

CONFERENCE NEWS BULLETIN



Mr Otula Owuor (MESHA Patron), Mrs Kathryn Toure (IDRC), Mr Godfrey Kalerwa (NACOSTI) and Ms Veronica Ndung'u of KALRO during the opening ceremony of the third African Science Journalists Conference in Nairobi yesterday. Journalists were urged to tell the African science stories objectively and boldly.

Pan African science journalists conference opens in Nairobi

By Faith Tanui

It was pomp and pageantry as science journalists from across Africa gathered in Nairobi from yesterday for the third edition of the African Conference of Science Journalists.

The one-of-a-kind three-day conference, convened by the Media for Environment, Science, Health and Agriculture (MESHA), brings together young and experienced journalists.

Over 70 science journalists from all over Africa, are in attendance. The theme of the conference is Science Journalism for Progress and Sustainability in Africa.

Dr. Godfrey Kalerwa, Deputy Director in charge of research at National Commission for Science, Technology and Innovation (NACOSTI) open the continental meet which runs until December 15.

During the event, senior scientists are expected to unveil the latest breakthroughs in scientific findings in animal health, agriculture and environment. It will also provide

a platform for stakeholders to discuss the current status and future of science journalism in Africa; in addition to disseminating latest updates in research and development affecting the continent.

"The meeting is a continuation of MESHA's work – that of bringing scientists, journalists, communication officers and other actors under one roof to discuss science that impacts directly on human life," said Aghan Daniel, the secretary of MESHA, Africa's most active science journalists association.

According to the chairlady of the association, Ms Violet Otindo, MESHA seeks to showcase the excellent work that scientists in Africa do amidst dwindling funding and sometimes unsupportive policy environment.

The conference comes against a backdrop of growth and development in the digital sector in Africa. It is therefore expected to provide an opportunity to explore how technology can transform the way communication is disseminated and received.

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Violet Otindo - MESHA Chairlady during the opening ceremony

Pan African science journalists conference opens in Nairobi

A member of the association, Mr Francis Mureithi, said the African Conference for Science Journalists is a meeting all science journalists look up to every two years.

"Science journalism in Africa is undergoing a rejuvenation, after decades characterized by inadequate coverage, poor reporting and weak scientists-journalists relationships," said Eng Wangai Ndirangu of WaterCap, a think tank that deals with water issues, "and this conference seeks to sustain the momentum, that scientists and journalists must continuously talk to each other to reverse trends in uptake of products of science," he added.

While addressing the organisers of the conference recently, Dr

Stephen Karimi, Head of Research at the National Council for Science, Technology and Innovation observed that science journalists must take advantage of the renewed interest and commitment to science journalism by governments, donors and the private sector.

"The role of the science journalist is increasingly being acknowledged as key to the achievement of African countries' individual and collective development agendas. Furthermore, the radically transformed technological and media landscape in Africa, increasing support to training for science journalists, and closer researcher-journalist partnerships all point to the great potential for science journalism to play its part in the

continent's progress and sustainable development," he added.

Previous African science journalist's conferences, all organized by MESHA, have served as eye openers to the need for regular African science journalists meetings, where journalists and others working in scientific communication, advocacy, and research have exchanged ideas. The first African Conference of science journalists was held in 2012.

MESHA also publishes SAYANSI, the only science magazine by a science journalists' association.

Journalists challenged to create awareness on increased mental health illnesses

By Mike Mwaniki

Health experts have challenged journalists to create awareness on the increased cases of mental illness in a bid to mobilise efforts in destigmatising the diseases.

Speaking during a field visit by science journalists drawn from Media for Environment, Science, Health and Agriculture (MESH), the African Mental Health Foundation Founding director, Prof David Ndetei said journalists had a key role in assisting society not to stigmatise those suffering from mental health illnesses.

Prof Ndetei accompanied by the Foundation's Clinical psychologist Dr Frida Kameti urged journalists to report objectively on mental health issues.

