

Note: DRAFT VERSION, NOT FOR QUOTATION
Paper for International FFS Workshop,
21-25 October 2002, Yogyakarta, Indonesia

Institutional characteristics that affect quality of FFS, the case of an IPM Project in Peru.

Abstract

Peru is a country that shares social and political characteristics of many other developing countries in the region. Its rural community is largely composed by small-scale farmers that struggle with poverty. The national extension service has never been sufficient. NGO have taken a great part of the responsibility of bringing development to rural communities. Nevertheless, the results to improve the large rural population quality of life have usually been poor in terms of achievements.

FFS have been recently presented as an alternative to overcome one of the principal problems at farm level, crop pests. FAO IPM-FFS Project is responsible for introducing FFS in large scale in the country is a. Many institutions are participating in this effort.

This paper focuses on institutional management and its effect on the quality FFS. Its purpose is to uncover common management assumptions that are easily questionable, but seldom taken into account. Institutional approach toward its own *objectives* and *organization* are the key elements to successfully implement FFS.

Introduction

Historically Peru has been considered one of the cradles of IPM. The experience in the valley of Cañete at the end of the 1950's is world known. Success achieved in controlling cotton pests became a model to follow by other growers around the country. However, few years later a land reform dramatically increased the number of farmers. Farmer driven research centers were replaced by National research and extension programs. Technical experts became responsible for developing pest control technical packages. In spite of these and other reforms, the situation in rural communities did not change. Even though former peasants have become farmers, they have kept struggling with poverty. In the last three decades pesticides have been intensively used; nevertheless, pests have remained a cause for significant crop losses. Most attempts to turn the situation around have been useless.

The present situation in Peru is not so different from that found in other latitudes. The government is supported by a fragile democracy while international organizations insist on moving decisively towards privatization and the reduction in public expenditure. At the same time, there is a general mistrust of the political class together with a rapid degradation of natural resources...Extension services are insufficient and NGOs take a great part of the responsibility on bringing development to rural communities.

Farmer Field School methodology was recently presented as an alternative to improve results of farmer training programs. More than 20 institutions from the public and private sector have accepted to give them a try. These institutions vary in size and orientation, but share a common difficulty, they are short of financial resources. Nevertheless, FFS could

become a story of success in terms of achievement and sustainability. Farmers can greatly benefit from institutions, but the approach has to change from productivity towards quality.

This paper focuses on institutional management and its effect on the quality of FFS. The information is presented in general terms and uses examples taken from the experience of FAO IPM-FFS Project in Peru initiated in year 2000. The purpose is to uncover common management assumptions that are easily questionable, but seldom taken into account. Importance of institutional *objectives* and *organization* are vital in terms of quality of FFS and other activities. Nevertheless, institutions keep repeating common management mistakes that have already been analyzed and/or overcome by successful commercial companies.

Definition for quality FFS

Quality is often seen as the fitness for purpose of the product to the customer's requirement. Therefore, quality FFS will always be expressed in terms of compliance to farmers expectation on training results. FFS participation significantly impacts knowledge on pests and skills to implement IPM practices. Farmers with higher levels of knowledge have significantly higher levels of productivity (Godtland *et al*, 2001).The ideal IPM-FFS training program could be easily defined in the words of farmers: *"...they provide basic scientific conceptual frameworks and knowledge in very democratically run field groups... and of course because farmers make more money with less inputs"* (Gallagher, 1999).

Quality parameters can be explained as requirements to be followed during the implementation process to assure a quality training. The following list of parameters was developed by the IPM Project working team and reviewed by their facilitators.

1. Training topics are chosen in accordance with farmer and community interests
2. Training sessions are performed during the whole season or beyond
3. Facilitators and farmers are motivated to share their knowledge
4. Most learning activities are conducted in a shared field
5. Expertise in agroecosystem analysis is developed
6. Participation with gender equity is promoted
7. Farmer experience is integrated in learning session
8. The learning cycle is completed for each training topic
9. The four IPM principles are respected in each practice

How Institutional objectives influence the quality of FFS

Most FFS implemented by FAO in Peru were conducted through institutional projects. The Institutions that participate in these projects are varied. They belong to either public or private sector. Perhaps the most important feature of these institutions is the assumptions behind the role they have chosen to play in the society. Their institutional objectives and approach towards the achievement of goals have great influence in the quality of their farmer training programs.

