Asian Journal of Agricultural Extension, Economics & Sociology

Volume 41, Issue 7, Page 192-198, 2023; Article no.AJAEES.100454
ISSN: 2320-7027

Knowledge and Adoption of the Respondent about the Livestock Insurance Scheme

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Authors' contributions

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

Article Information

DOI: 10.9734/AJAEES/2023/v41i71962

Open Peer Review History:
This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: https://www.sdiarticle5.com/review-history/100454

Original Research Article

Received: 18/03/2023
Accepted: 20/05/2023
Published: 22/05/2023

ABSTRACT

The present investigation was conducted in Dhariwal block of Gurdaspur district, Punjab. One hundred twenty respondents were selected purposively from 5 villages. The primary data were gathered by the researcher itself through pre-structured interview schedule. Appropriate statistical tools were used to interpret the collected data to draw logical conclusion. The finding inferred that the majority of respondents having low level of adoption towards livestock insurance scheme. And also, it was observed that most of the respondents had medium level of knowledge towards livestock insurance scheme. And age, education, family type, type of house, land holding, occupation, source of information, extension contact and personnel cosmopolite were observed positive and significant correlation with their knowledge level. And age, education, family type, family size, land holding, occupation, annual income, source of information, extension contact, personnel cosmopolite were observed positive and significant co-relation with their adoption level.

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Keywords: Knowledge; adoption; livestock insurance.

1. INTRODUCTION

India is an agricultural country with about 65 to 70% of the full population having agriculture and livestock is importance in India's economy. Livestock provides two-thirds of the agricultural community. It also provides 8.8% employment generation of the population in India. India has vast livestock resources which contributes 4.11% of the gross domestic product and 25.6% of the full agricultural GDP [1,2]. The farmers in India maintain mixed farming system i.e., a combination of crop and livestock where the output of one enterprise becomes the input of another enterprise so that they realize the resource with efficiency. The livestock farmers have lesser coping options at their discretion in comparison to crop farmers, to secure against economic losses in production and death of animals [3,4]. In crops, a farmers may adopt risk efficient farm plans, grow less risky crops and can go for diversification of crops/ varieties. The possibilities of adopting these strategies in livestock sector are either nil or little. In such circumstances, the livestock insurance is one of the main risk mitigating strategies in this sector [5-7]. The crops and livestock's insurance offers a valuable means of protection to farm incomes and standard of living against unavoidable risk and uncertainty period, especially when used in conjunction with price supports, organized marketing, and credit and extension facilities (Kohn, 1966). Lot of emphases has been given in the past to promote adoption of livestock insurance by the farmers. Taking into account the importance of livestock to poor farmers, the insurance is available at different subsidized premium rate to different sections of the society under Central Sponsored Scheme and State Sponsored Scheme (SCSP-Scheduled Castes Special plan and TCSP- Tribal Cates Special Plan.

Livestock is one of the primary sectors in our country. A large proportion of the employment is served by the livestock sector in the rural areas. There are millions of animals, including, buffaloes, goats, and cows served under the livestock in our country [8-10]. The loss of animals and livestock due to unfortunate circumstances, like diseases and death may cause turmoil in the life of farmers and cattle rearers. Therefore, an authentic protection mechanism should be provided for the safety and security of animals. The Livestock Insurance Scheme was developed in the context to provide a protective environment to the farmers as well as the cattle rearers. This scheme came into action during the years 2005-2006 followed by the year 2007 of the 10th Five Year Plan and the year 2008 of the 11th Five Year Plan. It was launched by centrally sponsored scheme, across 100 specified districts of the nation.

The livestock insurance in India is mainly associated with the animals like cattle, buffaloes, pigs, goat and sheep, etc. Basic risk covered by livestock insurance is death in consequences of illness or accident, diseases and emergency slaughtering. Premium in livestock insurance depend on animals' species, category of animals, fattening, breeding, age of animal, level of risk, milk production and current market value. This policy does not cover loss due to injury, death or liability directly or indirectly caused by disease arising out of external parasites, theft, clandestine sale, pollution war and invasion, etc. The major benefit of this scheme was to provide insurance to the farmers and rearers in case they lose animals due to unfortunate circumstances, like death or accident. This scheme continually focused on the importance of insurance to attain improvement in terms of livestock security. It aimed at achieving qualitative improvement in terms of livestock product.

