Towards COP27: Arab Regional Forum on Climate Initiatives to Finance Climate Action and the SDGs

Project Fact Sheet

Improve Agricultural Climate Resilience by Modernizing On-Farm Practices

EGYPT

Climate finance purpose
Adaptation
Sector
Water
Geographic coverage
Sub-national
Nile Valley & Delta (targeted area of about 10-12 canal command areas, covering a total area of about 500,000 feddan)
Description
The project will survey and define priority areas where modern irrigation systems are need. It will enable effective adaptation measures in a total area of about 500,000 feddan covering several full canal commands in the Nile Valley and Delta. Crop types and water availability under possible climate scenarios will be taken into account when designing and implementing the irrigation systems. The project will lead to raising water efficiency and productivity under water scarcity conditions. Reference: Egypt's National Climate Change Strategy 2050 (project number: 4.6)
Beneficiaries
7.5 million people (directly: 1.5 million people, and indirectly: 6 million people)
Climate rationale
Under scarcity condition induced by climate change, this project will introduce a climate-resilient pressurized piped irrigation system which will provide a flexible and reliable water supply to farmers, improve water productivity, and promote diversification to higher-value crops. The new irrigation system will operate by solar pumps, contributing to mitigation efforts.
Expected outcomes
• Raising overall irrigation water efficiency • Enhancing adaptation to water scarcity by reducing the volume of applied irrigation water; • Increasing the resilience of most vulnerable people and communities through the promotion of climate-smart agriculture. The project contributes to SDG 2 "Zero Hunger"; SDG 7 "Affordable and Clean Energy" (The use of solar energy to power pumps lifting water in the irrigation networks will contribute to significant energy savings, as well as reduced Carbon-Dioxide emissions.); SDG 8 "Decent Work and Economic Growth" (the project offers promotion of sustainable economic growth in accordance with national circumstances, achieving higher levels of water productivity through e.g. technological upgrading. It also promotes employment and decent work for all members of society.) Paris Agreement aims to strengthen countries' ability to deal with the impacts of climate change and support them in their efforts, so this project focuses on adaptation to water scarcity by reducing irrigation water requirements via using modern irrigation technology as an effective response option for adapting to climate change. On-farm irrigation technologies are providing a more efficient significant reduction of evaporation losses and increased crop production. This can eliminate water losses and consequently contributes to raising

overall irrigation water efficiency, as well as provide high adequacy for irrigation water to farmers. These advantages would contribute to facing the challenge of scarcity resulting from climate change impacts.
GHG reduction target
The use of solar energy to power pumps lifting water in the irrigation networks will contribute to significant energy savings, as well as reduced Carbon-Dioxide emissions. which links to SDG 7 (Affordable and Clean Energy".
Project implementation period
3 years From 2023 to 2026 (depend on the availability date of the finance)
Total Project Cost
Amount in National Currency: EGP 14,235 million Amount in US$ equivalent (per 1 August 2022 exchange rate): USD 750 million
Financing requirement
• Government budget: USD 60 million • Private sector: USD 10 million • Other (i.e. donors): USD 680 million
Expected Tenor / Duration of financing: 3 of years
Project Status: Feasibility study is needed
Contractual Structure: Government Ownership
Project proponent
Ministry of Water Resources and Irrigation
Contact persons
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