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Institutionalizing Participatory Extension: Experiences from Zimbabwe

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Abstract

The paper describes the rationale for a change from conventional extension towards participatory innovation development and extension. The 'Conservation Tillage Project' and the 'Food Security Project' developed such an approach and have embarked on institutionalization of this approach into the agricultural extension service in Masvingo Province in Zimbabwe. Dialogue with farmers, farmer experimentation and the strengthening of self-organizational capacities of rural communities are the major elements to improve development and spreading of innovations, thus the efficiency of extension.

The new approach requires appropriate methods and tools as well as a role change of agricultural extension workers from teacher to facilitator. Elements of "Training for Transformation" and Participatory Rural Appraisal (PRA) were tested and developed and were found to be effective tools. The strategy to institutionalize participatory extension is based on joining efforts and networking with other organizations, a campaign to familiarize institutional staff, and on a training and follow-up program for staff in the framework of organizational development.

The experiences show that the attitudinal change required to implement participatory approaches is highly dependent on personalities. To have an impact on the change of attitudes a continuous medium-term training process with a close follow-up is required. The paper concludes that institutionalization of participatory approaches into hierarchically structured organizations is a highly complex intervention. In order to be successful, major changes in planning, implementation and monitoring and evaluation procedures are required. Changes of that nature require a process of at least 5 to 10 years and high commitment on the side of institutional staff on all levels and donors as well.

Keywords

Zimbabwe, participatory innovation, extension, 'Training for Transformation,' organizational development, facilitation

1 Background to the Development of a Participatory Approach

In the framework of the project "*Conservation Tillage for Sustainable Crop Production System*" (Contill) adaptive on-farm trials with a farming systems perspective have been carried out since 1991. In order to stimulate adaptations to techniques offered by the project and to stimulate development of farmer innovations a participatory process for technology development has been initiated. During the process, experiences with smallholder farmers and with extension staff soon showed a need for further developing the approach for innovation development into an approach for participatory extension.

It proved to be unlikely that flexible, often site-specific innovations developed in the framework of the project would spread effectively if promoted with the present approach of the agricultural extension service (AGRITEX). Two main limitations were identified in the extension approach (see for example Madondo, 1992 & 1993): firstly the outreach of the extension service is limited as they concentrate on a 'master farmer program' which generally involves only approximately 10% of the farming households. Secondly, these farmers are being taught normative, rigid blanket recommendations in a top-down manner which hardly encourages dialogical, interactive learning, adapting of technologies and developing own solutions. On the farmers' side it was revealed that for an effective spreading of technical innovations the social environment must be favorable which is often not the case in the rural communities in Zimbabwe (Nyagumbo 1995, Chuma 1994, Hagmann 1993). Besides technical innovations, socio-organizational developments and innovations must be considered and addressed.

Based on these limitations and requirements a participatory approach was developed in a process driven by practical experiences while working with individuals and communities.

2 Concept and Approach for Participatory Innovation Development and Extension

The goal of the participatory process is sustainable management of natural resources and food security in smallholder farming areas in Zimbabwe. It aims at developing and spreading sustainable farming practices and at enabling rural communities to better handle their problems in a self-reliant way, without depending on incentives from outside. It addresses communities as a whole and individual families as units (men and women together).

The concept for participatory innovation development and extension is based on dialogical communication, farmer experimentation and strengthening of self-organizational capacities of rural communities. Encouragement of active

participation and dialogue among all actors on the local level as partners, e.g. farmers and their institutions, extensionists and researchers is the mainstay.

