



## Norman Borlaug Award for Field Research and Application presented to Charity Mutegi

The World Food Prize Norman Borlaug Award for Field Research and Application was presented to Charity Mutegi, Kenya Country Coordinator for the IITA Aflatoxin Biocontrol Project, in Des Moines, Iowa, on UN World Food Day last 16 October. The award presentation was attended by several hundreds of peers and a very encouraging audience of scientists, policymakers, and partners attending the 2013 Borlaug Dialogue, an international symposium on global food security issues held 15-18 October.

The World Food Prize is the foremost international award recognizing the accomplishments of individuals who have influenced human development by improving the quality, quantity, or availability of food in the world. Charity was recognized for her work in various facets of aflatoxin management in Kenya, which included awareness raising, capacity building, establishing risk assessment data, and extending and potential deployment of a biological control product called aflasafe, for managing aflatoxin. The biocontrol technology was initially developed by Dr Peter Cotty of USDA-ARS and has been adapted for use in Africa by IITA and partners.

Aflatoxin is a natural toxin produced by a mold that causes death and disease in consumers and massive economic damage to farmers, especially in developing



Charity Mutegi (center) with Gary H. Toenniessen, Managing Director of the Rockefeller Foundation (left) and Amb. Kenneth Quinn, President of the World Food Prize (right). Behind is a life-size portrait of Dr Norman Borlaug, 1970 Nobel Peace Prize recipient and the Father of the Green Revolution.

countries.

Charity previously worked with the Food and Agriculture Organization of the United Nations and the Kenya Ministry

of Agriculture to train more than 40,000 farmers, extension agents, and policy personnel on aflatoxin control measures, and continued to generate data on aflatoxin



Left to right: Charity during the press conference; with 1995 World Food Prize laureate and former IITA scientist, Dr Hans Herren; with her mentor Dr Ranajit Bandyopadhyay and the poster announcement on her award presentation.



Got a story to share? Please email it with photos and captions to Andrea Gros (a.gros@cgiar.org), Katherine Lopez (k.lopez@cgiar.org), Jeffrey T. Oliver (j.oliver@cgiar.org), Godwin Atser (g.atser@cgiar.org), or Catherine Njuguna (c.njuguna@cgiar.org).

prevalence to fine-tune national efforts to manage the problem. Her aflatoxin management efforts in Kenya have spanned over a decade.

While in Des Moines, Charity visited the Des Moines Area Community College (DMACC) and met with faculty and school administrators to discuss some of the challenges and opportunities that her award brings. After the meeting, she gave an inspirational talk to an auditorium-full of youths about her journey as a woman scientist and her aspirations and dreams for a food-secure world. She ended her talk by encouraging the youths to work hard and pursue their dreams.

Prior to the presentation of the award, which was held at the imposing World Food Prize Hall of Laureates, an old building that used to be the public library, Charity was given an enthusiastic and warm welcome by the African community of Iowa, organized with the World Food Prize and the local residents on the Riverwalk. The well-wishers, from 16 African countries, endured the chilly winds of autumn, while they sang and danced to traditional African music and gave testimonials to an inspiring “daughter of Africa”.

“You make Africa proud; you make all of us proud,” said Mpule Kwelagobe, Founder and CEO of the Mpule Institute of Endogenous Development, one of the speakers in the Borlaug Dialogue, who added that “the sooner we have our own (African) academics and researchers leading the fight against hunger in Africa, the better we can address the critical issue of food security.”

After the colorful and enthusiastic welcome led by Amb. Kenneth Quinn, President of the World Food Prize, Charity responded to the crowd, saying that it was a “great honor to have this reception.”

“There is a lot that Africans can share to the world. My award is not just a personal achievement, but it is an achievement for us as Africans; it also shows that scientists have something major to contribute towards global food security. We are as important as any other person in any other part of the globe. Never forget that. Also remember, for you here in the US, we also look up to you to come back home or do something that can bring positive changes to our continent. Always remember that. To the students, remember that there is no substitute for hard work. You have the opportunity to use the best resources, something that some of our colleagues in Africa cannot do. So, make the best use of it.”

In thanking the African community, Charity said, “Never forget your people back home. It is we who will make a difference. Please shine the African flag brighter. I am proud to be African.”

