

IMPACT STORY

Advancing alternative water supply solutions in the Mediterranean



Summary

Recognising the value of rainwater, greywater, and recycled wastewater as a resource rather than a waste product, GWP Mediterranean's Non-Conventional Water Resources (NCWR) Programme is a cost effective method of increasing water supply and climate resilience in water scarce Mediterranean islands.

The programme focuses on small-scale rainwater harvesting and greywater recycling applications, combined with education and awareness raising. It has benefitted water scarce communities and enhanced sustainable development by demonstrating alternative solutions to constraints on the water budget.

Background

The majority of the Mediterranean islands encounter water scarcity challenges due to their small catchment areas and the impacts of emerging climate vulnerability and change. Malta and Cyprus have been acknowledged as the water poorest countries in Europe¹, while a large number of Greek and Italian islands depend on costly desalination and even water transfers by tankers to meet their needs.

The restrictions in water availability pose risks to economic activities, such as tourism and small scale agriculture, and threaten the wellbeing of fragile ecosystems.

To address this challenge, GWP Mediterranean in 2008 initiated the NCWR programme to advance

¹ EU Commission, DG Research, Water Scarcity and Droughts Second Interim report, June 2007

Attributable Impact

- 110,000 inhabitants benefitting from more reliable water supply
- Close to 5 million USD of private finance invested in the Non-Conventional Water Resources (NCWR) Programme
- Over 550,000 USD of public finance leveraged as co-funding for the NCWR Programme (440,000 from Gozo; 110,000+ from Greek and Cypriot municipalities)

the use of alternative water supply solutions for secondary uses, such as rainwater harvesting and wastewater reuse.

The programme was first launched in Greece in collaboration with Coca-Cola's "Mission Water" Corporate Social Responsibility programme and islands' local authorities. It involves a series of pilot applications, together with educational, training, and awareness raising activities.

The approach delivers results for water security, coupled with increased awareness and building of local capacity on the benefits and use of NCWR. At the same time, it promotes the incorporation of

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solutions into local and national development planning to ensure large scale replication.

The programme began in the Cyclades islands, Greece, in 2008 with a focus on rainwater harvesting. In 2011 the programme expanded to Malta where it concentrated on greywater and treated wastewater reuse solutions.

It has since spread to Cyprus (2013) and Italy (2016), and was further expanded in Greece where it is now operational in 29 islands across the Cyclades and Dodecanese island groups.

GWP Contribution

GWP Mediterranean, the main administrative and technical implementing agency, developed the concept and the content of the programme. It also established a multi-stakeholder partnership that mobilised financial resources and gained buy-in from national and local authorities.

GWP Mediterranean plays a lead role in the implementation of the three main pillars of action on which the programme is built:

- **Infrastructure:** selection and installation of demonstration applications
- **Education:** development of materials for schools to encourage a new generation of responsible consumers
- **Capacity building and awareness raising:** training local technicians on installation and maintenance of NCWR technologies, and promoting the approach

Results

The most tangible impact is in the communities that have benefitted from demonstration applications. In total, 110,000 inhabitants in 32 water scarce communities in Greece, Malta, and Cyprus have enhanced water security through more than 86 site-specific NCWR applications.

These interventions have been accompanied by training seminars, attended by 270 technicians, and educational activities targeted at more than 20,500 students and 3,300 teachers.

Another impact is that the NCWR programme has built awareness of the benefits of alternative water sources to increase the water budget for national development for the long-term.

Financing for Water

Over 5.25 million USD has been mobilised to implement the programme for 2008-2018 – primarily raised through grants from the Coca-Cola Foundation, with co-funding from the “Mission Water” Environmental Program by Coca-Cola Tria Epsilon and Coca-Cola Hellas.

This funding leveraged public finances, including USD 440,000 from the Ministry for Gozo in the Maltese islands for programme implementation, as well as contributions from municipalities in the project islands in Greece and in Cyprus.

This is best illustrated in Malta where the demonstration projects on the island of Gozo have provided input to the Ministry for Gozo’s Sustainable Development Action Plan.

In addition, the new National Water Management Plan for Malta not only includes technical input from GWP Mediterranean, but integrates NCWR solutions to augment water supply in the country.

Hence, NCWR solutions are a contribution to scaling up water security and sustainable development beyond the communities that have directly benefitted.

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