

Current extension service models, what works and what does not work

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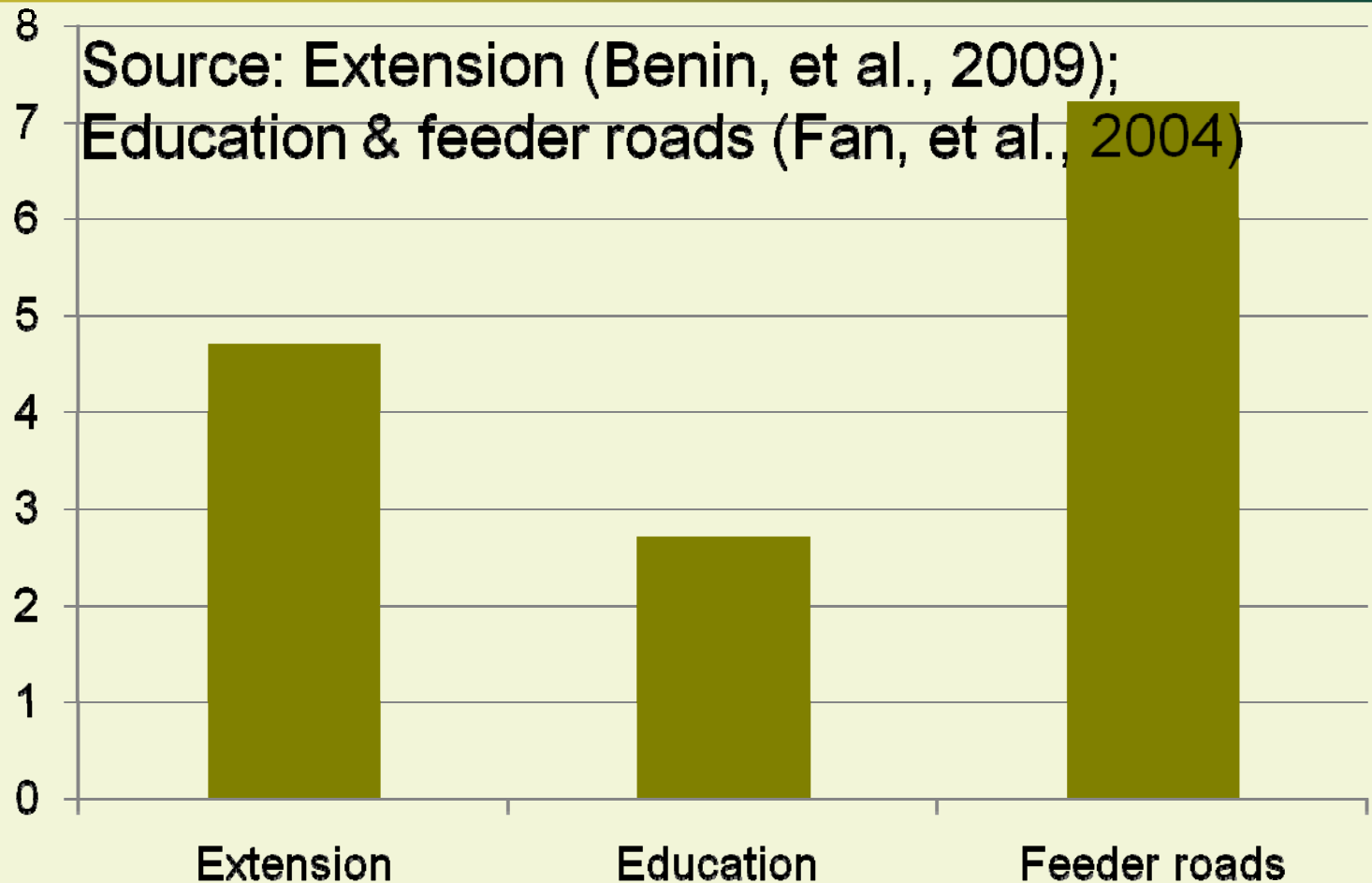
Outline of presentation

