Wurno Farmers Learn from Kerfi Farmers: An Example of a Farmer-to Farmer Training Experiment in Nigeria

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Participatory irrigation management is one of the policy thrusts that the Nigerian government is promoting for improved performance of its irrigation systems. In this management approach, beneficiary farmers play a very crucial role up to certain levels of large-scale, public sector irrigation systems. This is realized through formation of water users' associations (WUA) in the irrigation system. To be more effective, we assert that WUAs should be self-supporting, self-regulating and semi-autonomous units within the larger system. This would help strengthen the farmers' capacity and motivations for self-management.

The farmers of Wurno Irrigation Project (WIP) in Sokoto state, impressed by the positive results of WUA activities in the Kano River Irrigation Project (KRIP), decided to pay a visit to KRIP pilot sites on the 25th and 26th of May, 1993.

Background of Wurno Project

Wurno Irrigation Project is one of the oldest irrigation systems of Sokoto State, in northern Nigeria. It is located in the south of Kano City in Kano State. The system was non-operational for several years. The Nigerian government mobilized funds from the European Community for the rehabilitation of the system and then extended it to 1,500 ha.

The project aims at generating farmer participation right from the beginning of the project. The land within the command area, however, belongs to the government. The land has been allocated to the individual cultivators each year. Hence, there is no permanent land tenure. This provision for land allocation has implications for the functioning of water users' associations and the participation of farmers in the system. The project management and the government of Sokoto agreed to allocate the land to the cultivators for a period of seven years, instead of the previous one-year term. After every five years, a review as to whether the land is properly cultivated or not would be undertaken.

Lessons from KRIP

Hadejia-Jama'are River Basin Development, in collaboration with IIMI, undertook a research program in order to introduce participatory irrigation management in KRIP. Three pilot sites were selected for experimentation. The results were positive and indicated that farmer WUAs could be formed. The farmers could be given the responsibility of irrigation management up to the distributary channel level of KRIP. The distributary channel level consisted of a command area of about 150-200 ha, with 15-25 field channels and about 250 to 300 farmers.

The KRIP went through the following process in forming water users' associations:

1) The units within hydrological boundaries are determined,

2) Membership of the association is granted to the landowners,

3) Facilitating the formation & functioning of WUA by catalysts.

4) It is a single-function WUA, based on water-related activities, in the initial stages, and

5) The association evolves through catalyzing efforts,

The Wurno Irrigation Project became interested in learning about WUA formation from the experiences of KRIP, in order to promote participatory irrigation management between farmers and agency. As an exercise in learning and sharing the experiences of KRIP, a group of nine visitors, comprising five farmers and four officials of Wurno, visited the Kerfi sector of the Kano River Irrigation Project on the 25th and 26th of May, 1993.

Interaction of Wurno Farmers with Kerfi Farmers

As soon as the farmers of the two systems were introduced to each other, the Wurno farmers queried the Kerfi farmers about such matters as canal cleaning, water distribution, the role of different officials, crop culture and agriculture practices and the use of syphon pipes in field channels for irrigating fields. The farmers at once split themselves into several groups. Each group included farmers from both systems. The Kerfi farmers took this as an opportunity to show the Wurno farmers their agricultural practices and willingly shared their experiences. Since both the groups were farmers, they obviously understood each others' concerns better than did outsiders.

The field channel representative of the Kerfi WUA explained to the visitors his responsibilities. He also informed them about the agricultural practices of the area. The farmers then conferred over land preparation methods, seed bed preparation for rice cultivation, choice of rice, market value, and so on.

The visiting farmers were then shown around the maize fields, which had been planted after wheat harvesting. This was a testimony to the advantages of irrigation: one can grow at least three crops. The Wurno farmers were shown the application of syphon pipes for drawing water from the field channel of individual fields. The Wurno farmers had never seen this technique in use before. They used gasoline pumps for extracting water from field channels, which was a very expensive method. The syphon system does not cost much to operate, but investment costs in the initial stages for buying pipes can be costly.

The visiting farmers were keen on learning this technique and applying it to their system. Through the field visit and observations, they could identify what was relevant to them and what was not. This method helped the farmers to learn and adopt new techniques in a way which was both faster and more effective than the formal extension approach.

The effectiveness of the farmer-to-farmer training approach is conditional upon five important factors:

1) *The same wavelength.* Both groups of farmers can communicate with each other without any difficulty because both of them have similar work experiences, backgrounds and problems. Hence, learning through this method is swifter than other methods. Even those farmers who do not speak the same language can learn from this method by observing the fields and agricultural practices of fellow farmers.

2) *Seeing is believing.* When the farmers observe improved practices in other farmers' fields with their own eyes, they are more convinced and ready to adopt them. On government-owned farms, by contrast, they have a hard time adopting new techniques.

3) *Peer group learning is faster than a vertical training method.* "If they can do it, why can't we do it?" This thinking challenges the ego and propels farmers to learn and adopt. In the case of the syphon pipe used by Kerfi farmers, Wurno farmers were amazed to see the utility of this method.

4) *Farmers are innovative.* Farmers have been experimental for centuries and appear to be especially willing to be so when they see other farmers succeed. This approach is effective in learning from each other's experiences.

5) *Farmer-to-farmer training is effective.* The cost for such a training program is very cheap compared to other programs, whereas the effectiveness and adoption potential is high.

This method has also been used in Asia. The reactions and responses of farmers in Nigeria are not very different from those in Asia. The experimental tendencies of farmers worldwide seem to be similar. Farmers are open to innovations but are cautious investors and try to avert risk as far as possible. They will not as a group adopt new approaches unless they are convinced of their efficacy by personally observing the fields of fellow farmers.

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