

Scaling-up of Farmers Field School (FFS) in Peru. CIP's contribution to the process

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Abstract

The FFS method was introduced and adapted to potato-related problems in Peru by the International Potato Center (CIP) and the NGO CARE-Peru in 1997. Since then, a scaling-up process of the methodology has taken place following three phases: 1) validation (1997-1999) in which CIP and CARE adapted and assessed FFS; 2) replication (2000-2004) in which a large FFS-IPM project lead by FAO was implemented and trained about 150 facilitators, CIP-CARE experience contributed to replication phase; 3) institutionalization (2005-2008) in which several institutions have started to use the methodology on their own. Up to 2008, a total of 77 agriculture-related institutions in Peru have used the FFS methodology in different crops, particularly potatoes, and in some cases in livestock. The results of CIP's methodological research about FFS have been directly or indirectly shared with institutions during the three scaling-up phases. The analysis indicates that there has been a process of scaling-up of the FFS methodology in Peru, which is contributing to improve farmer access to technological information. However, the institutionalization process has been influenced by several factors such as the limited access to formal training for facilitators, limited financial resources to cover the costs of FFS implementation, slowness in institutional decision-making to adopt the methodology as part of their strategies, field workers being overloaded with responsibilities, and instability within institutions. The quality of FFS depends on the quality of the training that facilitators can receive. Hence, one of the challenges for the future of this methodology in Peru is how to provide training to facilitators, taking advantage of existing experiences, so that the process of scaling-up and out could continue with sufficient quality.

Keywords: FFS, scaling-up, Peru.

Introduction

Facilitating farmer access to appropriate information has become a common preoccupation among donors and agriculture-related organizations in the last decades. The assessment of several research and capacity building projects has shown limited impact at farmer level despite of large investments in agricultural research and extension. Additional analysis of the reasons why impact has not been achieved shows that farmers have limited access to information, and when they have access to it, information is presented in ways that limit understanding and transformation into knowledge and decision-making. Several organizations have started to explore ideas to solve this problem. For example some participatory research and training methods began to be proposed since the 1980s. That is the case of the farmer field school (FFS) methodology developed by FAO initially to deal with information about rice IPM. The method uses principles of adult education, which were developed in the 1960s by Freire (1970), in order to facilitate farmers' understanding of complex topics such as the biophysical principles involved in pest control. For farmers to understand such concepts, they need to be actively involved in learning activities, through which they learn by observing carefully what happens in the fields, and based on the observations, they enhance their capacities to make decisions about management options (Gallager, 2003).

Since the 1980's the method has been scaled-up and out in several places; first to deal with rice IPM, but latter in a number of crops and subjects. Evaluations have shown positive effects on pesticide reduction and increased yields in several countries (van den Berg, 2004; Godtland et al., 2004); but also the approach has been criticized because of its relatively high cost (Ricker-Gilbert et al., 2008). Most of the studies published so far have focused on the process of how to run FFS or on the results of FFS at farmer level. However, studies about scaling-up processes and the factors that influence them have been limited.

This paper aims at analyzing the scaling-up and out process of the FFS approach using Peru as a case study, and it is based on documentary analysis and interviews carried out during 2008 with 37 representatives of institutions involved in FFS implementation.

Introduction of FFS in Peru

FFS were introduced to Peru in 1997 by the International Potato Center (CIP) to work specifically on potato late blight. This process was initiated by a CIP staff member who had worked on rice FFS in Asia. At that time, CIP had an agreement for cooperation with CARE-Peru, and NGO working in the Andes. CARE and CIP had worked since the early 1990s on projects related to integrated pest management (IPM). The previous experience of both organizations had shown that innovative training methods were needed to support farmer understanding of IPM. However, most of the experience up to that point was on insect IPM. When CIP started to work with potato late blight, the most important potato disease, the team members realized soon that working with microorganisms was even more complex and required specific training methods. Hence the FFS approach was the best bet at that time (Nelson et al., 2002; Ortiz et al., 2004; Ortiz et al., 2008). Figure 1 shows the three phases related to FFS scaling-up and out in Peru.

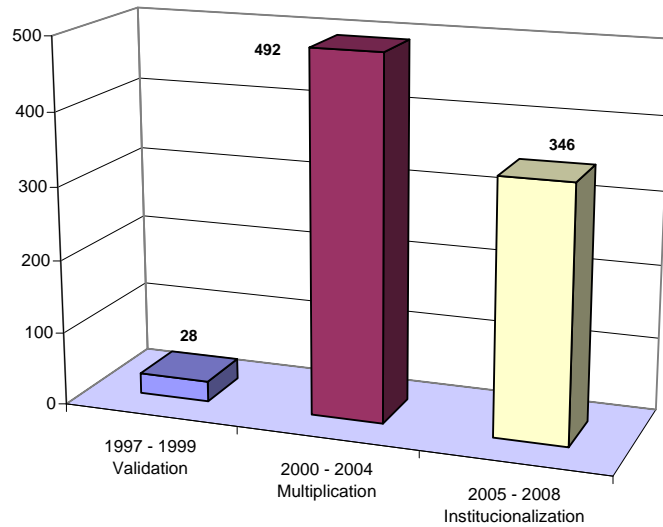


Figure 1. Phases for scaling - up and out of FFS in Peru, showing the number of FFS implemented between 1997 and 2008

