HOW TO IMPROVE THE SUSTAINABILITY OF APPROACHES FOR MANAGEMENT ADVICE FOR FAMILY FARMS IN AFRICA? TOWARDS A RESEARCH AND DEVELOPMENT AGENDA

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ABSTRACT
A plurality of forms of advisory services provided by a variety of actors has recently grown in Francophone Africa. In this context experiments in MAFF (Management Advice for Family Farms) conducted in many Francophone African countries have sought to promote advice to farmers based on learning methods by using farm management tools. Questions now arise on the scaling up of these experiences and their institutional and financial sustainability. In order to draw out lessons from past, stakeholders from various countries were asked to carry out a reflexive and collective assessment of their MAFF mechanism, regarding governance, funding, methods and capacity building issues. The results have been shared during a workshop held in 2012 in Benin. The results show diversity in governance mechanisms of MAFF. Most often, POs (Producers Organization) play a central role in the implementation of advisory services. Financial contributions from farmers and their POs are still low but promising funding possibilities do exist. Many difficulties are due to a lack of well trained advisors related to poor national specific training programs for advisers. Farmer extension workers appear as a key issue for scaling-up advisory services. However innovation in advising methods and knowledge production about MAFF impacts are required.

Key Words: Advisory services, family farms, extension, governance, advisor, farmer organization.
INTRODUCTION
In developing countries, including those in West Africa, advisory services are undergoing radical changes (Christopolos, 2010). The withdrawal of the state from this sector, and the poor performance of certain government advisory services, has inspired institutional reforms now underway (Rivera and Alex, 2004). Rethinking the role of the state and public and private advisory services is required for these reforms to be effective (Anderson and Feder, 2004). Today, different actors (producers' organizations, NGOs, agro-industries, input suppliers, public institutions, etc.) are able to provide advisory services through diverse institutional arrangements, including public/private partnerships (Swanson, 2008).

Institutional reforms raise a number of interlinked questions (Faure et al., 2011a, Cristovao et al., 2012). The first deals with the governance of advisory services: given the complex relationships between farmers, the state, and the private sector, what should orient advisory services? Swanson (2006) indicates two main options currently under debate: advisory services oriented by farmer demand (demand-driven extension system) or advisory services oriented by market requirements (market-driven extension system). Second, the disengagement of states and the emergence of the private sector raise the question of the funding of the advisory services (Kidd et al., 2000). It is generally admitted that the majority of farmers, and not solely those in developing countries, cannot assume the total cost of advisory services. The share of costs among stakeholders including the state and the private sector therefore is under permanent debate, with solutions depending on local contexts. Third, the roles and skills of agriculture advisory officers also have come under question because they need to be able to take into account new challenges that go beyond agricultural production (Remy et al., 2006) and to design new relationships with farmers that avoid top-down approaches (Cerf and Hemidy, 1999). Fourth, there is a debate over the best methods to provide relevant advice at an acceptable cost. However there is no silver bullet but a need to adapt the methods to the local and national contexts (Birner et al., 2009; Faure et al., 2011b)
In West Africa, new methods named Management Advice for Family Farms (MAFF) are under development. The experimental programs to promote such methods have received methodological and financial support from several French cooperation institutions (Djamen et al., 2003; Faure and Kleene, 2004; Moumouni et al., 2009). Some have been operating for over 20 years and become imbedded in institutions and include a significant number of farmers. Currently, advice based on these methods are provided by NGOs (Benin), producers' organizations (Benin, Guinea, Burkina), or cotton companies (Cameroon, Burkina) (see Tables 1&2). The MAFF approach aims to strengthen farmers' ability to manage their farms and improve their autonomy with regard to their economic and social environment. It is based on participatory methods providing (i) self-analyses to modify farmers' and advisers' representations and perceptions of the problems addressed, and (ii) decision-support tools based on technical and economic records (book-keeping) to produce new knowledge and generate learning processes. In this regard, management is perceived as a cycle consisting of different phases: analysis, forecasting, action, monitoring, adjustment, and evaluation. The advisor carries out a joint analysis of results obtained by each farmer. Exchanges between farmers about their results always are encouraged through regular meetings (training, field visits, on-farm experiments, etc.), as these exchanges stimulate strong dynamics. MAFF distinguishes itself from extension services which aimed primarily at transferring knowledge and new practices to farmers, notably in the field of agricultural production. Extension services can rely on intervention methods which are more or less participatory and can reach a wide audience.

However, the MAFF face difficulties to sustain advisory activities without external support to involve a large number of farmers (scaling-out) and the institutional and financial sustainability of advisory mechanisms (scaling-up). Such discussions take place in the African countries through national platforms and the drawing up of strategic documents on the agricultural sector – or on agricultural advisory services and/or training of rural populations. MAFF is thus currently being debated in this context in various countries (Burkina Faso, Benin, etc.). These policy documents are often derived from guidelines adopted at the African level within the framework of the Comprehensive Africa Agriculture
Development Programme (CAADP), which includes a research and advisory services section. Discussions are also taking place through international networks such as the Global Forum for Rural Advisory Services (GFRAS), through continental networks such as the African Forum for Agricultural Advisory Services (AFAAS), and through regional networks such as the Network of Agricultural and Rural Advisory Services of West and Central Africa (RESCAR-AOC).

