

Gaza Situation Report on Flooding

December 28, 2022



Background

Information about flooding in Gaza during the 2021-2022 winter season is summarized in Anera's last [Gaza Flooding Situation Report \(January 2022\)](#).

Overview

During the winter season, hundreds of locations across Gaza experience extensive flooding due to heavy rains combined with insufficient stormwater collection systems. Flooding damages houses, closes roads, and prevents children from playing outside or reaching schools. The flood water often stagnates and becomes contaminated, exposing communities to waterborne illnesses.

On December 25 and 26,¹ it rained heavily in Gaza, causing flooding which was exacerbated by Israeli forces opening the ducts in the dams east of Deir Al Balah. Homes and agricultural lands flooded. On December 26, the Israeli authorities further exacerbated the flooding by opening the ducts in the dams near Khan Younis. As a result, dozens more homes and hundreds of dunums

¹ [Past Weather in Gaza | Time and Date](#)

of agricultural land flooded,² in addition to the street where Al Aqsa Hospital is located.³ The ducts continue to flood the south and middle areas of Gaza.⁴

Gaza also faced severe flooding in early November. On November 8, heavy rain began to hit Palestine. The rain led to flooding that affected homes and buildings, left six vehicles stuck in the streets, and caused a wall in Gaza City to nearly collapse.⁵ The flooding also left many residents stuck in their homes or at their schools and jobs and affected livelihoods. The New Arab quoted a cafe owner, Mohammed Nafar, who could not serve customers. He said, "We are still in the first day and all of our work was stopped... I do not know how we can deal with such a complicated problem during the whole winter season." He also reported only being able to work two to three days a week during the previous winter season due to flooding. After the November floods, the shelter cluster reported that 40 families had to temporarily evacuate their homes.⁶ Temporary displacement creates challenges for families in accessing food, water, electricity, hygiene items, and jobs.

According to the Coastal Municipalities Water Utility, only 25% of Gaza is covered by stormwater systems. In some areas, the stormwater systems are connected to sewage networks, which causes pollution and wastewater flooding. The polluted floodwater increases the risk of waterborne illness in these areas.

Anera's Response

As part of its IRUSA-funded water and sanitation program, implemented from December 2020 to August 2022, Anera increased the capacity of Al Asqula Stormwater Basin in Gaza by removing the accumulated dirt above the basin and boreholes. The basin collects rainwater, which is infiltrated to the aquifer for use. Anera's upgrades allow rainwater to more easily enter the aquifer, thus increasing domestic water resources and reducing the risk of flooding.

Between 2021 and 2022, Anera successfully implemented six stormwater projects targeting five Gaza governorates with support from IRUSA. During the recent heavy rains, these targeted areas were fully protected from flooding. According to feedback from the Coastal Municipalities Water Utility, Anera's stormwater projects protected 24 areas vulnerable to flooding, but there are 191 areas still in dire need of stormwater interventions.

On April 1, 2022, Anera launched a flooding prevention project to install a stormwater network in Beit Hanoun and rehabilitate 30 households to improve flooding mitigation measures. The project is also protecting 62,340 individuals in Beit Hanoun from the risk of flooding and will ensure that 320 patients per day and 2,500 students have safe access to the nearby hospital and schools during the winter season. By 2023, the project will have rehabilitated all 30 homes, benefiting 191 individuals.

Anera's 2022 winterization campaign in Gaza focuses on protecting people from and mitigating the effects of seasonal flooding. With funding from IRUSA, Anera is expanding a stormwater

² [As if the heavy rain was not enough, Israel opens rainwater ducts to flood Gaza towns, destroy lands | Wafa](#)

³ [Israel Opens Levees, Floods Homes, And Agricultural Lands East Of Gaza | IMEMC](#)

⁴ [As if the heavy rain was not enough, Israel opens rainwater ducts to flood Gaza towns, destroy lands | Wafa](#)

⁵ [Rainfall floods Gaza's streets | MEMO](#)

⁶ [Palestine | IDMC](#)

network in Al Fukhari; constructing a stormwater pipeline and separating it from wastewater networks near Shejaiya schools; and rehabilitating 20 homes vulnerable to flooding in the south and middle of Gaza. About 55,100 Gazans will benefit from Anera's winter flooding mitigation interventions.

Under Anera's current IRUSA-funded water and sanitation program, Anera will separate the stormwater and wastewater networks in Jabalia – northern Gaza – to prevent winter flooding and stormwater contamination for an estimated 30,000 residents.