

Document: EB 2020/LOT/P.5/Rev.1
Date: 17 June 2020
Distribution: Public
Original: English

E



Investing in rural people

President's memorandum

Proposed additional financing to the

Hashemite Kingdom of Jordan for the

Rural Economic Growth and Employment

Project

Project ID: 1100001740

Note to Executive Board representatives

Focal points:

Technical questions:

Khalida Bouzar
Regional Director
Near East, North Africa and Europe Division
Tel.: +39 06 5459 2321
e-mail: k.bouzar@ifad.org

Mohamed Abdelgadir
Country Director
Tel.: +202 2594 372
e-mail: m.abdelgadir@ifad.org

Dispatch of documentation:

Deirdre Mc Grenra
Chief
Institutional Governance and
Member Relations
Tel.: +39 06 5459 2374
e-mail: gb@ifad.org

For: Approval

Contents

| | |
|---|------------|
| Abbreviations and acronyms | ii |
| Financing summary | iii |
| Recommendation for approval | 1 |
| I. Background and project description | 1 |
| A. Background | 1 |
| B. Original project description | 1 |
| II. Rationale for additional financing | 2 |
| A. Rationale | 2 |
| B. Description of geographical area and target groups | 3 |
| C. Components, outcomes and activities | 3 |
| D. Costs, benefits and financing | 5 |
| III. Risk management | 8 |
| A. Risks and mitigation measures | 8 |
| B. Environment and social category | 8 |
| C. Climate risk classification | 8 |
| IV. Implementation | 8 |
| A. Compliance with IFAD policies | 9 |
| B. Organizational framework | 9 |
| C. Monitoring and evaluation, learning, knowledge management and strategic communication | 10 |
| D. Proposed amendments to the financing agreement | 11 |
| V. Legal instruments and authority | 11 |
| VI. Recommendation | 11 |

Appendices

- I. Updated logical framework incorporating the additional financing
- II. Updated summary of the economic and financial analysis

Project delivery team

| | |
|-------------------------------------|--------------------|
| Regional Director: | Khalida Bouzar |
| Country Director: | Mohamed Abdelgadir |
| Project Technical Lead: | Myriam Fernando |
| Financial Management Officer: | Aziz Al-Athwari |
| Climate and Environment Specialist: | Tarek Abdel Monem |
| Legal Officer: | Paul Edouard Clos |

Abbreviations and acronyms

| | |
|----------|---|
| AF | additional financing |
| CBJ | Central Bank of Jordan |
| FFS | farmer field school |
| JEDCO | Jordan Enterprise Development Corporation |
| JEPA | Jordan Exporters and Producers Association |
| JRF | Jordan River Foundation |
| JSMO | Jordan Standards and Metrology Organization |
| MFI | microfinance institutions |
| MSMEs | micro, small and medium-sized enterprises |
| NARC | National Agricultural Research Centre |
| PGS | producer groups |
| PIM | project implementation manual |
| PMCU | project management and coordination unit |
| PSC | Project Steering Committee |
| REGEP-AF | Rural Economic Growth and Employment Project-additional financing |
| SCGs | savings and credit groups |
| SECAP | Social, Environmental and Climate Assessment Procedures |

Financing summary

| | |
|--|---|
| Initiating institution: | IFAD |
| Borrower/recipient: | Hashemite Kingdom of Jordan |
| Executing agency: | Jordan Enterprise Development Corporation (JEDCO) |
| Total project cost: | US\$39.17 million (original US\$15.1 million) |
| Amount of original IFAD financing: | SDR 7.67 million (equivalent to approximately US\$10.84 million loan and US\$0.5 million grant) |
| Terms of original IFAD loan: | Ordinary terms: 18 years maturity, including a grace period of three years, with an interest rate equal to the reference interest rate per annum as determined by IFAD semi-annually |
| Amount of additional IFAD loan: | EUR 11.35 million equivalent to US\$12.5 million |
| Terms of additional IFAD loan: | Ordinary terms: 35 years, including a grace period of four years, with an interest rate equal to the IFAD reference interest rate including fixed spread |
| Amount of additional IFAD grant: | EUR 0.635 million equivalent to US\$0.7 million |
| Cofinancier(s): | National Agricultural Research Centre, US\$1.62 million Jordan Enterprise Development Corporation, Jordan Standards and Metrology Organization, Central Bank of Jordan (CBJ), US\$0.3 million Private sector, US\$1.80 million |
| Financing gap: | US\$5.0 million |
| Amount of cofinancing: | US\$8.72 million (including the financing gap) |
| Terms of cofinancing: | Grants and in-kind contributions |
| Contribution of borrower/recipient: | US\$1.05 million |
| Contribution of beneficiaries: | US\$1.02 million |
| Cooperating institution: | Directly supervised by IFAD |

Recommendation for approval

The Executive Board is invited to approve the recommendation for the proposed additional financing contained in paragraph 44.

I. Background and project description

A. Background

1. The Rural Economic Growth and Employment Project (REGEP), EB 2014/LOT/P.18/Rev 1, was approved in December 2014 with an expected completion date of 31 March 2021. The project design took into consideration the recommendations of the country programme evaluation commissioned by the Independent Office of Evaluation of IFAD in 2012 and represented a real shift in IFAD's strategy in the Hashemite Kingdom of Jordan. It emphasized value chain support with private sector engagement; historically IFAD's interventions in Jordan concentrated on soil and water conservation investments; this has led to landless and poor people being left behind. The project's total financing was US\$15.18 million by IFAD, beneficiaries, domestic financing partners and the Government of Jordan. The project proved effective in creating employment for youth and women, providing opportunities for them to enhance their skills in horticultural production. It helped improve access to rural credit through the participation of commercial banks in lending to the agriculture sector. Given the success of the project, the Government of Jordan requested an additional loan of US\$12.5 million and an additional IFAD grant of US\$0.7 million to consolidate achievements made thus far and expand project areas. The completion and closing dates will be further extended, by three years, to 31 March 2024 and 30 September 2024, respectively.
2. The project expansion, REGEP-additional financing (REGEP-AF), will improve alignment with Government of Jordan's key strategies, especially Jordan's Water Strategy (2008–2022), its National Climate Change Policy (2013–2020) and the Jordan Response Information System for the Syria Crisis. REGEP –AF is in line with Jordan's 2020–2021 country strategy note and IFAD's 2016–2025 Strategic Framework, strategic objectives and corporate policies. REGEP-AF is gender-sensitive, mainstreams youth and climate concerns, and directly contributes to meeting the Eleventh Replenishment of IFAD's Resources (IFAD11) priorities. It complies with the 2019 revised IFAD targeting guidelines and Social, Environmental and Climate Assessment Procedures (SECAP) 2017, and contributes to the 2019–2021 Rural Youth Action Plan and IFAD's Policy on Gender Equality and Women's Empowerment.

B. Original project description

3. The project is structured around two components: (i) value chain and enterprise development; and (ii) inclusive rural finance. REGEP's development objective is the creation of productive employment and income-generating opportunities for poor and vulnerable rural people. The project will directly address the key strategic priorities of the government, including: improving access to finance in rural areas; integrating smallholder farmers into value chains and improving value chain efficiency and organization; increasing exports of high-water-value fruit and vegetables; and creating employment opportunities in rural areas. The project approach is based on: (i) targeting smallholders, rural entrepreneurs and the unemployed and underemployed in rural areas; (ii) building their technical and business capacity; (iii) increasing access to rural financial services; and (iv) improving, post-harvest handling, quality standards and certification.