The objective of this article is to draw out lessons on the up-scaling and out-scaling of MAFF approach in Africa based on a participatory evaluation carried out during a workshop organized in Benin (Bohicon) in November 2012. This workshop was held 11 years after a first one also organized in Benin (Bohicon) to draw out lessons on methods and tools related to MAFF approach.

THE ANALYTICAL FRAMEWORK AND METHOD

The workshop for improving the sustainability of approaches for management advice for family farms (MAFF) in Africa had the objectives of (i) taking stock of MAFF approaches in different countries in Francophone Africa through the analysis of the durability of such systems, (ii) determining courses of action to improve the ability of MAFF mechanisms to meet producers' needs and to ensure their sustainability by identifying methodological and institutional innovations. Thirteen internal assessments based on this analysis structure were carried out by various MAFF systems before the workshop. They helped draw out lessons which were discussed and further enriched at the workshop.

The workshop brought together 70 participants from over 10 African countries with participation by representatives of POs involved in the implementation of MAFF mechanisms, coordinators of advisory programmes, advisers, farmer extension workers, representatives of ministries of agriculture, entities providing support for advisory services, researchers, and donors (see table 2). This workshop was organized to examine the different existing MAFF mechanisms and to cross viewpoints on four main areas of inquiry: (i) modalities of governance of mechanisms, in order to define the orientations of MAFF, and of the actor-coordination mechanisms so as to create synergies between advisory services actors, (ii) MAFF funding modalities by focusing
on the contribution of different entities and the State to this funding, (iii) modalities for capacity and skill building for advisers, farmer extension workers, and all others involved in managing advisory mechanisms, and (iv) modalities of adapting advisory services to local or national situations depending on available skills and funding but also in terms of the needs of farmers and the sometimes conflicting priorities of guiding or funding organizations. Each of these four areas (governance, funding, competencies and methodology) has an influence on other areas of MAFF, which means that each MAFF mechanism is perforce original. This framework is based on previous research on MAFF (Faure et al., 2011b). Through the comparison of national or project experiences in the four areas we identified general trends and challenges.

Table 1 - Typology of MAFF experiences presented at the workshop

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
<th>Country</th>
<th>Objectives of advisory service</th>
<th>Start year</th>
<th>No. of auditor s</th>
<th>No. of skilled adviser s</th>
<th>No. of farmer extension worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. MAFF implemented and controlled by multiservice POs</td>
<td>FPFD/AFDI</td>
<td>Guinea</td>
<td>Helping and guiding farmers in their projects and building up their capacities</td>
<td>2004</td>
<td>845</td>
<td>13</td>
<td>52</td>
</tr>
<tr>
<td>UGCPA/FAR</td>
<td>Burkina</td>
<td>2009</td>
<td>240</td>
<td>5</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PO/RG/AFDI</td>
<td>Burkina</td>
<td>2001</td>
<td>13</td>
<td>52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPPC/SNV</td>
<td>Burkina</td>
<td>2002</td>
<td>1934</td>
<td>0</td>
<td>385</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. MAFF implemented by an entity devoted to providing advice and with participation by POs in its management</td>
<td>CAGEF/AFDI</td>
<td>Burkina</td>
<td>Helping and guiding farmers in their projects and building up their capacities</td>
<td>2001</td>
<td>277</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>CAP</td>
<td>Madagascar</td>
<td>2011</td>
<td>3188</td>
<td>17</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malagasy/FE</td>
<td>RT</td>
<td>2011</td>
<td>3188</td>
<td>17</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CGER/CER</td>
<td>Senegal</td>
<td>2009</td>
<td>52</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. MAFF implemented by advisory entities and with joint control (State-Project)</td>
<td>BV Lac</td>
<td>Madagascar</td>
<td>Improve managerial and technical skills to improve farm productivity</td>
<td>2010</td>
<td>486</td>
<td>18</td>
<td>70</td>
</tr>
<tr>
<td>PADYP</td>
<td>Benin</td>
<td>2008</td>
<td>19176</td>
<td>75</td>
<td>216</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. MAFF attached to a sector-strengthening programme and controlled by a PO</td>
<td>PRCPB</td>
<td>Burkina</td>
<td>Improve managerial and technical skills to improve farm productivity</td>
<td>2011</td>
<td>5117</td>
<td>21 Not functional</td>
<td></td>
</tr>
<tr>
<td>PROCOTON</td>
<td>Benin</td>
<td>2009</td>
<td>3237</td>
<td>34</td>
<td>140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. Public service MAFF</td>
<td>ACEFA</td>
<td>Cameroon</td>
<td>Improve managerial and technical skills to implement the State’s vision of agriculture</td>
<td>2008</td>
<td>32900</td>
<td>1972</td>
<td>0</td>
</tr>
<tr>
<td>ICAT</td>
<td>Togo</td>
<td>2010</td>
<td>62</td>
<td>21</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MAIN OUTCOMES OF THE WORKSHOP