This study will be justified because of its appropriate approach to trace out the dairy farmers who will adopt livestock insurance scheme. This study also helpful to dairy farmers and extension workers in formulation of conceptualization for increasing the involvement of dairy farmers for better knowledge about the benefits of livestock insurance scheme.

2. METHODOLOGY

The Present study entitled "Knowledge and Adoption of the Respondent about the Livestock Insurance Scheme" was undertaken to assess the knowledge and adoption about the livestock insurance scheme. Gurdaspur district was purposively selected for the study. Gurdaspur district comprised of 11 blocks among Dhariwal was selected by purposively due to the reason of maximum respondents engaged in Livestock Insurance Scheme. Appropriate number of villages will be selected through purposive sampling based on the maximum area cover under Livestock Insurance Scheme. (Abul Khair,

Adi, Agwam, Bagha and Chak Tara). From each village, 24 respondents were selected through random sampling method. Thus, constitutes the 120 respondents from 5 villages forms the respondents of the study.

A pre-tested well-structured interview schedule was prepared and used for collection of data from the respondents. The data was gathered with the help of pre-structured interview schedule. Each one of the respondents were interviewed personally based on the pre-planned meeting and their responses were recorded. The data collected from the respondents were categorized, tabulated and analyzed with suitable statistical tools in SPSS 16 software. The following statistical tools were used in the study based on the nature of the data and objectives of the study:

- Arithmetic mean
- Standard deviation
- Percentage analysis
- Pearson product moment correlation coefficient

3. RESULTS AND DISCUSSION

The study was undertaken to assess the knowledge and adoption about the livestock insurance scheme.

3.1 Knowledge Regarding Livestock Insurance Scheme and Knowledge Regarding Claim of Livestock Insurance

Table 1. Distribution of the respondents according to knowledge level of livestock insurance scheme and Knowledge regarding claim of livestock insurance (n=120)

Sl. No	Knowledge regarding livestock insurance scheme	F	%	Rank
1	Dairy animals… .....liter per lactation cover under livestock insurance.	35	29.17	III
2	Animal health certificate issues by the… .....for livestock insurance.	81	67.50	I
3	Which company responses the livestock insurance?	28	23.33	IV
4	Ear tags made of suitable material are applied to the ear of the animal	45	37.50	II
Knowledge regarding claim of livestock insurance				
5	The market value of insured animals decided by	24	20.00	V
6	Post – mortem certificate after death of insured animal is issues by	76	63.33	I
7	Claim amount after death of insured animals should be made within….days after submission of documents	58	48.33	II
8	By which means get the claim amount after death of insured animal is	48	40.00	IV
10	Minimum time required for claim settlement after taking insurance polices	49	40.83	III

Out of 10 statement related to Knowledge regarding livestock insurance scheme, (67.50%) of the respondents were aware about "Animal health certificate issues by the for livestock insurance.", followed by Ear tags made of suitable material are applied to the ear of the animal (37.50%), Dairy animals……..liter per lactation cover under livestock insurance. (29.17%) and which company responses the livestock insurance? (23.33%), had rank position I, II, III and IV respectively. These statements regarded knowledge livestock insurance scheme are satisfied data we found.

Regarding with Knowledge regarding claim of livestock insurance, It is further indicated that (63.33 %) of the respondents aware about Post – mortem certificate after death of insured animal is issues by, Claim amount after death of insured animals should be made within….days after submission of documents (48.33%), Minimum time required for claim settlement after taking insurance policies (40.83%), By which means get the claim amount after death of insured animal is (40.00%) and The market value of insured animals decided by (20.00%), had rank position I, II, III, IV and V respectively. These statements regarded knowledge livestock insurance scheme claim are satisfied data we found.

