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RESEARCH ARTICLE

Livestock Insurance Policy in India: Insights from Ground Level Study

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ABSTRACT

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This study presents the status of livestock insurance policy and ground level evidences on insurance adoption. The study is based on a field survey conducted in Haryana and Rajasthan and descriptive statistics and logistic regression model was employed to draw logical conclusions. The regional coverage of livestock insurance indicates diverse picture for different states in the country and only few states were having better coverage. More than 80 per cent of the livestock insurance in India is done by the public sector insurance companies and remaining by private sector. The micro level study indicates the low coverage and extremely lower renewal of livestock insurance which may cast doubts on the feasibility of livestock insurance policy. The opinions of the farmers indicate that insurance provider may diversify their products as per the need of farmers. Constraints in insurance adoption like no. of milch animal, education level of households, milk yield and bred of animal are the important factor. Farmers have reported difficulties while accessing the livestock insurance i.e. higher premium, cumbersome claim settlement and lack of knowledge about risk aversion products. Study suggests for improving the livestock insurance scheme for wider coverage to reduce premium, quick settlement of the claims, insurance service at door steps, more awareness programmes should be integral part of livestock insurance policy. Key words: Livestock; Insurance; Milch animal; Public sector insurance company.

ivestock are one of the most important productive assets for Indian farmers and an ex ante self-insurance mechanism to cope with income shocks arising due to extreme climatic and deadly diseases (Ahuja et. Al 2000, http://documents. worldbank.org, LID Somerset UK 1999, Choudhury 2013). Livestock contributes around 4.11 per cent to the National Gross Domestic Products (GDP) and around 25.6 per cent to the Agriculture GDP. The total livestock population consisting of Cattle, Buffalo, Sheep, Goat, Pigs, Horses & Ponies, Mules, Donkeys, Camels, Mithun and Yaks in the country is 512.05 million (20th Livestock Census at glance). The number of milch animals (in-milk and dry) in cows and buffaloes has increased from 111.09 million to 118.59 million, an increase of 6.75 per cent over 19th census. The crossbred milch cattle increased from 14.4 million to 19.42 million, an increase of 34.78 per cent whereas the indigenous milch cattle increased marginally (0.17%). The numbers of milch

buffaloes increased from 48.64 million to 51.05 million (4.95%) (20th Livestock Census at glance). India has highest number of livestock in the world but same time highest small and marginal farmers drive livelihood from this sector.

The livestock owners face several risks of climatic change, technological, marketing, policy and others. The present challenge of bringing in sustainability in animal husbandry sector justifies the adoption of risk management mechanisms. Animal diseases have multiple direct and indirect effects on human welfare. In order to achieve a better understanding of the importance of controlling animal diseases from the perspective of poor livestock keepers, however, a sustainable-livelihood approach is valuable (*Birthal et.al 2002, Jayanta basu 2022, Ugwumbu et.al 2010*). To mitigate these risks, the Cattle Insurance Scheme was initiated by the Small Farmers' Development Agency (SFDA) in 1971 and scheme got a real boost when banks started enhancing purchase of cattle under the IRDP during the 1980s. To protect the farmers against risk of animal, the Government of India introduced livestock insurance scheme on a pilot basis during the years 2005-06 and 2006-07 of the 10th Five Year Plan (2002-07) in 100 selected districts (Sharma A. 2011). The scheme continued for same districts during the 11th Five Year Plan (2007-12) which was further extended to other districts in the country. Though there are several players in the livestock insurance market, more than 80 per cent of the livestock insurance in India are by thorough the public sector companies namely, New India Assurance Company Limited (NIACL), National Insurance Company Limited. (NICL), United India Insurance Company Limited (UIICL) and Oriental Insurance Company Limited (OICL). However, several innovative cattle insurance products have been developed and being offered by private players like, HDFC, TATA-AIG, JK Trust, BAIF etc.). The Oriental Insurance Company Limited, United India Insurance Company Limited. SBI General Insurance, IFFCO-Tokio General Insurance Company Limited, Bajaj-Allianz, Tokio General Insurance Company, Future Generali total insurance solutions, Royal Sundaram, ICICI Lombard Rural Insurance and HDFC-ERGO Rural Insurance (Chand et.al 2016).

