

Participatory Plant Breeding Takes Root

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A collaborative project by four universities from Kenya, Uganda and the UK has given some East African farmers a chance- through participatory plant breeding- to influence final production of preferred varieties of maize, bananas, beans and pumpkins

According to project breeding experts this will increase the uptake of such new crop varieties because farmers input on preferred characteristics have been taken into account.

Capacitate East Africa Project, a partnership between Kenyatta University, Masinde Muliro University of Science and Technology in Kenya; Uganda Martyrs University and Bangor University (UK); has seen farmers involved in the selection process for breeding of beans, maize and bananas in Uganda and pumpkins in Kenya.

The participatory plant breeding process where farmers and scientists together selected breeds and carried out trials is ongoing with new varieties expected from these efforts.

According to the Project Coordinator Dr Julius Mwine these crops are some of the most important ones for food security in the region. "We have had farmers trained and made aware of particular traits of breeds that could help them produce more food and are both pest and drought resistant" said Dr Mwine.

He added that through training of trainers, 100 students in East African universities will benefit annually from the training programs, a move that is critical in building capacity of East African Scientists.

Kenyatta University chancellor Prof Olive Mugenda in remarks read on her behalf during the end of project meeting by Deputy Vice Chancellor Prof John Okumu, said that the potential impact of agricultural research in sustainable food production is enormous.

She said that the divide between farmers and researchers could be bridged through

methodologies like client oriented breeding which the project had taken in its three year period.

“Adoption of client oriented breeding methodologies, augmented with modern biotechnology tools where appropriate would meet the needs of farmers” she said.

The project was also intended to build capacity of crop scientists in East Africa equipping them with skills in a number of areas to further their scientific research and project management skills.

The three year project ending 2013 has seen several East African scientists and practitioners trained in – participatory breeding, scientific writing, statistical analysis, molecular techniques and project management.

Scientists from the participating universities have been trained on plant breeding and molecular techniques during the project. Four scientists underwent advanced training in molecular techniques at Bangor University.

Uganda Martyrs University vice chancellor Prof Charles Owleny said that the region has benefited from a good network of international scientists and the latter are likely to spur new crop research that will reduce the harsh effects of climate change on smallholder farmers.

The project was funded by the European Union African, Caribbean and Pacific (ACP) Science and Technology Transfer Programme.

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