Forging partnerships with innovative farmers in Tanzania

O.T. Kibwana

New ideas are the key to agricultural development. In today's dominant model, researchers develop and test new ideas, extension agents package them into "messages" and farmers are told what to do. A very specific status hierarchy is perceived by all the actors. While the ineffectiveness of this linear model is now recognised, the question of how researchers find out the relevance of innovations at field level remains open. Mechanisms have been introduced to feed back farmers' opinions via the extension system to researchers, but they have done little to change the assumption that new ideas originate from experts working at a superior level.

The Indigenous Soil and Water Conservation Programme (ISWCP) in Tanzania (see Box 1) recognises that such experts are an important source of new ideas. But it also believes and has concrete evidence that farmers are very resourceful in generating and testing new ideas.

Agricultural development demands continual innovation. All farmers innovate in their struggle to make a living from the soil. However, not all farmers innovate to the same extent. There are always those who lead the way. ISWCP's challenge was to identify these farmers and to forge a genuine partnership between them, and researchers and extension agents.

Before ISWCP began there had already been interactions between these actors, and the attitudes, behavioural patterns and role definitions that had developed were being taken for granted. To change these attitudes meant creating a "new order". ISWCP tackled this task in the following way.

Breaking the ice

One of the first activities of ISWCP was to bring together researchers and extension agents in a **Joint research-extension workshop on PTD**. "Experts" in agriculture believe they are more open to new ideas than farmers, and see themselves as "Agents of Change". The workshop aimed at getting researchers and extension agents to agree on a new concept of farmer innovation (as they were still thinking of "innovators", "adopters" and "laggards" in the terminology of transfer-of-technology extension), and at introducing and offering training in participatory methods. A longer-term objective was to nurture a working relationship between research and extension. The workshop gave participants the opportunity to understand and appreciate each other's roles and points of view, and led to the setting up of mixed teams to identify farmer innovators.

Opening eyes

Farmer innovators and innovations had to be identifying and analysed. ISWCP began by selecting two or three divisions within each district according to the extension staff's evaluation of the general level of innovativeness in the area and whether village-level extension staff who had attended the PTD workshop were based in the division.

Research and extension teams were formed. These consisted of the divisional extension officer (DEO), selected village extension workers (VEWs) and a researcher from one of the two research organisations in ISWCP-Tanzania's National Steering Committee (NSC). As only one researcher works in each region, that researcher takes part in all the divisional research-extension teams in that region.

VEWs were selected according to their interests, capabilities and disposition to regard farmers as creative. Team leaders were people from above the divisional level who were known to be interested in participatory research and extension.

The different approaches adopted in identifying innovators reflected the composition and orientation of each team. In some areas, the teams asked the local VEWs to identify local innovators. Others asked the VEWs to convene a meeting of community leaders to discuss the general topic of farmer innovation and experimentation. Community leaders were then asked to identify local innovators. In Njombe, for example, 12 innovators were identified in this way.

The teams visited the farmers identified as innovative and saw and documented their work. In the case of the more technically-oriented teams working through VEWs, the teams screened which innovations were interesting to document. Where community leaders were involved in identification, they met with the identified farmers and the research-extension team to discuss techniques and distinguish between innovations and traditional practices.

Innovator Profiles

The VEWs, assisted by the researchers, created innovator profiles using a format provided by the ISWCP. Profiles consisted of bio-data, economic status, social influence, neighbours' perceptions and motives for innovation. They found that:

- Most innovators had responded to problems they faced during their daily work, i.e. their motivation was to solve problems;
- Most innovators were middle-aged men with families, but the more striking

Photo: Laurens van Veldhuizen

Farmers discussing their experiences of "partnerships"

Partnership in action: planning future activities.

Photo: Laurens van Veldhuizen

innovations were undertaken by males in their early 30s;
- Some of the older male innovators held official positions in their localities; the younger ones were seen as being wayward. One was nicknamed "Pwagu", a popular character in a radio play who is always trying out new ideas but with little success;
- Better-off innovators embarked on more expensive innovations requiring purchased materials and hired labour, the poorer ones on simpler, less resource-demanding innovations; however, many who started resource-poor became richer through their innovations;
- Fewer women were identified as innovators, and their innovations tend to be homestead centred (e.g. mixing urine with manure from stall-fed cattle);
- Most innovators claim to have been inspired by their own ideas and curiosity; few admit to having been inspired by other farmers or extension agents; only later did it become possible to trace the origin of any particular innovation.

