



Role of Private Advisory Services in Agricultural Extension: A Review

Short Note

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ABSTRACT

Services that make new knowledge available to farmers and assist the farmers to develop their farming and management skills are known as agricultural advisory services. Agricultural extension and advisory services which were traditionally funded, managed and delivered by the public sector are in transitory phase worldwide. They are under increased pressure to reform their purpose as the nature of the agricultural and rural sectors is changing leading to demand for broader support from extension and advisory services. Technology transfer system has to become more demand driven and responsive to farmers need and helping farmers to organize themselves as well as linking them to markets. The advisory services has to also support other pertinent areas besides production such as value addition, market access, trade, agribusiness management, natural resource management, gender, climate change etc. It is in this light that the private advisory services are complementing, supplementing or even replacing the public advisory services. Emergence of paid extension services in agriculture is a recent development, where, professionals have been providing paid consultancy to farmers on technical, especially in high value crops like fruits and flowers. These agri-consultant are mostly retired professors of State Agricultural Universities (SAUs), extension professionals, financial institutions and also provided by Agri-Clinics and Agri-Business Centers (ACABCs) trained by the MANAGE.

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Extension services the world over been traditionally funded, managed and delivered by the public sector. In India it has been supported and funded by Ministry of Agriculture (MoA) and other allied ministries and the country is in the process of transforming its technology transfer systems to become more demand-driven and responsive to farmers needs its strength being the second largest extension system in the world in terms of more 90,000 technical personnel constituting its extension system (Brewer, 2000).

Extension system had its own weaknesses and constraints like top-down approach, being commodities and supply-driven specific, declining farm income lack of farming system approach, accountable to government than farmers, weakening research-extension linkages, and less focus on empowering farmers (Singh *et al.*, 2006). Slowly the extension system is changing from being an agency of technology dissemination with focus on agricultural production to helping farmers organize themselves, linking of farmers to markets and providing environmental and health information services (Swanson 2006; World Bank, 2008). National Agricultural policy (2000) had envisioned that private advisory services promotion through contract farming will allow accelerated technology transfer, assured

market, and capital inflow for horticultural and other cash crops like cotton and oilseeds.

Agricultural companies are providing services through payment by contract farming, marketing of high value crops by commercially export companies, Value addition and charged based service centres for farmers (Bharati *et al.*, 2014). Several corporation at present involved in agro-commodity trading, processing, exports have tried to establish systems to ensure timely and consistent supply of raw material of desired quality and at low cost. Some of the agri-business companies like e-choupal, Mahindra Samriddhi, Mahindra Shubhlabh, Tata Kisan Kendra, Chambal Uttam Bandhan in their unique model are also involved in transfer of technology with market support.

Farmers have increasingly begun to perceive marketing than production, as the major constraint in enhancing their farm incomes. It is in this scenario that the other agencies involved in the extension/transfer of technologies like NGOs, farmer organizations and the private sector (both corporate and informal) can actively complement/supplement the efforts of the public extension agency as the extension mechanisms will have to be "farmer driven," location-specific and address farmer demands for diversification. In recent times reform-oriented initiatives have been directed towards a demand-driven, broad-based and holistic agricultural extension system (NSSO, 2005) involving introduction of a multitude of integrated measures that will on the demand side-enable service users to voice their needs and hold service providers

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accountable, and-on the supply side will influence the capacity of service providers to respond to the needs of the extension service users (i.e., the farmers). Here the private sector is playing an important task in extension services and policy framework for agricultural extension notes that “public extension by itself cannot meet specific needs of various regions and different classes of farmers. Private sector could serve the needs of medium-size and commercial farmers, while the public sector could work in remote areas, which are currently not serviced well.

In the present situation of changing climate, fragmented and small land holdings, non-judicious use/limited water availability, indiscriminate application of fertilizers and pesticides, increasing fuel costs, lack of efficient market opportunities, farmers need is access to timely, reliable, and relevant information which can support the complexity of their farming systems, which in present system is difficult for public extension system so there is need to develop “need-based” capacity building of small-scale men and women farmers, as well as gaining access to reliable information in increasing their productivity and profitability for livelihoods improvements. This system should also support and deal other 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.

