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Awareness of the Farmers towards Activities of Rashtriya Krishi Vikas Yojana (RKVY), in Ranchi District of Jharkhand, India

Priya Ankita Toppo^{a++*} and Dipak Kumar Bose^{a#}

^a Department of Agricultural Extension and Communication, Naini Agriculture Institute, SHUATS, Prayagraj-211007, (UP), India.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

The study was conducted in the district of Ranchi to determine the Awareness of respondents towards activities of RKVY on both its beneficiaries and non-beneficiaries. 4 villages under Tamar block were chosen randomly, and a total of 120 respondents (60 beneficiaries and 60 non-beneficiaries) were selected randomly for the study. Data was collected using a pre-structured interview schedule through personnel interviews, and the results were analyzed using appropriate statistical methods. The study found that middle-aged individuals were the largest group among both beneficiaries (71.60%) and non-beneficiaries (46.60%). The majority of respondents had medium landholdings, with (41.60%) being beneficiaries and non-beneficiaries (36.60%) having marginal landholdings. Medium-income individuals were the largest group among beneficiaries

^{**} Research Scholar;

[#] Associate Professor;

^{*}Corresponding author: E-mail: ankitapriya179@gmail.com;

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(43.30%) and among non- beneficiaries (48.30%). The awareness of farmers towards activities of RKVY on its beneficiaries was found to be at a medium level (43.33%) among beneficiaries and low among non- beneficiaries (63.33%). The study also found that age, education, land holding, annual income, extension contact, social participation, mass media exposure, risk preference and economic motivation were positively and significantly correlated with the awareness of farmers towards activities of RKVY on both its beneficiaries and non-beneficiaries.

Keywords: Awareness; RKVY scheme; extension contact; social participation; mass media exposure.

1. INTRODUCTION

Agriculture is the life blood of Indian civilization. The scenario of agriculture over the years depicted that, it is an evergreen occupation for millions of people and feeding the entire nation. Agricultural growth plays an important role in achieving certain national goals, such as reducing rural poverty, providing food and nutritional security, supplying raw materials to major industries such as textiles, earning foreign exchange, etc. Further, it is also the dominant sector of the Indian economy because more than 60 per cent of the people engaged directly or indirectly in agriculture and it is the mainstay of livelihood for majority of the people, in addition to supporting the growth of other sectors. Nonetheless, growth of non-farm sectors, viz. Secondary and Tertiary can be sustained only when the agricultural sector continues to develop and supply sufficient demand for goods and services [1-3]. Therefore, sustained growth in India's agricultural sector is essential for economic development and for maintaining overall stability of the economy. However, despite major part of the workforce being employed in this sector, the contribution of agriculture in Gross Domestic Product (GDP) has registered a steady decline from 51.9 per cent in 1950-51 to 13.9 per cent in 2013-14, at 2004-05 prices. "A major cause behind the slow growth in agriculture was attributed to decrease in public investments. While public and private investments were increasing manifold in sectors such as infrastructure, similar investments were not forthcoming in agriculture and allied sectors which led to distress in the community of farmers, especially that of the small and marginal segment" [4].

Rashtriya Krishi Vikas Yojana (RKVY) scheme was initiated in 2007 as an umbrella scheme for ensuring holistic development of agriculture and allied sectors by allowing states to choose their own agriculture and allied sector development activities as per the district/state agriculture plan. The scheme has come a long way since its inception and has been implemented across two plan periods (11th and 12th). Till 2013-14, the scheme was implemented as an Additional Central Assistance (ACA) to State Plan Scheme with 100% central assistance. It was converted into a Centrally Sponsored Scheme in 2014-15 also with 100% central assistance. Since 2015-16, the funding pattern of the scheme has been altered in the ratio of 60:40 between Centre and States (90:10 for North Eastern States and Himalayan States). For Union Territories the funding pattern is 100 % central grant. RKVY scheme incentivizes States to increase public investment in Agriculture & allied sectors. Under RKVY, States have been provided flexibility and autonomy for selection, planning approval and execution of projects/programs under the scheme as per their need, priorities and agroclimate requirements [5-7]. The funds are released to the State Governments/UTs on the basis of projects approved in the State Level Sanctioning Committee Meeting (SLSC) headed by the Chief Secretary of the concerned State, which is the empowered body to approve projects under the scheme. It is for the State Govt. to further implement the scheme in the State as per its requirement in areas which requires focused attention for increasing production and productivity in the State.

