

# Awareness Level and Effectiveness of Livestock Insurance among Livestock Farmers in Barnala District of Punjab

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### Abstract

As insurance is a financial mechanism to minimize the risk, similarly Livestock insurance reduces the dynamism in the case of livestock due to various factors. The aim behind this study, conducted in April, 2019, was to examine the awareness level of farmers of Barnala District regarding livestock insurance and effectiveness of this insurance among them. The research was based on primary data which is collected through direct personal interview. For the study, randomly 50 livestock farmers were selected and a pre-structured questionnaire was interviewed. After the collection of data, from the questionnaire, statistical cum mathematical tool i.e. percentage share was applied on that. Firstly, the awareness level of the livestock farmers regarding the term insurance, livestock insurance & its adoption rate is examined. Secondly, on the basis of three selected parameters i.e. Service quality, Claim service and Service cost, the effectiveness of this insurance was checked. These parameters also implied the insurance companies' state in providing livestock insurance. Shocking results regarding the adoption of livestock insurance in Barnala requires that the perception of livestock farmers should be changed by using various ways as combined efforts by stakeholders, by providing education regarding this term, by making insurance products more friendly etc.

**Keywords:** Insurance, Livestock, Effectiveness Parameters.

### Introduction

India lives in villages. More than 70% of the people of the country belong to rural areas. Thus the role of rural people can't be ignored in the economy. They mostly depend on agriculture and allied activities. Agriculture and Livestock both have their own place in the economy of India as they are primary sources of earning for Indian population. Agriculture is the practice of crop production, soil cultivation, livestock raising and dispersion of resulting output. As per the data given by Central Statistical Organization, GOI, agriculture and allied activities sums up around 18.5% to total Gross Value Added (GVA) at current prices and the percentage share of Livestock to total GVA was 4% in 2011-12. This share of Livestock has increased to 4.6% in 2016-17. It provides employment to approximate 8.8% of the Indian population. As per 19th Livestock census, India is first in the population of buffaloes, second in the case of cattle and goats, third in the sheep and tenth in the camel population. About 512.05 million make India world's highest livestock owner. Livestock serves the farmers in different ways as an income source, employment opportunities, food and social security providers, weed controllers etc. But natural disasters like floods, bushfires, human made disasters like theft etc., and disease outbreak have a major impact on the welfare of livestock. In order to cope up or avoid these risks, it is significant to enhance the awareness of farmers regarding Insurance. Insurance is a contract between insurer and insured whereby the insurer assure the insured to indemnify the risks for some consideration. Livestock insurance covers under the rural insurance, which take the responsibility of insuring the rural masses. Before the nationalization of general insurance in India, there was not any worthwhile progress in livestock insurance till 1972. Recently some progress has been made but still people are not aware regarding the Livestock Insurance. To make farmers enable to realize the need of insurance of livestock, it is necessary to start campaigns regarding this. As India is a federal country with Punjab as one among its states. As per Census 2011, out of 277.43 lakh total population of Punjab, 173.44 lakh are rural ones.

As per Animal Census 2012, total livestock in Punjab was 8117000. This data clears our view regarding importance of livestock in Punjab. Barnala district came into existence in 2006 as 20th district of Punjab state. As per Census 2011, it was the least populous district of Punjab with population of 595527. Out of this a lot of people depend either on farming or on livestock for their livelihood. In Barnala district, a lot of people have livestock but the adoption of livestock insurance is still poor due to a lot of reasons like lack of awareness and access, service cost and quality etc. In this context, this study aims on knowing the awareness level of livestock insurance among farmers in Barnala district and the effectiveness of insurance as per farmers' point of view. As livestock is the backbone of our economy it is important to conduct the surveys at ground level to make farmers aware regarding the insurance of livestock. To make people aware regarding this, our aim is to find the factors that influence their behaviour regarding this insurance and to improve the know how of farmers. By doing this survey we will become able to understand the ground reality behind this and also can encourage them to mitigate the risks of livestock by taking insurance.

