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PROPELLING CHANGE FROM THE BOTTOM-UP: INSTITUTIONAL REFORM IN ZIMBABWE

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The Conservation Tillage Project (Con Till) began in Zimbabwe in 1988. Although its initial aim was to improve farmers' husbandry techniques so that soil erosion could be reduced, it soon became much more than that. Those involved realised at an early stage that trying to promote a narrow message (conservation tillage) to farmers who operated within a vastly more complex setting, was never going to help solve their considerable problems. The project evolved in an attempt to promote a completely different way of working within the government extension service. This implied a shift away from the rigid, linear, top-down extension model, to a more process-oriented approach, where farmers' needs provided the framework for the extension service. This paper documents the steps taken in promoting and institutionalising this new way of working within a conventional extension service.

The Institutional Setting

In 1988, the Zimbabwean Department of Agricultural, Technical and Extension Services (AGRITEX) and GTZ initiated the conservation tillage project (ConTill). The goal was to develop new extension messages for smallholder farmers to reduce soil erosion, to be achieved through scientific research at two different agro-ecological sites, one in the subhumid area close to Harare, the other in the semi-arid area near Masvingo in Southern Zimbabwe. The project was based at the Institute of Agricultural Engineering (IAE), a branch of AGRITEX headquarters, with a specific mandate to carry out tillage research. Any other agricultural research was conducted by the Department of Research and Specialist Services (DR&SS). The approach was different in the two locations, and this paper focuses on the process in Masvingo.

AGRITEX Masvingo employs about 400 staff, with staff specialising in specific disciplines. The organisational structure and the technical disciplines do not favour interdisciplinarity or systems-oriented extension approaches. The general approach, as in most government bureaucracies, is structural, linear and rather rigid. These rigid institutional remits made it almost impossible to explore any other relevant issues. Process-oriented approaches do not readily fit into this structure and scepticism towards them was widespread. The hierarchical, one-way flow of communication and the low standing of peasant farmers in society, especially as perceived by formally educated bureaucrats, largely prevented their needs from being effectively communicated back into the system. In contrast, farmers operate within a complex setting which is under severe pressure from socio-cultural change, population increase and dwindling resources. Such a situation requires more flexible context-specific support which is the opposite of the rigidity followed by AGRITEX.

Time for a Change

The need to involve farmers in the development of conservation tillage techniques was soon realised, especially when adaptive on-farm trials began (Box 1). Intensive interaction between project staff and smallholder farmers revealed the multitude and complexity of farmers' problems. It became clear that conservation tillage as one single technique had very limited potential, either for solving the land management crisis, or for solving farmers' problems.

Box 1. Avoiding Blanket Solutions

There were growing doubts about the performance of standardised techniques recommended by AGRITEX. Results depended largely on the site, soil and specific conditions of each farmer, even each field. A certain technique proved to be successful with one farmer, but failed with another farmer. Therefore, blanket recommendations could only be of limited success. Instead, it would be more appropriate to provide a basket of options and support for learning about technologies. Farmers needed to learn how to choose the most suitable option, combine it with their knowledge and adapt it to their conditions and circumstances. Therefore raising farmers' capacities through experiential learning and understanding and through sharing of knowledge and experiences among themselves became the goal, rather than the adoption of certain techniques.

It also became obvious that there was a need to move the focus of activities from an individual level to a community level. Individual innovators tended to be victimised rather than becoming examples for other farmers, limiting the spread effect. Besides new technologies, a need for social innovations which encourage effective spreading of knowledge appeared to be crucial for success. The outreach of extension was mainly limited to approximately 10% of so called 'master farmers', and their success in persuading other farmers to adopt techniques was generally low (Madondo, 1995).

These insights, as well as the behaviour of the extension workers, increasingly forced us to question AGRITEX's conventional approach to agricultural extension. We therefore decided to adapt our approach, despite our limited remit (Hagmann *et al.*, 1997). This process of adaptation was not conflict-free, but justifying our changes through facts and experiences gave us a strong position in negotiations. The steps taken are described below.

