

Preventing floods in Za'atari Camp through the construction of a stormwater drainage network

Za'atari Refugee Camp, Mafraq Governorate, Jordan - November 2018 to March 2022

Every year, **Za'atari Refugee Camp** receives heavy rainfall between November and April, resulting in flooding. The lack of a stormwater drainage network causes **devastating damage to key infrastructures**, such as schools and hospitals, and **road blockages**. The flood also **worsens sanitation and hygiene conditions** for residents within the camp.

To respond to these challenges, ACTED's technical specialists in collaboration with GIZ designed a **35km long stormwater drainage network** for Za'atari Camp. ACTED is leading the construction of the drainage network in **7 of the 12 most affected districts**.

ACTED is also providing **temporary employment opportunities for camp residents** to carry out the construction works. Participants are identified through a fair selection process. **Over 2,400 individuals** have benefited from **income generation** through the construction of the drainage network.



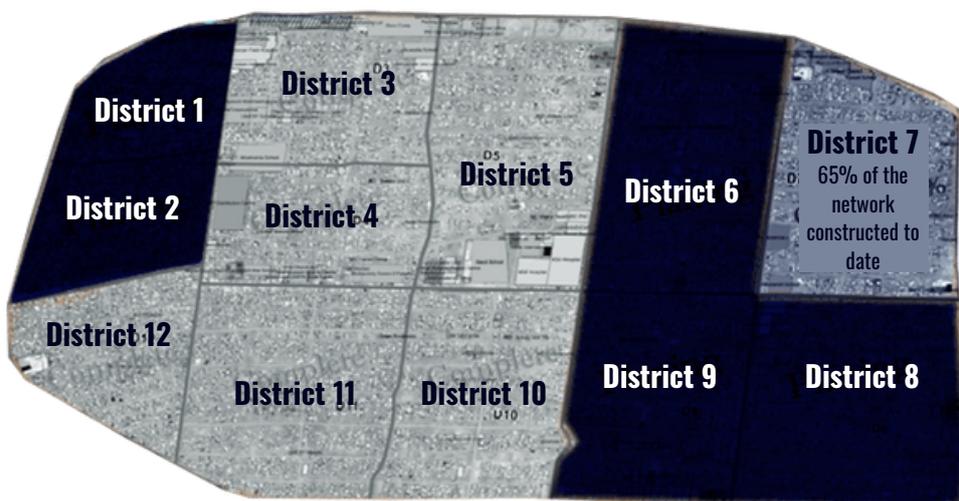
Figure 1: Za'atari camp flooded prior to construction (Winter 2017)



Figure 2: Construction of the drainage system by camp residents (January 2020)

Objective

Improving sanitation, hygiene and living standards of the approximate 80,000 refugees in Za'atari camp by constructing a stormwater drainage network through employment intensive measures



- Completed districts
- Partially completed district
- Remaining districts

Za'atari Camp map

With the support of **GIZ**, the ACTED-constructed stormwater drainage network has served **37,000 refugees residing in districts 3, 4, 5, 7, 10, 11 and 12**.

ACTED aims to continue constructing the network throughout the remaining districts of the camp. ACTED's team has identified **districts 1 and 2** as the main priority areas for the next phase of the intervention.

Our main achievements so far



Disaster Mitigation

The 2019/2020 rainy season was the **first time key infrastructures in targeted districts have not flooded** since establishment of the camp.



Temporary employment opportunities

2,411 persons benefited to date from income generating opportunities, as well as technical, skill development for future employment.



Sustainable Infrastructure

The construction of the drainage network aligns with national and international standards and has a **minimum lifespan of 20 years.**

Impact

Following the construction of the drainage network, **living standards have improved** for **86.5% of the beneficiaries.**

Effectiveness

69% of households served with the network **do not recall any flooding** in their house nor surround streets since the construction, compared with **only 21% before** the start of the project.

Efficiency

62.5% of the beneficiaries feel **very safe** moving around the district **during rainfall** events.

Sustainability

In instances of water accumulating around homes/shelters, **88% of households** reported, either **autonomously**, or together with their **neighbors**, digging a channel to let the water **reach the network.**

