



Caption: Children participating in hygiene promotion activities at schools in Yatta, southern Hebron, State of Palestine
Credit: Action Against Hunger/2023



UNICEF
State of Palestine

**Evaluation of the “Improving Living Conditions in
Yatta for Children and Families through
Sustainable Access to Safe Drinking Water” Project
in the State of Palestine**

Lay Summary
January 2025

Acknowledgement

Evaluation of water supply project in Yatta Municipality was commissioned by UNICEF's State of Palestine Country Office to IQVIA. The water supply project in Yatta aimed to improve water supply systems and the lives of the residents by improving the access to safe and clean water.

We extend a special thanks to the Government of the Netherlands for their time, efforts, and participation in the evaluation. We would also like to acknowledge the support from governmental entities such as the Palestinian Water Authority and Yatta Municipality, Ministry of Local Governorate, the Ministry of Education, and the Water Sector Regulatory Council.

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We deeply appreciate the opportunity to work with the Palestinian WASH sector on this significant evaluation, which has indeed provided us incredible insights.

The cooperation extended by the population of Yatta by participating in the evaluation and providing significant contributions to the findings of this report, is greatly appreciated.

Last but not least, we express our gratitude to the IQVIA team for their diligent efforts in designing this evaluation, conducting thorough research, and compiling this comprehensive report.

Note: This report has been commissioned by UNICEF to IQVIA consulting firm. The views expressed in this publication are those of the authors and do not necessarily reflect the views or policies of UNICEF, the United Nations or any of its affiliated organizations. UNICEF is not responsible for any inaccurate or libelous information or the erroneous use of information.

Introduction

The city of Yatta is the second-largest city in the Hebron Governorate in terms of population and area, as it constitutes about 25% of the total area of the governorate. It is located to the south of the city of Hebron, 12 km away. The population of the city of Yatta in 2017 was approximately 78,000 (within the municipal boundaries), according to the Palestinian Statistics Center.¹ Yatta is one of the most vulnerable cities in the West Bank, where people, on average, have access to less than 40 liters of water per person per day², which is below the basic recommendations from World Health Organization (WHO) that between 50 and 100 liters of water is needed per person per day to ensure that most basic needs are met, and few health concerns arise.³

The water distribution system in Yatta City, built in 1974, was expanded in 1995-1996 with funding from the Kingdom of Saudi Arabia and the Palestinian Economic Council, covering 80% of the municipality's area by 2002. The Palestinian Water Authority (PWA) later added water lines and tanks, extending the network to 31.7 km, covering 65% of the area, with the rest served by municipal water tankers. High Non-Revenue Water (NWR) at 47% was reported before a 2023 UNICEF infrastructure project.

The system is fed from three water sources: a) Bani Naim Wells (whereby water is pumped to a reservoir on a high hill before distribution); b) Mekarot (from the National Water Company of Israel); and c) Rehahiya Well (an unreliable water source as it was the first source of water for Yatta Municipality; water pumps, water levels and levels of pollution at the wells are hurdles to water provision to Yatta City). The households that rely on buying tanker water for drinking from private vendors pay an estimated 350 – 450 NIS per tanker of 7m³. This elevated cost puts a significant strain on the already vulnerable families.

Yatta Water Supply Project Overview

In October 2017, USAID initiated the 'Yatta Distribution Network Rehabilitation and Extension Project.' The project's rehabilitation and construction activities were scheduled for completion in April 2019. Unfortunately, they were halted in January 2019.

Consequently, UNICEF, in collaboration with the Palestinian Water Authority and Yatta municipality and with funding from the Government of the Netherlands, implemented and completed the “**Improving Living Conditions in Yatta for Children and Families through Sustainable Access to Safe Drinking Water**” project, also referred further in this report as “Yatta water supply project”. The UNICEF State of Palestine office is supporting the PWA in its mission to enhance the availability of water services that are affordable and safe for the Palestinian population, aligning with one of their objectives under the National Water Policy; this work is also aligned with the government's priorities, the Water and Sanitation Strategy, and the Water Law-2014.

Duration: November 2020 to December 2023.

Overall goal: The overall goal of the intervention was to ensure that Palestinian children and families, especially the most vulnerable ones, have improved and sustained access to piped water in different areas in Yatta, Hebron Governorate, West Bank.

Targeted outputs: The key targeted outputs of the Yatta water supply project were:

- **Output 1:** The institutional capacity of the Yatta municipality and the PWA is strengthened to ensure adequate management, monitoring of water provision, and operation and maintenance.