1. Addressing the multilevel governance issues of advisory services in a pluralism system

Self internal evaluations of mechanisms have highlighted the diversity of modes of MAFF governance mechanisms. To a large extent, they depend on the nature of the organization or structure providing advice (PO, management centre, project, NGO), on the history of establishment of the advisory service and funding arrangements. Table 1 proposes a typology based on the nature of organizations involved in governance of advisory services.

Table 2a - List of entities involved in MAFF and participating in the workshop

<table>
<thead>
<tr>
<th>Abbreviations and acronyms</th>
<th>Name [French name]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producer organizations (POs)</td>
<td></td>
</tr>
<tr>
<td>UGCPA/BM</td>
<td>Union of groups for the marketing of agricultural products of the 'Boucle du Mouhoun' region [Union des Groupements pour la Commercialisation des Produits Agricoles de la Boucle du Mouhoun] (Burkina Faso)</td>
</tr>
<tr>
<td>UPPC</td>
<td>Provincial Union of Cotton Producers [Union Provinciale des Producteurs de Coton] (Burkina Faso)</td>
</tr>
<tr>
<td>FPFD</td>
<td>Federation of Producers of Fouta Djallon [Fédération des Producteurs du Fouta Djallon] (Guinea)</td>
</tr>
<tr>
<td>RG</td>
<td>Management Network: network of advisory service POs [Réseau Gestion] (Burkina Faso)</td>
</tr>
<tr>
<td>External financial and technical support</td>
<td></td>
</tr>
<tr>
<td>AFD</td>
<td>French Development Agency [Agence Française de Développement]</td>
</tr>
<tr>
<td>FARM</td>
<td>Foundation for World Agriculture and Rurality [Fondation pour l’Agriculture et la Ruralité dans le Monde]</td>
</tr>
<tr>
<td>SNV</td>
<td>Netherlands Development Organisation</td>
</tr>
<tr>
<td>AFDI</td>
<td>French Agriculturists and International Development [Agriculteurs Français et Développement International]</td>
</tr>
<tr>
<td>FERT</td>
<td>Association for the Blossoming and Renewal of the Earth [Formation pour l’Epanouissement et le Renouveau de la Terre]</td>
</tr>
<tr>
<td>AVSF</td>
<td>Agronomists and Veterinarians Without Borders [Agronomes et Vétérinaires Sans Frontières]</td>
</tr>
<tr>
<td>CIRAD</td>
<td>Centre for International Cooperation in Agriculture Research for Development [Centre de coopération Internationale en Recherche Agronomique pour le Développement]</td>
</tr>
<tr>
<td>CER</td>
<td>Centre for Rural Economy [Centre d’Économie Rurale] (France)</td>
</tr>
<tr>
<td>CA</td>
<td>Chamber of Agriculture [Chambre d’Agriculture] (France)</td>
</tr>
<tr>
<td>CCFD</td>
<td>Catholic Committee for the Fight against Hunger [Comité Catholique de lutte contre la Faim]</td>
</tr>
</tbody>
</table>

However it appeared necessary to distinguish between (i) the internal governance of the advisory mechanism in which they are involved and which they seek to (re)orient, (ii) the governance at a territorial scale (small region) involving several actors providing different kinds of advisory services and which can interact with MAFF, and (iii) the overall governance of the advisory system at the national (or supranational) scale involving several different
advisory mechanisms which one cannot easily influence, but on which MAFF mechanisms can rely or of which they must form part of.

