

Profile characteristics of Farmers and their overall Perception about Effectiveness of Agriculture Input Dealers in Telangana State

B. Rajitha^{1*}, Bharat S. Sontakki², M. Jagan Mohan Reddy³ and G.E.CH. Vidya Sagar⁴

¹P.G Scholar, Department of Agricultural Extension,

College of Agriculture, Rajendranagar, Hyderabad (Telangana), India.

²Principal Scientist & Head, Extension Systems Management Division,

ICAR-NAARM, Rajendranagar Hyderabad (Telangana), India.

³Director, Extension Education Institute, Agricultural Extension, Rajendranagar, Hyderabad (Telangana), India.

⁴Professor, Department of Agronomy, College of Agriculture, Rajendranagar, Hyderabad (Telangana), India.

(Corresponding author: B. Rajitha*)

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ABSTRACT: There is a shortage of sufficient field level staff and the absence of dissemination of required information about appropriate cropping pattern, inputs, cultivation practices and so on. In this context with their locational advantage and easy access, among all the private extension stakeholders the Agri. Input Dealers efficiently became the most important source of farm information to farmers. As a result, the Indian farmer continues to rely on a variety of stakeholders of agriculture development mainly the Agri. Input Dealer than ever before. The Agri. Input Dealer has no specificity for qualification to get license from the government and in some cases have low knowledge about doses of pesticides and their method of application. In spite of having some limitations, as the Agri. Input Dealer are already part of value chain system they can't be eliminated. So, mainstreaming by legal format is to be done and training has to be provided to get better knowledge and skills to act as an extension service provider by competent institutes. This paper focused to study the profile characteristics of Farmers and their overall perception about effectiveness of Agri. Input Dealers. Ex-post facto research design was adopted for the study with a sample of 90 respondents covering 3 districts of Telangana. From the analysis, it was found that majority of respondents fall under medium profile characteristics.

Keywords: Farmers, Profile Characteristics, overall perception, effectiveness of Agri. Input Dealers.

INTRODUCTION

The ratio of Extension workers to Farmers is low at 1:1162 at national level as against recommended ratio of 1:750. In the past 20 years, extension has changed from technology-focused, public services-dominated, transfer of technology approaches to a much broader scope with many different actors from the private and civil society sectors (Sulaiman and Davis 2012). Many new service providers and institutional arrangements in agricultural extension have emerged over the last two decades. These include private extension agencies, input agencies, agri-business firms, farmers' organisations, producer cooperatives, financial agencies involved in rural credit delivery, and consultancy services (Sulaiman and Davis 2012).

Different roles of Agri. Input Dealer(s) in providing Extension and advisory services:

- Delivering and checking relevant and timely Extension and Agro advisory services to the farmers
- Report to the company agents/agriculture officer any serious pest and disease problems and natural calamities prevailing in his area and also unusual/inappropriate agro-advisory services

- Visiting the farmers field on fixed day
- To observe field operations, conditions of crops
- To enquire the problems and suggest appropriate measures.
- To make a note to what extent recommendations of agro-advisory services have been adopted and reasons for non-adoption.
- To detect the incidence of pests, diseases and natural disorders Provide credit based agro-advisory services to the farmers.
- Report to the department of agriculture special achievements of farmers by using agro advisory services.
- Evaluate the agro-advisory services feasibility in field conditions.
- Ensuring quality, low cost agro-advisory services to the farmers.
- Works out how to convince farmers to adopt the recommendations on agro advisory services made during the training sessions.
- Motivating the farmers to adopt new and additional recommended agro advisory services.

- Conduct demonstrations/campaign/seminars on productive technologies related to different crops to farmers.
- Arranging for company agents to visit the field in order to get solution when he is unable to get satisfactory solution during field visits/training programs.
- Hold the meeting with the farmers interest groups and rural institutions to discuss location specific problems of farmers.

MATERIALS AND METHODS

Telangana state was chosen for the study. The present study was undertaken in Khammam, Karimnagar, Rangareddy districts (1 district for each zone) covering all the 3 zones of Telangana state. All these 3 districts were randomly selected from the state of Telangana. A total number of 90 farmers (30 from each district, six each from the five Agri. Input Dealer(s) with three years of interaction) were selected randomly. Data were collected from the respondents by using a pre-tested interview schedule and analysed using Statistical Package for Social Sciences (SPSS 20).