"It is also important to ensure that those suffering from mental health problems are listened to without criticizing them..."

"Currently, for example, conditions such as depression are common even among young people due to emotional, substance and alcohol abuse among others," Prof Ndetei noted.

The World Health Organisation (WHO) in a report titled "Young people and mental health in a changing world" released during this year's World Mental Health Day held on October 10 warned that half of mental illness begins by the age of 14, but most cases go undetected and untreated.

In terms of burden of the disease among adolescents, depression is the third leading cause of mental illness while suicide is the second cause of death among 15-29 year olds.

Harmful use of alcohol and illicit drugs, the WHO noted, is a major issue in many countries and can lead to risky behaviours such as unsafe sex or dangerous driving.



Dr Frida Kameti, the Foundation's Clinical psychologist explains to journalists on the burden of mental illnesses in Kenya.

At the same time, eating disorders are also of concern.

Earlier, Prof Ndetei—who is a pioneer psychiatrist in Kenya said his Foundation was working closely with traditional healers at the grassroots to address stigma associated with mental health issues.

"We have found out that if traditional healers are properly empowered through training they are able to effectively supplement efforts by psychiatrists and other healthcare givers in the management of depression and other mental conditions," the AMHF founding director added.

The Foundation, Prof Ndetei observed, undertakes evidence-based research on mental health which is recognized internationally.

At the same time, the Foundation also treats those afflicted by mental health illness at Nairobi's Upper Hill area based organisation and also

liases with other hospitals in managing those suffering from the diseases.

On her part, Dr Kameti noted that currently, there are 300 different types of mental illness and there was need to demystify the existing myths on the diseases to enable those suffering from the diseases to seek treatment.

"All of us are vulnerable to mental health illness and there is need for us all to prioritise how the diseases are managed..."

"There is need to introduce mental health in our school curriculum while employers should strive to introduce workplace policies on how the diseases are managed similar to what we did with HIV/Aids. No employee should be penalised or discriminated for suffering from the mental health illness."

At the same time, Dr Kameti encouraged insurance companies to consider increasing the amount of money allocated to mental health cover.

Mental illness prevalent but neglected

Mental health illnesses such as depression are prevalent world over including Africa. But as prevalent as this might be, the diseases remain neglected in most African countries despite the high burden. What should be done to bring the issue to the attention of everyone? Suzgo Chitete engaged one of the researchers at the Africa Mental Health Foundation, Dr. Frida Kameti who is also a Clinical psychologist to share her experience of what is working in Kenya.

Q: Why should we care about mental health?

A: We have to care because the theme of this year's World Mental Health day was that "There is no health without mental health". This means that you cannot be healthy without being mentally stable. Every day, we are losing people through suicide, drug abuse and other causes. Research shows that a number of illnesses come about as a result of mental problems including depression.

Q: You are painting a picture, of how important mental health is. But why is it that it is not often talked about or in some cases neglected?

A: It emanates from the community. The way we perceive mental health. There are all sorts of misconceptions hence no one wants to talk about it. Even those who have a problem cannot easily visit a health facility or specialist because of stigma and discrimination. This is where we need people like you (media) to raise awareness that mental health is more important for anyone's health. We need to create awareness if we are to get rid of stigma.

Q: What is the source of this stigma?

A: Well, it is from so many angles but we can generally attribute it to lack of information. Some of the causes of mental illnesses are linked to drug and substance abuse which could be one cause but there are several other factors. Pressure at work, family or personal challenges all these could lead to mental disorder. This is why, I say it is everyone's problem and not just a group of certain people.

Q: How prevalent is it either in Kenya, Africa or Worldwide?

