

REPORT ON MAKERERE UNIVERSITY'S PARTICIPATION AT THE NATIONAL AGRICULTURAL SHOW, 20 – 26 JULY 2009 AT JINJA

Theme of the show: Promoting Value addition in Agricultural Production for poverty eradication.

MAK show ground space

Makerere University was represented by the Faculty of Agriculture and the following report is a summary of what was exhibited by the Faculty during the week of 20-26 July, 2009. There were numerous exceptional innovations and forms of value addition to agricultural produce demonstrated at the MAK stall. As a result, Makerere University received the best prize in value addition (which was the overall theme of the show), and Makerere also took second prize as the best exhibiting government institution.



Winners' joy

Several products with great market potential i.e. attractive, innovative packaging & labeling and safe and nutritious value added foods were demonstrated. The stall was always full of hundreds of people who really had a lot to learn. Food related exhibits included:

Food products

- **Whole passion** fruit drink packed in 500 ml plastic bottles
- **Mixed whole fruit** cocktail packed in 500 ml plastic bottles.
- **Whole banana** fruit drink packed in 500 ml plastic bottles.

- **Nutrinut-** Blends of G.nut and simsim paste, sugar, chocolate and milk in an attractive containers.



- Meat sausages in 500g and 1 kg packs.
- Simsim and ground nut cookies. These had a unique appearance, texture and packaging.
- **Vegetable pickles.** These were made from local bitter tomatoes (*Katunkuma*)
- **Mango sauce.** A special sauce from mangoes which can be used as a bread spread
- **Tomato sauce.** This had a redefined package compared to the others on the market
- **Water melon wine.** A crystal clear wine packed in transparent light green bottles.





Peanut butter

- **Soy cakes.** Highly nutritious cakes due to the incorporation of soy flour.
- **Soy milk.** This is an alternative to dairy milk but more nutritious and wholesome since its plant based. Was well labeled and packed in 300 ml plastic bottles
- **Soy yoghurt.** This is a great tasting product, another healthy alternative to dairy yoghurt.
- **Tofu.** This is a whitish cheese-like food from the soya beans. It is a product rich in protein, with a very low level of saturated fat no cholesterol at all. It is an alternative to animal based protein foods that are usually high in fat and cholesterol.
- **Pineapple drink.** This is a fresh pasteurized product under the brand name brisk. It had a unique packaging and labeling and was sold out by the last day of the show.
- **Obushera:** processed and packed non alcoholic drink from sorghum and millet.

Innovation in Goose berries (*ntutunu*)



- **Goose berry products.** This was an exciting category of products under the brand name Zzizzi which mesmerized everyone who came to the Makerere stall. It was hard for many people to believe that they were the goose berries which have always grown in the wild and now were domesticated and wonderful products can be made out of them. All the Zzizzi products were sold out with 2 days of the show to spare. The products included;
 - **Goose berry juice, ready to drink;** packed in 300 ml paper containers and 500 ml plastic containers
 - **Fresh whole goose berries** that were ready to eat, packed and labeled well in small plastic containers
 - **Solar dried goose berries.** Eaten and used just like other dried fruit.
 - **Goose berry jam.** This was another unique, wholesome product with an attractive package and labeling too.



Orange fleshed sweet potatoes

The importance of the Orange fleshed sweet potatoes was demonstrated in the field and in processed form. The potatoes are rich in Vitamin A which is an essential vitamin that is missing in so many diets in Uganda. Deficiency of Vitamin A leads to deaths millions of young children in developing countries including Uganda.



Demonstration Gardens

This was a very important section of the exhibition. People in the field were not only able to see the products but also the crops production techniques including; mulching, appropriate soybean plant population, the different crop varieties and backyard vegetable production. The farmers were expected to do exactly the same if they were to get good yields. Other exhibitions were shown in the following categories.

- **Oyster mushrooms as a business.** Two gardens with a good yield of mushrooms were exhibited. People were provided with details of the practices and proper management of the mushroom business. The mushroom seed and proper culturing methods and techniques were shown.
- **New soya bean varieties.** Three new soy bean varieties were exhibited. These are Maksoy 1N, Maksoy 2N and Namsoy 4N. They were shown in Demo plots, seed form and processed products. All the varieties are resistant to soybean rust which had threatened to wipe out the soybean in the country. These are fast growing and high yielding varieties. Many farmers and entrepreneurs picked contacts for the seed supplies.



Exhibitions related to soil fertility:

Food can never be food without soil for the proper nourishment of the crops. Therefore, nourishment of the soil was presented as the key issue to crop productivity. Communities were

taught proper ways of managing their soils and the importance of replenishing the lost soil nutrients using biological nitrogen fixing fertilizers and inorganic fertilizers. On display were;

- a) The different soils in Uganda
- b) Soil test kits that test the fertility status of the soils and
- c) Inorganic fertilizers among others included NPK, MOP and urea.

Animals:

There were also exhibitions related to livestock production:

- a) **Conservation of indigenous animals.** Special case show of the Mubende goat and Indigenous chicken were shown. These excited the people, who picked contacts for supplies and were enthusiastic to learn more. The he goat on exhibition was booked and bought by farmers who wished to improve their goat stock through breeding.
- b) **Equipment and structures used in Livestock production.** A digital livestock weighing scale and folder units for local chicken were on display.
- c) **Live stock feeds:** Preparation of hay and silage was also demonstrated by MUARIK



The following exhibitions were also made:

Solar drier: demonstrating an appropriate technology for drying agricultural produce in rural set up.

Bio-diesel: Many people were amazed and got to learn that Uganda also has the potential of producing alternate fuels to cut the dependence on the non green fuels.

Books:

The Faculty of Agriculture has successfully produced a number of publications specifically for farmers, entrepreneurs and individuals who wish to start up projects in agriculture. The books were on high demand and were readily available for sale. The books exhibited and sold at the show included Farming as a business, Pig production, Bee keeping theory and practice, Livestock nutrition, Fish farming, Okuganyulwa mubulimi (Luganda version of 'Farming as a Business'), Farm structures, Agriculture Extension, Herd Management, Agro-forestry and Surgical techniques. There were also soybean growers' guide in English, Luganda and Luo. Farmers showed great interest in the literature that was on display and many wished they could access the information in their different sub-counties.



Poster presentations

The different departments also had several poster presentations which reflected some of the out-puts of the research that goes on at Makerere. Below are some of the presentations;

- Bio-diesel production
- Features of new soybean varieties
- Meat quality improvement
- Range land recovery

- Local poultry production
- Piggery production

In this show we had four student bodies from our faculty showing their own innovations which were very out standing and inspiring. The work of these students contributed very significantly to the good performance by Makerere University and was a clear testimony that students can also be leaders in technology development and innovations once given the opportunity. I personally applaud all those students for their spirited performance, team work and entrepreneurial skills. The particulars of the participating students' organizations are shown in the Table below:

Organization	Mother Department	Exhibited products
Professional Practicing agriculturalists (PROPA)	Crop Science	Goose berries value chain
Pioneer Agribusiness Enterprise ltd (AGRIENT)	Economics/Agribusiness	Pea nut butter
Smart foods	Food science and Technology	Tofu processing from soybean
Makerere university farmers' association (MUFA)	Faculty of Agriculture	Artificial fertilizers



Finally, I take this opportunity to thank the Dean of faculty of Agriculture, Heads of Departments, Departmental representatives and students who jointly made this show a success.

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