Defining what? and for whom?

Every productive organization has an overall objective, a reason to exist, supported by the *need* of a group of people or a part of the society. Accuracy in identifying these needs and their ability to fulfill them results in sales of products and/ or services for the commercial companies. The natural selection of the best -fitted institutions is made by customers. They define the best choice based on price and their perception of quality of any product or service accessible to them. Thus, the key factor is to understand what the company's culture and production capacity are. After that, the target customer has to be identified and offered with best price and quality, without the sacrificing investors' revenues. In simple terms it is necessary to answer *what and for whom* questions, taking care to choose the right target and to limit over-expenditure of time and money.

However, when it comes to help poor rural communities, -can we use a commercial approach? Is it correct to think commercially? -. The answer is yes. In practice many organizations have benefited from this approach. It is common for NGOs to use their resources in marketing their services trying to attract "investors" or in humanitarian terms "donors". Even positive innovations in research have been explained as *client oriented* (Campilan, 1997).

The *what and for whom* question is crucial for institutions in quality terms. In the experience of the IPM Project in Peru, this is the starting point of inefficiency. Institutions with high expectations of their capacities are failing to insert the FFS methodology as an organizational strategy. In these cases, diversity overwhelms the provider. Poor communities come in different sizes, shapes, and specially in perceptions of what an improvement in quality of life is. The following examples of too ambitious institutional overall objectives are shown to clarify the concept of high expectations set by local NGOs:

- *"Promote and provide incentive to programs in favor of the poorest and facilitate their integrated development, based on the principles of justice, solidarity and respect for human dignity."*
- *"Promote the competitiveness of the small and medium scale dynamic farmers and strengthen democratic institutions, so that they are articulated to regional economical development processes."*

Institutions with such overall objectives have numerous programs. The programs could be as varied as farm development, health, financial loans, and training for production and leadership; all this in one single institution. This type of institution is not a recommendable

space for FFS where quality is taken into account. Under these circumstances, FFS gets too little attention because it is immersed in an intricate program arrangement. The bigger the institution the more difficult it is to give proper attention to FFS quality. Unfortunately, institutions, that create high expectations have an enormous ability to get funds by presenting themselves as experts in poverty alleviation. This opportunistic approach resembles the industries that look for gaps in the market without becoming specialized (Peters and Waterman, 1982). In reality, their ability to deliver quality will always be very limited. The only exception is when the institution is focused on education. When the institutional assumption is that education does improve the quality of life, then the quality of FFS can be manageable¹.

Less ambitious, but well oriented institutions, represent better potential for succeeding in quality terms. However, it is necessary that they take into consideration a significant change in their approach. Most development institutions or programs were created to help people. It is recommendable to turn this mission into *help people to help themselves*, becoming facilitators of development. This shift helps to introduce FFS principles in a more effective way. However, it will demand a redefinition of the roles of the majority of the institution workers at all levels (Thompson, 1998) , but in addition will demand a change in mentality.

A good example of institutions with rational overall objectives, comes from those linked only to agriculture. Independently of their size or being public or private, these institutions have found a real potential in FFS, especially as a way to better interact with small scale farming communities. These organizations are reshaping their programs with difficulties; nevertheless, they have agreed to include FFS in their operative plans.

Management by objectives vs quality management

Many institutions associated to rural development in Peru are familiar with planning by objectives, mainly because most international donors demand this approach. The most common tool used for planning is the Logical Frame Work Matrix (LFWM). Among other advantages the LFWM provides a way of checking whether the operation has been well designed and facilitates monitoring and evaluation. There are also more modern approaches used in Peru such as the Metaplan-Method, an Objective Oriented Project Planning (OOPP) technique designed to deal with communication problems, applicable for planning, re-planning and project appraisal (Hermans, 1999).