The steps to change

Where to start: from the top or the bottom?

A crucial first question was where to start in changing attitudes. Should the top management of AGRITEX be convinced first and then implement the changes? Or should one start at field level and then iteratively develop an alternative and justify the changes by clients' needs? In Masvingo, the second option was chosen and it proved much easier to convince the higher levels through on-going action with concrete positive examples and alternatives than with intellectual discussions on 'what is wrong'. For participatory approaches to be taken seriously, they need to be developed from the bottom-up. NGOs, with their freedom outside the organisational hierarchy, can play an important role in this respect.

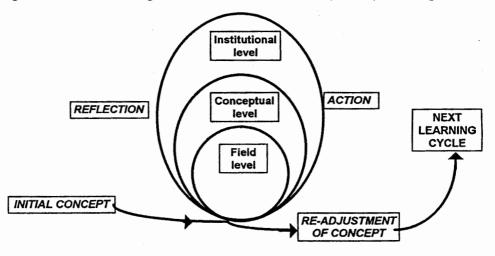
We felt that our influence on the extension department as one single project would be insufficient to generate change. Therefore we searched for allies and started networking. Together with two other projects¹, and in collaboration with AGRITEX, we developed the following strategy for institutionalising participatory extension approaches (PEA). Three main steps, overlapping to a large extent, were devised and supported by the three projects:

- From 1991, pilot studies using participatory approaches with communities were established in order to learn from the approach and to demonstrate the results.
- Wider awareness raising and demonstrations of alternative approaches were then pursued by the three projects from 1993 to 1995. This involved field visits to the pilot studies and presentations to AGRITEX staff in workshops, through networking and initial training activities.
- From 1994, AGRITEX embarked on a programme of organisational development to create the conditions for the sustained promotion of participatory extension.

This strategy involved action learning at different levels (Figure 1). At field level, action took place in the villages through the pilot studies. The outcome of this was analysed, and contributed to conceptual development. The analysis of the outputs at field level and conceptual level in turn contributed to the process of institutional change. Thus each phase has had three simultaneous learning and action loops.

¹ The GTZ-supported Integrated Rural Development Programme (IRDEP) and the Food Security project run by the Intermediate Technology Development Group. The experiences of the latter are described in a previous Gatekeeper paper (Croxton and Murwira, 1997)

Figure 1: Action learning at three different levels ('triple loop learning')



Learning cases as the foundation for change

The first step was to set up a 'demonstration' of participatory approaches. This was attempted through adaptive trials with four clusters of farmers in Zaka, Chivi and Gutu districts. ITDG started their activities in Chivi and IRDEP started their community-level planning projects slightly later in Zaka and Gutu. In the ConTill project we found that despite our encouragement, farmers were hesitant to make their own decisions on the trials and tended to wait for researchers to tell them what to do. Obviously it was the 'culture' of research and extension to be told by the extension workers rather than relying on their own decisions. We concluded that other means were needed to achieve active farmer participation in the experimentation and adaptation process and that we would have to move beyond adaptive trials and shift our focus towards catalysing active farmer participation.

Workshops with farmers, extension workers and researchers were the initial approach. Training for Transformation (Hope and Timmel, 1984) was used to build farmers' capacity for self-reliant development.² The workshops motivated farmers to experiment in seeking their own solutions to problems (Hagmann, 1993). These workshops really promoted farmers' capacity to participate, experiment and make decisions (Box 2).

Collaboration with extension workers, however, became increasingly difficult as they felt threatened by the confidence farmers displayed and the roles farmers claimed. Also, friction between field-level staff and the project facilitators was common. Field staff and also higher-level staff tended to be initially defensive about conventional

² Again, see Croxton and Murwira, 1997 for more on this.

practice. This defensiveness was eventually overcome through an intensive awareness and familiarisation campaign. The reactions caused by the friction between our activities and conventional practice gave us real insight into the structure of the extension system. This is best described by Kurt Lewin's statement: "If you want to know how things really are, just try to change them".³

Box 2. Farmers' Achievements

By 1995 the participatory approach to innovation development and extension in ConTill had yielded more than 20 innovations in the field of land husbandry and the spread of innovations was very encouraging in the seven intervention areas at community-level. In the ITDG project where a similar approach was practised, up to 80% of the households in one Ward (approx. 1000 households) were involved in soil and water conservation activities. Both male headed and female headed households were equally active.

