

THE STUDY OF PRIVATE SECTOR'S ROLE IN AGRICULTURAL EXTENSION SERVICES

AN EVALUATIVE STUDY OF KOTA DISTRICT OF RAJASTHAN (INDIA)

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ABSTRACT

The changing role in global scenario and additional responsibility increasing the pressure on public extension services, which will further widen the ratio between workers, farmers, operators in developing Indian economy. The meagre performances of the public agricultural extension services in Indian subcontinent engender interest in pluralistic concept of extensions involving in variety of contents. The public extension services filled this void of inadequate infrastructure, finance availability and inability to reach the grass root level of villages of public extension services.

The paper focus the conceptual underpinnings of these extension approaches, things to see the practical challenges inherent in their design, and provides an assessment of several performance based studies described in the formal and informal literature. The paper reviews the conceptual underpinnings of these extension services in Kota district of Rajasthan (India) region. The objective of this paper is the study the highlights the potential of the private extension agencies working in fulfilling the needs of farmers in Kota region of southeast Rajasthan. The extension system need of different providers as per clientele, with public providers and focusing the conceptual problems with focusing more on small scale and less commercial farmers, same time public system act as regulatory and watch dog mechanism on private extension services for accountability, quality and coverage of the wide range of the farmers need.

Keywords: Agriculture, Public Extension Services, Private Extension Services, Kota District

INTRODUCTION

India's half of the population is either wholly or significantly depend for their livelihoods or some form of activity be it crop, agriculture, horticulture, animal husbandry or fisheries (Sulaiman V) Agricultural progress continue remain vital for achieving faster, sustainable and more inclusive economic growth in India. Expansion of farm incomes is still most potent weapon for reducing poverty(planning commission 2011). India's agricultural faces numerous challenge and agricultural extension services can and should contribute to address these challenges. At present farmers is different from yesterday as they are not dependent on agriculture for food alone, but to produce more marketable surplus to make more profit. There diversified growing needs born out of modernization, besides food. His expectations depend on extension are changing.

The pressure of changing role and additional responsibility on public extension will add more to existing problems like wide ratio between worker and farmer, inadequate infrastructure and finance. It is under pressure to reform its purpose as well as the way it is managed and is also being encouraged to work closely with extension providers from the private and voluntary sector.(Sulaiman V Rashid 2012) .

Today Indian farmer shifting from subsistence farming to commercial farming and agriculture need more investment, high technology and various inputs like seeds, fertilisers etc.

The farmer dependent on his neighbour, progressive farmer, farmer organisations, extension workers ,input agencies, input dealers for seeds, fertilizers, pesticides, weedicides, machinery and labourers for regular work, banks for credit, government for supportive policy and nature for good production. However, more private extension players are

working in well-endowed regions and high value crops. Remote areas and poor producers are less served by both private and public extension services. Hence, the existing gap is expected to enlarge between public extension services and farmers. Private extension is not a substitute for public extension and there is need for a significant public extension yet reasonable good extension system takes time, learning and experimentation.

The Farmers average land and water resource base has been declining and the gap between yield potential and national average are widening with low yields “The slow growth of opportunities in the non-farm employment sector has led to the proliferation of tiny and economically non-viable holdings”(NCF, 2006).

The main extension roles are technology dissemination with improved access to markets, credit, infrastructure, research, advice, farmer organisation development and business development services.

The last few years have also saw the agriculture diversification headed for high value commodities such as fruits, vegetables and livestock products. The large share of high value commodities is total value of agricultural production in a number of districts in India.

In agricultural R&D private sector, participation is increasing as recent data show that the funding business own by private is 11 percent of the total R&D funding (Pal and Jha, 2007). The investment occurs in chemicals (fertilizers and pesticides), food processing followed by seed and machinery.

Today, considerable numbers of private extension service providers are there in the field that can influence the ultimate profit of the farmer. The genesis of private extension may be because of two reasons.