¹ Local development plan document for the city of Yatta 2023 – 2026, Yatta Municipality

² November progress donor report, 2023 – UNICEF

³ The Human Right to Water and Sanitation, WHO, Media Brief

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- **Output 2:** Around 100,183 people (50% children) benefit from the provision of a reliable, safe, and affordable water supply and distribution system to Yatta City and the nearby village, Beit Amra.
- **Output 3:** Children, adolescents, and parents improved their attitudes, knowledge, and practice about their rights and responsibilities on the proper use of municipal water.

Project Resources

The Yatta Water Supply Project was funded by the Government of the Netherlands. The project's Estimated Initial Planned Amount was **USD 5,051,145.00**. As per the revisions in August 2022, the estimated revised amount was **USD 9,747,000.00**.

Project stakeholders

The Yatta water supply project was a coordinated effort of the government partners in the State of Palestine (SoP), the donors and the implementing partners led by UNICEF.

- **Donor:** Government of the Netherlands
- **Government bodies:** Palestinian Water Authority, Yatta Municipality, Water Sector Regulatory Council, Ministry of Local Government, West Bank Water Department, Ministry of Education
- **Implementing partners:** Action against Hunger, Glory for Engineering and Water Treatment , Hydroconseil, Arab Brothers, PEAK.

Evaluation Purpose and Methodology

The end-of-project evaluation aimed to assess the outcome and impact of the Yatta Water Supply project, identify good practices, and linkages to broader UNICEF and national WASH priorities. ensure sustainable water services in Yatta city. The evaluation focused on the project's performance using Organization for Economic Co-operation and Development (OECD) and humanitarian criteria, addressing cross-cutting issues like human rights, gender equality, and equity. It also aimed to bridge technical knowledge gaps in the Water, Sanitation and Hygiene (WASH) sector and provide recommendations for similar projects. The primary audience includes UNICEF, relevant ministries, Yatta municipality, UN agencies, the Government of the Netherlands, beneficiaries, and partners. The evaluation covered November 2020 to December 2023, with updates until May 2024. A mixed methods approach was used in this evaluation. Evaluation covered 12 selected localities in Yatta. Data was collected via desk review of existing information and data, 336 household survey, 15 key informant interviews (KII), four focus group discussions (FGD) and five site observations. Data was triangulated and validated with stakeholders. The evaluation was managed by UNICEF with support from the Evaluation Steering Committee and an external evaluation team, with ethical approval from the HML IRB.

Evaluation Findings

Relevance

The project is relevant to the needs and priorities of the Palestinian government as this project was channelized through the Ministry of Local Governorate based on need for improving safe water access in Yatta community. It aligns with the PWA's aim for sustainable water management and Yatta municipality's priority of essential water services. The project supports marginalized communities, resonating with national policies on Sustainable Development Goals and WASH sector priorities. It aligns with the National Water Policy 2013-32, PWA Strategic Plan 2016-18, Water Law 2014, and various strategic plans. The project also aligns with UN agencies' strategies and international conventions on women's and children's rights. Initially managed by USAID and later by UNICEF, the project was adjusted based on local assessments. UNICEF added capacity building and community engagement components. The project addressed public concerns by repairing roads and accommodating rising material costs. Yatta, a vulnerable city with limited water access, benefited from

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improved infrastructure, extending services, and enhancing water reliability for over 100,183 citizens. The project significantly improved water access, especially benefiting women and children.

Effectiveness

The project effectively improved access to safe water in Yatta by developing three water reservoirs, installing a water pipe network, SCADA systems, staff training, and community awareness. It achieved all 13 target indicators, with some targets exceeded, such as 73% access to improved water against a 65% target. The project benefited over 100,183 people and extended the water distribution network to 17.8km, surpassing the 12km target. Output 1 was effective in establishing the Yatta Water Supply and Sanitation Department (YWSSD), developing its organizational framework, operational and financial plans, and training managers. As per Output 2 three water reservoirs were established with a total storage capacity of 6,500 m³. It also involved, concrete repairs, plastering and painting of internal and external walls, mechanical installations, underground electrical cables, SCADA system connections, yard leveling and paving, water tightness tests, disinfection, and construction of retaining walls for Beit Amra access road. These reservoirs greatly improved the water storage capacity of the YWSSD, enhancing hydraulic pressure in the areas served, especially by the school and KHALLET SALEEM reservoirs. Beit Amra is not operational yet as it awaits water supply. PWA has requested UNICEF to include water distribution network activity for Beit Amra in the proposed Phase II-Yatta Water Supply Project. The project installed a SCADA system that monitors water pressure and levels, aiding planning and management. The project also reinstated roads affected by pipeline trenching. Output 3 exceeded its target by engaging over 85,000 people in Social Behavior Change (SBC) activities. Raising awareness on proper water use and the Yatta water supply project. through mass media, social media, and public events with information on proper water use and information on Yatta water supply project.