1.1 Rashtriya Krishi Vikas Yojana (RKVY) in Jharkhand

RKVY was started in 2007-08 in Jharkhand. From that year to 2014-15, the central government has provided 100% funding to the selected agro-based projects to improve the agriculture situation in Jharkhand. In 2015-16, the assistance has been reduced to 60:40% for Centre and state. Under this scheme, the central government has allocated Rs. 82.65 Crore for Jharkhand in 2016-17, while state share for the same year is Rs. 55.10 Crore. In Jharkhand, in 2015-16, 12 projects with cost of Rs. 123 Crores were proposed. Data on project-wise distribution of proposed cost is not available for 2016-17. For the year 2015-16, crop development is given highest priority both in terms of cost and in terms of number of projects, though project of highest average cost was proposed for cooperatives and cooperation (www.rkvy.nic.in) [8-10].

2. METHODOLOGY

The present study was conducted in Ranchi district of Jharkhand. Out of18 blocks in Ranchi district, Tamar block was selected purposively based on maximum number of farmers engaged in RKVY.From the selected block, 4 villages were selected purposively based on maximum number of farmer involved in activities of RKVY. Ex-Post facto research design was adopted for the study as it describes the characteristics or phenomena that are being studied.

3. RESULTS AND DISCUSSION

In Table 1, distribution of various independent among beneficiaries variables and nonbeneficiaries is observed. Incase of age, middleaged individuals are the largest group among both beneficiaries (71.6%) and non-beneficiaries (46.6%). In case of gender, male individuals are the largest group among both beneficiaries (63.3%) and non-beneficiaries (81.6%). In terms of caste, the largest group among beneficiaries is ST category individuals (55%), while among nonbeneficiaries (50%). In terms of family type, nuclear family type is more among both beneficiaries (71.6%) and non-beneficiaries (63.3%).In terms of marital status, the largest group among both beneficiaries (63.3%) and non-beneficiaries (63.3%) are married. In terms of education, the largest group among both beneficiaries (30%) and non-beneficiaries (33%) has high school education. In terms of occupation, farming + business was the most common occupation among both beneficiaries (41.6%) and in non-beneficiaries (30%). In terms of type of house, cemented houses are more common among beneficiaries (48.30%), among non-beneficiaries (36.6%). In terms of farm power, most common are other farming tools and implements among both beneficiaries (23.3%) and non-beneficiaries (38.3%).In terms of landholding, medium landholding is the most common category in beneficiaries (41.6%) and non-beneficiaries(36.6%) were having marginal landholding.

In terms of annual income, medium income individuals are the largest group among beneficiaries (43.3%), while among non-

beneficiaries (48.3%).Similar findings also reported by Venkattakumar *et al.*, [11].

In terms of mass media exposure low media ownership is the most common category among beneficiaries (48%), among non-beneficiaries (51.6%). In terms of extension contact, low level of contact is the most common category among both beneficiaries (68.3%) and non-beneficiaries (46.6%). Similarly, in terms of social participation low level of participation is common among both beneficiaries (50%) and non-beneficiaries (50%). In terms of risk orientation, medium risk preference is observed among beneficiaries (41.67%) and among non-beneficiaries medium level is observed (60%). Finally, in economic motivation is same level of medium and low level motivation is observed among most beneficiaries (40%), while it is medium among most nonbeneficiaries (46.6%).

The awareness of respondents towards the activities of Rashtriya Krishi VikasYojana (RKVY) in India can vary based on multiple factors, including their personal experiences, cultural context, and socioeconomic background.

Challenges and Limitations: While there is generally a positive awareness regarding RKVY, studies also highlight challenges and limitations. Common concerns Info. regarding RKVY not easily available, complementary inputs not available, lack of monitoring, implementing agencies are located far away, biased towards large land owners. poor quality of materials/machineries supplied, long time gap between the purchase and receiving of subsidy, procedure for the subsidy very tedious, no. of documents req. For availing are too many, prescribed asset not easily available in the market, capacity building/technical advice not provided.

Suggestions given by the respondents are: Efficient supply of inputs should be provided; processing, storage and transport facilities there should be provided; should be improvement in training and demonstration; Village level worker (Agri. Assistant) should provide information about various programs including RKVY; wide publicity should be given for different schemes for increasing awareness among the farmers, supply and value chain guidance should be provided, there should be enhanced government support given to the farmers, provision of infrastructure facilities and inputs at subsidized rates should be provided.

