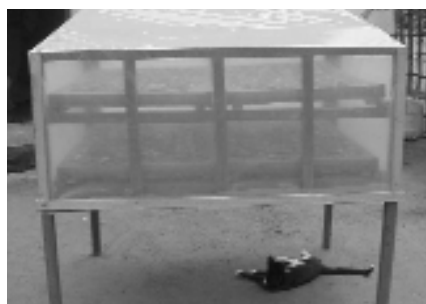


The sweetest potatoes of all

Vitamin A deficiency is the leading cause of preventable blindness. Children in sub-Saharan Africa are particularly at risk due to poor diets and a lack of knowledge about vitamin rich foods. FARM-Africa was founded partly through a belief that food is the best medicine of all. Now they are involved with a project in Homa Bay, Kenya, funded by The Maendeleo Fund, that is using a new variety of sweet potato to help prevent blindness.



Using a simple manual machine, sweet potatoes are sliced before drying. Alternatively there are chipping machines. *Credit: FARM-Africa*



After slicing, drying is done on raised beds or on locally made solar driers made by trained local artisans. *Credit: FARM-Africa*

Homa Bay in western Kenya is a very poor district; farmers practice subsistence agriculture but productivity is low. There is a high incidence of malnutrition, malaria and HIV/AIDS.

FARM-Africa is working with women farmers to grow and process an improved variety of sweet potato. Sweet potatoes are a widely cultivated food crop throughout Africa but commonly used varieties have white flesh and are low in beta-carotene - which the human body converts into vitamin A. In contrast, the new variety has been developed to produce orange flesh and a high beta-carotene content.

Sweet potatoes are considered a woman's crop in Kenya, as they can be grown on small plots of land. As women are responsible for feeding the family,

encouraging them to grow this improved variety is an ideal way of ensuring that children benefit. As a crop, they are inexpensive and can be grown throughout the year. The new varieties survive droughts well and produce higher yields than traditional varieties.

Processing

It's important that children eat enough of the potatoes for them to benefit nutritionally and so the women are processing them in different ways. Using simple manual machines, the potatoes are either sliced or chipped and then dried. The chippers are prefabricated by local artisans using designs developed by the Kenya Industrial Research Development Institute (KIRDI), that also trains artisans to

ensure good quality control.

The resulting chips can be eaten as snacks or ground into flour and used to bake bread, buns and cakes. The flour can be mixed with wheat flour to make products like cakes, biscuits, bread, doughnuts; or other cereal flours like sorghum and millet to make weaning foods.

The proportion of sweet potato flour in the baked products varies depending on the products - in biscuits half of the flour is derived from sweet potatoes; in bread it is down to 20 per cent; and in chapatis it is 60 per cent. Baking is done by the farmers in group bakeries with equipment developed jointly by local artisans and KIRDI. Individual farmers are also trained on simple baking techniques for using in the home.

The benefits for the farmers are immense; they control the whole chain of production, from growing and harvesting to processing and marketing. They have two cooperative bakeries and even an on-site cafe, where they sell their potato products. They have proved very popular locally and sell for higher prices at market, bringing in further income for the farmers. In fact, so popular are the potatoes that the project had to give out some sweet potato vines to non-target farmers who literally ran after the vans that were transporting them!

For more information contact the Maendeleo Agricultural Technology Fund, P O Box 49502, 00100 Nairobi, Kenya. Web site: www.maendeleo-atf.org



Once the slices are dried they can be stored or sold for eating as snacks or ground into flour for baking. *Credit: FARM-Africa*



Baked products - loaves, cakes and biscuits. *Credit: FARM-Africa*