Investing in rural people

**Executive Board**

# President's memorandum

# Proposed additional financing to

# Republic of South Sudan

# Sustainable Agricultural Development Project

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**FOR: APPROVAL**

**Action**: The Executive Board is invited to approve the recommendation for the proposed additional financing contained in paragraph 47.

**Technical questions:**

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*For more information on the project, please visit* *https://www.ifad.org/en/w/projects/2000004864*

International Fund for Agricultural Development – www.ifad.org

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# Financing summary

| | |
|---|---|
| **Initiating institution:** | IFAD |
| **Borrower/recipient:** | Republic of South Sudan |
| **Executing agency:** | Ministry of Agriculture and Food Security |
| **Total project cost:** | US$41.8 million |
| **Amount of original IFAD Debt Sustainability Framework grant:** | US$9.8 million |
| **Amount of additional IFAD Debt Sustainability Framework grant:** | US$10.8 million |
| **Cofinancier(s):** | Global Environment Facility/Least Developed Countries Fund (GEF/LDCF); African Development Bank (AfDB) |
| **Amount of cofinancing:** | GEF/LDCF: US$8.93 million<br>AfDB: US$9.5 million (parallel financing) |
| **Terms of cofinancing:** | GEF: Grant<br>AfDB: Parallel cofinancing through the Climate-Resilient Agrifood Systems Transformation Project |
| **Contribution of borrower/recipient:** | US$1.17 million |
| **Contribution of participants:** | US$1.6 million |
| **Amount of original IFAD climate finance:**[1] | US$6.2 million |
| **Amount of additional IFAD climate finance:**[2] | US$6.3 million (of which US$0.8 million is a climate top-up) |
| **Cooperating institution:** | IFAD |

[1] Includes climate resilience.
[2] Includes climate resilience.

# I. Background and project description

## A. Background

1. The Sustainable Agricultural Development Project (SADEP) was approved by the IFAD Executive Board in September 2024 (EB 2024/142/R.7), and the financing agreement entered into force on 17 March 2025, with a project completion date of 31 March 2032 and a closing date of 30 September 2032.

2. SADEP's total financing at approval was estimated at US$40.80 million, including IFAD original financing of US$9.8 million in the form of a Debt Sustainability Framework grant from the Twelfth Replenishment of IFAD's Resources (IFAD12) performance-based allocation system (PBAS), US$8.93 million from the Global Environment Facility/Least Developed Countries Fund, and US$9.5 million in parallel financing from the African Development Bank. Domestic cofinancing includes approximately US$1.17 million from the Government of South Sudan and an estimated in-kind contribution equivalent to US$1.6 million from the participants. SADEP was designed with a financing gap of US$9.8 million. The Ministry of Agriculture and Food Security is the lead implementing agency for SADEP.

3. Effective 1 January 2025, the Government was allocated a total of US$10.8 million, on grant terms, from the PBAS and core additional climate contributions under IFAD13, of which US$10 million is the regular PBAS allocation and US$0.8 million is a climate top-up. It is noted that IFAD's resources are meant to support investments aligned with IFAD's mandate and with the recipient government's priorities, particularly with regard to achieving the Sustainable Development Goals, building the prosperity and resilience of rural communities, and strengthening food systems. Climate top-ups, funded by core additional climate contributions, are meant to be wholly used for climate finance to support eligible climate adaptation and mitigation activities.

4. On 5 May 2026, the Government submitted an expression of interest in utilizing the entire allocation of US$10.8 million to cover the SADEP financing gap and to increase SADEP's climate resilience through the construction of additional kilometres of climate-proofed community access roads.

## B. Original project description

5. SADEP's goal is to contribute to enduring peace and reduced poverty and its development objective is to enhance resilience[3] and food security for target communities.

6. SADEP interventions focus on fisheries and sorghum-based production systems through the following components: (i) enhanced climate-adaptive production, productivity and availability of nutritious food; (ii) enhanced community infrastructure and post-harvest management capacity; (iii) institutional strengthening, policy support and project coordination; and (iv) response to emergency and disaster.

7. SADEP's outcomes are as follows: (i) increased production, productivity and availability of nutritious foods; (ii) enhanced community infrastructure and post-harvest management capacity for sorghum-based systems and fisheries; and (iii) strengthened institutional capacities and rural sector coordination.

# II. Rationale for additional financing

## A. Rationale

8. SADEP was designed with a full set of activities whose effective implementation would contribute to achieving its goal and development objective. However, the available funds were not enough to cover all the needed financial resources.

[3] Includes climate resilience.

Accordingly, SADEP was designed with a financing gap. At the time of SADEP design, it was expected that the financing gap of US$9.8 million might be sourced through subsequent PBAS cycles, under financing terms to be determined and subject to internal procedures and subsequent Executive Board approval, or through cofinancing identified during implementation.

