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Research Article

Farmers' Awareness and Perception about Livestock Insurance: A Case from Nawalparasi District of Nepal

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Abstract

Agriculture in Nepal has major contribution to National Gross Domestic Product (GDP). Livestock subsector has alone contribution of 24% to the agricultural GDP. As livestock acts as the source of income for majority of farmers, losses of livestock is associated with problem in livelihood and economy. Study was done to assess the farmers' awareness and perception of livestock insurance in Nawalparasi district of Nepal. Cluster sampling was done to identify sample cluster followed by simple random sampling for selecting individual household. A total of 80 household were taken for the study and data were collected using semi structured interview schedule. Collected data were analyzed with the help of SPSS 16 and results were presented in tables and figures. The survey results shows that majority of the respondents were male and had secondary level education. Agriculture was the primary source of income for majority of farmers. Major risk in livestock were found as disease, parasites, infertility and accident. All insured farmers and 75% non-insured farmers were aware of livestock insurance whereas majority of insured farmers (82.5%) and 32.5% non-insured farmers have knowledge of premium subsidy scheme of government in livestock insurance. Television acts as a major source of awareness for both types of farmers. It was found that majority of farmers were unhappy with claim procedure and requirements and quickness in paying payment.

Keywords: Gross Domestic Product; Livestock Insurance; Perception; Claim Procedure

Introduction

Agriculture in Nepal has Gross Domestic Product (GDP) contribution of 32% and acts as a source of livelihood for more than 60% household. Livestock subsectors alone contributed 24% to the total agricultural GDP [1].

Cattle rising, goat farming and poultry rearing is important for the rural population of Nepal. Loss of livestock is a huge problem for the livelihood and economy of rural Nepal [2]. In Nepal roughly 70 percent of household has practiced of keeping different types of livestock including cows, buffalos, pigs and chickens. Farmers with land holdings of between 0.2 and o.5 ha keep 25% of the total livestock and farmers who don't have any land or own land less than 0.2 ha own about 11 percent of livestock. A proper development in livestock sector could be the appropriate way to reduce poverty for a considerable number of poor and marginalized rural dwellers in Nepal [3]. Farmers involved in agriculture faced different types of risk. Different types of risk in agriculture can be dived as production or yield risk, Price or market risk, institutional risk, human or personal risk and financial risk [4]. The major risks of livestock are disease, parasites, infertility and accident [5].

Different risk management tools and strategies have been practiced in Nepal to help the farmers to cope with the risk associated with agriculture. In 1987 as an initiative in livestock insurance, Nepal Rastra Bank and Deposit Insurance and Credit Guarantee Corporation (DICGC) jointly developed an individual animal all risks mortality livestock insurance scheme, designed to protect the livestock investment loans provided by the public sector banks to small-scale farmers. Then after different schemes were launched to protect the farmers against risk caused by livestock losses. All these insurance programs were linked with the credit purchased for buying livestock insurance [6].

Later on, in 2013, Government of Nepal (through the Insurance Board) introduced crop and livestock insurance directives. The agricultural insurance scheme covers many agricultural commodities such as paddy, vegetables, fruits, potato, livestock and poultry and many risks such as flood, drought, landslide, windstorm, hail, snow, frost), disease, pests, fire, lightning, earthquake, and other emergency accidents that are likely to cause damage on agricultural production [5]. The directive has made it mandatory to non-life insurance companies to offer agricultural insurance. Due to this provision, 17 out of out of 19 non-life insurance companies have offered agricultural insurance services covering all 75 districts of Nepal.

Despite the different benefits and government initiatives and support from the government sectors the adoption of insurance was very low. According to World Bank [6] only 0.1% of national herd are covered under insurance in 2009.The success of insurance not only depend on the government policy and administration but also upon farmers. It is required to assess the farmers' awareness and perception to identify the success of insurance for both researchers and policy makers. Lack of information about insurance subsidy scheme was found as major constraints for insurance adoption [7]. Program linked insurance was also failure to create large scale awareness and adoption in agricultural insurance as farmers only concern about the subsidy or grant received in terms of money [8].

According to Chizari, Yaghoubi, and Lindner [9] major obstacles for proper development of livestock insurance was identified as lack of equipment and facilities for insurance personnel and lack of knowledge by livestock producers about the benefits of livestock insurance. Goudappa., *et al.* [10] studied on farmer's perception and awareness of crop insurance in Karnataka, India. The survey results revealed that majority of respondents (78%) were not aware of crop insurance. More than 75% of insurance beneficiaries mentioned that their major source of motivation was bank compulsion. Quick settlement of claims was identified as a major suggestion for improving existing insurance scheme.

