

A future for smallholder farming in the savanna

During the PTD process, the smallholder farmers and scientists working together in northern Ghana agreed that the most serious current problem in agriculture is declining soil fertility. The farming communities involved in analysing their situation, identifying potentials and experimenting with



photo: Bert Lor

Both women and men are keen to continue experimenting.

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options to improve soil fertility felt that the only realistic approach was to address this problem with primarily local means. Visits to other farmers operating under similar or even more difficult conditions, such as in Burkina Faso, stimulated the Ghanaian farmers to try out new ideas in new cycles of PTD.

The joint analysis and evaluation allowed the farmers to pinpoint more clearly for themselves and for the scientists involved the criteria they considered important in testing new ideas in crop production. In addition to yield, these criteria included germination rate, weed occurrence, labour requirements, other input requirements, drought tolerance, and seed quality after harvest. The trials showed that applying compost or farmyard manure led to good results, and adding phosphorus enhanced yields still further. The communities involved in the experimentation regarded the more efficient use of local biomass as the most promising option for improving soil fertility, as long as phosphorus fertiliser is not easily available. Analysis of experimental results led to new questions that the farmers were eager to explore and - after their experience in PTD - felt confident to explore. They identified the major problems related to use of compost - insufficient organic manure and higher weeding inputs - and are pursuing research to tackle these problems.

A similar gain in confidence could be seen in the women who experimented with different ways of storing cowpea, and found that wood ash and a local herb were the most effective. After this first experience in deliberate experimentation, they decided to test other botanicals to reduce pest damage in stored crops. The

experiments by farmers in Garu to tackle the striga problem led other farmers to try using crop rotation to reduce the incidence of this weed. Thus, the more structured experimentation within PTD appears to stimulate informal experimentation on a wider scale.

Lessons learnt at SCA level

The difficulties in the first two years of the project and the progress made in the second two years indicate the importance of taking time to negotiate the purposes and mechanisms of collaboration. This is true at both the international level (between ILEIA and NGLWG) and locally (within NGLWG and in interaction with farmers). Transparency in terms of motivation and finances as well as good information flows facilitated the process of reaching agreement about what the stakeholders wanted to do together.

The mandate from above (the interest of ILEIA and its donors) to validate LEISA did not mix well with a participatory approach. As soon as ILEIA took participation seriously, the emphasis shifted to strengthening the capacity of farmers and local supporting organisations to conduct research for development.

The best way to learn how to do PTD and to build up a platform of stakeholders to sustain and promote the process is to get started in a concrete activity that demands collaboration (for example, investigating ways to improve soil fertility), to review the process as one continues, and to learn from this action and reflection.

During the fieldwork conducted in the two-year project period, a process of supporting farmer-led experimentation to develop locally appropriate LEISA technologies was initiated and a wider interest in LEISA and PTD was stimulated within research and development institutions in northern Ghana. However, the period was

not long enough to ensure that this approach was firmly institutionalised, although promising beginnings have been made.

Prospects for the future

Through their interaction with farmers and with each other, the NGLWG members have developed a vision of how sustainable farming practices can be developed in northern Ghana and, indeed, in the West African savanna. Their common mission is to promote LEISA as a more viable agricultural production strategy for achieving family food security and poverty reduction than the traditional low-external-input or the 'modern' high-external input systems.

The NGLWG clearly recognises the need for critical rethinking at the policy level of agricultural development issues and strategies, and feels that it is well-equipped to analyse and share information on such issues. It sees the need to internalise PTD and LEISA in agricultural institutions in northern Ghana. The composition of the NGLWG - which brings together people from a wide variety of institutions - should make this possible. Efforts at institutionalisation are already being made by the University for Development Studies, which is incorporating PTD and LEISA into its curriculum.

The two years of collaboration in supporting farmer-led action research have established a good base for continuation - a good base in terms of mutual respect and understanding among all partners and in terms of initial results that point the way to promising options that can be investigated further. The NGLWG is resolved to continue collaboration in this direction.

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