9. The additional financing of US$10.8 million will be used to cover the US$9.8 million financing gap in its entirety, with the remaining US$1 million to be used to further increase the climate resilience of selected community access roads, consistent with SADEP's original design. South Sudan's agricultural transformation is significantly constrained by inadequate rural connectivity. Poor road infrastructure remains one of the principal barriers limiting access to agricultural inputs, extension services, aggregation centres, processing facilities and markets. During the rainy season, many productive areas become partially or completely inaccessible due to flooding, erosion, damaged drainage structures and prolonged waterlogging, resulting in high transport costs, post-harvest losses and reduced market participation by rural producers.

10. The activities supported by the additional financing will contribute to SADEP's objectives and are well aligned with the project design. All these activities were vetted as part of the SADEP review and approval process, and their respective financial and economic viability was established.

11. It is, however, noted that SADEP's implementation start-up was delayed by a protracted recruitment process for the third-party implementing agency (TPIA). The implementing agency has now been recruited, and project implementation began on 20 July 2026. The project met its disbursement conditions in May 2026, and US$344,449 (3.5 per cent of the IFAD financing) has already been disbursed. In addition, the implementing agency's key personnel were recruited as a mandatory requirement of the competitive selection process, ensuring implementation readiness and enabling rapid commencement of activities.

**Special aspects relating to IFAD's corporate mainstreaming priorities**

12. In line with IFAD's mainstreaming commitments, the project has been validated as:

☒ Including climate finance

☒ Nutrition-sensitive

☒ Youth-sensitive

☒ Build adaptive capacity

13. At design, SADEP was validated as championing the above four mainstreaming themes. The same mainstreaming priorities will be maintained for the additional financing.

14. **Environment and climate.** South Sudan faces significant environment and climate challenges because livelihoods are heavily dependent on climate-sensitive sectors. According to the Notre Dame Global Adaptation Initiative (ND-GAIN), approximately 95 per cent of the population relies on agriculture, fishing and forestry, making communities particularly vulnerable to climate-related shocks such as droughts and flooding. Recent climate disasters have contributed to worsening food insecurity and increased pressure on natural resources.[4]

15. The rate of deforestation and environmental degradation has been increasing over time. General circulation model projections indicate that temperatures may increase by 0.6–1.7°C by 2030 and by 1.1–3.1°C by 2060 relative to the baseline period of 1961–1990. Furthermore, future rainfall projections for the years 2010–2039 show reductions of over 150 mm. The frequency of droughts and floods is predicted to increase. The environmental and social risk classification of SADEP is assessed as substantial. The environment and social management framework has

[4] ND-GAIN. 2025. ND-GAIN Adaptation Brief: South Sudan.

been developed to guide implementation and prevent negative effects on the environment and social systems.

16. **Nutrition.** Despite a multitude of preventive efforts by various actors over the past decade, acute food insecurity has increased, and women and children in particular continue to suffer from unacceptably high levels of malnutrition. Based on the latest national projections by the Integrated Food Security Phase Classification for 2026, 7.8 million people – around 55 per cent of the population – are facing high levels of acute insecurity (Phase 3 and above), up by 280,000 from 2025, with 2.2 million children aged 6.59 months acutely malnourished, up by around 100,000 from 2025. The number of people classified as in Emergency (Phase 4) and Catastrophe (Phase 5) has also increased and now stands at 2.5 million and 73,000, respectively.[5] Acute malnutrition levels exceed the World Health Organization emergency threshold of 15 per cent, with most counties reporting levels above this threshold. Recent data also reveal a lack of progress in reducing the prevalence of anaemia among women of reproductive age, which remains persistently high at 35.6 per cent. The maternal malnutrition rate is also significant, and 35 per cent of women aged 15–49 are underweight.

17. **Youth.** South Sudan has the highest proportion of young people in the world, with a median age of 19 years; 74 per cent of the population is younger than 24 years. South Sudanese youth have low educational attainment, which hinders their economic participation, and are also affected by the widespread violence that has existed in the country for a number of years. As a result, South Sudan, with a score of 0.3, ranks second lowest on the Human Capital Index, behind only Chad. Unemployment in South Sudan is estimated at 11 per cent of the population as a whole, while youth unemployment is estimated at 50 per cent and it continues to rise, exacerbated by the low levels of education, limited skills and a weak economy.

## B. Description of geographical area and target groups

18. **Project area.** SADEP's geographical targeting strategy focuses on areas with high poverty prevalence, relative security and economic potential in the sorghum, groundnuts, sesame and fisheries value chains. It also considers counties with significant food and nutrition vulnerabilities and aims to leverage partnerships with other development actors. The selected counties are Terekeka (Central Equatoria), Mundri West (Western Equatoria), Mvolo (Western Equatoria) and Bor (Jonglei). This approach consolidates IFAD's investments for greater impact.

