



Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

Date Prepared/Updated: 05/13/2019 | Report No: ESRSC00541



BASIC INFORMATION

A. Basic Project Data

| | | | |
|----------------------|--|--------------------------|----------------------------|
| Country | Region | Project ID | Parent Project ID (if any) |
| Jordan | MIDDLE EAST AND NORTH AFRICA | P170476 | |
| Project Name | Exploring High Value, Socially- Inclusive, And Water Efficient Agriculture in Jordan | | |
| Practice Area (Lead) | Financing Instrument | Estimated Appraisal Date | Estimated Board Date |
| Agriculture | Investment Project Financing | | 3/28/2019 |
| Borrower(s) | Implementing Agency(ies) | | |
| FAO | FAO | | |

Proposed Development Objective(s)

The Project Development Objective (PDO) to pilot an environmentally sustainable, commercially viable and socially inclusive hydroponic agriculture business model in the Jordan Valley area.

| Financing (in USD Million) | Amount |
|----------------------------|-------------|
| Total Project Cost | 0.50 |

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

The Project aims to test and promote a commercially viable, socially-inclusive, and water-efficient agriculture production systems in Jordan through the piloting and the comparison of hydroponics units. The project will: (i) design three trial plots comparing traditional covered production system against medium and high technology hydroponic production system; (ii) identify which of these systems is the commercially and environmentally viable hydroponics unit; and (iii) draw and disseminate lessons learned from the pilot and identify avenues for investment, replication and scaling up. Lessons learned would seek to inform future (public and/or private) investments in the Jordan valley and beyond. The production systems will aim to supply high quality fruits and vegetables value chains. The aim is to maximize the high-end domestic market opportunities in Jordan and the wider region. Social inclusion



will feature strongly in the business models used to manage these pilots. Specifically, operations will be characterized by specific actions which seek to promote the women and youth in both entrepreneurship and greater participation in technology intensive agriculture. The lessons generated by the pilot unit will be the basis for an advocacy campaign. The information in this campaign will be used to inform the design of future business models/investments relevant to Jordan’s agriculture sector. The goal is for this pilot unit to play a significant role in the development of high technology agribusiness models in Jordan. The project will be based in Jordan Valley, the heartland of Jordan smallholder agriculture experiencing high rates of poverty. The pilot will take place on Government land (up to one hectare) available for the pilot under a already established 10-year lease agreement. FAO will be responsible for the overall leadership, management and delivery of this project. FAO will contract appropriately qualified and experience Jordanian firms and civil society organizations to provide support in key areas such day to day management and the advocacy campaign.

D. Environmental and Social Overview

D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]
The project is located in Wakas area, Jordan Valley - Irbid Governorate. Irbid Governorate is located in the far north west of Jordan in the Yarmouk River basin and Jordan Valley. Most of the governorate is part of the Hawran plateau, which covers northern Jordan, and south-west Syria. The governorate is bordered by Syria (the Golan Heights) from the north, the Jordan River from the west, Mafrq Governorate from the east, and Jerash, Ajloun and Balqa Governorates from the south. Irbid Governorate has the second largest population of all governorates, and the highest population density in the kingdom. Irbid City, the capital of the Governorates, has a population of more than 750,000. This population estimate includes more than 70,000 registered students in Irbid's 10 universities, community colleges and institutes, which also are a main economic driver for the City and Governorate. Clothing, chemicals and electronics constitute the main exports for Irbid Governorate. Irbid is also one of the most productive Jordanian agricultural regions, especially in the production of citrus, olives, wheat and beehoney. The project will be established on uncultivated land which is bordered by secondary, unpaved road from the northern and western sides. The road separates the project’s site from a fenced agricultural land – citrus farm – that is located to the north
Project Description: The Project aims to test, record and promote a commercially viable, socially-inclusive, and water-efficient agriculture in Jordan through the piloting of hydroponics farm unit. The project will support the acquisition, installation and initial operations of a pilot hydroponics unit (e.g. computer-based humidity, heat control systems and processing/packing). In addition, this component will support the provision of the technical assistance, training and business management skills required to ensure the pilot is managed as effectively as possible. Based on discussion with the implementing agency, and the field visit undertaken to the project's site, some information about the project are as follows: -The proposed hydroponics farm will be constructed on 10-Acre land which is part of a bigger land – 30 Acres– which is on 10-year leasehold from the government - Ministry of Social Development -The farm will apply 3 types of technologies i.e low-, high-tech hydroponics and traditional green houses -Types of crops considered to be grown in the farm: tomato, burry and cherry – final decision has not been made yet -Coir/Coco will be used as hydroponic substrate -Fertilizers and conditioners will be applied in the farm, no pesticides will be used. Construction activities will take between 4-5 months, and sandwich panels will be used to build the greenhouse and enhance insulation. The farm will be fenced and the contractor will operate the farm for one year before transferring its management.

