

MEDISS

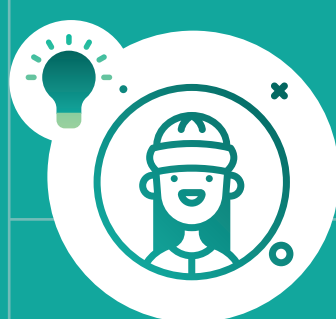
Mediterranean Integrated System
for Water Supply

PWEG
Palestinian Wastewater Engineers Group
Palestine
-
Monther Hind



MEDWAYCAP

MEDISS



WHAT

It addresses the issue of improving the quality of saline groundwater present in the Mediterranean area, opening alternative irrigation for higher quality and more diversified cultivations (dates, citrus, etc.).

According to the features and specific needs of the partner areas, MEDISS will test innovative solutions in the use of treated wastewater and desalination of brackish water. In the longer term, the project will contribute to reducing stress on freshwater, as well as costs for water supply.

At the same time, higher productivity and diversification of crops will increase food security and income for farmers.

AGRICULTURAL FIELD
NON CONVENTIONAL WATER RESOURCES
TREATED WASTEWATER
BEST AGRICULTURAL PRACTICES





HOW

Blending of treated wastewater (TWW) with fresh wadi water and brackish groundwater in Jericho/Palestine: Surface water in Wadi Quilt is collected, stored in a ground pool, blended with saline underground water and TWW from Jericho Wastewater Treatment Plant (WWTP), and then used to irrigate 400 ha of palm farms, benefiting 55 farmers.

Reverse osmosis (RO) desalination with innovative long-lasting membrane and PV energy in Aqaba Governorate/Jordan: Innovative approach never tested before in Jordan, is applied to desalination plant of brackish groundwater, extending membrane's lifetime with innovative treatment and using photovoltaic panels for energy supply. Fresh water is provided to the people of the village with a 32m³/hr.

media link



more infoproject

Prototype ammonia stripping plant for fertilization in Arborea in Italy: Sludge is used for ammonia stripping in the pilot WWTP, the plant is also equipped with a system for energy recovery through biogas cogeneration, which allows it to produce large amounts of electricity and heat that contribute to the support of the plant itself. The pilot plant has a high-efficiency biogas-powered cogenerator, produced by anaerobic fermentation of biomass and sewage stored in special structure. The pilot plant is equipped with photovoltaic plant to reduce the cost of energy in the system.

Tertiary treatment with innovative filter bed in Bechima/ Tunisia: Improving irrigation water quality by using a pilot WWT system through an innovative infiltration-percolation method with different filtration mixtures.