In spite of such efforts, livestock insurance has not picked up. This is a matter of concern, because livestock apart from being an important source of food and nutrition comprise an important pathway for poverty reduction (Carters; 2012). The reasons for its lack of adoption could be related with implementation and efficacy of the scheme, and socio-economic conditions of the farmer. As far the efficacy of the scheme is concern, the earlier study by (Thorup et. al 2012) found that livestock insurance scheme in Haryana has functioned effectively by settling about 87 per cent of the insurance claims on an average and was, also, found financially viable in the short and long run for the insurance companies. This shows that there is nothing wrong with the implementation of the scheme but there may be other reasons and factors which need to be determine and addressed to improve the adoption of livestock insurance by the farmers. In addition, consequently, several livestock insurance mechanisms have evolved and became operational. The Pradhan Mantri Fasal Bima Yojana (PMFBY) is government of India 2017, scheme for crops and is being given more importance to protect the farmers

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(www.dahd.nic.in, Chand et .al 2017, Choudhury et.al 2013)

The Bima Yojana was adopted by different states as in 2016, Karnataka decided to implement the Livestock Insurance Scheme to encourage farmers to insure their milch cattle and buffaloes. Further, in Bihar and Orissa, Pradhan Mantri Fasal Bima Yojana has been implemented in 2016 and these states are looking forward for the central livestock insurance policy to get doled up (https://ndma.gov.in). In Central India reported that most of the farmers were willing to get their cattle and buffaloes insured (Kumar et.al 2018). For sheep too, the Rajasthan Government's Avika Kavach scheme provides insurance against death and disability of sheep as in the Sheep Insurance Scheme of the Central Government. (De Haan et.al 2001, Khan, et.al 2013, Mohanty, cyclone fani 2019, LID 1999) have reported low level of knowledge on insurance products among farmers. There are several issues that need a re-look. Are the farmers aware of insurance schemes? What constraints farmers face in availing the insurance? To mitigate the uncertainties in the livestock, sector some strong policy interventions required. Therefore, this paper gives the glimpse of ground level insights about livestock insurance in India at regional level.

METHODOLOGY

Study Background: We have selected two states for detail study and at national level the share in different livestock attributes selected states were worked out as presented in table 1. The total number of Bovine in the selected states were 1.31 per cent (Haryana) and about 11 per cent (Rajasthan) of country. The milk production contributed about 13 per cent and 8 per cent by these states respectively, to total milk production in the country. The productivity of milch animal was found to the higher (9.0 lit./day/ animal) for Haryana and 8 litres in Rajasthan which is higher than the national average (7.95 lit./day). The milch animals including buffaloes and cross bred cows were higher in Haryana followed by Rajasthan. The institutional support was compared with all India and it was observed that veterinary hospitals, dispensaries in absolute term were higher in Rajasthan compared to Haryana. However, per 1000 livestock, the veterinary infrastructures were higher for Haryana as compared to Rajasthan.

The better veterinary infrastructure definitely

Table 1. General features of the study area							
States		Unit	Haryana	% to all India	Rajasthan	% to all India	All India
Total livestock (Bovine)		Million No.	7.05	1.31	56.80	10.58	536.76
Milk Production		Million Tonnes	10.73	5.71	23.67	12.61	187.77
Milk Yield		Lit/day	8.92	112.20	8.39	105.53	7.95
Milch cows		Millions	1.09	6.16	8.20	4.64	176.75
Total bovine	М	0000 No.	74.89	1.31	300.63	5.27	5703.37
	F	0000 No.	554.78	2.25	246.25	9.98	2467.25
Crossbred cows above 2.5 Yrs.	М	0000 No.	8.50	2.53	135.89	4.04	3359.59
	F	0000 No.	79.67	1.79	197.00	4.44	4438.93
Desi above 2.5 yrs.	М	0000 No.	21.88	0.51	193.91	4.49	4314.76
·		00000 No.	16.99	0.92	132.19	7.14	1852.68
Buffaloes (F)		00000 No.	37.48	3.91	1248.58	13.02	959.09
No. of institutions to support liv	estoc	k sector developm	ient				
Hospitals & Polyclinics		Numbers	1029	8.52	2530	20.95	12076
Vet. Dispensary		Numbers	1817	7.11	198	0.77	25571
Vet. Aid centres		Numbers	22	0.08	5167	18.34	28168
Total veterinary institutions		Numbers	2868	4.36	7897	12.00	65815
Total ICD project		Numbers	7	1.31		0.00	535
Frozen Semen Banks		Numbers	7	12.96		0.00	54
AI Cent		Numbers	2839	2.79	7619	7.49	101777
Goshala N ₂ Plant		Numbers	515	8.65	1865	31.32	5955
Rinderpest Check Posts		Numbers	#	#	#	#	178

Source: 20th Livestock census and Basic Statistics of Animal Husbandry & Fisheries, 2019.