S. No.	Independent	Category	Beneficiaries		Non- Beneficiaries	
	Variables		Frequency	Percentage	Frequency	Percentage
1.	Age	Young (18-35)	11	18.3	23	38.3
	-	Middle (36-50)	43	71.6	28	46.6
		Old (51 & above)	6	10	9	15
2.	Gender	Male	38	63.3	49	81.6
		Female	22	36.6	11	18.3
3.	Caste	Gen.	2	3.3	3	5
		OBC	5	8.3	7	11.6
		SC	20	33.3	20	33.3
		ST	33	55	30	50
4.	Family Type	Nuclear	43	71.6	38	63.3
		Joint	17	28.3	22	36.6
5.	Marital Status	Married	38	63.3	38	63.3
		Unmarried	20	33.3	18	30
		Divorced	2	3.3	4	6.6
6.	Education	Illiterate	13	21.6	13	21.6
		Primary school	17	28.3	12	20
		High school	18	30	20	33.3
		Intermediate	9	15	11	18.3
		Graduate	3	3.3	4	5
7.	Occupation	Only farming	22	36.6	22	36.6
		Farming + Business	25	41.6	18	30
		Farming + Service	5	8.3	7	11.6
		Farming + Any Other	8	13.3	13	21.6
8.	House holding	Hut	9	15	13	21.6
		Semi cemented	22	36.6	25	41.6
		Cemented	29	48.3	22	36.6
9.	Farm power	Bullock	5	8.3	10	16.6
	-	Pump set	19	31.6	7	11.6
		Tractor	13	21.6	4	6.6
		Thresher	4	6.6	8	13.3
		Mould board plough	5	8.3	8	13.3

Table 1. Socio-economic profile of the respondents

S. No.	Independent Variables	Category	Beneficiaries		Non- Beneficiaries	
			Frequency	Percentage	Frequency	Percentage
		Others	14	23.3	23	38.3
10.	Land holding	Marginal (<1Acre / ha)	5	8.3	22	36.6
	C C	Small (1-2 Acre / ha)	17	28.3	17	28.3
		Medium (2-3 Acre / ha)	25	41.6	13	21.6
		Large (4> Acre / ha)	13	21.6	8	13.3
11.	Annual Income	Low (<1 lakh)	14	23.3	23	38.8
		Medium (1-2 lakh)	26	43.3	29	48.3
		High (>3 lakh)	20	33.3	8	13.3
12.	Mass Media	Low	29	48	31	51.6
	Exposure	Medium	17	28	21	35
		High	14	23	8	13.3
13.	Extension contact	Low	41	68.3	28	46.6
		Medium	17	28.3	20	33.3
		High	1	1.6	12	20
14.	Social	Low	30	50	30	50
	Participation	Medium	25	41.6	25	41.6
		High	23	38.3	5	8.3
15.	Risk Preference	Low	25	41.6	11	18.3
		Medium	22	36.6	36	60
		High	13	25	11	18.3
16.	Economic	Low	24	40	24	40
	Motivation	Medium	24	40	28	46.6
		High	12	20	9	15

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S. No.	Statement		Beneficiaries			Non- Beneficiaries	
		Fully Aware F (%)	Partially Aware F (%)	Not Aware F (%)	Fully Aware F (%)	Partially Aware F (%)	Not Aware F (%)
1.	Assistance provided for making	3	56	1	39	18	3
	available certified / HYV seeds.	(5.00%)	(93.33%0	(1.66%)	(65.00%)	(30.00%)	(5.00%)
2.	Assistance provided for the	26	32	2	14	18	28
	purchase of breeder seeds.	(43.33%)	(53.33%)	(3.33%)	(23.33%)	(30.00%)	(46.67%)
3.	Obtaining improved tools,	14	26	20	1	34	25
	implements & machinery.	(23.33%)	(43.33%)	(33.33%)	(1.66%)	(%)	(%)
4.	Assistance provided for obtaining	12	13	35	7	9	44
	soil health cards.	(20.00%)	(21.66%)	(58.88%)	(11.67%)	(15.00%)	(73.33%)
5.	Help provided for testing of soil	2	34	24	1	18	40
	health.	(3.33%)	(56.66%)	(40.00%)	(1.66%)	(30.00%)	(66.67%)
6.	Micro nutrients demonstrations.	12	47	1	3	26	31
		(20.00%)	(78.33%)	(1.66%)	(5.00%)	(43.33%)	(51.67%)
7.	Training given for promotion of	13	45	2	Ì	18	41
	organic Farming.	(21.66%)	(75.00%)	(3.33%)	(1.66%)	(30.00%)	(68.33%)
8.	Assistance provided for promoting	25	2	33	1	8	51
	integrated farming system.	(41.67%)	(3.33%)	(55.00%)	(1.66%)	(13.33%)	(85.00%)
9.	Assistance provided for setting up	3	55	2	3	8	49
	of cold storage, godowns.	(5.00%)	(91.66%)	(3.33%)	(5.00%)	(13.33%)	(81.67%)
10.	Training given on proper use of	21	13	26	4	12	44
	fertilizer.	(35.00%)	(21.67%)	(43.33%)	(6.67%)	(20.00%)	(73.33%)
11.	Training given on proper use of	1	38	21	2	7	51
	fertilizers.	(1.66%)	(%)	(%)	(3.33%)	(11.67%)	(85.00%)
12.	Assistance available for	3	56	1	7	2	51
	horticulture activities.	(5.00%)	(93.33%)	(1.66%)	(11.67%)	(3.33%)	(85.00%)
13.	Assistance given for animal,	3	40	17	6	3	51
	poultry & fishery.	(5.00%)	(66.67%)	(28.33%)	(10.00%)	(3.33%)	(85.00%)
14.	Training through farm field	13	26	21	2	13	45
	schools.	(21.67%)	(43.33%)	(35.00%)	(3.33%)	(21.67%)	(75.00%)
15.	Study tours to research institutes.	12	2	46	1	34	25
	-	(20.00%)	(3.33%)	(76.66%)	(1.66%)	(56.67%)	(41.67%)

