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Use of Agriculture Information by fertilizer and pesticide dealer with respect their socio-economic variable: a study in Coochbehar District

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ABSTRACT

The source of agriculture information was a crucial point for farmers. Farmers were getting agriculture information from variety of sources. Among the variety of sources fertilizer and pesticide dealer play an important role for information dissemination about agriculture practices to the farmers. They were closely contact with farmers. Dealer also diagnosis the plant and suggest some medicine. But there were several question may arises that from which sources they were got information and disseminating to the farmers? On the basis above statement Coochbehar Krishi Vigyan Kendra organize an awareness generation programme on fertilizer and pesticide dealer of Coochbeahr district in eastern zone of India to know the used of information about agriculture practices with respect their some socioeconomic variable. The study was conducted during February, 2016. The research design was followed in the study was survey research method. The respondents for this study included from the Coochbehar district. The entire trainees available at the time of awareness programme were considered as respondents. Semi-structure interview schedule were used for collection of data. The sample size for the study was 50. The dependent variable of this study was Sources of information and independent variables were age, occupation, education, land holding, religion, family member and number of year associated with their occupation. descriptive statistics like frequency, percentage

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and other statistical tools were used for the investigation.

Keywords: Information, Communication, awareness, socio-economic, trainees

INTRODUCTION

Agriculture is one of the most prominent sectors in Indian economy. The rapid progress in modern Information and Communication Technology is seen as one of the potential tools in furthering development communication strategies. The creation and passing of information between farmers and extension agents, farmers and researchers, and researchers and extension agencies, among others, is critical to innovation and increased productivity through adoption of better farming practices and technologies. Knowledge brokering is becoming a specialization sometimes a profitable one. The people living in 21st century with the revolution of information communication technology which is responsible for wide spread access of computer technology as well as mobile services in to the social structure. The technology is turn influenced the society, development and social environment [1]. In this age of information revolution, information technologies are being used in almost all walks of life. Today computer, internet and mobile are turning out to be extremely important, Information and Communication Technologies (ICTs) are facilitating fast sharing of information and innovations and acting as a key agent for changing agrarian situation and farmers lives by improving access to agricultural information. [2]. The reports indicated that 45 per cent of the world's ICT projects implemented in India. Asia's highest number of information kiosks implemented across rural India [3]. Anonymous [4] concluded from his study that Perceived complexity can be reduced by practical experience and demonstration. Anonymous [5] reported that if the knowledge required for the innovation's use can be codified and transferred from one context to another, it will be adopted more easily. Anonymous [6] found from their study that Producers serving local markets are reliant on information delivered informally through local networks of communication, where trust and risk reduction are major factors that govern their dependence on those networks. However, knowing that a farmer is using HYVs, fertilizers and plant protection chemicals may not provide much information, because he may be using them for 1 per cent or 100 per cent of his acreage [7]. The private sector was more efficient to benefit farmers as compared to public sector [8]. The researcher did a case study of Monsanto SHP which is providing services like improved seed technology, crop production techniques, fertilizers and conservation tillage practices, training to use of safe and efficient technology packages. Study found that farmer's decision influenced the adoption of agricultural technologies in collaboration with private sector. The effect of family size and composition on agricultural technology adoption is not clear in adoption literature as both positive and negative relationships have been reported [9]. Anonymous [10] concluded that a closer relationship amongst the entire range of stakeholders (e.g. health librarians, social workers, health professionals and the patients) will develop a better understanding and acknowledgement of the particular needs of community. Anonymous [11] reported that the proportion of farmers with access to information was found to increase with an increase in the size of holding. The establishment of the Agricultural Technology Management Agency (ATMA) was a major step forward in the convergence of multiple actors engaged in agricultural extension. ATMA is supposed to act as an umbrella organisation for all major stakeholders in agriculture and allied activities within a district. The Strategic Research and Extension Plan (SREP) is an important feature of ATMA. It is

to be formulated by identifying local research and extension priorities in consultation with farmers. At the ground level, farmers' groups act as platforms for the convergence of various advisory and service providers. ATMA also tried to utilise the potential of agriculture entrepreneurs, custom hire service providers, input dealers, and extension workers in non-governmental organisations to supplement the efforts of public extension functionaries [12]. Sharma et al. (2011) have observed that KCCs are effective in hill agriculture where extension outreach is difficult.