Farmer experimentation. Dialogue and farmer experimentation is being encouraged in an environment where a very powerful top-down extension service has considered farmers' knowledge to be backwards and of no importance for nearly three generations and where farmers have been conditioned to accept externally developed standardized technologies (Madondo 1995). Stimulation of own experimentation proves to be a useful element to re-value and appreciate traditional and indigenous knowledge, to combine it with new techniques and synthesize the two. As an overall effect, the knowledge and understanding gained through this process strengthens farmers' confidence in their own solutions and increases their ability to choose options and to develop solutions appropriate for their specific ecological, economical and socio-cultural conditions and circumstances. This process aims at transforming the present standard-oriented extension into an output-oriented system where not the adoption of one specific technique is the indicator for success, but, for example, the efficient conservation of soil and water.

Strengthening Self-Organizational Capacities. Strengthening self-organizational capacities of rural communities with their local institutions often necessitates improvements in the communication structures within the local institutions, which farmers analyzed to be hierarchical, weak and discouraging for active participation in community activities (Hagmann 1993). In addition, the conflict between traditional leadership structures and modern, government-introduced representation contributes to conflicts and to weak local institutions. Leadership training and facilitation of dialogical communication in village workshops are elements which have shown high potential for improving cooperation, sharing of knowledge and participation of all gender and age groups in extension and rural development (Hagmann & Murwira 1996)

Strengthening of local institutions, together with an increasing confidence through experimentation, creates an atmosphere conducive to sharing experiences, innovations and knowledge among farmers and leads to an effective farmer-to-farmer extension.

Philosophy and Tools. The experience showed that this concept, in particular the component of leadership and cooperation, required more than a number of practical PRA-tools (see for example Theis & Grady 1991). A philosophical framework for the participatory development process was required and introduced in the form of "Training for Transformation" (TFT). This training program was developed in Kenya in 1974 and adapted to Zimbabwean conditions by Hope & Timmel (1984). It originates in the pedagogy of Freire (1973) and is built on conscientization through participatory education, where learning is based

on experience in the own living world of the actors. Teaching therefore consists of dialogue via problem posing, which means facilitation of communication flow and asking questions to help groups find the causes and the solutions themselves instead of teaching 'foreign' knowledge and realities. TFT provides concrete methods and tools (e.g. codes, role plays, poems etc.) to practically implement Freire's approach. It empowers local people to control their lives through active participation in their own development and sharing of ideas and knowledge. It stresses the importance of participation and cooperation in organizational development in order to build and strengthen institutions which enable people to become self-reliant. It aims at strengthening people's confidence (e.g. slogans like: "nobody knows everything and nobody knows nothing") and integrates social analysis to help groups to find the root causes of problems (Hope & Timmel 1984). Freire's key principles form a philosophical framework which is relevant for any individual living in a society and can be applied in almost all situations in life. The strong acceptance of and agreement on these principles by various characters with different attitudes and in different mainstreams is its major strength. It manages to integrate and unite these often conflicting interests under one umbrella, the key principles.

This effect is of great importance in a society where socio-cultural change has weakened the social cohesion and security which was based on traditional rules and regulations, which is the case in Zimbabwe (Hagmann 1993, Nyagumbo 1995). Therefore, according to our experience, a new 'umbrella' which can replace or at least partly substitute the old security is particularly important, as the desire of social harmony is very strong and dominates most decisions of individuals. Without providing a platform to develop the new 'umbrella,' cooperation and leadership structures in rural communities will generally remain weak and often dominated by the unresolved social conflicts, which also adversely affect innovation development and extension.

Farmers are introduced to this framework right at the beginning of the process in awareness-raising community workshops. Elements of TFT are utilized selectively in the process and are complemented by tools originating in PRA, diagnostic survey (Raintree 1987) and goal oriented planning 'ZOPP' (GTZ, 1987), as well as materials and aids for dialogical teaching in order to initiate and follow up participatory innovation development and extension.

