

= Tropical Storm Soudelor ( 2009 ) =

Tropical Storm Soudelor , known in the Philippines as Tropical Depression Gorio , was a weak tropical cyclone that produced deadly flooding in the Philippines , China and Vietnam in July 2003 . Forming out of an area of low pressure on July 9 , Soudelor failed to maintain deep convection around its center for the duration of its existence . On July 10 , the depression brushed the northern Philippines and intensified into a tropical storm on July 11 . Later that day , the storm crossed the Leizhou Peninsula . The last public advisory from the JMA was issued the following day after Soudelor made landfall in southern China .

In the Philippines , Soudelor produced severe flooding that killed one person and resulted in the issuance of a state of calamity . The storm later killed 15 people in southern China after a group of hikers were washed away in a flash flood on Hainan Island . In Vietnam , rainfall up to 250 mm ( 9 @. @ 8 in ) caused widespread flooding . Lightning triggered by the storm killed two people in the country .

= = Meteorological history = =

Late on 7 July 2009 , the Joint Typhoon Warning Center ( JTWC ) reported that an area of disturbed weather had formed 900 km ( 560 mi ) to the northwest of Yap . Deep convection was embedded in a broad , weak , poorly defined circulation that was starting to be enhanced by a Tropical Upper Tropospheric Trough to the east of the system . Over the next couple of days , gradual development took place and early on July 9 , a Tropical Cyclone Formation Alert was issued by the JTWC . Around the same time , the Philippine Atmospheric , Geophysical and Astronomical Services Administration ( PAGASA ) designated the system as a tropical depression , giving it the name Gorio . Later that day both the JMA and the JTWC reported that the depression had formed and started to issue warnings on the depression , with the JTWC designating it as 05W ;

On July 10 , PAGASA issued their final advisory on Tropical Depression Gorio as it moved out of their area of responsibility . Hampered by an unfavorable upper @-@ level environment , the depression barely intensified into a tropical storm early on July 11 . Upon becoming a tropical storm , the JMA named the system Soudelor reporting peak winds of 65 km / h , ( 40 mph ) . Later that day the JTWC reported that Soudelor had weakened into a depression ; however they re @-@ upgraded it to a tropical storm as it moved closer to Hainan Province . Shortly before landfall in Leizhou Peninsula , China , the JTWC downgraded the storm to a tropical depression . After moving back over water in the Gulf of Tonkin , the JTWC issued their final advisory on the depression . The JMA , however , continued to monitor Soudelor until it made landfall near Fangchenggang , China several hours later .

= = Preparations and impact = =

= = = Philippines = = =

The Philippine Atmospheric , Geophysical and Astronomical Services Administration issued public storm signal one for nine regions of the northern Philippines . As a tropical depression , Soudelor brushed northern Luzon in the Philippines , producing upwards of 330 mm ( 13 in ) of rainfall which resulted in flash flooding and landslides . In Ilocos Norte , major roadways were completely blocked by high waters . The storm affected 19 @, @ 845 people throughout the Philippines and one person was killed after being swept away by a fast current . At least ten villages were flooded during the storm . Three homes were destroyed and two more were damaged by Soudelor . A total of 42 barangays were flooded by the storm , killing 21 cows and isolating low @-@ lying areas . On July 10 , a battalion from the army engineers were deployed to the affected region to repair infrastructure . Following the storm , the hardest hit town Bacarra , Ilocos Norte , was put under a state of calamity and regional aid was deployed to the area . Total damage was estimated at PHP 205 million \$ 4

@. @ 4 ( US 2009 ) .

= = = China = = =

In Hong Kong , the Hong Kong Observatory issued standby signal No. 1 as Soudelor neared the region on July 11 . The following day , the signal was raised to strong wind No. 3 due to the possibility of landfall near the region . The signal was lowered back to No. 1 later that day before they were all canceled early on July 12 . The emergency response system was put at level four water @-@ disaster in preparation for torrential rainfall from Soudelor . A red alert was also declared for the affected regions . Torrential rains in Hainan caused significant flooding that killed 15 hikers and left several others missing . Numerous roads were also cut off or destroyed by landslides and 30 villages were inundated with flood waters . In Hong Kong , outer bands of Soudelor produced squally rain showers on July 11 . About 20 trees reportedly fell within Hong Kong , one of which struck a mini bus terminal . The direct economic loss to china was estimated at about RMB 1.71billion , ( \$ 5 @. @ 4 million 2009 USD ) .

= = = Vietnam = = =

Ahead of the storm , 4 @, @ 000 fishing vessels were ordered to return to port and up to 200 volunteers were mobilized to deal with damages from the storm . Officials evacuated people from 297 residences to higher grounds and reported that 977 other homes were in threatened areas . Roughly VND71 billion ( US \$ 3 @. @ 98 million ) was set aside by the Government of Vietnam to assist residents in natural disasters , including Soudelor . An estimated 5 @, @ 000 sandbags and 1 @, @ 000 cubic meters of canvas were distributed to flood @-@ prone areas . The remnants of Soudelor produced widespread torrential rains in Northern Vietnam on July 13 . Rainfall totals peaked at 250 mm ( 9 @. @ 8 in ) in the region . Heavy rainfall , amounting to 130 mm ( 5 @. @ 1 in ) , was also recorded in Hanoi . The capital city experienced flash flooding , inundating numerous streets and buildings . Two men were killed by lightning strikes associated with the storm . Officials reported that at least 13 large trees had been downed by high winds . Flood waters in the hardest @-@ hit areas reached a depth of 0 @. @ 35 m ( 1 @. @ 1 ft ) . One person was killed after being swept away . A tornado also touched down during the storm , destroying the roofs of three homes . Thousands of hectares of croplands were inundated by flood waters . Following the storm , 1 @, @ 000 tonnes of rice was allocated for victims of the floods .