

= 2004 Myanmar cyclone =

The 2004 Myanmar cyclone was considered the worst to strike the country since 1968 . The second tropical cyclone of the 2004 North Indian Ocean cyclone season , it formed as a depression on May 16 in the central Bay of Bengal . With low wind shear and a surge in the monsoon trough , the storm intensified while meandering over open waters . The storm eventually began a steady northeastward motion due to a ridge to the north over India . While approaching land , an eye developed in the center of the storm , indicative of a strong cyclone . On May 19 , the cyclone made landfall along northwestern Myanmar near Sittwe , with maximum sustained winds estimated at 165 km / h (105 mph) by the India Meteorological Department . The storm rapidly weakened over land , although its remnants spread rainfall into northern Thailand and Yunnan province in China .

Winds from the cyclone reached 157 km / h (98 mph) in Myanmar , occurring in conjunction with heavy rainfall and a high storm surge . Despite the storm 's ferocity , the government did not report about the cyclone for ten days , as they usually under @-@ report on landfalling storms . The cyclone caused heavy damage throughout Rakhine State , destroying or heavily damaging 4 @,@ 035 homes and leaving 25 @,@ 000 people homeless . There was widespread crop damage , resulting in food shortages , and damaged roads disrupted subsequent relief efforts . Damage in Myanmar totaled over K621 million kyat (\$ 99 @.@ 2 million USD) , making it the worst storm in the country since 1968 , and there were 236 deaths , with an unofficial death toll as high as 1 @,@ 000 . Although damage was heaviest in Myanmar , the cyclone 's effects also spread into neighboring Bangladesh , where strong winds knocked over trees and capsized two ships .

= = Meteorological history = =

Late on May 14 , an area of convection , or thunderstorms , developed in the central Bay of Bengal about 880 kilometres (545 miles) south @-@ southeast of Kolkata , India , associated with the monsoon trough . On May 15 , the system developed into a low pressure area off the west coast of Myanmar (Burma) . Initially , the convection was associated with a low @-@ level circulation center , developing good outflow despite the presence of wind shear . As the shear decreased , the thunderstorms increased and organized , with the eastward @-@ moving circulation partially exposed . At 09 : 00 UTC on May 16 , the India Meteorological Department classified the system as a depression , and nine hours later the agency upgraded it to a deep depression as the system turned northwestward .

The nascent system quickly organized , aided by the decreasing wind shear , as well as a surge in the monsoon . The IMD upgraded the depression to a cyclonic storm at 03 : 00 UTC on May 17 . At 12 : 00 UTC that day , the Joint Typhoon Warning Center (JTWC) began issuing warnings on the system with its own designation Tropical Cyclone 02B . With weak steering currents , the storm meandered over the central Bay of Bengal , executing a small cyclonic loop over 30 hours . The cloud pattern organized into a central dense overcast that was initially irregular in nature . However , the storm quickly intensified on May 18 , strengthening into a severe cyclonic storm and later very severe cyclonic storm . During this time , the cyclone turned eastward under the influence of a ridge over India to the north .

A buoy near the storm 's center recorded a pressure of 994 mbar (29 @.@ 4 inHg) on May 18 , the lowest recorded pressure in association with the storm . Convection increased around the center and organized into a distinct eye . The JTWC upgraded the cyclone to the equivalent of a minimal hurricane at 00 : 00 UTC on May 19 , estimating peak 1 minute sustained winds of 120 km / h (75 mph) . The IMD assessed a much higher intensity , estimating peak 3 minute winds of 165 km / h (105 mph) at 03 : 00 UTC that day . About an hour later , the cyclone made landfall at peak intensity with an estimated pressure of 952 mbar (28 @.@ 1 inHg) in northwestern Myanmar near Sittwe , near the country 's border with Bangladesh . It weakened gradually over land , dissipating over Myanmar late on May 19 .

= = Impact = =

While stalling in the Bay of Bengal , the cyclone 's outskirts dropped light to moderate rainfall along the eastern coast of India . In Odisha , two locations reported daily rainfall totals of 40 mm (1 @. @ 6 in) . Upon making landfall , the cyclone 's effects spread into southeastern Bangladesh , where heavy rainfall and high winds forced about 50 @, @ 000 people to evacuate to shelters . The winds also knocked down trees and power lines . Two boats sank off Cox 's Bazar , leaving five fishermen missing . Later , the remnants of the cyclone dropped heavy rainfall in northern Thailand , reaching 112 @. @ 4 mm (4 @. @ 43 in) in 24 hours at the Bhumibol Dam . In the nearby Yunnan province in China , precipitation reached 75 @. @ 5 mm (2 @. @ 97 in) in Ruili .