II. Rationale for additional financing

A. Rationale

4. Jordan is an upper-middle-income country with a population of 10.546 million at the end of 2019. Jordan has suffered significant economic and social shocks in the past few years. The regional conflicts in Iraq and Syria, the country's main trading partners, seriously damaged Jordan's trade routes and capital inflows. The Department of Statistics in Jordan estimated the country's poverty rate at 15.7 per cent, based on a Household Expenditure and Income Survey in 2017-18. The unexpected trauma of the COVID-19 pandemic further challenges the Jordanian economy. Political tensions combined with a weak economy and unprecedented new challenges will most likely heighten uncertainty, political risk and social unrest.
5. Jordan has a Gender Inequality Index value of 0.460, ranking it 108th out of 160 countries in 2017. Female participation in the labour market is 14 per cent compared to 63.7 per cent for men.¹ The unemployment rate was estimated at 27.2 per cent for women compared to 17.1 per cent for men during the second quarter of 2019.² Jordanian women have one of the lowest entrepreneurship activity rates worldwide, at 4.5 per cent, compared to 15.8 per cent for men.³
6. Jordan's youth population (aged between 15 and 24) was 1,946,700 in 2016. Young people in Jordan face many challenges, mainly unemployment which affects 40 per cent of the age group. In rural areas, the main challenge for the government is creating attractive income generation and employment opportunities for youth. Undernutrition is not a serious problem, either among Jordanians or the refugee population.
7. Jordan is one of the four driest countries in the world. Water scarcity is exacerbated by climate change, which has already lowered rainfall levels and increased temperatures. Some of the adaptation interventions in the country include, inter alia: increasing the efficiency of irrigation systems; introducing water-saving technologies such as drip and hydroponic irrigation; and raising awareness concerning climate-smart agriculture, soil conservation and water storage, including on-farm rainwater harvesting. Mitigation interventions include protecting forest lands; restoring degraded forest ecosystems; and promoting the use of renewable energy in agriculture and food production.
8. REGEP is addressing a sector in which Jordan has comparative advantages i.e. production of vegetable crops and selected tree types, particularly in winter. The government is also keen to make use of the market opening created by conditions in Iraq and Syria. The country has experienced rapid growth with the expansion of irrigation, plastic housing and hybrid varieties of vegetable crops. The project has been able to help forge effective partnerships with government agencies, e.g. the Ministry of Agriculture, the National Agricultural Research Centre (NARC), the Jordan Exporters and Producers Association (JEPA), and the Jordan Standards and Metrology Organization (JSMO).
9. The existing project has reached 7,490 beneficiaries (67 per cent of planned total) and is expected to achieve its targets on completion. The 2019 annual outcome survey suggests that targeting mechanisms are functioning well and mostly reaching commercially-oriented small farmers, with 84 per cent of beneficiaries marketing their produce and 15 per cent cultivating land solely for their own consumption. These small farmers either own small plots or rent land.
10. Outreach to women has exceeded its targets of 3,369 women (120 per cent) while the target for youth (2,246 individuals) is nearly met (91 per cent). The project has

¹ UNDP (2018), Briefing note for Jordan on the 2019 Human Development Report.

² ILO (2019), World Employment and Social Outlook.

³ UN Women (2016), Country Gender and Economic Profiles.

demonstrated its effectiveness in creating more than 1300 full-time equivalent jobs and provided significant opportunities for participants to enhance their skills in horticultural production through farmer field schools. The Jordan River Foundation (JRF) in 2018 reported that 65 per cent of savings and credit group (SCG) members earned an income either from sales of agricultural produce or from processing, with 47 per cent reporting an increase in their income from farm production. As of 30 September 2019, the total disbursement rate for the project stood at 61 per cent. Counterpart disbursement was 52 per cent, while disbursement from other domestic finance sources was 29 per cent.

B. Description of geographical area and target groups

11. REGEP has so far been implemented in five governorates – Mafraq, Al Balqa, Jerash, Ajloun and Madaba – where poverty exceeds 15 per cent. With its additional funding, REGEP-AF will expand operations to the Governorates of Irbid, Zarqa, Karak, Tafilah and Maan, thus covering the whole country. These new areas are more rural, poorer, more vulnerable and more densely populated than the national average. The project will target rural households below the poverty line and vulnerable rural households which, while still above the poverty line, face a high risk of falling into poverty.
12. The project's main target groups are: (i) very poor and extremely vulnerable households including refugees; (ii) transient-poor, low-income households including non-professional farmers and microentrepreneurs; (iii) better-off households including professional farmers and small entrepreneurs and (iv) transformation drivers, namely medium-large commercial farms and enterprises. The project implementation manual (PIM) has been adjusted to ensure targeting of Syrian refugees, which was not foreseen in the initial design, and the inclusive targeting of poor population groups.
13. Following the midterm review (2018) REGEP's final number of beneficiaries is now set at 11,230. REGEP-AF is expected to reach a further 10,000 households, corresponding to 47,000 beneficiaries. These include very poor families (approximately 4,500) and transient-poor households (approximately 3,700) benefiting from training (through farmer field schools [FFSs] and savings and credit groups [SCGs]), grant financing and micro-credit (especially for the transient poor). Approximately 1,900 better-off beneficiaries, including commercial farmers and medium-to-large enterprises will benefit from capacity-building to access medium-to-large project loans. Women constitute 45 per cent of the total target and youth 30 per cent. Refugees households, expected to participate in SCG formation, would account for 30 per cent of SCGs members, corresponding to approximately 1,500 households (or 15 per cent of total beneficiaries).

C. Components, outcomes and activities

14. REGEP-AF's expected outcomes are: (i) enhanced resilience by producers to water scarcity and climate change; (ii) improved technical capacity among smallholders regarding production and productivity of high-value crops through sustainable use of scarce resources; (iii) enhanced integration with markets, leading to improved quality and quantity of marketed produce; (iv) improved access to high-value domestic and international markets, and (v) capacity to access to sustainable financial services in a timely manner.
15. **Component 1: Value chain and enterprise development.** This aims to address key constraints in value chains to enhance access to high-value domestic and international markets, improve quality standards and strengthen value chain linkages.
16. **Mobilization, capacity-building and enterprise development.** This subcomponent will promote integration with high-value markets and improved business capacity for SCGs, FFS-producer groups (PGs) and better-off beneficiaries.

Governorate-level scoping surveys will permit smart value chain analyses, including understanding of capacity-building needs and identification of key investments.