Impacts related to human development were more difficult to measure. For example, during a project evaluation in April 1995 one of the evaluators perceived the confidence and pride of farmers who presented their innovations and achievements to be the key success of the participatory approach. Farmers were able to express themselves in a way which was unusual in post-colonial Zimbabwe. Compared to the output of conventional research and extension, participatory innovation development and extension has proven high performance and potential. This, however, applies to implementation under a well-resourced project. The output when operationalised through the extension department has still to be assessed.⁴

At institutional level the exposure to the facts in the field increasingly convinced higher management of AGRITEX Masvingo of the need for change. Once commitment for change at higher levels had developed, the pilot studies were crucial elements in the process of institutionalising ideas and approaches by extension staff, firstly as concrete examples of an improved output and secondly as models of 'how to' implement the approach.

It is clear to us that only the experience and the knowledge gained through working at field-level for several years enabled the three projects to understand extension and develop new approaches beyond the conventional paradigm of 'transfer of technology'. Without any ground work this analysis and the approach could not have been as 'grounded' and convincing as it turned out to be.

³ Kurt Lewin is one of the founders of action research.

⁴ For more on the success of the participatory extension approach at field level see Hagmann et al. 1996 and 1997.

Raising awareness and demonstrating alternatives

As the information flow in AGRITEX was mainly one way: downwards along the six hierarchy levels from the top to the bottom, it was difficult for top management to obtain information about the real problems at field-level. For this reason, we had an important role to play in feeding back these observations and experiences to the higher levels of AGRITEX, where they helped to create awareness of the need for change.

Awareness was also built through providing literature and reports, and through a series of workshops run by the three co-operating projects. In these workshops participatory approaches were presented, experiences were discussed and the pilot study areas were visited. Exposure to the impact and to farmers who explained the difference between the conventional and the participatory approach were particularly convincing. This enabled higher level staff to get involved in the process and to familiarise themselves with the new ideas without losing face by having to show that they did not know it all.

The reform under way

By 1995, a commitment to PEA by the AGRITEX management in Masvingo Province had developed. This was confirmed by an all-staff workshop organised by senior level management in which participatory approaches to extension were discussed as a means to improve the department's performance in the field. The main issue now was the actual operationalisation of participatory extension by AGRITEX itself, with their resource constraints, their staff capacity and the bureaucratic administration.

Change in attitudes and behaviour of AGRITEX staff towards farmers emerged as a major challenge. It was unlikely that PEA could work with staff attitudes such as dominance, superiority and the perception of farmers as empty vessels which have to be filled with knowledge and told 'what to do'. These attitudes, as well as poor motivation, were deeply entrenched in field staff, originating partly in the colonial predecessor of AGRITEX, a very powerful agency which exerted state control over farmers.

Other factors which were not conducive to participatory approaches were unclear roles and responsibilities, control-oriented management rather than performance-orientation and supply-driven staff training. Extension workers felt a major obstacle to PEA implementation was the lack of support from superiors who evaluated their work through planned targets rather than through the quality of an initially slow participatory process. Field staff were also not granted the freedom and flexibility which the approach required. An extension delivery based on rigid recommendations was another factor hindering a successful implementation of PEA, where learning about technologies rather than adoption of blueprint solutions is promoted. In addition, the management was afraid that implementation of PEA would be too expensive. These

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constraints revealed that operationalisation of PEA would require more than just staff training. To address this situation the head of AGRITEX Masvingo initiated an organisational development programme.