Fertilizer and pesticide dealer play an important role for information dissemination about agriculture practices to the farmers. They were closely contact with farmers. Farmers were getting so many advices from fertilizer and pesticide dealer. They act as key Extension person in a village for suggest plant protection, fertilizer dose and other practices in agriculture. But the problem was that is they give right information or not? If they give right information to the farmers then from which sources they got information and disseminating to the farmers? On the basis above query Coochbehar Krishi Vigyan Kendra organize a one day programme on awareness generation programme on fertilizer and pesticide dealer of Coochbeahr district in eastern zone of India to know the sources of information about agriculture practices with respect their some socio-economic variable. The respondents were selected from Coochbehar district, West Bengal. Fertilizer and pesticide dealer were selected as respondent because farmer contacts were more with them than others. Data were collected at the time of awareness programme of fertilizer and pesticide dealer in Eastern India by Coochbehar Krishi Vigyan Kendra during February, 2016. The purpose of this study is to identify the sources of agricultural information utilized by fertilizer and pesticide dealer and its distribution among the different independent variable selected for the study.

RESEARCH METHODOLOGY

The study was conducted on the respondent of Coochbehar district, West Bengal, who were participated awareness programme on use of agriculture information of input dealer by Coochbehar Krishi Vigyan Kendra during February, 2016. A pre-tested Semi-structure interview schedule was used for collection of data. Survey research method was used at the time of investigation. The entire trainees available at time of awareness programme were considered as respondent. The sample size was 50. The variables were selected based on recommendation of the scientist of Uttar Banga Krishi Viswavidyalaya, Coochbehar, West Bengal. The dependent variable of this study was use of information and independent variables were age, occupation, education, land holding, religion, family member and number of year associated with their occupation. The descriptive statistics like frequency, percentage, range and other statistical tools were used for the investigation.

RESULT AND DISCUSSION

It was observed from the study (Table no. 2) that the majority percentage of the respondent educational level at the time of survey was high school pass (60%) pass followed by graduate and above (40%). It was revealed from the study that educated respondents were doing fertilizer and pesticide business. It was found from the study that the great percentage of the respondent major occupation were business (74%) followed by business and farming (26%). It was expose from the result that majority of the respondent occupation were only business. It was found from the investigation that majority of the

respondents (40%) land holding size were more than 10 acre followed by 5 to 10 acre (32%). It was shown from the result majority of the respondent land holding size were large followed medium and small. It was found from the survey that majority of the respondents (56%) age range were 30 to 50 years followed by Less than 30 years (24%). It was expose from the result that majority of the respondent were middle age group. It was shown from the investigation that majority of the respondents (68%) religion were Hindu followed by Muslim (32%). It was revealed from the result that Majority of Hindu respondent were occupying fertilizer and pesticide business. It was found from the study that the great percentage of the respondent family member size were less than 5 (76%) followed by More than 5 (24%). It was expose from the study that majority of the respondent family size were small. It was found from the investigation that majority of the respondents (40%) associated with their major occupation were 6 to 10 years followed by more than 20 years (28%). It was clear from the result that majority of respondent were great experienced in their occupation. It was shown after investigation that majority of the respondent were used ADA office(90%) as sources of agriculture information followed by Private fertilizer and pesticide company representative (80%). The findings are in line with the results reported by anonymous [12]. It was exposed from the study (Table no. 3) that ADA and Private fertilizer and pesticide company representative company were playing major role for agriculture information dissemination to the fertilizer and pesticide dealer. The findings are in line with the results reported by anonymous [8]. It was also interesting to show that the result of the accessibility of agriculture information of fertilizer and pesticide dealer in case of newspaper, Kisan Call center and TV were wholly contributed 60% of the information which was supported the results found by anonymous [2].

CONCLUSION

It can be concluded from the investigation that majority of the respondent were high school and graduate and above pass. They were theoretically more knowledgeable and can codify a technology in one context to another context. They can take more advantage to used modern information communication technology in agriculture and information disseminating to the farmer. The findings are in line with the results reported by anonymous [5]. It was found that majority of the respondents land holding size were larger than other. This category respondent may more involve in motivating the farmers on Agricultural practices by showing practical demonstration in their own field [4]. It was shown that majority of the respondents were middle age group (more than 30 years to less than 50 years). This category age group was more involved professionally in fertilizer and pesticide business. It was found that majority of the fertilizer and pesticide dealer religion were Hindu than Muslim. So policy may be taken in a proper way which is not harmful on religion. It was shown that majority of the respondent family member size were less than 5. This category respondent may get more time to participating different agricultural programme and aware the farmers on scientific agricultural practices. The finding is in line with the results reported by anonymous [9]. It was shown from the investigation that majority of the respondents were experienced fertilizer and pesticide business. They were attached more than 6 years in fertilizer and pesticide business. They can easily motivate the farmers. They can take more initiative to learn and disseminating the agricultural information to the farmers. It was found from the investigation that majority of the respondent were used ADA office as sources of agriculture

information. So ADA office can take more initiative to provide agriculture information to the farmers through fertilizer and pesticide dealer.

