To find out the association between socio-economic characteristics of the farmers and the factors influencing the access to Agricultural information

ABSTRACT

In agriculture, the role of information in agricultural development is very important Information is essential for increasing agricultural production and improving marketing and distribution strategies. Agricultural extension depends on the exchange of information among farmers so greatly. The aim of the present study is to examine various sources of farmer's agricultural information, access to agricultural information, and its relationship with socio-economic characteristics. A table was formedfor randomly selected200 participants from the framers of Lakhimpur-Kheri, Uttar Pradesh. Data were collected with the help of a pre-tested and validated questionnaire and analyzed using descriptive statistics such as simple frequencies, percentages, meanetc. were used. Results showed that print media, mobile phones and fellow farmers were the main sources of information for farmers. The results further indicated that education and landholding size had a significant positive association with access to agricultural information while age and agricultural experience had a minor association.

KEYWORDS: Agricultural Development, Socio-Economic Characteristics, Strategies, Agricultural Information

INTRODUCTION

Agriculture in India is the means of livelihood of almost two-thirds of the workforce in the country it has always been India's most important economic sector. India ranks second worldwide in farm output India's largest service industry accounts for 57.2 % of the country's GDP while the industrial and agricultural sectors contribute 28.6 % and 14.6% respectively. Agriculture is the predominant occupation in rural India accounting for about 52% of employment is still the largest economic sector and plays a significant role in overall social economic development of India. In shaping of the modern agriculture technology role of information has been a vital component of it. Quality inputs such as seeds, chemicals, irrigation measures, fertilizers, pesticides and genetic engineering have played a major role in raising yields. Farmers now have a better asses and wide range of these inputs these steps include problem recognition information search alternative evaluation purchase decision and post purchase evaluation.

In agriculture, the role of information in agricultural development is very important, it is essential for increasing agricultural production and improving marketing and distribution strategies. To compete the global market these days, our farmers should have modern day information regarding new techniques of farming, new techniques of cultivation, new crops, seeds, pesticides, water management, marketing of the product, government regulations regarding agriculture, export potential of their plants and the statistics approximately the allied activities like fish farming, apiculture, chicken, dairy, and climate facts on nearby and regional levels. In the age of information and technology, the dissemination of information turns into a whole lot simpler though greater complicated, this is because of information messages need to be disseminated to the farmers in the manners and methods, which are appropriate, and satisfactory aid its recipient.

Socio-economic characteristics is a way of describing people based on their education, income, age and type of job. It also analyses how the community progress stagnate or regress because of their regional economy. Socioeconomic status is usually described as low, medium, and high. Farmer with a lower socioeconomic status usually have less access to financial, educational, social, health resources and farm related information than those with a higher socioeconomic status. As a result, they have less information related to new techniques of agriculture and new marketing options available in the market.

LITERATURE REVIEW

Mittal and Singh (2007) in a conference presented their views on 'Shifting from agriculture to agribusiness: The case of aromatic plants'.They studied the economic aspects of lemon grass, patchouli and citronella in Uttar Pradesh and Uttarakhand. The per hectare annual costs were calculated on the basis of current prices. The net returns came out to be negative in first year due to high fixed cost but turns out to be positive in subsequent years due to absence of cost of planting material. The payback period was almost same, around 4.35 years, in lemongrass and citronella, and lower in Patchouli, 2.69 years. The NPV was positive for all three crops being highest in lemon grass, the BC ratio was almost 1.17 for these crops and IRR came out to be around 20% indicating financial stability. The net returns from oil production of lemon grass was Rs.48868 per hectare whereas from sugarcane was Rs.35980 per hectare. Thus it was concluded that cultivation of aromatic crops in plains of Uttarakhand is more profitable than major field crops. Still area under these crops is not increasing due to lack of awareness among farmers and due to their risk averting nature.

Singh et al(2010) in their article on 'Production potential and economics of safedmusli (Chlorophytum borivilianum) under intercropping system' discussed about a field experiment

which they conducted in Central Institute of Medicinal and Aromatic Plants, Lucknow to study the compatibility, productivity and economies of safedmusli in different intercropping systems. Vegetable crops like; cowpea, okra and bottle gourd, maize for grain, long duration pigeon pea, sweet basil in first year at their full and half population were inter-cropped with full population of safedmusli in additive series. In the second year okra and sweet basil were replaced by lablab bean and sacred basil, respectively. Inter-cropping ofsafedmusli with pigeon pea and bottle guard came out to be advantageous.

Kumar et al (2011) conducted a case study in Barabanki district of Uttar Pradesh regarding menthol mint's economic analysis in which they found that BC ratio for menthol cultivation is 2.55 indicating less investment and higher returns. It was also found out that oil extracted from distillation units is less than desired and is of poor quality, thus working of distillation units needs to be improvised.