19. **Target group.** SADEP aims to reach rural agricultural and fishing households through producers' organizations. The target groups include the poorest and the most food-insecure and malnourished households and vulnerable people with limited access to assets and economic opportunities due to social exclusion and climate change. These individuals will participate in sorghum and fisheries producers' groups, such as village savings and loan associations, cooperatives, and savings and credit cooperative organizations.

## C. Components, outcomes and activities

20. SADEP's structure will remain the same with respect to the original components/outcomes, as described in section I.B above. The financing gap was identified at design. As such, the activities to be financed remain unchanged.

21. However, it is recognized that the IFAD13 PBAS allocation to South Sudan of US$10.8 million is US$1 million more than the financing gap of US$9.8 million. It is also noted that the additional financing includes a climate top-up of US$0.8 million. Accordingly, US$1 million of the additional financing will be used to strengthen the climate resilience of community access roads under activity 2.1.3. The investment will specifically finance the rehabilitation of strategic roads so that they meet climate-resilient standards, including improved drainage systems, culverts, erosion

[5] Integrated Food Security Phase Classification. 2026. South Sudan: Acute Food Insecurity Projection Update for April – July 2026.

control measures, raised embankments in flood-prone sections, slope protection works and other engineering measures designed to withstand increasingly frequent flooding and extreme weather events. These interventions will ensure year-round access to markets and services, reduce disruptions to agricultural value chains and protect productive investments supported under SADEP.

22. Experience from implementation of the ongoing South Sudan Livelihoods Resilience Programme has demonstrated that the original road rehabilitation unit cost assumptions applied during SADEP's original financing design are no longer realistic under current market conditions and engineering requirements. Based on recent procurement and implementation experience, a revised rehabilitation cost of approximately US$50,000 per kilometre, up from US$45,000 per kilometre, has been adopted. The additional financing will therefore serve both to support the application of realistic climate-proofed road construction standards and to modestly expand the overall road network reached by the project. The additional kilometres of community access roads to be rehabilitated will contribute to increased outreach; this is reflected in the revised logical framework.[6]

## D. Costs, benefits and financing

23. **Project costs.** The total cost for SADEP, including price and physical contingencies over a seven-year implementation period, is estimated at US$41.8 million. The investment costs have been estimated at US$34.7 million (89 per cent of the base costs), and recurrent costs are estimated at US$4.3 million (11 per cent of the base costs). Price and physical contingencies are estimated at US$2.6 million (US$1.4 million and US$1.2 million, respectively).

24. The additional financing of US$10.8 million will fully cover the financing gap identified at design (US$9.8 million). The remaining US$1 million will be allocated to priority rural infrastructure, particularly community access roads, by increasing the total length of roads to be rehabilitated from 50 km to 64 km. This expansion responds to high demand and the need to improve connectivity in additional participant areas, while remaining fully aligned with the original project design and development objectives.

25. Component 1 (enhanced climate-adaptive production, productivity and availability of nutritious food) has been allocated US$11.8 million, equivalent to 28 per cent of the total costs. Component 2 (enhanced community infrastructure and post-harvest management capacity) has been allocated US$17.9 million, equivalent to 43 per cent of the total costs. The allocation for component 3 (institutional strengthening, policy support and project coordination) is US$12.1 million, equivalent to 29 per cent of the total costs. SADEP was designed with a response to emergency and disaster component to mitigate risks, with a potential allocation of up to US$0.980 million, equivalent to 5 per cent of the IFAD funds.

26. Project subcomponent 1.2 (sustainable and climate-smart nutrition-sensitive production systems) is fully counted as climate finance. As per the multilateral development banks' methodologies for tracking climate change adaptation and mitigation finance, the total amount of IFAD climate finance for SADEP is estimated at US$12.5 million (61 per cent of the IFAD financing), including the original US$6.2 million and the additional US$6.3 million.

[6] The assumption used is that each kilometre rehabilitated will benefit 75 households with an average household size of six people.

Table 1
**Original and additional financing summary**
(Thousands of United States dollars)

| | *Original financing* | *Additional financing* | *Financing gap* | *Total* |
|---|---|---|---|---|
| IFAD | 9 800 | 10 800 | | 20 600 |
| GEF/LDCF | 8 932 | | | 8 932 |
| AfDB | 9 500 | | | 9 500 |
| Participant contribution | 1 600 | | | 1 600 |
| Government of South Sudan | 1 168 | | | 1 168 |
| Financing gap | 9 800 | | (9 800) | - |
| **Total** | **40 800** | **10 800** | (9 800) | **41 800** |