RESULTS AND DISCUSSION

Age. The data in Table 1 revealed that majority of the farmers 82.22 per cent belonged to middle age group (35 to 55 years) in the sample area. While, 12.22 per cent belonged to the young age group (upto 35 years) and very less 5.56 per cent belonged to old age group (above 55 years). From the above findings it can be concluded that the majority of the farmers belonged to middle age group.

Education. From the Table 1 it was evident that majority of the farmers had medium level of education (81.11%) followed by high (10.00%) and low (8.89%). From the Table 1 it was evident that nearly half of the farmers (46.8 percent) studied upto PUC followed by high school (21.1%), graduates (13.3%), agricultural graduates (10%), no school education (4.4%), primary school (4.4%). None of the respondents reported for middle school (5-7) and any others (Technical course). The probable reason for this might be due to the availability of formal schooling and college facilities in the study area. These results were similar to the findings of Saravanan (1999); Parouha (2014).

Family details. It is operationalized as the family type, family size, Number of dependents of the farmer.

Table 1: Distribution of farmers based on their profile characteristics (N=90).

Sr. No.	Characteristics	Frequency	Percent
1.	Age group (Years)		
	Young (Upto 35 years)	11	12.22
	Middle (35-55 years)	74	82.22
	Old(above 55 years)	5	5.56
2.	Education		
	No school education(illiterate)	4	4.4
	Primary school(1-4)	4	4.4
	High school(8-10)	19	21.1
	PUC(11-12)	42	46.8
	Graduates(Arts/Commerce/Management/science)	12	13.3
	Agricultural graduate	9	10
	Education		
Low (below 2.45 score)	8	8.89	
Medium (between 2.45 to 5.17 score)	73	81.11	
High (above 5.17 score)	9	10.00	
Mean= 3.81 S.D.=1.36			
3.	Family details		
	Low (below 5.28 score)	9	10
	Medium (between 5.28 to 10.86 score)	66	73.33
	High (above 10.86 score)	15	16.67
Mean= 8.07		S.D=2.79	
4.	Farm size		
	Marginal(<1 ha)	2	2.2
	Small(1-2 ha)	2	2.2
	Semi-medium(2-4 ha)	21	23.33
	Medium(4-10 ha)	55	61.11
	Large(10 ha and above)	10	11.11
5.	Farming experience		
	Low (below 7.37 score)	17	18.89
	Medium (between 7.37 to 19.57 score)	54	60
	High (above 19.57 score)	19	21.11
Mean= 13.47		S.D=6.10	
6.	Annual income		
	Low (below 93,388.1 score)	2	2.2
	Medium (between 93.388.1 to 6,02,167.46 score)	77	85.56
	High (above 6,02,167.46 score)	11	12.22
Mean= 347777.8S.D=254389.7			
7.	Socio-political participation		
	Low (below 0.08 score)	38	42.2
	Medium (between 0.08 to 2.96 score)	26	28.9

	High (above 2.96 score)	26	28.9
	Mean= 1.52	S.D=1.44	
8.	Degree of contacts with AIDs		
	Low (below 5.09 score)	21	23.3
	Medium (between 5.09 to 10.49 score)	56	62.22
	High (above 10.49 score)	13	14.45
	Mean= 7.79	S.D=2.70	
9.	Information seeking behaviour		
	Low (below 10.94 score)	9	10.00
	Medium (between 10.94 to 16.24 score)	68	75.56
	High (above 16.24 score)	13	14.44
	Mean= 13.59	S.D=2.65	
10.	Credibility on AIDs		
	Low (below 8.46 score)	10	11.11
	Medium (between 8.46 to 11.78 score)	66	73.33
	High (above 11.78 score)	14	15.56
	Mean= 10.12	S.D=1.66	
11.	Input acquisition behaviour		
	Low (below 1.64 score)	16	17.80
	Medium (between 1.64 to 3.20score)	74	82.22
	High (above 3.20score)	0	0.00
	Total	90	100
	Mean= 2.42	S.D=0.78	
12.	Cosmopolitaness		
	Low (below 1.96 score)	1	1.11
	Medium (between 1.96 to 3.88 score)	62	68.89
	High (above 3.88 score)	27	30.00
	Mean=2.92	S.D=0.96	
13.	Risk management behaviour		
	Low (below 2.98 score)	8	8.89
	Medium (between 2.98 to 6.82 score)	68	75.56
	High (above 6.82 score)	14	15.55
	Mean= 4.9	S.D=1.92	

Table 2: Distribution of farmers based on their Family details (N=90).

