What is the future for management advice for family farms in West Africa?

Guy FAURE (CIRAD Montpellier France)

Abstract — The evolution of management advice for family farms in West Africa. The orientations of farm holding in a context of a more open economy create a demand by farmers for advice that goes beyond technical aspects. The gradual withdrawal of states from extension services also encourages the rethinking of support facilities for producers. As a response, several experiments on advisory services for family farms are underway in West Africa. Beyond the variety of objectives and intervention procedures that are analysed in this paper, common features shared by many of them emerge and contribute to strengthening producers' capacity for reflection and action. These procedures involve specific intervention methods and tools aimed at formalising the management process and enhancing learning dynamics. In this respect, they are aimed at positioning farmers in the centre of the facility to formulate his needs, define his objectives, take decisions and appraise his results. Some experiments aimed at strengthening farmers' governance of the facilities at both local and global levels are giving promising results, with strong farmer dynamics and a significant improvement of farm performance. However, these procedures can only lead to change if agricultural policies are stimulating for family farms, in particular in terms of agricultural extension, the financing of advisory services and access to loans.

Management advice for family farms

The central role of family farms

The environment of agriculture is evolving rapidly. Farms are increasingly market-linked with a growing proportion of production being sold (export crops and, increasingly, food crops and animal production for supplying towns). The structural adjustment plans have resulted in the removal of stabilisation mechanisms (price support, subsidies, etc.) and gradual state withdrawal from numerous farmer support functions. New stakeholders are emerging or becoming strengthened (farmers' organisations (FOs), NGOs, private companies, etc.), providing services and developing new relations with the rural world (Schwartz 1994). This new context is causing an increase in economic risks, more rapid differentiation between farms or regions and also new opportunities through the possible comparative advantages that certain stakeholders may benefit from. It implies new information and training requirements for farmers to enable them to manage their holdings taking the technical, economic and social aspects into account. The diversity of situations and hence of producers' demands necessitates the identification of new intervention methods.

The evolution of support for farms and the diversity of approaches in MAFF

The agricultural extension sector has been wondering for nearly a decade about its ability to respond to the new demands from farmers while the resources allocated to state services have been shrinking. Various initiatives have been taken by different stakeholders (farmers' organisations, NGOs and private companies) to provide support and advice for farms. French co-operation has supported approaches that we refer to here as 'management advice for family farms' (MAFF)[1] for about ten years. The oldest experience is that resulting from research and development projects (Faure et al., 1998) and the most recent consists of the results of management centres in France or support from French professional organisations (Inter-réseau 1996). Some operations have

[1] **Family farming is a form of production characterised by the special link established between economic activities and the family structure. This relationship affects the decision making process, that is to say the choice of activities, the organisation of family or paid labour and the management of the family resources. This type of farming accounts for the greater part of world agricultural production. In Africa, family farms are complex in practice and this complexity must be specified in each case (farms based on the extended family or the immediate family, the geography of production units, consumption and accumulation, etc.), Gastelu et al., 1997**

existed for many years and have gone beyond the experimental stage and are now lasting and concern a significant number of farmers. Certain lessons can therefore be drawn from the study of these situations. A workshop to exchange experience of management advice for family farms (MAFF) was held at Bohicon in Benin, in November 2001. It gathered farmers' representatives, technicians and researchers About ten different case studies have been presented and analysed through a similar analyse greed. The workshop made it possible to assemble knowledge concerning activities in this

The table 1 below shows the variability between the different case studies in terms of addressed thematics, the tools and methods, the type of advisers and the governance implemented. The diversity of situations makes it possible to draw a number of lessons that are explained in this paper.

