Parallel Session 33: Post-disaster needs assessments and rapid assessments tools

Rethinking Livestock Safety in Natural Disasters: The Way Forward with Improved Social Insurance in Disaster Management in India

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DOI: 10.1481/icasVII.2016.f38

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ABSTRACT

While animals are an integral component of rural economy, India's disaster management laws and policies magnifies vulnerability of livestock. Every year, India faces hydro-climatic natural disasters such as floods and cyclones which expose the existing vulnerability of livestock. It is expected that the disaster management programme of the government of India will include livestock protection in recognition of their contribution to the agricultural sector. Legal instruments of disaster management hardly take into account the plight or impact of livestock washed away, injured or dead. The anthropogenic neglect of animals is not only an ethical neglect but also increases the vulnerability of the already vulnerable.

A careful review of the Disaster Management Act 2005, Compendium of Laws on Disaster Management 2015, and National Policy on Disaster Management 2009, throws light on the absence of mention of social insurance for livestock. The Disaster Management Act makes no clear legal obligation towards animals during emergencies, and the Compendium of Laws on Disaster Management does not speak of livestock

protection during natural disasters. The National Policy provides for proper and speedy disposal of animal carcasses and recommends planning appropriate measures with the community for livestock protection during and after disasters. In all these, there is a conspicuous lack of social insurance for livestock in post-disaster recovery phase.

Under the 10th and 11th Five Year Plans, the Livestock Insurance Scheme was launched by the Ministry of Agriculture, Government of India, on a pilot basis. In the subsequent years, more districts came to be included under this scheme. The Livestock Insurance Scheme is an illustration of social insurance that offers monetary indemnification to farmers and cattle-rearers in case of livestock death. Since the premium of the Livestock Insurance Scheme is subsidized by the government, it aims to work well for Indian agricultural communities which are often poverty-stricken so that formal insurance and credit markets are no viable for them.

There is a need to integrate social insurance for livestock into disaster management. It indicates mainstreaming livestock protection into disaster management design, planning, and implementation. The Livestock Insurance Scheme employs both “Area approach” and “Individual approach” to determine livestock loss due to natural disasters. These approaches should be extended to cover social insurance for notified livestock. Furthermore, India requires an appropriate database of livestock. The Ministry of Agriculture, in cooperation with different state governments, conducts Livestock Census on a periodic basis. However, it has limitations which make impact assessment problematic.

Impact assessment of the social insurance scheme for livestock may be improved with three innovations. Firstly, mapping notified livestock according to area – the lowest unit of area could be “village” at rural level and “municipality wards” for urban areas. Secondly, costing of social insurance should be estimated based on affected areas for which time-series data of natural calamities need to be used. Thirdly, developing loss function based on various parameters which need to be worked out.

Thus, this paper intends to present a blue print of improved social insurance of livestock in India based on available data.

Keywords: Livestock Insurance Scheme, NGOs, Subsidy, Premium

1. Introduction

During disaster management, it has been observed that animals are generally marginalised. Animals need as much protection as human beings in disaster situations. In India, natural disasters like floods and cyclones are common. Abandoned animals display a natural tendency to instinctively move away from flash flood waters. They move to higher grounds wherever available. In doing so, they are exposed to risks of drowning, injury, and death. Evacuation, rescue and rehabilitation of animals will depend on the extent of commitment and human-animal bond. In this paper, animals refer mainly to livestock.

Even as animals are integral to rural economy, India’s disaster management laws and policies magnifies vulnerability of livestock. The disaster management programme hardly takes into account plight or impact of livestock washed away, injured or dead. This anthropogenic neglect of animals increases vulnerability of the already vulnerable. The Ministry of Agriculture (MoA), Government of India (GoI), had flagged of the

Livestock Insurance Scheme wherein half of the premium was subsidized by the Central Government. This scheme offered monetary indemnification to farmers and cattle-rearers in case of livestock death. This paper intends to present a blue print of improved social insurance of livestock viable in rural India. To this extent, the paper has been divided into five sections- Place for animals in Disaster Management Laws and National Policy, Livestock Insurance Scheme, Critical Evaluation of Livestock Insurance Scheme, Strategy for Improvement of Social Insurance for Livestock Safety from Natural Disasters, and Conclusion.

