



## Effectiveness of Livestock Insurance Program in Dhading District of Nepal

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### Abstract

This study was conducted in 2017 to assess the effectiveness of livestock insurance program among farmers of Dhading district of Nepal. Primary information was collected through face to face interview of 100 households randomly selected from different villages of the district. Pre-tested questionnaire was used to collect the primary information where as FGD and KII were conducted to collect qualitative information and triangulate the information collected from household interview. Out of total respondents, 65 were male and 35 were female. Majority of them were uneducated (54%). Agriculture was the major family source of income for 87% of the respondents. Out of total respondents, 38% had received information on livestock insurance from their cooperative followed by livestock service center (24%), neighbor and relatives (22%), radio and television (10%) and insurance company (6%). Out of the losses claim files, 33% were reimbursed within a month and 58% reimbursed within three months. It was found that 90% of the farmers perceive the insurance process as easy and 98% of the farmers were satisfied with the insurance program and services. This study concluded the livestock insurance program in Dhading district of Nepal was effective.

**Keywords:** Livestock; Risk; Insurance; Premium; Effectiveness

### Introduction

The agriculture sector accounts for 30% share in GDP where Livestock sector alone contributes about 25.68% share in AGDP [1]. Agriculture and livestock are the major component of the household income in majority of the household in Nepal which provides employment opportunity for about 60% of the population. With wide climatic variation and agricultural management practices, there is always high risk of natural disaster, disease outbreak and physical and physiological disorder that dramatically reduce the production productivity and value of produce. Due to limited access to livestock health, advisory and veterinary services – there is high chance of failure of livestock business [2]. Therefore, farmers hesitate to increase their scale of operation or introduce high yielding costly breeds and species. In order to cope with the risks, different risk management options have been designed which can be classified into risk reducing and risk coping strategies. Agricultural insurance is considered as one of the effective risk-coping strategy which offers important benefits to the farmers and the investors [2].

Globally, governments in development countries have been increasingly involved in the support of commercial agriculture insurance in recent year [3]. Government of Nepal has introduced Crops and livestock Insurance Directives, 2013 by the Insurance Board with the focus on crops, livestock and poultry, making it mandatory for all the 17 non-life insurance companies to come up with insurance policies are obliged to provide livestock insurance at least in specified districts. Before this directive, there are other cooperative, and community based insurance schemes were in operation in different project areas [4]. In order to increase the adoption of insurance facilities, Government of Nepal has been providing 75% subsidy to farmers on insurance premium, but its adoption is still poor due to lack of awareness and access among the farmers and level of commercialization. On the other hand, the very small average herd size poses a major challenge for the design and implementation of livestock insurance in Nepal because of the potentially very high administration costs [5] of the insurance companies against the volume of premium generated from the livestock insurance business. Time and again, both positive and negative aspects

of the effectiveness of the livestock insurance program were reported in news however very rarely in research based literature. A study by [6] found the effectiveness of community based insurance program found increased the confidence of farmers to scale up and achieve higher income. Therefore, this study was carried out to assess the effectiveness of the livestock insurance being provided by different insurance companies in Dhading district of Nepal.

Dhading district has divided into three eco-zones: high Himalaya, high mountains and the mid-mountains [7]. This variation has offered both opportunity on livestock farming as well as risk associated with different disease and natural calamities. In FY 2015/16, the population of cattle and buffalo in Dhading is reported to be 363,473 including 60,537 milking animals. Similarly, there are 181,620 goats producing 314 mt of meat [8]. Dhading district is one of the severely affected districts from the mega-earthquake in April 2015 where almost 90% household rear livestock. From the earthquake, 15.3% have lost their livestock [9]. According to the national sample census of agriculture, the population of the Dhading district is 320,391 out of which 74.48% are farming population [10].

## Methodology

The study was conducted in 11 villages (Samutar, Koirala Gaun, Nilkantha, Pandit Pauwa, Bansbotay, Tallo Besi, Kataray, Paire, Chiuripati, Sasaha, and Chakamakay) of Dhading district of Nepal. Two sources of data were used, primary and secondary information. Primary source of data includes field visit and direct contact with the concerned people. Initially the list of the insurer was collected from the insurance companies and according to the list the respective farmer's interview was carried out. The Secondary source of data collection includes various published and unpublished sources such as related journals, books, reports, unpublished reports were reviewed for the secondary information. In addition, information was collected and validated from National Insurance Board (Rastriya Beema Samiti) and Insurance companies. Available reports published from Nepal Agricultural Research Council (NARC), District Agriculture Development Office (DADO), Central Bureau of Statistics (CBS), Agriculture Information and Communication Center (AICC), Agro-Enterprise Center (AEC) were also reviewed during the study.