1. Inability of public extension services to reach all the famers at same time, the void filled by the private extension services.
2. Those service, which are not covered by public extension services like, supply chain management, market support, processing etc.

EXTENSION SERVICES

All agencies working in the public, private, NGO and community based initiatives that provide a range of agricultural advisory services and facilitate technology application, transfer and management consist of "extension services" in current Indian context. The Department of agriculture continue to dominate the public sector extension

provision with other department's lines like, research centres and agricultural universities, which sector play a very limited role in extension.

The situation assessment survey of farmers conducted during the 59th round of the National Sample Survey (NSSO, 2005) provided valuable insights into reach of extension services across India. The last three decades witnessed declining support for public extension and emergence of a wide range of extension service providers in the private sector all over the world. Sulaiman V. (2012).

PRIVATE EXTENSION SERVICES

The definition of agricultural extension varies from simple transfer of information to facilitating the total human development. The services are mainly funded by Government in Indian context. But there are private players who also funded the extension services.

PLAYERS IN PRIVATE EXTENSION

Agricultural consultant, agricultural consultancy firms, Progressive farmers, Farmer's organization/ cooperatives, Non Governmental organizations(NGO), Krishi Vigyan Kendra(KVK), Input dealers, Newspapers, Private television channels, Internet, social media, Donor agencies.

There are many private extension services who are working in this fields like as DSCL, MSSL, IFFCO, KRIBHCO, CFCL etc. They provide timely and quality inputs for their processing units, quality products for the export.

OBJECTIVE OF STUDY

To study the public extension services in Kota district of Rajasthan (India) region.

To identify and study the different private extension agency working in Kota district.

To assess the role of private extension services in fulfilling the needs of farmers.

REVIEW OF LITERATURE

The approaches in agricultural extension to transfer the farm technology, has undergone spectacular changes over the years. These changes have taken place structurally and functionally across the globe. Many countries are now in the process of modifying the existing public extension system for meeting the current challenges.

Bloome (1993) indicated that private extension involves personnel in the private sector that delivers advisory services in the area of agriculture and is seen as an alternative to the public extension. whereas, Van den Ban and Hawkins (1996)

stated that, farmers are expected to share responsibility for the service and pay all or part of the cost.

Saravanan and Shivalinge Gowda(2001), operationalized privatization in the manner that "Privatization of agricultural extension services" refers to the services rendered in the area of agriculture extension services refers to services rendered to the area of agriculture and allied experts by extension personnel working in the private agencies or organization for which farmers are expected to pay a fee or free and it can be viewed as supplementary or alternative to public extension services".

Several workers indicated the need of privatization of extension services Howell (1992), Antholt .

(1994), Sulaiman and Gadewar (1994), Dinar (1996) and Van den Hawkins (1996) .They reported that first and foremost reason behind privatization is declining trend in government expenditure for extension in several countries over the last decades. Financial burden of government has forced to make sharp reduction in budget of public extension programmes.

Ameur(1994), Hansra and Adhiguru (1998), stated the impact of public extension in agricultural development is generally disappointing, ineffective work, transfer of technologies are not economically viable, not matching with farmers needs, little consideration for cost effectiveness, less competent extension personnel with no accountability to farmers, bureaucratic nature and target oriented programmes mostly imposed on farmers.

Sulaiman and Gadewar (1994), in recent past most of the developing countries including agriculture are shifting from mere subsistence level to commercialized agribusiness. Above all, challenges and opportunities, of globalization and liberalization era demand effective alternative extension approach.

Hassanullah (1999) stated that growing commercial and specialized nature of agriculture would demand quick and technically sound advice, based on scientific analysis with appropriate marketing information. Existing public extension is not capable of meeting these challenges.

Saravanan (2002) concluded that financial constraint of government , disappointing performance of public extension system and commercialization of agriculture would make privatization of agricultural extension service become unavoidable. Weighing the assumptions of privatization can make good decision.