- Importance of agricultural extension services
- Current agricultural extension service models in sub-Saharan Africa (SSA)
- Which models are working and which aren't?
- Potential and constraints of each model
- Policy implications – with focus on SLM practices

Importance of extension services in SSA

- Extension services are among the most important rural services in developing countries (Faye & Deininger, 2006; Jones & Garforth 1997)
- Investment in extension services is among the largest in the agricultural sector
- Returns to agricultural extension in many cases exceed returns to agricultural extension.
 - Review of social rate of returns to research and extension from 95 developing countries showed that returns to extension was 80% and 50% for research (Alston et al. 2000).

Benefit-Cost Ratio of extension & other rural services in Uganda



Importance of agricultural extension

- Evidence from many countries show that agricultural extension is a pro-poor public investment. Examples are:
 - One ag extension visit reduced poverty by 9.8% and increased consumption growth by 7.1% in Ethiopia (Dercon, et al., 2008)
 - Increase in extension visits in Uganda reduced poverty, child stunting and underweight children below 5 (Nkonya, et al., 2009).

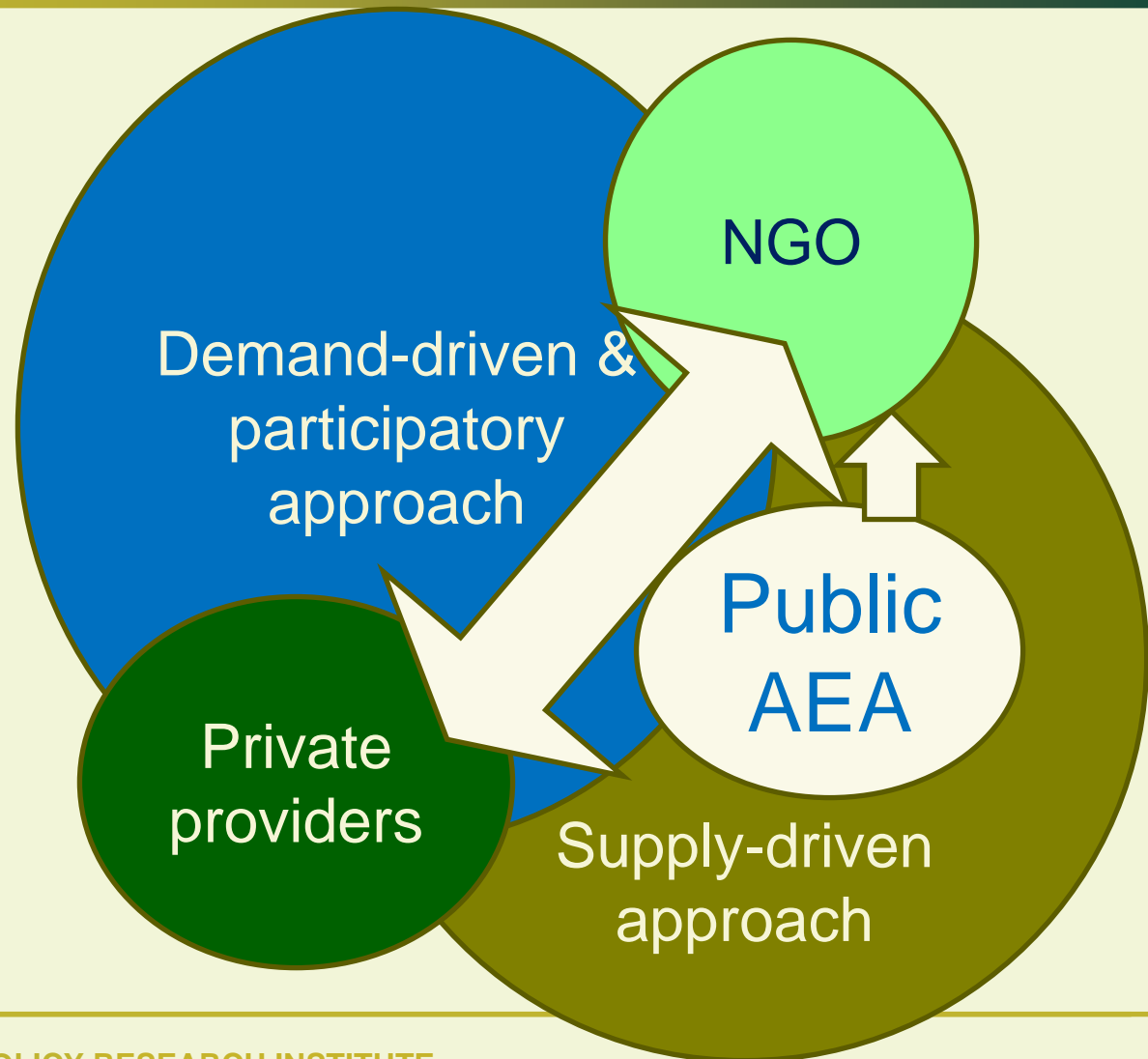
Models of extension services

- Models of extension services defined by
 - The approach of service delivery (supply-driven, demand-driven, participatory vs top-down)
 - Providers of extension services
 - Funders of services
- Most countries follow a combination of models.
- Each model is evolving in response to new realities and emerging opportunities
- There is no one size-fits-all model – so far