Table 2b - List of entities involved in MAFF and participating in the workshop

<table>
<thead>
<tr>
<th>Programme or Project</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRCPB</td>
<td>Project for Strengthening the Cotton Sector in Burkina Faso (Projet de Renforcement de la Filière Cotonière du Burkina Faso) (Financed by AFD and CEF; co-managed by the sector and UNPCB)</td>
</tr>
<tr>
<td>UNPCB</td>
<td>National Union of Cotton Producers of Burkina Faso (Union Nationale des Producteurs de Coton du Burkina Faso) Burkina Faso Textile Fibre Company (Société des Fibres Textiles)</td>
</tr>
<tr>
<td>SOFITEX</td>
<td>ACEFA Programme to Improve the Competitiveness of Family Farms (Programme d’Amélioration de la Compétitivité des Exploitations Familiales Agropastorales (Cameroon) (Financed by AFD and CEF; co-managed by the profession and the administration)</td>
</tr>
<tr>
<td></td>
<td>BV-Lac Project to develop and protect the Lake Alaotra watershed (Projet de mise en valeur et protection du bassin-versant du Lac Alaotra) (Madagascar) (Financed by AFD; contractors: BRL, AVSF, ANAE, BEST)</td>
</tr>
<tr>
<td></td>
<td>BRL, ANAE, BEST</td>
</tr>
<tr>
<td></td>
<td>Procoton Programme to Strengthen Cotton Producer Organizations (Programme de Renforcement des Organisations de producteurs de coton) (Benin) (Financed by SNV; national partners: FUPRO and ANPC)</td>
</tr>
<tr>
<td></td>
<td>FUPROB Federation of Producer Unions of Benin (Fédération des Unions de Producteurs du Bénin)</td>
</tr>
<tr>
<td></td>
<td>ANPC National Association of Cotton Producers (Association Nationale des Producteurs de Coton)</td>
</tr>
<tr>
<td></td>
<td>PADYP Project to Support Development of Production Dynamics (Programme d’Appui aux Dynamiques Productives) (Benin) (Financed by AFD; contractor: Sofreco; national partners: POs and NGOs)</td>
</tr>
<tr>
<td>Advisory entities</td>
<td>CGER-Vallée Centre for Management and Rural Economy (Centre de Gestion et d’Economie Rurale) (Senegal) (Associative status, established with the support of AFD)</td>
</tr>
<tr>
<td></td>
<td>CAP Malagasy Agricultural Adviser Proximity (Conseil Agricole de Proximité Malagache) (Private entity, established by FERT)</td>
</tr>
<tr>
<td></td>
<td>ICAT Institute for Agricultural and Technical Advice (Institut de Conseil Agricole et Technique) (Togo) (State entity)</td>
</tr>
<tr>
<td></td>
<td>CAGEF Centre for Management Support for Family Farms (Centre d’Appui à la Gestion de l’Exploitation Familiale) (Burkina Faso)</td>
</tr>
</tbody>
</table>

Workshop discussions led to identify two major unanswered questions:
- Which kind of organizations has the highest legitimacy and are the most qualified to provide quality advisory services?
- How to coordinate the various forms of advisory services at local and national levels?

FOs appeared as legitimate organizations to provide well-fit advisory services but the lack of human and financial resources are a great obstacle to scaling-out and sustainability. Some solutions could be found in coordination mechanisms at local and national level, with training organisms, other advisory services providers and with political support.

1.1. An important but difficult role for FOs in the provision of well-fit advisory services to farmers
First, what emerged from the workshop was the recognition of the strong role played by POs in the direct implementation of advisory services in many countries (e.g., MAFF experiments in Burkina Faso with the POs participating in the “management network”, in Guinea with FPFD, or in Benin with FUPRO, see table 1). Such role played by POs is in line with the strategy on agricultural advisory services drawn up by the governments in several African countries (see advisory policy analyses conducted in Niger, Burkina Faso, Benin, Guinea, www.gfras.org). In two other cases the implementation of advisory services by POs is indirect. In Burkina Faso, UNPCB enters into contracts with the SOFITEX cotton company which provides advisory services on behalf of UNPCB. In certain geographic areas with higher agricultural incomes, service centres have been tried out (e.g., CGER in the case of the Senegal River valley), with services primarily directed towards first-level POs but also available to farms. Such service centres are controlled by PO representatives. The direct implementation of advisory services by a PO requires that PO already has adequate human and financial resources. This option allows advisory services to be more in line with farmer needs. It can also help strengthen PO itself by letting it offer an additional service to its members, which relies on more in-depth knowledge on constraints and opportunities of its members' farms.

But the main key problem is that MAFF is often tried out and developed with the support of a project that aims to promote it without taking into account the overall strategy of the PO. If MAFF is poorly integrated into the PO's plans, direct management may actually weaken MAFF due to risks relating to the dispersion of
PO's activities, management of salaried advisers or financial equilibriums. For instance, farmer representatives are not fully able to defend MAFF internally and externally when project-based support comes to an end. 'How to explain that MAFF is a priority when we have yet to fulfil our members' urgent requirements?' asks a PO representative.

Improving connection between MAFF and other services provides by the POs would better meet the needs of their members and create synergies between the main activities of the PO (supply of inputs, access to credit, marketing). By instance, the case of UGCPA in Burkina Faso illustrates a way to better integrate MAFF with all the PO's activities. MAFF became a transversal service that should lead to an improved planning of credit provided by the PO to its members and of cereal delivery by members to the PO. MAFF also supports other PO activities on managing soil fertility.

However, these challenges require financial and human resources largely beyond the project periods. It calls for rethinking global strategies and approaches to strengthen PO's capacities.

1.2. Coordination needs at local and national levels
At the local level
The relationships between MAFF mechanisms and other actors involved in advisory activities in the same territory (small region) were discussed at the workshop (technical advice provided by the Ministry of Agriculture or by agro-industrial companies, credit providers, input supplier providing advice, etc.). We noted some cases of competition between MAFF mechanisms supported by different projects (in the case of Benin or Burkina Faso for examples) and more generally a lack of communication between various advisory mechanisms working in the same territory.