A programme of organisational development

Institutionalisation can be interpreted in different ways. Although the need for participatory approaches was now 'institutionalised' in the perception of many officers, this did not imply any changes in daily operations. Therefore the head of AGRITEX Masvingo insisted that the actual implementation of PEA with all the required changes within the organisation should be called operationalisation. This distinction is important as the organisational change starts with institutionalisation and later enters an operationalisation phase. Institutionalisation is the output of an 'unfreeze phase' where raising awareness for and commitment to required changes and the reorientation of staff are the main focus. Operationalisation is equivalent to the 'move phase' where the actual changes take place (Figure 2). The third phase is the freeze phase. Here we anticipate that the new roles, procedures and rules in line with the requirements are consolidated in the form of a 'learning organisation', where the new structure provides the framework to perpetuate this process.

In the case of AGRITEX Masvingo, the framework for operationalisation is the organisational development programme. The process involved several major elements:

- Staff training and attitudinal change
- Creating an incentive structure to support change
- Reorienting the structure of the organisation in line with these changes

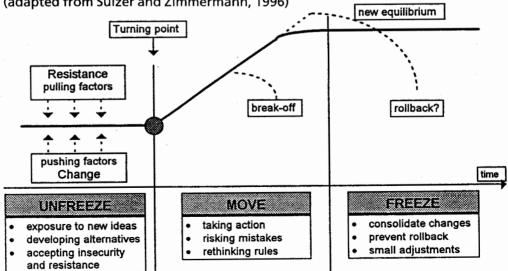


Figure 2. The three phases of change in socio-technical systems (adapted from Sülzer and Zimmermann, 1996)

Staff training and attitudinal change

Creating discomfort through training from the bottom-up

In the past, new methods and approaches were introduced through training specialists and officers first, who would then train supervisors and then extension workers. Often, however, the cascade ended at officers' level and extension workers continued with what they had been doing all along. New approaches remained constructs in the heads of managers and officers, and were rarely implemented at field level. The statement of an extension worker bluntly describes this common fact:

"... long back we had the Alvord approach, then we had the commodity approach, then they brought the farming systems approach and now we have the participatory approach. But, when I look at what I am doing, I do not see the difference..."

Therefore, we felt that the priority training on PEA should be for field staff. Courses for farmers and extension workers were initiated. This created 'discomfort' at higher levels (Scoones and Hakutangwi, 1996): suddenly extension workers knew more than their superiors. The superiors became eager to be trained as soon as possible, and the training became highly valued.

Developing training through action-research

Implementing PEA is more than just applying a new method. It means working under a new paradigm which implies behavioural and attitude change. Training for Transformation provided a philosophical framework for change. An action-oriented training and learning cycle over one to two years with alternating short training/review workshops and long field implementation (six months) was started with a pilot group of about 25 extension workers in 1995 (Hagmann *et al*, 1995a; 1996a). While learning about implementation by themselves, a training strategy and curriculum were developed with them. Having gained field experience with the new approach, they were in a position to identify clearly their training needs and could select and develop the training content for training other extension workers. This group was also meant to become support trainers in the district training programmes. The full strategy with elements of the curriculum is shown in Table 1.

The results of the systematic training are encouraging. Participants showed high motivation in implementing action plans which revealed further constraints and opportunities. Following this experience a large-scale training programme is now being set up based on five steps which were the outcome of the pilot training process.

Knowledge	Attitudes	Skills	Motivation
Learning	Training for	Learning	Intrinsic
workshops	transformation	workshops	motivation through
	courses		increasing cultural
Review/follow-up		Facilitation course	identity and
worksh ops	Interaction with		confidence during
	farmers	Exposure	the process
Exposure			
	Learning in the	Practical exercise/	Extrinsic motivation
Provision of	process and	application	through incentives
resource/reference	and building		performance
material	confidence	Learning groups	appraisal, staff
		in districts	counselling
Learning groups			
in districts			

Table 1. Development of knowledge, attitudes, skills and motivation

Incentives for change: the sandwich model

Training alone is not enough to motivate extension workers to change their entrenched working style. In a systems perspective, structural incentives are required to facilitate this change. The most effective system seemed to be one in which extension workers were in a kind of sandwich, facing demands from two levels:

■ Bottom-up from farmers. Farmers who were involved in the learning cases of the three projects became increasingly confident and able to express their needs. In some cases they went to the district offices of AGRITEX and complained about the extension worker who did not fulfil his promises. In another case, a farmer wrote a letter to 'remind' the provincial head of the extension service that he promised to come to his field and that he still expected him. However, we thought that unless the demand on AGRITEX is expressed through a formal farmers' organisation, better service would only depend on the goodwill of AGRITEX extension workers. This was tried through collaboration with the Zimbabwe Farmers' Union who had an initiative to support the democratisation of their farmer clubs. Unfortunately this did not work out as anticipated but we are still trying to pursue this idea.

■ Top-down from management. This was created through policy statements, performance-oriented bonuses and promotions. A reform of the public service in Zimbabwe was recently introduced at national level. It is based on performance appraisal and performance-based remuneration and incentives for high performers. This provided a favourable framework for the OD programme in Masvingo, giving more freedom to management to offer incentives to staff who improve performance. However, performance appraisals can only be as good as the job descriptions and the performance criteria which are in place. Therefore, improvements to the organisational structure are essential.

A suggestion for performance criteria came from extension workers, who were asked how they would assess whether their colleagues were performing well in PEA. They suggested a number of areas that they felt would be important, such as:

- Farmer participation/involvement in extension activities
- Empowerment: increased farmer confidence and decision making
- Implementation of community projects
- Active farmer experimentation with ideas and innovations

These issues have to be reformulated as sets of indicators and complemented in the development of a system for participatory impact monitoring. It is important to note that many of the achievements through PEA can only be assessed meaningfully by the actors themselves. They are the 'owners' of the process and they have set their own targets in their own reality which is often not transparent to outsiders. Self-evaluation by extension workers and farmers becomes an important assessment tool.

Another approach was through staff appraisal by the clients, the farmers. To our surprise, this courageous suggestion by the head of AGRITEX Masvingo was also suggested by some extension workers themselves. One 'transformed' extension worker even asked farmers to make a secret assessment of how much they would pay for the service she provided. Other performance indicators like the documentation of indigenous knowledge by extension workers also created a structural incentive to become interested in farmers' perspectives. The fact that their interest in the farmers' world would be rewarded in their performance appraisal breaks the communication barrier between the 'modern' knowledge system and the 'local' (farmers') knowledge system (Box 3). Farmers' appraisal of extension workers remains a big logistical and operational challenge, however.

Box 3. Regaining cultural pride through working with farmers

The acceptance of farmers' reality and knowledge as something to be valued had a huge impact on staff motivation. Most of the extension workers grew up in farming families, but their formal education and the low value of farmers in society made them look down upon farmers and thus on their own origins. The new way of working together with farmers as equals increased their own cultural identity and pride. As someone said: "I am now one of them". Extension workers also emphasised that they are proud to see farmers become more confident and self-determined. Once this happened, extension workers became much more motivated and dedicated. Extension workers in the pilot training group assessed the major factors which motivated them to try PEA. A major reason was to improve their relationships with farmers. This highlights how uneasy some staff felt when they had to impose their programme on farmers. Most of them obviously did not believe in their mission of 'educating farmers' either and were operating in a schizophrenic environment. As the extension programme was perceived to be 'owned' by the staff, farmers did not actively participate, causing increased work pressure. Workloads have decreased now that "farmers carry out their own programmes with minimum assistance", and the shared responsibility brings much relief: "...before we only used one brain and farmers' brains remained dormant; in PEA we use all brains together".

Structural Changes

During the last year all job descriptions of professional staff (about 350) were revised in close consultation with postholders. The revised job descriptions reflect the new thrust of AGRITEX programme activities and the associated tasks and responsibilities of staff.

The communication structures within the organisation are also important. Teambuilding and supervision workshops are used to improve relationships and communication between managers, and to encourage an institutional culture which is more performance-centred and less exclusively reliant on the narrow control of individuals or groups. The process revealed that often, relationships between superiors and subordinates are the blockages in the system. These issues were never discussed openly before, but are the determining factors for organisational performance. The OD programme provided the platform and the space to discuss and re-negotiate these delicate issues.