17. **Value chain upgrading.** This subcomponent will contribute to value chain upgrading through business plan development, training, exposure visits and facilitation activities to ensure improved access to high-value markets and financial instruments, and for quality enhancement. Two grant windows – respectively on: (i) value chain improvement investments; and (ii) innovative proposals aimed at climate resilience, natural resources savings, and employment – will support poor, vulnerable households including refugees, low-income households and microentrepreneurs. Grants will finance investments in value chain improvement and innovative projects.
18. **Knowledge management, learning and policy support.** This subcomponent will work closely with key development partners to improve the overall policy environment for small farmers and rural entrepreneurs, especially women and youth. The project is currently involved in discussions on the best ways of providing extension services to small farmers and on how they can best use digital technology to obtain critical technical advice. However, additional works is needed to test and use state-of-the-art technology and to upgrade the present agricultural production communication systems.
19. **Component 2: Inclusive rural finance.** Credit lines will be made available for: (i) lending to microfinance institutions offering loans of up to US\$10,000 to microentrepreneurs and farmers; and (ii) lending to commercial banks offering rural small and medium-sized enterprises and farmers larger loans (US\$50,000–US\$100,000). Beneficiaries will contribute between 20 per cent (micro) and 40 per cent (larger loans) of the financing. Loan disbursement is subject to inclusive business plan approval by the project management and coordination unit (PMCU), in line with specific eligibility criteria set out in the revised PIM.
20. **Training and capacity-building.** The subcomponent aims to strengthen the capacity of commercial banks and microfinance institutions (MFIs) to provide loans and microfinance to targeted beneficiaries. The capacity-building programme will include studies/assessments and training on: product development; credit risk management and appraisal; marketing strategies; agribusiness accounting; cash budgeting and sensitivity analysis techniques; and loans assessments and monitoring.
21. **Knowledge management and policy support.** The subcomponent aims to improve awareness and willingness among microfinance institutions and commercial banks to extend loans to farmers and agricultural micro, small and medium-sized enterprises (MSMEs). It would include: (i) savings mobilization by MFIs; (ii) alternative guarantee mechanisms and group-based lending; and (iii) agricultural sector lending and integrated value chain financing.

D. Costs, benefits and financing

Project costs

22. With the additional financing, REGEP's total costs will amount to US\$39.17 million as against total original project costs of US\$15.18 million. The proposed AF totals US\$23.99 million, of which US\$13.20 million from IFAD, US\$5.79 million from domestic financing from counterpart sources, the private sector, beneficiaries and implementing partners; and US\$5.00 million as financing gap. The overall IFAD contribution will increase to US\$24.54 million. The table below outlines the cumulative project costs. Beneficiaries' contributions will be in kind while counterpart contributions will be mixture of cash and in kind, including exemption from duties and taxes.

Table 1

Original and additional financing summary

(Thousands of United States dollars)

| | <i>Original financing</i> | <i>Additional financing</i> | <i>Total</i> |
|---------------------|---------------------------|-----------------------------|---------------|
| IFAD loan | 10 842 | 12 500 | 23 342 |
| IFAD grant | 500 | 700 | 1 200 |
| Financing gap | | 5 003 | 5 003 |
| Private sector | | 1 800 | 1 800 |
| Beneficiaries | 600 | 1 025 | 1 625 |
| NARC | 1 480 | 1 618 | 3 098 |
| CBJ, JEDCO and JSMO | 329 | 300 | 629 |
| Government | 1 432 | 1 046 | 2 478 |
| Total | 15 183 | 23 992 | 39 175 |

Table 2

Additional financing: project costs by component and financier

(Thousands of United States dollars)

| Components | Government | | IFAD additional loan | | IFAD additional grant | | Beneficiaries | | Private sector | | CBJ, JEDCO, JSMO | | NARC | | Financing gap | | Total | |
|---|--------------|------------|----------------------|-------------|-----------------------|------------|---------------|------------|----------------|------------|------------------|------------|--------------|------------|---------------|-------------|---------------|--------------|
| | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % |
| 1. Value chain and enterprise development | 854 | 5.1 | 7 533 | 44.9 | 700 | 4.2 | 1 025 | 6.1 | - | - | 47 | 0.3 | 1 618 | 9.6 | 5 003 | 29.8 | 16 781 | 69.9 |
| 2. Inclusive rural finance | 81 | 1.6 | 3 128 | 61.9 | - | - | - | - | 1 800 | 35.6 | 40 | 0.8 | - | - | - | - | 5 049 | 21.0 |
| 3. Project management | 110 | 5.1 | 1 839 | 85.0 | - | - | - | - | - | - | 214 | 9.9 | - | - | - | - | 2 163 | 9.0 |
| Total project costs | 1 046 | 4.4 | 12 500 | 52.1 | 700 | 2.9 | 1 025 | 4.3 | 1 800 | 7.5 | 300 | 1.3 | 1 618 | 6.7 | 5 003 | 20.9 | 23 992 | 100.0 |

Table 3

Additional financing: project costs by expenditure category and financier

(Thousands of United States dollars)

| Expenditure category | Government | | IFAD additional loan | | IFAD additional grant | | Beneficiaries | | Private sector | | CBJ, JEDCO, JSMO | | NARC | | Financing gap | | Total | |
|------------------------------|--------------|------------|----------------------|-------------|-----------------------|------------|---------------|------------|----------------|------------|------------------|------------|--------------|------------|---------------|-------------|---------------|------------|
| | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % |
| I. Investment costs | | | | | | | | | | | | | | | | | | |
| A. Equipment and materials | 7 | 1.8 | 38 | 9.2 | - | - | - | - | - | - | - | - | - | - | 371 | 89.0 | 417 | 1.7 |
| B. Consultancies | 267 | 14.5 | 1 353 | 73.5 | - | - | - | - | - | - | 87 | 4.7 | - | - | 135 | 7.3 | 1 841 | 7.7 |
| C. Studies | 17 | 8.1 | 88 | 42.6 | - | - | - | - | - | - | - | - | - | 102 | 49.3 | 207 | 0.9 | |
| D. Credit | - | - | 2 700 | 60.0 | - | - | - | - | 1 800 | 40 | - | - | - | - | - | - | 4 500 | 18.8 |
| E. Training | 508 | 11.3 | 2 667 | 59.4 | - | - | - | - | - | - | - | - | 1 312 | 29.2 | - | - | 4 488 | 18.7 |
| F. Workshops | 216 | 16.0 | 827 | 61.3 | - | - | - | - | - | - | - | - | 306 | 22.7 | - | - | 1 349 | 5.6 |
| G. Grants | - | - | 3 400 | 35.7 | 700 | 7.3 | 1 025 | 10.8 | - | - | - | - | - | - | 4 395 | 46.2 | 9 520 | 39.7 |
| Total investment costs | 1 015 | 4.5 | 11 074 | 49.6 | 700 | 3.1 | 1 025 | 4.6 | 1 800 | 8.1 | 87 | 0.4 | 1 618 | 7.2 | 5 003 | 22.4 | 22 322 | 93.0 |
| II. Recurrent costs | | | | | | | | | | | | | | | | | | |
| A. Salaries | - | - | 1 295 | 89.7 | - | - | - | - | - | - | 148 | 10.3 | - | - | - | - | 1 443 | 6.0 |
| B. Operation and maintenance | 32 | 13.8 | 131 | 57.4 | - | - | - | - | - | - | 66 | 28.8 | - | - | - | - | 228 | 0.9 |
| Total recurrent costs | 32 | 1.9 | 1 426 | 85.3 | - | - | - | - | - | - | 214 | 12.8 | - | - | - | - | 1 671 | 7.0 |
| Total project costs | 1 046 | 4.4 | 12 500 | 52.1 | 700 | 2.9 | 1 025 | 4.3 | 1 800 | 7.5 | 300 | 1.3 | 1 618 | 6.7 | 5 003 | 20.9 | 23 992 | 100 |

