### GLOBAL TRENDS AND CHALLENGES IN EXTENSION: A FARM MANAGEMENT RESPONSE

David Kahan The Food and Agriculture Organisation (FAO), Rome, Italy. Email: David.Kahan@fao.org

### Abstract

The paper reviews the dynamics of change in the global environment and its impact on the nature of farming in developing countries. Since farmers are working in a more competitive environment in order to increase income there is a need for their farm businesses to be profitable and adaptable to market conditions. Farmer's skills and capacity to better cope with this competitive environment need to be enhanced especially in the subject area of farm management. There is a need and challenge to broaden the technical scope of extension to better equip farmers to produce for the market. The paper discusses the response taken by FAO to meet these challenges. A strategy has been developed aimed at strengthening the capacity of extension workers and farmers by preparing and disseminating farm management training and extension materials adapted to the needs of specific countries.

Keywords: market orientation, farm management, extension, training.

### Introduction

The dynamics of change in today's global environment have had a noticeable impact on the nature of farming. Farmers are working in a more competitive environment where in order to increase income their farm operations need to be profitable and adaptable to market conditions. The force of circumstances is placing an emphasis on the emergence of commercial agriculture. Moreover, with rapid population growth, urbanisation and economic development, the demand for food and raw materials has increased remarkably. Consequently, a much higher proportion of farmers have entered into the market offering farm products for sale. With the increase of market-orientation and commercial production, more complex and specialised services are required. These trends have had a direct effect on both the demand for skills improvement and competencies to promote market oriented farming.

Liberalisation and globalisation mean that farmers face greater opportunities to sell their products in the market. Farmers have to compete more rigorously with others and those that can manage their farms in a market-oriented way will be in the best position to take advantage of opportunities which could earn them more money. However, in doing so, farmers face competition as well as risks. Farmer's skills and capacity to better cope with this competitive environment need to be enhanced especially in subject area of farm management.

Farm management, however, has remained a neglected domain of agricultural extension services, particularly in the case of programmes addressing the large majority of family farms in developing countries. Extension has often limited itself to the transfer of technologies, on the presumption that lack of appropriate modern technology is what farmers in these countries need most. Whatever the rightness of this position in the past, times have changed; family farms have become more and more integrated into the market economy.

Structural adjustment has also been a dynamic that has also impacted on the composition of the farming sector resulting in public sector retrenchment of agricultural extension towards a greater involvement of civil society and the private sector. However, in many country contexts, particularly in rural areas where

poverty is widespread, the private sector has had difficulty in effectively replacing the public sector. Public sector extension services invariably continue to have an important role and one that needs to be supported and strengthened.

This paper attempts to look at some of the challenges facing agricultural extension and experiences with some of the responses initiated by FAO.

## Challenges

### Market Oriented Agricultural Advisory Services

The mandate of almost all national agricultural extension services remains the transfer of agricultural technology. As long as a new technology can raise yields it lies at the backbone of extension services. As a result of market liberalisation and globalisation pure production advice is becoming less important and the very definition, scope and technical focus of agricultural extension has been changing. Marketing and farm management have rapidly gained predominance over the last two decades. With the historically low food prices and increasingly urbanized populations, narrow production-oriented food security strategies for extension services are less relevant than in the past. Extension services are being expected to address an increasingly diverse range of client needs that reflect their diverse livelihoods. More emphasis needs to be laid on developing the capabilities and capacities of farmers in terms of problem solving, management and decision-making.

## Extension Personnel Around the World in Need of Training

Worldwide, there are more than 600,000 extension workers comprised of administrative staff, subjectmatter specialists (SMS), fieldworkers, and some multipurpose unidentified people. The ratio of SMS to field staff is low in Asia, Africa, the Near East, and Latin American countries, varying from about 1:11 to 1:14. These figures can be compared against a ratio for countries of Europe and North America (varying from 1:1.5 to 1:1.6) (Swanson et al., 1990). Deficiencies in knowledge, skills, and ability among extension personnel are remarkable. In the early 1990s surveys conducted showed that on about 39 per cent of the extension personnel worldwide had only a secondary-level and 33 per cent an intermediatelevel education (Bahal et al., 1992). Within each developing region, there is a wide variation in basic academic qualifications of frontline extension workers, SMS, and administrators as are the differences in training received. The poor educational background of extension personnel necessitates regular training.

