

Context

Country Situation

Bhutan is a mountainous country and emergencies usually arise due to the following factors:

1. Road accidents because of the rugged terrain.
2. Flash floods from monsoon rains or bursting of glacial lakes.
3. Earthquakes as the country is in earthquake zone.
4. Fire
5. In the recent years, emergencies related to Indian militants who have taken refuge in the Bhutan forests.
6. Other occupational hazards (falls and animal attacks).
7. Chemical hazards from insecticides.

As the country is highly rugged and rocky, motor roads are narrow and pass through dense forests and vertical cliffs. As the traffic is increasing in the recent years, road accidents are increasing year by year.

The Road Safety and Transport Authority (RSTA) is doing much work to improve this situation. Backed by the 1999 Road Safety and Transport Act, motor vehicles are constantly under scrutiny for their roadworthiness. Besides the annual fitness checks, public transport vehicles are checked more frequently. The mobile inspectors and traffic police inspect all public vehicles after they are boarded and just before the departure. Their carrying capacity has been reduced significantly over the years. The running life of vehicles has also been reduced to 5-8 years depending on the type of the vehicle. Insurance requirements are also very strict.

Similarly, licensing for drivers has been tied up with training requirements and refresher training during their renewals.

These vehicles have to play audiotapes carrying messages about road safety in order to educate transport staff and the passengers. The national newsweekly carries road safety messages in all the issues and similar messages are disseminated using the television service from time to time.

Together with other sectors like the Public Works Department, the RSTA examines the road network and carries out both repair and widening works. In order to control pollution, emission tests have been introduced for all the vehicles in liaison with the National Environment Commission.

Bhutan is also bothered by flash floods from monsoon rains and bursting glacial lakes. Much preventive action is being taken. The glacial lakes are constantly monitored and when danger is detected, arrangements are made to drain water so that they do not burst causing floods. Similarly, roads and bridges are constantly watched for dangers from monsoon floods.

Although earthquake problems are not known in Bhutan's history there has not been much damage from earthquakes for a long time now. However, being in the earthquake zone, preventive measures are being taken. The designs of new houses incorporate certain amount of measure for safety from earthquakes. The tallest permitted construction in Bhutan is five storeys for the same purpose. Emergency exits are a new feature coming into building designs although no such provision existed in the previous building designs.

As the houses are mainly constructed with timber, fire hazards including forest fires are very common in Bhutan. Fire fighting teams are stationed in every big settlement in the country for this reason besides improving the household safety measures.

Although it has not been a regular feature, one of the major problems in the recent years has been the presence of three well-known Indian militant groups hiding in the jungles in southern Bhutan. Not only do they loot and collect contributions from the bordering districts of Assam and West Bengal, they hinder the economic activities of the country. The country has negotiated with them for six years to leave the country peacefully and these efforts have failed. As per the decision of the National Assembly, the Government had to finally use force to drive them out in December 2003. A lot of preparations have gone on for this emergency. Besides the military preparations, the Ministry of Health had to prepare to deal with the casualties. Starting with 1999, the Ministry trained 222 health workers consisting of doctors, nurses, and health workers and prepared its Emergency Medical Teams (EMTs) headed by one of the Directors from the Health Ministry. Emergency Services Back-up teams from the key hospitals and trauma centers supported these EMTs. In preparation for this emergency, a national emergency medical service guidelines was prepared together with the development of a standard training manual for EMTs which included topics of triaging, CPR, first aid, etc. among other things. Simulated disaster exercises were a part of the training.

As the settlements are in close proximity to the forest areas, it is often a case that a farmer is brought to hospital from animal attacks. Further, cutting fodder from tall trees, people also sustain injuries. These are altogether another type of emergency that the country's hospitals are prepared to handle.

Although chemical hazards are minimum, the health facilities do have to deal with these cases from time to time. There have been cases where people consumed fresh vegetables still containing insecticides used to protect them from worms and caterpillars and got sick. Similarly, summer mushrooms often poison people. There have also been cases where employees assigned to kill stray dogs with poisons died from contaminations. Concerned sectors are also taking into consideration the threat of food contamination and preparing to deal with them.

Bhutan also had to prepare to deal with SARS threat during 2003 like the rest of the countries in the Region. WHO's technical guidance has been very helpful for the country. Besides outbreak of diseases, natural occurrence or imported from other countries, direct biological warfare threat may not be a danger for the country although biological warfare was not unknown in the mid 1800s when Bhutan was torn by civil conflicts among the various feudal lords in the country. At that time it was often a practice to send expensive clothing gifts to a rival leader after making that gift to be worn by a person infected by smallpox and other deadly diseases.

So far Bhutan has not dealt with radiation emergencies, but preparations can start for that too.

Initiatives taken

The initiatives taken to prepare the country to deal with the specific problems mentioned above are already mentioned under each heading. The broad initiatives may be discussed under the following headings.

The Health Ministry has appointed focal units in the Ministry to deal with the emergency health activities. With technical support from the Regional Office, a general review of the situation took place in 2003. With WHO funding, a Programme has been initiated on EHA for the first time.

Trauma units have been set up in at least three places with ICU, OT, Laboratory and X-ray facilities. Blood banking facilities have also increased with identified live donors, as the storage facilities are not so good.

As mentioned above, Emergency Medical Team system has been established although their training content should now be broadened to deal with problems other than armed conflicts. Training manuals will also have to be improved and broadened.

In 2003, the Government also requested for exposure of concerned people in the Programme to other countries that had experience of dealing with emergencies so as to learn from these experiences. We have put this proposal up to the Regional Office. As the funds were short, this did not materialize. The Programme hopes for support and guidance of the concerned Technical Unit in the WHO Regional Office.