PROJECT METHODOLOGY AND APPROACH

The project undertaken in Kota district of Rajasthan. The primary data was collected from farmers and company officials through personal interview. The source of secondary data was taken from government publications, newspapers, internet and information collected from company officials. The detail of technical program is given below:



STUDY APPROACH: It is based on an explorative study, followed by descriptive study. The survey was conducted on following guidelines.

- Perception of structured schedules will be used as an instrument for gathering information.
- Conduction of surveys containing farmers and dealers distributors.
- asking the relevant question through schedule by personal contact
- After gathering information, and then a report was prepared after analysis.

RESEARCH INSTRUMENTS

Research Instruments were schedule with open ended and closed ended questions.

SAMPLING PLAN

Sampling unit: Sampling unit consisted of farmers and different company officials working under extension service.

- Farmers: 180 (30 farmers from each company)
- Company officials: 23

SAMPLING PROCEDURE

To knowing, the perception of farmers regarding private extension services provided by different companies in Kota Region randomly sample was taken.

ANALYSIS OF DATA

Data obtained by the survey of the sample was pursued through tabular analysis, including appropriate management tools as and when necessary.

Objective 1: To study public extension service in Kota Region.

Primary data was collected from deputy director (agriculture extension), Kota, Krishi Vigyan Kendra (KVK), and agricultural research station in Kota region about the establishment, labor engaged with the organization and extension services to farmers.

Objective 2: To identify and study the different private extension agencies working in Kota region.

Primary data were collected from company officials which are working in Kota district like DSCL, MSSSL, ITC, IFFCO and KRIBHCO. Secondary data were collected from government publications, newspapers and related websites.

Objective 3: To assess the role of private extension services with aim to fulfil need of farmers.

List of farmers were collected from different corporate officials of DSCL, MSSSL, ITC, IFFCO and KRIBHCO. A survey was conducted to farmers and fulfil the questionnaire and the find the response of private extension by farmers.

Objective 4: To make suggestions for improvement of UTTAM 30 milestone project of CFCL LTD.

The above objective was fulfilled by recommending critical improvement area for private extension services after analysis of sample data.

TO STUDY THE PUBLIC EXTENSION SERVICES IN KOTA REGION

For the objective data collected by surveys of KVK's, research station and deputy director extension in Kota region about their establishment, work force engaged with the organization and services provided to farmers.

Key Extension approach:

- Conducting "on farm testing" for identifying technologies in terms of location specific sustainable land use systems.
- Organise training to update the extension personnel with emerging advances in agricultural research on regular basis.
- Organise short and long term vocational training courses in agriculture and allied vocations for farmers.
- Organise frontline demonstrations on various crops to generate production data and feedback information.

AGRICULTURAL RESEARCH STATION (ARS)

ARS was established in the year 1991 with an objective to provide knowledge to farmers regarding the farm practices under Rajasthan agricultural university Bikaner but in year

1999-2000 it works under Maharana Pratap agricultural university of Agriculture and Technology, Udaipur.

Work force involved

S.No	Designation	No. of Post
1.	Zonal Director	1
2.	Professor	3
3.	Associate Professor	16
4.	Assistant Professor	39
5.	Technical Assistant	46
6.	Ministerial	17
7.	MTS	22

Key Extension approach

- Farmers meeting related to control measures
- soil testing facilities
- Demonstration of new varieties
- Management of salt affected soil
- Processing and preservation technology

DEPUTY DIRECTOR AGRICULTURE (EXTENSION) KOTA

Deputy director agriculture extension Kota was establish in the year 1957-58 under the department of agriculture Rajasthan Government.