Under common circumstances, most institutions monitor and evaluate results based on operational plans once or twice a year, depending on the management strategy. OOPP techniques provide “accurate” means to measure goals achievement with *objectively verifiable indicators* (OVIs) by using the *means of verification* (MOVs). The assumption behind OOPP is that all products are measurable in quantity, quality, time, place and target group, allowing assessment teams to carryout cost-benefit analysis. In reality, management by objectives is oriented toward productivity, and disregards real quality requirements.

¹ Originally FFS, *Sekolah lapanga*, was created to reflect educational goals

In management by objectives project coordinators are encouraged to produce results in terms of products. To better understand the emphasis made in the local institutions, here is an example taken from a monitoring and evaluation manual on the meaning of the word result (product): “.. *they are the goal of the project. Their production is a good manager duty*”. In terms of a LFWM, the objectively verifiable indicators are then the ultimate evaluation tool. Under these circumstances FFS are commonly assessed by number, rather than by compliance of farmer requirements in terms of quality training. What is the value of the numbers if the training is not having a real impact on farmer decision making capacity?. Lack of or limited impact on farmers is a waste of time and money for institutions and rural communities, and can not be measured by a result oriented monitoring program. The cost of quality is often high and not quantifiable (Bendell, 1998).

Biocontrol without control

The National Program for Bio-control (PNCB) measures its results by number of bio-controller releases and area coverage. To achieve its goals, the PNCB uses a force of 37 bio-control field promoters in different valleys. Their experience in convincing medium and large scale farmers to include biocontrol in their IPM strategies could be considered successful. However, the PNCB has failed to reach small scale farmers (95% of the rural population). To overcome this problem they agreed to send 10 “promoters” to a FFS facilitator course. After implementing their first FFS, PNCB promoter-facilitators agreed that FFS was really effective in improving small-scale farmer awareness of the importance of natural enemies in their fields. Nevertheless, the PNCB has compromised with a bank of development to achieve the pre-determined results. Thus, PNCB will remain with its traditional extension strategy.

When management by objectives is combined with *scientific management*² where experts define the role of workers, the result is a top-down inflexible and ineffective system that limits real human potential (Ishikawa, 1985). In our experience, many extension workers are aware of limitations and problems in the design and delivery systems of training services, and often have simple common sense options for their improvement. However, they have very little space for questioning institutional planning design and their own job descriptions. Institutions that limit the access of extensionists to the decision levels can be repeating the same mistakes over and over again. This is very common in large centralized governmental organizations, where unnecessary layers of bureaucracy exist and limit their ability to be flexible and responsive (Mizaur, 1992).

To assure quality FFSs, quality management principles have to be adopted. The organization needs to improve its internal systems making it more sensitive and dynamic:

1. Customer orientation at all institutional levels
2. Emphasis on team work
3. Prevention of errors rather than detection and correction.

² As proposed by Frederic Taylor in the 19th century

4. Barriers that limit access to understand farmers thoughts and expectations have to be broken down.
5. Participatory methods are not only applicable to the *external customer* (farmers), but also they have to be considered for the *internal customers* (institution workers).

Quality management system can be appraised, certificated and even prized. The industry has already shown the way to achieve better quality by using the ISO 9000 certification and other similar tools. The emphasis is made in the appropriateness of the production-delivery system not in the product (Drummond, 1992). For the most committed organizations, farmers' opinion, in terms of training relevance, should be the ideal information source for result assessment on FFS.

How the Organization influences the quality of FFS

FFS were designed to achieve good quality training. As a methodology FFS is reliable in terms of improving farmer knowledge and skill on agroecosystem management. When the delivery system is functional, training results will always be satisfactory for the farmer.

The institutional system behind the FFS, the road to quality loss

One of the most common arguments institutions use to explain their inability in scaling up with FFSs is in budget limitations due to reduction in international cooperation funds or cuts in government expenditure. This picture is not exclusive to Peruvian or Latin American realities. In fact the sustainability of FFS and other extension programs in Asia has been qualified as disappointing in a recent study (Quizon *et al*, 2000). Would it then be possible to remain engaged in search for quality when the money is short? Is it possible to actually increase the number of FFS without reducing or even improving their quality?. Certainly one of the key factors that has made quality management popular in the commercial companies is its unique and effective approach in cost reduction and profit increase. Quality begins by minimizing losses. The value of quality is inverse to the losses it causes to the society once it is delivered (Taguchi and Wu, 1985).

