

Celebrating women

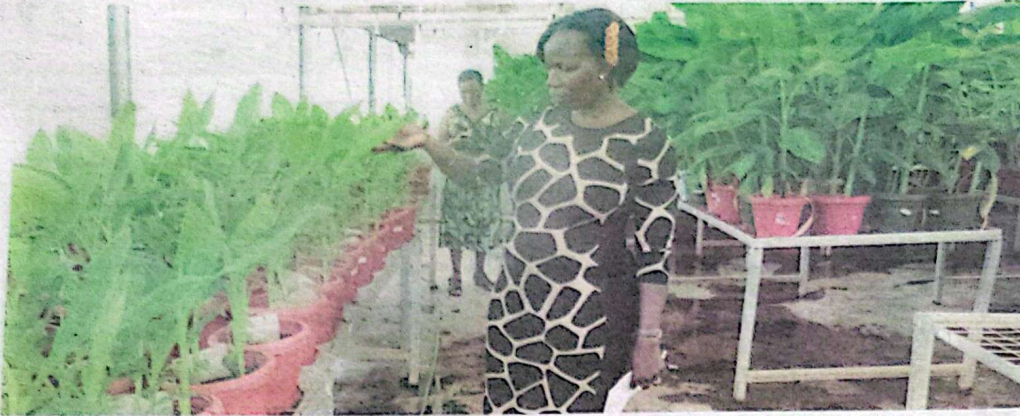
Series. Every Woman has a Story: Struggle, Belief, Triumph. This March, we celebrate the strides women have made through personal stories.



FIGURE

65%

Involvement. The agricultural sector contributed 25 per cent of the GDP growth. In 2017/18 budget statement it is indicated that out of total contribution in the sector 65 per cent are women who directly involved in the productivity aspect. However, some women have also take on roles in research.



At work. Dr Priver Namanya Bwesigye in a green house at NaRL showing banana plants grown from plant cells. PHOTO BY LAMINDA AFEQRARU

easy is the discovery of cells in plants which makes them develop. You know for any living organism to function, you need cells of the organism. Scientists equate cells to any egg in the ovary of a female human being. Once this egg meets a sperm then formation of a baby starts. Likewise for us to improve on banana variety for disease resistance and improved food nutrient, we have to reduce it to a cell and then regrow it into a plant," she explains.

A wait worth it

Dr Bwesigye was given an award by the Association for Strengthening Agricultural Research in East and Central Africa (ASARECA) in 2004, in Nairobi Kenya.

She emerged winner for being an outstanding young scientist in the area of cell suspension system for banana varieties.

The competition attracted participation of scientists from 11 countries in the region.

She considers it as her pride and believes that when scientists talk about eliminating banana bacterial wilt, nematode and improving the nutrient using modern biotechnology, it is not possible without forming cells of the plant.

It took her four years to study this to come up with ample technology. She emphasizes that for one to be a successful scientist, they must be perfectionists, patient and analytical, or else they will give up before finding a scientific solution to a problem.

"It is equally important to be determined and accurate because sometimes during breeding process, cells die off and one has to start again," she says.

It is her pride to utilise a microscope on day to day basis for thorough analysis of the scientific work.

“Women can do anything as long as they have the will and determination. It is therefore important for women to consider themselves as mothers and gather resources to pursue science course and become scientists. Female scientist can join the Women in Science Initiative where Uganda has its own chapter.”
DR PRIVER NAMANYA BWESIGYE.

Uncovering mysteries in banana plant

KAMPALA. She wakes up early every day to prepare her children aged six and nine for school before proceeding for her routine work.

Before leaving home, she ensures that her family is well catered for in terms of meals. She loves praying and this is done on daily basis with the family before everyone goes to bed.

She also mentors young women in a bid to pursue credible life once they are grown to be independent and above all loves going about her scientific work in the laboratory as an agricultural scientist. This is the persona of Dr Bwesigye, the head of Biotechnology Laboratory, at NaRL in Kawanda. In this institute, most of Uganda's research work on improving banana varieties is done.

The search for plant genetics

When Dr Bwesigye passed all the subjects in O' Level, her best friend was admitted to study literature. She wanted the same, but her biology teacher advised her to study Physics, Chemistry and Biology and her journey to be a scientist started.

In 1994, her journey as a female agricultural scientist began when she started working as nematology scientist breeding banana varieties which can resist nematode pests. This was after completing her degree in Plant Botany at Makerere University (MAK).

She worked for two years but shifted goals to banana tissue culture with advice from her supervisor. Initially, her interest was in plant genetics resources and how to conserve plant varieties for fear of them becoming extinct.

This led her to pursue a Masters in Plant Genetics at MAK before joining the University of Queensland in Australia for a PHD in advanced Biotechnology.

When pursuing her PHD, Dr Bwesigye majored in studying genes in Banana for Vitamin A. This was with hopes of breeding banana containing Vitamin A and iron food nutrients because the level of Vitamin A in bananas is very minute.

Upon her return to Uganda, she came with the technology and the team at NaRL began breeding banana with Vitamin A in 2005 and the products are ready for release to farmers. "I was the first female scientist to find Vitamin A genes and this is my pride. One of the things which makes my work

Solutions in science:

Dr Priver Namanya Bwesigye, the head of Biotechnology Laboratory National Research Laboratories (NaRL) in Kawanda believes that to be a scientist, is all about offering service to people. She heads a team of scientists finding solutions to food insecurity,



Tomorrow we feature Dr Alice Mwes teacher and counsellor who has inspired th