But Beyond the question of diversity, the common points that can be expressed as follows should be put forward:

1. MAFF is an overall approach that enables the farmer and his family to analyse their situation, to look ahead, to make choices, to monitor their activities and to evaluate the results. It takes into account the technical, economic and social aspects of their activities.
2. MAFF is a capacity-building process for men and women in farming. It helps them to master the different facets of their work (agricultural production and other work producing income, organisation of labour, management of financial flows, etc.) so that they can attain their various family objectives. It consists of placing rural families at the centre of the advice function.
3. MAFF is based on learning methods *(including training, the exchange of experience, making use of farming know-how, etc*.) and decision aid (*using various tools: technico-economic monitoring of production, calculation of gross margins, cash flow management, etc*.) that thus make use of the measure and are based more or less on the mastery of calculation and writing.
4. MAFF operations are set in real farming conditions: the farmers engaged in these procedures are part of networks for the exchange of techniques and local know-how; they are often members or officials of farmers' organisations (FOs).
5. MAFF operations are aimed at developing farmer support systems with strong participation from FOs and the possible involvement of new actors—NGOs or consultancy firms. They seek to strengthen the autonomy of farmers' and their organisations in relation to the other stakeholders.

Table I. The main characteristics of 10 management advice for family farms operations in West Africa. Sources: CIRAD, IRAM, Inter-réseau, forthcoming.

	Mali	**Burkina**	**Burkina**	**Burkina**	**Côte d'Ivoire**	**Côte d'Ivoire**	**Cameroon**	**Cameroon**	**Benin**	Benin
	cps/urdoc	**uppm**	**Fngm**	**unpc/sofitex**	**scgean**	**Aprocasude**	**dpgt/prasac**	**aprostoc**	**cagea**	CADG
Start of AFF	1997	1998	1996	2000	1997	1997	1998	1998	1995	1995
% literacy of pop.	20	40-45	25	29	30	65	30	25	33	30
Centre of interest										
Economic	XX	XX	XX	XX	XX	XX	X		XX	XX
Technical	XX	X	X	XX			XX	XX		X
Other					Loans	Fiscal			Land	
Tools and methods										
diagnosis/inventory	X	X		X	X		XX		X	
Monitoring/analysis	XX	XX	XX	XX	XX	XX	X		XX	XX
Forecasting	X	XX	XX	X	XX	XX	X		XX	XX
Exchange between farmers	XX			XX			XX	XX	X	X
Technical experiments	XX		X				XX	XX		
Use of computers		X	X		X	X			X	X
Individual advice	X	XX	XX	X	XX	XX	X		XX	XX
group advice	XX	X	X	XX	Planned	Planned	XX	XX	X	X
Advisers										
Number of advisers	5	4	9	10	1	1	14	10	18	12
Number of farmers	350	180	160	150	40	50	400	4500	360	600
Farmers / adviser (planned)	120	90	40	150	40	40	200	500	40	50
Farmer-trainer (part-time)	Yes	No	Yes	no	Planned	No	yes	yes	Sponsoring	Sponsoring
Management of the system	FO service centre	FO	FO	cotton company	specific FO	FO	project	FO	Private service	Private service

Procedure for building farmers' capacities

Management as a learning and decision aid process

The MAFF procedure is aimed at strengthening farmers' ability to master their farming system and improve their autonomy with regard to their environment. It aims at placing the stakeholder—the farmer—at the centre of the system. It is based on methods drawn from management[1] that make it possible to provide:

- analyses to modify farmers' and advisers' representations and perceptions of the problems addressed,
- decision aid tools to modify knowledge and generate learning processes.

In this respect, management is perceived as a cycle consisting of different phases: analysis, forecasting, action, monitoring, adjustment and evaluation. It in no way corresponds to accountancy, cannot be reduced to a set of technico-economic analysis tools and is not an improved version of the technology transfer concept (Benor 1984). However, in practice, the taking of forecasting into account is generally modest while the monitoring and analysis phases often take up much time, sometimes with the use of tools that are too cumbersome (exhaustive records of farm structures or crop monitoring, the weight of the accounts, etc.).

Such an approach is a fundamental calling into question of the function of the adviser, who is no longer there to draw up a diagnosis and propose solutions. The instruction relation is changed (Hatchuel 2001) and the adviser favours collective learning dynamics. He is more a facilitator, a person who helps to formulate a problem and to identify a range of possible solutions. This is certainly one of the greatest difficulties today—how can such advisers be identified and trained?

MAFF also raises the question of the position of arithmetic and writing in such an approach. Although it is important to measure in order to monitor, evaluate and programme, it is not true to say that only persons who can read and write[2] can master a management process. However, it is obvious that writing makes it possible to go further, to note, quantify, calculate and compare. Writing also strongly modifies modes of reasoning and representations. There is certainly work to be conducted to better understand decision and management processes among illiterate people in order to be able to propose tools adapted to their situation.

