prohibited. Patrol boats are strategically situated to check on encroachers according to Julius Ngeti – Tourism Warder Mombasa Marine Park.

"The locals depend on this for survival. We have locals hiring boats for tourists – and that earns them some income. The locals are also heavily involved in conservation – because any destruction it means disruption of their income.

"Outside this protected zone there are fishers and for sure the fish from here get that side and they cash it – to their advantage. More importantly government generates income for the benefit of the economy" added Ngeti.

Apart from people who simply come to appreciate biodiversity, others visit the park for diving and swimming because the beach is cleaner and attractive. According to Ngeti the park rakes in about 1 – million Kenyan shillings a month which translates to about 12 – million Kenyan Shillings per year.