3.2 Overall Knowledge Level of Farmers Regarding Knowledge of Livestock Insurance Scheme and their Claims

Table 2. Distribution of the respondents according to their overall knowledge regarding livestock insurance scheme and their claims. N=120

Sl. No.	Scores	Respondents	
		Frequency	Percentage
1.	Low (up to 33)	39	32.50
2.	Medium (29 to 37)	60	50.00
3.	High (38 and above)	21	17.50
	Total	**120**	**100.00**

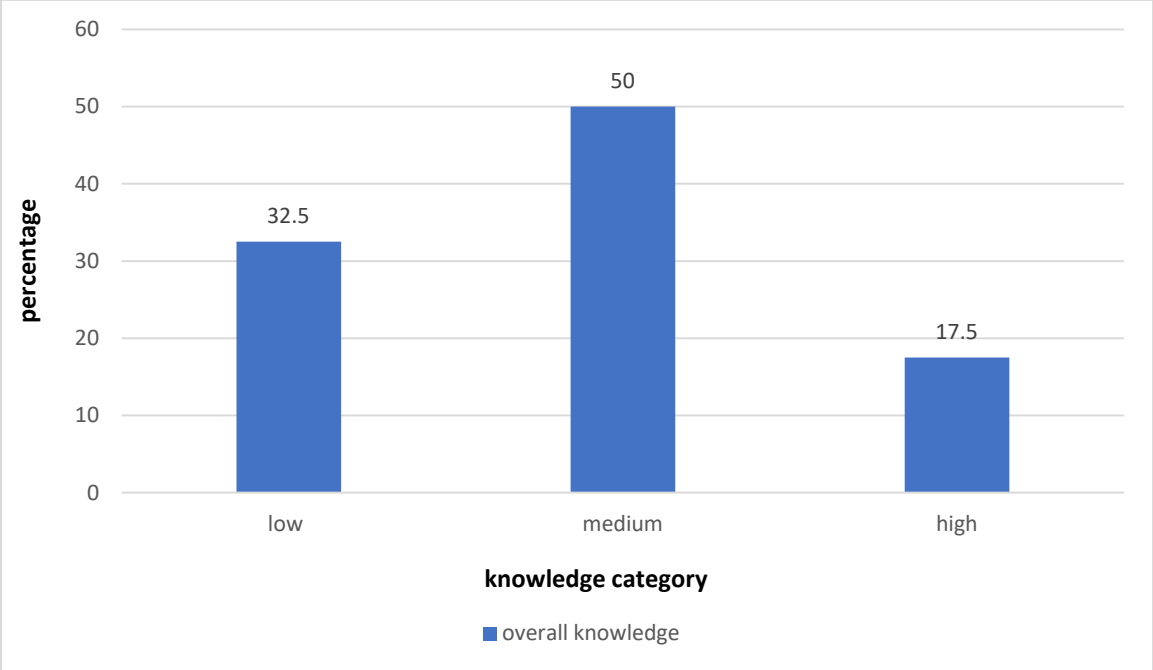

Fig. 1. Overall knowledge

It was observed that half of the respondents (50.00%) had medium level knowledge, further (32.50%) of them had low level knowledge and (17.50%) respondents had high level of knowledge regarding livestock insurance scheme and knowledge regarding claims of livestock insurance.

In general, from above result it may be said that majority of the respondents had medium level knowledge regarding livestock insurance scheme and knowledge regarding claim of livestock insurance in Fig. 1.

In case of adoption behavior of livestock insurance scheme among livestock farmers, the respondents livestock insurance scheme is based on dairy farming were The last experience of dairy farming helps to in adoption of livestock insurance scheme (82.50%) were concerned with adopted and non adopted (17.50%) respondents, Regular price fluctuation of milk and milk products improve adoption (74.17%) were concerned with adopted and non adopted (25.83%) respondents, followed by, It helps to reduce the personal financial stress (73.33%) were concerned with adopted and non adopted (26.67%) respondents, followed by, Livestock insurance make dairy farming easier (70.00%) were concerned with adopted and non adopted (30.00%) respondents, followed by, High purchase of milch animals will improve the adoption of livestock insurance (70.00%) were concerned with adopted and non adopted (30.00%) respondents, followed by, Govt. should reduce the premium rate of insurance (65.83%) were concerned with adopted and non adopted (34.17%) respondents.