The government of envisions that “Private sector participation will be promoted through contract farming and leasing arrangements to allow accelerated technology transfer, capital inflow and assured market for crop production, especially of oilseeds, cotton and horticultural crops. Private sector is playing an important task in extension services. The public sector recognizes this, with the policy framework for agricultural extension referring to the need for public extension services not to crowd out private services. Additionally, policy framework for agricultural extension notes that “public extension by itself cannot meet specific needs of various regions and different classes of farmers. The existing system has to be complemented, supplemented and even replaced by private extension. Extension agencies, services and workers will need to exercise a more proactive and participatory role, serving as knowledge agents in which they initiate and facilitate mutually meaningful and equitable knowledge based transactions among agricultural researchers, trainers and primary producers. With the increasing range of demands for agricultural technology in changing scenarios the public extension by itself cannot meet the specific needs of various regions and different classes of farmers. Therefore, the new extension regime recognizes the need for multi-agency collaboration to combine strengths.

Increasing role of private sectors in Agriculture extension

Private sector in India are mostly involved in contract farming models undertaken by agri-business companies which usually takes care of pre-agreed price, quality assurance,

quantity and time of delivery, and as per the contract farmers are required to plant the contractor's crop on his land and to harvest and deliver it to the contractor, based upon anticipated yield and contracted acreage mostly at a pre-agreed price. The contractor supplies the farmer with selected inputs along with technical advice. Some cases of private sectors involvement in extension system are:

- Input suppliers/dealers selling pesticides, seeds, nutrients and farm implements,
- Corporate sector (i.e. commercial crops like tobacco, tea, coffee, oilseeds (sunflower) and vegetables; plus farm implements—tractors, threshers, sprinklers, drip irrigation; etc.).
- Community based organizations, including farmers' organizations, farmers' cooperatives as well as farmer interest groups (FIGs) and self-help groups (SHGs)
- Para extension workers, including contact farmers and linking these farmers to: *gopals*, *mitrakisans*, and *mahilamitrakisans*.

Some Case studies of Private Sector Advisory Services:

E-Choupal

ITC's E-Choupal initiative launched in June 2000 by deploying technology to re-engineer procurement of soya and other crops from rural India, has become the largest initiative among all Internet-based interventions in rural India. It reach out to over 4 million farmers growing a range of crops from soybean, coffee, wheat, rice, pulses, and shrimp - in over 40,000 villages through 6500 kiosks across ten states (Madhya Pradesh, Haryana, Uttarakhand, Karnataka, Andhra Pradesh, Uttar Pradesh, Rajasthan, Maharashtra, Kerala and Tamil Nadu). This model was specifically designed to tackle the challenges posed by the unique features of Indian agriculture, characterized by fragmented farms, weak infrastructure and the involvement of numerous intermediaries and also unshackles the potential of Indian farmer who has been trapped in a vicious cycle of low risk taking ability - low investment - low productivity - weak market orientation - low value addition - low margin - low risk taking ability making the Indian agribusiness sector globally uncompetitive, despite rich & abundant natural resources, replacing with competitiveness of Indian agriculture and triggering a virtuous cycle of higher productivity, higher incomes, and enlarged capacity for farmer risk management, larger investments and higher quality and productivity. ITC's e-Choupal initiative delivers real-time information and customized knowledge to improve the farmer's decision-making ability, thereby better aligning farm output to market demands; securing better quality, productivity and improved price discovery. The model helps aggregate demand in the nature of a virtual producers' co-operative, in the process facilitating access to higher quality farm inputs at lower costs for the farmer. This has also created a direct marketing channel, eliminating wasteful intermediation and multiple handling, thus reducing transaction costs and making logistics efficient. The site is now helping the farmers discover the best price for their quality at the village itself and providing farmers with specialized knowledge for