Key Extension approach

S.No	Designation	No. of Post
1.	Deputy Director Agriculture (Extn.)	1
2.	Agriculture Research Officer	1
3.	Agriculture Officer	2
4.	Assistant Agriculture Officer	1
5.	Junior Accountant	1
6.	U.D.C	2
7.	L.D.C	2
8.	Agricultural supervisor	1
9.	Driver	2
10.	Peon	4

Key Extension approach

- Soil Testing Facilities
- Demonstration of new varieties and farmers meeting
- Crop Seminar

Recently in Kota region three public sector agencies engaged in providing extension services to farmers like organize short term and long term vocational training course, soil testing facilities, demonstration of new varieties, crop seminar etc. Although these agencies are working for their welfare of farmers but the area covered by them is limited in terms of services given due to limited work force. Now -a-days farmers need not only the above-mentioned services but also the importance of timely information about weather, marketing, new technological advances, after sale services, additional income source generation etc are recognized. Here, the need of private sector extension agencies is realized. They fulfill the gap cab.

To study and identify the different private extension agencies working in Kota region

A survey of the private was conducted in Kota region, which are involved in providing private extension services in Kota region like CFCL, DSCL, Mahindra Shubh services Ltd., IFFCO, KRIBHCO, ITC etc, to know about their establishment, manpower involved, service provide to farmers, functioning of the service centres and objective of the services.

A. DCM Sriram Consolidated Services Ltd (Dscl): DSCL launched the novel concept of chain of agri input retail stores called "Hariyali Kisan Bazaar (HKB)". The idea is to build the relationship with farmers and enhances their productivity. Hariyali Kisan Bazaar aim to cater all occupational needs of the farmers at one roof.

The four pillars of Hariyali's are offering to the farmers are complete range of quality inputs, objective technical guidance, easy crop finances, direct output linkage to farmer.

In Rajasthan, three (3) HKB centre are working currently at Kota, Bundi and Alwar, whereas India 18 HKB are established until date. In Kota region, it was started in July 2002.

The main objective of this centre is to fulfil the occupational needs of the agriculture under one roof at fair price and unbiased attitude.

EXTENSION SERVICES

Field demonstration, field visit, farmers meeting, crop seminars, participation in Kisan mela, soil testing facilities, advice of agronomist, output related business (contract

farming)- In Kota region contract farming as undertaken by HKB and Fro Lays ltd for growing chips processing varieties of potatoes. According to farmer, this output related business provides opportunities to them for growing new crops directly to the processor at better price.

Work force involved Agronomist, 1 commercial executives, sales person

Function of services centres: catchment area of the centre consist of 15 to 20 village in the radius of the 15-20 kilometre.

(B) Mahindra Shubh Labh Services (MSSL): The company retails agri inputs including M&M brand (Mahindra and Mahindra) through shubh labh. It offers the borrowing support to farmers, through krishi vihar, a platform for banks to provide loan to farmers.

M&M tractors giant has started a concept of the farmers in 2000 for "one stop shop" where farmer can purchase all type of the inputs including information, machineries at one place.

Extension services: Farmers contact program, communication through leaflets, letters, advertisement in news papers popularly read by the farmers, farmer's group formation, farm solution services.

Work force required Territory Manager, executive, agricultural officer, Team leader, Field supervisor.

FUNCTIONING OF SERVICE CENTER

Spokes may be field supervisor, spoke operators franchise, registration of the farmers in the centre when he used to come for purchasing the inputs. If any person wants agri finance they provide loan. Field supervisor visit to the field of the farmer as per plan. Crop experts also visit two and three fields. Farmers collected it to the centre. Field supervisor provides guide to the farmer regarding output sale. After output sale deduct finance amount if the farmer taken finance and rest amount given to farmers.

Objective: To provide technical guidance to the farmers so that they must increase the productivity.

Indian tobacco company (ITC) : ITC is one of the India's foremost private sector companies with market capitalization of around US \$ 6 Billion. It have diversified business present in cigarettes, hotels, papers packaged foods, confectionary, agribusiness, greeting cards & other FMCG product.