Indicates no information available (20th Livestock Census at glance, Singh et. al 2020).

assured the good health of livestock and hence, minimise the risks in dairy sector. Since, lack of sufficient institutions support and educate manpower, farmer suffers with huge losses in the event of sickness, natural calamities and market failure. Therefore, risks aversion schemes like insurance and timely vaccination may help the small and marginal farmers to safeguard themselves from expected losses.

Sampling design: This research study was conducted in two states, viz., Haryana and Rajasthan, depict diverse agro-climatic conditions (2015-16). Haryana is blessed with assured irrigation and availability of feeds and fodders led to maintained healthy livestock. The Rajasthan faces rainfed and harsh dry conditions coupled with challenged environment for livestock rearing. A random sampling technique was employed to select the districts and villages. Two districts from each state with five villages from each selected district were randomly chosen. From each village 50 farmers having at least one milch animal, total 1000 respondents were selected for primary data collection. The analysis could be carried out only for 913 and 87 samples were discarded due to non-availability of complete information. The data on feeding schedule, cost of production, expenses on health management,

socio economic characteristics of respondents, extent of insurance adoption and on other parameters were collected through personal interview method. We also used the secondary information collected from various sources i.e. govt. reports, research papers and databanks of livestock census of various rounds.

Analytical procedure: The sample were post-stratified into two categories i.e. adopter and non-adopter and descriptive statistics, econometric analysis was carried out to identify the factors influencing participation in livestock insurance. Source of risk was assessed through Likert scale (1-5) by considering the opinions of the farmer. The perception of farmers on livestock products attributes desired by the farmers were analysed through percent by asking direct questions to the respondents on insurance attributes. The ranking based on livestock insurance coverage for different state was calculated and categorized as ranks of particular state as (>5%=I, <5% to 1.5%=II &<1%=III).

RESULTS AND DISCUSSION

The data obtained from various sources were analysed and results are presented in subsequent sections.

42

Temporal and regional spread of livestock insurance: In spite of concerted efforts in the past, progress in livestock insurance has been slow. However, in recent years it picked up and by 2016-17, about 87 million animals were insured which is about 17 per cent of the livestock population in India (fig.1). Though, livestock insurance percentage shows increasing trend but the pace is very slow. Therefore, to increase the livestock insurance coverage in the country strong policy intervention like awareness programme, fast claim settlement mechanisms and efforts of extension agencies to cover more farmers is required.

To see the regional spread of livestock insurance data were analysed triennium basis and further ranking of different states and UTs was analysed based on per cent coverage (Table 2). The regional spread of livestock insurance indicates that leading states in livestock insurance coverage are Tamil Nadu (18.7%), AP(15.6%), Karnataka (11.7%), Maharashtra (8.8%) Kerala (6.6%) and Haryana (6.2%) as ranked Ist and states like Gujarat (5.6%), WB (4.9%), Assam, Odisha, UP, Rajasthan, HP and Punjab ranked IInd. The remaining states are lagging in terms of insurance spread. Therefore, there is need to speed up the coverage of insurance in the country. Progressive states like, Punjab, Haryana West Bengal and UP need to speed up their efforts to increase the insurance coverage as they contribute considerable number of livestock products in India.

