

6-2 Field Survey on Bangladesh Cyclone

From 27 November to 3 December 2007, the Asian Disaster Reduction Center (ADRC) conducted an emergency field survey on Cyclone Sidr, which struck southern Bangladesh on the night of 15 November 2007. The results of this survey are presented below.

Cyclone Sidr, with wind speeds up to 250 kilometers per hour, emerged in the Bay of Bengal on 11 November, made landfall near Patargata at about 18:30 on 15 November, and swept through the country in a northeasterly direction until it dissipated on 16 November. According to the situation report released by the Ministry of Food and Disaster Management of Bangladesh on 26 December 2007, it resulted in more than 4,234 dead and missing, affected 8,923,259 people, and damaged (either totally or partially) more than 1,518,942 homes.



Cyclones struck Bangladesh in 1970, causing about 300,000 deaths, and in 1991, causing about 140,000 deaths. Since 1991, international assistance has been used to promote several disaster prevention measures, including the construction of cyclone shelters, the development of an early warning system, and the improvement of riverbanks.

The ADRC conducted a survey focused on (1) early warning systems (issuance of alerts, information dissemination to communities), (2) evacuation conditions facing residents, (3) the effectiveness of cyclone evacuation shelters, and (4) the needs and challenges facing afflicted areas with regard to recovery. Since Sidr's point of landfall, along the southern coast of Barguna, was close to that of the 1970 cyclone, the ADRC survey compared the damage caused by Sidr to that caused by previous cyclones. Tremendous support for this survey was provided by the Bangladesh Disaster Preparedness Centre.

The results are as follows.

Because the government and the Red Crescent Society developed an early warning system after the 1991 cyclone, warnings were able to be issued to municipalities and residents two to three days before the cyclone hit, and even up until the afternoon of the cyclone. However, most residents started to evacuate when the winds began to pick up.

Some farmers did not evacuate because they did not want to leave their livestock, their sole source of income. Others remained in their homes because the false tsunami warning issued in September (after the earthquake in Indonesia) made them skeptical of the cyclone warning.

Since the 1991 cyclone, about 2,000 evacuation shelters have been set up, mainly in the coastal areas, but these could not handle the actual number of evacuees. The shelters the ADRC visited were designed to house 500, but

there were about 2,000 evacuees. Everyone survived, but was left standing throughout the night.

There were earthen riverbanks along the coast five to six meters in height. They likely mitigated some of the storm surge damage, but sections that were destroyed produced serious damage.

After the 1970 cyclone, forestation efforts were made in the coastal areas. The forestation zones were found to be effective against tidal waves and strong winds.

Though Cyclone Sidr was more powerful than the 1970 cyclone, which caused 300,000 deaths and moved through similar areas, it caused far fewer deaths. This is attributed to effects of such disaster prevention measures as the establishment of shelters and riverbanks, and the implementation of warning and evacuation programs.

The challenges for the future are to educate people about the importance of disaster warnings, increase the number of shelters, create a small hill (killa) near the cyclone shelter for livestock, quickly repair damaged riverbanks and roads, and employ disaster victims in the above-mentioned recovery projects to support their independence.

