Report Number: ICRR0022865

1. Project Data

Project ID P162659	Project RY: Sma	CLOSED	
Country Yemen, Republic of	Practice Area(Lead) Agriculture and Food		
L/C/TF Number(s) TF-A5431	Closing Date (Original) To 31-Aug-2020		Total Project Cost (USD) 36,000,000.00
Bank Approval Date 31-Jul-2017	Closing 30-Jun-2		
	IBRD/ID	A (USD)	Grants (USD)
Original Commitment	36,000,000.00		36,000,000.00
Revised Commitment	36,000,000.00		36,000,000.00
Actual	36,00	36,000,000.00	

2. Project Objectives and Components

a. Objectives

As per the Grant Agreement (GA, 2017) and the Project Appraisal Development (PAD, 2017), the objective of the Project was "to increase the use of productivity and nutrition-enhancing agricultural practices by smallholders in targeted Project areas".

The project would target poor and food insecure households within seven of the most food insecure governorates in Yemen. Within the targeted governorates, district-level project sites would be selected based



Implementation Completion Report (ICR) Review

Independent Evaluation Group (IEG)

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To increase the use of productivity and nutrition-enhancing agricultural practices by smallholders in targeted project areas, the following PDO indicators were measured.

Farmers adopting improved agricultural technology (Target: 10,000; Actual: 13,322) [Male: 7,000

Overall	Efficacy	Rating
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Substantial

5. Efficiency

Ex-Ante

At Appraisal, the project undertook an economic and financial analysis (EFA) built on the following indicators: Economic Internal Rate of Return (EIRR), Net Present Value (NPV), and Benefit Cost Ratio (BCR). According to the PAD (Annex 4), the financial analysis included investments proposed by the project to calculate their financial returns and viability. The model assessed the following eight indicative project investments: (i) terrace rehabilitation; (ii) water harvesting; (iii) spate irrigation; (iv) water ponds; (v) water harvesting cisterns; (vi) increased livestock production; (vii) commercial and local laying poultry model; and (viii) beekeeping and honey production. Meanwhile, the project's economic analysis focused on a non-conventional approach and assessed project benefits related to reduction in undernutrition and stunting built on literature on the economics of nutrition, and economic appraisals of similar recent projects. The benefits and costs were analyzed on lifetime earnings. The overall project EIRR amounted to 12 percent, with an estimated NPV of YER 1,054,316 million (US\$4 217 million) at a 10 percent discount rate. The Benefit Cost Ratio amounted to 1.53.

Ex-Post

At project closing, an ex-post EFA was conducted for ten project interventions. The model included all project interventions included in the ex-ante EFA (and referred to in the earlier paragraph) except water harvesting cisterns for which the benefits were not calculated due to a lack of data. In the ex-post EFA, the model included



years found a positive FNPV of US\$ 51.43 million and ENPV of US\$ 139.45 million, with FIRR and ERR of 17% and 39% respectively, and BCR of 1.37 (ICR, Annex 4, Table 4).

Quantified ex-post EFA results using 10% discount rate. Under the time horizon of 10 years, the overall analysis showed a positive overall FNPV of US\$ 19.62 million and ENPV of US\$ 160.11 million, with FIRR and ERR of 13% and 38% respectively, and BCR of 1.31. The results of the overall analysis over 15 years found a positive FNPV of US\$ 61.04 million and ENPV of US\$ 227.55 million, with FIRR and ERR of 17% and 39% respectively, and BCR of 1.37 (ICR, Annex 4, Table 7).

Sensitivity analysis for individual interventions. The EFA conducted a sensitivity analysis using 10-year and 15-year timeframes under both 6 percent and 10 percent discount rates. The analysis used a 30 percent. 20 percent, and 10 percent increase or decrease in variables (e.g., price and yield of sorghum grain, price of millet grain, sorghum fodder yield, price of eggs and local hen, price of honey and cane sugar, price of cowpea fodder, price of tomatoes and hot peppers seedlings, price of fertilizer). The analysis showed that the results of the EFA were robust as in eight out of ten project interventions, the ENPVs remained positive when there was increase in variables (prices) of 10 percent and 20 percent.

Administrative Efficiency: The ICR (paragraph 50) stated that both the implementing agencies (FAO and SFD) were very competent with high quality staff and experienced field teams. Though the grant had to be extended twice, it was due to factors outside the control of the agencies which did not incur additional cost to the project. The activities were implemented efficiently considering the FCV context of the country. FAO's fee of 5 percent to cover their administrative cost was reasonable.

In summary, in a challenging FCV environment, the project was efficiently implemented, and had high FIRRs, ERRs and BCRs for both 10-year and 15-year period under 6 percent and 10 percent discount. The project's Efficiency is thus rated as Substantial.

Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	12.00	0 □ Not Applicable
ICR Estimate	✓	38.00	0 □ Not Applicable

^{*} Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The project's objectives were highly aligned with both the Government and World Bank strategies, and therefore the Relevance of Objectives for this project was rated high. The project met its target for PDO indicators (except



implementing agencies, and Bank team were supportive in changing course when security situation changed.