Investment in rural poverty alleviation has to be optimized in terms of delivery. Shortage of financial resources is a reality and poor results in improving the life quality of rural communities are unacceptable. More than ever, it is necessary to review institutional systems in the search sources of unnecessary overspending of time, money and other valuable resources. Organizations and systems that allow (and even encourage) deviation from what is really required, spend a great deal of money doing wrong and doing it over again (Crosby, 1979). Organizational sustainability comes from more dynamic processes, the change has to increase the production capacity; thus, it is possible to achieve more with the same resources (Drummond, 1992).

Money and goodwill

Regardless of the benefits of FFS to rural communities, one of the biggest NGOs operating in the Peruvian Andes, laid off almost all their facilitators when financial aid for one of their largest programs came to an end. Several FFS were left half implemented. Nevertheless, the same NGO wanted to carry on working with FFS in another area, training new facilitators. An international donor has already granted financial resources for their new project.

Alternatively, several local NGO, - with a similar financial situation -, have chosen to remain open and implement more FFS in communities of the same area. Their commitment with helping these communities has brought them to an unexpected source of financial support for their FFS, the local governments.

The reason why it is so difficult for institutions to deliver quality training rests in several assumptions kept by institutional management. When asked about how they look after quality, most answer were as follow:

- *Technical experts are taking care of quality of training*
- *We already considered quality in our planning*
- *Our personnel is professional; they all have a degree in Agricultural Science*
- *We have several years in this area, our experience is our quality guarantee*

In reality the main road to quality loss is the system itself, involving all the organizational system parts regardless of whether these are technical or operational. To built an efficient system, it is necessary to understand how the organization works. The system design (not the people), is responsible for the results of that system (Deming, 1993).

No development project plan will ever match the real requirements of rural communities because they are diverse and perception of needs vary from one community to another (Lightfoot et al, 2001). Therefore, the organization needs to be dynamic and flexible to better respond to the necessary changes in direction. The rural world can not be visualized as a bumpy road. It is more like a wild river. Thus, the organization can not be driven as a car, where the manager is the only responsible for setting the direction and the rest of passenger have to assume a passive role. In reality it is more like a river raft were the whole team is responsible, independently of whether the rower is sitting in front or at the rear. Awareness of all senses and coordination are necessary to avoid capsizing.

Problems that limit institutional performance may vary from one institution to another. Among the most common are bureaucracy, information and people mismanagement:

Waste of time is more costly than waste of money

Bureaucratic issues have to be severely questioned in governmental organizations, and even in some NGOs. Often, the administrative norms and rules are so restrictive and bureaucratic that they impair the use of common sense by their managers and employees. A great deal of

time and brain power management and top-technical staff is used to bring solutions to solve problems associated to the inflexible systems they work in...

" I have just a little time to help you with the participative research workshop, we are trying to preparing a project document and this is very demanding. The donor has requested a very detailed budget, they even want to know how much money we will spend on telephone calls".

Few experts are available in rural development ,-considering that Peru has a rural population of 2 million people-, and it is not wise to use their time and skills to discover mechanisms to avoid bureaucratic delays. The "knowledge economy" approach is needed to avoid experts solving problems that are not the real issues (Mitroff, 1998). It is hard to believe the amount of time wasted on bureaucratic issues. Nevertheless, the cost is seldom taken in to account when an efficiency appraisal is conducted.

Overflow of information is as bad as lack of information and more costly

Management of information is quite inefficient in the majority of institutions. Written reports that are requested with no specific purpose other than the necessity to gather information for future evaluation is inefficient. Many monitoring and evaluation systems are developed to satisfy the requirements of the donors or institution managers. Instead all information should be aiming for quality improvement in the performance of the institution. Therefore, the internal communication system has to be built with this purpose in mind. Bottom to top reports are useful only when feedback arrives just on time to improve the performance of an employee or even a whole division or program. Usually information does not only not arrive out of time, it is often false or biased because the whole system is demanding for results. Therefore, problems are hidden or intentionally omitted from field reports. A very outrageous example of this was given by a former worker of a local NGO...