## **Demand-Orientation**

The vintage practice of delivering common technical extension messages to all farmers using a single extension methodology is also being challenged and gradually replaced by client-focused approaches. Differential strategies are being promoted that deal with each category of client group individually with their different extension needs: subsistence farmers, commercial farmers, rural youth, women, rural poor, physically disabled and lately HIV/AIDS-affected farmers' families. This has given rise to terms like client-oriented extension, and gender-sensitive extension. Moreover, in certain countries of sub-Saharan Africa, the HIV/AIDS epidemic has changed the very composition of extension clientele, bringing young orphans, widows, physically weak, elderly and ill persons in the fields. The epidemic is not just a health problem but is a serious development issue challenging the validity of present agricultural extension approaches.

### Structural and Functional Changes

There is also an increasing recognition of the need for national extension systems to broaden their mandates to extend beyond technology transfer and develop the human capabilities and capacities of men and women farmers. The organization, mandate, and practices of agricultural and rural extension systems are changing worldwide and it is vital that countries keep pace with latest developments. Extension services need to be more unified in the interest of optimum utilisation of resources and an efficient bureaucracy. Indeed, farmer's time cannot be wasted through multiple individual visits of extension workers.. The creation or strengthening of multi-disciplinary subject-mater specialist teams including extension workers trained in marketing and farm management extension during decentralisation of extension services in a number of countries, including Indonesia and the Philippines, is a popular move. The challenge of introducing appropriate institutional measures is being recognised by governments as is the need to reform the national agricultural extension systems to respond to global changes. Many governments have started to embark on processes of decentralisation and on ways to broaden the range of advisory services on offer to farmers, while at the same time ensuring that services are organised that can better respond to client demands. As noted previously, in many parts of the world pluralistic extension patterns are emerging. However, the roles and responsibilities of the public and private sectors have not been adequately defined. This also requires that appropriate organisational structures are established to promote active collaboration of stakeholders in both planning and implementation of extension programmes.

### Information Technology Break-Through

Information technology is tremendously powerful and needs to be harnessed by extension organizations for the benefit of farmers. Agricultural extension services need to exploit this potential to strengthen their own capacities and to educate the rural populations who have access to media. Extension organisations in developing countries have traditionally faced two major problems in transferring technology and information. These are the physical distances in rural areas and the lack of transportation facilities. Information technology has the potential to erase these physical barriers by developing and applying appropriate interactive information mechanisms. The challenge is how the powers of information technology can be harnessed for the benefit of both extension agents and farmers without compromising the importance of human and unique local factors.

#### Negative Attitudes Amongst Extension Workers, Donors And Policy Makers on Market Orientation

The attitude of donors, government policy makers, public managers and farmers towards business advice and marketing is also an issue that has impeded change. These stakeholders still regard business in a suspicious way and as inherently exploitative. For smallholder farmers and especially those that are resource poor, market orientation is seen as a risky and disturbing concept for the public sector to accept. Development agencies are also often ready to directly finance extension services to support donor driven initiatives and this as a matter of strategy has been contradictory and proven to be financially unsustainable. The prospects for an emphasis on farm management advice in extension services require attitudinal changes amongst all parties in order for market driven approaches to take hold in a sustainable way.

#### Response

#### **Regional Consultations and Studies**

In the early 1990s a series of FAO sponsored Regional Expert Consultation Workshops were organised to provide insight into the provision of farm management extension services to farmers. This was

supported by country studies launched in Africa, Asia, Latin America and Central and Eastern European countries (CEE) regions. The specific aims of the studies were to: (i) review the current status of farm management extension; (ii) appraise farm management training materials; (iv) examine how farm management is covered in formal education programmes; (v) assess the needs and interests of farmers for farm management and more specifically for farm business advice; (v) appraise extension decision maker views on options for improving the provision farm management advice; and (vi) make recommendations for their improved provision.

