

Activity: Construction of 100 individual metallic reservoirs (225m³ capacity each) (A.4.6)

Locations: Jenin, Tulkarim, Qalqilya, Tubas, Salfit, and Gaza

Beneficiaries: 250 farmers

Purpose: these reservoirs are mainly used for rainwater harvesting from rooftops of greenhouses and also for storage of water pumped from the groundwater wells.

Summary

Background Information:

Farmers involved in the irrigated agriculture are suffering from the limited amount of water and the irregular supply of water. They may wait a week for having their turn in water to irrigate their land and most of them lack any water storage facilities.

The aim of these reservoirs is to harvest rainwater from rooftops of green houses by channel the water by plastic piping systems.

This will increase the available water for irrigated farming and give farmers facilities for water storage which will give them good flexibility in schedule irrigation and improve water management at farm level.

District	Governorate	Number of tanks
West Bank	Tulkarim	28
	Jenin	21
	Tubas	4
	Qalqilya	14
	Salfit	3
Gaza	South	16
	North	14

Design Assumptions:

- Rainfall height ranging between 250-600mm yearly in each location.
- Each reservoir serves 2 farmers in average and a minimum of two donums of green houses.
- Technical Data (allowable stresses, minimum thickness of the steel sheets, height...etc).

Benefits:

Increase the amount of available water for irrigation

Available Documents:

- Application Forms.
- List of beneficiaries
- Photo gallery
- Design Documents and drawings.
- Tender documents.
- Contractor schedule/ project plan.
- Agreements with beneficiaries.
- Guarantee forms



with an amount of 80,000 m³ per year, if farmers have to buy this amount of water they have to pay about \$30,000 per year.

Farmers also will benefit from the metallic reservoirs as storage facilities for the pumped water from groundwater well.

Until April 2008 and from phase I + II of the project (100 tanks) more than 131,612m³ of water have been harvested.

Data will be collected during the next winter and will be available for all reservoirs after the rainy season, on the other hand we are collecting actual data about the benefit of these tanks resulted from using them as a balancing tanks.

Time Schedule for Implementation:

Phase 1:

- Data collection started on August 2004.
- Tender was published on June 2005.
- Execution of works started on January 2006.

42 reservoirs have been installed in West Bank and 18 in Gaza.

Phase 2:

- Data collection started on August 2005.
- Tender was published on May 2006.
- Execution of works started on September 2006.

28 reservoirs installed in West Bank during January 2007 and 12 in Gaza

Beneficiaries' Contribution:

Construction of plastic piping channels to direct the harvested water to the reservoir (this cost \$200 in average).

Offering the land for installing the reservoirs, in addition to the cleaning and leveling of the location.

Though the Beneficiary contribution was not envisaged. However, this was encouraged and put as prerequisite for benefit at beginning of implementation.