Kumar (2012) in his study on economic analysis of mentha cultivation in Punjab surveyed 100 mentha growing farmers form Jalandhar and Ludhiana districts. Benefit-cost ratio came out to be 2.99. It was stated that insurance is necessary to protect farmers from crop loss due to adverse climatic conditions mainly during harvesting stage. Rainfall cause main havoc since it causes severe incidence of insect-pests and loss of mentha oil to a large extent.

Singh et al(2012) in their study on resource use efficiency and determinants of mentha cultivation in Punjab worked to find the output input analysis, factors affecting productivity, resource use efficiency and biotic and abiotic constraints faced by mentha farmers in Punjab. The results highlighted that gross returns of mentha oil were higher in peppermintas compared to koshi thereby governing higher price. But the returns over variable cost were more for koshi due to cheap suckers and less use of pesticides and fertilizers.The major biotic constraint was loss due to insect pests and abiotic constraint was loss due to post harvest losses.

Suresh et al (2012) undertook research on topic 'Economics of production to marketing of aromatic crops in Uttar Pradesh' in the districts of Barabanki, Sitapur and Raebaerli in which they studied 100 farmers of menthol mint, tulsi and vetiver. Current prices were used for calculation of per hectare cost and returns. The major variable cost was accounted for vetivar (Rs.75517/ha). The net return over cost was highest for vetiver (Rs.1, 53,933 /ha), followed by menthol mint(Rs.53250 /ha), and tulsi (Rs.40094 /ha). However, the benefit–cost ratio was highest in the case of menthol mint(3.27), followed by tulsi (3.21) and vetiver (3.04). The results clearly revealed the profitability of three crops and suggested diversification of traditional cultivation towards aromatic crops to enhance farm income.

Choudhary (2013) conducted a study on the economic analysis of Mentha cultivation in Rampur district of Uttar Pradesh. In order to study the socio-economic status,estimating the costs and returns and resource use efficiency andidentifying and ranking the constraints faced by mentha growing farmers in mentha cultivation. The results revealed that majority of mentha growing farmers were in the middle age group (31–50 years). The major investment item was tractor (47.81%). The total cost of cultivation was estimated to beRs.64181 per hectare at aggregate level. The highest per hectare total cost of Menthacultivation (Rs.65050 per hectare) was recorded on small farms while the lowest (Rs.62472 per hectare) on large farms, attributed to scale economies realized on large farms in input use and bulk purchase on large farms.

Singh, A. and Yadav, P (2017) study the role of e-marketing in improving efficiency in agricultural marketing: Evidence from India. This research investigates the impact of e-marketing platforms on the efficiency and cost margins of agricultural marketing in India. It discusses how digital technologies are transforming traditional marketing channels.

Sharma, A and Singh, R (2018) observed socio-economic profile of mentha growers in selected districts of Uttar Pradesh, India. This study provides an in-depth examination of the socio-economic profiles of mentha growers in specific districts of Uttar Pradesh, India. The research utilizes surveys and field visits to gather data on various aspects of the growers' lives.

METHOD & MATERIAL:

Research Design: The descriptive research method was chosen with an objective together maximum possible information that would be helpful in analysing the farmers socio-economic condition and its effect on access of Information

Source of data

Primary data were collected from farmers of that region.

Secondary data were collected from websites general periodicals and company literature and internet.

Area of study chosen for the project Lakhimpur district of Uttar Pradesh

Sampling unit

Total of 200 farmers socio-economic characteristics were observed through proper set of questionnaires.

Sampling technique

The farmers for the study were selected by using convenience sampling technique.

Research instrument

Telephonic interview: An information was collected with the help of self-developed questionnaire.

Data analysis Firstly the data were collected from all the respondents and analysis was done by using statistical tools like averages and percentages ranking and into project for meaningful inferences using tables and exhibits.

Duration of the study

The duration of study was of 16 to 18 weeks during an internship program at UPL limited organization.

Sample size

Total of 200 respondents were taken for response.Telecommunication become important part of communication and prove to be very helpful in pandemic situation so while contacting with farmers of different villages, Lakhimpur farmers were observed keenly.

For recording the data, research method which proved to be relevant was telecommuting for frequent details and online questionnaires recorded details. These two methods were relevant to maintain data for research purpose because in that uncertain condition only this was the possible way to reach out the farmers.