#### **Objectives**

The basic aim behind the research is to study the actual flaw of livestock insurance in the Barnala district of Punjab state. However, some specific objectives to undertake this study are as follows:

1. To examine the pattern of livestock farming among the people of Barnala district.
2. To study the awareness level of farmers for livestock insurance in Barnala district.
3. To analyze the effectiveness of livestock insurance provided by different insurance companies by using three Parameters:-
  - a. Service
  - b. Service cost i.e. Premium
  - c. Claim Compensation

#### **Research Methodology**

Two sources of data i.e. primary and secondary were used for conducting this study in various villages and towns of Barnala district of Punjab. Under primary sources of data, field visits and direct contact with the concerned ones were included. Firstly, the search was conducted where generally people dealt in the livestock and the list was prepared for the respective livestock farmers so as to carry out the interview. At that time, 100 livestock farmers were selected; those were living in Barnala district. But due to non cooperation from the respondents, list of 100 was reduced to 50 livestock farmers and a pre structured questionnaire was interviewed to collect the secondary information, various published sources such as books, reports, journals, papers etc. were used. In addition to this, various websites of government institutions and others were used to review during the study. After collection of data from various sources, it was presented in tables, pie-charts and graphs etc. Percentage share method is used to depict the data in quantitative form. It is used to measure a portion out of whole which is usually depicted in how many of something in relation to 100.

#### **Review of Literature**

Edwin W. Kopp (1925) studied the origin, development and practices of livestock insurance. The main objective behind this study was to briefly depict the birth of livestock insurance and various practices regarding the insurance. It also showed the development of insurance by giving record of livestock insurance company in the US from 1828 to 1925.

Jarvie EM and Nieuwoudt WL (1988) studied the insurance as a protection against the economic losses through collection of premium payments by a large number of individuals, caused by natural factors like floods, fire etc. Two factors should be considered when decision regarding buying insurance had to be taken i.e. without insurance, how much loss could be withstood by the farmers and trade off between cost and loss regarding insurance. As per their research, systematic risk and asymmetric information were the basic issues by which insurer and insured affected. Generally the farmers who didn't want to take risk, adopted insurance. Government of some countries provided subsidized premium so as to make people adopt insurance.

Jigna C. Trivedi (2014) had done study on Cattle insurance in villages of Gandhinagar district. The study gave the views that usually the rural India depends on crops and for supplementary income, they did dairy farming. Scope for cattle insurance could be increased by mediclaim plans so as to protect the farmers against risk in cattle rearing.

Lopamudra Mohapatra, et.al. (2014) had done research on the performance of agriculture insurance in Punjab state of India. The paper showed that the correlation established between the level of productivity and weather variations so as to make weather insurance attractive as agriculture is a risky activity due to its dependence on the weather conditions. So, mainly two schemes were studied i.e. weather insurance and weather index based crop insurance scheme. Weather variables like temperature, humidity etc. were complex and affect the correlation. Secondly, the index insurance required the positive correlation between farm yield losses and weather index.

Subash Chand, et.al. (2016) had done research on the determinants of livestock insurance in India by taking micro evidences from Haryana and Rajasthan. The paper studied the various factors that motivate the adoption of livestock insurance. The coverage as well as renewal costs were low. Farmers friendly livestock insurance products should be made to increase the extent of coverage.

Soumyakant Dash (2017) studied the contribution of livestock sector to Indian economy. The paper was based on the various pros of the livestock as it provides various food and non food items and also helpful to the farmers. Population of livestock and its share in the Indian GDP was also studied.

Ashok Gulati, et.al. (2018) studied the key issues in crop insurance in India and the ways forward. Natural phenomenon increase the agricultural risks thus affect the farmers in India and to mitigate this risk, insurance system should be there.