ITC E-CHOUPAL

ITC christened e - choupal farmers use this technology infrastructure to access on line information from ITC'S

implemented soya choupal, aqua choupal on ITC'S farmer friendly websites etc. Indian farmers typically but at retail prices, losing out on both ends of the deal. ITC has convinced e-choupal bring the power of the scale to the smallest farmers e-choupal attempts to deliver to the farmer the best quantity information and inputs they require to raise the crop output. Companies provide an efficient and inexpensive infrastructure to reach the farmers.

In Rajasthan 700 e-choupal, where as in Kota it is in 54 locations. In Kota region, it is setup in 2003. The e-choupal redefines choupal Hindi word to village squares where elders meet to discuss important matters. ITC installed charge batteries with solar power to provide electricity.

FUNCTIONING OF SERVICE CENTRE

A local farmer called "sanchalak" operates the computer in behalf of the farmer and earn commission on every sale and purchase through e-choupal.

E-choupal provides farmers and village community five distinct services.

Information: Movies on latest farm techniques, weather forecasts and expert advice on email.

Knowledge: Soil testing, other method related to crop, mostly advised through agricultural universities.

Purchase: Internet access to buy seeds, fertilizer, consumer products and insurance policies.

Sales: Farmers can sell their crop to ITC after checking daily rates online.

Development work: NGO working for cattle breed improvement and water harvesting and women self help group also reaching the village through e-choupal.

Under ITC e-choupal providing training to agents related to computer/internet operation. Sanchalak

Agents must be selected based on villager trust.

at the time to sell the e-choupal help the farmers by breaking the monopoly of local markets that are controlled by trade cartels. For farmers it is win-win situation. Sitting in their village, they can check the purchase price at the Mandi and ITC centre through e-choupal. The company uses electronic weighing machine, better testing facilities and ensure spot payment.

S.No.	Designation	No. of Post
1.	Hub In-charge	1
2.	Hub Commercial	2
3.	Godown officer	4
4.	Field coordinator	6

Objective: The main objective of ITC is better prices to the farmers and gets information regarding technology.

INDIAN FARMERS FERTILIZER COOPERATIVE LTD. (IFFCO)

IFFCO was registered on November 3, 1967 as a multi unit cooperative society. The society is primarily engaged in production of fertilizers. The distribution of IFFCO's fertilizers. The distribution of IFFCO's fertilizers is undertaken through over 36000 co-operatives societies. IFFCO obsessively nurtures its relations with farmers and undertake large number of activities for their benefit every year. In Kota, it was set up by 1978.

Extension services:

Village adoption, health camp, veterinary camp, distribution of duster and sprayer, soil testing, farmer meeting, field demonstration

Manpower involved: Area Manager, manger agri services, accounts officer, data entry operator

Objective: To provide good quality fertilisers and latest agricultural technology to the farming community.

KRISHAK BHARTIYA COOPERATIVE LTD. (KRIBHCO)

KRIBHCO a premier co-operative society for manufacture of fertilizer, registered under multi state cooperative societies act 1985, was promoted by government of India, IFFCO, NCDC and other agricultural co-operative societies spread all over the country. In Kota region, it was set up in 1986.

Extension services:

Village adoption, health camp, veterinary camp, distribution of duster and sprayer, soil testing and community centre

Work force Involved: Marketing manager, assistant marketing manager

Objective: Increase economic conditions of the farmers.

To access the role of private extension services with aim to fulfil the needs of farmers:

Table 1: Farmer's response towards the extension services provided by different companies.

as table 4.1 revealed, farmers meeting is the activity, which is benefited most of the farmers, about 64% respondent are feeling benefited out of it and almost all the companies are the recognized it importance. MSSSL followed by CFCL and DSCL are the main players among the entire private player studied.

