

PIG INSURANCE: AN EXPLORATORY RESEARCH IN MID HILLS AND INNER TERAI OF NEPAL

S. Gairhe¹, N. Upadhyay¹, Y. Acharya¹, M. Kolakshyapati², S. Sapkota¹, K. P. Timsina³ and Y. N. Ghimire³

¹ Nepal Agricultural Research Council, Singhdurbar Plaza

² Animal Nutrition Division, Khumaltar, Lalitpur

³ Socio Economic and Agricultural Research Policy Division, Khumaltar, Lalitpur

E-mail: samaya43@gmail.com

ABSTRACT

This study was carried out in 2016 in Makawanpur and Nawalparasi districts from Inner Terai, and, Kaski and Kathmandu from mid hills to explore the issues of pig insurance in Nepal. From each district, 30 pig farming households were selected using multistage proportionate random sampling techniques irrespective of their size of holdings. The total sample size was thus, 120. Result showed, in an overall, 43 % of the respondents have knowledge about livestock insurance, 30 % of the respondents were aware about pig insurance and only 13 % of the respondent had insured their pig enterprise. Farmers in the study area insured their pigs due to fear of piglet mortality. Farmers perceived that small-scale production, poor knowledge on pig insurance, lengthy and difficult official procedure, lack of agent or insurance company nearby, and difficulty in selling pigs were the major reasons prohibiting pig insurance. With favorable situation and easy procedure, if availed, 86 % of the responded showed willingness to participate in pig insurance program in the future. Therefore, quick settlement of claims, insurance service at doorsteps, raised indemnity percentage and awareness about pig insurance were the major suggestions for improving pig insurance in Nepal.

Key Words: Insurance, pig, willingness to participate

INTRODUCTION

The contribution of livestock sector in AGDP is about 26 % and the share of dairy, meat and egg in livestock GDP is 62.5, 32.5 and 5 %, respectively. Among different livestock, pig shares about 6.63% of the total meat production of the nation (ABPSD, 2015). Pig and pork industry is flourishing day by day with a population of 1203230 and meat production 20135 Mt (ABPSD 2015). The production and consumption of the pig and pork is increasing and the pace can be impetus by systematic breeding with public-private partnership approach (Sapkota *et. al.*, 2014). This industry is considered as lucrative business with high export potential, and also has a vital role to achieve food and nutritional security of the country (Poudel *et.al.*, 2014). Technical backstopping, networking and unification of small holders for the increase in production and productivity of the pig farmer thereby benefit farmer as well as other stakeholders (Premy *et. al.*, 2014). This industry can flourish more by the involvement of microfinance and enabling insurance policies (Shrestha and Lamsal, 2014). This enterprise can be more systematic by zoning pig production site, introduction of systematic scavenging production system, mandatory registration of pig farms, following bio-security measures, increasing research and extension for productivity enhancement addressing animal welfare issues during production, transportation and slaughter, clear policy for domestication of wild pig, insurance policy and easing export hurdles (Shrestha *et.al.*, 2014).

Disease was the major problem faced by livestock farmers. Insurance, vaccination, sanitation, feeding right quantity and quality of feed and fodder were the mitigation measures. Publicity of insurance scheme, easing the procedure of insurance and quick settlement of claims was the ways to improve agriculture insurance (Ghimire *et. al.*, 2016a).

Therefore, this study was focused to explore the insurance status of pig and pork industry, reasons for not adopting pig insurance and to provide some recommendations to increase the pig insurance in Nepal.

MATERIALS AND METHODS

This study employed multistage proportionate random sampling by selecting four representative districts, Makwanpur and Nawalparasi from Inner Terai and Kaski and Kathmandu from mid hills based on the pig production potentiality in 2016. The pocket area of potential pig raising in the district was identified in

consultation with district stakeholders particularly District Livestock Service Offices (DLSOs). After identifying the pocket area, the survey was conducted in Padampokhari VDC and Hetauda municipality of Makawanpur; Harpur and Ramnagar VDCs of Nawalparasi; Hemaja, Deurali, Kalika, Puranchaur VDCs and Pokhara and Lekhnath Municipalities of Kaski; Sipadol VDC, Tokha and Tarakeswar municipalities of Kathmandu valley. From each district, 30 households were selected randomly irrespective of size of holdings. Therefore, the total sample size for the study was 120 pig farmers. The data was collected from face to face interviews of the pig farmers from study districts.

