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The Impact of Climate Change on Access to Water for the Most Vulnerable Communities in Southern West Bank

Palestinian communities in Bethlehem and Hebron governorates are most affected by water scarcity in the West Bank. Restrictions imposed by Israel in Area C, limited Palestinian control over water resources, and the often inadequate technical and financial capacities of water service providers, all have a negative impact on Palestinian access to water in the southern areas of the West Bank. As a result, more than 300,000 people receive less than 50 litres per capita per day, and more than 30,000 households are not connected to water network services.¹

Rainfall fluctuation in the south of the West Bank

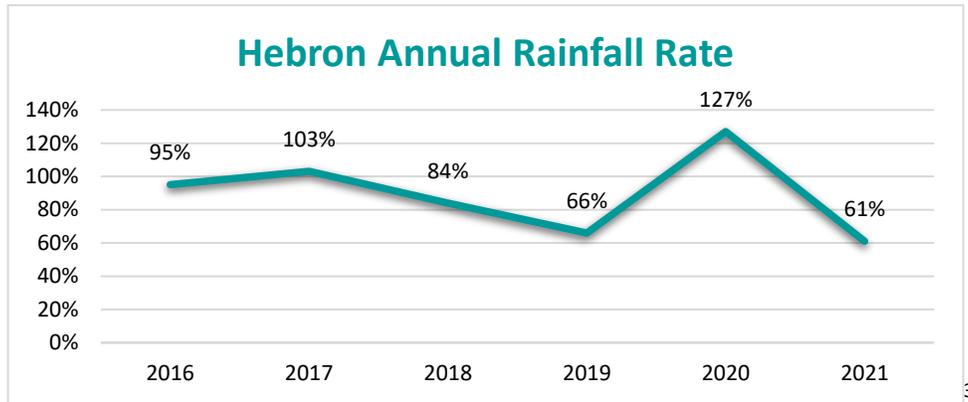
According to WASH vulnerability mapping, 75% of communities rely on rainwater harvesting as a primary or secondary water source.² Average annual rainfall in the southern areas of the West Bank is 500 to 600 mm. Unserved and underserved households collect rainwater and store it in cisterns during winter for use in summer.

Recently, due to climate change, rainfall fluctuations have prevented households from collecting adequate quantities of water. Heavy rain events affect the quality of the rainwater harvested,

¹ Water sector regularity council, water service providers performance report, 2020.

² WASH Cluster, WASH vulnerability mapping 2021.

while long dry periods without rain reduce annual rainfall and the quantity of rainwater available to be harvested.



The most vulnerable households in the south of the West Bank are struggling to adapt to this situation. The construction or extension of rainwater harvesting cisterns is costly, and Israeli restrictions on construction in Area C prevent families from expanding their rainwater harvesting capacities. The restrictive permit and planning regime in place prevents development, and even routine repairs and maintenance of water structures in OPT, leaving the West Bank with inadequate infrastructure (wells, cisterns, pipelines, etc.). The Palestinian Authority does not have powers to increase the water supply from the Mountain Aquifer, the main source of water for the West Bank, for underserved communities, nor does it have control over any other potential water sources. Palestinian access to water resources is severely constrained under the current water allocations specified in Article 40 of the Oslo II Accord.

Families are adopting negative coping mechanisms such as decreasing water consumption to less than 50 l/c/d, or becoming more dependent on expensive trucked water at a cost of 20 to 30 ILS/m³ to satisfy their basic water needs.

The impact of rainwater shortage on Palestinian communities: Susiya village

Susiya is a Palestinian community located in Area C in the south of the West Bank, southeast of the Palestinian town of Yatta. It is a farming and herding community of approximately 450 people.⁴ The community is not connected to piped water services and relies on rainwater harvesting and storage in cisterns for drinking, domestic use and livestock water consumption.

Last winter, Susiya received less than 60% of its average annual rainfall and households could not collect sufficient water for use over the summer. As a result, Susiya households reported running

³ Palestinian meteorological department 2021.

⁴ PCBS, Palestinian population 2021.

out of water reserves at the beginning of July and the community had to turn to purchasing expensive trucked water priced at 15 to 20 ILS/m³.⁵

Due to construction restrictions in Area C, Susiya households could not adapt to the impact of this change in climate by connecting to piped water networks or increasing water harvesting capacity with new cisterns. During 2020, the Israeli authorities demolished three rainwater harvesting cisterns in the Susiya community, significantly worsening the situation.⁶

As a subsistence herding and farming community, many Susiya families cannot afford to purchase expensive trucked water for all their water needs. Therefore, many families have been obliged to decrease their water consumption, which exposes them to associated hygiene and health vulnerabilities during the COVID-19 pandemic, or move to other communities with better access to water despite the potential risk of not being able to return to their community under the increasing restrictions imposed on Area C.

“Over the past years, we have endured Israeli measures against our community, but the water shortage is beyond the capacity of many residents. Therefore, since the beginning of summer, five families have left the community in search of water in neighbouring communities,” said Jihad Nawaj’a of Susiya village council.

Recommendations

In light of the impact of climate change on Palestinian communities, particularly households in Area C, the WASH Cluster and its partners call upon:

- **Israeli authorities** to immediately lift the planning and permit system that prevents Palestinian construction and allow Palestinian households in Area C to implement vital climate change adaptation measures, including the construction/rehabilitation of rainwater harvesting cisterns and water networks.
- **UN Member States** to challenge the existing planning and permit regime, the inequality of water allocation and demand the protection of Palestinian WASH infrastructure. Member States must also increase funding for climate change adaptation interventions and encourage the deployment of new technologies and techniques, particularly for communities that rely on rainwater harvesting as their primary or secondary source of water for drinking, domestic use and livelihood consumption.
- **Palestinian Authority** to adopt adequate and practical climate change adaptation strategies and plans for water supplies, and take a proactive stance by prioritizing the connection of unserved communities to water networks.

⁵ MA’AN field assessment, 2021.

⁶ OCHA dashboard: West Bank Demolition and Displacement.