

WaDImena Research Project Palestine

Building a Participatory National Consensus on Wastewater Reclamation and Reuse in Palestine

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Background

- Water scarcity is a major constraint for economic and social development and sustainability of the agricultural sector.
- Palestinian water deficit will be about 271 MCM in 2020.
- Agriculture consumes more than 70% of the total water supply.
- The Israeli occupation controls the Palestinian land and water.
- Search for other water resources, even those with inferior quality - in several locations, raw sewage is used by farmers for irrigation of fruit trees and vegetables.
- Inter-basin water transfers and desalination have been recognized for augmenting water availability.
- These alternatives are expensive and face daunting logistical and political constraints.



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Background

- Sewerage networks exist in major urban communities.
- Al-Bireh WWTP is the only one functioning in the West Bank.
- The treated effluent is discharged into *Wadis* without reuse.
- Unclear reasons of poor wastewater reuse.
- Onsite sanitation systems, especially cesspits are common.
- These systems are expensive and pollute the environment.
- There is increasing concern on grey water reuse at household level.
- This project focuses on the socio-economics associated with wastewater reuse with emphasis on the effluent from Al-Bireh WWTP.



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Objectives

- The main aim of this research was to develop a national consensus on the current and future status of wastewater reclamation and reuse in Palestine through participatory approaches.
- The specific objectives of this research were:
 - To better understand the political economy of wastewater reclamation and reuse, and
 - To influence concerned policy-making in Palestine.



Approach and Methodology

- The research team adopted participatory approaches that involved all stakeholders and encourage dialogue and involvement of marginalized communities on equal footing together with dominant governmental and non-governmental institutions:
 - Identified and analyzed the potential role of each stakeholder.
 - Several stakeholder meetings.
 - Several training courses on wastewater treatment and reuse.
 - A questionnaire survey in Deir Debwan town.
 - 10 specialized national workshops: general, technical, agricultural, environmental, health, guidelines and standards, institutional, financial and economic, socio-cultural, and religious.
 - National Symposium
 - Video



Major Project Findings

- There is a national consensus on the importance of wastewater reclamation and reuse in irrigated agriculture.
- All stakeholders have positive knowledge and perceptions towards reuse of reclaimed wastewater.
- Poor coordination and collaboration between various institutions related to the subject.
- Poor collaboration between the academic/research institutions and policy making.
- Onsite systems, especially grey water, are specifically important to Palestine.
- Participatory approaches and dialogue between policy makers the entire stakeholders community proved to be very effective.



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