Efficiency

The Yatta Water Supply Project utilized 88% of its budget, with high spending on infrastructure, community engagement, and communication. The budget for institutional capacity building was underutilized, and less work was done during the Defect Liability Period. The project was well-managed with adequate resources and technical expertise from donors, PWA, UNICEF, and Yatta municipality, ensuring quick issue resolution and transparency. Key success factors included municipal ownership, stakeholder coordination, and local support. The project timeline was extended from 36 to 45 months due to scope expansion and additional requirements. Despite delays from political, security, financial, and internal issues, most activities were completed on schedule. Increased project costs were offset by improved financial resource utilization, leading to better outputs and outcomes, such as increased revenue from additional water connections.

Impact

The initiatives under strengthening of the institutional capacity of the Yatta municipality had a positive impact on water governance and institutionalization. The establishment of YWSSD was a pivotal step in overseeing water supply services, and the project provided technical and financial training to municipal staff, enhancing their capacity. However, YWSSD remains understaffed and not fully operational, limiting its potential. Addressing staffing gaps and implementing comprehensive training plans for new and existing staff is necessary for sustainable improvements. Continued investment in human resources and infrastructure is essential for long-term success.

The project improved access to piped water, achieving a 73 percent coverage rate in the household survey. Marginalized areas benefited from new water connections and household water meters. Despite successes, challenges persist, such as irregular water supply and reliance on private vendors. Women expressed concerns about unaffordable bills and the need to purchase private water. About 93 percent of households were on metered connections, paying an average monthly bill of 219 shekels. Only 10

percent rated water quality as “very good” reflecting an area that was beyond the scope of this project but required urgent focus in future interventions to address the immediate needs of Yatta’s population.

The project increased water access for vulnerable communities, positively impacting women’s livelihoods and hygiene. It reduced the need to fetch water from distant locations, improving cleanliness and household management. FGDs highlighted the social benefits, particularly for women and girls, by reducing safety concerns. The impact of raising community awareness was moderate due to limited reach and engagement. Only 28 percent of the community was aware of the project, with minimal participation in workshops and social media campaigns. Training for community leaders was beneficial but did not effectively disseminate to local communities. Future efforts must target larger populations with tailored approaches for sustainable impact.

Sustainability

The municipality’s commitment is crucial for the project’s sustainability. Key stakeholders highlighted the importance of operational and maintenance follow-up for infrastructure. A one-year defect liability period allows the contractor to address any defects in the WASH facilities. The project developed a solid water supply infrastructure network in Yatta municipality. Adequate technical expertise and financial resources are needed for maintenance. Establishing a separate water unit (YWSSD) and building the capacities of the municipality staff were deliberate steps to enhance ownership. Capacity building is essential for sustainability. The Yatta municipality is equipped to manage and oversee the project, ensuring long-term sustainability. Smart water meters and pre-paid counters were installed to increase water revenues and reduce losses. Staff received training on financial and revenue management to improve tariff collection. The SCADA system provides data for evidence-based strategies. Clear roles among stakeholders ensure accountability.

SOPs and manuals were developed for maintenance protocols. The municipality strengthened its organizational capacity with specific departments. A dedicated hotline and staff member manage complaints, enhancing responsiveness. Community sensitization initiatives informed residents about the importance of paying water bills and rational water use. Financial sustainability efforts included revising the budget for WASH activities, but gaps remain. An investment plan is needed for the next phase. Capacity building addressed water loss, tariffs, and asset modernization. The water tariff structure now includes components for depreciation and future investments. Continuous assessment and new funding sources are needed for sustainability.

Environmental considerations were integral to the project, with mitigation plans for potential impacts. The project engaged with the Environmental Quality Authority for approvals. Positive contributions include addressing environmental challenges and enabling residents to undertake environmental activities like planting trees.

Coherence

The project addressed challenges in the water sector by adjusting the budget and timelines. Issues raised by contractors regarding material availability and costs, influenced by the war in Ukraine, were considered during the design phase. The project also accounted for local dynamics, such as political instability in SoP, requiring coordination with municipalities and stakeholders. UNICEF and Yatta Municipality focused on densely populated, previously unserved areas. The project emphasized inclusivity and equity by extending water distribution to marginalized communities, holding consultations with specific groups to ensure community participation and alignment with human rights principles.