The study revealed that the Pradhan Mantri Fasal Bima Yojana (PMFBY) was beneficial as compared to previous schemes but it was also gone through some challenges. The working paper recommended using high technology and linking the data of land of the farmers with their Aadhaar numbers and Bank accounts so that handy information can be obtained and faster settlement can be done.

Kinfe G Bishu, et.al. (2018) studied the factors that motivate the farmers' cattle insurance decisions by taking the proofs from smallholders in Northern Ethiopia. Education regarding Livestock insurance could stimulate and remove barriers in this insurance for the smallholders.

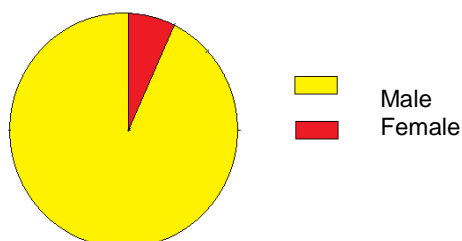
Raj K Adhikari; and Sagar Bidari (2018) gave the study on the effectiveness of livestock insurance program in Dhading district of Nepal. The research was carried out to check the effectiveness of livestock insurance provided by various insurance companies in Dhading district. The study found that majority of livestock farmers were aware but still adoption rate is low. On the other hand, the one who took the insurance were satisfied with the insurance programs.

Utoni Nahas, et.al. (2018) studied the factors that influence livestock insurance adoption by livestock farmers in Namibia. The objective behind their research was to examine the insurance appropriateness for the farmers in communal and commercial areas as a tool for risk management. Perception of farmers regarding the risk and management of risk were checked through a structured questionnaire. As the Namibia depends majorly upon livestock activities so it was important to improve the know-how of farmers that influence adoption of livestock insurance by farmers in Omaheke and Otjozondjupa regions of Namibia. The study gave results which were very surprising as no one among the livestock farmers adopted livestock insurance.

**Results and Discussions**

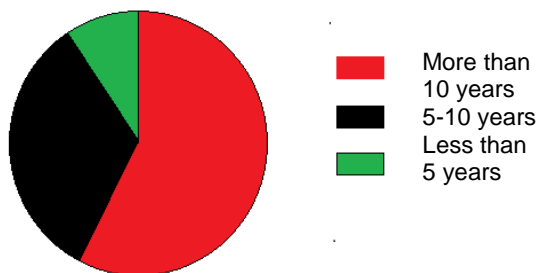
As for **first objective**, we examined the pattern of farming among the people of Barnala district, the study revealed out of total sample size of 50, 47 farmers were male and rest were females. Figure no. 1 depicted that most of male farmers were engaged in occupation of livestock farming. The study also depicted that only a few females were engaged in this farming. Due to direct face to face interview, we came to know the surprising truth that the females were generally more active but due to limited access to the information their names were not recognized. Therefore usually the livestock and the insurance policies were registered under the names of male members.

**Figure No. 1**



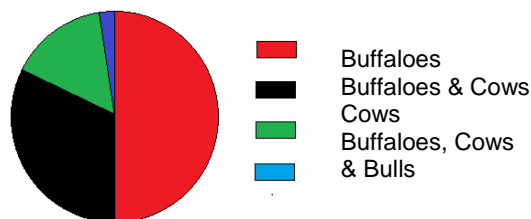
The figure no. 2 showed that 66% farmers were engaged in livestock since more than 10 years. This reveals that not just agriculture but livestock also have its great place in the life of farmers of Barnala district. 26% livestock farmers had dealt with livestock since more than 5 years but less than 10 years and very less people about 8% engaged since less than 5 years.

**Figure No. 2**



Thirdly, the classification of livestock was analyzed which showed that out of the whole sample size of 50, 50% farmers had buffaloes, 14% had cows, 34% had buffaloes & cows and 2% had buffaloes, cows and bulls. The figure no. 3 implied that the livestock farmers of Barnala district generally had buffaloes. It depicted that most of farmers showed their faith on traditional livestock farming that is mainly related to buffaloes and cows rather than on modern farming i.e. pig farming, camel farming etc.

