



# IMPROVING WATER HARVESTING AND LIVESTOCK REARING IN MATROUH GOVERNORATE, EGYPT

In the northern part of Matrouh Governorate, Egypt, yields of rain-fed agriculture are very low, owing to the erratic and variable rainfall pattern in the area. Besides the effect on crop production and productivity, the water scarcity challenges of the area and the erratic highly fluctuating rainfall affect the area’s feed supply for livestock, which, in turn, affects the production and reproductive performances of animals. Given that livelihoods in the area depend largely on the rainfall, it was crucial to increase the efficiency of runoff water for human consumption and agricultural use, for both crops and livestock. Against this background, the project aimed to increase the sustainability and productivity of rain-fed agriculture in rural areas and improve the living conditions of the local population, by promoting water harvesting and good crop-related agricultural practices in 38 communities located in four districts in Matrouh Governorate, namely Ras El Hekma, Matrouh, Negila and Barrani.



## WHAT DID THE PROJECT DO?

After conducting an assessment of water harvesting systems and land use in the target areas, 323 water harvesting structures were established and rehabilitated, improving households’ access to water for domestic use and agricultural activities, and contributing to increased crop productivity. The project promoted the application of Good Agricultural Practices (GAP) and climate-smart agriculture in new and rehabilitated farms. The improved practices included methods for pest prevention and control, and the provision of organic fertilizers and pesticides, and modern irrigation and simple mechanization tools. In order to improve livestock productivity, especially in vulnerable female-headed households, training and inputs were provided for the rearing of goats and poultry, and hygienic processing of milk and dairy products. In particular, livestock experts trained and provided technical guidance to beneficiaries on livestock rearing and feeding. Home gardens were established, targeting mainly women, to provide households with fresh fruit and vegetables and enhance household diets and nutritional status. The project also established demonstration plots for the rehabilitation of rangeland areas and the improvement of animal feeding, especially during droughts.

## KEY FACTS

### Contribution

USD 960 516

### Duration

March 2017 – February 2020

### Resource Partners

European Union Joint Rural Development Programme (EU-JRDP)

### Partners

Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD), Union of Agricultural Councils (under the umbrella of the Agriculture Directorate of Matrouh Governorate), and Animal Production Research Institute (APRI)

### Beneficiaries

1 501 small-scale farmers (both men and women)

## IMPACT

Agricultural productivity was significantly increased through the application of improved agricultural practices and climate-smart agriculture in new and rehabilitated farms. In addition, alternative livelihood opportunities were generated and nutritious diets were promoted through livestock rearing and home gardening. The establishment and rehabilitation of water harvesting cisterns will substantially help communities living in dry areas to access water for drinking and productive uses, and reduce the burden to fetch water in distant locations, especially for women. The project also increased awareness about the identification and treatment of animal diseases, and provided vaccinations and animal drugs, contributing to improving animal health and productivity, as well as increasing trust in the periodical vaccination campaigns conducted in the region.



## ACTIVITIES

- 323 water harvesting cisterns constructed, comprising 305 new water harvesting cisterns (water capacity of 29 728 m<sup>3</sup>), and rehabilitation of 18 cisterns from ancient Roman period (water capacity of 9 007 m<sup>3</sup>).
- 127 demonstration plots established for olive and fig cultivation, and theoretical and hands-on training and agricultural inputs provided, to support adoption of GAP practices.
- 27 new olive farms established and equipped with water harvesting cisterns, drip irrigation systems and 120 olive seedlings.
- 31.59 tonnes of improved, drought-resistant varieties of barley and wheat seeds distributed to 527 beneficiaries.
- 100 female-headed households provided with 500 Barki goats (five goats per beneficiary), with certificate of ownership and 750 kg of animal concentrated feed.
- 45 women trained to produce milk and dairy products (cheese and yoghurt) under hygienic conditions, and dairy processing tools provided to prepare cheese and butter.
- 50 women-headed households provided with 1 000 laying chickens, 50 cocks and poultry feed.
- 70 home gardens established, and women trained in seedling cultivation and organic vegetable production, in compliance with GAP practices.



### Project Code

FAO: GCP/EGY/026/EC

ID Donor: ENPI/2013/024-474

### Project Title

Water Harvesting and Good Agriculture Practices for Improved Livelihood, Increased and Sustained Production in Matrouh Rain-fed Agricultural Areas

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Partnerships and Outreach

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