

RESOURCE ARTICLES

Governance of Agricultural Extension and Advisory Systems

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RATIONALE

Agricultural extension includes institutions and people engaged in agriculture and allied sectors to facilitate their efforts to solve problems in production, to obtain information, skills, and technologies to link to markets and other players in the agricultural value chain leading to improved livelihoods (Birner, et. al., 2009). Addressing new and emerging challenges in agriculture requires extension to play a key role with diverse objectives and good governance. Governance is an important aspect and in extension, it refers to systems and processes in administrative and institutional set up to deliver the agricultural advisory services including institutional design of extension services like decentralization and public private participation in extension along with responsibilities and financial commitments (Bitzer et al, 2016). In many developing countries, governance systems in agricultural extension are weak and at cross roads, effecting delivery of services to farmers. In many instances the extension methods failed to reach the majority of farmers in most need of these services, particularly for those farmers of small and marginal holdings. The factors responsible were observed to be corruption, political misuse, paternalistic approaches, and patronage in agricultural extension services delivery (Anderson, 2008) resulting in poor performance of agriculture sector.

As a result of failures and emerging challenges in agriculture, there is a growing realization in many countries to introduce reforms in governance to the existing public extension services. Decentralisation is one of the most frequently encountered governance reforms in agricultural extension. It involves a comprehensive change in the structure and level of decision making in agricultural extension. In many developing countries, other attempts include introduction of public private partnerships, privatisation and outsourcing extension services leading to increasing pluralism. In view of this, there is a need to review governance failures, governance structures and processes evolved from extension

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reforms and promising processes that emerged in strengthening governance in agricultural extension services.

REASONS FOR GOVERNANCE FAILURES OF PUBLIC EXTENSION SYSTEMS

Agricultural extension systems and practices evolved over time, followed similar patterns and trends across the globe. However, public extension systems have been phased out or effectively been transferred to the private domain in some European countries, as well as in Australia and New Zealand. In North America, public extension systems still focus on technical and management skills and knowledge, as well as social capital development, but most technology transfer activities are now carried out by private input supply companies, as well as farmer cooperatives. Traditionally agricultural extension services in many developing countries are provided through state-run, centrally managed systems which focused on linear technology transfer from researchers through extension agents to farmers. This approach was modelled to replicate the significant rises in agricultural productivity, particularly for food crops, that had occurred in developed countries and implemented in high-potential areas with irrigation during the Green Revolution in Asia (Hounkonnou et al., 2012).

The Training and Visit system (T&V) was promoted by the World Bank in mid 1970s. It was an early anchor that reflected a belief in the role of the state as the main actor in agricultural extension services. Under the top-down approach of T&V, existing efforts and organizations were merged into a single national service to promote the adoption of high-yielding ('Green Revolution') technologies (Ferroni, 2003). The system experienced success in a number of countries, including India, at least for a period of time. It took a 'campaign approach' to raising food production that resonated in settings where farmers' needs and the promoted technologies matched up.

However, the T & V system suffered from a few limitations. It has been observed that the adoption rates of new technologies remained low and overall productivity increases were insignificant in many countries (Anderson and Feder, 2004; Anderson et al., 2006). Further, it was also observed that the public extension services were staff intensive with most part of the extension budget used for payment of salaries to the staff. As a result, only a limited number of farmers were served. In the early 2000s, the T&V system was judged to be financially unsustainable because staff costs were high and operational funds were limited and consequently this type of system was shelved (Anderson et al., 2006).

In India, public extension has a mixed record with poor research-extension-farmer linkages in many instances while on the other hand there are duplications of efforts among a multiplicity of agents attending to extension work without adequate coordination. Difficulty in attributing impact, high transaction costs and weak accountability to farmers are the some problems affecting the delivery and financing of public extension. As the public sector extension has failed to fulfil the role in promoting agricultural growth, its critical assessment became necessary (Rivera et al., 2001).