Methodology

A total of 80 household were taken for the study from Nawalparasi district which was selected purposively based on farmers' involvement in livestock farming and livestock insurance. Cluster sampling was done to identify the sample cluster and simple random sampling was done to reach individual household. A semi structured questionnaire was introduced for 40 insured farmers and 40 noninsured farmers for the purpose of primary data collection. Secondary data were collected from Insurance board, Insurance Company, Nepal Agricultural Research Council (NARC) and Ministry of Agricultural Development (MOAD), Nepal. The information collected from the household survey were analyzed with the use the computer software 'MS Excel 2013' and 'SPSS version 16'. Descriptive statistics like mean, percent and frequency were used to describe socio economic status and farm characteristics. Analyzed data was then presented in tables, graphs and pie-chart.

Results

Socioeconomics description of the respondents

Based on the study different socioeconomic parameter like age, gender, and educational status, family size, access to credit, extension contact and primary source of income for both insured and non-insured farmers were calculated and presented in table 1. The average age of the respondents for insured farmers was about 41 years and for non-insured farmers it was about 44 years. In case of insured farmers 92.5 percent were male and 7.5 percent were female whereas for non-insured 97.5 percent were male and 2.5 percent were female. Regarding education it was found that 65 percent of insured farmer had secondary level education followed by primary level education (22.5) percent. In case of non-insured farmers 45 percent had the secondary level education followed by illiterate 27.5 percent and primary level 22.5 percent. It was found that more number of non-insured farmers were illiterate as compared to insured farmers.

Characteristics	Insured	Non insured
Average age	40.10	43.32
Gender		
Male	37 (92.5)	39 (97.5)
Female	3 (7.5)	1 (2.5)
Education status		
Illiterate	3 (7.5)	11 (27.5)
Primary level	9 (22.5)	9 (22.5)
Secondary level	26 (65)	18 (45)
College/university level	2 (5)	2 (5.0)
Average family size	5.22	5.32
Credit accessibility	23 (57.5)	9 (22.5)
Extension contact	23 (57.5)	5 (12.5)
Major source of income		
Agriculture	30 (75)	31 (77.5)
Wage/Labor	1 (2.5)	0 (0)
Trade/Business	2 (5)	1 (2.5)
Services	3 (7.5)	3 (7.5)
Remittance	4 (10)	5 (12.5)

Table 1: Socioeconomics characteristics of the respondents.

Sources: Field survey, 2016; Notes: Figures in the parentheses indicate percent.

Here more number of insured farmers (58 percent) borrowed loan but in case of non-insured farmers only 23 percent farmers borrow loan to run livestock farming. Extension contact refers to the contact of livestock farmers to the district livestock services office (DLSO) and its service center. The survey results revealed that majority of insured farmers (57.5 percent) have regular contact with the DLSO staffs whereas only 12.5 percent of noninsured farmers have regular contact with DLSO staffs). The survey result revealed that the main sources of income of majority of all the respondents were agriculture. Remittance comes second in terms of primary sources of income in both types of respondents.

Different kind of risk as perceived by livestock farmers

Farmers' perceived risk in livestock sector was assessed and presented in the figure 1. The survey results shows that the disease was the major risk faced by both type of farmers. In case of insured farmer disease was found as the major risk for 97.5% farmers followed by Parasites (92.5%), Infertility (27.5%) and Accident. Disease, parasites and infertility were found as a major risk for non-insured farmers also.

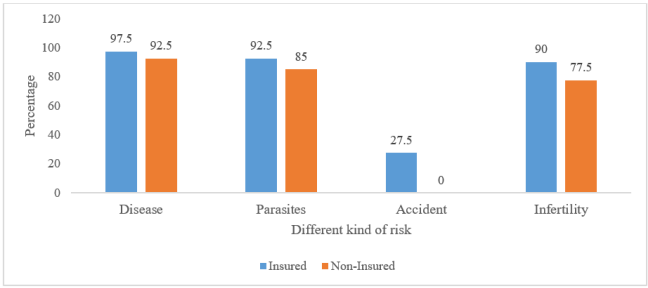

Figure 1: Different kind of risk as perceived by livestock farmers.

Sources: Field survey, 2016; Notes: Figures in the parentheses indicate percent.

Farmers' awareness on livestock insurance and premium subsidy scheme.

Farmers awareness about livestock insurance and insurance premium subsidy scheme of government were assessed and the findings revealed that all insured farmers (100%) and majority of non insured farmers(75%) were aware about livestock insurance. In case of detail insurance procedure and premium subsidy scheme 82.5% of insured and only 32.5% of non insured farmers were aware.

Awareness	Insured	Non insured
Awareness of livestock insurance		
Yes	40(100)	30(75)
No	0	10(25)
Awareness of insurance procedure and premium subsidy schemes		
Yes	33(82.5)	9(32.5)
No	7(17.5)	31(77.5)

Table 2: Farmers awareness on livestock insurance and premium subsidy scheme.

Sources: Field survey, 2016; Notes: Figures in the parentheses indicate percent.

Different source of awareness

Among the different sources of awareness, TV as a sources of awareness for majority of insured farmers (80%) followed by financial institution (50%), Neighbors farmers (47.5%), Radio (42.5%). Where as in case of non insurer farmers Financial institution acts as a sources of awareness for majority of farmers (70%) followed by TV (66.66%), neighbors farmers (56.67%), agro vets (50%) and Radio (46.66%). Only 35% of insurers and 6.67% of non insurers were aware about livestock insurance through DLSO staffs this is because of less contact of farmers with extension workers of DLSO.