Sr. No.	category	Frequency	percent
1.	Family type		
	Joint	12	13.33
	Nuclear	78	86.67
2.	Family size		
	Small family(below 3.24 score)	6	6.67
	Medium family(between 3.24 to 6.60 score)	74	82.22
	Large(above 6.60 score)	10	11.11
	Total	90	100
	Mean= 4.92	S.D=1.68	
3.	Number of dependents		
	Low(below 1.69 score)	7	7.8
	Medium(between 1.69 to 4.59 score)	70	77.78
	High(above 4.59 score)	13	14.44
	Total	90	100
	Mean=3.14 S.D=1.45		

From the Table 2 it was evident that majority of the farmers belonged to nuclear families (86.67%) followed by joint families (13.33%). The results were similar to the findings of Rout (2004); Kumari (2012).

From the Table 2 it was evident that majority of farmers come under medium family group (82.22%) followed by large (11.11%) and small (6.67%)

From the Table 2 it was evident that the number of dependents in the family of farmer fall under medium category (77.78%) followed by high (14.44%) and low (7.8%). From the Table 1 it was evident that majority of farmers fall under medium family profile category (73.33%), followed by high (16.67%) and low (10%).

Farm size. From the Table 1 it was evident that 61.11 percent farmers had medium land holdings, followed by 23.33 percent semi-medium, 11.11 percent large, 2.2 percent small and marginal land holdings. The medium farm size enabled the farmers in the area to avail better services from AIDs.

Farming experience. From the Table 1 it was evident that majority of farmers fall under medium level of experience group (60%) followed by high (21.11%) and low (18.89%). The probable reason might be that farming is their primary occupation from years. The result was in agreement with the Kumari (2012).

Crops grown previously

Table 3: Distribution of farmers based on Crops grown previously (N=90).

Sr. No.	Season	Combination of crops grown in previous season	Farmers (n=90)	
			Frequency	percent
1.	Kharif	Paddy	9	10.00
		Paddy, Chilli	15	16.67
		Chilli, Cotton	14	15.55
		Paddy, Cotton	15	16.67
		Paddy, vegetables	8	8.89
		Sugar cane	10	11.11
		Paddy, Chilli, Cotton	10	11.11
		Chilli, cotton, sugarcane	5	5.55
		vegetables	4	4.44
Total		90	100	
2.	Rabi	Maize	35	38.89
		Ground nut	15	16.67
		Maize, groundnut	36	40.00
		vegetables	4	4.44
		Total	90	100

From the Table 3 it was evident that in kharif season 10 percent farmers grown paddy, 16.67 percent farmers grown Paddy and Chilli, 15.55 percent farmers grown Chilli and Cotton, 16.67 percent farmers grown Paddy and Cotton, 8.89 percent farmers grown Paddy and vegetables, 11.11 percent farmers grown Sugar cane, 11.11 percent farmers grown Paddy, Chilli and Cotton, 5.55 percent farmers grown Chilli, cotton and sugarcane, 4.44 percent farmers grown vegetables.

In rabi season 38.89 percent farmers grown maize, 16.67 percent farmers grown ground nut, 40.00 percent farmers grown maize and ground nut, 4.44 percent farmers grown vegetables. In addition to these perennial fruit trees like mango was cultivated by some farmers. The probable reason might be that the climactic conditions are favourable to grow the particular crops.

Annual income. From the Table 1 it was evident that 85.56 percent farmers had medium annual income, followed by high (12.22 %) and low (2.2%). The

possible reason might be due to their capacity to take risk of accepting the recommended practices and services offered by AIDs. The result was in agreement with the Parouha (2014).

Socio-political participation. From the Table 1 it was evident that majority of farmers fall under low degree of socio-political participation (42.2%) and medium (28.9%) and high (28.9%). The probable reason for the kind of result might be that socio-political participation is considered as prestigious. The findings were similar to Vinayak Nayak (2014).

Degree of contacts with Agri. Input Dealers. From the Table 1 it was evident that majority of farmers fall under medium degree of contacts with Agri. Input Dealers (62.22%) followed by low (23.3%) and high (14.45%). The probable reason for the kind of result might be that getting agricultural information and inputs from AIDs is very easy.

Information seeking behaviour

Table 4: Distribution of farmers based on Crops grown previously (N=90).