World over also, other governance failures that are inherent in public sector extension systems were identified by several extension scientists (Anderson and Feder, 2004; Birner and Anderson, 2007; Bawa et al., 2010) and international organizations (World Bank and IFPRI, 2010). Some of these include:

- Low political priority and support for extension for food crops.
- Dominance of bureaucratic procedures.
- Top-heavy decision-making and lack of farmer participation in extension planning and implementation.
- Strong upward accountability toward bureaucratic hierarchies and donors, but weak downward accountability to users of extension services (farmers).
- Poor performance incentives for public extension officers.
- Weak research and extension linkages in agriculture.
- Misuse of extension officers for other purposes.
- Patronage by local agencies along ethnic or religious lines.

As a result of these governance failures, public extension has become largely defunct in many developing countries since the collapse of T&V.

IMPETUS TO GOVERNANCE OF EXTENSION SYSTEMS

The prominence of agriculture on the development agenda of developing countries has renewed the focus on agricultural extension and advisory services. The agriculture and allied sectors sector in developing countries were now characterized by rapid changes and unprecedented challenges. The knowledge intensive nature of the sector is more evident now than ever before. The trends in urban markets, globalization, changing consumption patterns, depleting land and water resources, climate change, need for alternative energy sources are driving development in agriculture and allied sectors. Private sector is increasingly playing a role and civic society demands for equitable

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distribution of resources and services are on the rise. Consequently, the demands on extension services which have a crucial role to play in agricultural development to keep pace with the changing context have also increased manifold. A number of approaches and methods to reform agricultural extension have been tried in various developing country contexts to transform the system and to enhance their capacities to respond to the demands and challenges. The common reform models include:

- Decentralisation of services.
- Outsourcing of services to private and non profit organisations.
- Privatisation of services.

Decentralization of Services

The objective of the decentralization process, as a part of good governance in agricultural extension is to provide better services by “*bringing Government closer to farmers*”. Accordingly, decentralisation is motivated by objectives of making services more demand-driven and farmer-led, improving the efficiency of governance, and responding to local needs of farmers. The objectives of decentralization do not include farmer empowerment as an explicit goal of this reform, but it brings services closer to the people, thereby offering opportunities for increasing the influence of farmers and enhanced accountability of public extension services (World Bank and IFPRI, 2010).

Important features of decentralization include;

- Transfer of professional staff, administrative functions and financial resources to lower levels of Government at district, Block and villages.
- Political decentralization accompanied by fiscal and administrative decentralization makes service providers accountable to farmers and locally elected Governments.
- Regular interaction with farmers and their interest groups enables Government to develop workable and sound agricultural policies and regulations.
- Promoting farmers access to right to information can make decentralization effective.
- Enhancing capacities of farmers including women in farm planning and budgeting contributes substantially to improve the effectiveness of this strategy.

Outsourcing of services

Outsourcing in the context of extension services is the contracting out of public extension services to private sector organisations, mostly for nongovernmental organisations. The objectives of outsourcing in extension services are: to reduce government expenditure, increase the efficiency of service delivery and improving the quality of services through greater demand orientation and accountability to clients (Heemskerk et al., 2008). Extension services in some African countries such as Uganda, Mozambique, Mali and Tanzania, serve as good examples in this regard. These countries have introduced outsourcing models with some degrees of success but in Uganda, private service providers were found to have higher effects on farm productivity (Benin et al., 2011). However, experience from these countries also seems to indicate that outsourcing is most effective and also cost-efficient if it concerns specific extension functions where private providers have clear competitive and complementary advantages (Heemskerk and Davis, 2012).

