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Topical surveys as a tool for a more dynamic farmer extension worker relationship

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· Introduction

Most of the papers on Farming Systems Research and Extension (FSR(E)) principles and methods stress the importance of high quality human resources: a multi-disciplinary team of university degree scholars with extensive experience in the subject matter. What if they are not at hand? Should the idea of FSR(E) be dropped altogether or can one introduce some useful FSR(E) principles and methods into the working schedule of any extension field worker and support him/her in this process?

Looking at it from another angle: can one expect to integrate FSR(E) results in the working programme of a regular extension service if its personnel isn't familiar with the basic philosophy and concepts of FSR(E)?

This article describes the results of a workshop held in the Tete Province of Mozambique in September 1989[1]. The main objective was of encouraging extension personnel from field level to provincial level to integrate farmer reality into the extension programme. It was based upon the assumption that new farmers' groups will have to be approached in an open dialogical way which supports their active participation and respects their knowledge and values.

· A program of topical surveys

The workshop concentrated on the simple truth that 'one has to understand a situation before

one can intervene in it', without denying that the consequences of a (careful) intervention can also contribute greatly to our understanding of a situation. This meant that, although extension workers (EWs), and their supervisors were encouraged to investigate farmers' reality, the whole process was very much oriented towards action.

The methodology sought to disturb the existing working patterns of EWs as little as possible. Hence their scheduled meetings and farmer visits were the primary fora at which ideas were discussed and actions planned.

EWs were asked to concentrate every month (or two months) on one topic such as grain storage and pest control. The emphasis was on 'gathering understanding' while executing their normal working programme[2] (Figure 1). A checklist of issues such as conversation topics, observations, measurements, etc was used. These activities were referred to as 'topical surveys'.

In periodical meetings with their fellow extension workers and superiors, each recently completed topical survey was analysed (description of encountered situation, definition, discussion of alternatives, etc) and the next topical survey was prepared (training, discussion, making of checklists). The strategy depended as much as possible on the extension

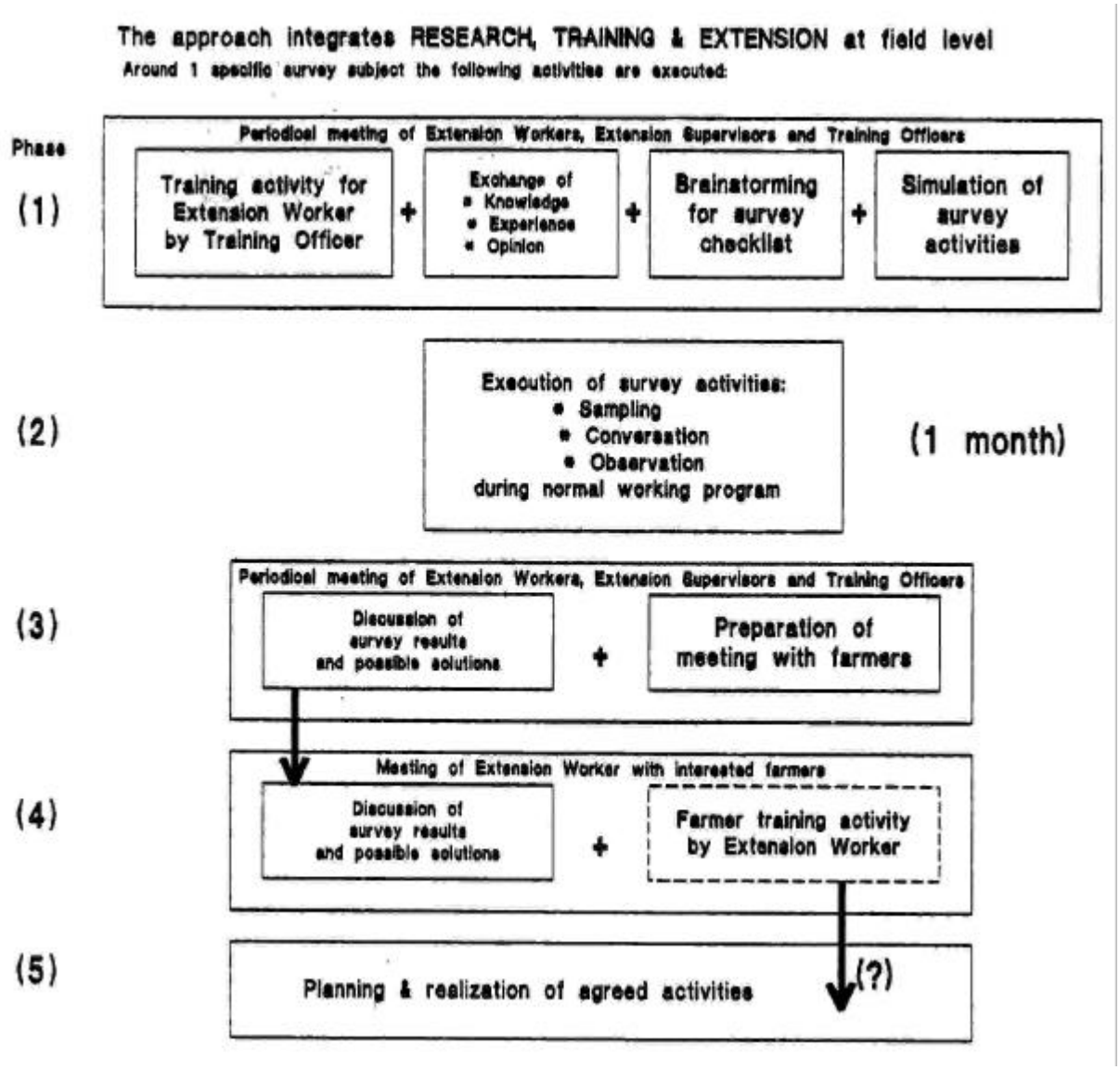
[1] The workshop was devised and organised by the author of the article, who worked at the National Training Institute for Rural Development (CFA) in Mozambique at the time. A step-by-step teaching guide is available in Portuguese (52pp).