From the list of farmers insuring their animals in selected villages, 100 farmers were randomly selected and interviewed by using pre-tested semi-structured survey questionnaire. The information collected from the household interview were coded first and then entered into the computer software 'MS Excel 2013'. Descriptive statistics like mean, percent and frequency were used to describe economic status and farm characteristics. Analyzed data was then presented in tables, graphs and pie-chart.

## Results and Discussion

### Socio-economic description of the respondents

Out of the total respondents, 65% were male and only 35% were female. Earlier studies revealed the dominance of female in terms of farming population [10] and in-charge of livestock related activities [9] in Dhading but their name and fame are not well acknowledged due to their limited access to information, resources and opportunity. Therefore, majority of insurance policy files were registered on male members of the household.

In spite of the adjacent district of the capital city, the education level of the farmers of the study area was found very poor. Among the 100 insurers, 54% were found illiterate followed by 31% only literate, 11% had college degree and only 4% had passed the high school. During the study – it was observed that the farmers living along the road corridor were educated and those from rural and hilly areas were deprived from education.

Majority of the farmers living here are involved in agriculture sector including crop and livestock farming. For 87% of the household, agriculture was found to be the major occupation and source of income followed by business (5%), service (7%) and remittance (1%). In spite of agriculture being major occupation for majority, still 46.6% households are food insufficient [10].

Occupation	Household (%)
Agriculture	87
Business	5
Service	7
Remittance	1
Total	100

**Table 1:** Occupation of the respondents.

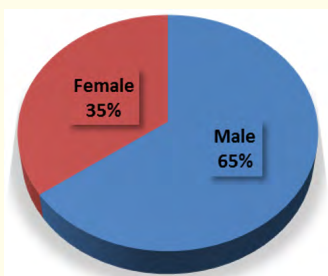


Figure 1: Gender of the respondents.

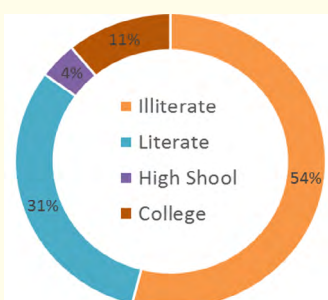


Figure 2: Educational status of the respondents.

The respondents were varied with different age categories ranging from 25 to 75 years. The average age of the respondent was found to be 40.22 years with standard deviation of 26.59. Out of the total respondents, maximum (37%) were found from 35 to 45 years age category followed by 45 to 55 years age category (27%). The detail of the age-wise distribution is presented in table below. This distribution indicates attraction of youths towards the insurance program and signifies new policy and programs on livestock sector development should target the youths.

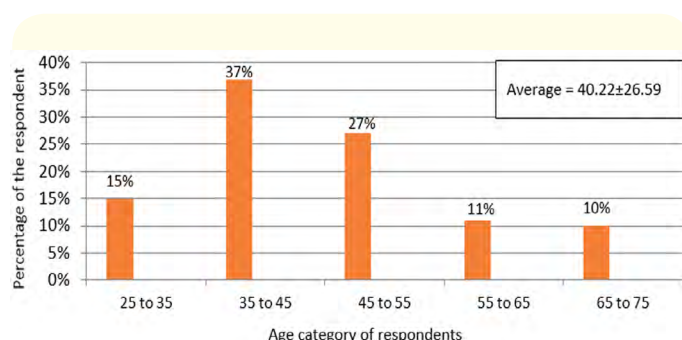


Figure 3: Age of the respondent insurer.

### Source of information

Out of the different sources of information, majority (38%) of the farmers learned about the insurance program through their cooperative followed by government service center (24%), neighbor and relatives (22%), radio and television (10%) and insurance company (6%). This indicate the scope of mobilizing the farmer’s cooperative to aware their members on importance of insurance program and participate them in effective way. However, there is still high scope of using radio and television programs to disseminate the information to a wider population at a time. Livestock in the study district is still subsistence and few are in semi-commercial scale, so there might be less effort made from insurance companies to inform the farmers about the services. On the other hand, insurance companies have assigned staff or service center and cooperative as agent of the company and incentivized them – more farmers are receiving information form these sources.

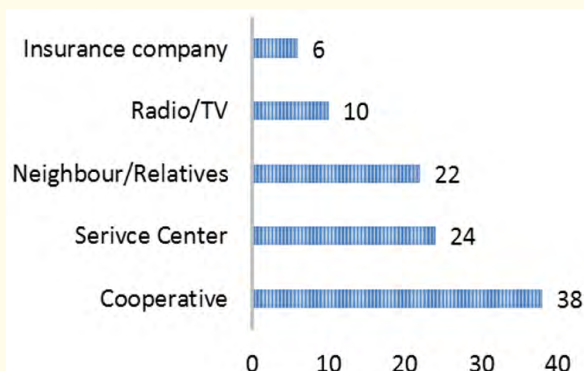


Figure 4: Source of information on livestock insurance.