" I reported the real problems in spite of what my colleagues advised me to do, I was sure I was doing the right thing. The NGO fired me claiming that I was an inefficient worker".

Information needs to be understood as a source for further improvement. If the information is requested under a supervision scheme, there is a high probability that it will be biased or false. This probability increases when mechanism of fear or reward are attached to the reporting system.

Unmotivated workers are less productive than motivated ones

Regardless of their wage, people are intrinsically motivated to perform well when the work is meaningful (Coens and Jenkins, 2000). Motivated workers are evidently more productive. Nevertheless, in many institution there is little interest in human resources approach to keep personnel motivated.

Vertical management for instance, produces a sense of fear in the middle and lower levels. Many local Directors that appreciate the benefits of FFS for farmers are reluctant to take

action because they fear that a slight deviation from annual plans would negatively impact their image at top levels of their institutions.

Systems that fail promoting team work make workers question the relevance of their role. This can be explained in the words of a second rank Director of a National Institution...

“Recently I find out that a new plan for the next six years has been approved, but I was not consulted. Top Directors write whatever they want but make us responsible for results...this new plan is not going to work”.

Education is an effective motivator. However, from the experience in Peru, few facilitators are trained or have access to useful training material. Without the sense of self-improvement personnel lose confidence in their own skills. In addition, political use of development programs, sudden cuts in budget, and other similar situations are a cause of frustration. No workers can stand uncontrollable internal uncertainty without reducing his or her productive capacity.

The facilitator, the interface

Understanding FFSs as a “service” strategy, where the customer is the farmer, and the delivery system is the institution, can help to define the real value of the facilitation role. In technical terms, the facilitator is the interface (Norman, 1984). As important as the keyboard on a PC, the facilitator is the main entry point for all the information regarding farmers and the rural community to which he or she belongs. Facilitators are in an unbeatable position to realize the diversity of problems and expectations of farmer groups in terms of results. Moreover the facilitator is the main responsible for interpreting the quality perception of the farmer. Facilitator performance is decisive in terms of results, whenever the expected result is quality training.

To get the maximum benefit from facilitators it is necessary to break down all barriers that limit his or her performance in terms of dedication and motivation. In the Peruvian experience, the majority of facilitators have been supplied by their institutions with basic equipment to perform their jobs. However, time has always been the most limiting factor. In extreme cases facilitators have been asked to implement FFS during weekends. All facilitators complain to be overloaded with work. This undermines facilitators capacity to conduct well their sessions, therefore, affect the quality of training. In addition, they are closely supervised in terms of results achievement, but almost never consulted for recommendations to improve their own working performance.

Confidence and trust pay off. When facilitators were asked for individual reports they omitted valuable information because they fear to demonstrate limited skills. Project has greatly benefited from sincerity and openness. Valuable information came from facilitators themselves when asked for help in quality improvement. Even though their first reaction was to request for more funding, the situation changed when cause-effect analysis was conducted. The following example, a “fishbone diagram”, was used to identify limitations to achieve a quality FFS (Figure 1).