Sr. No.	source	Frequency	percent
1.	Informal sources		
	Low (below 4.84 score)	9	10.00
	Medium (between 4.84 to 7.5 score)	68	75.56
	High (above 7.5 score)	13	14.44
Mean= 6.17		S.D=1.33	
2.	Formal sources		
	Low (below 1.78 score)	10	11.11
	Medium (between 1.78 to 5.3 score)	67	74.44
	High (above 5.3 score)	13	14.44
Mean= 3.54		S.D=1.76	
3.	Mass media		
	Low (below 2.36 score)	18	20.00
	Medium (between 2.36 to 5.40 score)	60	66.67
	High (above 5.40 score)	12	13.33
Mean= 3.88		S.D=1.52	

From the Table 4 it was evident that 75.56 percent farmers had medium Information seeking behaviour from Informal sources followed by high (14.44 percent) and low (10 percent).

From the Table 4 it was evident that 74.44 percent farmers had medium Information seeking behaviour from formal sources followed by high (14.44 percent) and low (11.11 percent).

From the Table 4 it was evident that 66.67 percent farmers had medium Information seeking behaviour from mass media followed by low (20 percent) and high (13.33 percent).

From the Table 1 it was evident that 75.56 percent farmers had medium Information seeking behaviour followed by high (14.44 percent) and low (10 percent).

The results were partially in consistent with Androulidakis *et al.* (2002).

Credibility on Agri. Input Dealer(s). From the table 1 it was evident that 73.33 percent farmers had medium credibility on AIDs, followed by 15.56 percent had high and 11.11 percent had low credibility on AIDs. The probable reason might be because farmers avail services from AIDs from years and are in touch with them more frequently. The results were in consistent with Singh and Narain (2008a).

Input acquisition behaviour. From the Table 1 it was evident that 82.22 percent farmers had medium Input acquisition behaviour, followed by 17.80 percent had low and 0.00 percent had high Input acquisition behaviour. The criteria for going to AIDs was because they were the prime source of farm information to farmers. The findings were similar to Androulidakis *et al.* (2002); Singh and Narain (2008a).

Cosmopolitaness. From the Table 1 it was evident that 68.89 percent had medium cosmopolitaness followed by 30 percent high and 1.11 percent had low cosmopolitaness. The results were partially in consistent with Shashidhar (2004).

Risk management behaviour. From the Table 1 it was evident that 75.56 percent had medium risk management behaviour followed by 15.55 percent high and 8.89 percent had low risk management behaviour. The probable reason may be the higher education, enough farming experience and annual income of respondents. The findings were similar to Vedamurthy (2002).

From the Table 5 it was evident that 67.78 percent AIDs fall under medium effectiveness category, 16.67 percent fall under less effectiveness category, 15.55 percent fall under high effectiveness category. The result was similar to the findings of Borah (2019).

Table 5: Distribution of respondents on Effectiveness of extension and advisory services of Agri. Input Dealer(s).

Sr. No.	category	frequency	%
1	Less effectiveness (below 26.12 score)	15	16.67
2	Medium effectiveness(Between 26.12 to 28.14 score)	61	67.78
3	High effectiveness(above 28.14 score)	14	15.55
Total		90	100
Mean= 27.13 S.D.=1.01			

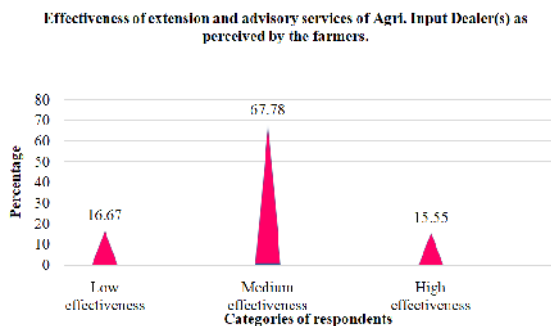


Fig. 1. Distribution of respondents based on Effectiveness of extension and advisory services of Agri. Input Dealer(s).

CONCLUSION

The findings of the study revealed that majority of farmers were medium in their profile characteristics and have perception of medium effectiveness on Agri. Input Dealers. Hence the planners and development agencies need to give attention on effectiveness of Agri. Input Dealers by planning training programmes for increasing their effectiveness.

FUTURE SCOPE

India needs quantum increase in productivity of crops, livestock and other farmed commodities while ensuring resource conservation to achieve food, nutrition and livelihood security at farm-household and community levels. It is critical to ensure the availability of inputs like seeds, fertilizers, plant protection chemicals and appropriate machinery at the right time and place in order to increase agricultural production, productivity and profitability. The AID scan, to a great extent, play

important role in this by delivering inputs and agro advisory services in a timely manner. The study will be extremely useful in eliciting AIDs concerns and their solutions to such difficulties.

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