Building staff capacity

The capacity of the provincial extension support system staff (Agricultural Extension Specialists and Agricultural Extension Officers) is enhanced through counselling, appraisal and relevant training. In addition, several task groups have been formed to develop a stronger interdisciplinary task orientation and to reduce the focus on single matter specialists. One of the task groups is on training, a stronghold of the OD process.

Reflecting on the lessons

While it is too early to assess the outcome of the OD process in Masvingo Province, some clear lessons can be distilled from the experience so far.

Role of an external organisation in facilitating the process

- As we have mentioned, AGRITEX management was poorly informed about the failings of the system at field level as the hierarchy levels in between tended to prevent any information going upwards. Thus we were able to play the delicate 'informant' role, bypassing the middle hierarchy levels.
- It was essential to the success of the approach that the Con Till project went beyond its original remit. This had to be done surreptitiously, as if we had asked for approval, the project would probably never have developed beyond the first two phases. The financial support behind a donor organisation also allowed us more space and negotiating power than an NGO would have had. Taking these risks is necessary for any process-oriented action, by definition an experiment whose outcome can not be predicted. Once the action proves to be a success, bureaucrats tend to strongly identify with it and claim ownership, but very few would ever take the initial innovator's risk. This appears to be an ideal role for a project. The challenge was to motivate staff to co-operate while keeping the management informed of progress. Bawden (1994) sees the key to institutional reform as the "judicious combination of a gently provoking practice with a comprehensive and multi-dimensional and systemic model of learning". This characterises the process in Masvingo well.
- Introducing innovations into a well-established, rigid bureaucracy obviously provokes and forces the system to react, creating conflicts which have to be resolved. The focus on behavioural change in such an intervention also involves the emotional level. For the initiators of the provocation from outside this is a very delicate intervention which requires a good insight into an organisation as well as the ability to deal with conflicts. It also requires persistence and resilience until changes have been negotiated and operationalised within the organisation, otherwise the system might go back to its original shape.

With each phase, the process of developing, institutionalising and operationalising participatory approaches became increasingly complex and demanding, comparable to increasing the number of balls when juggling. None of the new challenges could have been ignored or dropped without risking the failure of the whole venture. All the elements had to be developed simultaneously with sound strategies and flexible methodologies. This has implications to the replicability of such an effort in other areas and institutions.

The importance of a networked approach

■ The close co-operation between ConTill, ITDG and IRDEP as an informal 'lobby group' allowed activities to be co-ordinated. It also allowed us to learn from each others' experiences. The fact that the different interventions in different areas all came to similar conclusions, increased the impact, creating the 'critical mass' needed to draw attention to participatory approaches and bring these approaches into mainstream thinking.

- Conditions within the three collaborating projects and AGRITEX Masvingo were also crucial ingredients for success:
 - High motivation and commitment among staff to promoting participatory development
 - Preparedness to take risk. Often this resulted in emotional stress of project personnel and could easily have resulted in a serious conflict. High empathy and sensitivity was required
 - Good personal relationships and trust between the staff of the different projects
 - No personnel change from 1991 to 1995, either in ConTill and IRDEP, nor in ITDG. As most key factors for success are personality dependent, this was crucial

Although many of these conditions were favourable in Masvingo, this must be seen as the exception rather than the rule, urging caution when replicating such a process elsewhere.

Similarly, the OD process is highly dependent on the head of Agritex Masvingo province. Without his commitment and courage to pursue a radical reform, progress and achievements would have been slow, if not impossible. This can be considered a rather unusually favourable condition for institutional reform but bears a great risk as well.

A conducive political framework

Ever since the devastating drought in 1992 rigid post-colonial structures have been opened up. The economic structural adjustment programme reinforced this. Decentralisation has become policy in most government departments and participation is seen as one way to cope with reduced government services and expenditures. This has also influenced AGRITEX to a certain degree. The freedom for experiments like OD in one province has to be seen in this perspective as well. If OD works, it will be a challenge and a threat to the national level. At present the national level of AGRITEX is observing the process, leaving the risk to Masvingo.