A: Without any research, I can tell you it is a common problem. As a clinical psychologist, I go round hospitals diagnosing patients of depression, I can say almost half of the patients in hospitals suffer from depression. And

I think, this is the case in most parts of the world. So you can see how serious the problem is. You must also understand that depression can lead to other problems, some will think of taking drugs or alcohol as a relief and end up becoming promiscuous, and eventually contract sexually transmitted infections. For example, High blood pressure, headaches all these may come about as a result of depression.

Q: As a Research Institution in Kenya, what are you doing to make a difference?

A: We believe that science can change things, but we have realised that we need also to tap from traditional knowledge. We are working with traditional and faith healers, equipping them with skills to help in promoting mental health. We know how influential this group of people is hence we are working with them as change agents. Beyond that we are working with everyone at the hospitals and in communities because improving mental health requires multisectoral approach. Doctors can do their part but certainly the community have a role to play.

Q: What's your final thought?

A: We are glad that you took interest to know what we do and we really look forward to having media as partners. I must emphasise that mental health is manageable, all we need is to have everyone involved and this can be easily achieved through the involvement of the media.

Technology increasing farmers' rice yield with less water

By Clifford Akumu

The aroma and the picturesque view of rice fields is a sight to marvel at as you enter Mumbara village, Tebere section in Mwea, Kirinyaga County.

Being a rice harvesting period, machines roar in the expansive fields as farm workers too engage their sickles in the rice paddy.

Moses Kareithi, 45, one of the pioneer farmers who adopted the System of Rice Intensification technology that drastically utilises less water is all smiles as we meet him in his one acre farm in the village.

Before he started using this method, Kareithi used to harvest 4-5 tonnes of rice per acre. Today, he is able to get up to 8 tonnes per acre with the technology.

Kareithi grows Basmati 370 rice variety in three and a half acre plot of land.

A growing number of farmers who have adopted the technology in Mwea Irrigation Scheme are reaping the benefits, with majority recording up to 20-30 per cent increase in rice production.

The technology has also helped in reducing water used for irrigating the paddy.

“When the project started back in 2009, there used to be shortages in most irrigation blocks. The number has now drastically reduced because the farmers have adopted the use of less water to irrigate their rice fields” said Kareithi adding that farmers are now aware that too much water is bad for the plant.

Prof Bancy Mati, director and founder Water Research and Resource Centre, Jomo Kenyatta University of Agriculture and Technology (JKUAT) said the project has helped rice farmers grow more rice in small pieces of land leading to food security.

SRI technology main aim is to stimulate the root system of rice plants that helps in increasing yields. This is contrary to the conventional way of using improved seeds and synthetic fertilisers.

Rice is traditionally planted in large clumps in flooded fields. One kilo of rice typically requires about 660 gallons of water. SRI, on the other hand, needs at most half of that.

At the same time, SRI, in contrast, involves the careful spacing of fewer but younger plants, keeping the topsoil around the plants well-aerated by weeding, using manure and avoiding flooding.

The technology was introduced in Kenya at the Mwea Irrigation Scheme in August 2009, through the efforts of Prof Mati. The project has since been replicated in other schemes across the country at various levels including Ahero, West Kano and Bunyala rice schemes.

“The process starts from nursery preparation, with the yield increasing when planted from nursery then seedlings...

“In the old days, the nursery would remain there for one month then farmers plant a tall seedling, but under SRI we encourage a very young seed of 8 -15 days. Research has shown that rice produces best when planted in the nursery then seedlings, ” Prof Mati explains.

The younger seedlings, she continues, are planted at a wider spacing. This is followed by wetting and drying of the paddy.



Prof. Bancy Mati, director and founder Water Research and Resource Centre, Jomo Kenyatta University of Agriculture and Technology during the interview.

“With these technology the farmers only wet and dry the paddy for one week depending on the weather compared to previously when they used to wet the paddies for three months every day. The drying helps in root aeration as compared to the once submerged in water for three months,”.

Weeding is preferably conducted using rotary weeder machine. The use of these machines helps in stimulation of the rice root growth.