Let's get together

Parallel workshops for farmer innovators were organised at regional level (Iringa, Mbeya and Ruvuma), bringing together farmer innovators from several districts The general design of the workshops was made by a researcher, a PTD trainer and a woman who heads the national farmers' organisation. The main objectives were to provide a forum for exchanging experiences and to stimulate networking among the innovators. This was important because innovators often felt isolated within their own communities and unappreciated by the "experts" in research and extension services. The facilitation team for each workshop included a researcher, a PTD trainer, an extension agent and a farmer.

The farmer innovators greatly appreciated the workshops. For many, it was the first time they had travelled across district boundaries and their first opportunity to explain to others what they were doing. They exchanged seeds and planting materials as well as ideas. During the workshops, participants examined some innovations in the field and assessed their strengths and weaknesses. New friendships were made and innovators were enthusiastic to learn more from each other.

Farmers learn from farmers

Cross visits were organised in two stages. First, farmer innovators from one district visited others in the same district for three days and each group member played host in turn. Then, a group of innovators from one district visited innovators in another district within the region. VEWs accompanied farmers on their intra-district visits and the DEO went with them on inter-district visits.

The cross visits took place in December 1998. After each visit, group members evaluated what they had seen and identified the ideas to try out at home. In April/May 1999, teams of VEWs visited the farmers involved to see what they had put into practice. Farmers had been very active. The newly acquired seeds and planting materials had been tested. Some of the innovations had also been adopted, the most striking being the sowing of several maize seeds in a pit, the idea of Wilbert Mville in Njombe (see Temu et al., p.12). Seventy-nine farmers trying out this technique were identified in Njombe District alone. No wonder one farmer commented that "Learning from exchange visits is better than being visited by a VEW".

Agreeing on topics

Researchers and farmers often have different ideas about what problems should be studied first. Negotiations are needed to reach consensus on the relative importance of problems. Only then can joint action start. This process requires that each stakeholder group has the capacity to express its own position. Preparatory work is needed if fair negotiations are to take place. ISWCP tackled this on two fronts: by confronting the "experts" and addressing the farmer innovators. A series of workshops were held to help experts appreciate the farmers' potentials. Meanwhile, the process of identifying innovators, regional workshops and cross visits had served to strengthen the position of the farmers, who had became more confident, assertive and better able to argue their interests.

Negotiating priorities

Once these two parallel processes had matured, priorities could be set for joint experimentation building on local innovations. Multidisciplinary teams consisting of researchers (agronomists and soil scientists) and the VEWs visited individual farmers and discussions took place in the fields. Clusters of innovations were identified, for example:
- mixed cropping involving food crops and fruit trees;
- agroforestry systems;

- replenishing soil fertility with organic materials;
- testing different sowing systems;
- tapping underground water for irrigation;
- diverting waterways and managing the water;
- harvesting run-off water;
- production of agricultural tools.

Results were summarised and presented at a research-extension workshop for further negotiation. Finally, the proposals were reviewed by the NSC, which monitors the general orientation of the action research. The woman representative of the farmers' organisation had a special responsibility for ensuring that the farmers' agenda was maintained.

Learning together

During the first cropping season, a few farmer-experimenters were identified in each action area. Research teams consisting of a farmer-experimenter, the local VEW and a researcher were formed. The general framework for sharing responsibilities had already been agreed upon during the earlier workshops, but the teams still had to work out the details to fit their own situation.
Most experiments involved crops and some had been set up after the growing season had begun. In order to improve research in the next season, a workshop was held for the farmers, researchers and extension agents involved in the first experiments. The main aims were:

- to review the process of joint experimentation: How was it planned? How was responsibility shared? What happened?
- to derive lessons learnt so far: What went well? What problems had there been? How were these dealt with? What should be done differently next time?

