Discussion paper: Recognising farmer diversity, mainlining and optimising their different inputs – Mike Morris, August 2003

Farmers as beneficiaries: The Project Memorandum identifies various rural households as the potential beneficiaries of the project. These include small-scale farmers in semi-arid areas in general and poorer households and individuals in particular.

Technology's acceptability to farmers: The research hypothesis relates not only to scientifically testing whether DEs are effective grain protectants, but also to establishing their acceptability to small-scale producers for on-farm storage in areas where the large grain borer is endemic.

Farmers as project stakeholders: Project processes to date have included stakeholder identification and the rolling analysis of their multiple interests in the project. The project moreover has sought to actively engage diverse stakeholders (i.e. both intermediate and end-users - farmers) in its implementation from an early stage.

Farmers as partners: Groups and individual farmers from seven villages in Tanzania (5) and Zimbabwe (2) will have been engaged in the research process, from the needs assessment phase, hosting and evaluating the grain storage activities, eventually through to contributing to the promotion of the findings - new knowledge and practices - through for example, farmer field days and workshops.

Exploring farmer diversity: Reasons for and ways of disaggregating rural communities have been sought from the literature, from our own organisational experiences and that of intermediate stakeholders, and most recently in the farmer evaluation exercise, from key informants and farmers themselves at the different trial locations, where 'wealth ranking' was utilised.

The measure of this project will not only be determined by good science, but also and essentially by whether people make use of the technology. From the literature we note that analytical approaches with respect to post harvest issues have tended to adopt a technology, crop or pest focus, and rarely a farmer (or livelihood) focus.

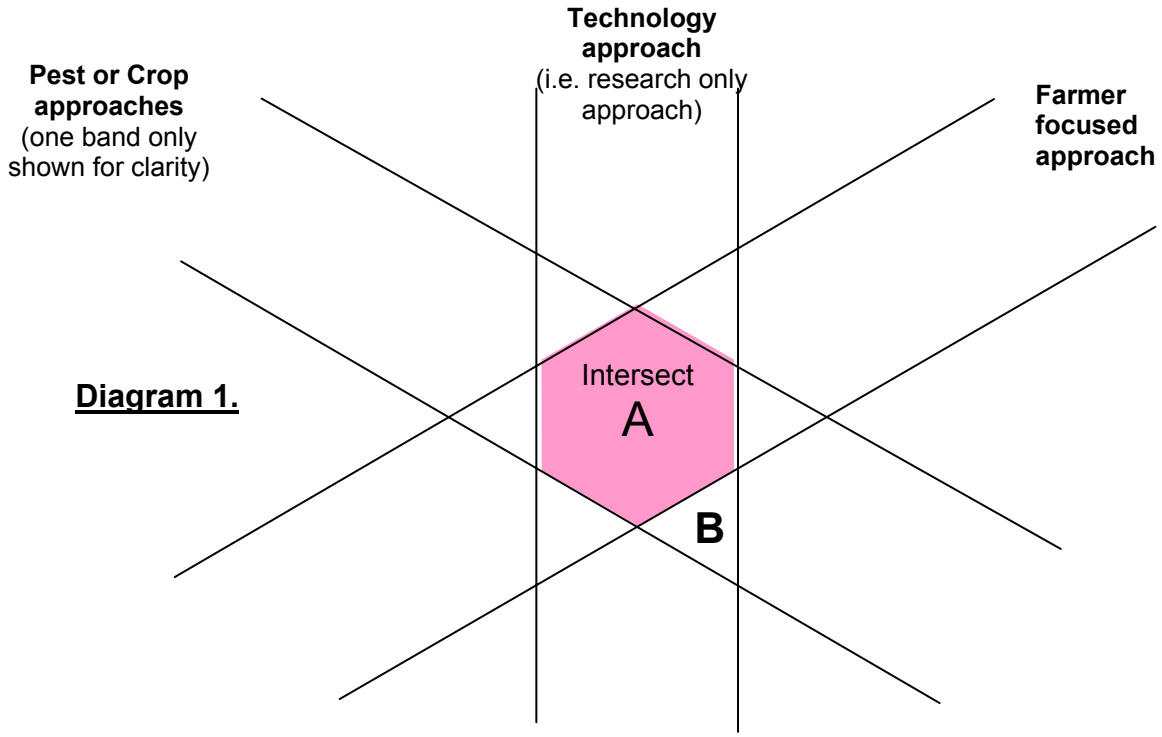


Diagram 1.

Conceptually the different approaches may be represented by intersecting bands as in Diagram 1. The challenge with respect to farmer up-take is to focus our attention on the area where technological, crop, pest and farmers' concerns all intersect, which is represented in the diagram by area A. Areas

such as B, outside the farmers band, may be of relevance to those with an interest in investigating a given technology, for example, but are not directly relevant to farmers' and their livelihoods[1].