[2] Gathering understanding versus gathering information.

Source: RRA Notes (1991), Issue 12, pp.47–53, IIED London

workers' way of perceiving reality, supporting them in their efforts to ask the right questions. The results of these meetings were then used as the bases for the discussions which the EWs would initiate on return to their areas.

Figure 1. Overview of extension workers' working programme



Source: RRA Notes (1991), Issue 12, pp.47–53, IIED London

A reasonable depth of critical analysis was expected because the free exchange of information and ideas between the extension field workers was encouraged during the meetings, which were facilitated by at least one senior officer.

· Preparing the workshop

It was crucial that all levels of the extension hierarchy in an area to be selected participate in the exercise. We held to the idea that there can be no real discussion between a farmer and an EW if there is no communication within the extension service. Besides, the integration of the approach could only be realised with the support of the authorities up to at least provincial level.

Two case study sites were chosen at which the participants would actually have to test the topical survey approach. These concentrated on maize storage and maize stalk borer control, both of which were identified as serious problems by farmers in the selected area.

· The first week: introduction of the approach

Through informal group work, plenary discussion meetings, role plays, field exercises and other exercises, the following introductory programme was executed:

- basic extension philosophy;
- farmer attitude towards extension;
- farmer reality, following a systems approach; and,
- survey techniques.

Using the participants' work experience and knowledge of key problem areas, the following interesting conclusions were reached:

1. Farmers' knowledge is a critical resource we must acknowledge, support and complement;
2. Extension workers can and should play an active role in research; and,
3. Only after acknowledging and understanding farmers' logic can a more appropriate extension system be developed and implemented.

A 'Farmer Activity Calendar' was designed which incorporated non-agricultural activities, gender differences, etc. This turned out to be a key tool for avoiding a narrow technical focus. Based on the calendar, ideas for interesting survey topics and short checklists for future surveys were generated.

· The second week: application of the approach

The topical survey approach was tested in the selected study in two different communities. Over, 3-4 days in each case, the following procedures were employed[3].

1. Theoretical and practical training of extension personnel on the subject (2 provincial training officers (PT0s));

2. Discussion of EW's knowledge of the situation in the chosen area and brainstorming to prepare checklist for future survey (2 extension supervisors);

3. Simulation of survey activities (sampling, interviewing and observing) at the Training Center (2);

4. Execution of a small quick survey in the area by teams of 2-3 participants (1 EW);

5. Collection and discussion of survey results, bottle-necks, alternative solutions and possible interventions (2 EWs supported by 1 PTO);

6. Preparation. of the meeting with the interviewed farmers and other interested farmers (2 EWs);

   This meeting consisted of the following:

   - presentation of survey data and conclusions in order to stimulate a discussion with the farmers and verify survey results;

   - a farmer training session whenever possible (normally part of the training

[3] The participants who were in charge of each phase, as in the real working situation, are noted in brackets.

Source: RRA Notes (1991), Issue 12, pp.47–53, IIED London

activity mentioned under 1, and the activity which is of special value to the farmers); and,

- presentation and analysis of practical solutions to the problem;

7. The simulation of the meeting with the farmers at the Training Center (2 PT0s); and,

8. Meeting with the farmers: discussion of survey results, bottle-necks and possible solutions, plus a farmer training activity by extension workers (2 EWs).

· The third week: integration of the approach

The workshop aimed at changing the attitudes of extension personnel towards farmers and stimulate them to investigate farmer reality and integrate farmer opinion in the planning of extension activities. It was realised that a two-week workshop could not achieve this. Therefore, the last week was devoted to the programming of a year's worth of topical surveys around a number of specific themes by extension personnel (provincial, district and field level).