Coverage

The Yatta water supply project aimed to improve water distribution networks and reach marginalized communities. Despite some areas still being unserved due to demand and supply issues, the project successfully reached over 100,183 people, exceeding its target. The new water pipelines extended coverage to previously unserved areas, achieving 110% of the planned coverage. However, only 70%

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of Yatta's needs were met, leaving 30% unserved. The project also aimed to educate 70,000 children, adolescents, and parents about water use rights and responsibilities. It successfully engaged over 85,000 people, including 41,650 women and 43,350 men, and informed 1,200 school children. The project exceeded its targets for community engagement and visibility campaigns.

Connectedness

UNICEF is a major player in the WASH sector in Yatta and the project was designed in consultation with all the key stakeholders in WASH sector to avoid duplication of any activities by other agencies. Within UNICEF, WASH team closely coordinated with the SBC team on output 3, leveraging their expertise to amplify project outcomes. The interventions indirectly supported outcomes in other sectors including health, sanitation and education. Within different sectors and other government departments the only area of collaboration was with the Ministry of Education to reach 1200 children in schools for awareness generation activities and coordination activities conducted on World Water Day. The community engagement and awareness activities were undertaken with the support of the NGO, who was the implementing partner for the initiative.

The project incorporated well defined transition strategies to ensure sustainability and alignment with development goals. A key achievement was the establishment of YWSSD with its organizational structure and strategic framework approved by Ministry of Local Governance. Additionally, a comprehensive business plan for YWSSD was developed, focusing on scaling up services, improving revenue collection and ensuring effective management. To support long-term development, the project also prepared a detailed roadmap for transitioning the YWSSD into a Regional Water Utility (RWU), fostering resilience and sustainability in the water sector.

Human rights, gender and equity


The project largely focused on the basic human rights of having access to clean water. The gender perspective was not separately planned or implemented as women are part of every household and improving the water supply to the households meant services directly reach to the women and children in households. However, the project brought considerable benefits to women in the households as presently 95 percent of the women do not need to fetch water from outside. It also notes that 52 percent of households reported that the water they received was not sufficient for all family members. This contradiction highlights a gap between the perceived benefits of increased water availability and the actual sufficiency of that supply for household need. Community engagement and SBC campaigns were designed with special consideration for women's participation, ensuring their involvement in community committees and workshops. Women were also invited to consultation sessions to share their experiences and needs regarding safe water provision.

The project was in tune with the equity aspect by extending the water network to previously unserved areas in the municipality. However, gaps still exist in terms of sufficiency of water for household needs, as some households still rely on different water supply modes such as private water trucking.


Conclusion and Recommendations

The recommendations drawn from the evaluation to support UNICEF, the Government of the Netherlands, the Palestinian Water Authority and the Yatta municipality in their future efforts. These have been structured to cover water governance, water supply and distribution strengthening and the sustainability of the services. Each recommendation with its corresponding actions addresses the gaps identified in the findings section of this report, ensuring they fully align with SWAP quality criteria. The recommendations have been presented and validated in two steering committee meetings for the evaluation.


1. Strengthen the governance and operational capacity of YWSSD by establishing clear policies, sustainable financing mechanisms, and institutional structures that promote accountability, efficiency, and inclusivity in water service delivery

Sl.no	Key activities	Responsible Entity	Priority (Short /medium/long term)
1.1.	Fully operationalize YWSSD by establishing and implementing clear operational rules, a sustainable budget, and ensuring that key staff positions are filled.	YWSSD, PWA, MoLG, Development Partners, Local Stakeholders	 High – Short term
1.2.	Develop and implement a transparent accountability framework, including regular public reporting on performance, finances, and service quality.		
1.3.	Conducting Non-Revenue Water (NRW) studies and assessments to reduce NRW by implementing strategies to optimize revenue collection and enhance operational efficiency.		
1.4.	Expand pre-paid water meter programs to improve revenue collection and reduce water wastage.		
1.5.	Implementation of business plan for YWSSD, including financial projections, institutional guidelines, and steps for transitioning into a Regional Water Utility (RWU).		
1.6.	Commitments to advance on redeployment/recruitment of personnel in line with YWSSD's structure and based on a competency assessment, the application of the revised tariff, and other factors by the Municipal Council		
1.7.	Establish a unified approach to enhance the performance of service providers and implementation of the Law and define a clear jurisdictional area for the future utility to ensure streamlines operations.		
1.8.	Support the reform process and enhance financial sustainability of Local Government Units including Yatta by increasing revenue streams.		


