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# Facilitating competence development to put learning process approaches into practice in rural extension

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*This article describes the learning experiences in competence development in participatory extension approaches (PEA) of the Zimbabwean Department of Agricultural, Technical and Extension Services (AGRITEX) within the Ministry of Lands and Agriculture. Since 1995, with support from the German Agency for Technical Cooperation (GTZ), AGRITEX has piloted and tested the development of competence in PEA among field-level extension agents in Masvingo Province. The effort was carried out as an integral component of wider change management through an organizational development programme geared towards improving organizations' performance in service delivery. This article focuses on the experience of developing a learning programme, the large-scale implementation of that programme, and the lessons learned.*

In many countries, public sector extension services have been accepting that there is a need for participatory approaches to agricultural service delivery ever since the potential of such approaches was demonstrated by non-governmental organizations (NGOs). The acceptance and promotion of these approaches and processes in hierarchical government bureaucracies, where they are often implemented by low-paid extension agents with low-level qualifications, has proved to be difficult. Many existing organizations will have to transform their approaches to extension from ones that are based on top-down teaching and a narrow orientation on production to ones that are people-centred, learning-oriented and participatory (Thompson, 1995). Such a shift in the *modus operandi* requires substantial changes in the culture and structure of the service organizations themselves, especially at the field level where particularly deliberate changes of extension agents' attitudes and behaviour and of capabilities to facilitate social processes are required. Such a reorientation and transformation of technically oriented extension agents necessitates a broader framework of human resources development in which training in participatory processes is carried out.

This article analyses the practical experiences in competence development in process facilitation in participatory community development and extension of the government extension services in

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Zimbabwe. It describes the demands put on extension agents who engage in process facilitation, which represents a radical move away from technical-based extension services towards a broader approach comprising the development of problem solving and innovation capacities in rural communities. Learning was enhanced at the cognitive, behavioural, attitudinal and emotional levels in order to facilitate such a change in individual capabilities. In addition, organizational capabilities were simultaneously strengthened through organizational development at different levels. The article reports on substantial successes, and the lessons learned are applicable to many situations beyond the case of Zimbabwe.

### A learning process approach to extension delivery

On the basis of pilot activities in research and extension, carried out by different actors between 1990 and 1995, a participatory extension approach was developed iteratively with farmers, researchers and extensionists in Masvingo Province. In 1995-1996, in response to growing interest in integrating alternative approaches to service delivery within the mainstream extension system, these experiences were synthesized into a common framework, called "participatory extension approaches" (PEA)<sup>2</sup> (Figure), which organizations accepted increasingly as a mainstream approach to extension delivery.

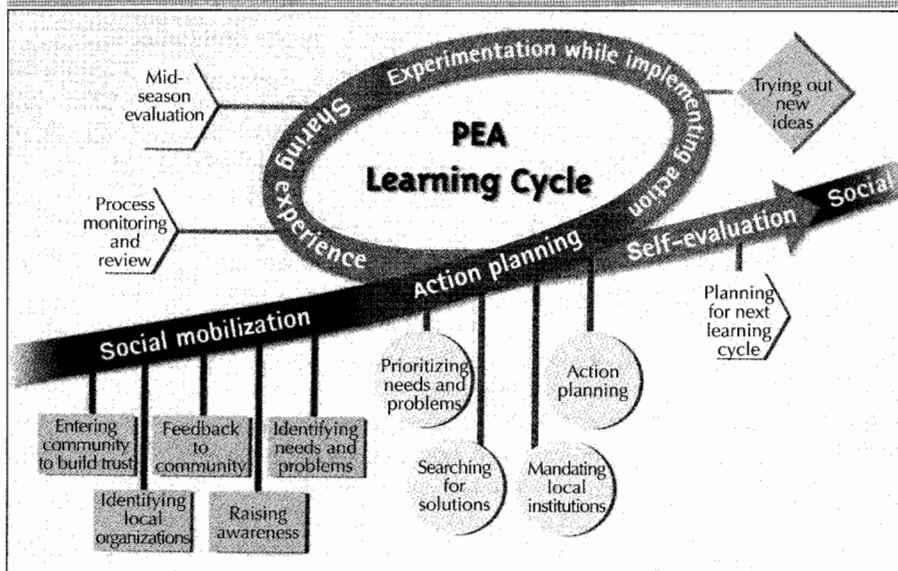
#### Key characteristics of PEA

PEA, as developed and understood in Zimbabwe, is an extension approach that involves a transformation in the way extension agents interact with farmers. Community-based extension, full community ownership of the process and joint learning are central to PEA. The characteristics of PEA include:

- a focus on strengthening rural people's problem solving, planning and individual, as well as collective, management abilities, which involves the development of local organizational capacities and leadership;
- integration of the social mobilization of communities for planning, and action with rural development, agricultural extension and research, in which innovation is considered as a social process;
- equal partnership among farmers, researchers and extension agents who can all learn from each other and contribute their knowledge and skills;
- promotion of farmers' capacity to adapt and develop new and appropriate technologies/innovations by encouraging them to learn through experimentation, building on their own knowledge and

<sup>2</sup>The development process of this approach, the emerging PEA framework, and the successes it achieved have been documented and published in Hagmann, Murwira and Chuma, 1996; Hagmann, Chuma and Murwira, 1997; Haggman *et al.*, 1998; and 1999; and Moyo, 1996, as well as in the set of PEA training and resource materials listed in the References on p. 157.

## THE PEA LEARNING CYCLE: MAIN PROCESS PHASES AND RELATED PROCESS STEPS



practices and blending these with new ideas in an action learning mode (usually these are agricultural technologies and practices, but they can also be social innovations in health, water and sanitation or in other areas of rural development);

- recognition that communities are not homogeneous but consist of various social groups with different and conflicting interests, powers and capabilities. The goal is to achieve equitable and sustainable development through the negotiation of interests among these groups and by providing space for the poor and marginalized in collective decision-making.

PEA integrates elements of participatory technology development (PTD), social development approaches, experiential learning (Kolb, 1984) and training for transformation (Hope and Timmel, 1984). The PEA learning cycle and operational framework suggest a holistic and flexible strategy following a step-by-step process in which a variety of extension methodologies and tools (including participatory rural appraisal [PRA] tools) are flexibly integrated into each step. For example, farmer-to-farmer extension or Farmer Field Schools can be part of the PEA framework. In isolation, these methodologies might address only a few farmers and even be used in a top-down manner but, within the community-based PEA framework, they can be more inclusive and effective, as whole social entities are addressed.

PEA is far more than a participatory methodology and is distinctly different from PRA, which is essentially a tool-box. PEA is a comprehensive, iterative learning process approach to rural innovation and problem solving that enhances governance and civil society in rural areas. Through the PEA process, both farmers and extension agents accumulate knowledge and skills. Inclusiveness and community ownership of the development process are core values of PEA.

### **The role of extension agents as process facilitators**

The role of the extension agent is to facilitate the process in a way that focuses on human development at the local level. This involves:

- A process of community development and innovation:
  - development of social mobilization and local organization in order to enhance community management capacities, and articulation of demand for services;
  - community needs identification and action planning processes;
  - community self-evaluation that reviews the successes and failures critically so that learning can become effective.
- A process in which farmers, collectively and individually, learn about innovations (technical and social) to enhance the community's capacity to innovate:
  - leading the different actors to learn and experiment together so that their understanding and management capacities are improved;
  - developing appropriate technologies and enhancing the spread of solutions to farmers' problems from one farmer to another;
  - introducing social innovations to improve processes for negotiation on land use and by-laws for natural resource management, which often takes place in situations where there is conflict.
- Rural knowledge management:
  - identifying knowledge about given technologies and sources of innovation;
  - linking various actors to bring together the knowledge and experience they possess and are seeking to obtain;
  - documenting existing knowledge in order to make it available to a wider audience;
  - preparing materials for effective dissemination (based on the knowledge generated).

The new role of managing and facilitating learning processes requires special skills and competencies that lie far beyond the present technical focus and thus need to be developed.

## The challenge: developing the capabilities needed to facilitate PEA processes

### Core capabilities needed

Practical experience of implementing participatory processes in pilot studies carried out between 1991 and 1995 provided a deep insight into the critical capabilities that extension agents require in order to facilitate complex and dynamic learning processes in communities. In many instances, participatory approaches are largely associated with PRA tools and components which are included in conventional projects through tools training. Such a reductionist approach to training obviously results in the mechanical application of tools without a full understanding of the dimension of paradigmatic change towards learning at all levels (Rölings and de Jong, 1998). This results in failure, because it is in no way sufficient as a way of managing and facilitating action learning processes owned by communities. The Zimbabwe experience with PEAs went beyond this stage, and succeeded in identifying the core capabilities (Box 1).