2. Place for animals in Indian Disaster Management Laws and National Policy

2.1 Disaster Management Act 2005

Enacted by the Parliament in 2005, the Disaster Management Act does not deal with animal protection. There is no mention of the word ‘animal’ so that Central and State Governments have no explicit legal obligation towards animals during disasters. **This anthropogenic neglect of animals is an ethical neglect.** Take the case of Himalayan Tsunami in 2013. Though the disaster affected human beings *and* animals, search and rescue teams were mainly dispatched for people as the death toll reached triple digits. It became difficult to count the number of animals which perished or struggled to survive. Non-governmental organizations (NGOs) such as People for Animals (PFA) and Humane Society took the responsibility to rescue and provide relief to trapped and injured mules and livestock (Lobo 2013). Even then, the role of NGOs seemed peripheral to that of the Central and State Governments and the National Disaster Response Force (NDRF). Since the Disaster Management Act does not mention “animals” and makes the provisions very general that these animals get marginalised, their agony ignored, and their rescue, relief, and treatment side-lined. Hence, the Act is embedded in a parochial bias that legitimises survival of the highest (and fittest) form of life.

2.2 Compendium of Laws on Disaster Management 2015

Interestingly, the Compendium hinted at animal safety in case of biological disasters. The Ministry of Health and Family Welfare (MoH&FW) was declared as the nodal ministry for the management of biological disaster. The MoH&FW would cooperate and coordinate with the Ministry of Agriculture (MoA) if animals and crops were affected. Compared to the Disaster Management Act 2005, the Compendium may be seen as an improvement that takes animals into account. Nevertheless, it came as a surprise that the Compendium did not have laws that would cater to animal protection during natural disasters as well as other kinds of man-made disasters. Post Phailin in 2013, NGOs like Action for Protection of Wild Animal (APOWA) found “The unspeakable misery of animals cannot be described in words” (Ranjan 2013). The International Fund for Animal Welfare – Wildlife Trust of India (IFAW-WTI) initiated its Rapid Action Projects and Emergency Relief Networks (ERN) to bring together over 400 animal rehabilitators from across the country.

2.3 National Policy on Disaster Management 2009

In two chapters, the National Policy cites animals in disasters. In chapter 5 entitled “Disaster Prevention, Mitigation and Preparedness” and chapter 7 entitled “Response”.

In the former, under Section 5.2.9 it states "Proper and speedy disposal of dead bodies and animal carcasses deserves due weightage" (National Policy on Disaster Management 2009: 20). Except for reference to animal carcasses, this chapter has no other reference to animals. Instead of animal protection, efficient disposal of animal carcasses receives "due weightage". In doing so, it prioritises animal carcasses over animal lives. In the latter chapter, section 7.10.1 caters to "Animal Care". This section fares better than its predecessor. It takes cognizance of animals, domestic and wild, that vulnerable to the effects of natural and man-made disasters. It recommends planning appropriate measures to protect, shelter, and feed them during and after disasters. It suggests community effort as much as possible for the above because communities have demonstrated compassion to animals during disasters.

3. Livestock Insurance Scheme

One of the popular ways to tackle risks is by way of insurance. Insurance can become an effective tool to brave the risks posed to livestock by natural disasters. In India, the Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture, Government of India implemented the Livestock Insurance Scheme (LIS) first as a as a pilot study in 100 selected districts for two years from 2005 to 2007 (10th Five Year Plan and 11th Five Year Plan) and then on a regular basis in 100 newly selected districts of the country from 2008 to 2013. Thereafter, LIS was extended to 300 selected districts in the states. India has a total of 675 districts of which LIS covered 500- a remarkable achievement indeed! This Centrally Sponsored Scheme (CSS) would be carried out by the State Implementing Agencies (SIAs). States without SIAs would depend on the State Animal Husbandry Departments for implementation of LIS.

