

Engaging international development banks in financing WASH and WEFE Nexus projects In Palestine –Gaza Case

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Water Sector Overview

- Pre-war capacity: ~85 liters per capita/day
- Current capacity: <30% of pre-war levels
- Main sources before war: STLV desalination (36,000 m³/day), Mekorot (52,000 m³/day), Wells & private desalination (~11,000 m³/day)
- Now: Heavy reliance on costly water trucking
- Water sector collapsed (<30% of pre-war capacity) trucking fills the gap
- STLVs and Mekorot lines = backbone of supply but heavily damaged
- Wastewater sector collapsed untreated sewage threatens health & environment

Past cooperation between PWA and Development Banks

Water Sector :

- Gaza STLV IsDB
- Water System Reconfiguration Projects IsDP
- Various projects (networks wells .. Etc)
- Central Desalination Program EU investment bank

Wastewater

- North Gaza WWTP World Bank
- Water energy food nexus program AFD
- Central Gaza WWTP KFW
- Khanyounis WWTP IsDB

North Gaza STLV (Before & After)

- Before: 10,000 m³/day capacity (planned expansion to 12,500 m³/day)
- Served Gaza City & North Gaza via Sheikh Radwan reservoir
- After: Completely destroyed during 2023/24 war
- Critical gap in drinking water for >135,000 people





Middle Gaza STLV (Before & After)

 Before: 6,000 m³/day capacity (operated at 3,000–3,500 m³/day due to power limits)

Location: Deir al-Balah

• After: Partially functional, frequent interruptions due to fuel & spare

shortages

Production at times <2,000 m³/day



Southern Gaza STLV (Before & After)

- Before: 20,000 m³/day capacity (new expansion commissioned just before war)
- Served Khan Younis & Rafah (~250,000 beneficiaries)

 After: Partially operational at ~8,000–10,000 m³/day due to repeated damages & fuel shortages

Wastewater Sector Overview

- Pre-war: 5 WWTPs with 154,600 m³/day treatment capacity
- Now: All 5 WWTPs damaged or inoperable
- 100% of sewage discharged untreated to sea (~30,000 m³/day)
- Health risk: widespread waterborne disease outbreaks

North Gaza WWTP (Before & After)

- Before: Advanced WWTP with aquifer recharge basins (~42,000 m³/day reuse plan)
- After: Severely damaged, inaccessible, no treatment
- Sewage seeping into soil, reaching beaches



Currently Not accessible

Central Gaza WWTP (Before & After)

- Before: provide WW treatment operations for Gaza.
- After: Heavily damaged, non-operational





Khan Younis WWTP (Before & After)

- Before: Planned as major treatment plant for South Gaza
- After: Destroyed/non-functional, sewage diverted untreated to sea





GRRP Detailed Plan – Water

- Emergency (0–12 months): Maintain trucking, repair Mekorot lines, fuel & spares for STLVs, mobile filling stations
- Early Recovery (1–3 years): Rehabilitate wells with solar/backup, repair reservoirs/pipelines, modular desalination, leak detection
- Reconstruction (3–10 years): Central Gaza Desalination expansion,
 Southern STLV upgrades, aquifer recharge & reuse schemes, Regional Utility

GRRP Detailed Plan – Wastewater

- Emergency (0–12 months): Repair pumping stations, deploy tankers & mobile latrines, reinforce drainage in IDP areas
- Early Recovery (1–3 years): Rehabilitate trunk sewers, hybrid power for stations, decentralized WWTPs, reactivate Rafah ponds
- Reconstruction (3–10 years): Rebuild NGEST & Central WWTPs, Khan Younis hub, expand Rafah WWTP, wastewater reuse for irrigation

GRRP Cross-Cutting Measures

- Governance: Establish Regional Water Utility under PWA
- Energy: Solar/renewables for STLVs & WWTPs
- Financial: Donor bridge financing until tariffs recover
- Capacity: Train CMWU(service provider) & municipal staff for O&M
- Health: Link WASH to epidemic prevention
- Build Back Better: resilient, decentralized, redundant systems

Investment Overview – WASH Sector (Total ≈ USD 2.66 Billion)

Phase	Time Frame	Focus	Estimated Cost (USD million)	Share %
Emergency / Life- saving	0 – 12 months	Rapid restoration, water trucking, Mekorot repairs	300	11
Early Recovery	1 – 3 years	Stabilization of networks & STLVs, temporary WWTPs	900	34
Reconstruction	3 – 10 years	Full rebuild of STLV & WWTP systems	1,200	45
Institutional / Resilience Building	5 – 10 years	Governance & capacity strengthening	256	10
Total			2,656	100

Key Investment Principles

- Investment plan –The GRRP includes a detailed investment plan
- Establish a Task Force for water implementation of GRRP
- Implementation Monitoring Plan
- Prioritize lifesaving interventions before full system rehabilitation.
- Apply 'Build Back Better' principles resilient and decentralized systems.
- Integrate energy and climate resilience across all facilities.
- Coordinate multi-donor financing (EU, AFD, IsDB, Qatar Fund, World Bank).
- Ensure transparency and community participation in reconstruction planning.

THANK YOU