S.No	Question	CFCL	MSSL	DSCL	IFFCO	KRIBHCO	ITC	TOTAL
		No. of cases	No. of cases	No. of cases	No. of cases	No. of cases	No. of cases	No. of cases
1.	Soil testing facilities	10	7	9	5	7	0	38
2.	Veterinary facilities	12	5	7	9	6	0	39
3.	Demonstration	8	3	10	7	9	0	37
4.	Women related program	11	5	6	6	4	0	32
5.	Farmers meeting	10	12	9	10	9	8	58
6.	Crop seminar	6	10	7	9	6	0	38
7.	Field visit	8	10	12	6	8	0	44
8.	Farm advisory services	11	9	9	10	6	0	45
9.	Agricultural implement supply service	8	0	0	6	10	0	24
10	Farm clinic & contact farming	9	11	13	6	9	7	55

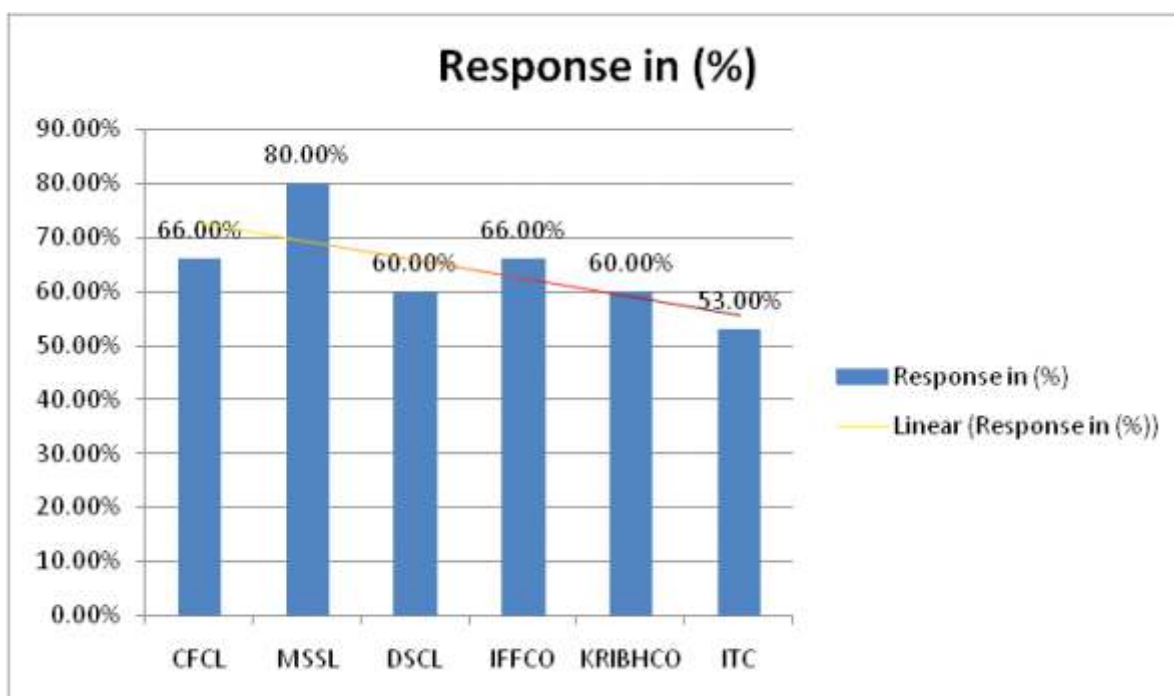


Figure 1 percentage of farmers benefited by farmers meeting

The concept of farm clinic and contract farming is also attracting farmers; about 61% farmers are observed direct benefit from this. Although this is new concept as par as poor farmers of Rajasthan are concern but mutual benefits, both the farmers and companies are associated with it are recognizing many tangible benefits. For farmers, assured marketing of produce, timely input availability , better price realisation, new technology availability etc. are the benefits and for company quality and quantity to produce , timely and assured supply of produce of the benefits for the company. DSCL and MSSL are main companies working efficiently in the area.