In all regions the studies recognised that farm management is becoming increasingly important and the demand for management training and advice is high on the development agenda. However, they also noted the shortages of adequately trained extension personnel that limit the effectiveness of extension services and in particular the lack of skills in farm business management. This was seen to be true at all levels: farmers, field extension workers, farm management specialists, their supervisors and regional and national programme managers. Also within and amongst private and NGO extension service providers the capacity and skills in farm business management were also seen to be weak. The studies also pointed to a lack of a concerted strategy resulting in the design of ad hoc training and extension programmes in many countries (Berdegue 2005). For farm management extension to be effective capacity building was identified as critical.

The studies went on to highlight deficiencies in the design of training programmes and content of the training materials developed for extension workers and farmers. Training materials were sparse in their availability and of poor quality. The materials used in various training programmes tended to focus on farm management topics incorporated within Organisation of Economic Cooperation and Development (OECD) country farm management programmes. These were often found to be less relevant to the situation of smallholders in developing countries. Little effort was placed on adapting the farm management materials used to specific farming systems and in way that took into account the varying levels of literacy and numeracy found amongst potential clients. While testing farm management training materials in West Africa, the conclusion was drawn that many farmers preferred symbols to works and numbers (Kunze D. 2002). This suggested the need for generic reference materials for extension workers, but with guidance in adapting them to the different needs and conditions at regional and country levels. The studies recognised that an eclectic range of training and extension materials were needed for farmers, extension workers and senior management decision makers so that the promotion of farm commercialisation could be dealt with in a systemic way.

As a result of the Expert Consultations and the findings of the regional studies FAO proceeded on a programme of curriculum development to produce regional training programmes in farm business management for trainers of extension workers in the Caribbean, Africa, Asia, the Pacific, Latin America and CEE countries. Farm management training and extension programmes have been incorporated to date, in over fifteen FAO projects globally and a portfolio of training materials prepared to respond to extension workers needs, taking into account the global trends and regional differences.

## Farm Management Training Programmes

Extension programme managers, extension workers and farmers are all targets of the farm management training and extension strategy. At the policy and programme management level, decision makers need to become aware of the increasingly important role of farm management in extension and programme design. At a lower tier the strategy calls for the preparation of training materials and design of programmes for trainers of extension workers in order to improve the capacity of the latter to work effectively with commercially oriented farmers. The third level is to develop information and training programmes for use by farmers and farmer groups through farmer to farmer learning.

More specifically the FAO training and advocacy strategy has been directed towards five levels of personnel:

- Training of farmers and farmer group facilitators
- Training of front line extension workers (public, private, NGO sectors)
- Training of trainers of front line extension workers
- Training of farm management and agribusiness subject matter specialists
- Awareness raising of policy makers and programme managers in the role of farm management extension and its practice and use.

The focus has been on the preparation of training materials to strengthen the capacities and skills of front line extension workers employed by ministries of agriculture, NGOs and the private sector working with farmers. Attention has been placed on training institutions and the trainers of extension workers as a way of ensuring sustainability. The training manuals aim at providing extension workers and through them farmers with an understanding of market oriented production as well as the skills and competencies needed to make profits and increase their incomes by farming for the market. They cover the principles of economics and the tools and techniques of farm management adapted to specific regional circumstances. The regional studies recognised that the emphasis on specific aspects of farm business management would need to vary depending on the location and duration of the training programmes. The FAO training materials and capacity building projects have also been evaluated and the training approach refined.

Recently FAO has also begun preparing training materials at farm level for use by farmer facilitators and farmer groups. The concept of the Farm Business School has been developed based on field level experiential learning throughout a farming year. The general format of the programme is a combination of self study guides providing technical information about given topics supported by field and class room exercises to reinforce the learning and practice skills.

## **Findings and Conclusions**

The evaluations show that as a result of the FAO training efforts carried out through field projects and training programmes, the standard of proficiency of extension workers in many countries has improved. The farm business management curriculum is generally well received and perceived by extension workers as both relevant and useful. However, in some situations the effectiveness of the programmes has been weakened by poor training design and organisation. Moreover, some participants have complained about the lack of follow-up training which is needed as an integral part of the extension service programme. Decision making skills cannot be provided to farmers as a single one off activity in isolation from a more comprehensive and long term capacity building strategy with back-up services and follow up.