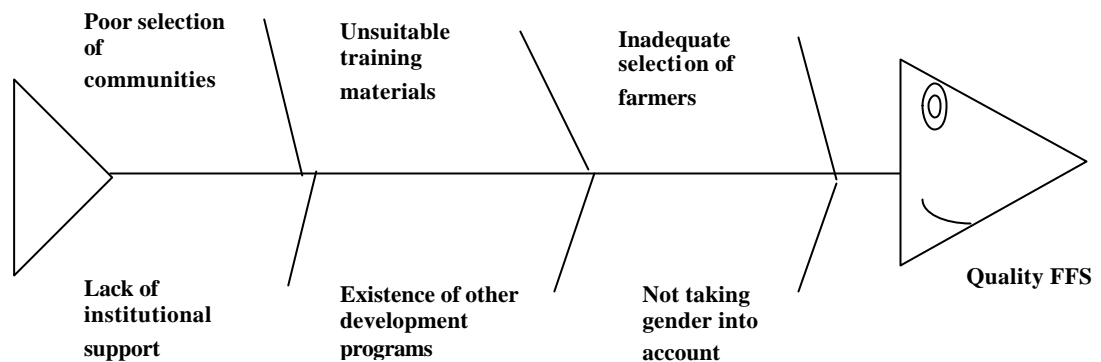


Figure 1. Fishbone diagram used to analyze the limitations in achieving a quality FFS. FFS Planning Workshop with Facilitators - 2002. Cuzco-Peru.

Facilitators were extremely motivated when they saw they can play a role in problem solving and assumed responsibility to improve matters that concern them. This is possible only when there is a true compromise to give feedback and not under supervision terms. When true information is available it is possible to take corrective actions and move one step further.

Conclusion

FFS methodology was designed to achieve results in terms of quality training, and have proved to be reliable in the practice. Nevertheless, institutions usually over estimate their capacity to deliver and/ or under estimate the relevance of their organization as a cause of lack of results . To assure FFS quality, institutional management has to become more dynamic and responsive. A thorough analysis of their own systems and processes is the only way to achieve this. Quality has to take precedence over productivity. Responsible organizations that truly want to benefit farmer communities will have to root out their old management principles. Once this happens, they will have a real chance to successfully fulfill the role they play in the society.

References:

Bendell, T. (1998) Quality, Total Quality Management and the Quality Gurus. Department of Trade and Industry. UK.

Campilan, D. (1997) User participation in agriculture R&D: turning the principle into practice. Local R&D, Institutionalizing in Rootcrop Agriculture Research and Development. UPWARD, Los Bananos, Laguna, Phillipines.

Coens T. And Jenkins M. (2000) Abolishing Performance Appraisals, Why they Backfire and What to do Instead. Berret-Koehler Inc. California. USA.

Crosby, P. (1979) Quality is Free. Mc Graw Hill. New York. USA.

Deming, W. (1993) The New Economics. MIT Press. Massachusetts. USA.

Drummond, H. (1992) The quality movement. Kogan Page. London. UK.

Gallagher K. (1999) Farmers Field Schools (FFS): A Group Extension Process Based on Adult Non-Formal Education Methods. Global IPM Facility, FAO- Rome.

Godtland E., Sadoulet E., de Janvry A., and Murgai R. (2001) Testing the Impact of Farmer-Field-Schools on Knowledge: An Empirical Study of Potato Farmers in the Peruvian Andes. The World Bank

Hermans G. (1999) Objective oriented planning: a team approach. ICRE-IAC, course manual "Management of Extension services,1999". Wageningen. The Netherlands.

Ishikawa, K (1985) What is Total Quality Control? The Japanese Way. Prentice-Hall. New Jersey. USA.

Lightfoot C., Fernandez M., Noble R., Ramirez R., Groot A, Fernandez-Baca E., Shao F., Muro G., Okelabo S., Mugenyi A. (2001) A learning Approach to Community Agroecosystem Management. In C. Flora(ed) Interactions Between Agroecosystems and Human Communities. Press/Lewis. USA.

Mitroff, I (1998) Smart thinking for crazy times. Berret-Koehler. California. USA.

Mizaur, D. (1992) Is Quality Government Possible. October 1992 issue of Looking Ahead. Federal Quality Institute. USA

Norman, R. (1984) Service management. John Wiley. Chichester. UK.

Peters, T. and Waterman R. (1982) In search for excellence; Harper and Row. New York. USA.

Taguchi G. and Wu Y. (1985) Introduction off-line quality control. Central Japan Quality Association. Nagoya. Japan.

Thompson, J. (1998) Participatory Approaches in government bureaucracies: facilitating institutional changes. In: Who changes?- Institutionalizing participation in development . Intermediate technology publications. London. UK.

Quizon J., Feder G. and Murgai R. (2000) A Note on the Sustainability of the Farmer Field School Approach to Agricultural Extension. The World Bank