



Exploring High-Value, Socially Inclusive and Water-Efficient Agriculture (P170476)

MIDDLE EAST AND NORTH AFRICA | Jordan | Agriculture and Food Global Practice |
 Recipient Executed Activities | Investment Project Financing | FY 2020 | Seq No: 4 | ARCHIVED on 29-Jun-2024 | ISR56603 |

Implementing Agencies: HASHEMITE KINGDOM OF JORDAN, Ministry of Agriculture

Key Dates**Key Project Dates**

Bank Approval Date: 09-May-2020

Effectiveness Date: 02-Dec-2020

Original Closing Date: 30-Apr-2022

Revised Closing Date: 30-Sep-2024

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

To pilot an environmentally sustainable, commercially viable and socially-inclusive hydroponic agriculture business model.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory
Overall Implementation Progress (IP)	<input type="checkbox"/> Moderately Satisfactory	<input type="checkbox"/> Moderately Satisfactory

Implementation Status and Key Decisions

- In October 2023, the Bank approved an additional financing request for US\$ 400,000. On March 19, 2024, the Ministry of Agriculture (MOA), in coordination with the Ministry of Planning and International Cooperation (MOPIC), requested an extension of the project closing date from March 28, 2024, to September 30, 2024. This extension is to allow sufficient time for the completion of critical support infrastructure procurement. Subsequently, on April 2, 2024, the Bank approved this extension request.
- The bidding tender for goods under Additional Financing (AF) was announced, completed, and awarded during the first week of April 2024. By the end of June 2024, goods, including two transportation buses, two cooling trucks, and planting seed trays, are expected to be delivered. Additionally, installing solar panels and two Reverse Osmosis (RO) systems is anticipated to be completed within the same timeframe.
- Water salinity issues at Al Tanoor and Al Moujab Dams in Tafileh and Karak have led to operational challenges for the hydroponics project. Climate change and low rainfall from 2021-2023 have depleted water sources, causing a shortage of fresh water. The PMT has tapped into the nearest underground water wells, but the high salinity of this water has caused pipe clogs, leading to crop losses. To mitigate salinity issues, the PMT restored connections to the dams' water supplies for reliable irrigation. PMT purchased two 1500 powerhouse pumps and the necessary piping, ensuring adequate water for hydroponics. The nearing completion of two ROs units will further ensure water quality, providing dual sources of clean water for the sites.

Risks**Overall Risk Rating**



Risk Category	Rating at Approval	Previous Rating	Current Rating
Overall	☐ Moderate	☐ Moderate	☐ Moderate

5. Results

Project Development Objective Indicators

► Increase in crop yield. (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	28.70	20.00
Date	15-Apr-2020	27-Mar-2022	08-Feb-2024	30-Sep-2024
Comments:	<ul style="list-style-type: none"> The crop yield at the Al Mujab Dam site in the Karak governorate significantly increased from September to December 2023, with the following production figures: strawberries at 750 kg, baby cucumbers at 50 kg, and cucumbers at 450 kg. The total cultivated area at the Karak site is 4,000 square meters, yielding a crop productivity rate of 18.7 kg/m². Plantation activities at Al-Tannor Dam in the Tafilah governorate have been halted since February 2023. Despite this, crop yield increased by 340 kg between September 2021 and January 2023, encompassing the following produce: cherry tomatoes: 200 kg; broccoli: 50 kg; strawberries: 40 kg; and Red cabbage: 50 kg. The total cultivated area at the Al-Tanoor Dam site is 3,250 square meters, resulting in a 10 kg/m² crop productivity. 			

► Increase in water productivity (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	85.00	40.00
Date	15-Apr-2020	27-Mar-2022	08-Feb-2024	30-Sep-2024
Comments:	Water productivity at the Al Mujab Dam site in the Al Karak governorate increased by 60%, surpassing the initial target by 20% between September 2023 and February 2024. Meanwhile, in Al Tanoor Dam in Tafileh, water productivity increased by 25% from September 2021 to January 2023.			

► Business solutions developed that will maximize profitability. (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	Yes	Yes
Date	15-Apr-2020	27-Mar-2022	08-Feb-2024	30-Sep-2024

► Women, youth and refugee-specific business solutions developed. (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
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Value	No	No	Yes	Yes
Date	15-Apr-2020	27-Mar-2022	08-Feb-2024	30-Sep-2024
Comments:	In the Al Mujab Dam site in Karak governorate, training on business solutions was provided to women, refugees, and youth from December 2023 to January 2024. Meanwhile, at the Al Tafileh site, a similar training program was conducted for women, refugees, and youth in November 2022.			

▶ Targeted members of farmers association/cooperative trained. (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	25.00	102.00	100.00
Date	15-Apr-2020	27-Mar-2022	08-Feb-2024	30-Sep-2024
☐ Women trained. (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	15.00	75.00	40.00
Date	15-Apr-2020	27-Mar-2022	08-Feb-2024	30-Sep-2024
☐ Youth trained. (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	25.00	40.00	30.00
Date	15-Apr-2020	27-Mar-2022	08-Feb-2024	30-Sep-2024
☐ Refugees trained (male) (Number, Custom Breakdown)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	5.00	5.00	30.00
Date	15-Apr-2020	27-Mar-2022	08-Feb-2024	30-Sep-2024

Overall Comments

Under the Refugees trained (male) Indicator, the project has found it challenging to find the targeted number of refugees in Southern Jordan (Tafila and Karak governorates). Typically, northern Jordan provides greater economic opportunities and resources to support refugees compared to the southern region. As a result, Syrian refugees are less commonly found in Al Tafileh and Karak, a trend shaped by the interplay of geographical, economic, and social factors.