Table 4

Project costs by component and project year (PY)

(Thousands of United States dollars)

| Component | PY1 | | PY2 | | PY3 | | PY4 | | PY5 | | Total |
|---|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|------------|----------|---------------|
| | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | Amount |
| 1. Value chain and enterprise development | 3 505 | 21 | 4 713 | 28 | 5 109 | 30 | 3 453 | 21 | - | - | 16 780 |
| 2. Inclusive rural finance | 1 047 | 21 | 2 857 | 57 | 1 008 | 20 | 112 | 2 | 25 | 0.5 | 5 049 |
| 3. Project management | 354 | 16 | 476 | 22 | 508 | 23 | 518 | 24 | 307 | 14 | 2 163 |
| Total | 4 906 | 20 | 8 046 | 34 | 6 625 | 28 | 4 083 | 17 | 332 | 1 | 23 992 |

Financing and cofinancing strategy and plan

23. The total project cost, including additional financing is US\$39.17 million. IFAD's total financing of loans and grants is US\$23.34 million and US\$1.20 million respectively. In addition, total updated contributions from cofinanciers amount to US\$9.63 million, including US\$2.48 million from the Government of Jordan, US\$1.8 million from the private sector, US\$1.62 million from beneficiaries, US\$3.1 million from NARC, and US\$0.63 million from the CBJ, JSMO and JEDCO. The financing gap of US\$5 million will be mobilized from other cofinanciers during implementation. Each dollar of IFAD financing leverages 40 cents of domestic contributions.

Disbursement

24. The project will open two designated accounts (DAs) at CBJ to receive additional IFAD loan and grant funds. The financing will flow from the DAs to the respective operating accounts opened by the project in Jordanian dinars at Jordan Commercial Bank, which is managed by the PMCU. Separate ledgers will be maintained for receipts and expenditures from each financing source. The project will be required to submit quarterly withdrawal applications for replenishment.

Summary of benefits and economic analysis

25. Benefits expected from the additional financing would stem from: (i) increased crop yields and productivity due to sustainable water use and enhanced agricultural practices; (ii) an increased share of marketed farm produce; (iii) reduced losses during production, processing and transportation of produce through innovative technology and improved rural infrastructure; (iv) improved quality of products, thus attracting higher prices and meeting demand by processors/traders for more reliable supplies; (v) increased employment for hired or family labour in both on-farm and off-farm activities; and (vi) higher tax revenues as a result of increased taxable production.
26. The economic and financial analysis indicates that the project's total investment gains are significant and robust. The analysis shows an internal economic rate of return of 21.8 per cent, in line with the findings of the original financing, and a net present value of US\$11.5 million over 20 years based on the quantifiable benefits of the activities undertaken with the additional financing.

Exit strategy and sustainability

27. REGEP's exit strategy and sustainability is built on developing beneficiaries' as well as partners' capacity and providing institutional strengthening to scale up benefits and services. This involves measures such as: strengthening JEDCO's capacity and its cooperation with other relevant ministries, partners and service providers; leveraging REGEP funds to crowd in additional finance; mobilizing the private sector through partnership with JEPA; and widely disseminating REGEP's success stories and experiences. In particular, strengthening community organizations through SCGs, FFSs-PGs and their interlinkages, is planned in order to make them more self-sufficient and financially sustainable.

III. Risk management

A. Risks and mitigation measures

28. The major project risks and mitigation measures include:

| <i>Risk</i> | <i>Rating</i> | <i>Mitigation Measure</i> |
|---|---------------|--|
| Further political instability resulting in further influx of refugees and lack of access to markets and trade routes | Medium | Inclusive approach to target refugees Policy support, studies and capacity-building activities aimed at ensuring value chain players preparedness to improved economic and market conditions |
| Financial management and risk | Medium | Strengthening the current financial management team with an additional accountant, upgrading the accounting software system, updating the PIM and external and internal audit arrangements |
| Market-related risks including weak capacity of rural institutions and lack of business acumen of smallholder farmers | Medium | Strengthened role of JEPA in particular in market-oriented value chain development |
| Lack of synergies between components and subcomponents and weak capacities of, and cooperation between, implementing partners | Low | Accurate redesign to ensure components' intra- and inter-linkages Strengthened role of PMCU and technical coordination committee to ensure complementary, coordination and synergies between components, including close monitoring of loans and microfinancing windows and compliance-based disbursement procedures Regular IFAD supervision and a detailed PIM |
| Young Jordanians are not interested in traditional farm work and are being replaced by migrant workers, most of them from Egypt | Medium | Providing youth with opportunities for introducing modern and smart technologies, increased access to finance and improved inputs to gain their interest and enhance agricultural productivity |
| Growing water scarcity in the country | High | Introduce agricultural production and irrigation technologies, and practices that maximize water efficiency and productivity |
| Increased farm vulnerability to climate change | High | Pursue climate adaptation investments |

B. Environment and social category

29. REGEP will target smallholders and rural entrepreneurs with particular focus on women and youth and in line with the international agenda of leaving no one behind and the Jordan Response Plan for the Syrian Crisis (2017-2019), which includes refugees. The project mainstreams social inclusion and environmental sustainability in its value chain approach and its rural finance component. The project is designed to prevent unprecedented or irreversible social or environmental damage. Hence, REGEP is classified as a moderate risk project: Category B according to IFAD's SECAP. An Environmental and Social Management Plan is required for each of the project components.

C. Climate risk classification

30. The proposed interventions will reduce the vulnerability of target populations and resources to climate hazards, and will contribute to increasing the adaptive capacity of targeted rural population through: livelihood diversification; enhanced access to markets; microenterprises development; and access to rural finance supporting adaptation to water scarcity and renewable energy investments. Hence, the project's climate risk classification is moderate according to IFAD's SECAP guidelines.

IV. Implementation

A. Compliance with IFAD policies

31. REGEP-AF is in line with, Jordan's 2020-2021⁴ country strategy note, IFAD's Strategic Framework and strategic objectives, as well as its corporate policies as embodied in the 2019–2024 IFAD Private Sector Engagement Strategy, IFAD's 2009 Rural Finance Policy, and the 2004 Rural Enterprise Policy. REGEP-AF is gender-sensitive, mainstreams youth, nutrition and climate, and directly contributes to meeting IFAD11 priorities. It complies with the 2019 revised IFAD targeting guidelines and SECAP 2017,⁵ and contributes to the 2019–2021 Rural Youth Action Plan and the IFAD Policy on Gender Equality and Women's Empowerment.

