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Strengths, weakness, opportunities, threats of livestock extension and delivery services in India-an overview

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Abstract

Livestock are important to millions of poor households across the world not only as a source of income but also as a major source of protein and supplementary nutrition, draft power, fertilizer, fuel and a store of wealth. A large majority of livestock owners comprise of small and marginal farmers, who own nearly 80 percent of the livestock. Therefore, extension of livestock information has become an important component for rural development in our country. The NSSO survey revealed that only 5.1% of the farmer households in India were able to access any information on animal husbandry against 40.4% of the Indian households accessing information on modern technology for crop farming. The Government of India spends below 10% on livestock extension activities. Public livestock extension delivery institutes include Directorate of Extension, I.C.A.R, N.D.D.B, K.V.Ks, S.D.A.H and private extension service delivery institutes include N.G.Os, Agriclincs and Agribusiness Centers etc. The public extension has faced many limitations in transfer of services and therefore private extension organizations came into existence to overcome the short comings. There is an enormous scope to boost rural income in combination of the services provided by the public, private and civil society organizations. However, this requires a policy regime that facilitates growth in productivity at the farm level as well as in the processing sector. Mechanisms to meet the service needs of poor livestock keepers and the ways and means to deliver them at minimum cost need to be identified.

Keywords: Strengths, weakness, opportunities, threats, service delivery

Introduction

Despite the pluralistic extension approaches, Indian livestock extension has a limited outreach, particularly to the marginal and small farmers. Extension of knowledge, technology and service through extension education to the grass root level is of paramount importance for the growth of the livestock sector. The Government of India (GOI, 1998) [2] spends below 10 per cent on livestock extension activities. The State Departments of Animal Husbandry (SDAH) - the major stakeholders for the livestock development in India are mostly dominated by animal health concerns with negligible attention to production related advice to farmers. Moreover, the expenditure on livestock extension activities is only around 1-3% of their total budget (Ravi Kumar, 2005) [6]. Only one centrally sponsored scheme on "Livestock extension and delivery services" with a budgetary outlay of Rs.15.00 crore was proposed by Department of Animal Husbandry, Dairying and Fisheries (DAHDF) during the 11th plan period. To cater to the diverse needs of livestock farmers, among others an efficient livestock extension delivery system is required. The National Sample Survey Organization (NSSO, 2005) [5] in its survey of 51, 770 farmer households across the country revealed that only 5.1% of the households were able to access information on animal husbandry as against 40.4% households accessing information on crop sector. Extension delivery in India is being carried out by different organizations broadly classified as public delivery system, private delivery system and civil society organization. Various government institutions which are involved in public delivery system are unable to deliver efficient livestock services and therefore a concept called private extension service delivery system has gained popularity in livestock sector. Among the public sector organizations, the major public sector extension systems for delivery of extension services in India are The Ministry of Agriculture at central level including the Indian Council of Agricultural Research (ICAR) and the Directorate of Extension (DoE), State Departments of Animal Husbandry as well as the State Agricultural/Veterinary Universities (SAUs), The Departments of Animal Husbandry (DAH) and Fisheries (DoF), Krishi Vigyan Kendra (KVKs) and The Agricultural Technology Management Agency (ATMA) at the District level. Private Sector organizations include producers groups, including cooperatives and federations

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of milk and meat, processing companies, clinics, Individual consultants and consultancy firms while civil society organizations mostly include NGOs, Farmers organizations etc. Though number of organizations are providing livestock extension service delivery, there are large gaps between actual needs of the farmers and the extension services provided by these organizations. Hence, there is need to evaluate the performance and socio-economic impact of the extension delivery services provided by these organization in order to identify best services and to understand their impact on small and marginal farmers. This paper tries to analyse the Strengths, Weakness, Opportunities and Threats played by the public sector, private sector and civil society institutions of India in general, with reference to their operational role and how the partnership between these institutions and policy implications can be formulated for the benefit of the livestock farmers.