RESULTS AND DISCUSSION

Household characteristics of the farmers

On the observation of farm and household characteristics of sampled farmers (Table 1), 57 % of the respondents were male in Nawalparasi, 70 % in Kaski, 30 % in Makawanpur and 63 % in Kathmandu valley. In overall, 55 % of the respondents were male and 45% female. This showed that both male and female were involved in the pig enterprise. In Nawalparasi and Kathmandu valley, all the respondents were other than Brahmin and Chhetri and similarly in Makawanpur and Kaski, only 13 % and 27 % of the respondents were Brahmin and Chhetri, respectively. In overall, about 10% of the respondents were Brahmin and Chhetri. This clearly states that this occupation is dominated by other castes than Brahmin and Chhetri. This may be due to the religious and social reasons. According to Niraula *et al.* (2015) 97% of the respondents were Janjatis and only 3% were Brahmin and Chhetri ethnic group and reported that the pig rearing is still a very traditional practice and very common among Dalit, Adibasi/Janajatis represented by Rai, Limbu, Tharu, Magar, Damai, Kami, Sarki, and other marginalized social groups. The average age of respondents were 48, 54, 41 and 39 in Nawalparasi, Kaski, Makawanpur and Kathmandu valley, respectively and with 45 as an average of all. The average household size of the sample farmer was 5.45 in which Kathmandu valley had 4.67, Kaski had 5, Nawalparasi had 5.8 and Makawanpur had 6.33. Experience of pig farming was highest i.e. 19.43 years in Nawalparasi and lowest in Kaski i.e. 7.46 years. The average experience of pig farming was 11.30 years. In an average, 46 percent of the respondent had participated in the pig production and marketing related training. However, the percentage is very low in case of Nawalparasi i.e. 3 percent. The percentage of the respondents involved in training related to pig enterprise development were considerably higher in Kaski and Makawanpur i.e. 70 % and 83 %, respectively. Organizational involvement related to pig enterprise was lowest in Nawalparasi i.e. only 10 %. Kathmandu valley had 23% and Kaski had 57 % and Makawanpur had 90 % with the average value of 45%.

Table 1: Farm and household characteristics of sample farmers (n=120)

Districts	Nawalparasi	Kaski	Makawanpur	Kathmandu Valley	Total
Sex (Male %)	57.00	70.00	30.00	63.00	55.00
Ethnicity (Brahmin/Chettri%)	0.00	27.00	13.00	0.00	10.00
Age (year)	47.53	53.93	40.60	39.07	45.28
Household size (number)	5.80	5.00	6.33	4.67	5.45
Experience of pig farming (year)	19.43	7.47	10.55	7.73	11.30
Training taken (Yes %)	3.00	70.00	83.00	27.00	46.00
Organizational involvement (Yes %)	10.00	57.00	90.00	23.00	45.00

Source: Household survey, 2016

Pig insurance status in Nepal

Farmers in the study region were participating in pig insurance due to fear about piglet mortality and practice of insurance mainly in lactating animals like cattle and buffalo. Information on livestock and pig insurance were presented in Table 2. Only, 17 % in Nawalparasi and Kathmandu valley, 43 % in Kaski and 97 % in Makawanpur were known about livestock insurance. In an overall, 43% of the respondents were known

about livestock insurance. While data on information about pig insurance revealed that 13 %,33 %, 70 % and 3 % of the respondents in Nawalparasi, Kaski, Makwanpur and Kathmandu valley were informed about pig insurance, respectively. Overall, 30 % of the respondents were aware about pig insurance. In Kathmandu valley none of the respondents had insured their pig whereas in Makwanpur, only 7% of the respondent had insured their pig. The scenario was slightly higher in Nawalparasi i.e. 10% and the highest 33 % of the respondents had insured their pig enterprise in Kaski district. Highest percentage of the respondents had insured pig in Kaski district as pig farm sizes were higher as compared to other districts. In an overall, 13 % of the respondents had insured their pig enterprise. Likewise, 90 %, 77 %, 100 % and 77 % percentage of the respondents in Nawalparasi, Kaski, Makawanpur and Kathmandu valley, respectively showed their interest in pig insurance program in future. With favorable (quick settlement of claims, insurance service at doorsteps, raised indemnity percentage and awareness about pig insurance) situation and easy procedure, if availed, 86 % of the respondents showed willingness to participate in pig insurance program in the future. Improvement of claim settlement procedure including raising awareness through farmers institutions are more likely to enhance adoption of existing agriculture insurance scheme in Nepal (Ghimire *et al.*, 2016b).

