

Patuakhali Science and Technology University Semester: MS in ESDM, Major in Disaster Resilience and Engineering, July-December/2019 Dumki, Patuakhali-8602

Cyclone Sidr

On 15 November 2007, Cyclone Sidr struck the coast of Bangladesh and moved inland, destroying infrastructure, causing numerous deaths, disrupting economic activities, and affecting social conditions, especially in the poorer areas of the country. At landfall, Sidr was a category 4 storm8, with a diameter of nearly 1000 km and sustained winds of up to 240 km per hour.

The number of deaths caused by Sidr is estimated at 3,406, with 1,001 still missing, and over 55,000 people sustaining physical injuries. However, damage to agriculture, physical infrastructure and socio-economic sectors were significantly higher in affected 30 districts.

Characteristics of Cyclone Sidr

Maximum wind speed	240 km/hr
Storm surge height	5-6 meter (MSL)
Cyclone category	4
Cyclone duration	12 hr
Landfall time	2 am

Impacts of Cyclone Sidr

Total number of cyclone affected population	89,23,259
Total number of lives lost and Missing	4,234
Total houses damaged (full and partially)	1518942
Total Educational institutions damaged (full and partially)	16954
Total amount of damage	1.7 billion USD

Evacuation Response to Cyclone Warning during Sidr (2007)

The overall evacuation rate for cyclone Sidr was 33 percent. Distance of cyclone shelters from house is nearly 3 km. and the shelters are made available 1-2 km of the residence, it might be too difficult for coastal residents to travel in time of emergency.

The Immediate Response

In the days before Sidr's landfall, the Bangladesh Meteorological Department (BMD) issued cyclone warnings, including advisory messages using the Government's warning signal system.



Warnings were sent to communities regularly, and once, warning signal number four was even hoisted on 14 November, resulting in 44,000 volunteers who immediately activated community-based warning systems, utilizing megaphones and other devices. After the storm, the Armed Forces immediately launched massive search and rescue and early relief operations. They also played an important role in helping communities bury their dead and remove dead livestock.

Bhola Cyclone

On the evening of November 12, 1970, the great Bhola cyclone made landfall as a category 3 cyclonic storm was one of the deadliest natural disasters in the recorded history. Maximum wind speed was recorded 223 km/hr with a remarkably high storm surge height of 6.1 to 9.1 meter, struck the densely populated coast in Barisal region at the early hours of the morning that resulted in a widespread tidal flooding with blowing of many people in their sleep. The estimated damage was 450 million US dollars and estimated death toll was ranging from more than 300000 people with 100000 people was missing.

Characteristics of Bhola Cyclone

Maximum wind speed	223 km/hr
Storm surge height	6.1 – 9.1 meter (MSL)
Cyclone category	3
Cyclone duration	-
Landfall time	morning

Impacts of Bhola Cyclone

Total number of cyclone affected population	4,700,000
Total number of lives lost and Missing	300,000-500,000
Total houses damaged (full and partially)	400,000
Total Educational institutions damaged (full and partially)	3,500
Total amount of damage	450 million USD