Table 3. Frequency distribution of farmer's towards adoption behavior of livestock insurance scheme

Sl. No.	Aspects	Adopted		Non Adopted	
		f	%	F	%
1	Livestock insurance make dairy farming easier	84	70.00	36	30.00
2	It provides protection to dairy farming	77	64.17	43	35.83
3	It acts as a personal saving	34	28.33	86	71.67
4	Govt. should reduce the premium rate of insurance	79	65.83	41	34.17
5	I will adopt scheme when its premium is available on subsidized rates.	50	41.67	70	58.33
6	It helps to reduce the personal financial stress	88	73.33	32	26.67
7	The last experience of dairy farming helps to in adoption of livestock insurance scheme	99	82.50	21	17.50
8	There is necessity in improving the infrastructure before livestock insurance scheme	63	52.50	57	47.50
9	High probability of disease occurrence will increase livestock insurance	37	30.83	83	69.17
10	High purchase of milch animals will improve the adoption of livestock insurance	84	70.00	36	30.00
11	High cost involved in the treatment of animal will improve the adoption of livestock insurance	54	45.00	66	55.00
12	Distantly located veterinary hospital lead to non-adoption of livestock insurance scheme	68	56.67	52	43.33
13	Limited number of institutions only provides livestock insurance scheme	79	65.83	41	34.17
14	Presence of less alternatives to risk management help inadoption of livestock insurance scheme	21	17.50	99	82.50
15	Regular price fluctuation of milk and milk products improve adoption	89	74.17	31	25.83
16	Motivation by friends and community will affects the adoption of livestock insurance	31	25.83	89	74.17
17	No satisfactory response from insurance company forqueries under its adoption	58	48.33	62	51.67
18	Lack of insurance agents and their services at village andblock levels limit adoption	37	30.83	83	69.17
19	Delay in arrival of insurance inspector after animal mortality result in less adoption of livestock	32	26.67	88	73.33
20	If it is provided by insurance companies are easy to adopt	57	47.50	63	52.50

Level of satisfaction regarding Livestock Insurance scheme, the majority of the respondents with Limited number of institutions only provides livestock insurance scheme (65.83%) were concerned with adopted and non adopted (34.17%) respondents, followed by, It provides protection to dairy farming (64.17%) were concerned with adopted and non adopted (35.83%) respondents, followed by, Distantly located veterinary hospital lead to non-adoption of livestock insurance scheme (56.67%) were concerned with adopted and non adopted (43.33%) respondents, followed by, There is necessity in improving the infrastructure before livestock insurance scheme (52.50%) were concerned with adopted and non adopted (47.50%) respondents, followed by, No satisfactory response from insurance company for queries under its adoption (48.33%) were concerned with adopted and non adopted (51.67%) respondents.

Level of satisfaction regarding Livestock Insurance scheme, the majority of the respondents with If it is provided by insurance companies are easy to adopt (47.50%) were concerned with adopted and non adopted (52.50%) respondents, followed by, High cost involved in the treatment of animal will improve the adoption of livestock insurance (45.00 %) were concerned with adopted and non adopted (55.00%) respondents, followed by, I will adopt scheme when its premium is available on subsidized rates. (41.67%) were concerned with adopted and non adopted (58.33%) respondents, followed by, High probability of disease occurrence will increase livestock insurance (30.83%) were concerned with adopted and non adopted (69.17%) respondents, followed by, Lack of insurance agents and their services at village and block levels limit adoption (30.83%) were concerned with adopted and non adopted (69.17%) respondents, followed by, It acts as a personal saving (28.33%) were concerned with adopted and non adopted (71.67%) respondents.