Privatisation of services

In some countries privatisation of services has been widely discussed as an alternative to the dependence on public funding for extension services (e.g. Rivera et al., 2001; Chapman and Tripp, 2003). This is primarily based on the assumption that the private sector works efficiently in the absence of administrative and political constraints. Despite this, efforts to completely privatise extension systems have largely failed. In most countries worldwide, public sector funds are still the primary source of funding even if extension services are provided by private sector organisations. This is attributed mainly to difficulties in implementing cost-recovery approaches, as low-income farmers are often not able to pay for private extension services themselves (Swanson and Rajalahti, 2010). However, evidence from experiences with privatisation in several Latin American countries in the 1990s suggests that there is also risk involved that privatisation may lead to a further bias in extension services towards middle- and high-income farmers. On the other hand though, privatisation of extension services in cash crop production for export markets, such as coffee, cotton, cocoa, tea, rubber and horticulture appeared to be successful when combined with input and marketing services. In some African countries small-scale producers were integrated into closely coordinated configurations run by organisations that offered interlinked services to farmers, such as inputs, extension, credit and marketing and were successful in increasing productivity and exports of cash crops (Hounkonnou et al., 2012).

PLURALISTIC EXTENSION SYSTEMS

Pluralistic forms of agricultural extension services seemed to have emerged after T&V system was abandoned in many developing countries. These pluralistic forms include different public and private models for funding and implementing extension services. Pluralistic extension services have been preferred for their ability to overcome different constraints related to funding, staffing and expertise as well as in providing the necessary flexibility to make extension services more demand-driven, context-specific and based upon multiple knowledge sources (Birner et al., 2006).

Farmers are highly heterogeneous with regard to education, farm sizes, resources, crop and livestock systems, market access, etc. and, they require different types of information. Public extension services, which often mainly focus on production issues, are insufficient to cover all their information needs (Spielman et al., 2011). Agriculture advisory services offered by other providers, such as NGOs, agribusinesses and farmer organisations, thus open up new opportunities based on distinct competitive advantages.

One of the key challenges in pluralistic systems lies in the coordination of activities by organisations that have vastly different ways of working. Such a coordination function is generally considered to be the role of the public sector (at district, regional and national levels) to ensure that the activities, scope and scale of the different service providers are aligned in such a way that service providers are accountable, quality is assured, farmers are able to influence extension services, and lessons learned are shared among service providers (Heemskerk and Davis, 2012). However, experiences from different countries show that this is the greatest problem up to now, and coordination and collaboration between the various service providers is generally low (e.g. Simpson et al., 2012; McNamara et al., 2011). Barriers to effective stakeholder coordination also exist in the form of mutual suspicion among service providers as well as lacking incentives for public sector actors to take up the coordinator role. These barriers have found to often leading to unnecessary costs, duplication and inconsistencies in service delivery (Chinsinga and Cabral, 2010). A high fluctuation in the number of service providers can also be observed which leads to dynamic but also highly fragile systems in which the public sector often remains the main provider of agricultural extension services (Heemskerk and Davis, 2012).

GOVERNANCE IN PLURALISTIC EXTENSION SERVICES

Heemskerk and Davis, (2012) suggest that pluralistic extension itself is characterized by the coexistence of multiple public, private, and mixed

extension systems and approaches; multiple providers and types of services; diverse funding streams; and multiple sources of information. They further suggest that good governance aids pluralistic extension and thereby facilitates interaction and learning.

Consequently, good governance in pluralistic extension services ensures great degree of satisfaction in different client groups with their access to services that they have demanded and makes it possible to capitalize on the competitive advantages of different actors in agricultural extension service providers.

Good governance in pluralistic extension services includes several emerging practices. The most important are:

- Public Coordination.
- Public-private partnerships.
- Bottom-up extension services through farmer organisations.
- ICT, Mass Media and e-Governance.

Public Coordination

Coordination plays important role in pluralism in respect of partnerships with farmer organizations and private venture companies. In a pluralistic extension arrangement, the responsibility is on the government which has to organize national and regional platforms and workshops. The objectives of these workshops and platforms would be to discuss and determine with major stakeholders the value and importance of extension, and how best to organize the varied extension activities in a systematic fashion, recognizing the various providers of such services—by private companies, private farmer associations, non-governmental organizations and commodity interest groups. Based on the outcomes work shop Government is to identify areas of operation and responsibilities of each actor.