2. Enhance the resilience and equity of water supply infrastructure by addressing existing gaps, ensuring reliable water access for underserved areas, and strengthening systems for preventive maintenance and quality assurance.”

Sl.no	Key activities	Responsible Entity	Priority
2.1.	Complete the operational setup of Beit Amra reservoir and ensure regular maintenance of all reservoirs.	YWSSD, PWA, WBWD, Local Municipalities	 High – Immediate
2.2.	Extend the water distribution network to the 30% unserved areas in Yatta, ensuring equitable water access for marginalized and underserved communities.		
2.3.	Improve water pressure and reliability by implementing preventive maintenance protocols using the SCADA system.		
2.4.	Ensure water quality management through regular sampling, testing, and public awareness campaigns focused on water safety and hygiene practices.		


3. Implement equitable and sustainable water tariff structures that balance affordability for vulnerable groups with financial sustainability for service providers, through evidence-based reviews and community consultations

Sl.no	Key activities	Responsible Entity	Priority
3.1.	Conduct a financial review to assess the affordability of water tariffs, particularly for vulnerable groups such as women-headed households and low-income families.	YWSSD, PWA, WSRC	 Medium – Immediate
3.2.	Develop and implement a tiered tariff system to ensure affordability for marginalized households while maintaining financial sustainability.		
3.3.	Hold community consultations to assess the impact of tariffs and incorporate feedback into policy adjustments. Ensure inclusion of women, marginalized groups and vulnerable communities in community consultation		


4. Build the capacity of YWSSD staff and key stakeholders through targeted training, competency development, and performance tracking to improve service delivery and operational efficiency.

Sl.no	Key activities	Responsible Entity	Priority
4.1.	Conduct a comprehensive training needs assessment for YWSSD staff across technical, managerial, and customer service domains.	YWSSD, UNICEF, Implementing Partners	 Medium – Immediate to long term
4.2.	Launch ongoing training programs to enhance staff skills in key areas such as water management, customer service, and technical competencies.		
4.3.	Set competency benchmarks and conduct quarterly performance evaluations to track progress.		

5. Develop and implement strategies that ensure the long-term sustainability and resilience of water services by strengthening financial systems, fostering community ownership, and integrating climate-resilient practices.

Sl.no	Key activities	Responsible Entity	Priority
5.1.	Develop a transition strategy for YWSSD to become a Regional Water Utility (RWU) with operational autonomy.	YWSSD, PWA, MoLG	 Medium – Long term
5.2.	Implement revenue generation strategies to achieve financial resilience and ensure cost recovery.		
5.3.	Strengthen community ownership by involving representatives in decision-making and governance processes. Representatives to include women, marginalized groups and vulnerable communities.		


6. Foster inclusive and transparent coordination among key stakeholders to align objectives, optimize resource sharing, and build strategic partnerships that strengthen the delivery of water services.

Sl.no	Key activities	Responsible Entity	Priority
6.1.	Establish a national sector coordination framework among different sectors (health, education, etc.) with focus in women inclusion and gender perspective across stakeholders.	UNICEF, YWSSD, PWA, Local Authorities,	 Medium – Immediate
6.2.	Establish a formal coordination framework among stakeholders to streamline efforts and align objectives.		
6.3.	Foster multi-stakeholder partnerships, including NGOs, donors, and community representatives with focus in women inclusion and gender		


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	perspective, to ensure effective resource-sharing and alignment with development goals.	NGOs, Donor agencies	
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7. Promote water conservation, hygiene practices, and inclusive community engagement through targeted Social and Behavioural Change campaigns that address the specific needs of vulnerable groups.

Sl.no	Key activities	Responsible Entity	Priority
7.1.	Scale up SBC activities to promote water conservation and hygiene practices, targeting low-participation areas.	YWSSD, UNICEF, community stakeholders	 Medium – Long term
7.2.	Tailor SBC efforts to vulnerable populations, such as women, children, and persons with disabilities.		

8. Strengthen monitoring and evaluation systems to enable evidence-based planning, track service quality and equity, and ensure adaptive management of water services.

Sl.no	Key activities	Responsible Entity	Priority
8.1.	Use SCADA and other tools to monitor service quality, efficiency, and customer satisfaction in real time.	YWSSD, WBWD, WSRC, PWA, UNICEF	 High – Immediate
8.2.	Conduct periodic evaluations such as surveys and assessments to assess satisfaction levels, identify service gaps, and adjust practices accordingly.		
8.3.	Monitoring and Evaluation systems and governance system trainings and strengthening institutional capacity		