

Recognising local innovation in livestock-keeping – a path to empowering women

by B. A. Letty and A. Waters-Bayer¹

PROLINNOVA is an international network that involves a range of different stakeholders. The network promotes farmer-led approaches to development such as participatory innovation development. Farmers and natural resource users often find novel ways of using natural resources to address challenges and improve their livelihoods. In many rural communities, women do not have the same access as men to resources such as land. They also often have much less decision-making power or capacity. Giving recognition to, and supporting, the innovative capacity of women farmers is seen as an effective mechanism to strengthen their role in rural research and development.

Introduction: promoting local innovation in South Africa

Small-scale farmers (a term that includes livestock-keepers) may be “resource-poor” with respect to financial and natural resource assets, but may be rich in creativity and ingenuity. It is by taking this positive entry point into agricultural research and development (ARD) that the PROLINNOVA programme in South Africa is building up partnerships between small-scale farmers and research and advisory services to help the farmers improve their livelihoods. PROLINNOVA–South Africa (SA) is a country programme within the Global Partnership Programme PROLINNOVA (PROMoting Local INNOVation in ecologically oriented agriculture and natural resource management)

under the umbrella of the Global Forum for Agricultural Research (GFAR). It is an international network of non-governmental organisations (NGOs), tertiary learning institutions, government departments (research and extension) and community-based organisations that promotes participatory, farmer-led ARD. The PROLINNOVA–SA network was initiated in 2004 by the then Director of the Farmer Support Group (FSG), the outreach arm of the Centre for Environment, Agriculture and Development (CEAD) at University of KwaZulu-Natal (KZN). Activities gradually spread also into other provinces: Limpopo, Mpumalanga and, more recently, North-West. The network is guided by a multi-stakeholder National Steering Committee and a Programme Co-ordinator based at the Institute of Natural Resources,

PROLINNOVA has been active since 2003 and now involves country-level networks in 18 countries in Asia, Africa and South America. The international network is coordinated by the Netherlands-based NGO ETC EcoCulture, and is funded mainly by the Netherlands Directorate for International Cooperation (DGIS). It encourages development agents, researchers and staff, and students of tertiary learning institutions to recognise and support local innovation. They thus become involved in farmer-led participatory innovation development (PID) to improve the farmers’ innovations or to develop further their ideas as to how a particular challenge can be addressed or an opportunity harnessed. The research questions come from farmers, who are actively involved in planning, implementing and evaluating the joint experimentation and development of better ways of doing things. The recognition by the “outsiders” (the above-mentioned actors in formal research, extension and education) that small-scale farmers have the ability to innovate brings greater equality into the partnership between smallholders and the “outsiders” (Wettasinha et al 2008).

¹ B. A. Letty, Institute of Natural Resources, PO Box 100 396, Scottsville, 3209, Pietermaritzburg, South Africa, E-mail: lettyb@ukzn.ac.za; Anne Waters-Bayer, ETC EcoCulture, Leusden, Netherlands, E-mail: waters-bayer@web.de

while activities on the ground are facilitated by Provincial Task Teams composed of governmental and non-governmental staff.

Capacity-building workshops were held in the different provinces and allowed for sharing and learning between participants around issues of local innovation, PID and other participatory development approaches. In each province, the first workshop ended with an assignment for participants to identify and document cases of local innovation in the areas where they work. They then brought these cases to a feedback workshop, where they deepened their understanding about local innovation and prepared for PID activities. This sequence has proved to be effective in creating awareness of local innovation, not only among the participants, but also among other people in their own institutions and beyond, who are exposed to the brochures and video films in which these cases are documented.



Mrs Maduba Mbila in Msinga, KwaZulu-Natal Province, uses very palatable leafed branches to attract her goats home each night. This reduces time spent fetching them and losses from predators. (Photo: M. Malinga)

What is local innovation?