REFERENCES

- [1] Manoj, D. 2006. Information Technology Need of the Hour for Rural Development. Indian Media Studies Journal, July Dec. 1(1):79
- [2] O.P. Parganiha, S.K. Shrivastava, A.K. Chaubey and J.L. Nag. 2012. Impact of Kisan Mobile Advisory (KMA) On Agricultural Technology Dissemination. Indian Research Journal of Extension Education, Special Issue (2):157-178
- [3] Chattopadhyay, B.N., 2004. Value Added e-learning for Quality Extension Education, Presented and Published in the Resource Document of the ICAR Sponsored Winter School on "Advanced Extension Strategies for Agricultural Management with Quality Issues" during 17th November to 16th December, 2004 at BCKV, Kalyani, India.
- [4] Plsek, P. 2003. Complexity and the Adoption of Innovation in Health Care. Paper presented at Accelerating Quality Improvement in Health Care: Strategies to Accelerate the Diffusion of Evidence-Based Innovations. Washington, D.C.: National Institute for Healthcare Management Foundation and National Committee for Quality in Health Care.
- [5] Adler, P.S., S-W. Kwon, and J.M.K. Singer. 2003. The "Six-West" Problem: Professionals and the Intraorganizational Diffusion of Innovations, with Particular Reference to the Case of Hospitals. Working paper
- [6] MITTAL, S., S. GANDHI and G. TRIPATHI (2010): Socio-economic Impact of Mobile Phone on Indian Agriculture. ICRIER Working Paper no. 246. International Council for Research on International Economic Relations, New Delhi.
- [7] Feder, G., Just, R.E. and Zilberman, D. (1985) Adoption of agricultural innovations in developing countries: A survey. Economic Development and Cultural Change, 33: 255-298. 3–15. Marshall School of Business, University of Southern California.
- [8] Glover, D. (2007). Farmer participation in private sector agricultural extension. IDS Bulletin, 38(5), 6\-73.
- [9] Oluoch-Kosura, W. A., Marenya, P. P., & Nzuma, M. J. (2002). Soil Fertility Management in Maize-Based Production Systems in Kenya. In Friesen, D. K., & Palmer, A. F. E. (Eds.), Proceedings of the Seventh Eastern and Southern Africa Regional Maize Conference. Nairobi, Kenya.

- [10] Ghosh, M., & Ghosh, I. (2009). ICT and information strategies for a knowledge economy: the Indian experience. Program: electronic library and information systems, 43(2), 187-201
- [11] NSSO (National Sample Survey Organisation) (1998) 54th Round, Schedule 31, January-June, Department of Statistics and Programme Implementation, Government of India, New Delhi.
- [12] DAC (2014), Guidelines for the Centrally Sponsored Scheme "National Mission on Agricultural Extension and Technology (NMAET)" to be implemented during the XII Plan, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India, New Delhi.

LIST OF TABLES

Table no.1: Variables and their measurement

	Variable	Measurement
А.	Dependent variable	
1.	Information	Schedule developed for the study
В.	Independent variable	
1.	Age	Chronological age of the respondents in completed years
2.	Occupation	Schedule developed for the study
3.	Family member	Schedule developed for the study
4.	Education level	Procedure used by Sivamurthy (1994)
5.	Land holding	Schedule developed for the study
6.	Religion	Schedule developed for the study
7.	Numbers of year associated with their occupation	Schedule developed for the study

Table no. 2: classification of the respondents with different independent variable, n=50

SI	Category	Frequency	Percentage
No.			
A.	Educational level		
1.	Illiterate	-	-

2.	Can read only	-	-
3.	Can read and write only -		-
4.	Primary school -		-
5.	Middle school	-	-
6.	High school	30	60
7.	Pre-university		
8.	Graduate and above	20	40
В.	Occupation		
1.	Business	37	74
2.	Business and Farming	13	26
C.	Land holding (acre)		
1.	Less than 2	4	8
2.	2-5	10	20
3.	5-10	16	32
4.	More 10 20		40
D.	Age		
1.	Less than 30 years	12	24
2.	30 to 50 years	28	56
3.	More than 50 years	10	20
E.	Religion		
1.	Hindu	34	68
2.	Muslim	16	32
3.	Others	-	-
F.	Family member		
1.	Less than 5	38	76
2.	More than 5	12	24
G.	Number of year's respondent associated with		
	the occupation		
1.	Less than 1	2	4
2.	1-5 4		8
3.	6-10 20		40
4.	11-20 10		20
5.	More than 20	14	28

Table no.3: Sources of information utilized for agricultural information dissemination n=50

Sources of Information	Frequency	Percentage	Rank
Own knowledge	35	70	Ш
ADA (Assistant Director of Agriculture) office	45	90	1
Krishi Vigyan Kendra	20	40	IV
Kisan Call Centre	10	20	VI
T.V (Television)	12	24	V
News Paper	8	16	VII
Private fertilizer and pesticide company	40	80	П
representative			