

Project Title: Study of the Economics of Water Conservation under the Jordan Water Innovation

Technologies Program

Project Location(s): Remote

### Background:

The Water Innovation Technologies Program is a USAID-funded \$32 million program carried out by Mercy Corps in Jordan. The goal of the five-year program is to save 18.5 million cubic meters of water. WIT has worked with market actors (equipment suppliers, financial intermediaries, etc.) and water users (households and famers) to improve the efficiency of markets for water saving technologies (WST) through market systems strengthening activities, incentive packages to equipment suppliers, loan programs for households, media campaigns, and other interventions. In addition, WIT has sponsored a number of communal water harvesting and storage infrastructure projects, adding to the number of such projects that the MC Jordan engineering team has designed and implemented over the last fifteen years. With achievement of its MEL indicators on target for the completion of the program in March 2022, WIT is seeking to learn lessons about the costs, benefits and incentives of the program and its various activities. In particular, the project represents USAID and Mercy Corps' first effort to apply Market Systems Development approaches to the challenges of water conservation. Throughout the project, WIT has carried out a series of research and monitoring, evaluation and learning (MEL) activities, with various partners, including its primary research partner, the International Water Management Institute.

#### Purpose / Project Description:

The purpose of the study is to assess the costs, benefits and incentives experienced by public (USAID and Mercy Corps) and private actors (suppliers, farmers and households) in incentivizing and implementing the range of water conservation activities completed through the WIT program. The study will provide important information on the costs and benefits of water conservation in the Jordanian context, as efforts to improve water productivity in the country continue. The study will also examine the incentives for adoption of water savings technologies (WST) faced by different actors, thereby informing similar programs in other contexts and complementing other ongoing evaluation efforts under the WIT program. The contractor will have access to the relevant suite of data, information and studies carried out by Mercy Corps in the conduct of the WIT program, including baseline and endline studies of knowledge, attitudes and practice (KAP), monitoring of water saved under the Program, etc. The purpose of this study to draw all this information together in one place, analyze it using the tools of economic analysis and report out to the global community on the lessons learned, in this respect, through this innovative project.

#### **Objectives:**

Research objectives under the study include:

- 1. Complete an activity-based cost analysis of the various WIT program activities.
- 2. Review and prepare household and farmer water savings data collected by Mercy Corps for inclusion in the economic analysis.
- 3. Assess the cost-effectiveness of the various Mercy Corps investments in promoting the adoption of WST by households or farmers and completing the construction of communal projects.
- 4. Estimate the return on investment (ROI) analysis for project participants (by relevant group) and evaluate the incentives faced by participants in adopting WST and engaging in the WIT program.
- 5. Estimate the net economic costs (or benefits) of the various activities and technologies applied by WIT and program participants, taking into account the amounts of water saved by each activity.
- 6. Compare, evaluate and draw lessons from a comparison of WIT results with other such results in Jordan or in other countries, and what these results imply for the future of water conservation efforts in Jordan.
- 7. Provide lessons drawn from the process of the study and make recommendations on additional monitoring or research that should be undertaken in the future on such projects.

#### **Deliverables:**



- An Inception Report
- Summary Report on the cost analysis, water saved and cost-effectiveness of WIT activities
- 3. (a) Draft and (b) Final Consultancy Report on the costs, benefits and incentives of water conservation of ~50pp
- A debrief session along with powerpoint sharing high level results for team members
- All Cost/Benefit/Output calculations (in one Excel File) as well as additional data/graphics input files

### Timeframe / Schedule:

Deliverable	Due Date
1	November 8, 2022
2	December 3, 2022
3a	December 20, 2022
3b	January 7, 2022
4	January 15, 2022
5	January 15, 2022

## The vendor will be managed by:

Bruce Aylward: Mercy Corps Technical Services Support Unit Water Advisor

# The vendor will work closely with:

Marco Scagliusi: Mercy Corps Program Analysis and Quality (PAQ) Unit Monitoring Advisor Members of the WIT team including the Deputy Chief of Party, Matt Marzolo, and the MEL Advisor, Dania Alhussaini.