

Social innovations for improved food and water security

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Rapid population growth across Africa has resulted in major challenges around the provision of basic needs such as food, healthcare, energy, water and sanitation. To address these issues, social innovators have made efforts to develop and deploy new solutions. Social innovation is an integration of various innovative solutions with the aim of addressing social issues. It can comprise combinations of technical and non-technical (i.e. organisational or institutional) innovations.

The INR has a fairly long history of supporting local innovation, having been the host organisation for the

Prolinnova South Africa Country Platform for some years. Prolinnova is a global network that ‘promotes local innovation in ecologically agriculture and natural resource management’. Prolinnova also supports participatory innovation development, whereby different stakeholders work together to strengthen and adapt local innovations. The INR team recently documented social innovations in two different areas they are working for the purpose of shared learning. With these cases, community members developed interventions to address issues of water supply and food insecurity.

Catchment restoration project

The Mapanekeni community, located within the Impendle District Municipality in KwaZulu-Natal, developed a water supply system for their area. This is a small community comprising less than twenty households. These households refused to move at the time when the government was moving households and settling them in villages and have thus not been provided with services such as piped water. This community is part of a catchment restoration project that is being supported by INR in partnership with Umgeni Water. Through pooling of resources and working collectively, community members purchased the necessary material and installed their own water system, drawing water from a stream and feeding it down to the households with the aid of gravity.



The pipe in the stream in the mountain that supplies households at Mapanekeni.

Credit: Nolwazi Ndimande



Mr Duma with the tank provided by the municipality that imp...

Since its installation in 2000, this innovation has been adopted and replicated in other parts of the community. The innovation has also been supported by the Municipality, which supplied a tank that has improved the water pressure to the households.

Food security project

Another social innovation that has been documented through a food security project that was funded by the United Nations Development Programme South Africa (UNDP-SA) is a method of vegetable gardening in the township of Sobantu, Pietermaritzburg. These households have to contend with steep terrain and limited space. They build walls with bags filled with soil to prevent soil erosion and to extend their reclaimed land. At the home of Mr Ndlela, he has found an innovative way

to use this extended part of his yard to produce food. Not only has he created terraces, but he also has made use of vegetables that grow in a way that is suited to the vertical walls. Since 2002, this garden has been a source of food for the community and income for him and his family.

These are just two examples of how the promotion and documentation of social innovation can help drive the developmental agenda in resource-limited settings.

Background: The main business of the INR is to work towards the wise use of natural resources in pursuit of sustainability for the good of the environment and society. This is done through multi-disciplinary action research and the dissemination of knowledge. INR works closely with community partners

in creating solutions which are both practical and easily implemented. In addition, the Institute plays an advisory role with government, communities and the private sector on key initiatives. Its primary focus is sustainable resource management, with programmes in the following fields:

- Water Resources and Biodiversity
- Environmental Sustainability Assessment and Reporting
- Land Resources and Biodiversity
- Sustainable Agriculture and Food Security
- Environmental Change and Vulnerability
- Livelihoods and Biodiversity.

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improves the pressure of the water to the households.

Credit: Nolwazi Ndimande



Community members planting a bed constructed through the UNDP project on the area that has been secured with sand bags and is used by Mr Ndlela to produce vegetables.

Credit: Brigid Letty