

## THE ROLE OF AGRICULTURAL PROFESSIONALS IN PROVIDING AGRICULTURAL INFORMATION TO RURAL FARMERS – A STUDY

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### **ABSTRACT**

*The National Policy on Agriculture aims at a growth rate in excess of 4% per annum in the agricultural sector based on efficient use of resources and conservation of soil, water and bio-diversity. The policy seeks to realize the unsourced growth potential of Indian agriculture, strengthening rural infrastructure for faster agricultural development, promote value addition, accelerate the growth of agro-business, create employment potential in rural areas; secure a fair standard of living for the farmer and agricultural workers and their families, discourage their migration to urban areas and face the challenges arising out of economic liberalization and globalization. Farming community can be classified into two categories as small and big farmers depending on the size of land cultivated by them. They are literate and illiterate. The literate farmer may be provided with information through training or print or electronic media, but in the case of illiterate farmers, these methods of communication are like beating drums in front of the deaf. This category of farming community can be made literate effectively by audio-visual and demonstration methods. Mandal Agricultural Offices are located at the Mandal-Headquarters only. They are playing a vital role in disseminating the agricultural information to the rural farmers. They refer the farmers to the Regional Agricultural Research Station concerned when they are unable to provide the accurate information to them.*

**Key Words:** *Agriculture – Farmers -Growth - Farming community - Agricultural Offices -Agricultural Technology - Agricultural Officer.*

### **INTRODUCTION**

The first Prime Minister of India, Sri Jawaharlal Nehru said, “Anything can wait, but not the agriculture”. He gave the first priority on war footing for the agriculture and agricultural production in the five-year plans. In the first five-year plan, the Government of India bestowed more attention to the agriculture. In the second five-

year plan, they gave priority for industrialization. From third five-year plan onwards, they gave equal priority for agriculture on par with other departments. Since food occupies the first place in the hierarchical needs of man, agriculture can be neglected only at the risk of economic instability. Through these five-year plans, the country has achieved a significant increase in production and laid the foundation for technological progress. The planning process in agriculture has resulted in its modernization, strengthened the rural economy and built rural India. The government has taken the steps for the development of irrigation, rural electrification, power, soil conservation programmes and supply of fertilizers, improved seeds and credit facilities together with the provision for extension services percolating to the grassroots level. These are some of the measures, which have been undertaken directly to increase agricultural production. In the first two plans, agricultural development emphasized the need for more produce to feed the people. In the third plan, agriculture was considered to be an industry with a key role in the process of attaining self-sustaining growth.

The National Policy on Agriculture aims at a growth rate in excess of 4% per annum in the agricultural sector based on efficient use of resources and conservation of soil, water and bio-diversity. The policy seeks to realize the un-sourced growth potential of Indian agriculture, strengthening rural infrastructure for faster agricultural development, promote value addition, accelerate the growth of agro-business, create employment potential in rural areas; secure a fair standard of living for the farmer and agricultural workers and their families, discourage their migration to urban areas and face the challenges arising out of economic liberalization and globalization.

## INFORMATION NEEDS OF FARMERS

Farming community can be classified into two categories as small and big farmers depending on the size of land cultivated by them. They are literate and illiterate. The literate farmer may be provided with information through training or print or electronic media, but in the case of illiterate farmers, these methods of communication are like beating drums in front of the deaf. This category of farming community can be made literate effectively by audio-visual and demonstration methods. The farmers required information on agriculture as shown below:

**Field acquisition:** Farmers are required to know the different types of schemes, subsidies available, their policies, procedures for purchasing of agricultural land,

**Agricultural inputs:** Farmers need information about improved variety of seeds, pesticides, agricultural equipment, weather conditions, harvest and post harvest technology like storage and transport to market.

**Agricultural Technology:** Farmers should be fed with innovative technology in their farming.

**Agricultural Credit:** Farmers need information about credit facilities sources, how to utilize loanable amount, terms of loan etc.,

**Agricultural Marketing:** Day-to-day market trend on price of different variety of agricultural produce are necessary for the farmers,

**Food technology:** Information on post-harvest and food technology is needed for the farmers to get maximum benefit out of their crop.

