= Cyclone Filao =

Cyclone Filao was a moderately intense tropical cyclone that caused widespread flooding in Mozambique in 1988 . First classified as a tropical depression north of Madagascar , the system moved southwest , crossing the northern part of the nation before entering the Mozambique Channel on February 27 , where it began to deepen . Later that day , the depression was upgraded into a moderate tropical storm . Two days later , Filao attained severe tropical storm intensity as it began to stall . On March 1 , the storm reached cyclone intensity just before turning west . Later that day , Filao attained peak intensity , with winds of 135 km / h (85 mph) and a minimum barometric pressure of 954 mbar (hPa) ; 28 @.@ 17 inHg . Within 24 hours , however , the system moved ashore near Quelimane in Central Mozambique , and several hours later , Filao dissipated inland .

Cyclone Filao killed 100 people in Mozambique , primarily in rural areas . Damage was heaviest in Quelimane , where wind gusts reached 105 km / h (65 mph) and rainfall totaled 104 mm (4 @.@ 1 in) . There , 57 people were killed and 7 @,@ 375 were left homeless . Elsewhere , the Pungwe River and Limpopo River experienced severe flooding , with the former sustaining its worst flood of the decade . Power and telephone services were also knocked out while a road that connected Mozambique to Zimbabwe was destroyed . In all , 5 @,@ 500 ha (14 @,@ 000 acres) of crops were destroyed . Damage totaled to $ 10 million , including $ 1 @.@ 5 million in property damage .

= = Meteorological history = =

On February 23 , Météo @-@ France 's office on the island of Réunion (MFR) started monitoring a tropical depression to the northeast of Madagascar . At this time , the depression developed a closed circulation , which received a rating of T1.5 on the Dvorak Scale , a tool used to estimate a system 's intensity . Shortly thereafter , the Joint Typhoon Warning Center (JTWC) first classified the system , designating it as 14S . Following a slight increase in organization , the depression moved southwest and quickly crossed the tip of northern Madagascar . After weakening over land , the depression reentered the Mozambique channel near Analalava on February 25 . Based on a 3 @.@ 0 Dvorak classification , MFR upgraded the storm into a moderate tropical storm on February 27 ; the JTWC would follow suit later that day .

After reaching the 40th meridian , Filao turned south , which weakened a ridge . The ridge near the system began to re @-@ strengthen , causing Filao to move erratically , first west , and then northwest . The new position of the ridge provided highly favorable conditions aloft , resulting in a period of rapid deepening . By February 29 , MFR upgraded the storm into a severe tropical storm , while the JTWC estimated that Filao attained hurricane @-@ force . Early on March 1 , data from MFR indicated that Filao reached its peak intensity of 85 mph (135 km / h) and its minimum pressure of 954 mbar (hPa) ; 28 @.@ 17 inHg , in agreement with T4.5 and T5.0 from the Dvorak Technique . Subsequently , the JTWC reported that Cyclone Filao had attained winds equivalent to Category 2 intensity on the Saffir @-@ Simpson hurricane wind scale , with winds of 155 km / h (96 mph) . Despite a decrease in satellite intensity estimates , Filao held on to this intensity until 1800 UTC , when the storm made landfall near Quelimane in Mozambique . Cyclone Filao quickly weakened over land ; both agencies suggest that the storm dissipated on March 2 over the Zambeze Valley and embedded into the Intertropical Convergence Zone (ITCZ) .

= = Preparations and impact = =

Due to the weak nature of the storm while crossing Madagascar , damage was minor . After crossing Juan de Nova Island as a tropical depression on February 27 , winds of 54 km / h (34 mph) and gusts of 87 kilometres per hour (54 mph) were reported , along with a minimum barometric pressure of 1 @,@ 002 @.@ 3 millibars (29 @.@ 60 inHg) at 0250 UTC .

Although the cyclone affected a sparsely populated region of Mozambique , Filao brought heavy rains . Peak storm totals included 103 @.@ 9 mm (4 @.@ 09 in) in Quelimane and 51 @.@ 5 millimetres (2 @.@ 03 in) in Beira , both far greater than their March average . Winds of 47 mph (

76 km / h) and gusts of 67 mph (108 km / h) were measured . Furthermore , a minimum pressure of 993 @.@ 9 mbar (29 @.@ 35 inHg) was reported in Quelimane at 2300 UTC on March 1 .

The Zambezia Province , where Quelimane is located , sustained the worst damage from the cyclone . Throughout Quelimane , 57 fatalities were reported and 800 homes were damaged . Eleven people were wounded , 7 @,@ 375 persons were rendered homeless , 2 @,@ 240 buildings were damaged , of which 359 were completely destroyed . Throughout the city , power was knocked out and telephone service was cut .

In the Inhassunge Province , 400 ha (990 acres) of rice were lost and thousands of coconut trees were downed by the storm . Throughout the district , some schools were damaged while 800 homes were destroyed . Within the province of Sofala , 14 @,@ 395 ha (35 @,@ 570 acres) of harvest were destroyed , 28 @,@ 174 people were rendered homeless , and 1 @,@ 389 buildings were destroyed . Elsewhere , many rivers along the southern and central part of the nation were flooded ; consequently ; 5 @,@ 500 ha (14 @,@ 000 acres) of crops were destroyed . The Pungwe River experienced its worst flood of the 1980s , but the worst flooding took place along the Limpopo River . Near the Pungwe River , a road that connected Mozambique to Zimbabwe was destroyed . Many nearby homes and fields were destroyed , forcing numerous families to seek shelter . Throughout the nation of Mozambique , large portions of the maize , potatoes , tomatoes , cucumber , and pumpkin crops were washed away due to flooding .

Overall , the storm brought considerable damage to the nation ; it was also the first storm to affect the nation since Tropical Storm Domoina in 1984 . Damage totaled to $ 10 million (1988 USD) . Property damage alone totaled to $ 1 @.@ 5 million , just under $ 1 million of which came from buildings . Moreover , insured losses from the storm totaled $ 1 million . Even though the death toll was initially believed to be 57 ; by March 14 , this number had increased to the final death toll of 100 after additional information was received from remote areas of the country . About 90 @,@ 000 people were directly affected by the system .