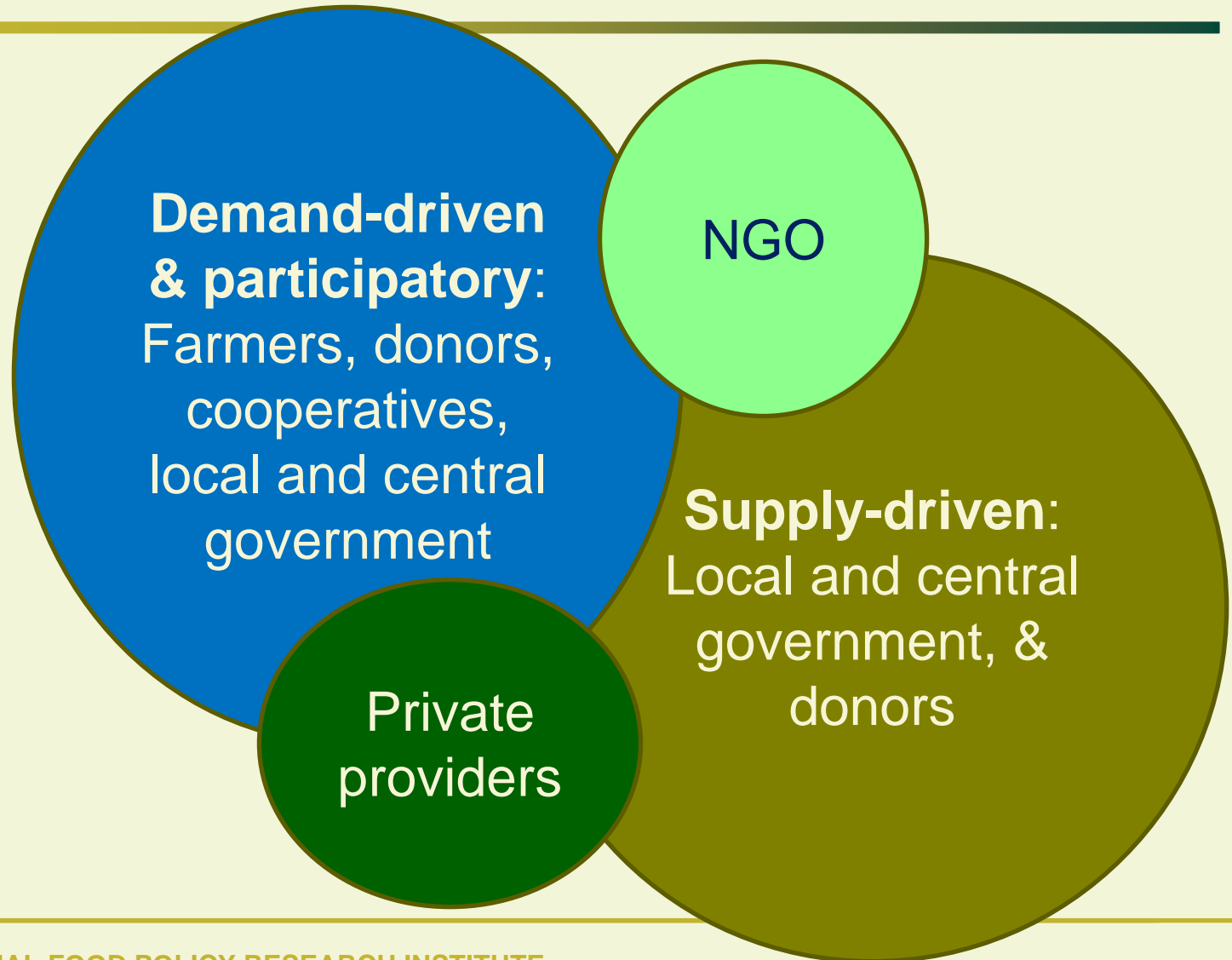
Models of extension services

- **Traditional supply-driven:** Provided and financed by government & donors
- **Demand-driven, participatory & pluralistic extension services:** Financed by government, donors & other funders and provided by public, NGOs & private providers
- **Private extension services:** Provided by private extension agents & financed by cooperatives; farmers, NGOs, etc
- **NGOs:** Financed by NGOs, provided by private or public agricultural extension agents (AEA)
- **A combination of models**

Agricultural extension models – method of service provision & providers



Agricultural extension models – sources of funds for each model



Traditional supply-driven extension services

- Traditional extension services have been evolving over time but still remain largely characterized by
 - Financed and provided by government
 - Supply-driven and use top-down approach (Alex, et al., 2001)
 - Poorly funded with weak human capacity (Qamar, 2006).
 - Limited access by women & people in remote areas (Alex, et al., 2001)
 - Low morale of providers
 - Major focus is on production

Demand-driven & participatory extension services

- In the 1990s' and 2000's, Governments and development partners started reforming traditional extension services to address their major weaknesses (Röling, 2006; Rivera and Alex, 2004). Examples of SSA countries that are implementing some form of demand-driven extension models (pluralistic, participatory, FFS, SG-2000; modified T&V, etc) include:
 - Benin, Ethiopia, Ghana, Mali, Mozambique, Nigeria, Rwanda, Senegal, Uganda and Zambia (Davis, 2008):