Information is essential for the effective agricultural production. It is also essential for making rational decisions. Many factors can affect individuals' needs and use of information, including age, sex, cultural, social and educational background, professional status, work environments and accessibility of information services.

In order to ensure good agricultural production and welfare of the people in any country, it is necessary that information should flow freely and rapidly from policy makers to the grassroots level. A well organized information system, which collects, processes and disseminates information, is essential to have free and rapid flow of information to all those who are ignorant of agricultural information.

## **NEED FOR THE STUDY**

The Government is providing essential agricultural information to the rural farmers; it is not reaching them in an effective way. They are also ignorant of the latest agricultural information, which is essential for their economic development as well as to the national economic development. They are not utilizing the agricultural information services provided by the Government. They are also ignorant of the services provided by the Government. It may be due to many factors namely ignorance, illiteracy, poverty and lack of proper information. Man has right to acquire information. If such information is not provided, the consequences can easily be imaginable. Information has great value in the present day information based society. It plays an important role in today's complex economic and social environment. Hence, the present study was undertaken.

## **OBJECTIVE OF THE STUDY**

Assess the role of Agricultural Professionals in providing agricultural information to rural farmers

## **DATA COLLECTION**

The questionnaire intended for agricultural officers consists questions on the type of information provided to rural farmers, the availability of agricultural information in the local library, receiving of different types of

materials on agricultural farming, problems faced in providing agricultural information and channels used to provide it. It is given in appendix E. Copies of the questionnaire were posted to all 66 Mandal Agricultural Offices in Chittoor district with stamped self-addressed postal envelopes. However, the investigator received 49 replies from Mandal Agricultural Officers only.

## ANALYSIS OF DATA

After collecting the data from the respondents, the data was analysed according to the objectives and hypotheses stated. First the data was recorded in data sheets and then fed into the computer. The data was analyzed by using 'LOTUS' and statistics (SX) software packages. However, percentages and other necessary calculations were done with the help of calculator. Both descriptive and inferential statistical techniques were employed. Chi-square values were calculated using SX software package.

### Mandal Agricultural Office and its functions

Mandal Agricultural Offices are located at the Mandal-Headquarters only. They are playing a vital role in disseminating the agricultural information to the rural farmers. They refer the farmers to the Regional Agricultural Research Station concerned when they are unable to provide the accurate information to them.

For each Mandal Agricultural Office, one Agricultural Officer and other supporting staff are appointed to provide agricultural information services. A questionnaire is prepared to get the opinions of agricultural officers on the various issues relating to the provision of agricultural information to the rural farmers. It consists of questions on the type of information provided to the rural farmers, the availability of agricultural information in local libraries, receiving of different types of materials on the agricultural farm practices, problems faced in providing agricultural information and channels used to provide it. Copies of questionnaires were posted to all the Mandal Agricultural Officers in the district. The replies given by them are analyzed and interpreted under the following headings.

The farmers were enquired about their awareness with regard to the Mandal Agricultural Offices and its functioning. The replies are presented in Table -1

**Table -1**

**Distribution of rural farmers according to their education, income and landholdings with regard to their awareness about the existence of Mandal Agricultural Office (in percentage)**

Reply	Education		Income		Landholdings		Total
	Lit	Illit	LIG	HIG	SF	BF	
Yes	63.44	44.80	53.24	58.64	47.97	62.72	56.27
No	36.56	55.20	46.76	41.36	52.03	37.28	43.73
<b>Total</b>	100 n=692	100 n=433	100 n=494	100 n=631	100 n=492	100 n=633	N=1125
	$\chi^2 = 37.5894$ d.f = 1 T.V=3.841 Sig. at 0.05 level		$\chi^2 = 3.2813$ d.f = 1 T.V =3.841 N.S.		$\chi^2 = 24.4749$ d.f = 1 T.V=3.841 Sig. at 0.05 level		

It is evident from Table -1 that most of the respondents (56.27%) know the existence of Mandal agricultural office. The rest of them (43.73%) replied negatively in this regard.

It is evident from Table -1 that there is significant difference in their awareness with regard to existence of Mandal Agricultural Office between literates and illiterates as indicated by Chi-square value, which is significant at 0.05 level with one degree of freedom. Literates are more aware of the existence of Mandal Agricultural Office and its benefits compared to the illiterates.