= = = Myanmar = = =

Damage was heaviest in Myanmar where the storm moved ashore , and winds of 157 km / h (98 mph) were reported . Widespread areas reported winds of 40 km / h (25 mph) . The Tropical Rainfall Measuring Mission estimated that up to 500 mm (20 in) of precipitation fell along the Bay of Bengal coast in Myanmar and Bangladesh . There were reports of waves 15 m (50 ft) in height along the coast . A high storm surge and coastal flooding inundated four towns in Rakhine State , causing damage to water systems . Flooding was visible on satellite imagery in the days following the cyclone . Eight townships in the state were affected , five of them severely .

For 10 days , Myanmar 's government did not report about the cyclone , which usually under @- @ reports on storms that affect the country . There was also little to no advanced warning of the storm . The storm destroyed over 2 @, @ 650 homes and severely damaged another 1 @, @ 385 , leaving around 25 @, @ 000 people homeless , mostly in Pauktaw . Four hospitals in the region were heavily damaged , including the one in Sittwe that was unable to continue normal operations . About 300 schools were damaged or destroyed , including 44 in Sittwe . The storm also damaged or destroyed 133 religious buildings and 176 government buildings . Across the region , high winds knocked down telephone lines and disrupted power supply . About 2 @, @ 000 cattle were killed , and many rice mills were knocked down , causing a 70 % increase of food prices . Transportation was disrupted after roads were washed away , which contributed to food shortages , while damaged wells caused water shortages . During the storm , 84 ships were lost at sea , in addition to a lost ocean liner , while the main harbor at Sittwe was damaged , along with several fishing piers .

The United Nations Office for the Coordination of Humanitarian Affairs considered the cyclone as the worst to hit Myanmar since 1968 . Damage totaled over K621 million kyat (\$ 99 @. @ 2 million USD) . Officially , there were 236 deaths in the country , although there were unconfirmed reports of a death toll as high as 1 @, @ 000 . In the city of Myebon alone , there were 139 deaths . Most of the deaths were fishermen from Rakhine State caught at sea .

= = Aftermath = =

On May 27 , the Myanmar government issued a rare appeal for aid to the international community in response to damage from the storm . The request included \$ 220 @, @ 000 (USD) worth of rice , tarpaulin sheets for temporary shelter , medicine , and clothing , to assist 14 @, @ 000 people . In early June , the government issued an updated appeal to request \$ 337 @, @ 000 (USD) to help 25 @, @ 000 people , after the scope of the disaster became better known . The Red Cross operation responding to the cyclone ended in December 2004 , which marked the first time the agency had a major response to a disaster . It worked in conjunction with the World Food Programme , Bridge Asia Japan , and the Myanmar Maternal and Child Welfare Association , utilizing some private donations . Red Cross volunteers helped clear roads and clean ponds to return areas to normalcy . Typically , the government handles relief measures .

In the days following the storm , Myanmar 's Ministry of Social Welfare , Relief and Resettlement assessed damage in the affected areas to determine needs , and also coordinated relief efforts . The local Red Cross chapter went to the worst affected villages with water , water purification tablets , blankets , and mosquito nets . Many of the affected families were unable to afford rebuilding their

homes . Myanmar 's National Disaster Relief Committee distributed 500 tons of concrete and 50 @,@ 000 roofing sheets to help rebuild homes . By June 8 , all displaced residents were either staying with relatives or returned to their homes , with the reconstruction or resettlement process expected to take up to nine months . Myanmar 's then @-@ Prime Minister Khin Nyunt surveyed the damaged areas and held a ceremony on June 7 in Sittwe , where domestic donations were transferred to the government in " the spirit of national consolidation " . The Prime Minister stated that the country rarely experiences devastating cyclones due to their strong religious beliefs . A group of 35 Rohingya people from Yangon took a tour of Rakhine State after the storm , despite they are usually banned from the region . The group donated about \$ 267 @,@ 000 (USD) , although due to their minority status in the country , the aid did not help other Rohingyas in the state , who also did not receive assistance from the government .

In response to the aid request , various United Nations agencies sent \$ 175 @,@ 000 (USD) worth of financial or material assistance to the country . The World Food Programme provided 50 kg (110 lb) of rice to 3 @,@ 700 families for three months , and UNICEF provided medicines , corrugated sheeting , and latrine slabs . The government of Japan donated about ¥ 10 million worth of supplies , including blankets and water . The Chinese Red Cross donated about \$ 20 @,@ 000 (USD) worth of relief . Eight other governments and Red Cross chapters donated CHF331,432 francs worth of aid or supplies .