B. Organizational framework

Management and coordination

32. JEDCO will continue as the lead technical agency and its existing PMCU will implement the project's day-to-day activities. JEDCO will supervise, coordinate and monitor interventions implemented by partners/service providers. It will chair Technical Committee meetings.
33. The performance of implementing partners and selected service providers is adequate and the roles of each are further specified under the additional financing as follows:
- (i) NARC will provide technical training and capacity-building to FFS-PGs members in accordance with the project's value chain approach. NARC will mainly deal with the value chain/s focusing on the poor and, as far as possible, with the market-oriented value chain/s.
 - (ii) A service provider⁶ selected on a competitive basis will look after small-farmer mobilization and sensitization, and help train SCGs while providing overall support to targeting, including supporting target group engagement in value chains. The service provider will organize capacity-building activities along the poor farmers' value chain. It will facilitate access to the grant facility and assist beneficiaries in preparing viable business plans.
 - (iii) JEPA will assist and support large producers to work on the market-oriented value chain/s. It will facilitate the access of this group to the rural finance facility. JEPA will assist producers seeking to access loans in the preparation of inclusive and viable business plans.
 - (iv) JSMO will continue to provide project beneficiaries with training and knowledge on health, safety and quality standards.
 - (v) CBJ will be responsible for the implementation of the inclusive rural finance component. A subsidiary agreement between the Ministry of Planning and International Cooperation, JEDCO and CBJ will allow the latter to receive loans from the project, and subsequently lend to competitively selected, licensed commercial banks and microfinance institutions.
34. The Project Steering Committee (PSC) chaired by the Minister of Planning will continue to provide overall guidance. The PSC will include representatives of JEDCO, CBJ, JEPA, NARC, JSMO, the Ministry of Agriculture, the Ministry of Environment, the Ministry of Water and Irrigation and a representative of the selected service provider and private sector. The PMCU director is the PSC secretary. The PSC will meet quarterly to provide strategic guidance to the project. The PSC will also hold meetings on grant proposals as required. The project would

⁴ IFAD country strategy note (2020-2021) formulated in December 2019.

⁵ The first phase of REGEP was designed prior to the introduction of the new SECAP within IFAD. The REGEP-AF complies with the SECAP attached to this Memorandum including its Environmental and Social Management Plan.

⁶ Under the original and still ongoing project, the service provider is JRF, which performed well.

have a technical coordination committee. Chaired by the project director, the committee will include PMCU staff and focal points in CBJ, JEPA, NARC, JRF/service provider, and JSMO. Its main purpose would be to ensure interlinkages between the two components and within each component. The project would also include an Evaluation Committee, which would meet to evaluate grant proposals. The final decisions on awarding would be made by the PSC.

Financial management, procurement and governance

35. **Financial Management.** The country risk is rated as medium. Transparency International's Corruption Perceptions Index ranked Jordan 60th worldwide in 2019. At the project level, the last supervision mission, in 2019, rated the quality of financial management as moderately satisfactory. It confirmed that internal control systems remain effective but indicated some areas for improvement.
36. The project's overall risk is rated as medium and the residual risk as low. The risks identified will be mitigated through: (i) strengthening the existing financial management structure of the PMCU by recruiting an additional qualified accountant; (ii) introducing an internal audit function; (iii) updating the existing PIM; (iv) upgrading the accounting software system; (v) carrying out effective budgetary control; and (vi) having external audits carried out by an outside audit firm.
37. **Procurement.** In 2019, Jordan pursued important structural reforms, introducing new regulations to govern aspects of financial transactions, such as insolvency, digital payments and public procurement. Based on a review of the new law and a procurement risk assessment performed for JEDCO, the project will be implemented using Jordanian national procurement procedures while respecting the revised IFAD policy on preventing fraud and corruption in its activities and operations. JEDCO will be responsible for conducting all procurement-related project activities except for those covered by the memorandum of understanding (MOU) to be signed with preselected public institutions. The procurement officer, seconded by JEDCO, will report to the PMCU director on REGEP procurement activities.
38. **Service providers.** MOUs and performance-based contracts will be signed with selected consultants, suppliers and contractors. Service providers will include: (i) preselected public institutions (such as JEDCO, CBJ, JSMO, JEPA), who will be required to ensure that procurement actions undertaken by them and financed by IFAD or the Government are compliant with the stipulated IFAD and government procedures; and (ii) competitively selected civil society or private sector entities (e.g. NGOs, consultancy firms and MFIs).

C. Monitoring and evaluation, learning, knowledge management and strategic communication

39. REGEP-AF will benefit from a more comprehensive monitoring and evaluation system. An updated reporting system will include progress on project outputs against their targets, thus clearly indicating the likelihood of achieving expected outcomes and, ultimately, the project objective. The improved system will help the PMCU to take corrective measures and develop a stronger knowledge management strategy. Proposed tools include a solid information management system; knowledge management-related roles and responsibilities clearly established in the PMCU; facilitated internal programme learning and cross-project exchanges; studies and impact assessments feeding into the preparation of policy briefs to inform government; and training materials on agricultural technologies and practices distributed through learning events. Periodic beneficiary surveys will be conducted to assess the perceptions of target groups regarding activities. REGEP has been selected by IFAD's Research and Impact Assessment Division as one of the projects in which to test their new methodology. A baseline survey (BLS) for

REGEP has already been completed. The final impact evaluation, however, should take into account BLS results for the new governorates.

D. Proposed amendments to the financing agreement

40. Subject to approval of the additional financing by the Executive Board, the financing agreement will be amended to (i) integrate the additional loan and grant into the existing categories of expenditure; and (ii) extend the project completion date to March 2024, and the loan closing date to September 2024. A new financing agreement specifying the new lending terms and conditions will be prepared and negotiated.

V. Legal instruments and authority

41. A financing agreement between the Hashemite Kingdom of Jordan and IFAD will constitute the legal instrument for extending the proposed financing to the borrower/recipient. The signed financing agreement will be amended following approval of the additional financing.
42. The Hashemite Kingdom of Jordan is empowered under its laws to receive financing from IFAD.
43. I am satisfied that the proposed additional financing will comply with the Agreement Establishing IFAD and the Policies and Criteria for IFAD Financing.

VI. Recommendation

44. I recommend that the Executive Board approve the proposed additional financing in terms of the following resolution:

RESOLVED: that the Fund shall provide a loan on ordinary terms to the Hashemite Kingdom of Jordan in an amount of eleven million three hundred and fifty thousand euros (EUR 11,350,000), and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

RESOLVED FURTHER: that the Fund shall provide a grant to the Hashemite Kingdom of Jordan in an amount of six hundred and thirty-five thousand euros (EUR 635,000), and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Gilbert F. Hougbo
President