In view of the need for additional staff in many public sector extension services, with better capacity and skills, a challenge is to impart a basic knowledge to a large number of extension workers. This has been inadequate and in effect seldom happens. It is very rare that training programmes are seen as part of a broader strategy aimed at creating both a critical mass of extension workers at field level and farm management subject matter specialists. This is a vital prerequisite to ensure its institutionalisation and sustainability.

Government and donors are in the best position to provide back-up services to service providers which include public, cooperative and private extension workers, local authorities, academic institutions, researchers and value chain actors (input suppliers, processors, traders etc.). Such services could embrace training of trainer's programmes, mentoring, testing new value adding technologies, providing analytical assistance and developing training and extension service materials. An important area of back-up service

is the training of 'core trainers'; the first rung of Training of Trainers programmes. This assistance is needed not only to support farmers in farm business management but all actors located along value chains. These services need to be provided on a continuous basis to cope with changes and challenges encountered.

Another aspect is the need to better integrate farm management into the work programmes of front line extension workers. In the South Pacific, in particular, the focus on farm management training by itself was seen to be inadequate and extension workers felt that business management needed to be better integrated with technical aspects of farm management. This absence was regarded as an impediment to attempts to entrench farm management decision support services in regular extension activities (Mc.Gregor A. 2002).

Following is a list of lessons that have been learned from the review and field programme experience with respect to farm management training.

- Training programmes should be designed on the basis of client demand. However, since farmers are often unaware of their own training needs, an important aspect of a programme should involve stimulating demand for the 'programme' services. By demonstrating the returns to be made from the training, demand can be stimulated.
- The content of training programmes must be tailor made to the needs and requirements of the target recipients, their level of literacy and ability to assimilate the information provided.
- The content of training programmes should be kept flexible and broadened in line with trainee demands. New topics of business management might be introduced that include contract negotiations, food quality, and food safety, technology development and niche market penetration. In all events these subjects would also need to be selected in line with client demand.
- Training materials should be reinforced by the preparation of extension materials designed for specific categories of learners reinforced with other media such as radio and television and methods such as individual contact with extension workers.
- Training programmes should be designed for different stages of the farm enterprise development process. Farm business development is a process of change that requires the development of different management and entrepreneurial skills at various stages of enterprise growth.
- New ways of building local capacities need to be explored. Guiding individual farmers through processes of self analysis and problem identification with the objective of enabling the participants to solve their own problems. This is ultimately more empowering than the traditional ways of building local capacities.
- Training of both field workers and farmers should be practical, continuous, regular, participatory and closely monitored. Priority should be given to short, practical and action oriented courses, and theoretical topics should be linked to practical applications and demonstrations. Extension worker training in farm management should occur on a regular basis. Training should be concentrated and provided to field workers in manageable doses.
- A particular challenge for farm management extension is that of building capacities to undertake facilitation. Competent local facilitators are rarely available and especially within public sector agencies.
- Training should be largely 'experiential', practical and problem oriented, simulating the reality of the situation of the entrepreneur as farmer and service provider.
- Finally training should be cost effective, and aimed at maximizing outreach. This can be achieved by utilizing local training capacity, organizing farmers into extension groups reducing the transaction costs involved. Outreach can be assured by bringing training to the clients in the rural areas and at times of the day convenient to the trainees. This may be done by sub-contracting service providers located close to the clientele, in the rural areas, or alternatively by establishing mobile training programmes. This will help to minimise the opportunity costs associated with the training.

The changing nature of agricultural extension makes a case for pluralism in extension service delivery and systemic approach to deal with different actors involved in specific sub-sectors or value chains. While all extension workers at different levels within the public sector extension services need to strengthen their understanding on markets, prices, demand and policies (Rasheed and van den Ban, 2000), there are other stakeholders situated in the value chain that also need to be reached. Training needs to be broadened to ensure that the capacities of other players in the chain are also developed. The role of the extension worker is wider and deeper.

Furthermore, farm management extension and training cannot be seen in isolation from formal training programmes conducted by universities, schools and colleges. Farm management is part of the curricula of the leading agricultural universities in most developing countries. Yet, the level of formal education in developing countries is often weak. The development of training programmes at university, vocational college and secondary school levels is vital to ensure the longer term development and sustainability of the discipline. By following the systemic approach there is a need to produce training and extension materials that are demand responsive, adapted to the needs of different stakeholders, in different development contexts.

