



Indian Farmer
Volume 8, Issue 12, 2021, Pp. 565-568.
Available online at: www.indianfarmer.net
ISSN: 2394-1227 (Online)

POPULAR ARTICLE



Disaster Preparedness for Animal

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Article Received: 25 December 2021

Published: 28 December 2021

INTRODUCTION

Livestock has been an integral part of human culture since the time people started raising animals. In ancient times, livestock was an important symbol of advancement and prosperity. It is not just another source of livelihoods but also a popular proposal way for vulnerable sections of society, especially, women. Dairy farming on landless and poor farms provides employment opportunities for their family members and contributes significantly to their family income. There is need for protecting animal/ livestock before, during and after disaster because there is a mutual give and take relationship between animal and human. Livestock income includes not only cash for the sale of animals, but also the provider of different services like mechanical power, farm ploughing, transport of different products, post harvesting process on farm and other different agricultural farm activities. Use of manure obtained from animals, from this dung we can also prepare compost for agriculture use as a fertilizer and fuel for cooking purpose. Livestock also provide milk, meat, egg, bone meal and blood meal. Animal plays an important role in providing self-employment, food in rural and urban areas and contributes to family nutrition, providing animal protein. Livestock products used as clothing include wool, hides, skins, leather and feathers (Khillare and Kaushal, 2021). In urban areas, livestock not only provide friends for the blind person, old and the lonely human but also provides protection like a security guard. Hence, we must protect every animal. Disaster means any event that causes significant damage and loss not only to people but also to infrastructure and the environment (Cutter, 2001). The Food and Agriculture Organization of the United Nations, 2008, described the disaster as a sever event in which a particular community could not function properly due to

loss of resources, economy, environment, etc., making it difficult for the community to cope up with the remaining resources. It is important to prepare preparedness plan to protect the livestock in different disaster situations such as earthquake, flood, tsunami, drought and cyclone. During a disaster, people lose their property and livelihoods that take time to recover. Natural or manmade disaster affects the weaker parts of society especially in developing countries as the reliance on animals for survival is enormous (Rai *et al.*, 2021). Disaster preparedness is very important for livestock because of the size of the animals, feed requirement, their living area and transportation needs. If you think that disaster just happens when you live in a flood plain, near an earthquake area, or in the coastal area, you might make a serious mistake. Disasters can happen anywhere and can take many forms, from barn burns to catastrophic explosions. It is imperative that animal owners prepare themselves to protect livestock, either by evacuating or taking shelter in the area. Disaster management authority, local Nongovernment organization, agricultural extension agency or local emergency management agency can be able to provide you with detail information about your preparedness of animal for disaster plans.

Measures/ strategy for disaster preparedness for livestock

1. In order to minimize the impact of natural disasters, a preparedness plan must be planned in advance and people should be able to participate effectively in such programs (Pyne and Samanta, 2009). Make a disaster plan to protect property, resources and animals. Create a list of emergency telephone numbers, including those of staff, workers, neighbour's, Para veterinarian, veterinarian, district veterinarian, poison control, animal shelters owners, animal care and control agency, regional extension service, local agricultural schools, address of feedstock providers in various regions, and different local volunteer's groups. Include a contact person outside the disaster area as the local resources are overwhelmed. Make sure all the details are documented and everyone has a copy. Review and update disaster plan.
2. Disaster planning involves recognize an organization resource, determining roles and responsibilities, develop policies, better policy formulation, better implementation processes and planning activities in to reach all the level of preparedness to respond on time and effectively when actually disaster occur (Rasool *et al.*, 2021). Early warning systems about disasters can save animal life and property hence raising awareness among the people of the dangers by providing advice on basic health and hygiene requirements of animals.
3. There should be a separate plan for animal population preparedness plan at the state, district and block level. Construction of scientific animal shelters in disaster-prone areas. Under normal circumstances, these facilities may be used for livestock feed and fodder stores, livestock production, extension centre which give awareness about disaster management. In the case of animals move to safer areas during disaster than preference should be given to bulls, dairy cows, breeding bulls as their losses could cause serious damage to the economy.

4. Make sure all animals are visible identification mark from even long distance also. Make sure that the poultry birds reach high places where they can live, if they are in a flood-prone area and they should provide hygienic feed and water to avoidance of disease outbreak in the flock.
5. Floodwaters often contaminate soil, animal feed, and sources of clean water by transporting chemicals, fertilizers, garbage and other waste from containers to the environment hence proper label dangerous pesticides containers and keep them in a safe place. Also, remove chemicals, fertilizers and other contaminants into the elevated area and inspect containers for leaks.
6. Regularly check the safety of all equipment, facilities, animal buildings shelters in cyclone prone area. Remove all sharp object, edges of wire so that the animals can move to higher ground in a flood's situation. Farmers and animal owners should assess the risk of flooding their specific region and plan accordingly.
7. Efforts should be made to collect animal feed, fodder, medicines, first aid box etc and should be kept in safe places.
8. Animal shelters should be close to human shelters so that people can take their animals with them during the warning period of disaster. Install manually operated a water hand pump and obtain enough large containers to provide fresh, wholesome water for animals at least a week on animal farm. Need to keep important extra stock of feed, vaccines, and medicines for animals in disaster-prone areas.
9. Find other sources of water and energy. A safe fuel-efficient generator may be useful, especially if you have the electrical equipment needed for your well-being of animal health.
10. Emergencies plan to evacuate animals from the affected areas. For poultry birds, special cages and transport arrangements should be made.
11. Community people should be trained to protect their animal population and first aid treatment in the disaster situation.
12. The separate detailed action plan should be chalked out for veterinary staff who should receive the training dealing with specific disaster conditions.
13. In earthquake, flood and hurricanes prone areas, regular mock drill/ exercises for animal protection should be there. Scientific and actual training should be given to animal owners, farmers for evacuating their animals.
14. Review disaster risk management preparedness for available veterinary hospitals, veterinary dispensary, mobile veterinary units and veterinary ambulance arrangements for access to sick and injured animals. Also, availability of adequate storage of medicines, animal vaccines, surgical equipment, diagnostics facilities, material for sanitation, personal protective equipment.
15. Vaccination of all domestic animals and deworming of livestock for economically important infectious animal diseases prior to rainy season and as per schedule of vaccination against specific diseases.

keep farm disaster kit on animal farm

Make a disaster kit so that you have what you need in case of an emergency. Place the kit in the center and let everyone know where it is. Check the contents regularly to confirm new and complete assets. Current list of all animals, including their location and records of their feed, vaccination, and testing. Make this information available in various locations on the animal farm. Make sure you have proof of ownership of all the domestic animals. Temporary animal identification materials, such as plastic necklaces and permanent markers to label your animals by your name, address and phone number. Keep the first aid kit / box ready. Animal handling different equipment's such as halters, cages, and all required tools are appropriate for each type of animal. Water, food, and buckets. Sanitation tools and materials are also required. Disaster equipment such as cell phones, flashlights, portable radios, and batteries. Other safety equipment's required for emergencies for your vehicles.

CONCLUSION

Animals are the important part of human life. Many people rely on livestock for their survival and care for their animals' health and wellbeing. Animals are productive assets requiring protection and scientific care to preserve their productive quality. Animals also represent more than food. They also provide livelihoods, cultural identity and companionship. Well prepared in advance plan for disaster preparedness for animals to be able to protect the life of livestock. Disaster awareness, preparedness and management training should be given to livestock owners and farmers. Veterinary officer plays an important role in disaster preparedness for animals. Farmers and animal owners should be kept animal farm disaster kit on their animal farm.

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