Methods and tools for initiating new dynamics

Tools useful for farmers

Such an approach involves the use of specific methods and tools that above all are diversified in order to respond to varied requests. We therefore observe the gradual design of tools for handling questions as diverse as crop or herd management, evaluation of production costs, management of paid and family labour, food self-sufficiency and the management of food crops, cash flow management, the scheduling of investment, etc. The workshop in Bohicon showed the substantial range of tools used. Depending on the situation, stress is laid on technico-economic analyses, technical experiments or on management/accountancy approaches.

The tools used (teaching material, information sheets, notebooks, etc.) are aimed at changing farmers' perceptions, stimulating reflection, enhancing the monitoring of activities and proposing scenarios for changes. They participate in the training and decision aid procedures and are therefore based on the development of indicators that are meaningful for farmers (crop gross margin, the quantity of cereals per mouth to feed, etc.) and avoid the recording of tedious or useless data. They are reconstructed with the farmers in some case since the process of developing a reasoning is more important than the resulting figure itself[3].

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[1] **Management can be defined as the analysis and design of a steering system for the action organised.**

[2] **Farmers may be illiterate, the case of most of them, or literate in a local language or have been schooled in French.**

[3] **It is not rare to observe that the result of calculations performed by the farmer are not right but that the decision taken is in conformity with the result of his thinking.**

The adviser and the farmers must have access to relevant information on new techniques, marketing opportunities, prices, local technico-commercial references, etc. The adviser must also possess specific tools for understanding agrarian realities (zoning, typology, etc.) and be able to benefit from refresher courses in methods of running operations and in technical and professional knowledge.

These services provided upstream can come from the MAFF system itself and from external sources (the radio, information systems, etc.).

An active teaching approach

The tools are developed using different approaches and produce different effects depending on the context. The same crop technico-economic analysis sheet can be filled in and analysed by the farmer with the help of the adviser, filled in by the farmer and analysed by the adviser or filled in and analysed by the adviser who then reports the results. We thus go progressively from a training and capacity-building procedure to a relation of expertise between the two actors. The Bohicon workshop showed that more than the tools, which can be common to certain experiences, it is the implementation methods that vary, inspired by different philosophies of intervention.

The training aspect of MAFF is expressed in the progressive scheduling in time of the themes addressed. This takes into account the needs expressed by participants and anticipates the main events in the farming season. Approaches based on long learning phases in the form of classes should be avoided[4]. If these are necessary, they must be short and designed for the public, with young people entering this process more easily. In this respect, the progressiveness of the MAFF procedure in time is evidence of quality.

Exchanges between farmers are always enhanced on the one hand by joint analysis of the results obtained by each of them and on the other by meetings between them (field visits, on-farm experiments, etc.) as these stimulate strong dynamics. Farmers tend to believe what they see more than what they hear.

Although the aim is clearly to enable each farmer to analyse his situation, to specify his objectives and improve his decision making, MAFF is based in most cases on the group dynamics likely to lead to collective evolution of representations. However, more individualised, complementary advice is often needed, in particular on subjects requiring confidentiality and/or to solve specific questions (the choice of an investment, strong evolution of the farming system, etc.). The questions of the qualifications of the adviser, who must have excellent mastery of techniques, and that of the cost of advisory services then arise.

The confidentiality of data should obviously be approached with the farmers themselves as sensitivity varies according to the region or the farming system. In a great majority of cases, exchange of technical and technico-economic information between farmers is appreciated and strengthens their capacity to analyse their own situation, whereas the dissemination of information on farm income within groups may be refused. When farmers' organisations (FOs) participate in or manage the MAFF system, the aggregate information is useful for FOs for the negotiation of better price or service conditions for marketing or for the supply of inputs. In contrast, the use of data by other stakeholders (banks, private companies, the state, etc.) without the participants' approval may compromise farmers' confidence in MAFF. A code of ethics should be drawn up for this and respected.