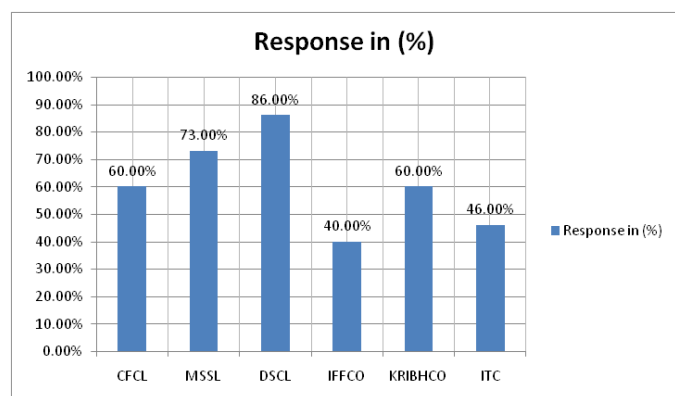


Figure 2: % of farmer's awareness about farm clinic and contract farming

Farmers response for farm advisory services (50%) and field visit (48%) are also found positive for most of the companies and information's related new varieties, new molecules of pesticides, disease infestation, other recommendations for the crop are given. CFCL is working very effectively as far as advisory services are concerned but the farmers are not found satisfied with the visits of the field staff of CFCL.

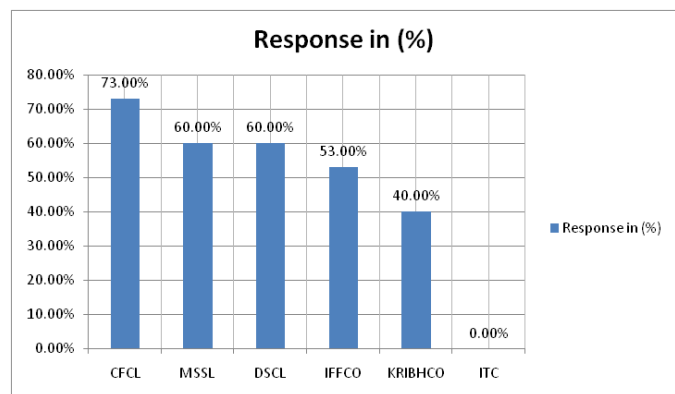


Figure 3: % of farmers benefitted by farm advisory services

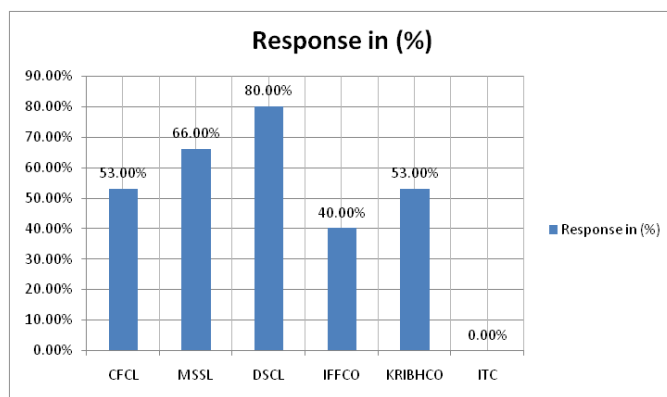


Figure 4: % of farmers benefitted by field visit

As far CFCL services are concerned, it is providing some of the services very efficiently to the farmers like, veterinary services, farm women development program, soil testing facilities etc. but the services like crop demonstrations , crop seminars and agricultural implements are needed to be improved.