Strengths, Weakness, Opportunities and Threats of Extension Services Provided by Public Sector Strengths

- India has second largest extension system in terms of professional and technical staff. More than 90,000 technical personnel constitute its extension system. Hence, these large human resources need to be efficiently utilized for the effective transfer of technology process.
- 40 million farm families are supported by the livestock extension services, financed by state governments so far. The public sector could work in remote areas, which cannot be serviced well by any other sectors in the country.
- Livestock extension is under transition as governments and international agencies are advancing their structural, financial and managerial reforms to improve the pluralistic extension system. Decentralization, pluralism, participation of stakeholders, cost sharing and cost recovery are some of the elements in the current transition.

Weakness

- Mingling of government schemes and extension activities.
- Lack of farmer's involvement in program planning.
- Supply rather than market-driven extension.
- Lack of local capacity to validate and refine technologies.
- Inadequate technical capacity and communication capacity
- Weak research-extension linkage and weak linkages with private sector firms.
- Little focus on empowering farmers.

Opportunities

- The most efficient way of organizing livestock service delivery is to see that all buyers and sellers take prices as given, i.e., no one has any market power and there are no transaction costs.
- Extension can be changed from an agency of technology dissemination to emphasis on production, linking of farmers to markets and providing information services and to helping farmers to organize themselves.
- Design and introduction of a multitude of integrated measures that on the demand side-enable service users to voice their needs and hold service providers accountable

and on the supply side influence the capacity of service providers to respond to the needs of the extension service users.

Threats

- Information flow being supply-driven and not being need based or area specific is the major constraint and therefore the farmers view the quality of information provided by public extension as a major shortcoming (NSSO, 2005) ^[5].
- Lack of convergence in operationalization of extension reforms and lack of provision for dedicated manpower at various levels.
- Inadequacy of funds, lack of infrastructural support below district level and inadequate support for promotion of farmer's organizations and their federations.

Private Sector Extension Service Delivery Strengths

- Policy framework notes that "Public extension by itself cannot meet specific needs of various regions and different classes of farmers" (India, DAC, 2000) ^[3].
- In the pluralistic extension systems, private sector is providing services related to proprietary goods such as clinical diagnosis and treatment, production and distribution of vaccines and other veterinary supplies which do not involve any externalities or moral hazard problems while the public sector can provide services such as veterinary surveillance, research and extension which tend not to be addressed by private-sector firms (Swanson, 2008) ^[8].
- Private-sector is successful in developing context-specific models and using ICT tools to diffuse agricultural information directly to farmers.

Weakness

- Private sector serves a corporate interest, works for the individual farmers and can only work well if farmers are willing and able to pay indirectly through the sale of inputs.
- Could not serve the needs of marginal and small farmers, who are currently not serviced well.
- May not be able to provide trainings that reflect up-to-date information.

Opportunities

- Lot of scope for Public-Private Partnerships (PPP) that are currently weak or almost does not exist.
- It would mean changes in the way the public sector views and interacts with the private sector.

Threats

- None reach to the small and marginal farmers.
- Social capital is not built.

Civil Society Extension Service Delivery Strengths

- The Civil society extension systems can play an important role in articulating the need of men and women farmers to knowledge intermediaries through the Farmer Interest Groups (FIGs) and Self Help Groups (SHGs).
- Both FIGs/SHGs are already emerging as an effective mechanism for both the transfer of technologies and the

empowerment of the rural poor by fostering innovation in participatory ways. (Meena *et al.*, 2008) ^[4].

- Adoption of this approach can reduce the extension cost and workload of extension functionaries.
- ICTs could be useful tools to increase connectivity between the various FIGs/SHGs and different extension approaches.

Weakness

- Covering the whole country with huge diversity and complexities as well as mental makeup for converting into social capital especially of the landless laborers, smallholders, rural women etc., is a herculean task.
- For harnessing the ICTs, there are many challenges prevalent like insufficient infrastructure, sustainability aspect and capacity development which need to be addressed.

Opportunities

- Development of leadership and management skills through capacity building of SHGs/FIGs.
- Farmers need to be promoted in such a way that they can demand information needed.
- Can be developed into an important component of agricultural extension approaches.
- Serve as platforms for the effective dissemination of technology innovations.