Demand-driven & participatory extension services

- The key characteristics of the reforms of extension services include (Rivera, 2001; Chapman and Tripp, 2003):
 - Demand-driven & participatory approach
 - Pluralistic providers of advisory services (public, NGOs, farmer organizations, and private providers, etc)
 - Pluralistic funding: gov't, donors, farmers, NGOs
 - Targeting vulnerable groups & empowering farmers to demand & manage advisory services
 - Focus & type of technology provided depend on demand and/or donor objectives
 - Coverage of service tend to be limited

Non-Governmental Organizations

- Funds and provides specialized extension services
- Tend to provide better services in their focus area than public extension (e.g. Nkonya, et al., 2004 observed that NGO with focus on agriculture environment provided better SLM practices than government extension agents in Uganda)
- Tend to follow participatory approaches
- Limited coverage
- Work with public extension agents or hire own extension providers

Private extension services

- Provided by The extension model is also in many forms but the common ones include:
 - Cooperatives/farmer groups provide extension services to farmers. Examples, cotton, coffee, cashew nuts, tea, cocoa cooperatives
 - Agricultural input companies: agro-chemicals, seeds)
 - Veterinary services – provided on fee for service
 - Commercial large-scale farmers hire own AEA
 - High value crops with out-grower schemes (cut-flowers, horticultural crops, etc)

Which models are working and which are not?