Operational and administrative process for livestock insurance: The Govt. of India has formulated the guidelines for implementation of livestock insurance scheme. The guidelines envisaged that an animal is insured for its current market price which will be assessed jointly by the beneficiary and the insurance company preferably in the presence of the veterinary officer or the Block Development Officer (BDO). The minimum value of animal should be assessed by taking Rs.3000/ litre milk yield/day for cows and Rs.4000/litre milk yield/ day for buffalo. The market prices of pet animals (Horses, Donkey, Mules, Camels, Ponies, male Goat, Sheep, Pigs, Rabbit, Yak and Mithun) are to be assessed by negotiation jointly by owner and by insurance company in the presence of veterinary doctor. The ear tagging must for the insured animals. One photograph of the animal with the owner clearly visible ear tag shall be taken at the time of processing the insurance documentation. In case of sale of the animal or transfer of animal from one owner to other, before expiry of the insurance policy, the remaining period of policy will have to be transferred to the new owner. The insurance policy provides coverage for death due to accident (Inclusive of fire, lightning, flood, inundation, storm, hurricane, earthquake, cyclone, tornado, tempest, and famine), diseases occurring during the period of policy.

Central assistance and claims settlement process for livestock insurance: Since May 2014, the Centre has been implementing risk management and insurance scheme in all the districts of India for all animals including non-milch animals. The premium rates for one year policy for normal areas @3%, North Eastern regions @3.5% and for difficult areas @4% of market value of animal. Premium for three years' policy for normal areas @7.5% and for other areas @9.5% to 10%. Again, Centre and state share 25:25% each and beneficiary share 50 per cent whereas in case of APL this share is 40:30:30%. For difficult areas this share is 45:25:30% (De Haan et.al 2001). Benefit of subsidy is to be restricted to 5 animals per beneficiary except sheep, goat, pig and rabbit. Only four documents



Sources: Basic Animal Husbandry Statistics (various issues) and livestock census (Cameron, and Trivedi 2009)

States/UT	Number	of animals insured	Total	Ranking based on insurance		
	2006-08	2009-11	2012-14	2015-17		coverage
Tamil Nadu	365.62	292.81	739.7	234.38	1632.51	
Andhra Pradesh	256.72	582.05	420.27	103.77	1362.81	
Karnataka	23.34	163.24	205.56	632.17	1024.31	
Madhya Pradesh	45.83	84.93	542.98	96.6	770.34	I*
Kerala	108.74	242.28	226.09	0	577.11	
Maharashtra	61.69	39.22	126.66	317.07	544.64	
Haryana	130.95	156.22	204.43	0	491.6	
Gujarat	26.64	255.29	154.26	0	436.19	
West Bengal	2.64	71.14	303.75	40.55	418.08	
Assam	19.04	86.28	163.5	0	268.82	
Odisha	60.97	70.59	135.04	0	266.6	TT*
Uttar Pradesh	94.04	45.52	86.05	0	225.61	11*
Rajasthan	31.65	62.73	47.62	26.07	168.07	
Himachal Pradesh	61.07	37.43	42.17	0	140.67	
Punjab	24.1	44.37	71.33	0	139.8	
Uttarakhand	11.14	11.31	7.95	54.97	85.37	
Nagaland	10.89	10.95	24.97	0	46.81	
Chhattisgarh	9.45	14.94	15.86	4.51	44.76	111*
J&K	8.8	17.37	0	0	26.17	111*
Bihar	13.75	6.22	3.8	0	23.77	
Others states	16.3	15.87	19.43	0	51.6	
All India	1383.37	2310.8	3541.4	1510.1	8745.64	

Table 2. State-wise number of animals insured under livestock insurance scheme

Authors calculation: >5%=I, <5% to 1.5%=II &<1%=III to the total animals insured for the country

Source: Ministry of Agriculture and Farmers Welfare, Govt. of India report, 2018-19 (Bardhan and Tewari 2007).

would be required by insurance companies for settling the claims viz. intimation with the Insurance Company, Insurance Policy, claim form and postmortem report of deceased animal. In case of claim becoming due, the payment of insured amount should be made within 15 days positively after submission of requisite documents. If an Insurance company fails to settle the claim within 15 days of submission of documents, the insurance company will be liable to pay, a penalty of 12 per cent compound interest per annum to the beneficiary.