The validation phase (1997-1999)

The main objective of CIP and CARE at the beginning of the FFS experience was to adapt the method to the potato crop and particularly to late blight management under Andean conditions. Both CIP and CARE had experience with IPM for managing the Andean Potato Weevil and the Potato Tuber Moth. However, they realized that working with disease control required developing specific teaching/learning activities and the FFS approach represented an option to test. CIP and CARE team started to develop teaching/learning activities in a participatory way following the principles of FFS. However, they realized that methodological backstopping was needed in order to do a better adaptation. Because of this, CIP established contact with FAO and agreed to collaborate for a training of trainer (TOT) course, which was organized in Ecuador in 1999 and lasted 3 months. One CIP staff member and 7 CARE staff members, along with 27 other institutional representatives from Peru, Bolivia and Ecuador participated in this TOT. The training helped the CIP-CARE team to continue adapting the FFS approach to the potato crop in the Andes. The adaptation process resulted in field guides (Bazan et al., 2002), which were validated in 21 FFS between 1997 and 2001 with the support of the International Fund for Development (IFAD). The project supported by IFAD was also implemented in Bolivia, Uganda, Ethiopia, Bangladesh and China, where the FFS method was also being adapted to the potato crop.

The main lessons of the validation phase were that the FFS methodology was effective in terms of contributing to farmer learning of new technical knowledge, which in turn was related to improved productivity (Godtland et al., 2004; Ortiz et al., 2004; Zuger, 2006). Another lesson was that farmers wanted more information about other pest-related problems such as other insects and diseases, and also about crop management in general, but this added complexity to FFS. This phase also showed that participatory research should to become integral part of the FFS process because of the need to test new technologies with farmers, particularly to control potato late

blight, which varied from site to site, according to agroecological conditions. For this reason, CIP called the approach farmer participatory research through FFS (Ortiz et al., 2004).

The replication phase (2000-2004)

Between 1997 and 2001, CIP and CARE had sufficient experience for thinking about scaling-up and out FFS for the potato crop in Peru. In addition, there were also similar experiences in Ecuador and Bolivia, and CIP also had FFS-related experiences in Asia and Africa at that time. In Peru, FAO initiated a large IPM-FFS project and key CARE staff who have learned about IPM with CIP was hired to support this project. In this way the CIP-CARE experience was shared and contributed to the replication phase. The FAO project expanded the scope of work in geographical and thematic terms. FFS were replicated in potatoes, but also in cotton, coffee, maize, citric fruits, peanuts, beans, banana, aromatic herbs, mango, artichoke and also in livestock (Figure 2). A total of 492 FFS were implemented directly or indirectly under the influence of the FAO Project between 2000 and 2004 and a total of 145 staff members from 56 institutions received training about the methodology as part of this project (Groeneweg et al., 2004).

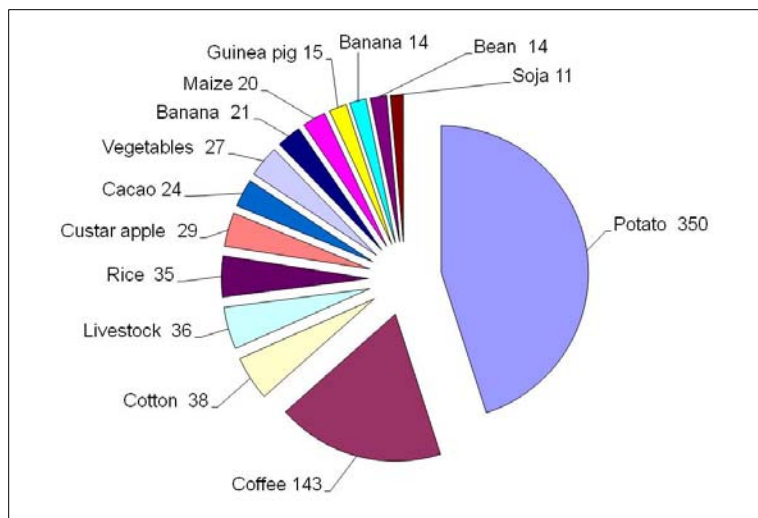


Figure 2. Number of FFS per topic implemented in Peru. 1997 – 2008

The main lessons of this phase were that for FFS to be implemented institutions needed training and funding, and that institutional efforts were needed to maintain or enhance the quality of FFS (Malarin, 2003). However, a limitation was that participating institutions still perceived FFS as something external to their normal structures and strategies, providing only part-time staff for the implementation. The FAO project provided a number of institutions with the opportunity of experiencing FFS and learning in the process, which contributed the further adaptation of the method to other topics and contexts. Douthwaite (2002, 2009) highlights the need to learn from experience in order to innovate, and that was what happened during the replication phase of FFS in Peru.

