

# A Synopsis of ICRAF's First Agroforestry Technology Dissemination Planning Workshop, Kadoma Ranch Hotel, 28 – 30 July 1997, Kadoma

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## Introduction

Agroforestry is an old concept in many parts of the world but with the advent of the green revolution and its emphasis on mono-cropping and intensive use of land, much of the indigenous knowledge of agroforestry technology was lost or its use discouraged. It has dawned on many people that there is a great need for us to reconsider our attitudes and practices as far as agricultural production is concerned. Under the social, economic and physical environment that most of Zimbabwe's farmers live, the only sustainable approach to encourage is that of "farming systems"; the so-called holistic approach. The International Centre for Research in Agroforestry (ICRAF) must be numbered among the global leaders in this respect. It is ICRAF's conviction that integrating various species of trees into farming systems will yield positive and lasting benefits to communities, nations, and the world as a whole.

## ICRAF – Zimbabwe Agroforestry Project

A diagnostic and design exercise, carried out in 1989 before ICRAF started work in Zimbabwe, identified poor soil and a lack of quality grazing and fodder for cattle as two of the most critical constraints in smallholder agriculture. The project therefore began research to mitigate these constraints through screening potential tree species coupled with on-station and on-farm testing of the screened species.

After six years of research, it was felt that some technologies were now ready for dissemination. During the current phase of the project ICRAF will be making concerted efforts to disseminate these technologies regionally, i.e. in Tanzania, Malawi, Zambia and Zimbabwe. ICRAF organised a planning meeting for all stakeholders in July 1997, who participated in the planning of the Dissemination Strategy for the most promising agroforestry technologies.

## Workshop recommendations

Key stakeholders presented papers at the workshop. Five smaller groups were then convened to discuss the opportunities for disseminating agroforestry technologies and to come up with some operating or action plan guidelines. These groups were "farmers", "dissemination", "technology", "management" and "training", and adequately covered the main issues brought out through the presentations and plenary sessions.

## *The Farmers' Perspective*

Farmers were represented Mr. Muronzi and Mr. Chihwayi from the Guruve and Chikwaka Communal areas respectively. Both are leaders in smallholder dairy farming in their areas and use some agroforestry tree fodder as supplementary feed. They made the following points about the dissemination and adoption of technology:

1. There was little collaboration amongst the technocrats and stakeholders and organisations like ICRAF, the Department of Agricultural, Technical and Extension Services (AGRITEX), Forestry Commission and Dairy Development Programme (DDP) did not plan their activities together, and often brought conflicting messages to the farmer. This lack of effective networking has obvious negative implications for the adoption of potentially useful technologies. They indicated that there was an apparent need for all the organisations working in rural development to identify all the stakeholders in their area of interest and to find ways of effectively complementing each other's efforts rather than "competing" for the farmer's attentions.
2. The research-farmer linkages were very weak and the much talked about research-farmer-extension linkage model was not as functional as the farmers would have wanted. There was a need for farmers to be involved in all the activities that ultimately affected their livelihoods. They were often excluded from research stations – probably because of the scientific nature of research. We can, however, learn some lessons from the commercial seed houses who have long realised that exposing farmers to research work is a great extension tool and helps to foster strong ties between the farmers, and extension and research workers.
3. The Department of Agricultural, Technical and Extension Services (AGRITEX) runs a scheme known as the "Master Farmer Training Programme", which involves intensive teaching of farmers in various key aspects of crop and livestock production. Unfortunately, the syllabus has stagnated and new developments in agriculture in general, and agroforestry in particular, have not found their way into the programme. In some cases, lessons tend to be heavily weighted towards theory rather than the practical application of principles

and concepts learnt. This issue touches upon research-extension linkages. The farmers' concern implies that there is weak flow of information that can be translated into field recommendations, from research via extension to the end-user. What may not be so clear is whether this reflects a general lack of applicable technologies or a breakdown in their transmission to the farmers.

4. Participatory planning is the development approach of the nineties but it is very easy to exclude the "participants" from the planning process. Whilst praising the organisers of the dissemination planning workshop, the farmers pointed out that the people whom they interacted with on a daily basis (i.e. the field extension workers) had been excluded. The farmers felt that the field staff was best placed to understand and appreciate their problems. They pointed out the need for frequent visits to farmers, not only to supply expert backstopping but also to support the field staff and to provide moral support to farmers who are struggling to survive.
5. The quality of extension support being given to the farmers came into question. Some extension workers were said to be not doing their jobs, as expected by the farmers, possibly because their superiors did not, apparently, monitor their activities.
6. Agricultural competitions have for a long time been a way to reward progressive farmers and teach good farming practices to their neighbours but lately they have not been as effective as extension workers and farmers would have liked. A question that is now being asked is, "Should the same farmers be allowed to enter and win competitions year after year?" The problem is that in many cases the "leader" farmers are never overtaken. Do other farmers learn from one person who is always winning? The farmers said that Agritex had become biased in the selection of farmers who enter various competitions – the officers simply gave support to the best farmers and ignored those who needed the most assistance.