There is no significant difference in this regard between lower income and higher income groups as indicated by Chi-square value which is not significant at 0.05 level with one degree of freedom.

It can be seen from the table that there is significant difference in this regard between the small farmers and big farmers. It is indicated by Chi-square value, which is significant at 0.05 level with one degree of freedom. It means that more number of big farmers are aware of the Mandal Agricultural Office compared to small farmers.

### Services of Mandal Agricultural Officers

A question has been put to the farmers to know their awareness according to the services provided by the Mandal Agricultural Officers with regard to their education, income and landholdings. The replies given by them are shown in Table -2

Table -2

**Distribution of rural farmers based on their education, income and landholdings with regard to their awareness about the services provided by Mandal Agricultural Officer (in percentage)**

Reply	Education		Income		Landholdings		Total
	Lit	Illit	LIG	HIG	SF	BF	
Yes	37.78	40.00	24.73	57.20	39.56	38.12	38.76
No	62.22	60.00	75.27	42.80	60.44	61.88	61.24
<b>Total</b>	100 n=630	100 n=495	100 n=639	100 n=486	100 n=498	100 n=627	N=1125
	$\chi^2=0.5767$ d.f = 1 T.V=3.841 N.S.		$\chi^2= 122.6580$ d.f = 1 T.V =3.841 Sig. at 0.05level		$\chi^2=0.2425$ d.f = 1 T.V =3.841 N.S.		

It is evident from Table -2 that majority of the rural farmers (61.24%) do not know the services provided by Mandal Agricultural Officer and the remaining (38.76%) of them replied positively. It is evident from the table that there is no significant difference in this regard between literates and illiterates as indicated by Chi-square value, which is not significant at 0.05 level with one degree of freedom. It is further shown that there is significant difference in this regard between the farmers of lower income and higher income groups as indicated by Chi-square value, which is significant at 0.05 level with one degree of freedom. That means more number of farmers from higher income group knew the services of Mandal Agricultural Officer compared with the farmers of lower income group.

It is obvious from it that there is no significant difference in this regard between small farmers and big farmers as indicated Chi-square value, which is not significant at 0.05 level with one degree of freedom.

### **Information services provided by the Mandal Agricultural Officer**

It is evident from Table 2 that 436 rural farmers (38.76%) know the services provided by Mandal Agricultural Officers. Again they were questioned to know about the type of information provided by the Mandal Agricultural Officers. Their replies are presented in Table 4.10.1.

It is evident from Table 4.10.1 that most of the farmers (74.31%) replied that they are getting information on High Yielding Varieties from the Mandal Agricultural Officer. The farmers are also getting information on the

following items from the Mandal Agricultural Officer:

Pesticides and Fungicides	(47.24%)
Water Management	(46.10%)
Pests Management	(42.66%)
Primary Agricultural Co-operative Society	(40.59%)
Agricultural Implements	(23.85%)
Agricultural Marketing	(23.39%)
Weed Management	(22.48%)
Chemical fertilizers and Bio-fertilizers	(19.95%)
Post-harvest Technology	(14.91%)
Agricultural Consultation Services	(14.45%)
WTO	(0.23%)

**Table -3**

**Distribution of farmers according to their replies with regard to the information provided by the Mandal Agricultural Officer (in percentage)**

S. No.	Information services	Number	Percentage
1	High Yielding Varieties	324	74.31
2	Pesticides and Fungicides	206	47.24
3	Agricultural Implements	104	23.85
4	Pests Management	186	42.66
5	Water Management (including drip irrigation)	201	46.10
6	Chemical and Bio-fertilizers	87	19.95
7	Weed Management	98	22.48
8	Agricultural Marketing	102	23.39
9	Primary Agricultural Co-operative Society	177	40.59
10	Post-harvest Technology	65	14.91
11	World Trade Organization	1	0.23
12	Agricultural Consultancy Services	63	14.45

Note: The respondents were permitted to give multiple answers.