D. 2. Borrower’s Institutional Capacity

Food and Agriculture Organization of the United Nations FAO Jordan will be a recipient of the financing as well as the managing and implementing entity. FAO is responsible for overall project management including safeguards,



reporting, and monitoring and evaluation (M&E). Although FAO has no environmental and social unit/officer currently in Amman, FAO will develop and formalize an appropriate institution and implementation mechanisms for the delivery of the project relevant activities and will put in place proper arrangements for implementation, monitoring and reporting on safeguards measures under the project. This includes hiring an environmental and social officer to supervise and report on the safeguards aspects under the project. It should be mentioned that this is not the first project of its type that FAO supports, there are already four greenhouse projects/hydroponics in Jordan that is supported by FAO.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Moderate

Environmental Risk Rating

Moderate

According to the World Bank Environmental and Social Framework, the risk level of this project is considered 'Moderate'. The project will support the acquisition, installation and initial operations of a pilot hydroponics farm unit (e.g. computer-based humidity, heat control systems and processing/packing). By design, this pilot project will apply water, soil and energy saving technologies and will be operated in an environmentally-sound manner. No adverse or irreversible impacts such as on biodiversity and habitats, and on cultural heritage are expected; only minor, localized and mitigatable negative impacts might be caused under the project. Nonetheless, during the implementation phase, and after the transfer of the project to the owner, there is risk of improper pest management, this includes (improper) use of pesticides. As a precautionary measures, an Integrated Pest Management Plan will be developed as part of the ESIA. The risk of improper pest management will be monitored during the implementation phase, and the findings will be mitigated as needed, including through adjusting the project's risk rating.

Social Risk Rating

Moderate

The project is expected to have positive social impacts. The intended beneficiaries will benefit from the project through the creation of work opportunities and increased access to food thus improving their livelihoods. There is no land acquisition associated with this project as the Ministry of Social Development has agreed to make a plot of land (up to one hectare) available for the pilot project for a 10-year lease contract.

Potential negative social impacts are mainly associated with the risk of misperception, and unintended negative impacts. The latter is expected mainly due to the perception that there will be plentiful work opportunities available especially in what is identified to be a high poverty pocket area according to the World Bank and Department of Statistics, Hashemite Kingdom of Jordan Poverty Update (2009) and the Poverty Report (December 2012). This will result in negative social impacts or tensions, and as such the risk level of this project from a social safeguards perspective is rated 'moderate'. This high level of possibility of ensuring employment was seen during meetings held with women's associations and NGOs in September 2018. The women present at the meeting welcomed the project as it would provide opportunities for the poor and vulnerable in the area but seemed to believe that the project would pave the way for numerous work opportunities. As such, the project may carry the risk of misperception, local tensions, or excessive expectations. To mitigate such risks, it will be essential to conduct meaningful stakeholder and public consultations and to be transparent. Citizen engagement activities can also help to mitigate such risks, and this will be done through consultations before and during project implementation. The outcome of these consultations will be reflected in the ESIA that will be prepared by FAO and that will be reviewed by World Bank team following the Environmental and Social Framework ESS 10 "Stakeholder Engagement and Information Disclosure" and this

Public Disclosure



requirement shall be listed in the Environmental and Social Commitment plan (ESCP) between the World Bank and the FAO.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

The World Bank Environmental and Social Standard 1 ‘Assessment and Management of Environmental and Social Risks and Impacts’ is applied considering the type of activities that will be implemented under the project and potential risks and impacts. The project will support the acquisition, installation and initial operations of a pilot hydroponics farm unit (e.g. computer-based humidity, heat control systems and processing/packing). By design, this pilot project will apply water, soil and energy saving technologies and should be operated an environmentally-sound manner. No adverse or irreversible impacts such as on biodiversity and habitats, and on cultural heritage are expected; only minor, localized and mitigatable negative impacts might be caused under the project. Such impacts include the production of wastes which are mainly the coco which will form the substrate that will be replaced each three years. Other impact might be related to the potential need for pest management. Although procurement of pesticides is not envisaged under the project, farming is expected to both improve and/or to change cropping patterns to pilot commercially viable, socially-inclusive, and water-efficient agriculture. These changes are expected to include the use of agricultural conditioners and fertilizers. In addition, some remedies and precautions might be required to ensure that pests, if any, are controlled in an integrated- and environmentally-safe manner. As such, the World Bank Environmental and Social Standard 3 on ‘Resource Efficiency and Pollution Prevention and Management’ applies to the project, and an Integrated Pest Management (IPM) plan will be prepared as part of the ESIA.