During the awarding program at the Hall of Laureates, Charity wowed the audience with her short talk on what inspired her to work in the area of food safety, describing the science behind IITA’s aflatoxin

## The World Food Prize

The World Food Prize was founded in 1986 by Dr. Norman E. Borlaug, who won the 1970 Nobel Peace Prize for his work in developing high-yielding, disease-resistant wheat in Mexico and in introducing adaptable wheat varieties into India and Pakistan during the 1950s and 1960s. Since then, the World Food Prize has honored outstanding individuals who have made vital contributions to improving the quality, quantity or availability of food.

The Norman Borlaug Award for Field Research and Application endowed by the Rockefeller Foundation recognizes an individual under the age of 40 who emulates the scientific innovation and dedication to food security demonstrated by Dr Borlaug. Since the launch of the award in 2012, both winners have been



women from developing – and both have been from the CGIAR Consortium. The first recipient was Dr Aditi Mukherji, who was working as a senior researcher for the International Water Management Institute (IWMI) in India, and now with the International Centre for Integrated Mountain Development (ICIMOD).

Charity was unanimously selected over more than 40 other contenders to win the award launched in Norman Borlaug’s memory.



*The magnificent state capitol in Des Moines was the site of the awarding of the World Food Prize.*

management work. She said that she cannot just stand by and do nothing about the problem of aflatoxin contamination when she can see people in her country

dying from eating maize contaminated with aflatoxins. A devastating outbreak of aflatoxicosis in 2004-05 caused the death of more than 125 people who had

## Snapshots of the World Food Prize celebration



Above: Charity being welcomed by the African community of Iowa. Above left: Amb. Quinn dances with Charity, while Mpule Kwelagobe, Founder and CEO, Mpule Institute for Endogenous Development (center), and 2009 World Food Prize laureate Gebisa Ejeta (right) and Z. Bomba, CEO, Ethiopian Agricultural Transformation Agency from Ethiopia (right) congratulate a sister African.

Below (left): Charity during the panel discussion titled "Behind the big idea", on 17 October; and with the Borlaugs, Jeannie (Borlaug's daughter, left) and Julie (granddaughter, second from right), and Katherine Lopez of IITA's Communication Office.



consumed contaminated grain in eastern Kenya. This prompted her to go into this area of research and investigate solutions to help avert future outbreaks and safeguard the region's staple crop of maize.

Upon receiving the award at the Hall of Laureates, Charity thanked the various individuals and institutions that have helped and supported her and her work, including Dr Ranajit Bandyopadhyay, principal scientist and lead of the IITA aflatoxin management project, her mentor, who also attended the award ceremony at Des Moines.

Charity also served as a panel member in one of the sessions titled "Beyond the big idea", where along with two other panel members, she talked about the intersection of science, enterprise and technology in creating a more effective and innovative agricultural sector, and the role of young innovators in shaping the future landscape of food security and international development.

Charity also helped pack meals with students attending the Global Youth Institute during the meal packaging event sponsored by Outreach, a nonprofit organization that helps feed children in Tanzania. The meals will be shipped to Tanzania as part of development programs for local communities. Outreach focuses on developing services in the area of water, food, medicine, and education.

Charity also interacted with students and fellow laureates on the last day of the Dialogue. Every year, as part of the Borlaug Dialogue, more than 150 exceptional high schools students and their teachers from the USA and other countries are selected to participate in the three-day Global Youth Institute hosted by the World Food Prize Foundation. The students are given the opportunity to interact with Nobel and World Food Prize Laureates and discuss pressing food security and agricultural issues with international experts.

When asked about her experiences at the World Food Prize celebration, she said, "It was very fulfilling, and worth every moment in spite of the rigorous schedule. It was a great honor to see the world recognize my efforts towards achieving food security through safe food."



Above: Meeting with DMACC administrators and officials. Right: DMACC President Rob Denson introduces Charity during the seminar presentation.