LIS has twin objectives that cater to farmers and cattle rearers and the insurance sector. It intends to provide protection mechanism to the former in the event of animal loss due to death and popularize livestock insurance in order to attain qualitative improvement in livestock and their products. Initially, it covered only crossbred and high yielding cattle and buffaloes but later aimed to include indigenous cattle, yak & mithun. The insurance amounts to maximum of the current market price of the insured animal. The insurance premium is subsidized whereby 50% is borne by the Central Government for a maximum of 2 animals per beneficiary for a policy of maximum of 3 years. The broad guidelines of LIS may be found in
http://uldb.org/pdf/Guidelines_for_Livestock_Insurance_Scheme.pdf,
http://dahd.nic.in/sites/default/files/Advisory%20LIS%20%202_0.pdf.

4. Critical Evaluation of Livestock Insurance Scheme

Despite the benefits and scale of coverage of LIS, there are concerns which require attention. Firstly, the insurance scheme does not consider cases of missing livestock in times of natural disasters. Secondly, there is no subsidy on premium against disability of livestock due to natural calamities. As the subsidy on premium is restricted only against death of livestock, the entire cost of premium against disability will have to be borne by beneficiaries. Thirdly, LIS is meant for high yielding cattle and buffaloes which directly pertain to commodification of animals and exclusive of cultural and ethical dimensions. Livestock may not be high-yielding due to nutritional deficiencies in poor households or arid regions in the country or both. They may not be productive for the market but their yield may be enough for daily household consumption. In addition to being a form of wealth, animals also become part of the household. Humans develop an emotional bond with animals that is part of everyday culture. It is quite common to see animal worship in India, particularly *Gau-Mata*. Their lives are revered as much as the lives of human beings which explain why it is unethical to neglect them during natural catastrophes. The emphasis on high yielding milch animals indicates the worth of livestock is measured in terms of market value. Those which are not market-worthy are not eligible for protection at all. For India, this is a very problematic stance that entirely omits cultural and ethical value of livestock. Lastly, this scheme does not address issues that contribute to incidents of moral hazard or fraud often complained by insurance companies.

The Livestock Insurance Scheme employs both “Area approach” and “Individual approach” to determine livestock loss due to natural disasters. Better known as homogeneous area approach, here homogeneous livestock area is assumed as the unit for estimation of yield and payment of compensation. The area is homogeneous in terms of livestock and annual variability in livestock yield. The unit area of insurance, that is, the aforementioned selected districts is decided by the Central Government. The Central Government permits only one insurance company to handle livestock insurance in a state normally, however, in case two or more companies bid the same premium rate then the area is equally divided in terms of Revenue Divisions or in absence of Revenue Divisions, region wise (Livestock Insurance Scheme 2013). This approach has the provision of data on yield variations (Singh 2010). In the individual approach, the farmer or cattle rearer is compensated fully for the losses suffered. The LIS mandates that the method of settlement of claim should be very simple and prompt to preclude unnecessary obstacles to the insured. It clearly states that only four documents would be required by insurance companies for settling claims- First Information Report with the Insurance Company, Insurance Policy, Claim Form and Postmortem Report. All insurance claims must be settled within 15 days positively after submission of requisite documents. Documents or forms for insuring and settling claims must be made available by the insurance agency in local language and English language. It is highly recommended that these approaches be extended to cover social insurance for notified livestock.

Finally, India requires an appropriate database of livestock. The Ministry of Agriculture, in cooperation with different state governments, conducts Livestock Census on a periodic basis. However, it has limitations which make impact assessment problematic. The recent 19th livestock census report do not match with the National Sample Survey Office (NSSO) survey report. The former pegged the number of sheep and goats at 200 million in 2012-13 while the 70th round of National Sample Survey represented a steep fall in their numbers to 99 million. The former also showed the number of poultry at 729 million in 2012-13 while the latter survey reported a huge decline to 255 million. The discrepancy in figures is unsettling since the livestock sector contributes almost 25.6 per cent (at current prices) of total value of output in agriculture, fishing and forestry sector while the overall contribution remained at 4.11 per cent of total Gross Domestic Product at current prices during 2012-13. The trends also differed between livestock census and the NSSO report. Agro-experts were of the opinion that mismatch of data on livestock was nothing new. The mismatch happened even in 1982, 1992, 1997 but the concerned ministry never rectified it (Choube 2015).

