Japan’s experience after the Great East Japan Earthquake

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Characteristic of Japanese Livestock Industry

• High temperature/ humidity with typhoons, torrential rains and heavy snow.
• Seismic and volcanic activities occur constantly.
• Small island with limited cultivated acreage.

• Most livestock animals are kept in shelter.
• Self sufficiency of feed is only 26%. Most of feed grain is imported from US.
• Appropriate manure/disease control is required.
• The average size of livestock farm is expanding to against the trade liberalization.
General Background
Legal framework of disaster management in Japan

• Disaster Countermeasures Basic Act requires national/local government to establish its basic management plan.

• According to the law of humane treatment and management of animals, local gov. has to establish a plan for welfare and management of animals. The plan has to include management of animals in disaster, to secure proper handling, feeding and keeping.
Basic approach for disaster management is preparedness

• This is an example of call to livestock farmers to pay attention for Typhoon arrival from the livestock hygiene service center.

• As a preparedness, reinforcement of shelters, secure of evacuation root and generator are recommended.
Typical disaster management system at regional level

Disaster management is done by the prefecture gov. under the cooperation with stakeholders.

Municipality Gov.

Industrial Development Division

Prefecture Gov.

Livestock Production Division※

Livestock Hygiene Service Center※

Expert volunteers

Livestock Industry Assoc.
Agricultural cooperative.
Agricultural Insurance Assoc.※
Veterinary Medical Assoc.※
Livestock Dealer Assoc.
e etc.

※ means Veterinary Services

Livestock Farm
Importance of volunteers' activities

• Volunteers’ activity to disaster recovery has been spotlighted after the Great Hanshin-Awaji Earthquake in 1995.

• Volunteer’s will be classified with “General volunteer” and “Expert volunteer”.

• The Cabinet Office published a brochure to enhance both participation/receiving of volunteers.
Voluntary organization for Disaster Prevention

• Municipality Gov. has to support to establish neighborhood community association/ resident’s association.

• Historically, these voluntary organizations play important role during the disaster. However, entering an era of an aging population, maintain their high activity level become difficult.

• In the field of livestock industry, stakeholder’s associations work as the “Expert Volunteers”
After National Gov. receives request from Prefecture Gov.

- If the impact of disaster is too serious to recover with local level, the prefecture Gov. will require support to the National Gov.
- In such case, “National Headquarter” will be established in the Prime Minister’s Office and “On-site Headquarter” will be established in the local area affected by the disaster.
Organization for FMD eradication in Miyazaki

National Headquater (Prime Minister’s Office)
- Ministry of Agriculture Forestry and Fisheries
  - Food Safety and Consumer Affairs Bureau
  - Animal Health Division※
- Animal Quarantine Office※
- Livestock Industry Bureau (Director for RM)
- National Livestock Breeding Center (Emergency Responding Team)

On-site Headquarter
- Supervised by the Vice Minister of MAFF.
- Attaches from relevant government office gathered to coordinate between the National Headquarter and Miyazaki Pref.

Miyazaki Pref. Gov. (Governor’s Office)
- Livestock Production Division※
- Livestock Hygiene Service Center※

Prefecture Gov.
- Livestock Industry Assoc.
- Agricultural Insurance Assoc.※

Ministry of Land, Infrastructure and Transport Defence Agency
National Police Agency

Veterinary Medical Assoc.※
Livestock Dealer Assoc.
Agricultural Cooperative. etc.
Current Improvement of the organization

• Established a new position titled as “Director for risk management” in Livestock Industry Department of MAFF.

• Amended the medium-term objective of NLBC and add “Disaster Assistance” as a formal mission.

• Established the “Emergency responding team” in NLBC

• Stored necessary materials in NLBC with subscribe from JRA.

