

## Factors Affecting Adoption and Level of Satisfaction Among Dairy Owners Towards Livestock Insurance

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### Abstract

Risk is inherent in livestock farming. Farmers face a variety of situations in this enterprise due to climate extremities and disease epidemics leading to reduced livestock productivity and, in severe cases, lead to widespread livestock losses that make their incomes unstable and unpredictable from year to year. Insurance is thus a risk-sharing arrangement. This study, therefore, addresses factors affecting adoption and level of satisfaction among dairy farmers about Livestock Insurance. The data was collected from Mathura district of Uttar Pradesh in India with a sample survey of 100 cattle and buffalo farmers. It is observed that from the results that respondents were having very low information i.e. 51.0 %, 94.0 % and 85.0 % percent in all three categories. This is because the farmers are still practicing the traditional dairy farming. The adoption of livestock insurance is mainly influenced by individual motivation performed by friends and community members followed by high probability of diseases occurrence in particular area, effective risk assessment and the economic security by provided insurance. It was revealed that the satisfaction level of the respondent depends on attitude of insurance specialists and quickness and manner of payment after claim of insured animal. Apart from these, provision of sustainable livestock insurance is very low due to the list of risks covered by insurance policy is perceived as limited especially in the case of diseases and the costs of veterinary services and lack of awareness about livestock insurance but it is mitigated by extension activities like awareness campaign about loans, insurance of animals.

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### 1. Introduction

Livestock are a natural capital, which can be easily reproduced to act as a living bank with offspring as interest, and an insurance against income shocks of crop failure and natural calamities. Farmers rear dairy animals as a part of a mixed farming system which comprises of crop and livestock production. The distribution of livestock primarily dairy animals as a liquid asset to poor families is more egalitarian as compared to land (Taneja, 2012) and mostly own one or two dairy animals. The regular livestock income generated through the sale of milk is used to supplement seasonal farming income. With small farmers generating nearly half of their income from livestock (Sharma, 2010) and the value of cattle representing a substantial percentage of the farmer's

wealth, the death of cattle poses a considerable risk and affects the farmer's net worth and income. The studies had shown that approximately 100 million people rely on livestock as their primary or secondary source of income, But the performance of livestock insurance sector is however not encouraging, since the scheme had covered only 0.9 million dairy cattle (BIRTHAL and TANEJA, 2012). In fact, livestock rearing is riskier than agriculture because the death of cattle due to any disease, accident, or theft leads to a substantial loss to the household. The risk is greater when the livestock is purchased with a loan because the household has the additional responsibility of repaying a loan without access to the asset that was meant to generate the income for the repayments. Apart from this, huge production risks associated with dairying activities

render animal husbandry business a risky proposition leads to permanent asset erosion and can have longer-term consequences than the seasonal loss of income resulting from a failed crop for the low-income households (Ruchismita and Churchill, 2012). Therefore, Government of India initiated a subsidized livestock insurance scheme in 2006, which is now operational in 300 districts. This study is an attempt to examine Information seeking behaviour and satisfaction in adoption of livestock insurance of dairy farmers.

## 2. Materials and Methods

The ex-post-facto research design was adopted for the study since the phenomenon had already occurred. The study was purposively conducted in Mathura district of Uttar Pradesh. Multistage random sampling procedure was adopted for the present study. Five randomly selected blocks were taken for the study and from each block two villages were selected randomly, thus comprising a total of 10 villages. Information was collected from 100 farmers, 10 from each selected village, which had must possess a milch animal as well as at-least five year of experience in rearing dairy animal in addition to their basic agriculture occupation. Information seeking behaviour is a ways by which individuals articulate their information needs, seek, evaluate, select and use information related to livestock insurance. It may be through either published/unpublished documents or communicating with colleagues. The respondents were categorized into low, medium and high category based on mean  $\pm$  standard deviation (SD) respectively.

Adoption is a decision to make full use of an innovation as the best course of action available. The adoption behaviour among livestock owner in respect to livestock insurance were studied on three point continuum, viz., S.A. (Strongly agree), A. (Agree), D.A. (Disagree) with the score of 2, 1 and 0 respectively and reverse for the negative statements.

$$\text{Weighted Mean Score} = \frac{\text{Actual scores obtained for the statement}}{\text{Maxi possible scores obtainable for the statement}}$$

Satisfaction is defined as the personal beliefs and values about service as well as expectation about service. Satisfaction or dissatisfaction is the respondent judgment on quality of service in all its aspect. It was also studied on three point continuum, viz., S.A. (Strongly agree), A. (Agree), D.A. (Disagree) with the score of 2, 1 and 0 respectively and reverse for the negative statements. After duly recording their judgments, the statements were considered for the analysis. The weighted means score of the statement

was calculated and the statements were ranked accordingly.

## 3. Results and Discussion

### 3.1 Information Seeking Behaviour

The distribution of dairy farmers based on the information seeking behaviour was presented in Table 1. The various sources of information from where respondents collect information as viz, personal localities source, personal cosmopolite source and impersonal cosmopolite source. It is observed that from the results that respondents were having very low information i.e. 51.0 %, 94.0 % and 85.0 % percent in all three categories.

This is because the farmers are still practicing the traditional dairy farming and may considered the personal localities sources as major source of information. This could be reason for low adoption of the livestock insurance. It was observed that only 23.0 %, 06.0 % and 15.0 % of farmers were found in high category on information respectively.