**Figure No. 3**



As for **second objective**, it was surprising to see the results regarding awareness of livestock insurance in Barnala district of Punjab that even in the modern world, most of the farmers of Barnala district are not known about the term insurance. Table no. 1 showed just 58% livestock farmers were aware regarding insurance and this share was further reduced when we saw the awareness level of farmers regarding term livestock insurance as just 36% had knowledge regarding this. As we go further, the study revealed that just 4% had adopted livestock insurance. This implied that even if the livestock farmers knew about term and its importance, they didn't adopt the livestock insurance. There is a need to increase the awareness among them by combined efforts of stakeholders, by campaigns etc.

**Size of Sample 50  
Table No.1  
Awareness Level**

Variables	Number of People				Total
	Yes	%	No	%	
Insurance	29	58	21	42	50
Livestock Insurance	18	36	32	64	50
Adoption	02	04	48	96	50

As for **third objective**, we have to study the effectiveness of livestock insurance provided by different insurance companies by using three parameters that is Service, service cost and claim compensation. Whether the livestock farmers adopted the livestock insurance or not, we gave them discretion to give their views regarding our 3 selected parameters to check the effectiveness of livestock

insurance provided by the insurance companies. The table no. 2 depicted that out of our sample size of 50 regarding Service quality, 64% gave their views, 50% in case of Claim service and similarly in case of Service cost, 78% gave their views. It implied the reasons behind less adoption rate of livestock insurance by the farmers in Barnala district.

**Size of Sample 50  
Table No.2  
Effectiveness Parameters**

Variables	Yes	%	No	%
Service Quality	32	64	18	36
Claim Service	25	50	25	50
Service Cost	39	78	11	22

After that, who gave their views regarding the effectiveness parameters, further classified into three Satisfaction levels i.e. Fair, Good and Excellent as shown in Table no. 3. In case of Service Quality, out of 32 who gave their views, 81.25% were in favour of fair attribute and 18.75% in good attribute. Regarding the Claim service, out of 25, 76% gave

their views in favour of fair service and 24% in good service. Similarly, in case of Service cost, just 10.26% called it average and 89.74% in favour of calling high cost, out of 39. It revealed that the main reason behind not to adopt the livestock insurance is the service cost that is the premium amount charged by the insurance companies.

**Size of Sample 50  
Table no. 3**

Effectiveness Parameters	Fair	%	Average	%	Excellent	%
Service quality	26	81.25	6	18.75	--	--
Claim Service	19	76	6	24	--	--

Effectiveness Parameters	Low	%	Average	%	High	%
Service Cost	--	--	4	10.26	35	89.74

**Conclusion**

In the modern world, it was surprising to see the results regarding the awareness level of livestock insurance and especially its adoption rate among the livestock farmers of Barnala district. Most of the people are not aware; even if they are aware they didn't prefer to adopt it. Examining effectiveness parameters implied the perception of livestock farmers about the cost of taking insurance i.e. the premium is more but they are ignoring the fact that it can be beneficial in case of emergencies. Farmers generally prefer to mitigate the risk through diversification not through purchasing insurance products. Lower amount of valuation of livestock can be disastrous in the case of death of livestock and its replacement due to wide scope of price escalation, they are ignoring this fact. Insurers should have to make friendly demand driven insurance products to the livestock farmers. Better education can also make this insurance attractive among the livestock farmers. Stakeholders i.e. governments, private companies, society etc. have to put combined efforts for designing a program that can educate farmers and can increase their participation. Advertisement and campaigns by the insurance companies can also make the

insurance attractive among the farmers. At our level, during filling of questionnaire we try to aware maximum farmers regarding livestock insurance and its advantages for them and working on this till now. Even though the study is restricted to some areas, considerable scope is still remaining in this topic for the deepening of research.

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