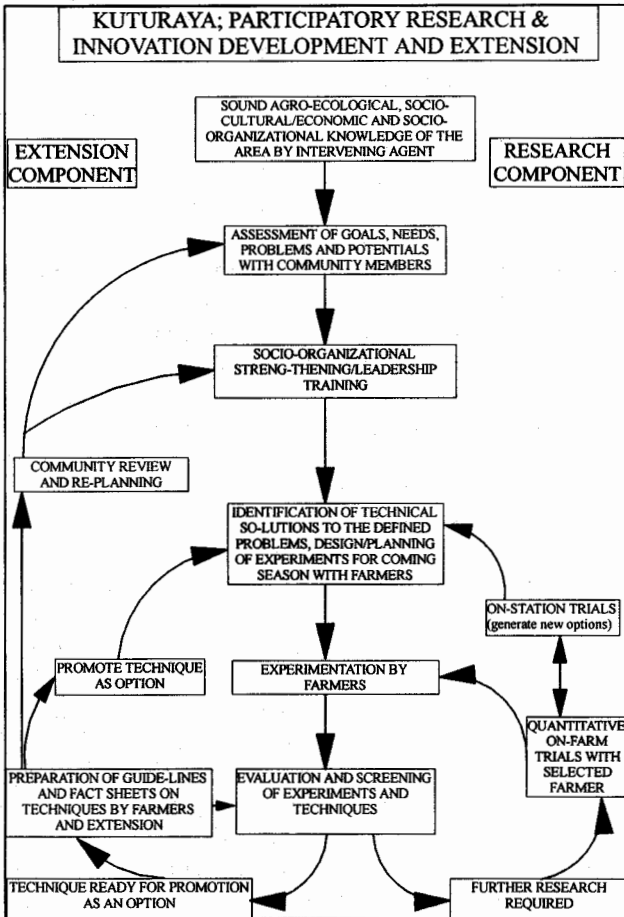
Figure 1 illustrates the concept of participatory research/innovation development and extension. It consists of three main components, participatory community development as a process of learning and development through experimentation, the 'process of learning and development through experimentation,' the research component and the extension component.

The 'Learning and Development through Experimentation' Process. The main process (centre column in figure 1) can be considered as 'learning & development through experimentation,' initiated and facilitated by extension workers. It is people-centered as villagers analyze and define their problems, needs and potentials and the activities they want to carry out. The intervention from outside facilitates the process, raises awareness, contributes methodologies and inspires with potential technical options, but does not dominate and push people to carry out certain (from outsiders) preconceived activities. It is an open-ended development process where research and extension are support agencies and ideally participate in people's programs and not vice-versa.

Development of Innovative Techniques (Research component in figure 1). Innovation development is based on the trial and error principle. Farmers are encouraged to experiment with ideas and techniques emanating from their own source of knowledge or from outside sources. Problems identified during the process are the basis for a research agenda and resulting on-farm trials in which more focus is put on quantitative data to support the findings. If technical processes are not fully understood farmers' ideas are taken to the research station for further research under controlled conditions.

Spreading of Innovative Techniques (Extension component in figure 1). Spreading is stimulated through the strengthening of the self-organizational capacities of rural communities and institutions. Improvements of communication structures, skills and modes is facilitated with the help of the TFT philosophy and tools in order to enable people to create an environment where they feel free to communicate and share their skills and experiences with all members of the community. Once this level of communication flow is reached in the communities, a high dynamic in farmer-to-farmer sharing and extension should result. In technical terms, not new techniques as such are promoted, but the experimentation with technical options and indigenous technical knowledge (ITK) is encouraged. Experiences and results of the experiments are shared and compiled by farmers and extension as guidelines/training materials which focus on the understanding of the factors which make the techniques succeed or fail. Important tools are annual community reviews where the technical and socio-organizational progress is reviewed and evaluated and adaptations to the planning made (see figure 1).