### Management

The most critical question that the managers wanted to be addressed was that of effective resource management: "How can we make best use of the "limited" resources?" As the plenary sessions progressed, it was clear that resources were not quite as limiting as had originally been stated. It is true that many stakeholders are, on their own, very limited in what they can accomplish but there are ways to overcome or at least minimize such limitations.

1. *Go for demand-driven projects.* "Demand" determines the success or failure of many commercial enterprises in market economies. Unfortunately, in our quest for rural development, we are frequently unaware of the need to carry out market research that tells us who our customers are, and what exactly they need from us. Because of this, resources tend to be wasted without proportionate benefits to the clients so there is a definite need for us to collect information about our clients before embarking on projects and programmes. The

most important questions are: "Who is the client? Where are they?" "What are their needs?" and "What circumstances do they operate under?" Once these questions are adequately answered, it becomes easier for technocrats to concentrate their efforts on only the important work that leads to adoption of technologies of relevance to the farming community.

2. *Make realistic work plans and budgets.* The recently introduced performance appraisal system in the civil service requires that one comes up with at least five key result areas on which one is subsequently assessed. Performance appraisal has been widely used in the private sector with very good results, but one problem in applying this system to the civil service is the availability, and sometimes accessibility, of resources to achieve the key result areas! Why should people plan to accomplish work in five key result areas when the resources are not available? We need to plan within our means – one task done well is better than five tasks unfinished!
3. *Pool resources through institutional collaboration.* All organisations have areas of comparative advantage; some have limited transport and mileage but are heavy on the ground as far as staffing is concerned, whilst others may have limited staff but adequate transport. Focusing on areas of comparative advantage and collaborating with other stakeholders requires excellent networking and public relations.
4. *Evaluate impact.* One of the key concerns of participants was that much of the work in the smallholder sector lacked the component of impact evaluation. Just how much impact has the project or programme or technology had on the farmers' livelihood? Good impact assessment can only be achieved through operational monitoring and evaluation systems and before we take our technologies to the farmers, we should establish some sort of baseline. We need to gather adequate information to compare with periodically so that progress or the lack of it can be seen clearly. Besides these baseline data, clear, agreed and objectively verifiable indicators of project success/failure need to be established among all stakeholders.
5. *Sustainability of programme within extension, institutions, processes, programmes and projects.* At every level, sustainability is of paramount importance, particularly where non-governmental organisations and other donors are involved. The so-called dependency syndrome is now rife in this country and for development to be sustainable demand driven and appropriate technologies must be generated. At all levels of this process there needs to be full participation, open communication and transparency amongst all stakeholders. Farming is a business and the cost implications of agroforestry technologies play an important role in their development, dissemination and adoption. We often think of sustainability only at the farm level but national policies should also ensure sustainability of national research and extension institutions by providing

adequate manpower and financial resources, appropriate capacity building, cost recovery mechanisms and management back up.

### *Training, technology and dissemination*

There was an urgent need for training of both farmers and extension staff. Some training had been carried out within Agritex, but it tended to concentrate on theoretical agroforestry principles rather than on practical technologies that could be used by farmers. Several contributors questioned the availability of “extendible” agroforestry technologies in Zimbabwe, which only emphasised the breakdown in communication between the stakeholders.

Questions like “What technologies are ready for dissemination and under what conditions do they work?” were asked. This pointed to the need for comprehensive synthesis of research work (past, present and planned) for wide distribution to all stakeholders, especially the extension services. The provision of technical information and skills is critical if the technologies are to be widely adopted and used properly. Technical information and skills can be provided via formal training, informal awareness meetings, demonstrations, tours and field days.

The training materials that were being used for training, especially the Agroforestry Manual, had become outdated and urgently needed reviewing and revision, which requires input from all stakeholders if the manual is to be relevant to the trainees. Besides revising the agroforestry manual, there is also a need for other resource materials to be developed and for an inventory of available materials to be drawn up. Training of extension workers and farmers in agroforestry would have to be preceded by some needs assessment.

The “technology” group cited the availability and distribution of planting materials as the main limiting factor in the adoption of agroforestry technologies. Strategies that ensure that planting materials for the most promising technologies are available must be devised before these technologies can be widely disseminated and, hopefully, adopted. In developing these strategies, the issue of sustainability must be foremost in our minds and involving the private sector seen as the key to sustainable seed supply and distribution – provided the venture is profitable.

### **Conclusion**

The key to the success of agroforestry work is the full involvement and commitment of stakeholders and in a climate of “limited” resources, research needs to be more focused and client oriented. Agroforestry has great potential in Zimbabwe but properly targeting the recipients of specific technologies is necessary. The end-users, the farmers, must be involved in all aspects of technology generation, testing and dissemination, as they are the ultimate users of these technologies. In all projects and programmes, sustainability must be a major consideration and must be viewed from all levels within, and among, stakeholders. As research work is carried out, communication among stakeholders will ensure that one message is taken to the farmer by all advisors and interest groups. Effective communication is only possible through transparent and genuine networking and collaboration.

### **Discussion Session**

**P.L. Mafongoya:** How can you base your conclusions on two farmers?

**P.R. Makaya:** This data is supported by PRA data.