## Highlights of 2013 Borlaug Dialogue

The 2013 Borlaug Dialogue, organized by the World Food Prize, had the theme "The Next Borlaug Century: Biotechnology, Sustainability and Climate Volatility". Activities for this year's celebration included the centennial observance of the birth of 1970 Nobel Peace Prize recipient and Father of the Green Revolution Dr Norman Borlaug, and the 60th anniversary of Watson and Crick's discovery of the double helix makeup of DNA; and the recognition of 2013 winners of Dr Borlaug's World Food Prize—all pioneers of modern agricultural biotechnology.

World Food Prize laureates for 2013 include Marc Van Montagu of Belgium, a former member of IITA's Board of Trustees; and Mary-Dell Chilton and Robert T. Fraley from the United States.

An excerpt from the World Food Prize briefing kit says that this year's laureates were recognized for their independent, individual breakthrough achievements in founding, developing, and applying modern agricultural biotechnology. "Their research helped us to discover and understand how plants work, and how it is possible to add desired traits or characteristics in a more exact, specific, and faster way than through traditional plant breeding. Their research is making it possible for farmers to grow crops with improved yields, resistance to insects and diseases; and the ability to tolerate extreme variations in climate. The work of these three distinguished scientists had been critical in bringing new technologies to our food system".

Other highlights of the celebration include:

- Iowa Hunger Summit that brought together more than 600 Iowans and visitors working on feeding hungry people, both in the US and abroad. Featured speakers and guests included Magnus McFarlane Barrow from Scotland, who founded Mary's Meals, an organization that provides meals for more than 700,000 school children each day around the world; and Lucille Wilson, the first Robert D. Ray Iowa SHARES Humanitarian awardee.

- Presentation of Norman Borlaug Award



for Field Research and Application to honor Charity Mutegi for her efforts working with a team in combating the deadly aflatoxin mold that contaminates stored grains. According to the World Food Prize, "her diligent research led to innovative solutions to avert outbreaks and safeguard the region's staple crop of maize. Dr Mutegi is leading efforts for the development of a natural, biocontrol product in Kenya that can be used to significantly reduce aflatoxin levels on maize."

- Global Youth Institute, which provided youths from the US and other countries the opportunity to come together and learn about global challenges and present their own original research and solutions. They also interacted with the laureates and other scientists in examining complex hunger issues.
- Interfaith Service to End World Hunger, led by Cardinal Peter K.A. Turkson, President of the Pontifical Council for Justice and Peace, Holy See, the Vatican, and leaders of a broad representation of faith communities.
- Iowa Hunger Fight, where participants packaged meals for feeding hungry local communities and also identified communities in Africa. The meal packaging event was presented by DuPont Pioneer in conjunction with Meals from the Heartland.
- Special Film Screening: A Place at the Table, a film that examines hunger in America. It tells the story of Americans who suffer from food insecurity and explores the implications of hunger. It was followed by a special discussion panel.





**What they say about her**

**IITA Director General Dr Nteranya Sanginga:** “She is a great role model for all young African scientists and we are proud to have her on our team.”

**Amb. Kenneth M. Quinn, President of the World Food Prize:** “Dr Mutegi is an inspiration to other young scientists around the world. She tackled a critical problem, and has effectively transferred her own scientific knowledge to farmers and policymakers to help improve food safety for the entire region. Like Dr. Borlaug, she has put the needs of people first, and has shown persistence, innovation, effective communication, contribution to science, and application of that science to improve lives and livelihoods.”

**The news agency Agwired in their article on World Food Prize:** “Brilliant, well-spoken, and pretty as a doll, Dr Charity Kawira Mutegi was everyone’s darling at the World Food Prize symposium last week.”

*Above: Charity with 2013 World Food Prize laureate Marc Van Montagu (left) and Nigerian Minister of Agriculture and Rural Development Akin Adesina (center); Charity and Ranajit with IITA partners and friends: Jacob Mignouna (middle) and Vasey Mwaja (extreme right), Bill & Melinda Gates Foundation, and Dennis Kyetere, African Agricultural Technology Foundation. Below: IITA booth during the World Food Prize celebration held in Marriott Hotel, Des Moines.*



*Above left: Charity talks to the youth participants of the Global Youth Institute. Above right: Charity with organizers and youth participants in the meal packaging event sponsored by Outreach.*

*Charity with her plaque from the World Food Prize (right) and with Dr M.S. Swaminathan, the first World Food Prize laureate from India (right).*