However, initiatives – still too timid and too few as emphasized by participants – were undertaken to establish relationships between MAFF mechanisms with other advisory mechanisms or with actors who devote part of their activities to provide advice. These initiatives take the form of alliances with other stakeholders to develop common actions (e.g., literacy efforts undertaken by other actors and MAFF, credit managed by microfinance institutions and MAFF, etc.), of the creation of local platforms for exchanging
experiences that can be used by a municipality (case of Benin), of the management of PO networks that allow innovative experiences to be capitalized (case of the “network management” in Burkina Faso) or of informal networks between advisers working in various systems for coordinating their day-to-day activities.

The workshop highlighted that structures providing support to MAFF actors (international NGOs such as AFDI or national NGOs, foreign advisory centres such as the French CERs) can combine both direct implementation of MAFF in some areas (particularly in the experimental phases to assess how MAFF is perceived by farmers) and support to POs and their advisers in order to strengthen their capacity to implement MAFF through training, assistance in managing MAFF mechanisms and monitoring systems. In the perspective to reinforce durably POs capacities, these structure should also play an important role in providing support at the institutional level in order to link the national advisory structures (POs in particular) with relevant financial and political actors.

At the national level
At the national level, the insertion of MAFF mechanisms within the national advisory systems is still poor. This governance takes the form of networks or platforms and currently manifests through informal exchanges or exchange workshops (such as at Bohicon). The trend towards a national governance of advisory services incorporating formalized and sustainable mechanisms seems difficult given the diversity of objectives behind advice delivery (from top-dow to bottom-up, from technical advice to management advice, etc.) . Indeed, it is clear that advisory services actors have different political and financial strategies that lead to various competitions or alliances between actors in pursuit of institutional positioning or access to funding.

It appears, however, that the State still has a role to play in ensuring equity (access by the greatest number of farmers to advisory services) and the sustainability of advisory services. For the State, it is not so much a matter of coordinating or controlling advisory systems than of (i) mobilizing all advisory services actors, including those involved in MAFF, through local or national platforms to foster synergies, and encouraging actors to clarify
their roles and responsibilities, (ii) encouraging the sharing of experiences to draw lessons and ensure capitalization of knowledge in the field of advisory services, (iii) developing an advisory services-friendly regulatory framework that would, for example, recognize the status of advisers or facilitate access to vocational training for them, and (iv) promoting innovative mechanisms for funding of advisory services and ensuring the sharing of funding whenever possible.

2. Looking for a business model adapted to MAFF delivery
The workshop allowed us to take stock of the still critical situation regarding funding available for advisory services in general and for MAFF mechanisms in particular. MAFF mechanisms remain highly dependent on external funding (foreign donors or technical partners), which makes them highly vulnerable and sometimes prevents them from innovating. Compared to the assessment made after Bohicon I, however, we noted some real openings and two main strategies to initiate financial durability of MAFF systems were highlighted: the diversification of funding sources and cost savings in advisory services.

2.1 Contributions from farmers and their POs will continue to remain limited
Obtaining direct contribution from farmers remains difficult; some experiences proved inconclusive over the long term. In fact, since MAFF is an intangible service whose effects are not immediate neither easily quantifiable, the farmer is reluctant to pay for it. However, it appears that direct payments for advisory services become possible when it is connected to an economic activity such as the sale of inputs (e.g., breeding assistants paid on the sale of products for livestock in Madagascar). It certainly remains important to conduct research in this field to innovate and come up with a form of payment acceptable to the farmers.

Contributions from POs become more feasible when they undertake commercial activities such as marketing of agricultural products or sale of inputs to members which allow compulsory indirect contributions from the farmers through levees (case of UGCPA in Burkina Faso, of FUPRO in Benin, of FPFD in Guinea). But these contributions by producers and POs currently cover, and will cover in the foreseeable future, only a small part of the costs of
advisory services. Nevertheless, such contributions are necessary if the POs want to really orient advisory services themselves and not to have choices imposed on them by those who control funding.

2.2 Rare funding alternatives: banks and territorial authorities
Experiments in alternative funding arrangements are being conducted with the entry of new stakeholders to the cause of rural development in the South. Advisory services appear as a means of securization of bank investments for developing traditional credit, to support microcredit activities or for promoting crop insurance systems. But only a few rare experiments were mentioned at the workshop (case of Benin).

Policies of decentralization require territorial authorities to become involved in advisory services, as stated in some guiding documents for agricultural policies (see CAADP). In Benin, some municipalities view advisory services as a way of stimulating development in their territory and have offered to fund MAFF. But their thin budgets and priorities oriented towards rural infrastructure have prevented these intentions from turning into reality.