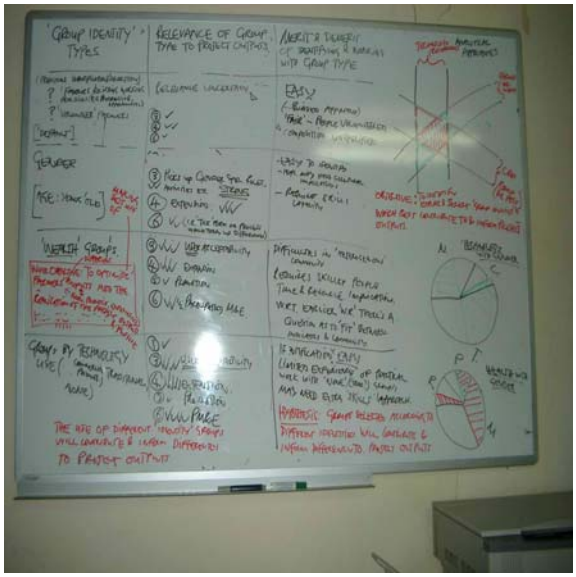
From a farmer-centred approach, and with the area of maximum overlap A in mind, the initial challenge[2] is to ensure that we give consideration to the diversity of farmers as represented by the breadth of the *farmer focused approach* band in Diagram 1. This would for example optimise our understanding of the relevance of a given technology (and/or crop, pest) to all farmer types, which in turn would have greater merit for informing policy and promotion, targeting extension and dissemination. Working with a narrower group of farmers (e.g. progressive farmers) would not be expected to provide the same breadth of analysis (i.e. only a slice of area A along the farmer-focused axis would be in focus).

Farmer group selection objective: Our objective then in exploring different group identity types may be expressed in terms of seeking to optimise the inputs (e.g. knowledge, practices, experiences) of different farmer types in the realisation of the project outputs and purpose. And the underlying hypothesis would be that participating farmers, selected according to different identities, will inform and contribute differently to project outputs.

Table 1 was devised as a tool to explore the potential implications of farmer diversity and the selection of group identity types for the project. The entries are based on discussions held in the IPM office, Shinyanga, between Mr Riwa, Mr Kitandu and Mr Morris (see Figure 1), but it is envisaged that other team members will repeat and elaborate the exercise. Other possible identity types to be considered might include self sufficient and food insufficient households, male and female-headed households etc. It is conceivable that different identity groups might be used at different locations (i.e. Dodoma, Manyara and Shinyanga).

The conclusion that was drawn from this initial exercise was that group identities determined by existing technology use (i.e. commercial products, traditional practices only, none) scored most favourably in terms of relevance to project outputs, a position which remained unchanged when the merits and demerits of the process were taken into account. It was also concluded that gender (and possibly age) be incorporated into the selection process as a cross-cutting theme i.e. men and women (youths and the elderly) would be sought from each group. The comparison between wealth and technology user groups proved very interesting, with the clear emergence of the latter group, which spans all farmers and has most obvious overlap with the project focus, coming nonetheless as a surprise. It was noted that while technology use does not explicitly relate to wealth or poverty status, there may well be an implicit relationship with key determinants of people's livelihoods (e.g. farming strategies, resources, knowledge, access to services), which could form the basis of further study.

Figure 1. Farmer identity work as originally recorded



[1] The use of 'traditional' treatment materials in the research led trials, but without the incorporation of traditional practices (e.g. intermittent winnowing and reapplication), might be considered to fall into area B.

[2] We need first to better understand the diversity of the rural communities with which we are working. With this knowledge, we might subsequently choose to focus our efforts on a particular group (e.g. target extension where needs and potential benefits look greatest).

Table 1. Relevance of farmer identity types to project outputs, and implication of identification and selection methodology and of implementation*

Group identity type	Relevance of group type to project outputs*	Merits & demerits of identification & selection, & of working with group type
Earlier project approaches: In line with existing office practice (e.g. progressive farmers) ? Favouring volunteer / opportunistic farmers ?	✓ - ✓ ✓✓ - ✓ Relevance uncertain. Omits many farmer types	Composition unspecified Easy approach, but unknown bias Non-representative of farming community
Gender (could be treated as cross-cutting identity i.e. in addition to selected type. 'Age', which is also of great significance, might be treated similaly, but was not assessed on this occassion)	✓ - ✓✓ Will pick up on gendered divisions of labour. ✓✓✓ Strong implications for gender aspect of extension. ✓ strong but indirect message for policy etc ✓✓ Would pick up on procedural differences.	Easy to make identification Cultural norms and practices might impede selection Require particular skills & capacity Would not necessarily be representative (e.g. poor widows and rich women very different)
Wealth groups	✓ - ✓✓✓ Would reflect diverse aspects of acceptability. ✓✓✓ Strong implications for extension ✓ Some farmers might also be intermediate stakeholders ✓✓½ Would pick up on procedural differences	Wealth ranking requires skills & capacity & would involve training. It would demand time of village working group. Important that it's participatory to ensure indicators are location-specific; recent exercise points to difficulties. May be challenged in heterogeneous communities. Good representation of farmers
Groups by storage technology use (i.e. users of commercial products; of traditional practices only; none)	✓✓ see activity 2.1 - some may be aware of local DEs? ✓✓✓✓ Would reflect diverse aspects of acceptability, including contrasting technology perceptions. ✓✓✓✓ Technology-linked implications for extension ✓ Some farmers might also be intermediate stakeholders ✓✓✓ Would pick up on procedural differences	Identification relatively easy. Limited experience of working with non-users and traditional users. May require different approach and new skills. Selection key, as conceivably could degenerate to earlier or 'default' selection mode Good representation of farmers (may incorporate wealth, innovation, etc indicators) Technology focused.
Other group identities?		

***1. Optimising treatment method; 2. Evaluation of local DEs; 3. Evaluation of user acceptability; 4. Development of extension materials; 5. Promotion and scaling up; 6. Participatory evaluation of procedures**

* as completed by William Riwa, Lazaro Kitandu and Mike Morris, August 2003.