Updated logical framework incorporating the additional financing

| Results Hierarchy | Indicators | | | | | | Means of Verification | | | |
|---|--|----------|----------|----------------------|----------------------|-------------------------------|-----------------------|---|-------------------------|---------------------------|
| | Name | Baseline | Mid-Term | End Target (phase 1) | End Target (phase 2) | Cumulative End target with AF | Source | Frequency | Responsibility | |
| Outreach | 1.b Estimated corresponding total number of households members | | | | | | | M&E system | Annual | M&E officer |
| | Household members - Number of people | | | 11 230 | 47 000 | 58 230 | | | | |
| | 1.a Corresponding number of households reached | | | | | | | M&E system | Annual | M&E officer |
| | Households - Number | | | 2 484 | 10 000 | 12 484 | | | | |
| | 1 Persons receiving services promoted or supported by the project | | | | | | | M&E system | Annual | M&E officer |
| | Females - Number | | | 3 369 | 3 000 | 6 369 | | | | |
| | Males - Number | | | 7 861 | 7 000 | 14 861 | | | | |
| | Young - Number | | | | 3 000 | 3 000 | | | | |
| Total number of persons receiving services - Number of people | | | 11 230 | 10 000 | 21 230 | | | | | |
| Project Goal Rural poverty, vulnerability and inequality contained and reduced (from PSR 2013-2020) | Percentage of households with improvement in assets ownership index | | | | | | | Baseline Mid-term and Completion Survey | Baseline and completion | PMU |
| | Percent - Percentage (%) | 0 | | 20 | 20 | 20 | | | | |
| | Percentage of HHs with increased income and improved food security | | | | | | | Baseline Mid-term and Completion Survey | Baseline and completion | PMU |
| | Percent - Percentage (%) | 0 | | 15 | 15 | 15 | | | | |
| | Percentage reduction of rural poverty | | | | | | | | | |
| Percent - Percentage (%) | 26.1 | | 23.5 | 23.5 | 23.5 | | | | | |
| Development Objective Employment and income generating opportunities | 2.2.1 New jobs created | | | | | | | Project Monitoring reports | Annually | M&E officer, DEF and JEPA |
| | Job owner - men - Number | | | 2 571 | 895 | 3 466 | | | | |
| | New jobs - Number | | | 4 674 | 1 627 | 6 301 | | | | |

| Results Hierarchy | Indicators | | | | | | Means of Verification | | | |
|--|--|----------|----------|----------------------|----------------------|-------------------------------|---|-----------------------------------|-------------------------|------------------------|
| | Name | Baseline | Mid-Term | End Target (phase 1) | End Target (phase 2) | Cumulative End target with AF | Source | Frequency | Responsibility | |
| created for rural poor and vulnerable, especially youth and women (from PRS 2013-2020) | Job owner - women - Number | | | 2 103 | 732 | 2 835 | | | | |
| | Percent increase in beneficiary HHs' incomes | | | | | | | DOS | Baseline and Completion | M&E officer |
| | Percent - Percentage (%) | 0 | 0 | 20 | 20 | 20 | | | | |
| Outcome 1 Technical capacity and competitiveness of smallholder farmers and rural MSMEs enhanced | Sales increase for smallholders and MSMEs/groups | | | | | | | | | |
| | Increase in farm gate value of sales for smallholders - Percentage (%) | | | 20% | 20% | 20% | Trade statistics and Project M&E system | Baseline, Mid-term and Completion | M&E officer | |
| | Increase in value of sales for supported MSMEs/group - Percentage (%) | | | 30% | 30% | 30% | Trade statistics and Project M&E system | Baseline, Mid-term and Completion | M&E officer | |
| | Number of Smallholders engaged in agribusiness activities | | | | | | | JEPA monitoring reports | Quarterly | JEPA |
| | Smallholders - Number | 0 | 800 | 1 200 | | 1200 | | | | |
| Output 1.1 Capacity of smallholders and rural MSMEs enhanced | Number of SCGs and FFS formed | | | | | | | Project Monitoring reports | Quarterly | M&E officer |
| | SCGs - Number | 0 | 200 | 350 | 500 | 850 | | | | |
| | Women led SCGs - Number | 0 | 100 | 175 | 200 | 375 | | | | |
| | SCGs members - Number | | | 3500 | 6 000 | 9500 | Project Monitoring reports | Quarterly | M&E officer | |
| | Refugees members of the SCGs - Percentage | | | 0 | 1500 | 1 500 | | | | |
| | FFS - Number | | | 125 | 150 | 275 | | | | |
| | Males FFS members- Number | 0 | 1500 | 1750 | 1 785 | 3 535 | Project Monitoring reports | Quarterly | M&E officer | |

| Results Hierarchy | Indicators | | | | | Means of Verification | | | |
|---|---|----------|----------|----------------------|----------------------|-------------------------------|--|-----------|-----------------|
| | Name | Baseline | Mid-Term | End Target (phase 1) | End Target (phase 2) | Cumulative End target with AF | Source | Frequency | Responsibility |
| | Females FFS members - Number | 0 | 1500 | 750 | 765 | 1 515 | | | |
| | Total number of FFS members - Number | 0 | 3 000 | 2500 | 2 550 | 5 050 | | | |
| | 1.1.4 Persons trained in production practices and/or technologies | | | | | | Business plans and progress reports from MSMEs and PAs | Quarterly | JEPA |
| | Men trained in crop - Number | | | 1 400 | 2 040 | 3 440 | | | |
| | Women trained in crop - Number | | | 600 | 510 | 1 110 | | | |
| | Total persons trained in crop - Number of people | | | 2 000 | 2 550 | 4 550 | | | |
| | 2.1.2 Persons trained in income-generating activities or business management | | | | | | Project Monitoring reports | Quarterly | M&E officer |
| | Females - Number | | | 1 200 | 7 944 | 9 144 | | | |
| | Males - Number | | | 1 200 | 5 296 | 6 496 | | | |
| | Young - Number | | | | 5 296 | | | | |
| | Persons trained in IGAs or BM (total) - Number | | | 2 400 | 13 240 | 15 640 | | | |
| Output 1.2 Fruits and vegetables value chain upgraded | Grants for value chain upgrading investments and innovation | | | | | | Project Monitoring reports | Quarterly | Finance Manager |
| | Amount disbursed on value chain upgrading- Money (USD' 000) | 0 | | 1 000 | 2 900 | 3 900 | | | |
| | Amount disbursed on innovation - Money (USD' 000) | 0 | | 360 | 1 200 | 1 560 | | | |
| | Total number of persons receiving grants for value chain upgrading - Number of people | 0 | | 5 000 | 5700 | 10 700 | | | |

| Results Hierarchy | Indicators | | | | | | Means of Verification | | | |
|--|--|---|----------|----------------------|----------------------|-------------------------------|-----------------------|-------------------------|----------------|---------------------|
| | Name | Baseline | Mid-Term | End Target (phase 1) | End Target (phase 2) | Cumulative End target with AF | Source | Frequency | Responsibility | |
| | Total number of persons receiving grants for innovation - Number of people | 0 | | | 2 400 | 2 400 | | | | |
| | Number quality standards certificates issued | | | | | | | JSMO reports | Annually | JSMO |
| | Certificates issued-total - Number | 0 | 90 | 150 | 100 | 100 | | | | |
| | Policy 1 Policy-relevant knowledge products completed | | | | | | | The M&E system | Annually | M&E officer |
| | Number - Number | 0 | 1 | 4 | 4 | 4 | | | | |
| | Outcome 2 Enhanced farmer resilience to climate change | 3.2.2. Households reporting adoption of environmentally sustainable and climate resilient technologies and practices | | | | | | | | |
| Households - Percentage (%) | | | | | 25% | 25% | | | | |
| Total number of household members - Number of people | | | | | 1 504 | 1 504 | | | | |
| Increase in crop value/unit of water | | | | | | | DOS | Baseline and Completion | | |
| Ratio - Ratio (%) | | 0.46 | | 0.55 | 0.55 | 0.55 | | | | |
| Output 2.1 Farmers learn to manage natural resources and face climate-related risks | 3.1.1. Groups supported to sustainably manage natural resources and climate-related risks | | | | | | | | | |
| | Total size of groups - Number of people | | | | 2 650 | 2 650 | | | | |
| Outcome 3 Microenterprises and SMEs invest in a productive or income-generating activity | 1.2.5 Households reporting using rural financial services | | | | | | | MFIs and DEF reports | Annually | DEF and M&E officer |
| | Households - Percentage (%) | | 0 | 0 | 80% | 80% | | | | |
| | Males - Number | | 0 | 0 | 1 067 | 1 067 | | | | |