The PROLINNOVA network defines “local innovation” as the process whereby farmers (or other natural resource users) develop new technologies or ways of doing things, without support from external people. The intermediate results of this continuing process of innovation are “local innovations” that make use of local resources, are site-appropriate and address specific constraints, challenges or opportunities perceived at a local level (Wettasinha et al 2008).

Local innovation grows primarily out of indigenous knowledge but can be stimulated also by ideas that local people have heard about or seen elsewhere. This process reflects the dynamic nature of indigenous knowledge. Local innovators find ways of building on existing knowledge in their area in order to improve their livelihoods. As their practices became known to other members of the community (through a process of farmer-to farmer sharing or dissemination) and possibly also further developed in different locally specific ways by these other farmers, so the general knowledge in that area changes to reflect the new practices that have become integrated into the dynamic body of indigenous knowledge.

Gender issues in rural South Africa

In South Africa, where cropping and livestock-keeping have become “feminised” largely because of the migration of healthy male family members to seek wage labour in mines or towns, fairly equal numbers of female and male innovators have been identified during the awareness-raising and capacity-building process (Salomon 2008). Already during the Indigenous Soil and Water Conservation programme that was a precursor to the international PROLINNOVA initiative, it was recognised that men and women in “resource-poor” households often innovate in order to survive and their innovations can reveal entry points for pro-poor development (Reij & Waters-Bayer 2001). Women are more likely to create low-external-input innovations that resource-poor household members would consider trying out for themselves (Fetien et al 2001). Moreover, it was found in several countries, including South Africa, that women are more open to sharing than are men, who often want to “protect” their new ideas (Salomon 2008).

In many rural communities in South Africa, women are less able to access vital productive resources such as land and tend to have less decision-making power than men. While current policies and legislation, such as the child-support grants, are changing these dynamics to

some extent, women are still largely the weaker party in the rural gender balance. PROLINNOVA-SA partners are exploring how the PID approach can address this imbalance and give more power to women. While carrying out the workshop assignments, partners in PROLINNOVA-SA discovered numerous resource-poor women who, in the face of challenges caused by factors such as economic change, (re)settlement, labour shortage, climate change, HIV/AIDS and other diseases, are making novel use of natural resource so as to cope or even to improve their livelihoods. These include local innovations in the livestock value chain, developed by local women to address specific challenges they experience, frequently challenges that pertain more to women than to men.

However, despite the fact that numerous women innovators have been identified, it is often men who show their innovations at agricultural fairs, such as at the exhibition that was held at Irene at the grounds of the Agricultural Research Council on 12 June 2007, in association with the Fourth General Assembly of the Forum for Agricultural Research in Africa (FARA).

Women often lack confidence and undervalue their own achievements. An important step to empowering women is to raise awareness of how resource-poor women are contributing to family wellbeing through

cropping and livestock-keeping and how they are contributing to the development of smallholder agriculture through their own efforts and creativity. This approach not only reveals low-cost ideas for improving livelihoods but also generates local pride and hope in the face of adversity. For this reason, PROLINNOVA-SA makes a concerted effort to focus on women innovators, encouraging research, development and teaching staff to recognise and stimulate women's innovativeness.

Examples of innovation by women livestock-keepers

In Msinga, KwaZulu-Natal (KZN), many households have indigenous goats, and women in the household are often involved in managing them. The goats go out to graze during the day and must be brought home in the evening to ensure that they are not stolen or taken by predators. Because the goats must cover long distances to be able to find enough feed, much time is often needed to find them and bring them home in the late afternoon. One of the farmers encountered through the process of documenting local innovation was Mrs Maduba Mbila. She had developed an effective means of ensuring that her goats return home every evening without household members having to

go and fetch them. She offers them various palatable leafed branches (e.g. *Schotia brachy-petala*) and water when they return to the kraal. She discovered this mechanism by chance. She had kept several female goats at home while their kids were small and fed them with leafy branches lopped from indigenous trees and bushes growing naturally in the vicinity of the homestead. When the kids became older and she released the female goats for grazing, she found that they continued to return home in the evening and also brought the rest of the flock with them.