The technique works with all rice varieties but, she notes, high yielding varieties like BW (Sindano) perform better than low yielding ones.

Kareithi joined the project in 2009 in a demonstration plot where he used to only produce a maximum of 8 bags of rice of around 90kgs.

But after trials, the small plot yielded good results. He got 11 bags that produced more than 100 kgs and this inspired other farmers. He has never turned back.

“By 2010, the farmers on this technology had increased to above one hundred. In 2011, the number had increased to over 200 farmers, today over 50 per cent of farmers in Mwea scheme have adopted SRI,”he adds

Cyrus Mbogo, a water technician at National Irrigation Board based in Mwea, said the programme has enabled the scheme to increase area under rice production.

“We have been able to expand acreage under production in the scheme to about 4,000 acres” said Mbogo.

The use of SRI has also increased milling grade quality of the rice, he adds.

Mbogo further explained that rice blast, caused by too much humidity, is a major challenge facing farmers in the area.

He, however, advises farmers to follow right cropping programme and agronomy practices to prevent incidences of pests and diseases.

“To get high yields, farmers must practice field hygiene to ward off incidences of pests,”he said.

The University has also conducted research on how this technique impacts on mosquito breeding areas. That research, the professor noted, has shown that adoption of this technology can have help in reducing malaria incidences across the region.

“If more farmers adopt SRI, they can disrupt the development of mosquito larval stage hence reduce incidences of malaria” she added.



Mr Victor Bwire Deputy Director of Media Council of Kenya during the opening ceremony of the third African Conference of Science Journalists

Continental Journalists urged to embrace solution based journalism

By Manuel Odeny

The Media for Science, Health, and Agriculture held its third African Science Journalists conference in Nairobi which brought together scribes from 16 countries in the region.

The patron of Mesha-Kenya, Mr Otula Owuor said science journalism in Africa has come a long way with scribes being educated and trained to embrace solution based journalism stories.

“Awards given to scientists on their work should reach the market, and the best way is through African journalist who should have regular science beats,” Otulo said.

Ms Violet Otindo, the chairperson of Mesha-Kenya termed the conference a milestone since it is being held three years after the last one, instead of biannually.”

“It has been a bumpy ride since we took three years to converge at this conference. Despite the setback our membership in Kenya has

increased to over 100, with at least more than 200 other colleague’s country -wide requesting to join us,” Ms Otindo said.

She further stated that the decision to include other African scribes, and the modalities on the way to join will be discussed later during the Annual General Meeting.

Ms Otindo said Mesha-Kenya prides herself from mentoring journalists from “writing just stories” to writing award winning stories and

being offered fellowships globally.

“We are also the only journalist’s organisation in Africa sustaining a quarterly magazine on science not only in the continent but across the world,” she said.

The association has also organised several workshops and cafes where journalists and researchers engage on pertinent and emerging issues on science.

The director International Development Research of Canada (IDRC) Africa Regional office, Dr Kathryn Toure, said working with science journalists has helped her organisation to directly reach population with innovation.

Media Council of Kenya Vice Chairman Mr Victor Bwire said unlike political and entertainment stories which are events, science stories can splash the front pages of publications.

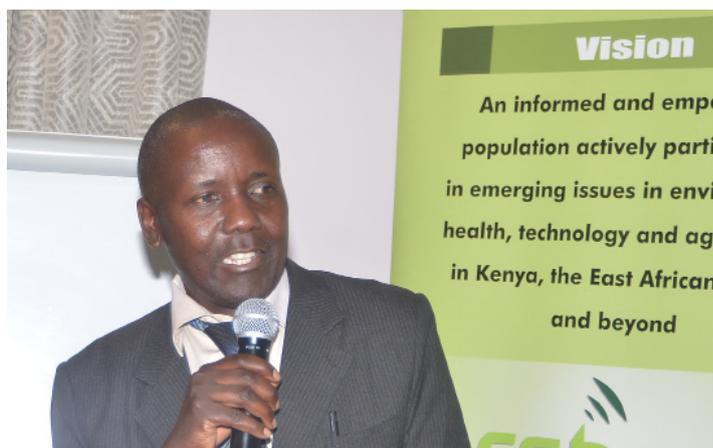
MESHA Secretary General Mr Dan Aghan noted that “Africa is hungry for science stories and the challenge remains with journalist to ensure this is achieved.”