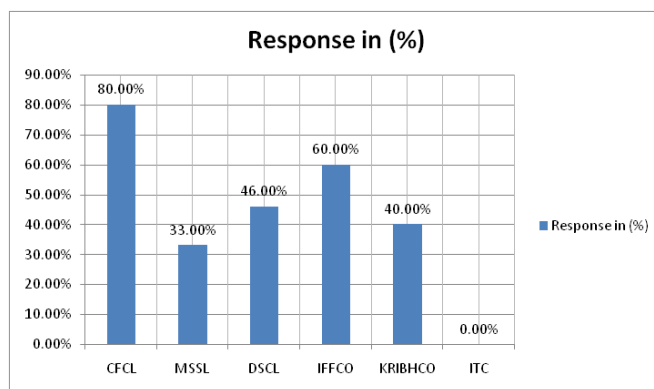


Figure 5: % of farmers benefitted by veterinary facilities

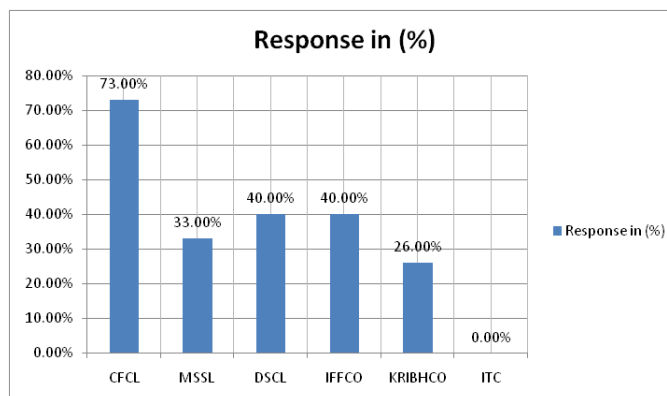


Figure 6 percentage of the farmers benefitted by woman related program

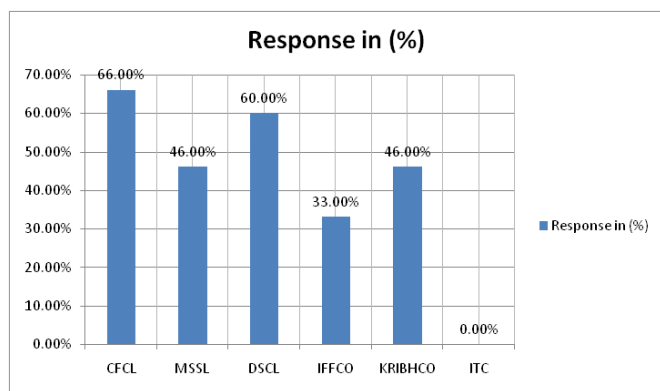


Figure 7: % of the farmers benefitted by soil testing facilities

ITC is the company, which is recently involved in the farmers meeting and farm clinic and contract farming as they have started their procurement work form Rajasthan.

- Suggestion for improvement of uttam 30 of CFCL milestone project
- Company should provide crop seminar facility to the farmers to improve the crop performance in terms of the productivity, quality, benefit cost ratio etc.
- Supply of agricultural implements and good demonstrations can easily help farmers for new variety or technology. CFCL increase the number of demonstration on the farmer's fields.
- Currently CFCL is doing contact farming only for medicinal plants.

CONCLUSION

The responses of the farmers validate the need of the stimulating private extension. Another strong reason for private extension is shrinking resources of the public organization and there may be chance that public extension organizations will likely be financially constrained which would force them to withdraw from areas which can be served by private extension systems.

Again, there is an apprehension that private extension services usually concentrate in horticulture, floriculture, and other commercial crops, which have both domestic and global markets only the so called progressive and wealthy farmers would be utilizing these services as they can afford to pay the services.

it is clear from study that mostly companies are given more emphasis to the farm advisory services and farmers meeting to improve the technical knowledge of the farmer with income.

Hence, in order to achieve overall department of all classes of

rural population, there is urgent need for polices and schemes for development of all classes of rural population and appropriate introduction / transfer of agriculture and allied technology based on market assurance and tangible benefit to rural community.

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