IITA scientist joins advisory panel of Norwich Institute for Sustainable Development

IITA’s Director for Eastern Africa Hub and leader for Biotechnology research, Leena Tripathi, has been selected to be part of the External Advisory Panel of the newly launched Norwich Institute for Sustainable Development (NISD), UK.

NISD is a world-leading institute that fosters sustainable development through transdisciplinary research and innovation. It is a partnership of leading research institutes working towards the UN Sustainable Development Goals. NISD’s mission is to create synergies across the natural and social sciences for excellent research and the global public good. And in this way, transform research and practice to enable equitable, food secure, and sustainable futures.

Commenting on Tripathi’s nomination, Professor Nitya Rao, Director of the Institute, said they were looking forward to her advice and expertise to support growth and research development plans at NISD.

Tripathi will also speak at the Thought Leader Seminar Series organized by the Institute on 28 April.

The NISD is a transdisciplinary hub based at the Norwich Research Park (NRP). Its researchers work across environmental, plant, microbial, food, health, and social sciences.

NextGen Cassava project develops new gari product for consumers in Benue, Imo, and Osun states

Traditionally, the cassava mash used for gari production in Nigeria is left to ferment between 48 and 96 hours, depending on its quality. Thus, there is high variability in the sensory attributes and consumer acceptability of the gari. Additionally, the fermentation process takes longer in some communities where highly sour gari is preferred, reducing the quantity of gari produced within a specific period.

Training local gari producers on the BFG production method.
The backslopped method of fermentation, where portions of the previously fermented cassava mash are added to a freshly prepared cassava mash to act as an inoculum, allows for the gradual selection of lactic acid bacteria and accelerated fermentation.

Backslopped fermentation has been used for cassava products such as fufu, lafun, and stored cassava chips gari, but little or no information is available on backslopped fermented gari (BFG) produced from freshly grated cassava roots and the consumer acceptability of the gari/eba. Consequently, Design-Expert software was used to get the mixing ratios of the fresh cassava mash (FCM) and backslopped cassava mash (BCM) to produce a laboratory-scale gari. Results showed that the optimum combinations of FCM and BCM for gari were 88 g FCM: 20 g BCM after 24 h, 90 g FCM: 20 g BCM after 48 h, 87 g FCM: 20 g BCM after 72 h, and 70 g FCM: 16 g BCM after 96 h.

The outcome of the laboratory scale gari was used for the training on the production and consumer acceptability of BFG in three different locations each in Benue (Gwetaeast, Konshisha, and Makurdi LGAs), Imo (Ikeduru, Mbaitemi, and Owerri North LGAs), and Osun (Ifeelowun, Olaoluwa, and Orolu LGAs) states in Nigeria. The FCM and the BCM combinations that look like the 24 h, 48 h, and 72 h fermented gari were used in Benue and Imo states. This is because these states do not like gari that is too sour. In Osun State, the combinations of the FCM and the BCM that produced gari that looks like the 48 h, 72 h, and 96 h fermented gari were used as the people in the state like a more sour gari. The control sample was produced using the traditional methods of gari production in each location.

The consumer acceptability study showed that most of the gari consumers in Benue State preferred the 72 h BFG compared to the control sample produced in each location. Gari/eba consumers in Ikeduru and Mbaitemi LGAs of Imo State preferred the 48 h BFG and the 72 h BFG compared to the control sample, respectively. In contrast, the consumers in Owerri-North preferred the control sample compared to the eba prepared from all the BFG samples. More than 55% of the gari/eba consumers in Osun State liked the control sample compared to all the BFG.

Therefore, BFG was well accepted in Benue and Imo states. Still, there is a need to increase the length of fermentation of BCM and the quantity of BCM added to FCM in producing BFG in Osun State for proper adoption and commercialization.

The NextGen Cassava Breeding project (NextGen Cassava) seeks to modernize partner cassava breeding institutions in Africa and use cutting-edge tools to deliver improved cassava varieties.

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Young Africa Works-IITA Project trains over a thousand youth in three centers across Nigeria

The Young Africa Works-IITA Project has concluded the first cohort of its training program, which commenced on 1 February in Lagos, Kaduna, and Kano states.