5. Strategy for Improvement of Social Insurance for Livestock Safety from Natural Disasters

To begin with, impact assessment of LIS needs to be improved. This may be done in three ways. Firstly, mapping notified livestock according to area – the lowest unit of area could be "village" at rural level and "municipality wards" for urban areas. Secondly, costing of social insurance should be estimated based on affected areas for which time-series data of natural calamities need to be used. Thirdly, developing loss function based on various parameters that need to be worked out.

A holistic strategy to enhance livestock safety from natural disasters requires active participation of civil society in addition to LIS. As discussed earlier, NGOs play a very crucial role in post-disaster animal recovery, rehabilitation and treatment. Livestock safety can be delegated to dedicated NGOs at the pre-disaster stage itself. Coordinating with the respective State Disaster Management Authority (SDMAs), State Animal Husbandry Departments, and SIAs, the NGOs can be deployed to evacuate livestock to animal shelters that are specially built keeping in mind their needs. General trends in evacuation show that owners are compelled to leave their animals behind. NGOs can prevent death, disability or missing of animals and, thereby, they can reduce overall loss of animal wealth.

The package called LIS should include safety net against disability or missing of animals. It is rightly argued that the number of claims per time period, will rise as the range of claims which the scheme is authorised to handle is increased (Mosley 1989: 7). However, the number of claims will not increase drastically with livestock safety planning and active intervention of NGOs at the pre-disaster stage itself. This helps to thwart fears of insurance companies and expand current protection mechanisms.

Insurance companies often complain of moral hazards or frauds in livestock insurance claims. Frauds arise when it becomes difficult to determine whether the animal in the claim is the insured cattle (Dalal et al. 2012: 5). The cause has been attributed to identification problems of the correct animal. The real problem lies elsewhere. Based on the amount of premium paid by the farmer and cattle rearer, they wish to maximize the returns from it. Since the subsidized premium is valid only for two animals, insurance for more than two animals will entail full payment of premium by them. Poverty makes it unaffordable to insure more animals. Little wonder, economic rationality appropriates loopholes in identification of insured animals to claim compensation for uninsured assets. Thus, frauds emerge not because rural poor are malicious but out of constraints of poverty and subsidy limitations in LIS.

A way out may be modeled on the logic of donor-funded "food for work" programme. Here, it may be re-designed to a donor-funded "insurance for risk reduction work" programme (Linnerooth-Bayer 2009: 391). Such a programme has the potential to become a significant source of insurance for farmers and cattle rearers with more than two animals. Income from this source will assist to finance premium on more animals. LIS is valid for a maximum period of three years. In case of no death of livestock in three years, farmers and cattle rearers do not get either the insurance amount or a refund of the premium amount. This factor can lead to reluctance towards LIS or contribute to negligence of animals during disasters. This challenge can be grappled in this way- the insurance company can reduce the amount of premium based on the accumulated insurance amount which will act as incentive for farmers and cattle rearers to insure more livestock. Along with the "insurance for risk reduction work" programme, farmers and cattle rearers will be in a position to afford further insurance. In return, insurance companies get more business as well as lower cases of fraud. Given the role of NGOs in livestock safety, it will help to lower cases of real claim too.

6. Conclusion

Different beings experience disasters and vulnerabilities differently. Compared to human beings, animals including livestock are greatly vulnerable so much so the number of injured, missing, and dead may exceed that of human beings in disasters. This study shed light on the disaster laws and national policy to mitigate disaster risks to livestock. The need of the hour requires a direct approach to livestock emergency preparedness and response. It is strongly recommended mainstreaming livestock protection into disaster management at central and state levels. Mainstreaming would transform their marginality and induce greater sensitivity into disaster management design, planning, and implementation. Simultaneously, the government should train animal owners to be self-reliant with respect to livestock safety and evacuation (Heath 2001: 1904).

The Central Government sponsored LIS addresses death of livestock due to natural calamities like floods and droughts. However, this scheme is not foolproof which restricts impact assessment and a holistic conception of livestock safety during natural disasters. It was suggested that the role of NGOs be recognized and encouraged at pre-, during, and post-disaster stages. Additionally, it was proposed to introduce donor-funded "insurance for risk reduction work" programme and trim down premium on accumulated insurance amount which will act as incentive for farmers and cattle rearers to insure more livestock. These measures would decrease incidents of fraud and expedite the growth of insurance sector in rural India.

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