Level of satisfaction regarding Livestock Insurance scheme, the majority of the respondents with Delay in arrival of insurance inspector after animal mortality result in less adoption of livestock (26.67%) were concerned with adopted and non adopted (73.33%) respondents, followed by, Motivation by friends and community will affects the adoption of livestock insurance (25.83%) were concerned with adopted and non adopted (74.17%) respondents, followed by, Presence of less alternatives to risk management help in adoption of livestock insurance scheme (17.50%) were concerned with adopted and non adopted (82.50%) respondents, Thus, it may be concluded that the maximum respondents were having either high adopted and non adopted attitude regarding Livestock Insurance scheme.

It was observed that half of the respondents (49.17%) had low level of adoption, further (41.67%) of them had medium level of adoption and (9.17%) respondents had high level of adoption regarding livestock insurance scheme.

Table 4. Distribution of the respondents according to their overall adoption status regarding livestock insurance scheme N=120

Sl. No.	Scores	Respondents	
		Frequency	Percentage
1.	Low (up to 33)	59	49.17
2.	Medium (29 to 37)	50	41.67
3.	High (38 and above)	11	9.17
	Total	**120**	**100.00**

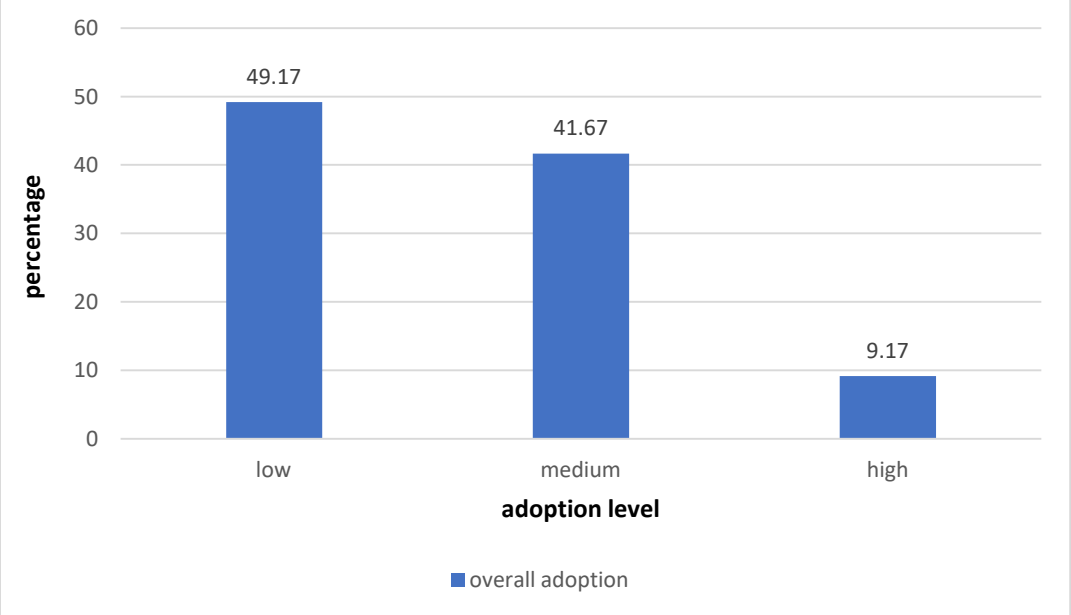

Fig. 2. Bar graph showing overall adoption rate

4. CONCLUSION

It is concluded that the respondents involved in dairy farming were in middle and old age category which indicates that the dairying was less practiced by the young age people of the family. It is there by necessary to create awareness among the younger generation about the commercial viability and profitability of the dairy enterprise. And the education level is also medium. The low level of respondents was showing interest in innovativeness. The overall knowledge of the respondents is found under medium level. The overall adoption of the respondents is found under low level. The independent variable of the respondents is age, education, occupation, land holding, annual income, mass media exposure, innovativeness and extension contact were positively significant correlated with the knowledge at 0.01% probability. The independent variable of the respondents is age, education, occupation, land holding, family size, annual income, mass media exposure, innovativeness and extension contact are positively and significantly correlated with the adoption at 0.01% of probability.

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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Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle5.com/review-history/100454