- No hard and fast rule – each model has strengths and weaknesses
- However, participatory approach has been shown to perform better than top-down approaches. Yet, supply-driven approach still play a major role and still required (Rivera, 2001; Qamar, 2006)
 - For example, Qamar (2006) note that SLM practices may not be demanded by farmers due to the large investment required and/or limited knowledge of emerging issues (e.g. integrated soil fertility management). Supply driven model is required in this case – at least in the beginning

Potential of providing demand-driven advisory services & NGO models

- Increasing number of NGOs providing demand-driven advisory services (Oladele, 2004)
- Orientation of projects & programs to:
 - Participatory approaches, e.g. the Community Driven Development (CDD) projects and programs (Dongier, et al., 2002 and Mansuri and Rao, 2004);
 - Participatory action research
 - New efforts to use agriculture as engine of growth & poverty reduction

Constraints of demand-driven & NGO models

- Low capacity of farmers to demand for technologies – due to long exposure under supply driven approach (Qamar, 2006)
- Low capacity of AEA to provide some technologies, notably:
 - Integrated soil fertility management practices
 - Price & marketing information and strategies
- Policies & government financial support are weak. For example, Uganda is retracting back to supply driven approaches
- Largely donor-funded - hence sustainability questionable.

Constraints of demand-driven & NGO models

- Limited capacity to regulate and coordinate multiple providers of advisory services – leading to multiple and conflicting messages
- Coverage in remote areas and among poor farmers still limited.
 - For example, Benin, et al., (2009) observed non-significant impact of the demand-driven extension services in the two poorest regions (northern and eastern) in Uganda
 - NGOs & private providers tend to operate in areas with high market access (Rutatora & Mattee, 2001; Jagger and Pender, 2006)

Potential for the traditional supply-driven model

- Remain the largest program employing the largest number of providers and covering entire countries in SSA
- Evolving due to the emerging participatory development approaches, donor orientation, and decentralization
- Empirical evidence in Nigeria show supply-driven approach provided more SLM technologies than the demand driven model
- Provides services on all technologies regardless of their demand – but still focused on production

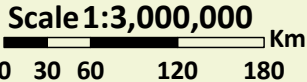
Constraints of the traditional supply-driven model