Figure 1: Conceptual Model for Participatory Research & Innovation Development and Extension

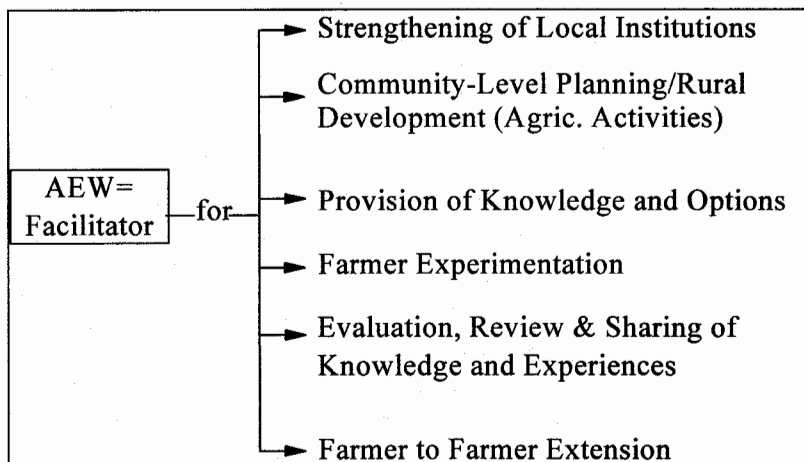


3 The New Role of the Agricultural Extension Worker

At present agricultural extension workers (AEW) see their role as that of a teacher. A participatory approach requires a major shift in roles from teacher to facilitator. This implies that the AEW is no longer the main carrier of a message and knowledge, but coordinates and organizes the knowledge acquisition from several sources. Utilizing the TFT philosophy and the tools, the AEW as a facilitator would then initiate a participatory process in communities with a major focus on local institutional strengthening, needs identification and prioritization.

He/she would assist farmers in the discussion about solutions with background knowledge and options (e.g. through organization of "look and learn" visits to innovative farmers, research stations etc.) and encourage farmers to experiment with these options and ideas as described above. The AEW would also encourage farmers to hold field days for those who could not directly participate. With time the facilitator role will be taken over gradually by community leaders who are being trained in facilitation skills. Figure 2 summarizes the main elements of the facilitator role.

Figure 2: The Main Elements of the Facilitator Role



4 Strategy for Institutionalizing the Participatory Approach

Pilot activities were carried out by the Contill Project, the ITDG Food Security Project and the Community-Level Planning and Development operations of the Integrated Rural Development Program (IRDEP) which is supported by GTZ. These activities served as case studies for the development of a model for participatory approaches. The case studies enabled a detailed monitoring of processes, impacts and reactions on the side of farmers and extension staff. The success of the three projects in terms of development and extension of innovations (Hagmann et al. 1996), the improvements in the social organization in communities (Hagmann & Murwira 1996) and in terms of community-planned and implemented projects (Görcke 1993) justified scaling up. In addition, the extension service, which is a strong and functional organization, showed interest in trying new approaches in order to increase their efficiency. Therefore, a

strategy for institutionalizing the participatory approach was developed for Masvingo Province and several elements will be described.

Networking. Several organizations and projects in Masvingo Province apply elements of participatory approaches. The focuses differ, but all of them work in close collaboration with AGRITEX, the extension service, as this is the institution which is strongly represented at field level. Sharing of experiences among those projects has been extremely valuable and we were able to closely cooperate with ITDG and with IRDEP and coordinate activities aiming at institutionalization of participatory approaches into AGRITEX. The informal networking and joint lobbying has resulted in learning from each other's experiences, joint papers and workshops. It proved to be crucial to obtain the 'critical mass' necessary to draw attention to participatory approaches and the pilot activities. At present, after several presentations in various provincial, national and international workshops, the network is expanding as various organizations from other provinces have shown vivid interest.