2.3 Promising funding possibilities with financial contributions from agricultural production chains and the establishment of development funds
The most promising funding possibilities to be discussed at the workshop were (i) the funding by already organized sectors with compulsory contributions at the marketing stage (case of cotton in Burkina Faso), not in itself a new idea, and (ii) the establishment of regional or national development funds. These funds can either be financed by sectors (as in Ivory Coast with FIRCA) or by the State and funding agencies (e.g., FNDA and FRDA in Madagascar). Services can then be implemented by public or private providers. Under the pursuit of a public good, the State may contribute to the funding of advisory services when they include a dimension of training and capacity building, as is the case with MAFF. In the case of funding by sectors, participants arose the difficult question of solidarity between sectors, an option that was not retained in Ivory Coast at the request of actors of the contributing sectors. This type of solidarity between sectors was attempted in France in the 1950s to develop trans-sector advisory services but floundered due to
tensions between sectors, thus calling into question this principle of solidarity itself. However, it is still possible to introduce compulsory financial contributions within a sector to develop services that can include advice for topics beyond the strict requirements of the particular sector and destined to all farmers living in the territory of the sector, irrespective of whether they are part of the sector or not.

Except Ivory Coast and Madagascar, others countries have so far not established regional or national funds – though Benin and Burkina Faso have expressed intentions of doing so. Nor have they released specific funding destined for advisory services except when it comes to strengthening their own public advisory structures, as is case of the Ministries of Agriculture in Benin and Cameroon. It should be noted that international funding agencies continue to play an important role in financing projects directly and, increasingly, by directing their contributions to regional or national development funds. This raises again the question of sustainability.

2.4 Operators propose cost savings by relying primarily on farmer extension workers

It should be noted that MAFF appears to be still expensive because the cost of all activities required to implement it are included in the overall cost of the systems: operator providing methodological support to service providers, training of advisers and literacy programmes for producers to enable their full participation in MAFF. Cost savings in advisory services have been attempted through reliance on the growing numbers of farmer extension workers or adviser-farmer extension worker to increase the number of farmers who can access the advisory service and thus reduce wage costs. Another cost saving avenue pursued was through the merging of adviser training programmes with training courses already existing in the concerned countries. The development of PO-implemented MAFF will ultimately reduce costs, particularly those related to coordination of activities. But the need to invest in capacity building of POs precludes any hope of a reduction in costs in the short term.
3. Building capacity of all advisory actors by mobilizing permanent institutions

The workshop addressed three key areas of building capacity of advisory services actors: (i) the issue of the training of advisers, (ii) the role of farmer extension workers and (iii) the strengthening of the skills of advisory system managers.

3.1 The necessity to have specific training programmes for advisers

Very encouraging initiatives in adviser training by public and private organizations at the national level were discussed (case of the University of Parakou in Benin, FERT training centre in Madagascar). However, they are still far from common. Yet they allow us to anticipate the long term viability of initial and professional training courses in these countries and to ensure a smooth turnover of advisers, given that a significant proportion of advisers can leave for other jobs once well trained. Employers (the State, private firms, POs), however, are little involved in creating the contents of training courses, which may lead to a mismatch between the training provided and the employers' requirements. To ensure the viability of such public training courses, it is manifestly necessary to build curricula that enable students to acquire knowledge and skills useful for a wider range of occupations than just of advisers. The establishment of permanent training programmes leads to questions from advisers and technicians on the possibility of obtaining diplomas that may be useful in their career paths.

Even with generalized adviser-training programmes conducted under the ambit of permanent institutions, training within projects and particular MAFF mechanisms remains relevant for advisers to acquire targeted skills. In such a situation, sharing of training resources between projects will be desirable, through capitalization of experiences, training methods and tools. The importance of training all those involved in the management of MAFF mechanisms, not just the advisers, was stressed: salaried technicians, certainly, so that they can implement the planned activities and be capable of monitoring advisers but also elected farmers involved in MAFF so that they are able to monitor MAFF mechanisms (orientation and evaluation) and develop skills to draft effective funding requests.
3.2 Farmer extension worker are the future but only under certain conditions

The workshop was an opportunity to take stock of the activities and the role of farmer extension workers, recourse to whom is becoming increasingly widespread in all MAFF mechanisms. With the promotion of farmer extension workers, actors managing MAFF mechanisms seek, on the one hand, a change of scale due to the increase in the number of farmers involved in advisory services and, on the other, to facilitate greater sustainability of advisory services through cost savings. In addition, workshop participants also showed that farmers are appreciative of the help the farmer extension workers provide during the transition between two advisers or between two projects funding advisory systems.

A large variation in profiles and activities of those called 'farmer extension workers' was noted with respect to MAFF mechanisms: literate or illiterate, volunteer or paid on lump-sum basis, collecting data or acting as trainer, etc. In some MAFF systems (case of mechanisms supported by SNV in Benin and in Burkina Faso), farmer extension workers can even train other farmer extension workers and take on a 'supervisory' role over MAFF activities in the field. Strong concerns were then expressed on the real capacity of these farmer extension workers to 'provide advice' while working on a voluntary basis and given the large workload normally assigned to them, thus distracting them from their own farming activities. While the question of what the farmer extension worker 'should' and 'can' do is usually easily discussed, what he 'wants' to do is rarely addressed. Farmer extension workers present at the workshop spoke about their interest and motivation in undertaking such a function: easy access to training, particularly through privileged exchanges with the adviser, desire to help friends and neighbours, desire to be useful, opportunity for additional income, and, for some, improved job prospects.