Example: Case study of Malawi

Malawi has implemented the challenge of coordination by creating different organisational structures. At the district level, the District Agricultural Extension Services System (DAESS) is the main framework for organising farmer demand through Stakeholder Panels and coordinating service delivery through Extension Coordination Committees. At the national level, coordinating structures was the Malawi Forum of Agricultural Advisory Services (MFAAS) to serve as an information sharing body concerned with co-ordination, standardisation, quality, and capacity building. Both district and national levels are considered critical for coordinating activities (Masango and Mthinda, 2012).

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Particularly the district structure, as set up in Malawi, is viewed as innovative and vital for a demand-driven system, even encompassing attempts to coordinate with related projects on nutrition and gender (Sigman et al., 2014). Though pitfall still remain, overall assessments of the pluralistic extension landscape in Malawi, indicates that the foundation for a strong and effective demand-led extension system has been put in place (Masangano and Mthinda, 2012).

Public-private partnerships

A partnership implies proportional input by the various parties involved. In some countries (e.g. South Korea and Taiwan), farmer associations are equal partners with decentralized government authorities. In other countries (e.g. Israel), farmers may contract in for services, ensuring an equal partnership since decisions regarding the provision of field services are made by the farmer associations. More recently, other forms of public sector partnership have emerged involving government funding (e.g. Chile, Hungary and Venezuela).

Example: Case study of India

India has decentralised its public extension services and also recognised the growing importance of private extension providers through the Agricultural Technology Management Agency (ATMA) model. Under ATMA, there have been several public-private partnerships with NGOs and commercial organizations for service provision. In the state of Maharashtra, strong partnerships were developed with private sector firms on a variety of topics, including organic farming, processing and marketing of medicinal crops, and joint operation of information technology kiosks (Singh, 2008).

Even partnerships with input providers – traditionally viewed with suspicion by public extension workers as unskilled competitors ‘who just want to sell more products to farmers’ have been established to ensure that farmers receive accurate and consistent technical information (Swanson and Rajalahti, 2010). The advantage of these partnerships lies in their potential for benefit and risk sharing. They are also important in being able to reach smaller and poorer farmers, who are frequently omitted by both commercial extension providers and by public extension (Ferroni and Zhou, 2012).

However, (Ferroni and Zhou, 2012) reported some implementation bottlenecks that have emerged because of limited qualified public extension staff, insufficient technical and financial support, and a weak framework and coordination of public-private. With this experience, government has increased funding to ATMA in the last two years (Kaegi, 2015).

Bottom-up extension services

The top down approach of agricultural extension was followed in many countries without consulting people at field levels with lack of accountability resulting in governance failure. With this in view, bottom up participatory extension is earlier help increase ownership and accountability of programs to stakeholders (Swanson and Rajalahti, 2010) and better use of resources. Bottom up decision making is attempting to incorporate ideas from stakeholders who are both outside government agencies and within, but at lower levels than the decision makers and controllers of funds. The benefits are that those that are being asked to implement the change and possible change have an opportunity to contribute their ideas. This in turn means that the extension strategy uses the historical and management knowledge of the stakeholders. Therefore the resulting changes are addressing some of the goals of all interested parties. It also means that more people are informed about the objectives and the constraints within which all stakeholders are operating.

ICT, Mass Media and e-Governance

Many countries have a long history of using radio and television for reaching farmers with new information on agriculture. Besides radio, television and print media, new avenues in the form of ICT enabled portals, call centres, community radio, information kiosks, digital photography, digital videos, apps etc., are being used for disseminating information on agriculture. In the last two decades, improved availability and access to new ICT technologies, especially personal computers, the internet and mobile telephones, has provided a much wider choice in collection, storage, processing, transmission and presentation of information in multiple formats. ICTs are also providing greater access to information and communication among the hitherto un-reached geographies and populations. A number of important initiatives have been taken to provide ICT hardware and connectivity to all organizations involved in agricultural extension.

Strategies to strengthen governance

The governance of agricultural extension systems should consider the national context of a country and take in to consideration of current configuration of the actors in the extension and advisory service system because an approach that worked in a state or country may not work in another. It is essential to design and develop more effective and sustainable extension and advisory services to meet local needs and conditions. These include reforms in governance structures, capacity development and advisory methods to bring services closer to farmers.