Familiarization of all Levels of Staff. Soon after the interest within AGRITEX had been created familiarization of all levels of extension staff became a priority in order to stimulate discussions. Besides provision of literature and reports, several workshops organized and/or supported by the three cooperating projects were held during the last two years. These workshops were combined with field visits to the case study areas. Participatory approaches were presented and experiences discussed. This enabled higher level staff to get fully involved in the process and to adopt the new ideas. Exposure to the impact of the case studies and to farmers who analyzed the difference between the conventional and the participatory approach were particularly convincing. In addition to these formal activities, informal discussions based on good personal relationships and field visits were key elements to familiarize AGRITEX officers with the participatory process and raise their acceptance of these ideas. Once high-level officers were convinced of the potential of the new approach, AGRITEX Masvingo organized a familiarization workshop for all its staff in the province. The management level wanted to give direction to the lower level staff and show their support to these approaches.

Elaboration of a Training and Follow-Up Program for Extension Workers. After familiarization of the key players, a systematic training of 30 extension workers in TFT, participatory tools/methods and facilitation began. An initial two-week course in TFT which was attended by extension workers and farmers together was followed by a report-back workshop to the communities who chose the farmers and to AGRITEX District staff. Extension workers then decided on communities in which they wanted to apply and practice the skills. A follow-up in facilitation training is being provided throughout one year at 3- to 6-

monthly intervals. These follow-up workshops will give them a chance to assist each other, to exchange experience and to improve their facilitation skills while practicing. The experiences of this training process are being documented and a final evaluation after one year will reveal the effectiveness.

Framework of Organizational Development. AGRITEX Masvingo has recently launched an organizational development program which is supported by IRDEP. The purpose of the program, which was initiated by the Chief Agricultural Extension Officer is that '*relevant aggregate output at all levels of AGRITEX staff in Masvingo Province is improved*' The most important result is that '*extension delivery system to farmers in Masvingo Province is improved*' (AGRITEX 1995). As participatory extension has shown to be the most promising approach for improving the extension delivery system, it has become an integral part of the organizational development system as the software for achieving the most important result. The successful project to project cooperation between Contill and IRDEP and the informal network has assisted in complementing the activities and approaches in an output-oriented organizational development and support program.

5 Experiences and Lessons Learned

Our experiences with institutionalization in Masvingo are based on a two year effort to actively integrate participatory approaches. The full cycle of the training and follow-up program for extension workers, however, was only initiated in 1994 and has not been completed yet. Some major experiences and constraints will be discussed. More details are described in Hagmann et al. (1995).

Participatory Approaches Demonstrated High Potential to Increase the Efficiency of Extension and Rural Development Activities. The impact of the participatory approaches of the three projects was highly convincing in terms of active farmer participation in innovation development, increased rates of adoption of technologies and innovations and in terms of self-organization and target setting of communities. In some areas up to 80 % of the households were involved in soil and water conservation techniques developed and promoted through the activities.

Implementing Participatory Approaches Requires a Change of Attitudes. Experiences of the case studies which were implemented by project staff in collaboration with extension workers showed that the change in attitude of extension staff towards smallholder farmers is the key determinant for the success of the approach. In a hierarchically structured society, where the hierarchy is mostly based on the level of formal education, it is difficult for formally educated staff to accept farmers with their traditional and experience-based knowledge system as equals and to learn from them. Attitudes cannot be changed by utilizing

certain methodologies only. It requires a philosophical framework to create conducive conditions in which this process can take place. Training for Transformation (Hope & Timmel 1984) has demonstrated the highest potential as philosophy.

Ability to Develop Participatory Skills Depends on Personalities. As attitudes highly depend on personalities, it is doubtful whether staff who have been professionally socialized and to a certain extent been conditioned under colonial rule are able to reverse the top-down approach, as it would question most of their working life. The same applies to older farmers who have accepted their obsequious and subordinate role and who now identify with it. Therefore the impact depends strongly on the AEW and one can not expect it to be uniform.

Training in Participatory Approaches is a Continuous, Medium-Term Process. Training courses in TFT and participatory tools were initially successful, but it was revealed that without an on-the-job follow-up of the process of change over a medium-term time span, the impact is low. Intensive training, support and follow-up are extremely important in order to avoid labeling of the conventional work as participatory simply because participation is the talk of the day (which occurred with other approaches in the past). In particular, during the transition phase, extension workers need strong support to overcome the often observed insecurity and fear of losing power when giving up the teacher role.

