## Observing local innovation in Swayimane, South Africa

By Mzo Mndali, Thabo Makhubedu and Brigid Letty

For the first time, Prolinnova-South Africa is involved in the suite of Misereor-funded Prolinnova projects that focus on supporting local innovation related to food and nutrition security. Through the ELI-FaNS project (full title: Expanding the promotion of local innovation for food security and healthy nutrition to strengthen resilience with focus on women), the Institute of Natural Resources (INR) has a team exploring examples of local innovation in the community of Swayimane in KwaZulu-Natal Province, which is about 60 km inland on the east coast of South Africa. It is an area where the INR has already been working with the local people in joint development that builds on local knowledge, but this is the first time that there is a specific focus on identifying innovation by community members.

The first months of the ELI-FaNS project have involved introducing the project to local stakeholders via the traditional authorities in the area, and then seeking cases of local innovation. From these cases, some will be selected to receive additional support through a process of joint research and innovation. The INR team has used two approaches to identify local innovators: some have been identified by the local headman (Induna), while others have been identified through field work focused on observing farming activities that seem unusual to the area. The latter approach has led to identification of some very interesting innovators, who are described below.

Sanele Nkala (age 26) is a young

man who completed a national diploma agriculture at Mangosutho University of Technology. His family grows sugarcane on a small scale to supply to a local mill and he has become responsible for a piece of land in the homestead to grow vegetables. He had been exposed to the concept of permaculture after a field trip to a farm and explored it further on the internet, before he started doing it himself. Although completely self-taught, he has reached a scale in producing vegetables not only to feed his family but also for local sale - mainly to a group of nurses in a nearby clinic who see value in consuming organic produce.

Another young innovator whom the INR team learnt about is a high school student who has found a way to improve the production of his family's chickens. To overcome the problem that dogs eat the eggs, she had constructed a number of laying boxes that she places on top of the chicken coop. This innovation appears to be



The garden of young innovator, Sanele Nkala, applying the principles of permaculture

Credit: Mzo Mndali

very effective in reducing egg losses, but now she faces the problem of having too many hens that start to lay eggs in nests where other hens are already brooding. Another community member who observed this new practice is now constructing similar laying boxes, which he sells locally. This highlights that one innovation leads to the next, by the same or other people in the locality.

A third case is that of Ms Celiwe Shezi, a middle-aged woman whose husband died some time ago. Although keeping cattle is generally a man's task, she had to take this over. She also grows maize and potatoes but in an unfenced field, so she has come up with an innovative way of keeping livestock - her own and others' - out of her crops. She collects cow manure, mixes it with water and then applies it around the perimeter of her cropland. She says that this is an effective deterrent and she is thus able to avoid crop damage. Interestingly, Lesotho herders are known to throw cattle manure onto maize plants to discourage cattle from eating the plants when they pass by them.

A fourth case discovered by the team is related to processing and popularising a traditional vegetable locally called amadumbe (taro). This crop is widely grown in Swayimane, but many children and young people do not like eating it. A village woman, MamZondi, has developed a way of using amadumbe to make commonly eaten foods such as amagwenya (vetkoek, a fried product normally made with wheat flour) or uphuthu (normally made from maize meal). She decided to do this because she sees this as a source of healthy food that can fill the gap "at the end of the month when there is no money left to buy food - because there will still be amadumbe in the garden."

These four cases show that innovators include both men and women, and both young and old. What has also become clear is that we can see what innovators are doing to solve challenges they encounter if we are observant and are willing to stop and engage and ask questions.



Laying boxes placed on the top of the chicken coop at the Vuduma household at Swayimane

Credit: Mzo Mndali



MamZondi preparing innovative foods made from amadumbe (taro)

Credit: Thabo Makhubedu