### Major insurance companies in Dhading

There are 17 non-life insurance companies active in Nepal and Government of Nepal has mandated them to provide insurance services in different districts. Shikhar insurance company is mandated to provide insurance service in Dhading and other adjacent districts. In addition, NLG insurance, Sagarmatha insurance companies were also found active in the district. Out of the survey households, 77% of the farmers have insured their animals in Shikhar insurance companies followed by NLG Insurance Company (25%) and Sagarmatha insurance company (2%).

### Mortality rate and insurance claim

As the study area is gradually going into commercial pocket area, all the farm animals are not insured yet. The study recorded

S.N.	Name of Company	% of farmers
1	Shikhar Insurance Company	77
3	NLG Insurance Company	21
4	Sagarmatha Insurance Company	2
	Total	

**Table 2:** Number of respondents with different insurance companies.

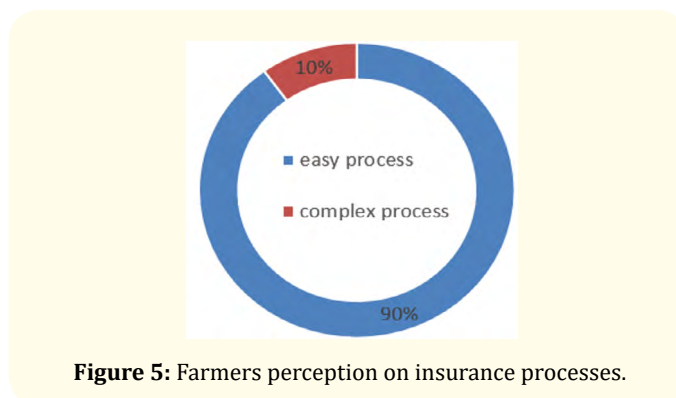
total of 583 adult animals (Cow, Buffalo and Goat) out of them only 265 (45.5%) were insured in last fiscal year. Out of the total 265 insured animals, only 15 died due to different identified and un-identified causes. The highest mortality rate was found in cow followed by buffalo and least in goat. Those 15 animals were from the 12 responding households and had registered their claim file to the insurance companies. Out of them, 4 respondents received the claimed compensation within one months, 7 household received within 3 months and one household didn't receive yet due to insufficient documents.

S.N.	Animal	Insured	Death	Mortality (%)
1	Cow	88	8	9.1
2	Buffalo	69	4	5.8
3	Goat	108	3	2.7
4	Total	265	15	5.7

**Table 3:** Mortality of insured animals

**Perception on complexity of insurance procedure**

During the study, 90% of the respondents stated that the process of insuring their animals and claim for compensation is easy. It was due to the availability of local technicians and agents helping them to fill-up the forms and formats as well as carrying them to the company office. Farmers were not required to visit the insurance company, rather the agent or representative visit the farm gate for the insurance process. On the other hand, 10% of the respondent state the process as difficult because of their limited access to the representative and long distance to the company office. The complexity is associated with the many paper works, difficult forms and formats to be filled up, delay in renewal of policy. In some cases, there was not common understanding between insurance company and the farmer on the valuation of animal of improved breed which cost much higher than the existing common breed animals.



**Figure 5:** Farmers perception on insurance processes.

**Level of satisfaction**

During the survey, respondent farmers were asked to rate their level of satisfaction towards the livestock insurance services in totality including the types of services available, service delivery mechanism, responsiveness, trust, cost and benefits, and the customer behavior. It was found that 68% of the responding farmers were highly satisfied with the services followed where as 28% were satisfied and only 4% were poorly satisfied.

S.N.	Satisfaction level	Satisfaction score	Respondents (%)
1	Highly satisfied	9 or above	68
2	Satisfied	5 to 8	28
3	Poorly satisfied	1 to 4	4

**Table 4:** Level of Satisfaction.

**Conclusion**

Dhading is one of the mountainous districts of Nepal experiencing different risk factors in agriculture and livestock production and insurance can minimize the negative impact of such externalities. In spite of government priority and support to make the livestock insurance service available among the farmers, the rate of adoption is still low in the district as well as other districts. There are three insurance companies are actively providing this service in Dhading and this is in increasing trend. The availability of service, their responsiveness to the farmers need and constraints and the overall performance of the insurance companies has satisfied majority of the farmers. Based on this information - we can recommend accelerating the availability of extension service through different means. There is huge scope of mobilizing the farmers' cooperative to spread the message to wider mass and involving more farmers

to insure their animals. The effectiveness of the insurance program still can be increased by simplifying the procedure on issuing the insurance policy and claim reimbursement process.

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