'Good' institutional practices and mechanisms are also required to improve the public sector extension performance. This will require the design of a monitoring and evaluation system focusing on the capacity building of extension workers, farmers and other actors within the system, as an ultimate measure of outcome. As the implementation of farm management extension programmes is based on complex processes at different levels, involving large numbers of stakeholders, structures and mechanisms need to be developed in which the performance of the entire process of learning, adapting, reflecting is regularly reviewed and the activities, roles, and relationships of different actors and their overall effectiveness are evaluated. Stakeholders will need to assess together the performance of the actors in the change process. Platforms and processes to facilitate access to experiences are needed so as to create an open and transparent atmosphere of exchange and a shared joint vision for supporting farm commercialisation. These issues reflect the challenges for the future.

## References

- Bahal R., Swanson, B. E., Farmer, B. J (1990). The current status of agricultural extension worldwide. InB. E. Swanson (Ed.), Report of the global consultation on agricultural extension. Rome: FAO.
- Bahal, R., Swanson, B. E., & Farmer, B. J. (1992). Human resources in agricultural extension: A worldwide analysis. *Indian Journal of Extension Education*, 28 (3, 4), 1-9.

### Berdegue J. (2005) Analysis of Technical Assistance and Training Services for Production Systems Management Selected Experiences in Latin America, (2001) RIMISP. Santiago, Chile.

- Chwee C.P. (2003) Relevance and Usefulness of Farm Management Training in Enhancing Small Farmer Income in Malaysia. FAO Consultancy Report.
- E. Fleming. (2005)Relevance and Usefulness of Farm Management Training in Enhancing Small Farmer Income in the Pacific Region..
- E. Fleming and B. Hardaker.(2005) The Relevance and Usefulness of Farm Business Management in Enhancing Small Farmer Income in the South Pacific. FAO.
- Kunze. D. (2002) Farm Management in Extension in Africa, FAO, RAF Publication, Ghana

- McGregor A. (2002). The Role of Farm Management in Agricultural Extension in the Pacific Islands. SAPA Discussion Paper 1.
- Rolls M. (2001), Review of Farm Management in Extension Programmes in Central And Eastern European Countries.

Rasheed and van den Ban, 2000. Reorienting Agricultural Extension Curricula in India

Shiluli M. C., (2005), Farm Management Training Impact in Kenya, FAO Consultancy Report.

# FAO Case Study Articles

- Dr. Bashir Ahmad, Farm Management in Agricultural Extension, Pakistan
- Farm Management in Agricultural Extension and Extension Services, Bangladesh
- I.J.Singh, Farm Management in Agricultural Extension, India
- Chua Piak Chwee, Farm Management in Agricultural Extension, Malaysia
- N.F.C. Ranaweera, Farm Management in Agricultural Extension, Sri Lanka
- Farm Management in Agricultural Extension, Vietnam.
- Arunee Pinprayong, Farm Management in Agricultural Extension, Thailand
- Torres, Farm Management in Extension, the Philippines
- Simplice Davo Vodouhe, Farm Management in Extension Programs in Benin
- Aly Ouedraogo et Adama Belemvire, Farm Management in Extension in Burkina Faso
- Patrick Dugue, Study of Management and Marketing Support Methods for Farm Households, Ivory Coast
- Miaman Kone, Farm Management in Extension in Ivory Coast: The Case of Anader
- Kofi O. Aduse, Farm Management in Extension: The Case of Ghana
- T. H. Giorgis Gutema, Farm Management in Extension in Ethiopia
- Johanesa Rasolofonirina, Commercial Farm Management in Extension Programs, Madagascar
- Ben Mkomba Review of Farm Management in Extension in Malawi
- Keffing Sissoko, Y. Kone, B. Kone, The Experiences in Farm Management in Extension, Mali.
- Patrick Kormawa, Timothy Awoyem, L.A. Akinbile, Farm Management in Extension in Nigeria: An Assessment and a Strategy for Improvement
- David O M Gooday, Country Review of Farm Management in Extension: Swaziland
- Andison M. Ngalafarm, Management in Extension: a Brief on Zambia