| Results Hierarchy | Indicators | | | | | Means of Verification | | | | |
|---|--|----------|----------|----------------------|----------------------|-------------------------------|--|----------------------|----------------|---------------------|
| | Name | Baseline | Mid-Term | End Target (phase 1) | End Target (phase 2) | Cumulative End target with AF | Source | Frequency | Responsibility | |
| | Females - Number | | 0 | 0 | 457 | 457 | | | | |
| Output 3.1 Access to sustainable and timely rural financial services enhanced (PRS 2013-2020) | Loans to microenterprises and SMEs | | | | | | | | | |
| | SMEs accessing loans - Number | | 0 | 30 | 1 260 | 1290 | | | | |
| | Amount of loans to microenterprises and revolving - Money (USD' 000) | | 1 630.5 | 3 261 | 900 | 4 161 | | | | |
| | Amount of loans to SMEs - Money (USD' 000) | 0 | 1 050 | 2 100 | 3 600 | 5 700 | | | | |
| | 1.1.5 Persons in rural areas accessing financial services | | | | | | | MFIs and DEF reports | Quarterly | DEF and M&E officer |
| | Men in rural areas accessing financial services - credit - Number | 0 | 583 | 1 120 | 1 334 | 2 454 | | | | |
| | Women in rural areas accessing financial services - credit - Number | 0 | 250 | 480 | 572 | 1 052 | | | | |
| | Total persons accessing financial services - credit - Number of people | 0 | 833 | 1600 | 1 906 | 3 506 | | | | |
| | Policy 1 Policy-relevant knowledge products completed | | | | | | Project monitoring reports and studies | Semi-Annually | M&E officer | |
| Number - Number | 0 | 1 | 4 | 4 | 4 | | | | | |

Updated summary of the economic and financial analysis

Table A
Financial cash flow models

| Summary of the financial results (JD) | | | | |
|--|-----------------|--------------|-------------|------|
| Grants for individual and groups activities (5 models): | | | | |
| | Without project | With project | Incremental | FIRR |
| Model 1: Individual grower HMAPs | 720 | 1,960 | 1,240 | 21% |
| Model 2 : Individual grower vegetables | 193 | 226 | 34 | 113% |
| Model 3: non-HMAPs (dairy) | 545 | 1,435 | 890 | 36% |
| Model 4: Group growers HMAPs cultivation | 440 | 10,821 | 10,381 | 61% |
| Model 5: Group growers greenhouses | 500 | 3,483 | 2,983 | 20% |
| Micro credit for individual activities (4 models) | | | | |
| | Without project | With project | Incremental | FIRR |
| Model 6: Individual grower HMAPs | 720 | 1,960 | 1,240 | 21% |
| Model 7: non-HMAPs (dairy) | 545 | 1,435 | 890 | 36% |
| Model 8: Small-scale HMAPs packaging (individual model) | 315 | 882 | 567 | 57% |
| Model 9: individual greenhouse | 193 | 1,161 | 968 | 20% |
| Credit for small and medium rural enterprises (5 models): | | | | |
| | Without project | With project | Incremental | FIRR |
| Model 10: Groups HMAPs cultivation | 4,000 | 54,883 | 50,883 | 99% |
| Model 11: Groups packaging | 2,400 | 27,100 | 24,700 | 44% |
| Model 12: Group growers greenhouses | 1,000 | 6,966 | 5,966 | 20% |
| Model 13: Oil extraction | 0 | 90,080 | 90,080 | 23% |

Table B
Project costs and logframe targets

| Project costs and indicators for logframe | | | | |
|--|---------------|--|---|-------------------|
| Total Project cost | 39.175 | m US\$ | PMU | 4.4 m US\$ |
| Base Cost | 37.027 | m US\$ | | |
| Number of Beneficiaries | 58 230 | People | 12484 | HHs |
| Cost per beneficiary (IFAD resources= US\$24.5 million) | 421.5 | US\$/person | | |
| | 1965.9 | US\$/HHs | | |
| Components and Cost (USD) million | | Outcomes | Indicators | |
| Component 1: Value Chain and enterprise development | \$24.47 | Technical capacity and competitiveness of smallholder farmers and rural MSMEs enhanced | <ul style="list-style-type: none"> - 20% Increase in farm gate value of sales for smallholders - 30% Increase in value of sales for supported MSMEs/group | |
| Component 2: Rural Finance | \$10.26 | Microenterprises and SMEs invest in a productive or income-generating activity | <ul style="list-style-type: none"> - 1290 SMEs accessing loans - 2 454 men and 1 052 women in the project area accessing financial services | |

Table C

Main assumptions and shadow prices

| Financial and economic prices | | | |
|---|-------------|------------------|-----------------|
| | | Financial | Economic |
| | Unit | JD | JD |
| Outputs | | | |
| Herbal medicinal and aromatic plants | | | |
| Fresh | | | |
| Sage | kg | 0.8 | 1.1 |
| Thyme (domestic market) | kg | 0.8 | 1.1 |
| Thyme (export market) | kg | 0.3 | 0.4 |
| Basil | kg | 2.0 | 2.7 |
| Tomatoes | kg | 0.3 | 0.4 |
| Baby cucumber | kg | 0.4 | 0.5 |
| Processed | | | |
| 1st processing : drying | | | |
| Thyme (bulk) | kg | 2.8 | 2.8 |
| Sage (bulk) | kg | 2.8 | 2.8 |
| Basil (bulk) | kg | 2.5 | 2.5 |
| Sage (packaged) | kg | 6 | 6 |
| 2nd processing | | | |
| Thyme mix (zatar) | kg | 10 | 10 |
| Sage oil | litre | 2200 | 2,200 |
| Thyme oil | litre | 2200 | 2,200 |
| Basil oil | litre | 2800 | 2,800 |
| Olive oil | litre | 20 | 20 |
| Herbal soap | unit | 3 | 3 |
| Herbal tea (25 bags) | pack | 0.7 | 0.7 |
| Livestock/dairy | | | |
| Milk | litre | 0.7 | 0.7 |
| Dry yoghurt | kg | 9.5 | 10 |
| Ghee | kg | 7.5 | 8 |
| Inputs | | | |
| Seedlings | | | |
| Sage, thyme | each | 0.05 | 0.05 |
| | | | 0 |
| Fertilizer chemical | kg | 150 | 150 |
| Fertilizer organic | kg | 7 | 7 |
| Irrigation water | per m3 | 0.5 | 0.5 |
| Labor | | | |
| Seasonal labor | per day | 15 | 11 |
| Full time labor | per month | 200 | 140 |