Socio-economic features of sample households: The socio-economic characteristics of adopters and non-adopters of livestock insurance do not difference significantly, except in average herd size, average milk yield and family income. The average herd for adopters of livestock insurance was 3.9 as against 5.3 for the non-adopters. It is evident from the Table 1 that insurance adopter had higher milk yield than the non-adopters. Hence due to higher yield farmers might prefer to go risks minimization strategies. The insurance adopter had expressed that they insurance

milch animals only. Further it was also observed that milch animals purchased under subsidiary programme were insured compulsorily by financing agencies. Indicating insurance adopter had lager herd size. But the average milk yield was significantly higher for adopters than that of non-adopters. The average annual income of adopters (Rs.1.19 lakhs) was also significantly higher than the non-adopters (Rs.11 lakhs). During the discussion with the livestock keepers, it was observed that majority of them were in favour of insuring all animals should be the common feature of scheme (Table 3)

Why livestock insurance? The natural calamities like cyclones during the years 2013,2014, 2019, 2020, losses of animals, livestock infrastructure and farmers as reported by *(Mukherjee 2016)*; Govt. of Odisha, 2014; *Amfan* and *Nisarg* cyclone, 2020. Similarly, several time floods have affected the livestock owners and put them in huge loss *(Livestock investigation department (LID) 1999, Jhirwal et.al, 2018)*. Flood in Tamil Nadu, 2015; Kashmir, 2014; Uttrakhand, 2013; Assam, 2012; 2020; draught in Marathwada, 2016,

 Table 3. Socio economic features of households

Indicators	Insurance	Insurance	t-Test of
maleators	Adopter	Non-adopter	difference
Sample size (number)	288	625	
Age (years)	50.0	49.6	0.4311
Experience in livestock farming (years)	41.9	41.9	0.0356
Households headed by female (%)	4.9	4.8	0.0016#
Education Level (%)			
Illiterate	50.4	53.0	
Below Primary	8.0	8.8	
Secondary	16.7	19.8	6.1640#*
Sr. Secondary	15.9	12.6	
>Sr. Secondary	9.0	5.8	
Main occupation status (%	<i>。</i>)		
Agriculture	27.1	30.4	1 0/59#
Agri. + livestock	72.9	69.6	1.0436
Av. herd size (no.)	3.9	5.3	7.11***
Av. milk yield (liter/day)	8.1	4.7	33.29***
Av. holding size (ha)	3.1	3.1	0.04
Family income (Rs./ yr)	1,18,738	1,11,403	1.6088**
Source: Field survey, 2015	-16		

***Significance at 1% level, #Pearson Chi² (1)

Singh et.al, 2016. Therefore, always livestock owners are at risk due to natural calamities apart from disease and other reasons. Thus, due to several risks in livestock rearing as explained below as farmers need to go for risk aversion instruments. Therefore, in this study, sources of different risks to livestock owners were investigated. The source of risks perceived as very important by the respondents were repeat breeding, delay in breeding service accessibility, lack of knowledge on heat detection as important risks, while some farmers have perception also these risks are somewhat not important (Table 4).

Animal health related risks, it was observed that farmers that delay in availability of health services, incidences of disease, accidental injury, financial hardship, non-availability of veterinary doctors etc. are the very important to somewhat important risk. The limited accessibility of extension services, accidental fire etc. was perceived as major source of risks.

The sources of risks were represented by marketing, institution, and policy related issues about 64 per cent respectively, followed by animal health (22%) and breeding (14%). Thus, the risks which are associated with other support and interventions or beyond the control by farmers weighted more important. Our findings matched with (Basic statistics Department of

Table 4. Source of risks reported by respondents in livestock enterprise (Likert Scale 1-5)

	Overall			
Source of risks	Score	SD		
Breeding related				
Repeat breeding problems	4.31	0.99		
Delay in breeding services accessibility	3.87	0.81		
Lack of knowledge on heat detection	4.25	0.99		
Animal Health related				
Delay in accessibility of health services	4.52	1.30		
Incidences of livestock diseases	3.44	0.81		
Accidental injury to animal	3.36	0.77		
Financial hardship to maintain good animal health	4.35	0.97		
Non availability of vet. Doctors in the centres	3.51	0.74		
Market related				
Fluctuations in milk prices	3.80	0.89		
Variation in animal milk yield	4.40	0.98		
Difficulties in marketing of livestock	3 90	0.81		
products	5.90	0.01		
Fluctuation of operating inputs price	3.86	0.98		
Non availability of green fodder	4.15	0.90		
Fear of Change in technology	3.90	1.05		
Institutions and policy related				
Limited accessibility of financial services	4.42	0.91		
Limited accessibility of extension services	3.88	0.85		
Chance of Burglary and theft	4.11	0.92		
Changes of govt. policies	3.99	0.81		
Climate risk (Extreme conditions hot and winter)	4.68	1.17		
Accidental fire	3.19	0.82		