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Under these reforms, participatory planning and resource allocation occur at the local level and local extension functionaries coordinate the provision of services.

Governance of agricultural extension must take in to account of lessons learnt and pilot experiences emerging from structural reforms to develop pluralistic, demand-led, and market oriented extension systems. Further, extension services must address emerging challenges in agriculture arising from climate change, food security programmes, international trade, phyto sanitary requirements etc. Realizing these objectives requires reforms and addressing several challenges and Christoplos (2010) and Heemskerk and Davis (2012) provided an overview of some of the critical structures and processes to strengthen governance.

- Public extension services continue to dominate in many countries but it has to bring different extension providers together to assure an adequate mix of services to meet existing demands and needs. Government should act as facilitator with all service providers including public, private, embedded services etc. This requires moving toward pluralism in extension service provision while retaining public financial commitments and coordination.
- Public sector may reduce their involvement in actual delivery of extension but they should play a major role in providing a national vision and strategy.
- Proceed with extension system reform without relying on a single grand model as one model cannot accommodate all situations. Extension is to be location- and even value chain-specific.
- Public-private partnerships between the various agricultural extension service providers are critical to draw upon a diversity of knowledge sources and promote innovative practices that encourage smallholder-led agricultural growth and sustainable livelihoods.
- Market-driven services are essential in the face of changing market demands and increased competitive pressures. Market driven extension approaches are urgently needed to shift from supply-driven dissemination of packages towards approaches that respond to and make use of market demand.
- Increase downward accountability to farmers and farmer organizations. Improving the accountability of extension services ensures increased involvement of farmers in monitoring and evaluation at a systemic level. This requires integrating farmers into extension planning and by involving farmer organisations in service procurement.

- Create an effective, efficient market for service providers, which will control the costs of scaling up promising experiences by different public and private actors.
- Face the enormous need for capacity development of local extension functionaries as they require wide range of skills to face emerging challenges.
- Move away from pilot projects to programs based on long term vision and commitments to match national extension systems based on public-private partnerships.
- Move from standard packages to tailored services provided at the right place, at the right time, and in the right format. Critical thinking and problem solving are integral to developing tailored services.
- Address equity issues to ensure that extension adequately reaches different groups of farmers and entrepreneurs: women, youth, the landless, resource-poor farmers. This need categorising farming households as priorities for services differ significantly between small-scale commercial, emerging and subsistence, food-security focused, or part time farmers.

CONCLUSION

The widespread governance failures inherent in public sector extension systems in many developing countries have impacted on the systems' effectiveness, relevance and performance and led to mounting pressure to bring about radical reforms in extension. Further, the acknowledged failure of the T&V system in many African and Asian countries fuelled an intense debate on new approaches to extension. Added to this, in many developing countries centrally managed, publicly funded and implemented system of agricultural extension was no longer considered a desirable and feasible option, particularly in the light of limited budgets available to fund these services.

The reform efforts initiated in many countries have sought to address these failures and brought about changes in governance through decentralisation, outsourcing and varying degree of privatisation. Pluralistic systems have evolved, which are sustainable with respect to institutional design and organisational structures. Practices in advancing the governance of pluralistic extension systems include public coordination, public-private partnerships and farmer involvement in extension service provision. Several strategies and structures to strengthen governance in agricultural extension systems are suggested to adopt as per the local needs and conditions. However, the success of these reform efforts varies greatly, and a range of benefits and

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drawbacks has been identified for each of these reforms. The extension reforms suggests that there is no single prescribed governance model that can address all of the prevailing governance failures. The experience reveal that grounded in the predominant culture of public extension systems are strongly resistant to change and which cannot be easily altered through reforms in governance structures. Emerging pluralism in extension systems thus provides an opportunity for change outside of existing public extension services to begin with, which may create conditions necessary for more fundamental changes to the overall governance of extension systems.

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