### 3.2 Factors Affecting the Adoption of Livestock Insurance

The results presented in Table 2 reveal the factors affecting the adoption behaviour of livestock insurance among dairy owners. The result indicate that adoption of livestock insurance is mainly influence by individual motivation performed by friends and community members followed by high probability of diseases occurrence in particular area, Effective risk assessment and Livestock insurance provides protection to dairy farming were ranked first, second and third respectively. The other personal deciding factors that are influencing the adoption of livestock insurance includes high purchase cost of milch animal, act as a measure of saving by the owners and it make dairy farming easy. Amini *et al.* (2002) and others in a research about factors influencing on adoption of insurance to control risk among livestock owners reported that 78.0 % of risks caused by diseases. Sharma (2014) also stated that the personal challenges faced by insurers in the sense that the burden of all risks are passed on to the insurer as ex-ante risk mitigation strategies in the form of vaccination, deworming, etc are not well in place. It was further revealed that the past experiences of dairy owners about livestock insurance and unsatisfactory response from the insurance companies are still hindering its adoption among the owners. Therefore measure should be introduced to counter these issues so that more can more dairy owners can be added towards the livestock insurance. These finding were also in accordance with -

Table 1: Information seeking behaviour of dairy farmers

Sl. No.	Variables	Category	Frequency	Percentage
<b>Information source of the farmers</b>				
A	Personal localities sources	Low	51	51.00
		Medium	26	26.00
		High	23	23.00
B	Personal cosmopolite source	Low	94	94.00
		Medium	00	00.00
		High	06	06.00
C	Impersonal cosmopolite sources	Low	85	85.00
		Medium	00	00.00
		High	15	15.00

Table 2: Factors affecting the Adoption of livestock insurance

Sl. No.	Item	S.A.	A.	D.A.	Weighted mean	Rank
1.	Motivation by friends and community.	97	02	01	98.00	I
2.	The last experience of dairy farming helps in adoption.	85	13	02	08.50	X
3.	High cost involved in the treatment of animal will improve the adoption.	75	17	08	83.50	IX
4.	High purchase cost of milch animal will improve.	88	10	02	93.00	IV
5.	Livestock insurance act as a personal saving.	87	10	03	92.00	V
6.	Effective risk assessment helps in improving adoption.	88	12	00	94.00	III
7.	Livestock insurance provides protection to dairy farming.	90	08	02	94.00	III
8.	High probability of diseases occurrence.	95	05	00	97.50	II
9.	Livestock insurance helps to reduce the personal financial stress.	78	20	02	88.00	VIII
10.	Regular price fluctuation of milk and milk products improve adoption of livestock insurance.	85	10	05	90.00	VII
11.	Livestock insurance make dairy farming more easy.	87	09	04	91.50	VI
12.	No satisfactory response from insurance company for queries under its adoption.	94	06	00	03.00	XI

SA = Strongly agree, A = Agree, DA = Disagree

Table 3: Level of satisfaction among dairy farmers about livestock insurance

Sl. No.	Item	H.S.	S.	N.S.	Weighted mean score	Rank
		F	F	F		
1.	Attitude of insurance specialists	1	5	1	50.00	I
2.	Indemnity period of livestock insurance for the dairy animals	0	2	5	28.57	IV
3.	On time visit made by insurance specialists at accident scene	0	2	5	14.29	V
4.	Guidance, availability and helpfulness of insurance specialists	0	1	6	7.14	VI
5.	Livestock insurance premium rate for dairy animal	0	2	5	14.29	V
6.	Terms, conditions, rules and regulations of insurance policy	0	2	5	14.29	V
7.	Quality of loss estimation after death of insured animal	0	2	5	14.29	V
8.	Insurance flexibility regarding production of interest	0	5	2	35.71	III
9.	Coverage of risks of livestock insurance policies	0	5	2	35.71	III
10.	Quickness and manner of payment after claim of insured animal	1	5	1	50.00	II

HS-Highly Satisfy, S- Satisfy, N.S - Not Satisfy

results observed by Sendilkumar and Mishra (2013), Amini *et al.* (2002) and Narayanan and Saravanan (2011). Teweldemedhin and Kafidii (2009) also stated that to increase the farmers' participation in insurance, policy makers and insurers should design a program to educate them about different sources of risk and risk management tools.

### 3.3 Level of Satisfaction Among Dairy Farmers About Livestock Insurance

Insured farmers were asked about their satisfaction level on various aspects on livestock insurance. It was revealed from the Table 3 that attitude of insurance specialists and quickness and manner of payment after claim of insured animal which obtained score of 50.00 and were ranked first and second respectively as by weighted mean score. Along with flexibility provided by the insurance and its coverage of risks were ranked third and fourth with score of 35.71 respectively. Insurance is thus a risk-sharing arrangement (Leppert *et al.*, 2012). Chaudhury (2014) stated that farmers are dissatisfied with their experience with veterinary healthcare in the past as well as with the insurance companies in the past during claim settlement.

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### 4. Conclusion

The poor particularly those in developing countries, are ordinarily vulnerable to emergencies and disasters. Cushioning individuals, families and communities against the financial burden of catastrophes and periods of incapacity and old age, is what insurance schemes seek to do. Realising the importance of livestock insurance as a tool for managing risk and uncertainties, the present paper has examined the farmers' adoption and satisfaction about livestock insurance and evident from the findings that most important factors affecting farmer level of adoption and satisfaction regarding livestock insurance such as individual motivation performed by friends and community members followed by high probability of diseases occurrence in particular area, effective risk assessment and livestock insurance provides protection to dairy farming. Such schemes, though have laudable objectives, are not implemented effectively mainly due to lack of awareness among the beneficiaries. It is important that the farmers are made aware of the benefits of such schemes so that the owners will be inclined to pay the required premium to insure them.