Note: important =1, somewhat not important =2,

neutral=3, somewhat important =4 and very important =5

animal husbandry 2012-2019). Study found that adverse effect on animal health and lack of institutional support in dairy farming in India were major source of risks while observed that source of risk meat price, epidemic animal disease and milk price as the most relevant one (*Hussain, S 2019, Minhaj et. al 2018*). The average scores were more than 3 for most of the sources of risks indicates almost all the attributes on which opinion of respondents asked were important. However, for some of the famers were in the opinion of listed risks are very important as scores was >4.0. Hence, the efforts should be intensified to mitigate the risks and informed to the livestock owners about different source of risks associated with livestock enterprises so that risks aversion strategies can be adopted by farmers.

Knowledge and adoption of livestock insurance: To understand the awareness on the livestock insurance,

farmers were asked about the extent the information known to them. It was observed that 58 per cent in Haryana and 38 per cent in Rajasthan know about it but only 33 per cent know where to and how to approach for insurance. To minimize the livestock risks government has placed the insurance as risks aversion instrument. About 30 per cent of the livestock rearing households in the sample availed the livestock insurance facility. But, the concern remains why two-thirds of the livestock farmers are still beyond the reach of livestock insurance providers? Though some of them may be voluntary non-participants, majority of them might be unwillingly. Overall progress also indicates the slow pace of livestock insurance spreads. The possible reasons may be farmers either unaware or complexities in dealing with insurance related operational process like purchasing policy, complexity in getting claims etc. The findings conformity with (Cameron and Trivedi 2009) conducted a study in Maharashtra and found that majority of the respondents (82.67%) considered information on insurance, agencies and insurance schemes for livestock. knowledge as a constraint was reported among dairy farmers by (Mohanty et.al 2019). Farmer's preference on type of livestock insurance products demanded: The direct questions on the preferred attributes in the insurance product from the insurance livestock owners were asked. Further, how you rate current insurance scheme question was asked? Findings revealed that about 75 per cent farmers have informed, it is relevant however, about 25 per cent said it is irrelevant (Table 5).

We offered another type product as credit along with insurance coverage can be an insurance product. We observed that majority of insurance adopters were in the opinion that all animals should insured. However, farmers have suggested that insurance product should be animal coverage with savings. Therefore, insurance product may be devised in view of the farmers need and preferred attributes so that insurance spread can be increased. Low rate of renewal put question mark on the service provider as well as the poor implementation of policy on the livestock insurance in the country. Famers have informed that we were not aware about renewal of policy and thought it is once for all.

Animal insurance and policy renewal: An overall sample basis only about 9 per cent of the households has renewed livestock insurance policy. Though Haryana sample farmers had higher coverage of cows and buffaloes as compared to Rajasthan. However, fact remains the same why more than 90 per cent of the beneficiaries are not interested to continue the insurance. Renewal of the livestock reveals the satisfaction level from both clients and the insurance providers (Table 6).

	NL CE	Opinior	n of livestock insurance ad	opters
Attributes of insurance products	No. of Farmers	Relevant	Somewhat relevant	Irrelevant
Insurance	73 (25.35)	27 (36.99)	28 (38.36)	18 (24.66)
Insurance + Credit	98 (34.03)	31 (31.63)	39 (39.80)	28 (28.57)
Saving + Insurance	48 (16.67)	15 (31.25)	18 (37.50)	15 (31.25)
insure all Livestock	69 (23.96)	44 (63.77)	16 (23.19)	9 (13.04)
Total	288 (100.00)	117 (40.63)	101 (35.07)	70 (24.30)

TADIE 5. I VDE OF HINDFAILCE DEOUDCIN DECLETEU DV HIE FENDOHUEHIN EFELCEDHO	Table 5.	Type of	insurance	products	preferred b	v the res	nondents	(Percent	tion
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Figures in parenthesis indicate the percent