Themes chosen included production, storage and marketing problems identified by farmers as well as specific extension messages which needed promoting. An example of the latter was the 'Planting in Rows Program': nobody could really explain why farmers did not plant in rows[4]. Here again the Farmer Activities Calendar was used as a tool to avoid a narrow, excessively technical focus. While these activities were instituted on the ground, the provincial extension officers planned the resource component needed for monitoring (people, transport, money). Thus, at the end of the workshop, a year-long programme of topical surveys could be presented to the Provincial Agricultural Authorities for approval.

· Results and discussion

Extension personnel were most receptive to the idea that they themselves can be instrumental in the research process, as well as to the belief that farmers' knowledge is valuable to them. During the survey there were moments when EWs discovered that farmers were aware of phenomena they themselves had only learned of at the training session (eg the effect of heavy rainfall on maize borer damage). This contributed to their respect of farmer knowledge.

Farmers,' in turn, were very positive about the fact that, only three days after a half-hour conversation with an extension worker, a possible solution to their problem was presented and discussed. Farmers participated actively in the evaluation of alternative solutions.

Based upon the results of the topical surveys, a demonstration was given at the Tete Workshop of a method to combat the maize borer by mixing a small quantity of cypermethrin with sand and applying this mixture in the funnel of the maize plant after detection of 'windows' caused by young larvas in the upper leaves, then repeating the treatment after a two-week interval (normally 3 and 5 weeks after planting). It was received with enthusiasm by the farmers.

The farmer training session about the life cycle of the maize stalk borer, which was developed by 2 EWs for the workshop, was also successful. Farmers knew the 'different' insects and were very much taken by the idea that they were one and the same animal at different stages of development. Their reaction boosted the morale of the EWs, who were glad to impress the farmers. At these moments, it was stressed to the EWs that they were able to capture the farmers' genuine interest because of the genuine interest they took in the farmers' problems. It was then that the EWs discovered that knowledge was not a fancy idea, but a pool of ideas and strategies from

[4] The idea that arose during the preparation of the workshop was that farmers refused to plant 1 maize plant per plant hole, as recommended by the extension service, since they felt that harvesting two maize cobs at an early stage and leaving 1-2 plants per plant hole for the final harvest, was more advantageous in terms of shortening the period when food supply was critical. This was a clear example where local extension objective (higher yield) and farmers' objective (security food) did not coincide and led to misunderstanding.

Source: RRA Notes (1991), Issue 12, pp.47–53, IIED London

which they could draw to improve their own work.

The three month interval between the selection of the area and case-study topics and the beginning of the course, was used to build three different types of locally used granaries. EWs participated in the construction of a fourth, improved granary which was later presented to the farmers (The main storage problems being rats and weevils). This granary was presented to the farmers as an alternative and it was stressed that, if interested, they could participate in a trial comparing production losses in the four models.

In order to avoid the entrance of rats in the improved granary, rat guards were prepared by the participants using various materials. one provincial training officer remarked: 'I always tell them(the EWs) to use rat guards but I didn't know it was so difficult to make one'. Farmers were very definite in their rejection of six out of seven funnel models, then demonstrated that they were very much at ease in direct discussions with EWs and not meekly accepting the suggestions that were put forward. In the end, a more appropriate alternative was produced combining farmers' and EWsl ideas.

AS mentioned, these workshops were only the first step in a process which aims to bridge the gap between research and extension: not by bringing the researcher closer to farming and extension, but by bringing the extension worker closer to the research.

It is clear that the extension personnel need strong assistance from people who have an FSR(E) background and it is also clear that analysis can be slower and possibly not as comprehensive as more research-oriented FSR work. In particular, the EWs need a lot of support in asking the right questions. It must be remembered, however, that the development and implementation of a new approach by an extension service is a long-term investment which can produce a lot of positive benefits in the years to come.

It should be noted that prior to a workshop, a general survey must indicate more clearly what the suitable topics for a 'programme of topical surveys' might entail. In this experience, a quick meeting with farmers and extension workers mainly came up with two critical topics for the initial case studies, but did not provide enough insights to assist EWs in selecting the topics for their year programme.

More activities will have to be developed in order to achieve the earlier mentioned goals. More specific RRA techniques such as direct matrix ranking could be included. Village teachers, health workers and other key individuals could be asked to participate in the workshop in order to improve the analysis of the selected area. Further it may be necessary to repeat the workshop in different locations and at different times of the year to see how easily it can be adapted to fit different socio-economic and agro-ecological conditions.

Clearly, it is not only necessary for scientists to conduct their research with the direct involvement, of farmers, but also for extension personnel to participate directly in those research activities. Both processes can have a positive influence on a more dynamic farmer-extension worker relationship.

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