

= September 2009 Vietnam tropical depression =

The September 2009 Vietnam tropical depression was a weak tropical depression that caused deadly flooding throughout central Vietnam in early September . Forming out of an area of low pressure on September 3 , the depression hardly intensified as it meandered off the coast of Vietnam . Initially situated in a favorable environment , convective banding features began to develop and shower and thunderstorm activity formed near the center . On September 4 , the Joint Typhoon Warning Center issued a Tropical Cyclone Formation Alert ; however , a sudden increase in wind shear caused the system to rapidly become disorganized , leading to the cancellation of the alert the next day . The system continued to slowly track off the coast of Vietnam , nearly dissipating on September 5 , before becoming better organized . However , the depression remained weak , with the JTWC reporting on September 7 that the depression had dissipated , though the Japan Meteorological Agency (JMA) continued to issue advisories until the depression dissipated during September 9 .

Although the depression did not make landfall , the outer rainbands of the storm led to heavy rainfall throughout central Vietnam , peaking at 430 mm (17 in) . The ensuing floods killed at least six people and left three others missing . Large areas of cropland were inundated by the waters and numerous homes were damaged . In Quang Nam Province , damages from the system were estimated at 45 billion (VND ; \$ 2 @. @ 52 million USD) .

= = Meteorological history = =

The tropical depression originated from an area of low pressure in the South China Sea on September 1 . Scattered convection was associated with the system , with the center devoid of showers and thunderstorms , as the low slowly tracked westward in a weak steering environment . Weak outflow had formed along the northern edge of the system ; however , intensification was not anticipated . The following day , convection began to form around the center of circulation and weak diffluence was noted around the system due to an anticyclone to the north . With low wind shear , convective banding features began to develop and the possibility of the system becoming a tropical cyclone increased . Early on September 3 , the JMA began issuing advisories on the cyclone , classifying it as a tropical depression , the twentieth depression to be monitored by the JMA during the season .

Although the system had a partially exposed low @-@ level circulation center , the Joint Typhoon Warning Center (JTWC) issued a Tropical Cyclone Formation Alert (TCFA) as the depression was likely to intensify as it was situated over high sea surface temperatures and in a favorable environment . However , by September 4 , wind shear quickly increased and dislocated all of the convection associated with the depression from the center of circulation . This led to the JTWC canceling their TCFA as the environment was no longer favorable for development . The following day , the JTWC declared that the system had dissipated and was no longer a suspect area for tropical cyclone development as the system was virtually stationary off the coast of Vietnam . The JMA , on the other hand , continued to monitor the cyclone as a tropical depression . Although previously declaring that the system dissipated early on September 6 , the JTWC began monitoring the re @-@ developing system later that day . Convective banding had reformed , wind shear had decreased and the cyclone had less interaction with land as it slowly moved further into the South China Sea . However , late on September 8 , both agencies declared that the depression had dissipated off the coast of Vietnam .

= = Impact = =

At least six people were killed , three were left missing and nine were injured by the depression throughout Vietnam . Rainfall from the storm exceeded 430 mm (17 in) , triggering widespread flash flooding . A maximum of 540 mm (21 in) fell in Hu? . Sixty @-@ one tons of fish were swept away during the floods and 8 @, @ 700 hectares of rice fields were destroyed . The city of Da Nang

sustained the worst flooding from the storm , with some areas reporting flood depths of .8 m (2 @. @ 6 ft) . Schools throughout the area were closed as many residents were unable to pass through flooded streets . A sixth grader drowned in the city after the boat he was on overturned in flood waters . In Hu? , a two @-@ year @-@ old drowned in flood waters on September 4 . A large section of highway 14B , connecting Nam ?ông and Hu? was washed away . In Qu?ng Ngãi Province , two fishermen were left missing and five other people were injured by the storm . At least three homes sustained severe damage . Residents throughout Qu?ng Tr? Province were advised to evacuate to safer areas as numerous landslides threatened homes .

Numerous bridges were washed away by flood waters exceeding 1 @. @ 5 m (4 @. @ 9 ft) , isolating several communities . In the S?n T?nh District , 76 structures were destroyed by flooding and high winds . More than 200 homes were inundated by up to 0 @. @ 7 m (2 @. @ 3 ft) of flood waters in the communities of Hoa Tho Dong and Hoa Phat . At least one ship sank and officials lost contact with two others ; officials stated that 1 @, @ 178 boats were in the South China Sea in the storm . In the valleys of Tam K? and Phú Ninh , nearly 1 @, @ 000 homes were inundated by water . Roughly 20 % of the 373 @, @ 000 students starting school were told to remain home as their schools were closed due to flood waters . By September 7 , officials in Qu?ng Nam Province estimated that property damages from the depression had reached 20 billion (VND ; \$ 1 @. @ 12 million USD) and agricultural losses amounted to 25 billion (VND ; \$ 1 @. @ 4 million USD) . Throughout other regions , at least 100 structures were damaged and more than 20 @, @ 000 hectares of crops were submerged in flood waters . Damages to irrigation systems throughout the county amounted to 3 billion (VND ; \$ 168 @, @ 000 USD) .