Table 6. Animals insured an	nd policy renewed	d by sample l	households (No.))
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	Tuste of finituals insured and pointy fenerical sy sample housening (1.00)								
			Harya	ina			Rajast	han	
Particulars	Type of	Animal No.	%	No. of Farmers	%	Animal No	%	No. of Farmer	%
Animals possessed	ammai	1934	100	500	100	1802	100	413	100
Insurance	Cow	365	18.87	135	27	304	16.87	98	23.73
adoption	Buffalo	126	6.51	53	10.6	21	1.17	15	3.63
	Total	497	25.70	188	37.6	325	18.04	113	27.36
	Cow	151	7.81			98	5.44		
Policy renewed	Buffalo	54	2.79			21	1.17		
	Total	205	10.60			119	6.60		

Figures indicate the percent total number of animals possessed by respondent. Survey, 2015-16

Table 7. Reasons for discontinuation of livestock insurance										
Doutionland	States under the study (%)									
Particulars	На	ryana	Rajasthan							
Reasons for discontinuations of animal insurance (%)	Accepted	Not accepted	Accepted	Not accepted						
Complications in getting claims	92	8	95	5						
High premium rates	82	18	66	34						
Lack of trust on insurance providers	50	50	54	46						
It does not payout when farmers suffer loss	47	53	55	45						
Of no use	62	38	69	31						
Overall	66.6	33.4	67.8	32.2						
Source: Field survey, 2015-16										

 Table 7. Reasons for discontinuation of livestock insurantial

Reasons for discountenance of livestock insurance: There is general perception of livestock owners who ensure their animal that insurance policy will help in the event of animal loss due various reasons i.e. disease, theft, climatic factors etc. But in the event of anima sickness, transfer of ownership etc. circumstances, farmers have faced several problems. There is a problem of claim settlement, limited understating on the procedures and lack of knowledge. Therefore, to understand rationale for discontinuance, the reasons for non-renewal were examined and same is presented in the Table 7. The reasons for discontinuance include difficulties in getting claims, high rate of premium, lack of trust on insurer, lack of timeliness in claims processing and lack of information of renewal. It was observed that farmers faced the problem while settling the claims (>92%) and some of them even did not get the claims in both the state.

Therefore, famers indicated that claims settling are major problem followed by high premium, 82 per cent in Haryana followed by Rajasthan about 66 per cent, lack of trust on insurance agencies. Some of the farmers say livestock insurance is of no use. The reasons provide an insight to design sustainable livestock insurance products based on real needs of the farmers. Further study suggests that bottlenecks in the insurance operational process may be narrowed to increase widespread in the study area.

CONCLUSION

The regional livestock insurance coverage indicates diverse picture, only few states are having better coverage but rest of the state falls in very low coverage category. The study indicates that more than 80 per cent of the livestock insurance in India is done by the public sector insurance companies and remaining by private sector. These companies need to have better network and accessibility with the livestock owners.

Moreover, confidence building on insurance provider needs to be strengthened among the stakeholders, which need commitments and responsiveness of these companies. The insurance institution should take measures like developing infrastructure, to reduce the premium and appoint proper staff to guide the farmers for the insurance. Although the central and the state governments are taking up policies to cater the needs of the livestock owners but still reaching to the grassroots is a challenge. The opinions of the farmers indicate that insurance provider may diversify their products as per the need of farmers. India being a diverse country with varied climatic zones, soil cover and livestock aggregation require an effective safeguard from environmental variations, natural disasters and sudden outbreaks of fatal diseases pertaining to livestock. This can only be achieved by creating awareness among the rural livestock farmers and motivating them to insure their animals. The micro level study indicates the low coverage and extremely lower renewal of livestock insurance which may cast doubts on the feasibility of livestock insurance. The most determining factors of livestock insurance adoption were milk yield and income of the farmers. It is suggested that government and other stakeholder efforts need to be directed towards policies and programmes to create more awareness, assess the real demand of attributes of insurance products preferred by farmers in the livestock insurance and constant engagement with all stakeholders. Farmers have reported difficulties like higher premium, cumbersome claim settlement and lack of knowledge about risk aversion products. Therefore, it is suggested for improving the livestock insurance scheme i.e. reduce premium, quick settlement of the claims, insurance service at door steps, awareness program should improve the implementation mechanism and cover more risk under scheme. To increase the

insurance coverage, to equip the livestock farmers with latest knowledge about insurance, to assess their information needs pertaining to insurance and to address them which eventually be fulfilled by better extension and advisory services.

CONFLICTS OF INTEREST

The authors have no conflicts of interest.

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