

CONSTRAINTS EXPERIENCED IN ADOPTION OF LIVESTOCK INSURANCE BY DAIRY FARMERS OF MATHURA DISTRICT OF UTTAR PRADESH

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ABSTRACT

Faced with fast changing environment, livestock risk management is of utmost importance for livestock farmers. Insurance is risk management strategy with a positive effect on income stabilization by transferring risk from farmer to insurance company. Nevertheless, livestock insurance is relatively less adopted by dairy farmers. With this view, the present study was taken with the objective to analyze risk management constraints of dairy farmers with focus on livestock insurance. Structured survey on 100 farmers in Mathura district of Uttar Pradesh was conducted through pre-designed interview schedules. The important top ranked constraints faced by dairy farmers at personal level, institution level, pre-claim level and post-claim level in adoption of livestock insurance were inadequate information about livestock insurance including the procedure, to inadequate awareness programme by State Department of Animal Husbandry, less coverage against risk and unsatisfactory experience of dairy farmers regarding payment of insurance claim, respectively.

Keywords: Adoption, Constraints, Dairy owners, Livestock insurance

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Livestock play diverse roles for the well-being of rural households like source of food supply, income and livelihood, generate employment, soil fertility improvement, farm diversification and to sustain agricultural production. Moreover, additional income derived from livestock financially supports farmer facing uncertainties of crop production. But yearly natural disasters, climate change and disease outbreak eventually leads to livestock causality which affects the farm income as a whole and enhances the unfavourable situation to many folds. To check this Government launched a centrally sponsored scheme on Livestock Insurance in 2005. Insurance is a financial tool to transfer risk associated with livestock farming to a third party by paying amount of premium. Livestock insurance is beneficial to farmers by reducing or preventing the effects of disasters, disease epidemic, accident injuries and death of animals by establishing linkage between farmers, private sector and government. The study reflects that adoption of livestock insurance among livestock owners is mainly effected by motivation by friends and community members followed by high probability of disease occurrence in particular area, effective risk assessment and previous experience of livestock owners (Kumar *et al.*, 2018). Despite having beneficial effect, plethora of studies reported that farmers experienced certain constraints in adoption of livestock insurance like inadequate animal husbandry department support for veterinary healthcare services, less availability missing of risk minimisation options such as livestock insurance, poor infrastructure, absence of expertise in insurance, effective participation of various stakeholders

like line department, Animal Husbandry Department and Banking and Insurance Regulatory Authority (Aker, 2012), higher premium rate and affordability of insurance premium amount (Kumar *et al.*, 2011). Thus, to identify the gap that exist at different levels of livestock insurance, the study was planned with the objective to identify the constraints faced by dairy farmers at personal level, institution level, pre-claim level and post-claim level in adoption of livestock insurance in Mathura district of Uttar Pradesh.

MATERIALS AND METHODS

The study was carried out in Mathura district of Uttar Pradesh having about 70 per cent rural populace engaged in agriculture and livestock rearing. Mathura District lies in semi arid zone as per Agro-Climatic Zone (NARP) classification. Stratified sampling procedure was followed for the study by purposive selection of 5 blocks and random selection of 2 villages and 10 dairy farmers from a selected district, block and a village, respectively. Thus, total 100 dairy farmers possessing milch animal, having at least five year of experience in rearing dairy animal with primary occupation in agriculture were sampled as respondents. Constraints imply the problems or difficulties faced by dairy farmers and various agencies involved in livestock insurance. A structured interview schedule was prepared in view of the objective of the study and data were collected by personal interview from the sampled respondents. The responses was collected from respondents on three point continuum *viz.* SA (Strongly agree), A (Agree), DA (Disagree). After duly recording their judgments, the

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statements were considered for the analysis. Weighted means score of the statement was calculated and the statements were ranked accordingly.

$$\text{Weighted mean score} = \frac{(\text{Actual scores obtained for the statement})}{\text{Maximum possible scores obtainable for the statement}}$$

RESULTS AND DISCUSSION

Constraints faced by dairy farmers in adoption of livestock insurance

Personal constraints

Table 1 reveals that unawareness about livestock insurance and inadequate information about the procedure for applying livestock insurance were the major personal constraints accepted by dairy farmers. Awareness and attention are the first steps that the individual passes before adopting any practices. Thereby, there is a need to create awareness about livestock insurance by using mass media channel. Raju and Chand (2008) also stated that unawareness about the insurance scheme is one of important reason for not availing the insurance by farmers. Further, it was also found that inadequate coordination between different insurance stakeholders and less faith of livestock owners in getting adequate livestock insurance claim were the next major constraints faced by dairy farmers and ranked second and third. Similar findings were also reported by Mohapatra and Dhaliwal (2013).

Institutional constraints

Table 2 reveals that inadequate awareness programmes about livestock insurance by State Animal Husbandry Department was ranked first due to lack of adequate localized interactions and effective image building awareness campaigns. Thus, there is a need that insurance company along with the State Animal Husbandry Department should start extensive campaigning to aware the farmers about the benefits of livestock insurance. Further, less coverage of small animals in the insurance

policies and less number of financial institutions providing livestock insurance were ranked second and third institutional constraints by farmers. These findings were in resemblance with the results reported by Kammar and Bhagat (2009).

Pre-claim constraints

The result of pre-claim constraints of livestock insurance (Table 3) indicates that financial institutions providing less coverage against risk as the most prominent constraint faced by respondents followed by livestock insurance adoption by large farmer and inadequate information about claim amount as second and third constraint, respectively. Though farmers have general information of livestock insurance but few of them lack the information of premium subsidy scheme given by government (Kandel, 2019). Singh and Chandel (2019) also stated that a large herd size with more of crossbred animals and distance location of veterinary hospital were influencing the adoption of livestock insurance.