Table 2. Distribution of respondents according to their awareness regarding RKVY

		Beneficiaries		
S. No.	Category	Freq.	Percentage	
1.	Low (24-27)	21	35.00	
2.	Med (28-31)	26	43.33	
3.	High (32-34)	13	21.67	
Total	• • •	60	100	
	N	on - Beneficiaries		
S. No.	Category	Freq.	Percentage	
1.	Low (17-22)	38	63.33	
2.	Med (23-28)	14	23.33	
3.	High (29-33)	8	13.34	
Total	* · · ·	60	100	

Table 3. Overall awareness about RKVY on its beneficiaries and non-Beneficiaries

Table 4. Association between selected independent variables with dependent variable 'awareness' of farmer towards activities of RKVY

SI. No.	Independent Variable	Correlation coefficient			
	-	Beneficiaries	Non- Beneficiaries		
1.	Age	0.339**	0.228**		
2.	Caste	0.079NS	0.037NS		
3.	Education	0.745*	0.766*		
4.	Occupation	0.079NS	0.097NS		
6.	Type of house	0.052NS	0.049NS		
7.	Land holding	0.785*	0.856*		
8.	Annual income	0.710*	0.989*		
9.	Extension contacts	0.785*	0.717*		
10.	Social participation	0.976*	0.586*		
11.	Mass Media Exposure	0.875*	0.586*		
12.	Risk preference	0.826*	0.269*		
13.	Economic motivation	0.812*	0.361**		

= 0.01% level of probability, ** = 0.05% level of probability, NS = Non-significant

It is evident from the Table 3 that among beneficiaries, 35% of the respondents have low level of awareness about RKVY, 43.33% of the respondents have medium level of awareness about RKVY and 21.67% of the respondents have high level of awareness about RKVY. Similarly, among non-beneficiaries, 63.33% of the respondents have low level of awareness about RKVY, 23.33% of the respondents have medium level of awareness about RKVY, and 13.34% of the respondents have high level of awareness about RKVY.

From this above Table 4, it can be concluded that independent variable education, type of house, land holding, annual income, extension contact, social participation, mass media exposure, risk preference and economic motivation were positively and significantly correlated at 0.01 per cent level of probability and age was positively and significantly correlated with awareness of farmers towards activities of RKVY on its beneficiaries at 0.05% probability. Therefore, null hypothesis was rejected for these variables. Caste, occupation and type of house were negatively and not significantly correlated with awareness of RKVY on its beneficiaries.

4. CONCLUSION

It was concluded that the majority of respondents, both beneficiaries and nonbeneficiaries, were middle-aged and had a high school level of education. Most respondents were part of a nuclear family and owned 2-3 hectares of land. Both groups had moderate levels of extension contact and social participation. The awareness of farmers towards activities of the RKVYon its beneficiaries was observed to be at a medium level and in the case of non-beneficiaries was observed to be at a low level. Moreover, it was found that age, family size, education, householding, annual income extension contacts, social participation, media ownership, risk preference, and economic motivation were positively and significantly correlated with awareness of farmers towards activities of RKVY. Government should provide subsidized training, demonstrations, infrastructure facilities, and inputs to improve the awareness of farmers towards RKVY.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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