Intermediate Results Indicators



► Hydroponic Units systems for monitoring water use and production are operational. (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	01-Apr-2020	27-Mar-2022	08-Feb-2024	30-Sep-2024
Comments:	Seventeen hydroponic houses have been installed at the Al Tanoor Dam site in Al Tafileh governorate and seven at the Al Mujab Dam site in Karak governorate.			

► Percentage in energy consumption decrease (from grid) (Percentage, Custom)



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	50.00
Date	01-Mar-2023	--	08-Feb-2024	30-Sep-2024

Overall Comments

The measurement of energy consumption is pending because the solar panels have not yet been installed. They are expected to be fully operational by the end of June 2024. The next ISR, scheduled for August 2024, will provide the most up-to-date information and performance data for this specific indicator.

Data on Financial Performance

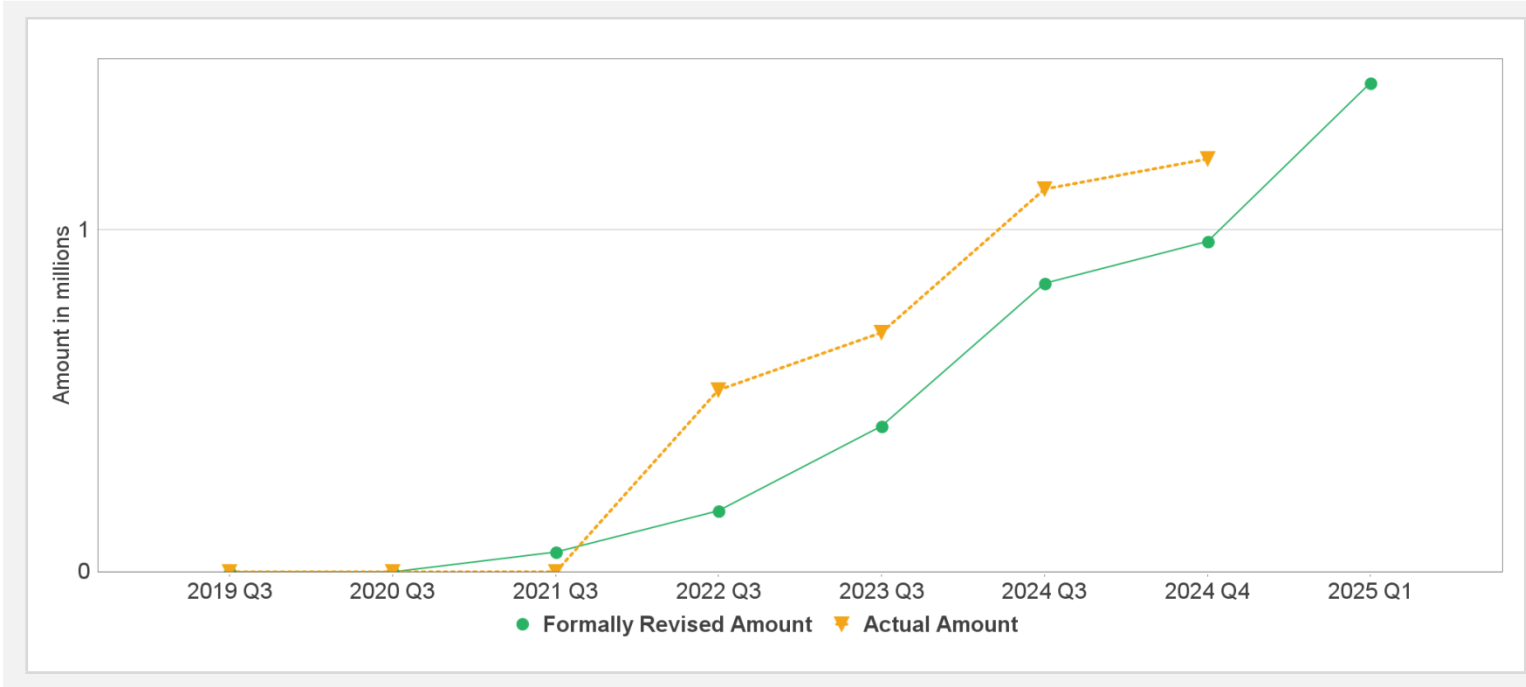
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P170476	TF-B2626	Effective	USD	1.00	1.00	0.00	0.78	0.22	 78%
P170476	TF-B2638	Closed	USD	0.43	0.43	0.00	0.43	0.00	 100%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P170476	TF-B2626	Effective	09-May-2020	02-Dec-2020	02-Dec-2020	30-Apr-2022	30-Sep-2024
P170476	TF-B2638	Closed	09-May-2020	02-Dec-2020	02-Dec-2020	30-Jun-2021	30-Jun-2021

Cumulative Disbursements



Restructuring History

Level 2 Approved on 25-Apr-2022 ,Level 2 Approved on 23-Dec-2022 ,Level 2 Approved on 25-Sep-2023 ,Level 2 Approved on 26-Mar-2024

Related Project(s)

There are no related projects.