### The foundation of PEA capability development

It is obvious that these are high-level capabilities that require a cadre of field agents who are professional and experienced. They need to be able to manage dynamic complexity, which is almost the opposite of the linear, mechanistic and rigid teaching schedule of the old type of extension agent. Competence development therefore needs to stimulate and enhance the cognitive, behavioural/attitudinal and emotional levels simultaneously in order to build individuals' capacity to transform themselves and act in a different way.

*At the cognitive level*, the major thrust is to move from rigid and structural thinking to lateral thinking in terms of processes and systems perspectives. This shift can be facilitated by critical self-analysis and the challenging of certain mind-sets, as well as by exposure to divergent concepts and paradigms. Creativity and mental flexibility need to be enhanced through experimentation with new ideas and action learning in social interaction. Without a focus on creativity, people always return to their old patterns of problem solving, even when the problems have new dimensions. Orientation towards a vision, development of guiding principles for interventions and establishment of conceptual and operational frameworks (such as matrixes) can help to overcome the fear of the unknown by providing the cognitive understanding, security and confidence to engage in new ways of working. An example of such a matrix comprises the steps of a process, the objectives of these steps and key issues for dealing with possible methodologies and potential partners.

**BOX 1****Core capabilities needed for PEA**

Extension facilitators need to have the following capabilities:

- a full understanding of and orientation towards participatory development processes in which human development and people's self-development, rather than purely technical development, are the ultimate goals of extension;
- a clear understanding and overview of a variety of extension approaches and methods that they can use as a pool from which to draw ideas, combining different elements for their own work, alongside the entrepreneurial spirit to try out new and different approaches and methods in order to continue to improve their ways of working;
- a deep conceptual understanding of learning process approaches and systems approaches as vehicles for self-development, and the capacity to handle these approaches flexibly and adapt them to situation-specific requirements (process management);
- the creativity to invent adapted methods and tools that correspond to requirements (e.g. the process of conflict management);
- excellent communication and facilitation skills based on a positive attitude towards clients and performance;
- the skill to communicate and share freely with others, identifying effective linkages among people and institutions, as well as among technical disciplines – "building bridges" and bringing actors together are the aims;
- the technical knowledge necessary for advising farmers on topics related to solving their immediate farming problems, managing their natural resources effectively and achieving food security. This does not require deep specialized knowledge of certain commodity crops, but rather knowledge of the broader issues such as farm management, soil and water management, basic crop and animal production and new areas of increasing importance (e.g. marketing and processing, and urban agriculture); specialized expert knowledge can be obtained externally if required;
- knowledge and understanding of the management and organization of extension, including development towards effective extension (knowledge of what makes good management, leadership, etc.), so that field agents are aware of their rights and opportunities and can both claim support and contribute to improved overall organizational performance.

*At the behavioural/attitudinal level, prevailing values, social norms and expected behaviour need to be reviewed critically. For example, formal education is often valued much more highly than non-formal practical knowledge. This puts farmers, with their local knowledge, and extension agents, with their "common sense", in a position of inferiority. The valuing of external inputs more highly than communities' indigenous knowledge often undermines the esteem and confidence that drives*

development. This denial of actors' roots and knowledge creates enormous insecurity and inhibits open dialogue. To facilitate change, social norms, values, attitudes and behaviour need to be made clear to the extension agents. Consideration of alternative choices needs to be informed by awareness of the consequences of preserving the status quo.

*At the emotional level*, confidence, self-esteem, equilibrium and cultural identity need to be factored in to the management of communities' complex social processes, the fluid nature of which entails continuous uncertainty about the course of action that should be pursued. A mixture of common sense, empathy, self-awareness and self-control, in other words, "emotional intelligence" (Goleman, 1998) helps people to "read the process" and thus reduces uncertainty for decision-makers. Enhancing emotional intelligence and intrinsic motivation is probably the most difficult aspect of competence development, and can only be achieved through a gradual engagement in the process of change and experimentation. While phases of insecurity are necessary for breaking old patterns of behaviour in any change process, it is important to start a learning situation with small steps in which success is likely. Such a procedure allows a relatively fast increase in levels of confidence, and frequently motivation, despite the obvious setbacks that occur in processes where emotions are involved.

The three levels are integrally linked and strongly influence one another during the transformation process. So, it is not a matter of addressing them separately, but of being aware of when and how to deal with the different aspects of an iterative approach. One-off events can trigger some awareness, but rarely lead to action and sustainable change. Experiential learning through iterative action and self-reflection, based on practice in the field as well as theory, is highly likely to lead towards ownership and internalization of learning that is focused on personal development. Experience has shown that this approach of learning by doing, through intervals of training and practice periods backed up by peer learning groups and coaching support, has great potential to develop these skills gradually.