Table 2: Percentage of respondents about knowledge and willingness to participate in pig insurance

Particulars	Nawalparasi (n=30)	Kaski (n=30)	Makawanpur (n=30)	Kathmandu Valley (n=30)	Total (n=120)
Awareness about livestock insurance	16.67	43.33	96.67	16.67	43.33
Awareness about pig insurance	13.33	33.33	70.00	3.33	30.00
Insured their pig	10.00	33.33	6.67	0.00	12.50
Willingness to participate in pig insurance	90.00	76.67	100.00	76.67	85.83

Source: Household survey, 2016

Risk and reasons for not adopting pig insurance

Piglet mortality, diseases, infertility and marketing were the major risk associated with the pig farmers in Nepal. Small scale production, poor knowledge, lengthy and tedious official procedure, no agent or insurance company nearby, and difficulty in selling their product as required after insurance were the reasons hindering the growth and development of pig and pork industry in Nepal. In addition, frequently eaten of ear tag by pig was also major problem during pig insurance program. So the introduction of alternative and sustainable option of ear tag can solve this issue. Other than insurance; timely treatment of diseases, vaccination, and adoption of breed tolerant to diseases, feeding in right time and quantity and sanitation were the major adaptation strategies for risk reduction in pig farming.

CONCLUSIONS

With favorable situation and easy procedure, if availed, 86 % of the responded showed willingness to participate in pig insurance program in future. Piglet mortality, diseases, infertility and marketing were the major risk faced by the farmers. Small scale production, poor knowledge, lengthy and difficult official procedure, no agent or insurance company nearby, and difficulty in selling their product in required time after insurance were the reasons hindering the growth and development of pig and pork industry in Nepal. Therefore, quick settlement of claims, insurance service at doorsteps, raised indemnity percentage and awareness about pig insurance are the major suggestions for improving pig insurance in Nepal.

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ANNEXURE

Annex-1

List of Insurance company for crops and livestock insurance in Nepal

S.N.	Name of Insurance company	Districts				
1	Nepal Insurance Company Limited	Darchula	Baitadi	Dadeldhura	Kanchanpur	
2	Rastriya Bima Company Limited	Bajhang	Doti	Kailali		
3	United Insurance Company (Nepal) Limited	Humla	Bajura	Accham		
4	Everest Insurance Company Limited	Kalikot	Dailekh	Surkhet	Bardiya	
5	Sagarmatha Insurance Company Limited	Mugu	Jajarkot	Jumla		
6	NLG Insurance Company Limited	Dolpa	Rukum	Salyan	Banke	
7	Prabhu Insurance Limited	Mustang	Myagdi	Baglung	Gulmi	Syangha
8	Siddhartha Insurance Limited	Manang	Kaski	Parwat	Palpa	Rupandehi
9	Prudential Insurance Company Limited	Gorakha	lamjung	Tanahun	Nawalparasi	
10	Shikar Insurance Company Limited	Chitwan	Makwanpur	Dhading	Nuwakot	Rasuwa
11	Himalayan General Insurance Company Limited	Sindhupalchowk	Kavrepalanchowk	Lalitpur	Parsa	Bara
12	Premier Insurance Company (Nepal) Limited	Dolakha	Ramechhap	Sindhuli	Sarlahi	Rautahat
13	NB Insurance Company Limited	Solukhumbu	Okhaldhunga	Mahhotari	Dhanusa	
14	Lumbini General Insurance Company Limited	Sankhuwasabha	Bhojpur	Khotang	Udayapur	Siraha
15	Neco Insurance Limited	Taplejung	Panchther	Ilam	Jhapa	Morang
16	The Oriental Insurance Company Limited	Dhankuta	Sunsari	Terhathum	Saptari	
17	National Insurance Company Limited	Rolpa	Puythan	Dang	Arghakhanchi	Kapilwastu

Annex-2

Details of crops and livestock Insurance F.Y. 2072/73

Type of Insurance	Amount Insured	Insurance charge	Subsidy	Paid claimed insurance
Crops	438721001	21633998	16225499	9739898
Fisheries	290058732	6332589	4749442	1210350
Animals	4745141546	235013552	176260164	146081365
Poultry	564490946	15764941	11823706	2551265
Total	6038412224	278745081	209058810	159582878

Source: Bima Samiti, Barshik Prativedan 2072/73

Annex-3

Details of crops and livestock Insurance F.Y. 2071/72

Type of Insurance	Amount Insured	Insurance Charge	Subsidy	Paid claimed insurance
Crops	146955001	7341804	5506353	1741482
Animals	2471547069	121342265	91006699	59428591
Fisheries	168233687	3012519	2259389	121898
Poultry	293945138	10432365	7824274	358208
Total	3080680895	142128953	106596715	61650179

Source: Bima Samiti, Barshik Prativedan 2071/72