The institutionalization phase (2005 – 2008)

After the FAO project concluded, the scaling-up and out process entered a period of scarcity of external funds. However, at the same time, the investments made for training staff from a number of institutions, and the organizational learning process initiated in the previous phase started to pay off. As a result, institutions started to implement FFS using their own funds. For example, CARE developed a FFS project to manage native fruit trees, incorporating marketing concepts (CARE-Peru, 2006). At the same time, CIP and CARE started to work in another project related to assessing participatory research and training methods, including FFS, supported by IFAD, and implemented also in Bolivia, Ethiopia and Uganda. Results of this project indicated that for participatory research and training methods to succeed, the methods should facilitate farmer access to new knowledge, skills and technologies to solve their main problems. In addition, this project also identified some factors that constrain institutionalization of FFS, for example, limited funding sources, which influenced a limited logistic support for FFS implementation, misconception among institutions that field staff could run FFS as a part-time activity on the top of their normal duties, time constraints on the part of facilitators and researchers involved was also highlighted, because this type of method requires relatively more preparation, which has implications for its cost. Staff instability within institutions was also indentified as a limiting factor because it did not allow facilitators to grow in their skills and interest about participatory research and training methods. In addition, changes in, and discontinuity of, institutional policies influenced FFS implementation (Ortiz et al., 2008; Ortiz et al., 2009).

Despite of some of the limitations described above, a total of 35 government, non-government and private organizations reported having implemented FFS in 2008. The topics covered have increased including crops such as organic banana, soja, quinoa, grass for livestock, organic vegetable production, native fruits, and other topics such as agro forestry, Peruvian guinea pigs and pig production, management of fish farms, food security, nutrition, marketing and family health (Figure 2). This figure shows that some of the new topics in which FFS have been used include cash crops and other income generation activities (case of coffee, organic banana, cacao, vegetables and fish farms), which represent a shift from the original orientation to staple crops, such as potatoes, during the validation phase. These 35 organizations have already inserted FFS principles as part of their formal operational procedures and plans. Therefore, there is evidence to claim that an institutionalization process of the FFS methodology is happening in Peru. Some preliminary lessons of this phase indicate that the FFS approach has sufficient flexibility to be adapted to a number of needs, topics and contexts, including income generation and market oriented activities. However, as the number of organizations interested in FFS increases, there is also need for having more trained facilitators. One of the challenges is how to continue a process of training which can ensure sufficient number of facilitators who could use and implement quality FFS.

Concluding remarks

After ten years of the introduction of the FFS methodology to Peru, an scaling-up process has happened and a number of institutions had access to training about this approach, and have included it as part of their formal plans. At the same time, a scaling-out process has occurred in terms of the number of FFS implemented, which were 4 in 1997 and a total accumulated of 866 implemented up to 2008. Given the interest among organizations about FFS, and the diversity of on-going experiences, there is the need to learn from existing experiences, share information, and try to form some formal or informal network of organizations interested in continuing the process in Peru.

As indicated above, a total of 866 FFS have been implemented between 1997 and 2008; assuming 20 participants in each FFS, this would mean a total of 16,062 participants. This number represents only 0.92 % of total farmers in Peru, and if we look at only potato farmers, about 1.1% would have been reached through FFS. Therefore, there is still a long way to go to increase coverage, which calls for a better interaction and coordination among local, regional and national government institutions with NGOs and the private sector interested in this methodology and agricultural development in general.

The initial methodological research outputs of the CIP-CARE experience have resulted in outcomes related to methodological innovation by a number of research and development oriented organizations in Peru. The challenges related to the scaling-up and out of this method in Peru include aspects such as the need to have more stable sources of funding for implementing FFS. There is hope that this may happen if the method could become part of the activities of regional governments such as in the case of Ayacucho region in Peru. Another challenge is how to continue providing training to new facilitators and institutions interested in the methodology. At the moment, there is a lack of training sources, which may have influenced negatively the quality of FFS. The method has sufficient flexibility and could be easily adapted to a diversity of topics, including specific market-oriented activities, but also could be used to facilitate farmers' understanding of, and preparedness for, climate change. However, FFS represent just one option, which would not be enough to solve the problems related to agricultural development. A combination of methods properly selected according to contexts and topics would be advisable to reach a larger number for farmers. For this purpose, research and development organizations should conduct methodological research jointly and learn in the process.

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