Threats

- NGOs, which are not numerous, rely on donor funds and would need public support to develop the technical skills to facilitate groups.

Ascertaining the strengths, weakness, opportunities and threats of each sector and considering the opportunities in combination of the three, there is an enormous scope to boost rural income and accelerate the pace of poverty reduction. However, this requires a policy regime that facilitates growth in productivity at the farm level as well as in the processing sector. While the unfolding livestock revolution is likely to result in a rapid increase in the demand for quality livestock services, the policies and institutions are not geared up to meet that challenge. There are no mechanisms in place to identify the service needs of poor livestock keepers and the ways and means to deliver them at minimum cost. Therefore, good support services are critical for enhancing livestock productivity and for enabling the poor to gain access to expanding markets. "In determining the appropriate channel for delivery of services, it is necessary to classify each service on the basis of its public and private good character, while taking into account any externalities, moral hazard problems, free rider problems that may accompany the production or consumption of the service".

Based on these principles, the services can be classified under public and private sector for delivery of animal health and production services (FAO 1998) ^[1].

Public Sector

Ensuring the health of the national herd including disease surveillance, compliance, monitoring, quarantine, quality control of remedies and vaccines, planning for emergencies and reporting to international bodies and neighbouring countries; oversight of food safety, import and export inspection and certification according to international

standards; regulation, monitoring and support of other partners in the animal health care system; accreditation of personnel; creation of an enabling environment for the private sector and general formulation of livestock development policy.

Private Sector

Clinical diagnosis and treatment, production and distribution of remedies and vaccines, artificial insemination, management of herd health and production programmes, marketing livestock and products.

Shared Responsibility

Disease diagnosis and reporting; compulsory testing; accreditation; control of external and internal parasites; food hygiene and inspection; continuing education and training; diagnostic support; animal welfare; notifiable disease control; disease emergency response; zoonosis control; research; and advice and extension.

Issues to be considered for Efficient Delivery of the Livestock Services

- Demand-side reforms which include empowerment of rural population by means of decentralization, participatory planning and implementation through adoption of farmer field schools and farming system approach. Success of demand-side initiatives also depends on the capacity of farmers to identify and communicate technology problems and to implement their solutions.
- There has been considerable growth in connectivity, content, and capacity of ICT sectors of India. However, there are still lags behind developed countries in the ICT development Index published by International Telecommunication Union (ITU).
- Marketing efficiency is a prerequisite for creation of more suitable and workable organisational arrangements, leading to a new shape of service delivery with respect to structure, form, quality and prices. These arrangements can be the producer and consumer organisation, veterinary associations, etc. This also points towards the need for an effective regulatory and legal framework, and an effective extension service that governments will need to provide for proper functioning of the market. This is one of the areas where future thinking in livestock service delivery will need to focus.
- For the services which must remain the responsibility of governments, it has been suggested that the efficiency of these services can be significantly enhanced by subcontracting the service delivery to private agents. While sub-contracting does have the potential of yielding some cost savings by circumventing the rigidities and perverse incentives that often characterize the government delivery systems, there is also the need to ensure that contractual obligations will be met.
- To promote service delivery adequate fund provision is made at State Agriculture Management and Extension Training Institutes (SAMETI) to train 40,000 master trainers. SAMETI's will make use of the expertise from SAUs, KVKs, NGOs and private sector to develop master trainers, who in turn promote FFSs.
- In most of the states, though manpower is available, funds for grounding extension activities are inadequate. Trends in public funding (central and state governments)

of agricultural research and extension, shows an increasing trend in the investment.

- Various line departments at the state and district levels have been criticized for working in isolation, with weak linkages and rare partnerships. The research-extension link has been criticized for not absorbing or using feedback from farmers and extension staff. Extension personnel and farmers are passive actors, and scientists have limited exposure to field realities (Reddy *et al.*, 2006) [7].
- Numerous components of public-sector extension system suffer from duplication of programs, without convergence. While ATMA is pushed as the platform through which the multiple agencies can converge, the implementation difficulties are proving great for effective integration, with shortages of both personnel and funds (Working Group on Agricultural Extension, 2007) [9].

