

Agricultural extension and advisory research issues worldwide: a literature review

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Advisory services and extension

- Advisory services include all activities carried out by a service provider to provide support to individual farmers or groups of farmers to manage their farm or their activities
- The analysis of advisory service system includes
 - The stakeholders and their relationships, the rules to manage the advisory system, the activities and the resources
 - The methods used to generate knowledge, to strengthen know-how
- Advisory services are embedded within an institutional framework at national, regional or local level

The diversity of approaches to provide advice

- Transfer of knowledge and technologies = extension
 - The advisor says what farmers have to do
- **Support to decision making at producer level**
 - The advisor presents several options (topics are already defined, easy for the advisor and the farmer)
- **Strengthening of producers' skills to analyze their own situation and identify their own solutions**
 - Co-construction with farmers
- To accompany farmers' initiatives
 - Listen and reformulate farmers' preoccupations and priorities (topics to be defined, eventually ethical problems)
- Brokering to support interactions between actors
- For advisor : a mix of different approaches ?

A few literature review on extension and advisory services

■ Our questions:

- What are the relationships between actors of advisory services and others stakeholders in a context of institutional reforms?
- How did the advisors' competencies and their relationships with producers evolve to address the challenges of sustainable development?
- How did advisory methods evolve in a context of increasing demands addressed to advisory services?
- What are the main questions addressed by impact evaluations (magnitude of impacts, methods, etc) ?

■ Our method:

- Scientific production in different databases (CAB, ECONLIT, Web of Science) + books 2009/2010
- Key words around extension and advice
- 735 references selected,
- 109 articles analyzed.

Thematic distribution of the references



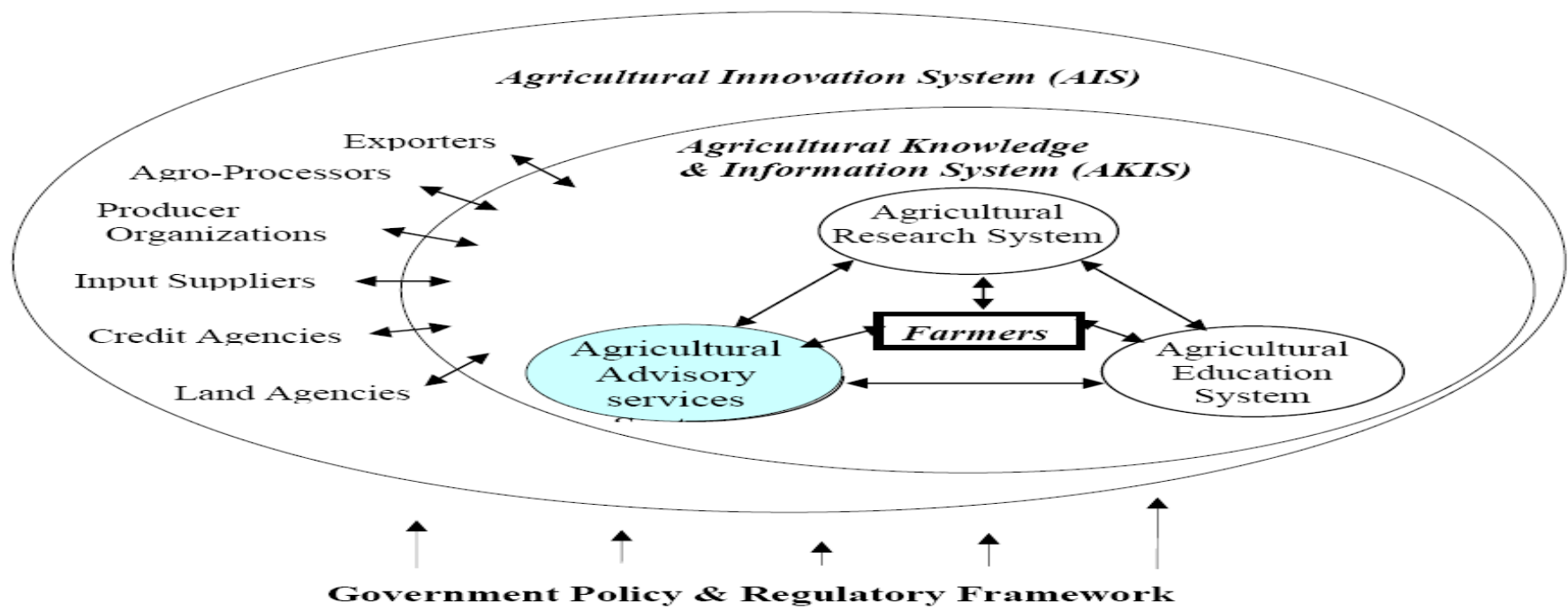
THEMES	Number
Method and tools	327
Institutional arrangements	277
Advisors and competences	235
Evaluation	192
Knowledge production	154
Institutional environment	121
Demands and needs	43
TOTAL	1349