## Utilization of services

The farmers were further questioned to know the proper utilization of services provided by the Mandal Agricultural Officer with regard to their education, income and landholdings. The replies are shown in Table -4

**Table -4**  
**Distribution of rural farmers based on their education, income and landholdings with regard to their utilization of services provided by Mandal Agricultural Officer (in percentage)**

Reply	Education		Income		Landholdings		Total
	Lit.	Illit	LIG	HIG	SF	BF	
Yes	21.37	36.30	26.05	30.68	29.68	27.90	28.53
No	78.63	63.70	73.95	69.32	70.32	72.10	71.47
<b>Total</b>	100 n=585	100 n=540	100 n=522	100 n=603	100 n=401	100 n=724	N=1125
	$\chi^2 = 30.6895$ d.f = 1 T.V = 3.841 Sig. at 0.05 level		$\chi^2 = 2.9366$ d.f = 1 T.V = 3.841 N.S.		$\chi^2 = 0.3988$ d.f = 1 T.V = 3.841 N.S.		

It is evident from Table -4 that majority of the respondents (71.47%) are not utilizing the services provided by the Mandal Agricultural Officer. The rest of them (28.53%) replied positively. It is also evident from the table that there is significant difference in utilizing the services provided by the Mandal Agricultural Officer between literates and illiterates as indicated by Chi-square value, which is significant at 0.05 level with one degree of freedom. It is clear from the table that there is no significant difference in this regard between the farmers of lower income and higher income groups as indicated by Chi-square value, which is not significant at 0.05 level with one degree of freedom. It is also evident from the table that there is no significant difference in this regard between small farmers and big farmers as indicated by Chi-square value, which is not significant at 0.05 level with one degree of freedom.



### Satisfaction of the services provided by the Mandal Agricultural Officer

The farmers, who replied that they are utilizing the services provided by the Mandal Agricultural Officer, were again asked to reveal their level of satisfaction with the services. Their replies are presented in Table -5

**Table -5**  
**Distribution of farmers according to their replies with regard to their level of satisfaction of services provided by the Mandal Agricultural Officer (in percentage)**

S. No	Level of satisfaction	Number	Percentage
1	Highly satisfied	47	14.64
2	Satisfied	61	19.00
3	Neither satisfied nor dissatisfied	97	30.22
4	Dissatisfied	79	24.61
5	Highly dissatisfied	37	11.53
	Total	321	100.00

It is evident from Table -5 that most of the respondents (30.22%) are neither satisfied nor dissatisfied. It is also evident from it that 24.61% of farmers are dissatisfied, 19.00% of them are satisfied, 14.64% of them are highly satisfied and 11.53% of them are highly dissatisfied.

### CONCLUSION

The study reveals that about 28.53% of the farmers are utilizing the services provided by the Mandal Agricultural Officers. They were asked to reveal their satisfaction with agricultural information services provided by Mandal Agricultural Officers. Among these farmers, 36.14% of them are dissatisfied and 30.22% of them are neither satisfied nor dissatisfied. Hence, Mandal Agricultural Officers should take necessary steps for their redressed.

### SUGGESTIONS

The following suggestions are given by the farmers to improve the services provided by the Mandal Agricultural Officer:

- ❖ Literature regarding the agricultural information should be in regional language only.
- ❖ At the time of giving demonstration to the farmers, Mandal Agricultural Officers should avoid the use of

technical terms. The knowledge of use of Agricultural Implements and pesticides should be explained in regional languages only.

- ❖ Fertilizers and Agricultural Implements should be supplied by the government agencies to get good quality of products.
- ❖ Agricultural graduates are to be appointed as agricultural officer in each village to provide the latest and required agricultural information to the farmers.
- ❖ There is need to improve the agricultural related programmes on mass media.
- ❖ Agricultural programmes should be shown on the television at the most convenient time of the farmers.
- ❖ At least once in a week Live Agricultural Programmes should be organized on television to establish direct contact between the farmers and the scientists.
- ❖ Combination of traditional as well as electronic methods should be used in the dissemination of information to the farmers.
- ❖ Regional FM radio stations especially for agriculture should be established through which agricultural information can be given in the form of various entertainment programmes.
- ❖ The farmers should be motivated to participate in various extension programmes organized by Mandal Agriculture Officer.
- ❖ Agricultural tours should be organized to provide first hand information to farmers on agriculture.
- ❖ Rural libraries should be established at each village with audiovisual and Internet facilities.
- ❖ Farm clinics should be established in the villages.

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