customizing their produce to the right consumer segments. The new storage and handling system preserves the identity of different varieties right through the 'farm-gate to dinner-plate' supply chain. Encouraging the farmers to raise their quality standards and attract higher prices. The costs for providing the products and services provided on the e-Choupal platform are recovered through various business models either by way of service charges, margins from distribution of products (Inputs, FMCG, and Insurance products), embedded charges in the transactions etc. A nominal Registration Fees is charged from the Farmer which contributes to cost recovery in a small way, but ensures effective delivery of services as the same is demanded by farmers by perceiving as paid service.

Mahindra Shubhlabh Services Limited

Mahindra Samriddhi was pilot tested in 2008 by Mahindra and Mahindra Ltd. - a biggest tractor company to provide the holistic agricultural consultancy services and inputs to all kind of farmers i.e. landless, small, medium, large and commercial farmers to support the public extension system. It was supported by USAID and the company collaborated with University of Wisconsin, USA under USAID, and State agricultural universities in India-for technical services at district level. Today there are more than 100 Samriddhi centres where the Farm Equipment Sector (FES) initiative focuses on farmers' prosperity and productive innovations in traditional farming. Farmers can carry their soil samples for testing and discuss yield improvements with trained professionals about the various nutrients they should add to the soil and also conduct tests on soil samples for nominal fee of Rs. 60 per sample.

Samriddhi centres also provides market related information to farmers to keep them abreast of world-class solutions offering a range of agricultural services under one roof including sales and service of tractors and implements, productivity demo farms, soil and water testing facilities, knowledge updates on the weather, crops, eradication of pests and diseases, market prices, etc., via the technical interface, finance facilities and counseling. It also offers, Mahindra Samriddhi Samman- a pioneering customer centric initiative, through which the farmers are encouraged to achieve an increase in productivity through the use of innovative farming technologies. The successful innovative farmers are awarded through Mahindra Samriddhi Samman. Each Samriddhi centre also identifies 25 farmers based on productivity in their last Rabi season and become members of the Mahindra Samriddhi Club entitling them discount of 10 % on all spares purchased from any of the Mahindra Samriddhi Centres. The farmers are helped in marketing of their produce through improved quality and yield to fetch the best available price. Need based trainings on plant protection, soil health; agronomical practices etc., are imparted to the needy farmers under the productivity improvement program. The Agricultural University provides technical support through subject matter specialists, in production and protection technology, post-harvest management, mechanization etc. Innovative technologies like tractor-solutions are provided to boost up the

mechanization process in agriculture for enhancing the rural prosperity (Aggarwal, 2008).

Chambal Uttam Bandhan

Chambal's Uttam Bandhan tries to enhance a farmer's income and quality of life. They provide Services taking into consideration farmer's preferences and packaging them according to the agro-climatic zones. UttamKrishiSewak are the crucial link between the company and the farmer who are about 300 educated, unemployed youth from a rural background who are properly trained to provide best practices in agriculture and specialized services to farmers. They earn commission on the sale of specialized products. Soil and water samples are collected and tested for micro-nutrients and balanced inputs. Soil test reports are explained, and the farmer is educated on the importance of proper soil health and micronutrients on which basis soil mapping is being done. The company does not charge any testing fee from Uttam Bandhan member-farmers. So far its two soil testing laboratories have carried out over four lakh soil tests whose results are electronically stored and data is maintained on soil health. Crop and product demonstrations, field demonstrations and farmer meetings are conducted regularly to educate farmers on the latest farm practices. Farmers are given training on specialized services that vary from cultivation of medicinal and horticulture crops to vermiculture and the use of bio-fertilizers (Aggarwal, 2008).