Main research teams working on extension issues

Country	Number of universities or organizations	Number of authors with more than 3 articles
United-States	9	15
India	9	12
Australia	3	5
France	3	8
Nigeria	3	6
Pakistan	2	11
United Kingdom	2	2

Institutional changes: innovation system and institutional reforms

- Advisory services are part of a global system:
 - AKIS linking AAS+Education+Research (Roling and Groot, 1998)
 - Innovation System linking all stakeholders (Birner et al., 2009, Sanginga et al. 2009; Scoones and Thompson, 2009; Hoffmann et al., 2009).



Source: Adapted from Rivera et al. (2006).

Figure 1. Agricultural Advisory Services as Component of an Agricultural Knowledge and Innovation System

Institutional reforms

- Institutional reforms remain a “hot” topic
 - Privatization, decentralization to improve AAS (Rivera and Alex, 2004).
- Critical questions:
 - the new role of the State : enabling environment, coordination, assisting poor farmers (Anderson et Feder, 2004)
 - the risks of privatization leading to exclusion (Labarthe, 2005),
 - No analysis of the food crisis on AAS
- Many questions on financing (Kidd et al. 2000)
 - How to assess the producers’ capacities for buying advice ?
 - What are the mechanisms for financing AAS (diversity)?

Table 1. Options for Providing and Financing Pluralistic Agricultural Advisory Services

Provider of the service	Source of Finance for the Service				
	Public sector	Private sector: Farmers	Private sector: Companies	Third sector: NGOs	Third sector: FBOs
Public sector:	(1) Public sector advisory services (different degrees of decentralization)	(5) Fee-based public sector advisory services	(9) Private companies contract staff from public sector advisory services	(12) NGOs contract staff from public sector advisory services	(16) FBOs contract staff from public sector advisory services
Private sector: Companies	(2) Publicly funded contracts to private service providers	(6) Private sector companies provide fee-based advisory services	(10) Embedded services: Companies provide information with input sale or marketing of products	(13) NGOs contract staff from private service providers	(17) FBOs contract staff from private service providers
Third sector: Non-governmental organizations - NGOs	(3) Publicly funded contracts to NGO providers	(7) Advisory services agents hired by NGO, farmers pay fees	(11) Private companies contract NGO staff to provide advisory services	(14) NGOs hire own advisory staff and provide services free of charge	
Third sector: Farmer-based organizations (FBOs)	(4) Publicly funded contracts to FBO providers	(8) Advisory service staff hired by FBO, farmers pay fees		(15) NGO fund advisory service staff who are employed by FBO	(18) FBOs hire own advisory staff and provide services free to members

Source: Adapted from Rivera (1996) and Anderson and Feder (2004: 44).

Institutional change: the promotion of new and diverse arrangements

- There is a shift in the analysis and proposals: from “best practice” to “best fit” (Birner et al., 2009)
 - AASs depend on the context (institutions, farming systems),
 - the components of AASs interact : Governance structure (orientation, financing), method to provide advice, capacity of service providers