The evolution of the farmer extension worker's role as he gradually acquires new skills and gains independence was highlighted. Some POs even expressed emphatically their wish to see the most capable farmer extension workers become formal advisers, considering that they had acquired the necessary skills and abilities. Some participants raised the issue of the need to keep the farmer extension workers in the POs in which they were trained. This
position appeared neither relevant to the POs concerned, nor desirable, because farmer extension workers have the right to grow in their activities. The question raises again the question of the continuing training of the farmer extension workers through formal training programmes or through the creation of exchange networks between farmer extension workers.

The importance of the 'adviser-farmer extension worker' pairing was also highlighted. As shown by research conducted in Benin, an adviser's profile has a strong influence on how the farmer extension worker develops and implements advisory activities. This pairing needs to be recognized and the functions of each should be better explained and better differentiated.

4. Knowing how to customize one's advisory service offer while preserving MAFF's core

The issue of MAFF methods was discussed in terms of their evolution and adaptation in the context of implementation of advisory services. The important changes observed since the time of the Bohicon I workshop, ten years ago, can be divided into four major themes: (i) diversification of forms of advisory services, ranging from technical advice for illiterate farmers to techno-economic advice based on the traditional MAFF tools, (ii) simplification of documents relating to techno-economic advice, given the difficulty expressed by many farmers participating in MAFF, (iii) diversification of tools to better adapt to the diversity of producer profiles, and (iv) diversification of tools to better adapt to the diversity of skills of advisers and farmer extension workers. Innovations have also been tried out by combining conventional advisory tools with ICTs or methods inspired by coaching systems or professional didactics.

These changes in methods are required if the scale of MAFF coverage has to be widened. This will require changes in the skills mobilized (number of farmer extension workers mobilized with respect to number of advisers), available funding (cost savings by participating in a context with a fixed total available budget) and modes of governance (e.g., greater involvement of the POs in order to better adapt the advisory systems to the needs of farmers and involving POs more in mobilizing participants). These changes raise the issue once again, ten years after Bohicon I, of the intensity
of advisory services (number and quality of interactions between advisers and farmers) that MAFF mechanisms should aim for generating a real learning process. Indeed, managers of MAFF mechanisms remain still undecided, and very legitimately too, between quality advisory services but with a small number of producers ("true MAFF"), and more standardized advisory services which reach a larger number of producers ("light MAFF").

4.1 The core principles of MAFF have to be preserved
Developing learning process on farm management for farmers is a priority to improve their incomes. However the broad diversity of advisory services (diversity of methods and tools) currently offered to producers for implementing a MAFF approach led to a debate on what is at the heart of MAFF. This diversity of offers for advisory service requires us to clarify what forms the core of a MAFF approach, including its advantages and disadvantages. While the concepts of learning and of farmer empowerment in decision-making processes are at the heart of the approach, these concepts are not the sole privilege of MAFF as shown by discussions on Farmer Field Schools (Davis, 2006). Promoting a holistic approach to farm management is already a more characteristic aspect. Such an approach is based on the traditional management cycle (analyze, plan, act, monitor and adapt, evaluate the results) and can be used with both literate and illiterate persons, albeit with a lesser degree of accuracy for the latter category. Finally, the inclusion of concepts that allow technical and economic dimensions to be translated to impacts on agricultural production and the farm is a distinguishing aspect of MAFF mechanisms. Such a techno-economic analysis requires data acquisition and processing which can be more or less extensive depending on the requirements and available time and skills.

4.2 Advising illiterate farmers is possible
In order to reach a wider audience, experiments in MAFF for illiterate farmers have been conducted in several countries (e.g., PADYP in Benin). In such cases, advisory methods can draw on tools already being used in other advisory service experiments by actors unrelated to MAFF (visual aids, construction of stories, role playing, field trips, etc.). But questions still remain on how to conduct advisory sessions for illiterate farmers to strengthen management skills (analyze, plan, act, monitor, evaluate) for the
main productions of the farm without falling into the pitfall of a simple offer of technical advice based on the mere transmission of knowledge from the adviser and exchanges of experiences between participants.