### **Conducive organizational climate**

Individual capability development took place within the wider context of institutional and organizational development. This is probably one of the unique features of PEA in Masvingo Province, compared with many other experiences of participatory approaches which were often developed and implemented without regard to the need to adapt certain variables within the organization, e.g. management styles, incentives,



procedures and clarification of individual roles. The details of the process go beyond the focus and scope of this article, but have been partially described elsewhere (Hagmann *et al.*, 1998). Without such processes of organizational change, PEA could risk becoming a series of one-off ephemeral projects.

### **Curriculum development through action research with a pilot group**

The principles and conditions discussed in the previous section were put into practice in a pilot training/learning programme for the development of an experience-based strategy and learning curriculum for PEA capability development (Box 2). This lasted for 18 months and involved a group of 23 field extension agents. Based on the insights gained from the programme, a set of materials – comprising a guide booklet about the PEA approach, a trainer's guide and a video (see References) – was developed and published to support the large-scale training process.

The fact that field-level cadres were trained before higher-level staff created an interesting dynamic, as field staff knew more about PEA implementation than their superiors. In general, the effect on training of this "discomfort model" was positive, as many superiors became highly committed to being trained themselves as soon as they realized that they knew less than their subordinates. The usual hierarchy and training methods, with all their limitations, were interrupted and would probably never have been effective for such a demanding transformation of field cadres. In some cases, however, the delays were too long and distances grew too large, resulting in resistance from higher-level staff who feared the threat of losing face. It must be noted that PEA training is very demanding, especially in the early stages, when trainer competence, organizational skills and adequate resource allocation are crucial.

### **Going to scale: full staff training in PEA**

With a staff complement of around 300 field extension agents, it became obvious that one or two external facilitators would have taken a very long time to train all staff in PEA. Subsequently, the training of trainers within AGRITEX–Masvingo was chosen as the best strategy for achieving fast and wide coverage. A total of 20 PEA trainers were trained, so that each of the seven districts of Masvingo Province now has a team of PEA trainers. Most of the trainers were recruited from the pilot group of 23 field extension agents, and their training skills were further developed through training and coaching by external facilitators/trainers. This strategy put the practitioners at the forefront of training,

## BOX 2

### An iterative learning programme in PEA

The sequence of training of field staff in PEA follows the action learning and reflection cycle that was found appropriate during the pilot phase of the training, as described in the following. (Details of the curriculum are described in the trainer's guide – see References):

- **Phase 1** constitutes the initial training in PEA. This is based at the training centre and exposes trainees to the guiding principles, core concepts and methods of PEA. Facilitators use the PEA video and written material, as well as small-scale, interactive group exercises, role plays and case studies, to illustrate different aspects of the approach. Sharing of trainees' practical experiences, and fieldwork for practising selected participatory methodologies and tools are integral components of the two-week training. At the end of phase 1, trainees develop action plans which they will implement with communities/groups in their working environments over an experimental period of six months.
- **Phase 2** allows trainees to try out several PEA tools and techniques in the field, based on their action plans. Extension agents are encouraged to collaborate with one another in the field, and this has proved helpful in enhancing individual confidence. Coaching by trainers is also available.
- **Phase 3** is a feedback and further training workshop, during which trainees reflect on their individual and collective experiences, highlighting the particular problems they faced, e.g. the handling of conflicts within a group and the application of specific methods and tools. Trainees collectively seek ways of overcoming these problems and their capabilities are enhanced through training in other tools. Facilitators continuously monitor and analyse trainees' attitudes, behaviour and perceptions of local people, rather than just imparting purely technical skills. Phase 3, therefore, recaps on conceptual issues, the principles of transformation and aspects of farmer experimentation and innovation development. This phase is not as highly structured as the initial training in phase 1, but is designed to respond to trainees' subsequent training needs. In order to provide orientation and further exposure, a field trip to a site where PEA has been implemented successfully is undertaken during the learning workshop. At the end of the one-week feedback workshop, trainees develop a second action plan for implementation over the following six months.
- **Phase 4** is the actual field implementation of the second action plans, in the same mode as in Phase 2.
- **Phase 5** is similar to phase 3, whereby trainees share their field experiences and are trained further in PEA concepts and tools. Although this phase constitutes the final PEA training workshop, learning is a continuous process.

with the training specialist, rather than the expert, having a coordinating role using the learning programme described above and in the trainer's guide (see References). The large-scale competence development programme in PEA has been a substantial investment in terms of

resources and time. All AGRITEX staff in Masvingo will have gone through the five major learning phases by the end of 2000, and the other provinces are about to start the process.