Tata Kisan Kendra

TKK was started by Tata Chemicals Ltd. with the objective of providing the farmer with a package of inputs and services for the optimum utilization of balanced primary nutrients, plant protection chemicals, water, seeds and post-harvest services and to develop a genuine partnership with the farmer. The network of farmer centers is divided into mother Tata Kisan Sansars (TKSs) known as Tata KrishiVikas Kendras (TKVKs) and franchisee TKSs. Each TKVK covers 20 franchisee centers, and each franchisee covers about 60 villages. Every Sansar is equipped with an administrative office, a training hall, a crop clinic, a soil-testing laboratory, a research and development farm, storage go down, an exhibition hall and a TKS retail outlet—all under one roof. TKKs use remote-sensing technology to analyze soil, to provide information about crop health and pest attacks and to predict final yield. This helps farmers adapt quickly to changing conditions. Geographic Information System (GIS) mapping was the main standout point in this Information and Communication Technology (ICT) initiative.

The TKK network has collected census data for the districts in which they operate. This information is combined with the spatial data generated by the GIS facility and correlated with socio-economic information, such as the name of the owner of a plot of land, the crop grown on it, the number of members in the family, the family's level of education, its annual income, etc. Both raw and processed data is fed into the GIS, which then becomes the basis for providing quality decision support for the agronomy services offered by the TKKs. Tata Chemicals purchased and used satellite pictures of the area from the National Remote Sensing Agency, Hyderabad. These

images are then sent to Indian Resources Information and Management Technologies for processing and classification. The agronomist analyzes information on topography, soils, climate, hydrology, cropping systems and crop suitability to advise farmers on which crops to grow, crop management, market trends, what kind of fertilizers to use and how much, etc. The model has been tested and validated. The training halls at the TKKs are used for workshops and the screening of films related to agriculture. The TKK network runs crop clinics where agronomists use GIS to advise farmers. At the soil-testing laboratory, technicians analyze soil samples to determine their composition and confirm what the satellite maps have indicated. Additionally, the TKK network operates experimental farms where scientists conduct agricultural research and development.

It stocks seeds, pesticides and fertilizers that farmers can buy at affordable prices, and lease out farm equipment and implements to farmers who cannot afford to buy expensive, modern machinery. Farmers can also get credit, insure their crops against natural disasters and even make use of buyback facilities.

The command area of the Tata Kisan Sansars is states of Uttar Pradesh, Haryana and Punjab. Currently, 40 TKVKs and about 800 franchisee TKs are in operation, catering to 27,200 villages and almost 25 lakh farmers. The farmers from these states have benefited in multiple ways, improving their income and their quality of living. It is an excellent model, providing an end-to-end solution and fully utilizing potential of a GIS-based ICT system (Aggarwal, 2008).

Public service agencies provide subsidized agro-goods and services that are a significant deterrent to the expansion of private sector involvement in technology transfer, as this leads

to the creation of an uneven playing field and discourages market entry by private sector providers. Slowly these subsidies are phased out to stimulate the emergence of a private input supply networks to provide hybrid seeds, artificial insemination services, fertilizers, agro-chemicals, animal feed, machinery, equipment and other agricultural supplies and services to farmers on a full cost-recovery basis. Generally, the costs associated with the research, development and transfer of these material technologies are embodied in the prices of these products. Therefore, farmers cover these costs when paying for the products, making this component of the Agricultural Technology System (ATS) financially sustainable. Targeted subsidies may be retained to protect the interest of the poor and vulnerable sections.

CONCLUSIONS

In the field of material technology dissemination—which includes distribution of inputs such as fertilizer, seed, planting material, chemicals for plant protection and agricultural implements—a competitive, private sector has developed in almost all states except for the northeastern states. This new policy envisages withdrawal of the public sector from areas where agro-services can be effectively and competitively provided by the private sector. In such cases, the role of the public sector becomes one of facilitator and enabler. Such a system dictates moving towards a realistic system of cost-recovery for agro-services by the state. If the public sector continues to subsidize these services, this will prevent a “level playing field” in which the private sector can operate. There will need to be a re-examination of existing rules, regulations and acts to abolish provisions, which constrain private investment in the delivery of agro-services

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