Generally, participants and especially the farmer experimenters were satisfied with the process. For them, the most gratifying part of the experience was that they had been treated - at long last - as partners and equal to the "educated elite".
Of course, some problems were also identified. A major one was that it had been assumed that, simply by dividing responsibilities, the partners would be able to play their roles effectively. As it turned out, even in cases where the partners were clear about what they were supposed to do, they were not always prepared to do it. The participants therefore requested that, in each district, practical "hands-on" training be given. This should focus on the tasks that the farmers, researchers and VEWs should undertake in the next cropping – hence, experimenting – season. These workshops would also serve as planning sessions for the next season – a good way to complete the reflection-action-reflection loop.

Just catch words?

Participation, stakeholder involvement, empowerment are concepts that have gained popularity, but there is a danger that they become catch words. ISWCP-Tanzania is being implemented by partners – including research institutions and extension agencies, both governmental and non-governmental - who have claimed from the beginning that they believe in participation. However, experience shows that old habits die hard. Deliberate efforts have to be made to achieve a common understanding of the vision, philosophy and strategies of genuine participation. The terminology used must have a clear and shared content. Mutual trust is also critical in genuine partnership. You trust people whom you respect and understand. The mixed workshops were powerful tools for building trust, but it is wise to remember that farmers are old hands at uncovering deception. They may decide to keep quiet. And this would be a very dead end. ■

O.T. Kibwana, National Coordinator, ISWCP Tanzania, Cooperative College Moshi, PO Box 474, Moshi, Tanzania (iswcp@form-net.com).

Box 1: Indigenous Soil and Water Conservation in Africa (ISWC II)

The first phase of ISWC focused on indigenous knowledge (IK) in land husbandry. The second phase (ISWC II) focuses on dynamics in IK: discovering and promoting farmer innovation. The programme operates in Burkina Faso, Cameroon, Ethiopia, Tanzania, Tunisia, Uganda and Zimbabwe. The main objectives are:

- to improve the effectiveness of ISWC practices and innovations through joint experimentation by farmers, researchers and extension agents
- to initiate research on ISWC, spread research results, and create lobbying platforms to show policymakers that building on ISWC practices and innovations is an effective option for development.

Local innovators, who develop new ideas without direct influence from formal research and extension, are often overlooked as a source of inspiration for development. Innovators already in the midst of informal experimentation can be entry points into a process of Participatory Technology Development (PTD). The major components of ISWC II are:

- identification and analysis of farmer innovators and innovations
- networking between farmer innovators
- participatory research involving men and women farmers to develop improved land-husbandry technologies and systems
- setting up farmer-based monitoring and evaluation systems
- dissemination of tested technologies through farmer-to-farmer visits.

In each country, researchers and extension agents are trained in PTD methods. The researchers' role is to support experiments by farmers. Extension agents participate in planning the experiments. They help the farmers to monitor them, and organise farmer-innovator workshops and farmer-to-farmer exchange visits.

In each country, a government agency or NGO concerned with agricultural research or development acts as the lead agency. It establishes links with other local research, development and teaching institutions interested and experienced in participatory approaches to improving land husbandry. A National Coordinator in the lead agency manages programme activities. A National Steering Committee, involving representatives of the collaborating organisations, approves plans and evaluates the activities.

Annual review meetings and regional workshops in Anglophone and Francophone Africa bring national programmes together. An informal newsletter (*Farmer Innovators in Soil and Water Conservation*) also allows exchange between the participants. Advisory support is provided by a European consortium involving the Centre for Development Cooperation Services (CDCS), Free University of Amsterdam; International Institute for Environment and Development (IIED) Drylands Programme, Edinburgh, Scotland; Institute for Development Studies (IDS), University of Sussex, UK; and ETC Ecoculture, Leusden, Netherlands.

Funding is provided by the Directorate General for International Cooperation (DGIS) of The Netherlands Ministry of Foreign Affairs. Each partner country manages its own fund for activities such as training in PRA and PTD, farmer-innovator workshops, participatory research and farmer-to-farmer exchange visits.

Further information: Chris Reij, CDCS, Vrije Universiteit, De Boelelaan 1115, NL-1081 HV Amsterdam, The Netherlands (cp.reij@dienst.vu.nl).