RESULT & INTERPRTATION

Age of Farmers	**No of Farmers**	**Percentage**
Young Age (Below 30 years)	45	22.5%
Lower Middle Age (30-45 years)	90	**45%**
Upper Middle Age (45-60 years)	40	20%
Old Age (60 years above)	25	12.5%
Educational Status of Farmers		
Up to High School	72	36%
High School	43	21.5%
Intermediate	60	30%
Graduation & above	25	12.5%
Land Holding		
Marginal (less than 01 ha)	19	9.5%
Small (1-2 ha)	20	10%
Small Medium (2-4 ha)	45	22.5%
Medium (4-10 ha)	106	**53%**

Large (More than 10 ha)	10	5%
Farming Experience		
1-10 years	66	33%
11-20 years	58	29%
More than 20 years	76	**38%**

Table 1: Socio-economic Characteristic of Farmers of Lakhimpur-Kheri,Uttarpradesh

Table 1 indicates that maximumof the farmers belonged to the middle age category and only one fifth of the farmers belonged to the old age category. While barely more than one fifth of the respondents belonged to young age group of the farmers. Table 1 also suggests that majority of the farmers had education above primary class and more than half of the farmers are educated to high school or more than that.Also,it appears from the table that about fifty eight percentof the respondents had farm land holding more than 5 ha. And when we talk about the farming experience around 67% of farmers are having experience of more than 10 years and they are involved directly and fully in farming of different things in these years.

Farmer's reach to the agricultural/farm information is an important aspect, which can be influenced minorly or majorly by socio economic characteristics like age, educational qualification, land holding, experience of farming. In this study farmers access to agricultural information was analyzed on the basis of there access to mobile phone,radio, print media, television,other farmers or relatives from low to high on different parameters of farmer's socio economic characteristics and it can be shown in the below Table 2-5.

Table 2. Relationship Between age of farmers and their access to agricultural information

Age of Farmers	**Access to Agricultural Information**			**Total**
	Low	**Medium**	**High**	
Young Age (Below 30 years)	15	24	6	45
Lower Middle Age (30-45 years)	28	49	13	90
Upper Middle Age (45-60 years)	20	15	5	40
Old Age (60 years above)	19	4	2	25
TOTAL	82	92	26	200
Percentage	41%	**46%**	13%	100%

Data in Table 2 show that the age of the farmers had minor relationship with their access to agricultural information. The minor relationship reveals that access to agricultural information was unlikely to be influenced by farmers age.

Table 3. Relationship Between education of farmers and their access to agricultural information

Educational Status of Farmers	**Access to Agricultural Information**			**Total**
	Low	**Medium**	**High**	
Up to High School	76	34	5	115
Intermediate	12	44	4	60

Graduation & above	3	17	5	25
TOTAL	91	95	14	200
Percentage	45.5%	**47.5%**	7%	100%

The data in Table 3 indicate that there existed a highly significant relationship between education of the farmers and their access to agricultural information. The value illustrates a positive relationship; which indicates that with the increase in the educational level of the farmers, there was an increase in their access to information.

Table 4. Relationship Between land holding of farmers and their access to agricultural information

Land Holding	**Access to Agricultural Information**			**Total**
	Low	**Medium**	**High**	
Marginal (less than 01 ha)	12	5	2	19
Small (1-2 ha)	11	5	4	20
Small Medium (2-4 ha)	26	14	5	45
Medium (4-10 ha)	27	66	13	106
Large (More than 10 ha)	2	6	2	10
TOTAL	78	96	26	200
Percentage	39%	**48%**	13%	100%

The data in Table 4 reveals that there is asignificant relationship between size of the landholding of the farmers and their access to agricultural information. The values in the table indicates a positive association between the variables; which shows that with an increase in the size of land holding of the farmers, there was an increase in their access to agricultural information.

Table 5. Relationship Between farming experience of farmers and their access to agricultural information

Farming Experience	**Access to Agricultural Information**			**Total**
	Low	**Medium**	**High**	
1-10 years	25	33	8	66
11-20 years	17	31	10	58
More than 20 years	26	38	12	76
TOTAL	68	102	30	200
Percentage of farmers	34%	**51%**	15%	100%

The data in Table 5explains that there is a minor relationship between the farming experience of the farmers and their access to agricultural information. The minor relationship indicates that experience of farming of the farmers had no effect on their access to information.

CONCLUSION

From this study it can be concluded that most of farmers are of middle age, are having educational qualification above intermediate, farming experience more than Ten years and most of the farmers belongs to medium category on the basis of land holding. In current situation print media and mobile phones had been the major sources of agricultural information and the other sources of information areKisan melas, Government/NGOs organized programmes, other fellow farmers, television etc. Farmer'seducationalqualifications as well as size of land holding had been discovered to persuade theiraccess to agricultural information, while age and farming experience have very minor influence on their access to information related to agriculture techniques, crops or any other information related to agriculture.

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