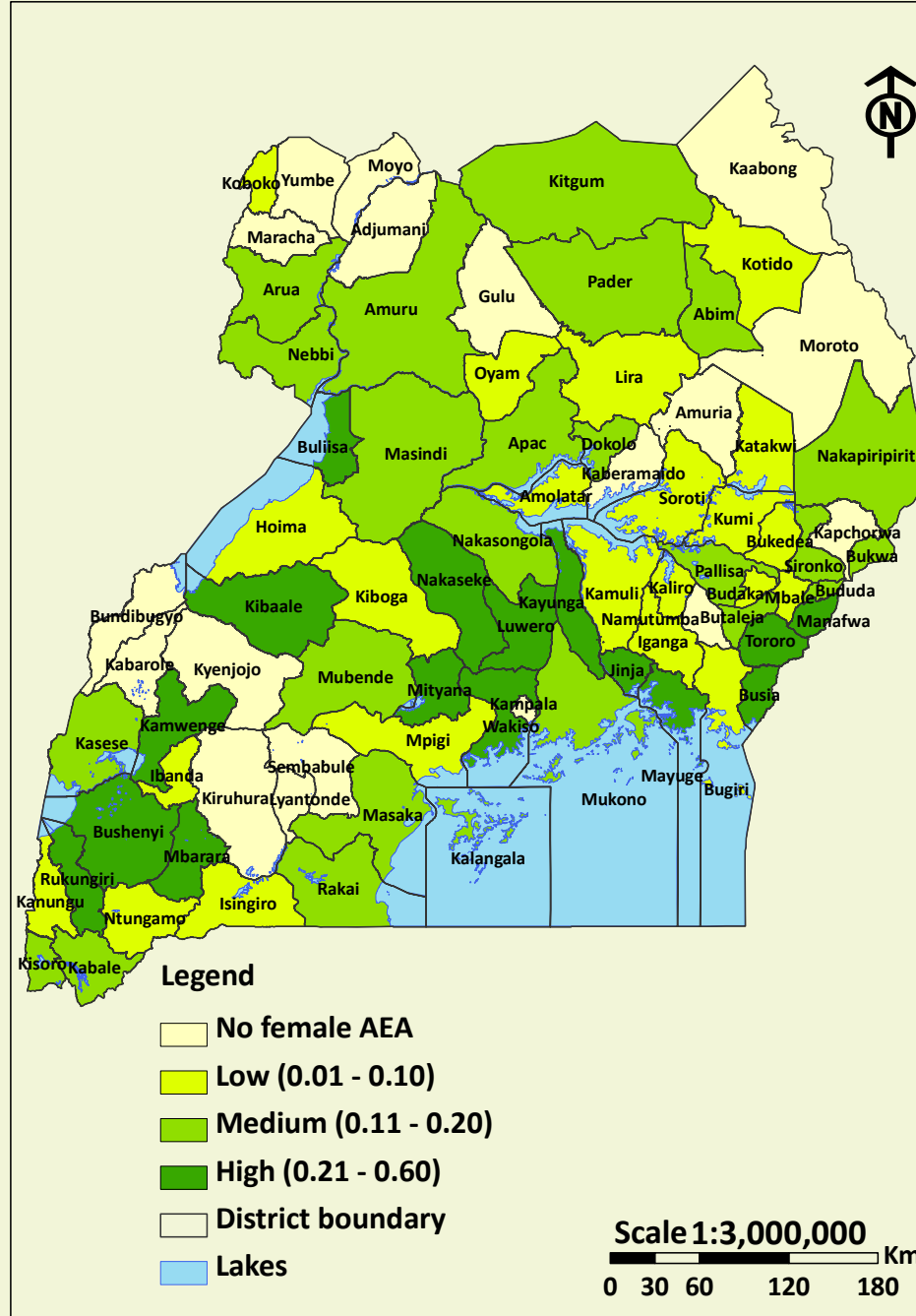
- Poorly funded and equipped
- The approach does not take advantage of farmer indigenous knowledge. For example indigenous SWC technologies (e.g. *zai* in west Africa, *ngoro* in Tanzania) were not promoted by traditional extension services but now promoted by NGOs and participatory models
- Access by women is more limited than is the case under demand-driven approaches
- Coverage in remote areas is limited. For example Ugandan case given below



Legend

- Kampala (no agents)
- High (<10000)
- Medium (10000 - 15000)
- Low (15000 - 60000)
- District boundary
- Lakes





Potential for private extension model

- The following new trends increase demand for private extension providers:
 - New drive to promote high value crops
 - New approaches to promote cooperatives and farmer production and marketing groups
 - Demand-driven approaches require private AEA
 - Weakening traditional extension services create vacuum
 - Policies and strategies to provide post-production technologies

Constraints of private extension model

- Poorly regulated – hence likely to mislead farmers, e.g. promotion of agrochemicals under a certain brand name
- Not accessible to poor farmers who can't afford the associated fees
- Provision of services in remote areas is limited
- Highly specialized – limiting capacity to provide key technologies – especially SLM practices

Policy implications

- Increase the capacity of extension service provide SLM practices
 - All major models reveal weakness in providing integrated soil fertility management (ISFM) practices. This is partly due to the limited development of ISFM technologies – a relatively new approach but becoming increasingly important due to increasing fertilizer prices and diminishing soil carbon
 - Hence need to provide short-term training, workshops and networking – extension services poorly networked within and across countries
 - Supply-driven approach may be required in the initial stages of demand-driven approach and/or to build capacity of farmers to demand SLM practices

Policy implications

- Target training to women to increase access of extension to women farmers
- Increase capacity to use and access to ICT – mobile technologies can be effective
- Increase linkage with research
- Diversify provision beyond production
 - Capacity to provide post-production is low – especially for the traditional supply model
- Improve incentive for extension services
 - Rewards & recognition of best providers of extension services
- Improve extension – research interaction

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