National Commission for Science, Technology and Innovation officer Mr Geoffrey Kalerwa said journalism connects scientists with the population.

“Effective science journalism is integral in research as it communicates to the population,” Kalerwa said.

He decried that current media obsession with politics and entertainment is misplaced but said that science stories have a big impact to the community.

The conference runs from December 13 to 15.



Mr Godfrey Kalerwa of the National Commission of Science and Technology at the opening ceremony of the conference. He pledged that his office will work with MESHA to promote science journalism



A journalist samples a chicken that was fed on highly nutritious feed from the black soldier fly

ICIPE scientists make a new discovery

By Philip Muasya

Scientists at the Nairobi based International Centre of Insect Physiology and Ecology (ICIPE) have discovered a highly nutritious feed from the black soldier fly.

The cheap feeds from the flies, known for transmitting diseases to humans, have provided an alternative meal for fish, poultry and pig.

According to ICIPE research scientist, Dr Chrysantus Mbi Tanga, since the discovery of the new feeds Kenyan farmers who in the past have relied on high cost feeds found in shops are now able to use cost effective feeds leading to high profit margins.

The leading scientist on insects for food, feeds and other uses programme said the insects provide high nutrient value with over 60 percent protein and fat contents compared to conventional feeds with 10 per cent protein in the market.

However, to produce feeds a farmer should be committed to trap and domesticate the houseflies. "Their eggs should be grown into larvae in specialized containers," he said.

During a visit at the institution's laboratory, Dr Tanga said this technology has been tried for the last three years where the black soldier flies are trapped and mated for egg production.

"We fit small cartons pieces inside the containers for the flies to lay their eggs on. When the eggs are laid, the cartons are transferred into buckets containing human waste, chicken dropping or cow dung for larvae growth," Dr Tanga revealed.

In the ongoing research, the scientists are using barley waste from Kenya Breweries as the perfect fodder for growing maggots.

"We have found out that this waste is one of the best for the eggs to hatch and grow. It takes about 15 to 20 days for them to be ready for harvesting," he said.

At harvesting and processing, the maggots are sieved from the waste and sun dried for a duration of at least two days after death. Once dried, they are grounded into powder using a grinder.

Further, Dr Tanga said the powder is then mixed with maize grains to form cakes or pellets that have a balance diet formula ratio for fish, poultry and pigs.

Since the technology was discovered at ICIPE, farmers across the country are flocking for free training on insect feed production.

A Thika poultry farmer, Mr Kamau Kamuchu said he learned the technology from the broadcast media and the challenge led him to register for lessons to improve his chicken production.

Dr Tanga said the centre is open to all people, saying the scientists were willing to offer free lessons to farmers on how to use insects to attain food security in the country and elsewhere in the world.

Insect Matters



High Nutrient Value Source: Principal scientist and head of Arthropod Pathology Unit at International Center of Insect Physiology and Ecology (icipe), Dr. Sevgan Subramanian fields questions from journalists attending the African Conference of Science Journalists during a visit to the lab that deals with rearing of insects. Dr. Subramanian noted that despite insects being a rich source of proteins, many people in Africa still ignore them. Insects are said to have high protein value of about 65 percent and 20 per cent fat as compared to other sources of beef and white meat.

The dried insect products are also used as protein sources in manufacturing of livestock and poultry feeds given their high nutrient value and since they are less costly as compared to the fish meal which are widely used as a protein for the feeds in Kenya and Uganda. *(Photo story by Christine Ochogo)*