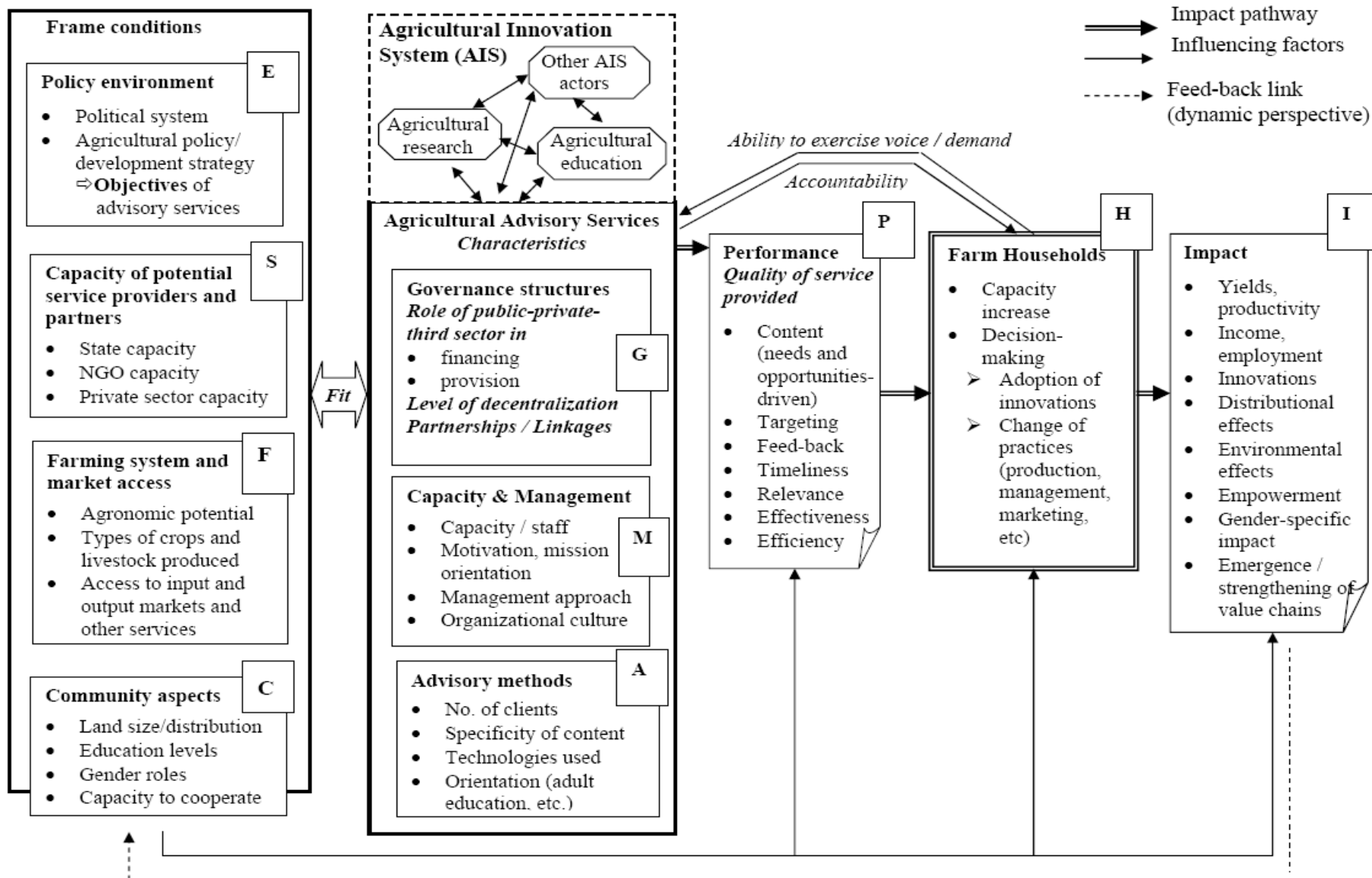


Figure 2. Framework for Designing and Analyzing Agricultural Advisory Services

Institutional change : some questions

- A question remains unanswered: who is the pilot of the system?
 - Demand-driven extension systems (the needs of farmers) ?
 - Market driven extension systems (the need of downstream actors)?
 - Public goods-driven extension system (a focus on poor farmers, public interests)?
- Few studies on advisory providers (PO, private) addressing management issues, innovation process, etc.