Post claim constraints

Under Post claim constraints category (Table 4), unsatisfactory experience of farmers regarding payment of insurance claims and lengthy and time taking process to avail insurance claim were the major hurdles to adopt insurance claim by the respondents. Khan *et. al.* (2014) found that the mean time in claim settlement for livestock insurance was 104.5 days and one of the most important constraints faced by the farmers. They further stated that the ignorance of rules and lack of estimate of correct value of animal are major constraints in livestock insurance. Singh and Chandel (2020) also stated that the actual market price of dairy animals and lengthy time taking procedures in completing the formalities to file the claim were hindering the farming to go for livestock insurance. Farmers also faced delay in insurance claim payments because of lack of knowledge and literacy problem among

Table 1
Distribution of the respondents according to personal constraints (n=100)

S/No.	Item	S.A.	A.	D.A.	Weighted mean score	Rank
1.	Unaware about livestock insurance	88	10	01	93.00	I
2.	Inadequate information about the procedure for applying livestock insurance	91	04	05	93.00	I
3.	Inadequate coordination between different insurance stakeholders	85	14	01	92.00	II
4.	Less faith of livestock owner in getting adequate livestock insurance claim	81	16	03	89.00	III
5.	Lack of subsidies in premium amount of livestock insurance	55	44	01	77.00	IV
6.	Presence of limited choice in insurance product suitable to socio-economic condition of livestock owner	57	42	01	77.00	IV

SA= Strongly Agree, A= Agree, DA= disagree

Table 2
Distribution of the respondents according to institutional constraints (n=100)

S/No.	Item	S.A.	A.	D.A.	Weighted mean score	Rank
1.	Inadequate awareness program about livestock insurance by state Animal Husbandry department	96	03	01	97.10	I
2.	Less coverage of small animals in the insurance policies	90	10	00	95.00	II
3.	Less number of financial institution providing livestock insurance	87	11	02	92.50	III
4.	Complex procedural difficulties for applying livestock insurance	86	11	03	91.50	IV
5.	Inability to pay insurance premium in one instalment	80	16	04	88.00	V
6.	Excessive waste of time during procedure of livestock insurance	78	19	03	87.50	VI
7.	No claim was made by insurance official for animal mortality due to disease	76	22	02	87.00	VII

SA= Strongly Agree, A= Agree, DA= disagree

Table 3
Distribution of the respondents according to pre-claim constraints (n=100)

S/No.	Item	S.A.	A.	D.A.	Weighted mean	Rank
1.	Financial institution providing less coverage against risk	96	04	00	98.00	I
2.	Livestock insurance can only be adopted by large farmer.	90	09	01	94.10	II
3.	Inadequate information about claim amount	86	11	03	91.50	III
4.	Post-mortem of animal was not done in due course of time.	85	13	02	91.50	III
5.	Distantly located veterinary hospital for contacting veterinarian and conducting post-mortem of animal	84	15	01	91.50	III
6.	Assessment of animal loss was done by insurance official	81	18	01	90.00	IV

SA= Strongly Agree, A= Agree, DA= disagree

Table 4
Distribution of the respondents according to post- claim constraints (n=100)

S/No.	Item	S.A.	A.	D.A.	Weighted mean	Rank
1.	Past experience of farmer reveals unsatisfactory payment of insurance claims	93	07	00	98.00	I
2.	Getting livestock insurance claim is a lengthy and time taking process	90	10	0	95.00	II
3.	There is always delay in insurance claim payments	80	19	01	89.50	III
4.	Inadequate information about agency paying compensation	86	11	03	87.50	IV
5.	Ear tag maintenance is difficult in livestock insurance	57	44	01	77.00	V
6.	Maintenance and preservation of documents for getting claim after loss of animal	48	30	22	63.00	VI

SA= Strongly Agree, A= Agree, DA= disagree

livestock owners also. Similar finding were also reported by Mohapatra and Dhaliwal (2013).

Independent Variable Co-relation with constraints

Pearson's coefficient of correlation was worked out to find out the relationship between independent variables with the constraints of livestock insurance. A close perusal of table 5 reveals that education and information source showed positive and significant relationship at 1 percent level of significance whereas, land holding and experience

in livestock rearing showed positive and significant relationship at 5 per cent level of significance. Similar findings were also reported by Khan *et al.* (2013) and Singh and Chandel (2019). Education and information exchange from different sources like members from peer group, family and others provide an important angle which influence individuals' innovation adoption process. In contrast, Singh and Chandel (2019) observed the factors like education, farm size and social participation to be

Table 5

Independent variable co-relation with constraints (n=100)

S/No.	Variables	'r' value
1.	Age	0.010
2.	Total income	-0.115
3.	Family size	-0.117
4.	Education	0.200**
5.	Herd size	0.020
6.	Milk production	-0.039
7.	Milk consumption	0.062
8.	Milk sale	-0.060
9.	Land holding	0.019*
10.	Experience of livestock rearing	0.812*
11.	Information source	0.191**

*Significant at 0.05 level of probability; **Significant at 0.01 level of probability

statistically non-significant and considered to be not influencing the adoption of livestock insurance.

The present study reveals different constraints experienced by farmers and their risk taking behaviour with respect to adoption of livestock insurance. Lack of awareness about the livestock insurance scheme, less coverage against risk provided by financial institution and unsatisfactory past experience of farmer regarding claim were the top ranked constraints faced by dairy farmers while insuring their animals against risk. Hence, there is a need to extend farmers knowledge about insurance and risk management through training and education with co-ordination and corporation between implementing agencies of livestock insurance, farmers and State Department of Animal Husbandry.

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