Policy Issues

- Public policy networks must be established in which governments, national and international organizations, civil society organizations and the private sector can collaborate on selective issues to achieve consensus, as an effective means to address this gap (FAO 1998) [1].
- These networks could serve as a forum for informing the national and international policies that determine poor-people's livestock related livelihoods.
- Discussion and dialogue on policy issues in order to enhance the effectiveness of livestock services for the poor.
- Reduce transactions costs for making the services more accessible and mitigate information asymmetry.
- Creating a conducive environment for policy change involving credible local institutions.
- Identifying the research gaps and sponsoring well focussed studies to examine them.
- Creating local databases, information and knowledge banks.
- The success of these networks will, however, depend on the mechanisms and processes that will be used in operationalizing their formation and functioning.
- It is therefore important that functioning of these networks is carefully monitored and their impact on the ground rigorously evaluated.

Way Forward

- India's pluralistic extension system must be capable to tackle the diverse emerging issues in agriculture.
- This system should also support and deal with the pertinent areas beyond the production aspect, such as processing and value addition, market access, trade, agribusiness management, natural resource management, gender, climate change etc.
- Within this paradigm of innovation systems, extension agencies can act as innovation intermediaries or innovation brokers, working with many partners to strengthen linkages and provide support for innovations including extension delivery.
- Private sector initiatives, like e-Choupal, and other small-scale models have explored possibilities to provide information on diverse areas from production to accessing markets. Multiple ICTs approaches are not properly documented hence the need to concentrate and

work with small communities by modern ICTs.

- Scaling up of FIGs/SHGs and Farmers Associations (FAs) could be an effective mechanism for empowerment and transfer of agricultural technologies. It will also reduce extension cost and the workload of extension functionaries. Hence, enriching the system with social capital is the need of hour.
- A greater understanding of PPP is also required including mechanisms to help encourage partnerships. There is a need to identify and encourage best practices and, thereby, understand their impact on farming communities predominantly in reaching smallholder and marginal farmers.
- The absence or weak Research-Extension-Farmer can be best served through efficient linkages among technology generation, dissemination and adoption.
- Adequate fund allocation to reach large numbers of small and marginal farmers by ATMA is essential. Infrastructure below district level is needed to support the capacity building of farmers.

References

1. Food and Agricultural Organisation, 1998. "Principles for Rational Delivery Public and Private Veterinary Services with reference to Africa.
2. Government of India. National accounts statistics, CSO, Department of statistics, Ministry of planning, GOI, New Delhi, 1998.
3. India, Department of Agriculture & Cooperation. Policy framework for agricultural extension (draft). Extension division, DAC, Ministry of Agriculture, Government of India, New Delhi, 2000.
4. Meena MS, Jain, Dilip, Meena HR. Measurement of Attitudes of Rural Women towards Self-Help Groups, the Journal of Agricultural Education and Extension. 2008; 14(3):217-229.
5. National Sample Survey Organization. Situation assessment survey of farmers: Access to modern technology for farming, 59th round Report No. 499(59/33/2). New Delhi: Ministry of Statistics and Programme Implementation, 2005.
6. Ravi Kumar RK. 'Livestock extension activities under the State Departments of Animal Husbandry in India: An institutional analysis.' Ph.D. thesis, 2005.
7. Reddy MN, Swanson BE. Strategy for up-scaling the ATMA model in India. In Proceedings of the Association for International Agricultural and Extension Education (AIAEE) 22nd Annual Conference, Clearwater Beach, Florida, U.S.A, 2006.
8. Swanson BE. Global review of good agricultural extension and advisory service practices. Rome: Food and Agriculture Organization of the United Nations, 2008.
9. Working Group on Agricultural Extension. Recommendations of working group on agricultural extension for formulation of eleventh five-year plan (2007-12). New Delhi: Planning Commission, 2007.