The position of innovation in MAFF procedures

Innovation remains an important factor in the improvement of farm results. The experiences analysed show that the position of technical change varies from one experience to another, mainly according to their history. Some favour approaches combining technico-economic analyses and procedures for improving techniques in order to respond to the concrete problems brought up by farmers, while others are limited to the economic or even the financial and accountancy aspects. In the first case, experimentation is used as a tool for training and the drawing up of local references Although the contribution of the research sector and supervision structures are mentioned, the mobilisation of farmers' knowledge is usually the main source of information and above all the most credible

[4] The phase of training in concepts and tools lasts for more than a year in some situations.

for producers. Use is thus made of endogenous innovation[5]. With this in mind, it would be useful to formalise procedures and propose specific tools based on on-farm experiments and the use of local knowledge.

Farmers as stakeholders in MAFF

The incorporation of MAFF in farming life

MAFF is part of the farming scene and claims the true taking into account of farmers' requirements that goes beyond good intentions. It makes it necessary to be able to respond to sometimes varied or even contradictory expectations. Well equipped farms (animal traction, tractor) do not have the same requirements as farmers performing manual cultivation. Farms are taking more entrepreneurial forms in certain zones close to urban centres, especially in coastal countries (Benin and Côte d'Ivoire). The strength of the social links in villages affects the behaviour of farmers in the Sudanian zones. It is therefore necessary to clearly define the type of farmers that can potentially benefit from MAFF services. This is a political orientation requiring discussion between stakeholders (farmers, FOs and the state) and the implementation by farmers of steering mechanisms for the procedures.

However, beyond this observation, it seems that MAFF is more intended for innovative farmers in a region (who are better equipped, often have more labour, who are better trained, etc.) but who are clearly farmers, with the exception of the rare entrepreneurs who benefit from individualised advice. In some cases, it does not involve the head of the farm but his 'assistant' or one of the main workers. Only a few experiments are also specifically aimed at women, who nevertheless play an often important economic role. The impact of MAFF on the functioning of the farm should be examined, as exchanges of ideas and information between members is not always the rule. In the case of trials involving the FONGS[6] in Senegal, MAFF is thus focused on families and not on the holding operator alone.

Farmers participating in MAFF are part of socio-professional networks for the exchange of techniques and knowledge that enable the effective dissemination of information and innovations. Some of them are resource persons consulted in the circles concerned and others are leaders of professional organisations (FOs, boards of community banks, etc.). Their participation in MAFF enables them to strengthen their skills, can stimulate the group and contribute to diffusion of the achievements of MAFF[7].

For lack of pertinent information concerning the social position of MAFFF participants, it is currently difficult to specify the impact of the method beyond the group of participants. A stimulating effect on the local economy is generally recognised but little is known about its extent.

The importance of farmers' governance

Mastery of the steering of the procedure

The institutional set-up of the procedure is not completely neutral with regard to the orientation of advice. The choice of themes (with more or less stress on a sector, the taking into account of all the farmers' occupations, broadening to include family requirements, etc), of the tools (input that is more technico-economic or more concerning accountancy) and the methods (greater or lesser participation by farmers, use of farmers' knowledge, etc.) vary according to the stakeholders who steer the procedure and therefore according to the position of farmers in the procedure.

Four types of institutional system are observed today:

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[5] It should be noted that a producers' organisation in northern Cameroon has set up an internal technical service for the promotion of transplanted sorghum (training for farmers, the setting up of tests, etc.).

[6] Federation of non-governmental organisations in Senegal)

[7] One of the participants of AFF in southern Benin is the chairman of a pineapple FO; using the achievements gained from advice, he organised training for the members of his FO, translated certain documents into the local language and generalised the calculation of production costs to all the members.

- a system managed by a farmers' organisation (UPPM),
- a system managed by an interprofessional body (in the cotton belts in Mali and Burkina Faso)
- service provider centres specialised in MAFF and managed by the beneficiary farmers (CPS in Mali),
- private providers of services giving advice to individual farmers or advice within the framework of contractual relations with FOs and projects (CAGEA, CADG in Benin).