Analysis to take into account the new competences and skills for advisors

- Many surveys (Chizari et al., 2006) and analyses (Remy et al., 2006) on :
 - the changes of competencies (farm management, marketing, natural resources, etc.) required to address new and more complex challenges
 - the processes to improve the advisors' competencies (academic training and vocational training)
- A more complex relationship between advisors and farmers:
 - co-construction of the problems and the solution (Cerf and Hemidy, 1999),
 - evolution from a role of dissemination of results to a role of intermediary (King et al., 2001) or brokers of innovation (Klerkx and Leewis, 2008).
- Place and strategies of advisors within the organization providing advice (Compagnone, 2001)

Methods improvement as a key driver to think about advisory service

- We can see the shift from an objective of “Transfer of Technology and knowledge” to an objective of “assistance to learning process” (Roling and Jong 1988)
 - Many studies on T&V approach (Ilevbaoje 1998, etc) but mainly on impact evaluation,
 - Many studies on the new FFS approach (Davis 2006, etc.) focusing on evaluation and learning process
 - Some studies on alternative approaches : Management Advice (Djamen et al. 2003), Participatory Technology Development, etc.
- In southern countries the promotion of new methods remains based on the concept of “transfer of methods”.

Which room for farmers according to methods to provide advice?

- Different ways to assess the demands and the needs of farmers :
 - From a social construction perspective:
 - Opinion poll with questionnaires (Om et al. 1998 in India)
 - Direct interaction between farmers and advisors, based on relevant tools (Magne and Ingrand 2004)
 - From a market perspective:
 - use of models of demand and supply of services in a free market (Frisvold et al. 2001)
 - need for the intervention of brokers in imperfect market (Klerkx and Leewis, 2008).
- Why do we need the participation of farmers?
 - Farmer participation is necessary to strengthen learning processes (Kibwana et al. 2000)
 - In fact many providers do not encourage participation with the aim :
 - to promote standards dealing with environment concerns (Cross et Franks 2007, in the EU)
 - to secure the supply of downstream actors in value chains (Argerich 2006, Argentina).

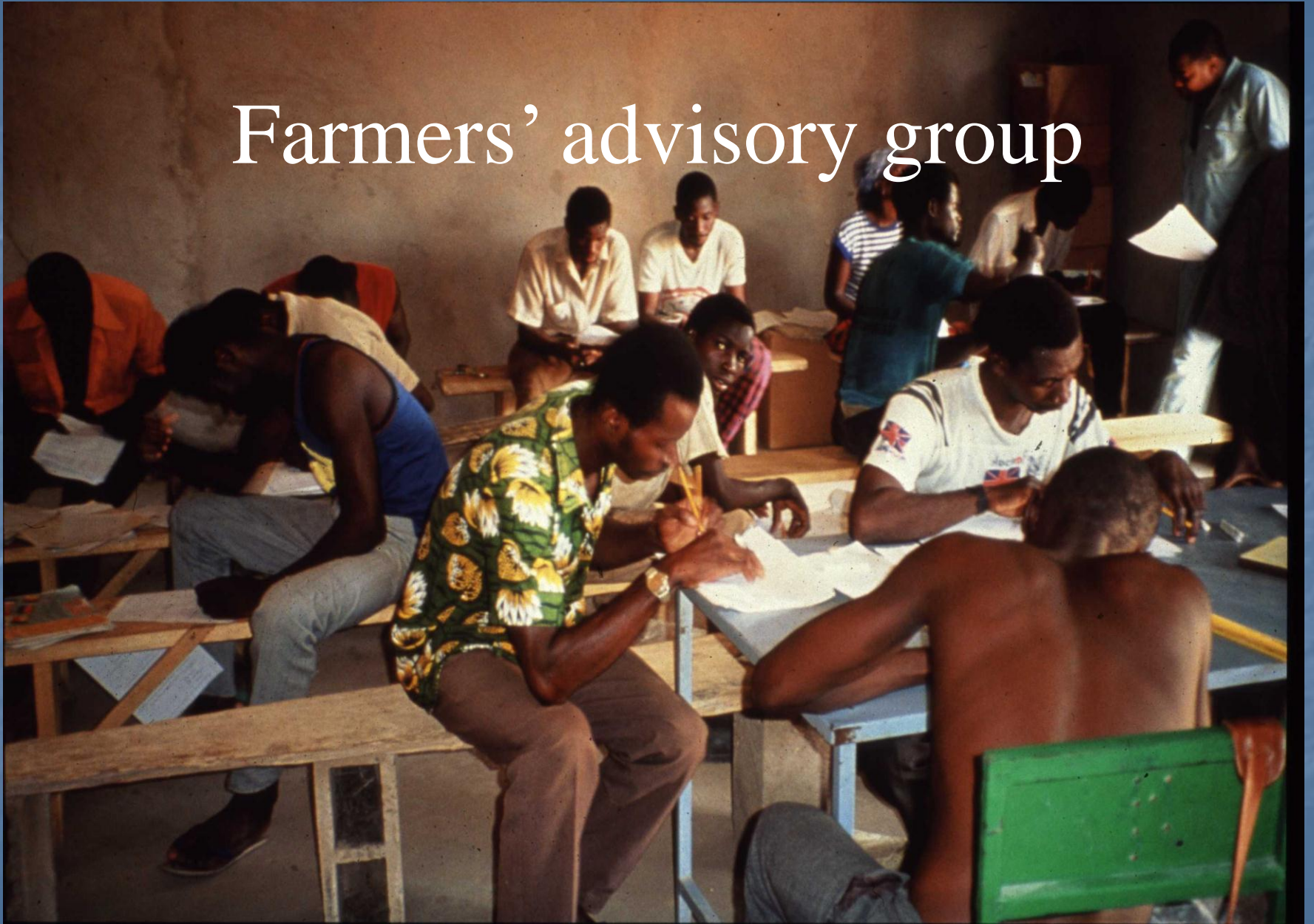
Management advice for family farms in West Africa