### **Experiences, outcomes and lessons learned**

To draw conclusions regarding the lessons learned on training/knowledge gained and capability development in general, the outcome of the pilot group and large-scale competence development in PEA in Masvingo needs to be analysed at the farmer and field agent levels.

#### **PEA capability development at the farmer level**

Farmers' response to the extension agents' implementation of PEA during the learning process was encouraging. Farmers took on ownership and responsibility and, in some cases, even paid their own expenses for exposure trips and field days. These are indicators that the process of developing self-organization and demand-oriented extension is evolving. The extension agents of the pilot group set themselves PEA performance evaluation criteria that indicated their high level of competence in PEA. In their practical interaction with farmers in the early stages of PEA facilitation, the extension agents were faced with severe challenges in the areas of leadership, cooperation and power relations within communities. The problems and needs that were identified by different groups within communities revealed themselves to be strategically directed towards potential donor contributions. Certain groups also tried to influence the needs analyses in their favour. Such problems relate to the core of PEA aims and have always existed, but were not previously dealt with. Now they have been recognized as stumbling blocks and are being tackled. A detailed impact assessment of PEA implementation through the newly trained extension agents is currently being carried out.

#### **The transformation process and capability development**

The impact of the transformation process on extension agents' abilities to implement PEA was highly dependent on the different personalities of the individuals concerned and was not uniform across all staff. Some capabilities (e.g. facilitation of local organizational development, conflict resolution) proved to be difficult to acquire. The analytical skills, critical self-analysis and culture of inquiry and questioning needed for the facilitation of PEA have proved to be crucial, but developed slowly and unevenly. The impact of the transformation increased over time, but as regards the shift from a non-questioning hierarchical culture to a liberal, self-reliant culture, in many cases, the process of change will

probably take more than 18 months. The same applies to the development of lateral thinking and flexibility. However, the trainee group generated an encouraging number of ideas for solving the major problems. Participants' tendency to do only what they were told to do, and their belief that they could not solve their own problems, gave way to a proactive approach in which solutions and mutual help were developed to overcome problems. This indicated that the self-reliance and problem solving capacity of the extension agents had been strengthened during the competence development process.

Key issues emerged with regard to incentives for change. Within extension organization, there are no formal incentives for good PEA practitioners (e.g. better remuneration, or advancement), yet there is great enthusiasm for and commitment to the approach. In an evaluation, the pilot group defined the motivation for practising PEA as being centred on value-based and emotional issues rather than material incentives (Box 3).

The second major motivating factor was linked to an increased recognition of work resulting from increased work output. Extension agents emphasized that, until recently, neither the recipients of extension, nor their own superiors cared about their work. Now that the situation is changing visibly, everybody is becoming interested and suddenly the work of extension agents is being recognized. This revealed a stronger than expected work ethic: "We all want to do a good job". However, the extension agents need opportunities for showing that they are able to perform. They also need recognition from inside and outside the organizational system. This incentive does not involve any cost, but requires a change of attitudes and culture within the entire organization.

### **Design and management of the learning process**

The major success factor in capability development was the iterative nature of the learning and coaching process over 18 months, which made it possible to enter into the work environment and see the problems that extension agents faced. During the systematic follow-through of the sequence, extension agents' problems shifted and there was increasing engagement in the process over time. Although the capability development sequence ended after 18 months, it appears crucial to maintain backup mechanisms for continuous, long-term learning in order to improve service provision (e.g. peer learning groups at the district level).

The importance of actively linking theory and practice in order to build capability for flexible process facilitation and management has

**BOX 3****Becoming active members of farmer development teams**

The responses indicate that the testing of PEA has created intrinsic motivation based on better relationships and greater recognition of farmers' work. There is also a link with the increased sustainability of the programmes. The improved relationships with farmers, who are now free from tensions and friction, highlight how uneasy some extension agents felt when they had to impose their programme on farmers. Most of them clearly did not believe in their mission of educating farmers and, therefore, had to operate in an ambiguous environment.

They owned the extension programme and, consequently, farmers did not take an active part in it. This caused agents to suffer from work pressure and emotional stress resulting from discord. Accordingly, extension agents perceived their previous workload to be greater than it is with PEA, where farmers carry out their own programmes with minimum assistance. The reduced stress resulting from this sharing of responsibility is a relief. "Before, we only used one brain, and farmers' brains remained dormant; in PEA we use all our brains together," as one participant put it. Farmers' increased ownership of the programmes is perceived as a positive change of attitude.