Sources of awareness	Insured (N=40)	Non insured (N=30)
Insurance company/Agents	16(40)	6(20)
DLSO staffs	14(35)	2(6.67)
Newspaper	7(17.5)	4(13.33)
Radio	17(42.5)	14(46.66)
TV	32(80)	20(66.66)
Financial institution	20(50)	21(70)
Agro vets	16(40)	15(50)
Neighbors	19(47.5)	17(56.67)

Table 3: Sources of awareness about livestock insurance.

Sources: Field survey, 2016; Notes: Figures in the parentheses indicate percent.

Perception of insured farmers in different aspects of insurance

Farmers who had livestock insurance indicated their level of satisfaction or how good they felt about various aspects of their insurance policy using a 3-point scale. As shown in the table the participants felt that the current coverage of risk under the insurance policy, premium to be paid and insurance procedure and requirements is good. Participants felt that current valuation techniques of animal and the subsidy policy of government are very good. However, they were less satisfied with claim procedure and requirements and the time taken by insurance company for claim settlements.

Perception	Very good	Good	Not good	Total
Risk coverage	13(32.5)	26(65)	1(2.5)	40(100)
Valuation of animals	21(52.5)	13(32.5)	6(15)	40(100)
Premium amounts	15(37.5)	25(62.5)	0(0)	40(100)
Subsidy policy of the governments	29(72.5)	11(27.5)	0(0)	40(100)
Insurance procedure and requirements	13(32.5)	25(62.5)	2(5)	40(100)
Claim procedure and requirements	0(0)	5(12.5)	35(87.5)	40(100)
Quickness in paying payments	1(2.5)	13(32.5)	26(65)	40(100)

Table 4: Perception of insured farmers in different aspects of insurance.

Sources: Field survey, 2016; Notes: Figures in the parentheses indicate percent.

Discussion

This study aim to assess the livestock farmers' knowledge and perception about livestock insurance in Nepal. Most of the respondent were found male and with secondary level education for both category of farmers. The average family size of livestock insured was found to be 5.22 whereas the average family size for non-insured farmer was 5.32 which was found greater as compared to national average (4.88) and district average (5.00) [11]. More number of insured farmers have access to credit than that of non-insured farmers. Fewer number of non-insured farmers have regular extension contact whereas number of farmers with access to extension contact was found more in case of insured farmers. Agriculture was found as primary sources of income for both insured and non-insured farmers. Disease, parasites, infertility and accident were found as major risk in livestock for both insured and non-insured farmers. Disease, parasites and infertility as a major risk to livestock farmers [5]. Chizari., *et al*. [6] also reported the disease as the major causes of livestock damage in Iran.

All insured farmers have general information of livestock insurance but few of them lack the information of premium subsidy scheme given by government in agricultural insurance. In case of non-insured farmers limited number of farmers have knowledge of premium subsidy scheme of agricultural insurance. The findings also correlated with the study of Falola, Ayinde and Agboola [12] where 77.5% of the farmers were aware of agricultural insurance. Low level of awareness among farmers about crop insurance was reported by Uvaneswaran and Mohanpriya [13]. Regarding the source of awareness TV acts as the primary source for both type of farmers. Other source of awareness includes Radio, Financial institution, DLSO etc. Kumar., *et al.* [15] reported that mass media play an effective role in disseminating information about various insurance products. According to the Ghazanfar, Wen, Abdullah and Latif [14] the various sources of awareness for crop insurance perceived by farmers were E-media, print media, friends/ coworkers, financial institutes, insurance agents and extension staff. Bank as the major sources of awareness about insurance was also reported by Sundar and Ramakrishna [16]. Among the different aspect of livestock insurance, farmers perception towards risk coverage, valuation, subsidy scheme and insurance procedure was found good where as they were unhappy with claim settlement procedure and time taken to settle claim. Farmers less satisfaction towards the manner at which claim settlement takes place is also reported by Chizari, Yaghoubi and Lindner [9].

Conclusion

The livestock sectors in Nepal contribute 24% of AGDP and exist all over the country. Livestock sectors are exposed to different types of risk caused by disease, parasites and infertility. Farmers are using different indigenous to cope with risk such as sanitation, vaccination, early treatment of disease etc but failed to handle catastrophic losses. Earlier forms of insurance begin in 1987 characterized by credit linked insurance. From the year 2013, private insurance company started to insurer livestock. Majority of farmers were aware about livestock insurance. TV and financial institution acts as a source of information about insurance for majority of farmers. Farmers perceived that insurance procedure is easier but claim settlement procedure is tedious that it requires recommendation from different agency. Farmers were satisfied with the premium percentages and subsidy given by government. Further research is needed to assess farmers' perception and willingness to join in livestock insurance program.

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