- 20 years of experience (Faure and Kleene, 2004)
- Provided by NGOs (Benin), PO (Benin, Guinea, Burkina), cotton companies (Cameroon, Burkina).
- MAFF aims to strengthen farmers' ability to autonomously manage their farms :
 - Global approach at farm level (not only production)
 - Technical and economic analysis

MAFF method

- Participatory methods to generate learning processes based on
 - self-analysis to modify farmers' and advisers' perceptions
 - decision-support tools based on technical and economic records (book-keeping).
 - Management principles (planning, monitoring, evaluation)
- The advisor
 - carries out a joint collective or individual analysis of results farmer.
 - Organize exchanges between farmers (training, field visits, on-farm experiments,...)

Farmers' advisory group



Evaluation: a growing concern

- Evaluation of the results of advisory services:
 - different methods: SWOT, rapid appraisal, in-depth study, statistical analysis, review of case studies, etc.
 - with or without the participation of the stakeholders to identify key questions and relevant indicators.
- Evaluation of impacts at farm level:
 - Many quantitative approaches with the use of a limited set of indicators
 - T&V and impact on yield : Evenson and Mwabu 2001
 - FFS and impact on income : Mubashir et al. 2007)
 - The recent promotion of a mix of qualitative analysis and quantitative analysis (Godtland et al. 2004 in Peru) or systemic evaluation (Williams et al. 2010)
- A few evaluations of impacts related to :
 - learning processes (King et al. 2001, in Australia)
 - dissemination of knowledge and technologies beyond the participants Feder et al. 2004, in Indonesia)

Conclusion

- AAS go on with a large scientific production (some of the papers remain descriptive)
- Largely connected to policy makers, donors and service providers
- Some hot topics: institutional changes, methods (*e.g.* FFS), impact evaluation.
- By contrast some uncovered topics:
 - comparison of the performance of new arrangements between public-private providers in different institutional contexts
 - analysis of the strategies, management and innovation processes of service providers
 - new approaches to advisory services in complex and risky situations, with an innovation perspective, mixing participatory methods and the use of decision-making tools.

SENS BARAZW- Saah 1993/1994

Case #	SPS	NO33N	NO33WE	Area (m ²)	Plant	Plant	Plant	Plant	Plant
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10
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30	30	30	30	30	30	30	30	30	30

Elabé Faméy
AVEC Poyé Com
Pohéce

Posse Com
Poyé

243

242x2=8m
2x3x3=18m



Thank you