※After the Great East Japan Earthquake
※After the outbreak of FMD in Miyazaki
Response to the Great East Japan Earthquake
Impact by the Great East Japan Earthquake to livestock Industry

- Earthquake and Tsunami destroyed communication, power supply and transportation.
- Tsunami destroyed feed mill and harbor facilities.
- Nuclear power plant accident forced residents evacuate from 20 km radius from the plant.
- Released radioactive substance caused food/feed contamination.
Recovery of feed supply

【As for earthquake and TUNAMI】
MAFF released national stock of feed grain.
MAFF paid incentives to increased production of formula feed in non-affected areas and to transport of the feed to the affected area.

【As for nuclear power plant accident】
National Livestock Breeding Center provided hays free of charge to farmers who were in 20-30 km radius from the nuclear power plant.
To secure the food and feed safety, the Government of Japan introduced new regulation with radio active substances.
Assist evacuation of residents by supporting evacuation of owned animal.

Many livestock animals were within 20 km radius from the plant and the surrounding area. Some farmers refused to leave their farm, because they had to care for their livestock animals.

Pollution of Livestock products and feed were widely reported.

Vehicles and fuel were not enough to assist evacuation of animals.

No guidelines to secure safety of livestock industry workers concerning control of dose of the exposure to radiation.
Procedure of evacuation of animals from planned evacuation area.

MAFF assisted evacuation of 10,000 heads of cattle from the planned evacuation area before it came into effect (within a month).

Confirm the animal was cared under the appropriate condition with a questionnaire.

Check the level of radioactive pollution is lower than 100,000 c.p.m. with survey meter. If result exceed the threshold, clean up of the surface of animals are necessary.

Loading animal onto the vehicle.

Clean up wheels and tires of the vehicle.

The veterinary official has to check every step.
Secure the safety of workers.

The GOJ prohibited the entry within a 20 km radius from the plant because it could not foresee the development of the accident.

We established the guideline to control dose of the exposure to radiation among the workers who will be engaged in evacuation of animals.

【Guideline】
Every worker must wear radiation-protective equipment.
Dose of the exposure to radiation among the workers should be controlled by personal dosimeters. The maximum total exposure is 20 mSV per year.
Workers and vehicles should have screening and cleaning.
Burial of the dead animals is prohibited, because there will be the risk of recontamination with polluted dust, so dead animals should be covered with plastic sheet and slaked lime.

Planned the working project for released animals with FUKUSHIMA prefecture after the investigation by the reconnaissance team.
Respond to livestock animals released from the farm after the great east Japan earthquake.

【Background】
Some farmers and animal activists released livestock animals from the farm.

These animal caused following problems:
- Disturbed search for missing persons
- Broke into houses and farm facilities and dirty with feces
- Caused traffic accidents with vehicles

These animals gradually became more wild, and started breeding.

【Respond】
The GOJ, Fukushima prefecture and NLBC started to capture the animals with trap and tranquilizer guns.
Many companion animals were suffered.

20 of Local Veterinary Medical Associations did following activities:

1. Examination of suffering pets at the shelter
2. Took care of animals from suffered persons

At least the associations kept 242 heads of dogs/cats in Fukushima prefecture.

Local Veterinary Medical Assoc. examined suffering pets and protected pets.
What Japan is doing to reflect the lessons learned from the Great East Japan Earthquake
Amendment of Disaster Countermeasures Basic Act

The Act was amended to reflect the experiences during the Great East Japan Earthquake in 2012.

• Strengthen the quick corresponding ability for the disaster which affect for wide area and its impact is serious.
• Securing the safety/ immediate evacuation of the residents.
• Improvement of measures to protect the sufferers.
• Strengthen the efforts to disaster prevention in peace time.
Review activity of local disaster management plan by the local gov.

• Review activity at local level is a step forward to reflect the experiences during the Great East Japan Earthquake.

• Preparedness for accident of nuclear power plant.
• Review the result of Risk Assessment, especially for Tsunami.
• Enhance the establishment of "Business Continuation Plan" by private enterprise.
• Securing the cooperation with private sector and volunteers etc.
Thank you for your attention!

Thank you for your supports which Japan received after the Great East Japan Earthquake.