| Financial and economic prices | | | |
|---|-----------|-----------|----------|
| | | Financial | Economic |
| | Unit | JD | JD |
| Outputs | | | |
| Herbal medicinal and aromatic plants | | | |
| Fresh | | | |
| Sage | kg | 0.8 | 1.1 |
| Thyme (domestic market) | kg | 0.8 | 1.1 |
| Thyme (export market) | kg | 0.3 | 0.4 |
| Basil | kg | 2.0 | 2.7 |
| Tomatoes | kg | 0.3 | 0.4 |
| Baby cucumber | kg | 0.4 | 0.5 |
| Processed | | | |
| 1st processing : drying | | | |
| Thyme (bulk) | kg | 2.8 | 2.8 |
| Sage (bulk) | kg | 2.8 | 2.8 |
| Basil (bulk) | kg | 2.5 | 2.5 |
| Sage (packaged) | kg | 6 | 6 |
| 2nd processing | | | |
| Thyme mix (zatar) | kg | 10 | 10 |
| Sage oil | litre | 2200 | 2,200 |
| Thyme oil | litre | 2200 | 2,200 |
| Basil oil | litre | 2800 | 2,800 |
| Livestock/dairy | | | |
| Dry yoghurt | kg | 9.5 | 10 |
| Inputs | | | |
| Seedlings | | | |
| Sage, thyme | each | 0.05 | 0.05 |
| Fertilizer chemical | | | |
| | kg | 150 | 150 |
| Fertilizer organic | | | |
| | kg | 7 | 7 |
| Irrigation water | | | |
| | per m3 | 0.5 | 0.5 |
| Labor | | | |
| Seasonal labor | per day | 15 | 11 |
| Full time labor | per month | 200 | 140 |

Table D

Beneficiaries participating to project activities and phasing

| Beneficiaries participating to project activities | | | | | |
|--|-------|-------|-------|------|-------|
| COMPONENT 1. VALUE CHAIN AND ENTERPRISE DEVELOPMENT | PY1 | PY2 | PY3 | PY4 | TOTAL |
| Farmers grouped in SCGs | 1200 | 1800 | 1800 | 1200 | 6000 |
| FFS created and supported | 510 | 510 | 765 | 765 | 2550 |
| Famers trained in agricultural practices and technologies | 510 | 510 | 765 | 765 | 2550 |
| Famers trained in business management | 1448 | 1448 | 2172 | 2172 | 7240 |
| Famers trained in income generating activities | 1200 | 1200 | 1800 | 1800 | 6000 |
| Professional farmers participating to market opportunities workshops | 180 | 180 | 180 | 180 | 720 |
| Grant financing | | | | | |
| Individual grants | 198 | 198 | 219 | - | 615 |
| Group grants | 1 848 | 1 848 | 2 044 | - | 5 740 |
| COMPONENT 2. RURAL FINANCE | | | | | |
| Microenterprise financing | | | | | |
| | 72 | 216 | 72 | - | 360 |
| Small and medium enterprise financing | | | | | |
| Small enterprise financing | 252 | 757 | 252 | - | 1 261 |
| Medium enterprise financing | 56 | 168 | 56 | - | 281 |

Beneficiary adoption rates and phasing

| Enterprise financing (USD) | | | | | | |
|--|----------------------------------|------------------|------------------|------------------|----------|------------------|
| | | PY1 | PY2 | PY3 | PY4 | TOTAL |
| Grant financing | | 1,320,000 | 1,320,000 | 1,460,000 | | 4,100,000 |
| Individual grants | 30% | 396,000 | 396,000 | 438,000 | | 1,230,000 |
| Group grants | 70% | 924,000 | 924,000 | 1,022,000 | | 2,870,000 |
| Microenterprise financing Small and medium enterprise financing | | 180,000 | 540,000 | 180,000 | | 900,000 |
| Small enterprise financing | 70% | 504,000 | 1,512,000 | 504,000 | - | 2,520,000 |
| Medium enterprise financing | 30% | 216,000 | 648,000 | 216,000 | - | 1,080,000 |
| - | | | | | | - |
| Number of loans and grants | | | | | | |
| | Average loan size (USD) | PY1 | PY2 | PY3 | PY4 | TOTAL |
| Grant financing | | | | | | |
| Individual grants | 2,000 | 198 | 198 | 219 | | 615 |
| Group grants | 6,000 | 154 | 154 | 170 | | 478 |
| Total grants | | | | | | 1,093 |
| Microenterprise financing Small and medium enterprise financing | 5,000 | 36 | 108 | 36 | - | 180 |
| Small enterprise financing | 10,000 | 50 | 151 | 50 | - | 252 |
| Medium enterprise financing | 50,000 | 4 | 13 | 4 | - | 22 |
| Total loans | | 55 | 164 | 55 | 0 | 274 |
| Success rate | 70% | | | | | |
| Number of enterprises under the project (after success rate) | | | | | | |
| | Average loan size (USD) | PY1 | PY2 | PY3 | PY4 | TOTAL |
| Grant financing | | | | | | |
| Individual grants | 2,000 | 139 | 139 | 153 | - | 431 |
| Group grants | 6,000 | 108 | 108 | 119 | - | 335 |
| Microenterprise financing Small and medium enterprise financing | 5,000 | 25 | 76 | 25 | - | 126 |
| Small enterprise financing | 10,000 | 35 | 106 | 35 | - | 176 |
| Medium enterprise financing | 50,000 | 3 | 9 | 3 | - | 15 |
| - | | 38 | 115 | 38 | 0 | 192 |

Table E
Economic cash flow

| Calculation of the overall EIRR of the REGEP AF (USD) | | | | | | | | | | |
|---|--------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | PY1 | PY2 | PY3 | PY4 | PY5 | PY6 | PY7 | PY8 | PY9 | PY10-20 |
| Total Incremental Net Benefits | -1,354,618 | -1,762,862 | -1,462,434 | 1,966,420 | 3,663,653 | 4,088,649 | 4,211,762 | 4,176,449 | 4,127,257 | 4,014,033 |
| Total Incremental Costs | 2,086,515 | 3,128,868 | 2,337,769 | 971,975 | 122,358 | 122,358 | 122,358 | 122,358 | 122,358 | 122,358 |
| Cash Flow | -3,441,133 | -4,891,730 | -3,800,203 | 994,445 | 3,541,294 | 3,966,290 | 4,089,403 | 4,054,091 | 4,004,899 | 3,891,674 |
| EIRR | 21.8% | | | | | | | | | |
| NPV | \$11,498,762 | | | | | | | | | |

Table F

Sensitivity analysis

| $\Delta\%$ | Link with the risk matrix | IRR (%) | NPV @10% (USD M) |
|----------------------------|---|---------|------------------|
| Base case scenario | | 21.8% | 11,498,762 |
| -20% in benefits | Combination of risks affecting output prices, yields and adoption rates | 16.5% | 6,172,799 |
| -40% in benefits | | 10.9% | 5,409,008 |
| +10% in costs | Increase of construction material prices and trainings | 20.6% | 10,743,083 |
| +20% in costs | | 19.4% | 9,987,404 |
| 1 year delay in benefits | Delays in implementation | 19.3% | 9,224,020 |
| 2 years delay in benefits% | | 17.4% | 7,501,153 |