In summary, the Bank's performance at entry was high. The project was relevant to both Government and Bank strategies. Implementation arrangements were well designed with strong technical and local institutions. The M&E system was designed to capture internal monitoring which was supplemented by third-party independent monitoring. The quality of supervision was also found to be high, with close and timely supervision provided by the Bank which was well resourced. The quality of Bank performance at entry and supervision is thus rated as Satisfactory.

Quality of Supervision Rating Satisfactory

Overall Bank Performance RatingSatisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

As stated earlier, the project's M&E system was well designed with FAO taking the main responsibility for overall coordination of project monitoring. The project's internal monitoring was supplemented by a third-party independent monitoring to track performance through collection of data and evidence and provide feedback to FAO on improvements in delivery of project activities. It also reported on lessons to facilitate learning within the project. The project design included important features such as a baseline survey to be conducted within the first three months of the project to assess needs as well as the end-project assessment to measure impacts. In addition, the M&E system benefited from the reporting requirements of GAFSP, the Trust Fund that financed the project.

The Results Framework was developed to monitor progress and included relevant output and intermediate outcome indicators to measure the PDO. The Results Framework could have been strengthened by including an indicator to track nutrition related activities considering that nutrition-enhancing practices were key element of the PDO. Further, the PDO "Number of farmers adopting improved agricultural technology" did not comprehensively capture all practices or technologies adopted by the beneficiaries though this review agrees with the ICR (paragraph 80) that the intermediate outcome indicators provided support to towards of the PDO.

b. M&E Implementation

Over the project period, the M&E System ran smoothly except for some difficulties the project encountered occasionally on data collection. The project implemented large number of activities which were spread across geographical areas. There were also numerous local level organizations (FAO had contracted ten NGOs and worked with several other local Government offices) and information from all organization did not always come on a timely manner. Further, as planned during project design,

Environmental and Social Safeguards: At appraisal, the project prepared an Environmental and Social Management Plan (ESMP) in accordance with Environmental Assessment Policy OP4.01. According to the ICR (paragraph 91), the ESMF developed at appraisal was robust and was implemented according to the plan. The ICR did not provide details on the types of activities carried out but upon communication with IEG, the Project Team indicated that all activities proposed under the ESMF were implemented. The project developed 17 site-specific ESMPs covering 106 subprojects under Subcomponent 1.1, 4 ESMPs for activities under Subcomponent 1.2, and 1 ESMP for activities under Subcomponent 1.3. As a result, there was a high satisfaction with the environmental and social safeguards related activities implemented by the project. As per the Beneficiary survey, 98% of the interviewed beneficiaries in all the targeted governorates did not report any negative health impact from project interventions.

During implementation, the project was faced with two significant issues. First, ESMPs that were prepared by the implementing agencies were delayed from time to time due to internal clearances required within the implementing agencies (FAO and SFD). In some cases, it was found that work had started before the agencies received clearance of the ESMPs from the Bank which led to a temporary suspension of works. This happened during the early stages of the project due to misinterpretation of ESMF which was rectified and as a result, all ESMPs prepared thereafter were validated by the World Bank prior to the start of construction work.

The second issue was related to a fatal incident that occurred in a project site in January 2019 when soil accumulated for land protection activity fell on a worker and suffocated him. This led to the Bank rating the Implementation Progress (IP) rating of the project to a Moderately Satisfactory on May 2019. As per the report of the Third-party Monitoring Agency, the investigation revealed that there were several shortcomings such as inadequate pre-work planning, hazard identification and risk management as well as insufficient safety training. Following this incident, as per the ICR, the implementing agency (SFD) established a dedicated Occupational Health and Safety (OHS) unit and a Consolidated Safeguard Corrective Action Plan (CSCAP) was prepared to classify risks of all sub-projects and identify OHS-related mitigation measures, including by strengthening their training and monitoring. As a result, no further incidents were reported.

Grievance Redress Mechanism (GRM). The project established a Grievance Redress Mechanism (GRM) and were made accessible at the local level. According to the ICR, during project implementation, 325 complaints were received, and all were resolved within an acceptable timeframe. At completion, the Third-Party Monitoring found that two thirds of beneficiaries consulted were knowledgeable about GRM.

b. Fiduciary Compliance

Financial Management: The project was financed through a TF grant to FAO, and as a result, the financial management arrangements for the project was governed by the Financial Management Framework Agreement (FMFA) signed between the World Bank and FAO. This meant that the project would need to be compliant with UN Financial Regulations. At appraisal, in accordance with the OP/BP 10.00, an FM assessment was conducted by the Bank to ensure that the required capacity, fiduciary and accountability oversight existed within the implementing agency (PAD, paragraph 77). During project implementation, financial management was rated satisfactory or moderately satisfactory and interim Financial Reports (IFRs) were submitted on time. As per the third-party monitoring assessment, no reports of bribery or corruption were reported in the project.



were identified with a clear criterion that were validated through a participatory approach of community engagement. The selection was led by the Implementing Partners and in close cooperation with local authorities.

M&E System based on participatory approach through community consultations and third-party monitoring was critical not only to collect information but helped build accountability. The project's M&E that depended on extensive field level consultations, various assessments, along with GRM (Grievance Redressal Mechanism) helped build mutual accountability among the project beneficiaries, project's internal M&E teams and the third-party monitoring agency.