4.3 How best to equip farmer extension workers?
To increasingly rely on farmer extension workers, we need to take a hard look at advisory methods and tools that we equip them with, given that their skills differ from those of formal advisers. Would tools that are simplified versions of those used by advisers be suitable or will new ones have to be designed from scratch? For example, should we build tools, or select some from existing ones, for each different farmer extension worker based on his domains of excellence (avoiding a standardized approach for all farmer extension workers) or do so with an intention of fostering a network with his friends and neighbours (promoting peer-to-peer exchanges). It is also apparent that providing technical advice on crop and herd management is occupying an increasing place in the activities of MAFF advisers and farmer extension workers. For this they tend to rely on a traditional group advisory approach or on new methods, such as those relating to farmer field schools. Questions have been raised about the ability of advisers or farmer extension workers to provide this technical advice while promoting a real learning process and thus avoiding the simple transfer of knowledge and technology. Finally, there was discussion on the possibility of hybridizing MAFF methods with other methods such as farmer field schools or with the one currently recommended by the GIZ: the 'farmer business school'.

4.4 Adapting the advice for the target audience does not necessarily mean creating homogenous groups
However, in this phase of MAFF expansion, both in terms of diversity of the target groups to be concerned and of the methods to be developed, discussions have been led to the possible segmentation of the target audience. What advice with what method for what type of farmer? The majority of workshop participants suggested a segmentation by educational proficiency (literate and accustomed to writing, literate but not favouring text-based advice, illiterate but wanting to turn literate to progress, illiterate). It is obvious that advisory tools will be different for each of these categories.
According to feedback provided at the workshop, experiments of offering advisory services on the basis of farm segmentation (size, type of production, etc.) to provide differentiated advice were not found satisfactory. Through the presentation of the study on learning within the MAFF framework conducted in Benin, discussion also took place on the importance of the farmers' psychological profiles (proactive, responsive, imaginative, passive) to explain the diversity of learning processes in order to find another way of grouping farmers. But the same question pops up: Should one work with homogeneous groups to provide more targeted advice or instead should one take advantage of the diversity within groups to draw lessons for all? In this perspective, it seems necessary that the adviser and the farmer extension worker each have two different toolboxes on hand in order to be able to deal with different groups and profiles as well as differing advisory needs.

4.5 We need to update knowledge on farms, better characterize the evolution of advisory methods and, finally, be able to characterize MAFF's impacts

Taken together, these observations argue for a deeper analysis on the changing methods to more efficiently improve them. But such thinking cannot separate itself from the need to invest more substantially in the analysis of the impact of various methods (on the performance of farms, changes at family level or even territory level) in order to make better choices. If little effort has been expended in this area, it is mainly because the methodological difficulties are huge. Having up-to-date knowledge of farms will also help guide the advisory services based on the needs of farmers, the diversity of their farms, and the diversity of learning processes.

CONCLUSIONS AND RECOMMENDATIONS

The workshop helped in analyzing several MAFF mechanisms using a framework based on four attributes: (i) modalities of governance mechanisms, (ii) funding modalities, (iii) capacities and skills of the actors involved in managing advisory mechanisms, and (iv) methods for advising farmers. Each mechanism is context-dependant hence unique regarding characteristics and relationships between each attributes. However some common features concerning sustainability and scalability issues emerged from lessons learnt and debates. POs played a crucial, but not durable
yet, role in implementing, orienting and assessing advisory services. Farmer extension workers appeared as key factor for maintaining POs as advisory services providers and extending advisory services to a larger audience. New promising opportunities to train advisors are observed with initiatives carried out both by public and private organizations. Funding of advisory services remains a challenge even if some relevant experiences do exist: implementation of national or regional funds aimed at financing rural development projects including advisory services or levies on commercial products at marketing level. More research should be done on business models adapted to immaterial services such as advisory services. Some solutions could also be found in reshaping delivery models with less costly and time-consuming methods but still efficient. Many attempts are carried out especially in order to include more farmers and especially illiterate ones. But all cases face difficulties to address questions related to the scaling-up and scaling-out.

Lessons learnt from past and on-going experiences helped us to narrow a research agenda regarding burning issues for improving the sustainability and scalability of MAFF mechanisms: innovate in delivery models so as to reduce costs and increase efficiency; produce impacts studies that include economical as well as socio-cognitive criteria; capitalize on institutional arrangements that enable better coordination between complementary activities; better consider FOs capacities to deliver well-fit advisory services without external support; help the redesign of supporting project in a perspective of durable capacity reinforcement of local stakeholders engaged in advisory services.

1 A farmer extension worker is a farmer who acts as an advisor. Depending on the different MAFF experiences he could play various roles. He can only communicate information from top to bottom and vice versa. He may also act as a facilitator and, when necessary, as an advisor closely working with one official advisor.
2 In farmer field schools, advisers hold regular meetings with volunteer farmers who acquire new knowledge and new skills, mainly on crop management, through field observations (analyzing to make decisions) and exchanges between themselves and the adviser.
3 This method aims to impart the rudiments of techno-economic management to a big audience of farmers through a limited series of meetings between the adviser and farmer groups.
4 The term ‘advisory tools’ include a variety of tools: tools for farmers (data recording, results analysis at the plot or farm level, reasoning to better define one’s project, etc.), tools for advisers (modalities of organizing an advisory session or field visit, understanding the diversity of farms in an area, etc.).
REFERENCES