The participation of farmers and their organisations is essential for identifying and responding to the varied requirements of farmers, to ensure their support for the procedure, to strengthen their autonomy and to increase their responsibility. However, participation of farmers as an 'alibi' when decisions are taken elsewhere should be avoided. Mechanisms must be set up in which the farmers can define the scheduling of activities and evaluate the results at all levels:

- at that of the farmers participating in MAFF in order to specify their requirements locally and to orient and appraise the work of the adviser,
- in the advisers' action zone to steer the work of the latter by involving MAFF participants and representatives of FOs,
- at the level of the procedure as a whole by FO officials to define orientations and handle the scheduling, monitoring and evaluation of MAFF.

Control of advisers

The involvement of farmers in the steering of the procedure means that the farmers monitor the recruitment of advisers. Farming leaders nonetheless clearly express their preference for the employment of advisers with intermediate qualifications (no engineers or persons with higher education) to reduce the risk of too great a difference with the farming world) and who are from their social group (having farmed and who speak the local languages). The participation of paid farmer-advisers is being tested in some situations (Office du Niger, UPPM). Accompanying and training facilities for advisers remain to be created or strengthened for capacity building and motivation. The participation of farmers in the scheduling, monitoring and evaluation of the work of advisers must be specified in a detailed manner and requires the development of specific methods and tools (Hémidy and Cerf, 2000).

Control of financing

Experiences of MAFF still appear to be substantially supported by external aid. The contributions of members and FOs form about 5 to 10% of the cost of the system. In exceptional cases, they cover half of the expenditure. The state only intervenes in rare cases by providing personnel (APROCASUDE in Côte d'Ivoire). In Mali, the role of the state in advisory services and training is currently subjected to question and future World Bank financing could be used at the request of FOs to finance services dispensed by private service providers.

While necessary to mark their commitment and to prepare their increasing involvement in the control of this service, the financial contribution of the farmers concerned in these forms of advice should necessarily be compatible with their means and will doubtless remain modest in comparison with the cost of the service. Coverage of the cost can vary according to the type of farm and the type of advice. The 'training' component of advice is often strong and merits significant external support as payment for a public good. In contrast, a higher charge can be made for more individual consultancy services (drafting of a loan application, a farm development plan, etc.) .

However, farmers must be able to participate in major orientations in the financing of the procedure (support, training, the functioning of advisers, etc.). A private stakeholder can implement public funding for a public service. Depending on the case, funding implementation can be performed by a private operator or by an FO (van den Ban 2000).

The need for an agricultural policy favourable to family farming

MAFF can be a driving factor in agricultural development when it is recognised by the institutions, when it forms part of rural reality and is mastered by farmers. It does not totally replace classic agricultural extension whose dissemination of information and techniques may remain pertinent for certain subjects (information on new inputs, training in little-known technologies, etc.). It completes rural training actions when these exist and can strengthen those aimed at functional literacy by giving practical application to teaching or by prolonging the training effort in time. It participates in capacity building for farmers' organisations and for their leaders.

Durable support for MAFF therefore requires the imagining of financing from different sources (farmers, farmers' organisations, sector participation, state and/or international community subsidies) justified by the interest of each stakeholder in promoting a strong farming economy. Support for the finalisation of methodology, literacy campaigns, the training of advisers and capitalisation is normally handled by public funding.

However, it is not a cure-all or a miracle solution. In order to change scale, the development of MAFF requires a secure economic and institutional environment and regional and national policies that are favourable for family farms[8] and include investment in rural areas (education, literacy, infrastructures, etc.), appropriate access to loans, etc. The instability of numerous agricultural export sectors is often mentioned (cf. the fluctuations in the prices of cotton, coffee, cocoa, etc.) as being the cause of economic instability, making the forward-looking management of farms difficult. The sustainability of MAFF experiences in the long term cannot therefore be envisaged without a minimum of stability combined with public support (national and international) made legitimate by the fact that MAFF contributes to fighting poverty and increasing the competitiveness of African family farming.

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[8] **see, in particular, the proposals of the ROPPA to the heads of African states in Dakar in December 2001.**

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Corresponding Author Information:
Guy Faure, CIRAD-tera, 73 rue Jean-François Breton, 34398 Montpellier cedex 5, France Tel.: (33) 4 67 61 55 42, e-mail guy.faure@cirad.fr