SCOPE OF WORK
Irrigation Software Design

INTRODUCTION

The Water Innovation Technologies (WIT) project is a five-year initiative funded by the United States Agency for International Development (USAID) and implemented by Mercy Corps (MC). The objective of the project is to increase water conservation in Jordan by focusing on water efficiency in the agricultural sector, community and household levels. The Project's theory of change states that "if barriers to the adoption of water-saving technologies are systematically broken down at multiple levels, with different groups of water users and market actors through enhancing knowledge, forming partnerships and providing advisory services, in addition to improving access to finance and strengthening institutions that support water-saving, then adoption of water-saving technologies by farmers, households, and communities will increase leading to sustainable management of water and natural resources". The project goal is to save 18.5 MCM of water by addressing market system constraints in the adoption of innovative water-saving technologies in agriculture and household sectors.

As a market-driven development project is seeking to improve water use in agriculture in Jordan and increase the adoption of water savings technologies , for the past two years, WIT has partnered with suppliers with the aim of improving their knowledge, promotion and marketing efforts in order to deliver a full package of irrigation services , consisting on: 1) Irrigation network evaluations, 2) Irrigation network design, 3) Cost-benefit analysis, 4) Installation of technologies, 5) Operation and maintenance training for farm workers, and 6) provision of after-sale services , to increase the adoption of water saving technologies by farmers .

OBJECTIVE

For a better operating market system , a complete set of irrigation services including technology, system design and after-sales advisory services must be provided by suppliers to farmers WIT seeks to help suppliers to improve their business model and therefore, increase on-farm water use efficiency. For the upcoming year, WIT is supporting suppliers with different means that will enable to increase their sales and hence increase water savings at the farm level , one of the means of this support is the irrigation system design software .

TARGETED AUDIENCE

Irrigation suppliers and project partners

DELIVERABLES

The irrigation design software that should be provided to the suppliers must have the following specifications:

1-Able to design all types of pressurized irrigation systems from concept through the completion.

2-Allow rapid analysis of complex hydraulic systems, which facilitates faster design changes.

3-Analyse any existing irrigation system, design extensions to existing systems and can design new system.

4-Select pipe sizes and type of fittings

5- The software compatibility/ability of integration with other software (e.g. AutoCad , GIS , Google earth)

6- The software flexibility/ability for upgrades to higher versions when released

7- Create Data-Base library that contains irrigation network parts specifications that are related to each suppliers' products

8- The software design irrigation network applicability at farm level

9- Provision of training to suppliers in Arabic language

DURATION

The software is expected to be purchased in September 2020 and training must be delivered as soon as the software is installed.