The challenge of changing attitudes

Both participatory approaches and OD imply processes of behavioural and attitudinal change for both farmers and bureaucrats. This touches the relationship between farmer and extension worker and also the relationship between superiors and subordinates in the organisation. Such changes are at a personal level and can only be facilitated in a conducive atmosphere which reduces the fear of loss of power and control and where new relationships can be negotiated. A strong philosophical framework (eg. Training for Transformation) for such deep-seated changes within an organisational culture is therefore important.

Participatory extension is cheap

■ An assessment by extension workers who practised PEA for about two years revealed that except for additional stationery, PEA can be implemented within existing budgets. The general impact could be higher with more resources, but this was not found to be a pre-condition. The main costs arising are thus costs for training and for resource material which could be sourced through re-arranging existing programmes.

The limitations of pilot studies

■ Successful externally-driven interventions are often viewed with scepticism: "You have invested much more resources, much more monitoring than we can do..., highly qualified staff.... etc." Spreading PEA through the pilot activities would not have worked as the initial ownership was not with institutional staff. Despite the successes they were demonstrating, a rapid withdrawal of outside support might have resulted in a collapse. This is important to stress as often external support is withdrawn at that stage, assuming a rapid adoption of the new ideas. The length of time individuals and organisations need to internalise new ideas and approaches, especially behavioural changes are implied, has to be taken into account.

A new understanding of pilot activities is therefore suggested: they should be used as learning cases which are not necessarily sustainable projects in their own right. It should be accepted that an approach is only operationalised once the institution itself, without external support, has established its own show cases and commits itself to spreading them. Intensive training of field-level staff to come up with their own show case is the ultimate requirement and has to be given high priority. Until these internal show cases are established, the externally established pilot activities have to be continued, for training purposes, for further observations and as proof that the approaches work.

Implementation of participatory extension through the projects was highly successful. Whether the same will be true for a 'diluted' implementation through the extension service is still to be seen. Much depends on the skills, attitudes and personalities of the extension workers who implement it. It also depends on the effective strengthening of the social organisation and farmer representation; a challenging task. Qualitative and quantitative indicators and the whole methodology for participatory impact monitoring still have to be further developed. The major bottleneck at present is a lack of capacities to maintain a systematic training and follow-up through experienced trainers.

Emerging challenges

Operationalisation of PEA through AGRITEX might be successful if the favourable conditions continue and the commitment of all actors, including donors, does not weaken. However, there are certain contradictions which could prevent widespread participatory development:

- It will be AGRITEX extension workers who concientise farmers and encourage them to demand services. Ironically, this demand might challenge their own role and performance and lead to contradictions. Therefore, if participatory development is perceived as a process of negotiating power between actors, other forces and pressures in the institutional set-up (eg. farmer lobby – ZFU, competition between the 'service provider', new financial arrangements in which farmers can 'buy' the services from the providers who perform best) have to be added.
- Because of the extra support AGRITEX is receiving, their position in the institutional set-up is strong. Jealousies on the part of other institutions and ministries are likely and could block the drive in AGRITEX. Therefore, capacity building in these other institutions is also a priority.
- AGRITEX is not the only service provider in agriculture. Increasingly, agricultural industries (eg. seed companies) are strengthening their services to smallholder farmers, while AGRITEX's budget is reduced and its future is uncertain.

This last point implies a need to consider the institutional arrangements in an AKIS (agricultural knowledge and information system) perspective (Ramirez, 1997). For example, the separation of research and extension must be reviewed so that innovation and learning systems can include all actors and service providers (including the private sector). Other means of intervention, like new models for financing agricultural service activities, might be required. Such a holistic perspective might come to the conclusion that the focus on AGRITEX is extremely narrow and not sustainable. In the end, it should not be AGRITEX which is reformed to promote participatory development, but rather, reform is needed within a highly diverse network of actors. This already gives an indication of where the learning process might lead us next.

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