Mrs Machoncho Dlamini in Msinga makes nesting boxes out of sisal stems. This insulates the chickens well against heat and cold and protects them from predators. (Photo: R. Alcock)

This innovation has proved very useful for Mrs Mbila, as it has reduced the effort and time needed to ensure that the goats are kraaled at her home every night (Swaans & Malinga 2006).

Other women innovators who have been identified include Mrs Sarah Martha Mbuyisa of KwaMhlanga, Mpumalanga Province, and Mrs Machoncho Dlamini, who also lives in Msinga. Mrs Mbuyisa keeps backyard chickens and has developed a system of raised grass baskets in which her hens lay eggs. This has proved effective as a way to make it easier to find and collect the eggs. The extension staff from the Mpumalanga Department of Agriculture are planning to assist her with growing supplementary feed for the chickens in an effort to prevent them from wandering out of her yard in search of food (J S Maphosa, pers. comm. 2008). Mrs Dlamini is a member of a community that makes chicken nesting boxes out of the bases of sisal stems. The stem is stripped of leaves and hollowed out to create a nest. In addition, the women have found through informal experimentation that, if some burning grass is used to burn off the inside of the hollowed nest, a smoother surface is obtained which creates a less favourable environment for external parasites. They also found that the nests insulate the chickens well and protect them from predators (Alcock 2005).

Recognising this creativity amongst women raises the women's esteem in their own eyes and in the eyes of others, both in the community and in institutions of research, extension and teaching. It reveals entry points for pro-poor livestock development and it encourages women to become involved in experimentation to develop the innovations further.

Rural women decide on ARD funding

Going beyond recognising local innovation and encouraging "outsiders" to join farmers in ARD partnerships, PROLINNOVA-SA is also involved in piloting local innovation support facilities (LISFs) as mechanisms to support local innovators. The LISFs



Members of Local Innovation Support Fund selection committee, KwaZulu-Natal (Photo: A. Krone)

provide them access to technical expertise as well as to financial resources for materials and equipment to allow them to explore their ideas further. The initiative to pilot LISFs in KZN (as well as in seven other PROLINNOVA country programmes in Africa and Asia) is called FAIR, an acronym for "Farmer Access to Innovation Resources". It is coordinated by FSG in partnership with another NGO, SaveAct, as well as the KZN Department of Agriculture and Environmental Affairs (DAEA). In an effort to allow the community to manage the LISF, the Hlahlindlela Voluntary Association (HVA) has been established. The HVA receives funding through FSG and is responsible for managing the funds and making payments to beneficiaries and service providers. A screening committee evaluates applications coming from community members for support (financial or other) to explore or test new technologies or systems.

Rural women have been included as members of the screening committee in order to capacitate women in terms of being able to make decisions as to which individuals or groups of farmers should receive grant funding through the LISF. Women are thus empowered to have a say in local-level research and development and also to support other community members in developing proposals (Ngubane & Maxwell 2008). The purpose of the pilot is not only to test the efficacy

of a local-level fund that supports farmer-led research and development but also to involve other stakeholders such as research staff from KZN DAEA, who can take these concepts forward and mainstream them.

Promoting gender responsiveness

At an international PROLINNOVA workshop focused on gender in November 2008, an action plan was drawn up to encourage country programmes in PROLINNOVA, including the one in South Africa, to take steps to ensure that issues of gender equity are considered during the planning, implementation, monitoring and evaluation of the activities that its members undertake in identifying local innovation, engaging in PID and piloting LISFs. Such steps include consciously identifying women innovators to be supported through PID activities, and making sure that women are involved in capacity-building initiatives and multi-stakeholder ARD platforms. PROLINNOVA-SA is making deliberate efforts to ensure that the member organisations recognise the need to, and the benefit of, being gender conscious and that they seek and find ways not only to integrate women farmers and natural resource users into pro-poor ARD, but also to empower women to be a driving force in this process.

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