

Recognizing farmer innovators in Africa

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Farmers are not only recipients of introduced knowledge or technologies. They are also innovators who often develop new techniques or improve existing practices to fit them into their local conditions and adapt to global changes. As part of the **Program of Accompanying Research for Agricultural Innovation (PARI)**, the Center for Development Research (ZEF) in collaboration with the Forum for Agricultural Research in Africa (FARA) and national partners implemented innovation contests in Ethiopia, Kenya, Malawi and Zambia in 2016 to find high-potential farmers' innovations. About 350 promising innovations were submitted to the contests in the four countries. Below are examples of some of the winners.

NTHUPA SHAMPOO FOR PIGS

Innovator: Lisbon Mbale (21), Malawi

This innovative idea came to Lisbon when his pigs were attacked by external parasites and he could not afford to take them to the vet. He thought of using Nthupa—a tuber that looks like cassava and a well-known herb used for fishing—to suffocate the ectoparasites. When nthupa is mixed with water, it foams like shampoo which can then be used to bath the pigs or any other livestock. To his surprise, not only did the mixture kill the parasites in few days, it also dried and healed the wounds.

Ever since he started using this innovation, his pigs are clean and healthy and production has gone up.



BIOGAS-SLURRY APPLICATION AS PESTICIDE

Innovator: Beyene Tadesse Lenjiso (39), Ethiopia

Beyene is known in his area for his compost and biogas preparation. He even sells compost to other farmers and non-governmental organizations. With this innovation, Beyene wanted to reduce the cost of pesticide while still protecting crops from pests, increasing the production and obtaining healthy agricultural produce through organic farming. He dilutes biogas-slurry with water and then sprays it on infected crops. The spraying is repeated after a month. At the end, the crop is free from diseases and chemicals.



EIGHT-ROW PLANTER OF SEED AND FERTILIZER

Innovator: Adane Alemu Timkete (27), Ethiopia

The planter that Adane developed is constructed from locally available materials (wood, iron sheet and plastic can) with a manual control to adjust to the size of different crops. When the ox or tractor pull the planter forward, the gears at the back and in the middle open which in turn triggers the eight openings underneath the planter to release the seeds and fertilizer. The additional part at the back of the planter then covers up the hole with soil and levels the field. Adane found that the planter can cover 1.5 hectares of wheat farm land per day while the traditional practice of row planting by hand will require 24 people and eight pairs of oxen to finish the same size of land in the same time.



KODACLOM BROODER

Innovator: Cornelius Otieno Obonyo (53), Kenya

Cornelius was concerned about high chick mortality and feed wastage, so he developed a brooder consisting of various sizes of plastic containers which provides feed, water and sleeping space separately in a single system. This isolation principle ensures a clean environment for 50 chicks which in turn reduces the occurrence of poultry diseases, the use of veterinary drugs and the amount of feed wastage. It also protects the chicks from hawks. As a construction material, plastic is easy to clean and regulates the temperature because it does not conduct heat well.



NYACHIRAMBO LIVESTOCK BOOSTER

Innovator: Jane Chirambo (41), Malawi

Jane wanted to reduce the cost of producing livestock because feed, immunization and other medication are expensive. She came up with her own booster which not only increases the productivity of livestock through enhanced growth but also protects them from disease attacks. She mills together dried soybean grain, dried pumpkin seed and dried moringa to get a high protein concoction. The feed can be given directly to livestock or mixed with bran. She offers the treatment of sick livestock as a service in exchange for money.