Commitment on Higher Levels and Effective Staff Appraisal System are Required. Various levels of staff have frequently misinterpreted participatory approaches as "pulling out of AEW," "let farmers do what they want," as relaxation and as not being accountable for failures. To avoid this danger, besides proper training and follow-up, a more effective and appropriate staff appraisal and counselling system (incl. performance criteria) has to be developed and must be effective from the start of the implementation of the participatory approach. This requires a strong commitment on the part of higher level staff to give direction and incentives to the extension workers and to follow up the operations. A key element which was agreed upon in Masvingo is the integration of a farmer appraisal of the extension workers into the M&E system in order to increase the accountability of extension workers towards their clients, the farmers. Another important job evaluation criteria is the performance in the documentation of farmer knowledge by the AEW. This is an incentive for the AEW to learn from farmers and also to recognize the value and the importance of indigenous knowledge. As AEWs are also part of the indigenous knowledge system, this enables them to cross the borders between the western knowledge system which they represent with their advice at present and the indigenous knowledge system.

Criteria and Indicators for Monitoring and Evaluating the Impact of Participatory Extension Need to Be Developed. The present M&E system is based on quantitative indicators for adoption of key practices to increase and sustain production. Successes of a participatory process in a community, however, require a medium-term time frame and the output in terms of quantifiable increases in production can not be expected to be very spectacular in a marginal semi-arid area. Qualitative results, which are equally important and elementary in the process (e.g. human development in terms of an increase in self-reliance and in self-organizational capacities, confidence building etc.), however, are difficult to measure and have not yet been taken into consideration in the indicators.

6 Conclusion and Recommendations

Experiences gained so far allow the following conclusions and recommendations:

- Institutionalization of participatory approaches into a hierarchically structured organization is a highly complex intervention. It requires a major reorientation of planning, implementation and M&E systems for which high commitment from all staff is needed and must be considered as a medium to long-term objective.
- Case studies or pilot activities in which the participatory approaches are developed, tested and adapted are very important. They serve as practical examples (methodologies, tools, and impact) to familiarize and convince institutional staff and thereby influence policies from the bottom up. Detailed monitoring of those operations should be continued parallel to institutionalization and gradual upscaling in order to detect pitfalls and mistakes.
- Intensive efforts to familiarize and train all levels of staff is crucial. Networking and coordination of activities with other projects appears to be a successful approach to reach a 'critical mass.'
- Once higher level staff is committed, intensive training, support and follow-up of field extension staff must have priority in institutionalizing participatory approaches. Extension workers at the interface between farmers and the extension agency require new skills and a higher social competence to tackle the facilitator role. As staff turnover at field level is low, intensive training at this level contributes to the sustaining of the efforts.
- Despite favorable conditions in Masvingo Province, it shows that effective institutionalization of participatory innovation development and extension into the agricultural extension service will require a process of at least 5 to 10 years. Continuous commitment from the institution as well as from the donor side during this period will be critical to success. Nevertheless, due to the

availability of an effective training, an M&E system, and the willingness to institutionalize the approaches, chances for success are bright in Masvingo.

Lessons Learned

To summarize the lessons learned in our case, one has to stress that our experience proved the effectiveness of participatory innovation development and extension for the management of the natural resources and for food security. This was achieved through a better self-organization of the communities and through a learning process which was catalyzed by farmers' experimentation. This enabled farmers to develop appropriate innovations and manage their highly diverse environment site-specifically and therefore improved the total output in terms of production and conservation. The second major lesson learned was that case studies in projects can only be successful at a larger scale if simultaneously a systematic support program for institutionalization of these approaches into larger bodies or institutions can be launched. This, however, is an intervention which is highly complex and situation-specific.

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