



## 13th WEDC Conference

*Rural development in Africa  
Malawi: 1987*

### DISCUSSION GROUP REPORT

Agriculture and irrigation

Chairman: C.N. Roberts

Rapporteur: R.A. Lambert

The discussion began with comments on the aspects of irrigation and agriculture in several countries. Ms Siakantu gave some details on irrigation in Zambia. She informed us that government has just formed an irrigation branch. Mr Stoutjeskijk commented on the use of dambos and the problem of marketing.

Mr Mphande and Mr Mwakikunga told us that in the case of self-help irrigation in Malawi, the government waits for the farmers to initiate the scheme and then provides support in the form of advice or certain inputs. Government does not intervene in the case of kitchen gardens. The paper by Brown on the Zumulu self-help scheme illustrated these points.

Mr Mbugua from Kenya told us about the wide range of irrigation in his country. He mentioned traditional furrow irrigation on the slopes of Kilimanjaro, a run-off collection project, use of domestic waste water and the BURA irrigation scheme.

Mr LeMercier described rice irrigation in Zanzibar and the problems of growing high cost rice when good quality, cheap imported rice was available. Mr Taylor mentioned the wide range of irrigation on mainland Tanzania including some successful large-scale sugar plantations.

After these initial comments the discussion developed around a variety of themes which are summarised as follows:

- Women usually do most of the work in irrigation but have little power of decision. They may be free to grow crops for family nutrition but men control crops for cash.
- The problems of the Bura scheme in Kenya illustrated the problems of irrigation development where it is introduced as a new technology. There are fewer problems when traditional forms of irrigation are supported eg dambo cultivation. When possible the step-by-step approach should be used. Clearly this will not always be possible and the use of pilot projects should be considered.
- It was recognised that extension workers can be crucial and so require good training, motivation and encouragement. It is vital that they are trained to listen to farmers and appreciate their skills, not just to give them advice.
- Formulators of irrigation policy should recognise how farmers balance the minimisation of risk (eg by planting a variety of crops) against the maximisation of profit that may be possible with one high-value but high risk crop. Traditional farming systems irrigation may form only part of the system along with dry field cultivation.
- On the question of technology, the need for improved water-lifting devices was recognised. This should be considered in conjunction with improved water-use efficiency through mulching or shading. Given the problems of scarce labour, improved water lifting technology must fit in with other labour demands such as those for weeding.
- Water supply planners need to recognise potential conflicts in demand. Examples are domestic water supplies being used for irrigation, fishermen blocking irrigation canals etc.
- Irrigation must be seen in the context of soil and water management. Farmers must be able to cope with removing excess water in one season and supplying water to satisfy a deficit a few months later.
- Water engineers in irrigation who know nothing about agriculture or marketing, or agriculturists with no knowledge of domestic water requirements can be a menace.

Finally the discussion made it clear that there are great differences between and within countries in relation to irrigation and agriculture. There is no single solution to the problem of irrigation development.