Areas where reliance on the Borrower’s E&S Framework may be considered:

Borrower's ES Framework will not be used under the project.

ESS10 Stakeholder Engagement and Information Disclosure

The project is expected to have positive social impacts since the intended beneficiaries will benefit from the project through the creation of work opportunities and increased access to food thus improving their livelihoods. However, the project may raise expectations or create tensions among local stakeholders as it would create job opportunities for only 10-15 workers and mainly women. The pilot project is situated in a high poverty pocket area (Al Waqaa) according to the Poverty Report (December 2012). As such there is a high number of vulnerable groups including the poor, women and elderly who are expecting to benefit from any development project taking place in the area. Due to the limited number of work positions available in this pilot project, this might result in the risk of social tensions and misperceptions amongst the local communities expecting to benefit from this project. As such it will be important to hold meaningful stakeholder consultation sessions and to be transparent from the very initial stages of the project. The ESIA will include the stakeholder engagement plan for this pilot project and will also provide an outline for a grievance redress mechanism for local communities as well as for the workers.

B.2. Specific Risks and Impacts



A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

The project will employ 10-15 workers and mainly women and therefore proper management of labor should be ensured, including providing the relevant insurance, providing a robust GRM to workers, essential training on GBV risks, and implementation of OHS measures. The ESIA will detail all potential risks and impacts related to workers and will provide appropriate measures and mechanisms to ensure proper management of labor under the project. Labour Management Procedures will accordingly be prepared.

ESS3 Resource Efficiency and Pollution Prevention and Management

Although procurement of pesticides is not envisaged under the project, farming is expected to both improve and/or to change cropping patterns to pilot commercially viable, socially-inclusive, and water-efficient agriculture. These changes are expected to include the use of agricultural conditioners and fertilizers. In addition, some remedies and precautions might be required to ensure that pests are controlled in an integrated- and environmentally-safe manner. As such, the World Bank Environmental and Social Standard 3 on ‘Resource Efficiency and Pollution Prevention and Management’ applies to the project, and an Integrated Pest Management (IPM) plan will be prepared as part of the ESIA. The IPM will include preventative actions and mitigation measures that will be used to address any potential adverse environmental and social risks and impacts, including on occupational health and safety, that might be associated with pest management and control.

ESS4 Community Health and Safety

Although the project is environmental friendly, small-scale project with no potential impacts on community health and safety, this standard is triggered as pest management methods might be used under the project, and if some methods -such as pesticides- are not used or stored properly, potential impacts might exist which might affect community health. To deal with such potential risk, and Integrated Pest Management Plan will be developed as part of the EISA including all measures and best practices for pest management, which should also ensure that there is no impact or risk on community health and safety.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

As the Ministry of Social Development of Jordan has agreed to make a plot of land (up to one hectare) available for the pilot project for a 10-year lease contract, there will be no need for land acquisition under this project. In addition, the land is empty with no squatters observed at the time of the site visit thus there will be no need for resettlement action. This ESS5 is therefore not considered to be currently relevant under this project

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

This standard is not relevant.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

This standard is not relevant.



ESS8 Cultural Heritage

This standard is not relevant.

ESS9 Financial Intermediaries

This standard is not relevant.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways No

OP 7.60 Projects in Disputed Areas No

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered? No

Financing Partners

NA

B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:

The implementing agency is preparing and ESIA which should be finalized, cleared and disclosed by appraisal. The LMP and SEP will also be prepared and disclosed by appraisal.

The proposed project follows the Bank’s procedure for Small Recipient-Executed Trust Fund Grants, hence will not be submitted to Board (as opposed to title of this section) and will be approved at CD level.

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

- The implementing agency i.e FAO will prepare an Environmental and Social Impact Assessment (ESIA), as well as an LMP and SEP, and submit the assessment to the World Bank for review, clearance and disclosure at the FAO and Bank external websites. The action will be implemented before any bidding, procurement or commencement of works. All safeguards instruments including the GRM, will be cleared, disclosed, and made fully operational before any physical activity starts on the ground.

- The implementing agency i.e FAO will hire an Environmental and Social Officer to monitor and report on the safeguards aspects under the project.

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS

22-May-2019

Public Disclosure



IV. CONTACT POINTS

World Bank

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Borrower/Client/Recipient

Borrower: FAO

Implementing Agency(ies)

Implementing Agency: FAO

V. FOR MORE INFORMATION CONTACT

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VI. APPROVAL

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