The six-week training program targeted young people between 18 and 35 years. It introduced the participants to agribusiness through classroom training, practical sessions, excursions to successful agribusiness firms, mentorship, sharing success stories, soft skills training, team building exercise, experiential learning, and internships with technical hosts.

The training mixed theoretical and practical methodologies in the employment and entrepreneurship tracks, positioning the beneficiaries to secure fulfilling jobs and establish their enterprises, respectively.

In bridging the gap between theory and practice, the Project identified agribusiness technical hosts for beneficiaries who selected the employment track. The Project also considered the importance of mentorship. It partnered with reputable agribusiness firms to ensure that beneficiaries who opted for the entrepreneurship track were exposed to the reality of operating a successful agribusiness enterprise.

The practical session exposed young people to hands-on skills in agricultural value chains, motivating many of them to develop agribusiness ideas even while still undergoing the training program.

Also, the beneficiaries formed cooperatives to position themselves for funding opportunities after the training program.

The employment track beneficiaries had the opportunity to be tutored by one of the Project’s partners, Jobberman, on the skills needed to position them for employment opportunities in the agrifood system.

The training also considered the less educated youth, regarded as the modern young farmers. These young farmers are youth and women who are already engaged in the production or processing of chosen commodities. Locally-identified experienced partners/resource persons collaborated with the Project to deliver the training for these youth beneficiaries. They focused on improving their production output through the introduction to improved technologies (Good Agronomic Practices – GAP) and standardize processing/value addition skills to enable them to compete favorably within their communities. These departing trainees were also grouped and registered in a cooperative to better place them in a position to access finance and operate as self-employed commercial farmers but with skill sets required to make them compete within the larger rural farming community.

During the training, representatives from the different financial institutions were at the states’ centers to initiate discussion on youth- and women-sensitive loans for business start-ups.

Institutions such as the Standards Organization of Nigeria (SON), Corporate Affairs Commission (CAC), and National Agency for Food and Drug Administration and Control (NAFDAC) also participated across the training centers to expose the beneficiaries to standard business operating guidelines in Nigeria.
Following the screening of their business plans by professionals, some training beneficiaries will be linked to credit facilities for business start-ups. Others will be linked to firms for employment opportunities.

One of the highlights of the training was product development by the beneficiaries. Various products emerged from the practical sessions, especially from women who showed more interest in value addition.

Internship centers also retained some of the employment track beneficiaries as staff of the organization at different levels.

**TAAT Cassava Compact: Rebranding the cassava value chain in the Central Africa Republic**

IITA, through the TAAT Cassava Compact, in partnership with The Savannah-based Agricultural Value Chains Development Support Project (PADECAS), has launched an initiative to strengthen the technical and organizational capacities of seed multiplier farmers and seed companies in the Central African Republic (CAR).

The Project, funded by the Central African Republic government through a grant from the African Development Bank (AfDB), will facilitate technical assistance from TAAT Compacts enabling farmers to access improved technologies and establish strong, economic links between actors in the cassava, maize, and three other value chains with financial institutions to fast-track farmers’ access to credit for four years.

The main objective of the cassava component of the Project is to contribute to the deployment of the National Roadmap to improve Seed and Cassava Production Systems through catalytic support for the introduction of SAH™ (Semi-Autotrophic Hydroponics) technology to produce high-efficiency healthy cassava cuttings and the dissemination of other technologies and innovations to increase cassava productivity on smallholders’ farms. IITA experts will strengthen technical capacity and support the various sector players to use the introduced technologies.

The Project will establish a dynamic and efficient system of disseminating cassava seed, promote good agricultural practices (GAP) and mechanization to improve cassava productivity, and enhance the private sector’s ability to manufacture nutritious cassava products.

Project Manager Adebayo Abass explained: “PADECAS provides a vital opportunity to upscale TAAT technologies to new domains in the CAR. The country is desirous to transform its agriculture sector taking advantage of TAAT experts’ support to deliver new technologies that have proven effective in achieving agricultural transformation.”

The TAAT Cassava Compact project will establish the necessary infrastructure for the production, processing, and marketing of commodities while engaging the private sector in the commercial, industrial, and financial activities to ensure the successful delivery of the project goal. The Cassava Compact will also support the Monitoring and Evaluation activities of the Project.