Extension agents also emphasized that they are proud to see how much more confident and self-determined farmers have become. This pride not only reflects the relationship between farmers and extension workers, but also indicates that the agents themselves have gained cultural identity. One of them said: "I am now one of them", which implies that the ambiguity has ended. Through recognizing and valuing farmers' knowledge, the extension agents also learn to value their own origins and cultural identity, as most of them are descendants of peasant farmers. In this respect, the process helped them to gain strength and confidence in themselves, which was reflected in the behaviour of the group in general.

been confirmed. However, the pilot activities also revealed that not everyone is a conceptual thinker, nor a flexible process manager. The appropriate mixture of structure and process in training/learning is one of the greatest challenges for trainers. The provision of structural elements (e.g. stepwise procedures, tools) helps to create pathways for action, but at the same time these structures should not be allowed to become blueprints. The mixture therefore needs to be carefully monitored and flexibly alternated as it develops. The pilot testing of capability development as a "learning laboratory" for the testing, modifying and refining of PEA through trial and error was crucial in the development of a quality learning programme.

**Organizational capabilities for service delivery**

PEA competence development was positioned within the wider framework of improving extension service delivery as a whole. The

experience gained also has the following implications for the whole organization:

- The experiences from pilot testing PEA on extension staff convinced higher levels of the need to scale-up. The approach was particularly well accepted because it was grounded in the concrete field experience of the organization's own staff and because the expertise it depended on was within the organization. Scaling-up therefore became demand-driven, as the organization acknowledged the appropriateness of PEA and the need for all staff to share the same philosophy
- Training of trainers as in-house facilitators has been important in terms of the management and internalization of expertise within the organization. It also positively affected learning throughout the organization, in the sense that competent practitioners became trainers instead of academics.
- The comprehensive inclusive approach and competence development made PEA attractive outside the organization. Other line ministries, NGOs and consulting firms are increasingly interested in receiving training and adopting the approach. This offers a good opportunity for coordinating and harmonizing service provision in the rural areas and, thus, for eliminating often contradictory approaches (e.g. with regard to self-reliance and free handouts), which is an unintended but important impact.
- As demonstrated in this case, the development of a flexible approach requires flexible funding arrangements that allow time for experimentation and innovation before any tangible results are generated.
- PEA competence development was only able to succeed because organizational factors were dealt with through the organizational development programme. If problems arising from a hierarchical organizational structure, bureaucratic procedures and management styles had not been addressed, any field-level motivation would have been reduced in the long term. As "delivery software", organizational development and PEA are integral to the change process and to the improvement of this public service organization's service delivery.

### Future challenges

The major challenge in the future is how to institutionalize a continuous process of learning and optimization of service delivery approaches within the whole organization, particularly in the districts. This will be difficult if managers in the organization do not share a vision of

participatory open management styles and philosophies. Continuity is often another problem: when managers are redeployed, new managers who are not familiar with the process are not able to support it. PEA trainers are now attractive market commodities and can get better paid jobs outside the government. The next major step will be the scaling-up exercise in other provinces of Zimbabwe. This will be a massive venture, as there are more than 2 000 field extension agents to be engaged in PEA competence development.

When all staff have been trained in PEA, there will be a need to refocus more strongly on the technical extension content. New areas such as marketing and processing in which extension has not so far had much of a stake need to be developed as technical thrusts for better service delivery. Issues such as farmer-paid services and pluralism in service provision will also need to be firmly taken into account when service delivery is developed further in the future.

The key to making service provision client-responsive in a sustainable way lies in developing appropriate mechanisms for quality control and impact assessment by the clients. Such mechanisms need to be progressively developed by all interested groups.

PEA competence development has so far been carried out as a fundamental reorientation of existing extension agents. In future, much more attention needs to be paid to the training institutions where new cadres are educated. The curricula of agricultural colleges in Zimbabwe are still reductionist and disciplines-based, with a traditional focus on production and commodities. To prevent the persistence of obsolete paradigms that do not include critical contemporary knowledge, the primacy of extension needs to be re-established in such centres of learning.

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The following is a list of training /learning materials on PEA which can be obtained from the authors:

*Learning together through participatory extension* – a Guide to an Approach Developed in Zimbabwe

*Learning together through participatory extension* – a Trainer's Manual

*Learning together through participatory extension* – a Video on an Approach Developed in Zimbabwe