Table 2
**Additional financing: project costs by component and subcomponent and financier**
(Thousands of United States dollars)

| | *Additional IFAD financing* | | *Total* | |
|---|---|---|---|---|
| *Component[/subcomponent]* | *Amount* | *%* | *Amount* | *%* |
| **1. Enhanced climate-adaptive production, productivity and availability of nutritious food** | | | | |
| 1.1 Community-led planning and prioritization | 239 | 100 | 239 | 2 |
| 1.2 Sustainable and climate-smart nutrition-sensitive production systems | 2 911 | 100 | 2 911 | 27 |
| **2. Enhanced community infrastructure and post-harvest management capacity** | | | | |
| 2.1 Community-led and resilient rural infrastructure | 1 584 | 100 | 1 584 | 15 |
| 2.2 Capacity-building and inclusive post-harvest technologies and practices | 1 463 | 100 | 1 463 | 14 |
| **3. Institutional strengthening, policy support and project coordination** | | | | |
| 3.1 Institutional strengthening and policy support | 1 112 | 100 | 1 112 | 10 |
| 3.2 Project coordination and management | 3 492 | 100 | 3 492 | 32 |
| **Response to emergency and disaster** (lump sum to be allocated in case of emergency) | | | | |
| **Total** | **10 800** | **100** | **10 800** | **100** |

Table 3
**Additional financing: project costs by expenditure category and financier**
(Thousands of United States dollars)

| | *Additional IFAD financing* | | *Total* | |
|---|---|---|---|---|
| *Expenditure category* | *Amount* | *%* | *Amount* | *%* |
| **Investment costs** | | | | |
| Works | 1 000 | 100 | 1 000 | 9 |
| Consultancies | 3 153 | 100 | 3 153 | 29 |
| Equipment and materials | 66 | 100 | 66 | 1 |
| Goods, services and inputs | 1 642 | 100 | 1 642 | 15 |
| Training and workshops | 3 355 | 100 | 3 355 | 31 |
| **Total investment costs** | **9 217** | **100** | **9 217** | **85** |
| **Recurrent costs** | | | | |
| Operation and maintenance | 287 | 100 | 287 | 3 |
| Salaries and allowances | 1 297 | 100 | 1 297 | 12 |
| **Total recurrent costs** | **1 583** | **100** | **1 583** | **15** |
| **Total** | **10 800** | **100** | **10 800** | **100** |

Table 4
**Project costs by component and project year (PY)**
(Thousands of United States dollars)

| | *2025* | | *2026* | | *2027* | | *2028* | | *2029* | | *2030* | | *2031* | | *Total* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Component/subcomponent* | *Amount* | *%* | *Amount* | *%* | *Amount* | *%* | *Amount* | *%* | *Amount* | *%* | *Amount* | *%* | *Amount* | *%* | *Amount* | *%* |
| **1. Enhanced climate-adaptive production, productivity and availability of nutritious food** | | | | | | | | | | | | | | | | |
| 1.1 Community-led planning and prioritization | 711 | 37 | 723 | 37 | 256 | 13 | 176 | 9 | 77 | 4 | - | | - | | 1 942 | 5 |
| 1.2 Sustainable and climate-smart nutrition-sensitive production systems | 1 097 | 11 | 2 111 | 21 | 1 995 | 20 | 2 052 | 21 | 831 | 8 | 1 112 | 11 | 708 | 7 | 9 897 | 24 |
| **2. Enhanced community infrastructure and post-harvest management capacity** | | | | | | | | | | | | | | | | |
| 2.1 Community-led and resilient rural infrastructure | 139 | 1 | 4 393 | 33 | 1 956 | 15 | 3 308 | 25 | 3 083 | 23 | 301 | 2 | - | | 13 179 | 32 |
| 2.2 Capacity-building and inclusive post-harvest technologies and practices | 462 | 10 | 1 497 | 32 | 469 | 10 | 1 089 | 23 | 894 | 19 | 239 | 5 | 41 | 0.9 | 4 691 | 11 |
| **3. Institutional strengthening, policy support and project coordination** | | | | | | | | | | | | | | | | |
| 3.1 Institutional strengthening and policy support | 52 | 1 | 1 949 | 50 | 534 | 14 | 540 | 14 | 384 | 10 | 269 | 7 | 138 | 4 | 3 867 | 9 |
| 3.2 Project coordination and management | 1 558 | 19 | 1 025 | 12 | 1 072 | 13 | 1 323 | 16 | 1 119 | 14 | 1 039 | 13 | 1 087 | 13 | 8 224 | 20 |
| **Response to emergency and disaster** (lump sum to be allocated in case of emergency) | | | | | | | | | | | | | | | | |
| **Total** | **4 020** | **10** | **11 698** | **28** | **6 282** | **15** | **8 488** | **20** | **6 378** | **15** | **2 960** | **7** | **1 975** | **5** | **41 800** | **100** |

**Financing and cofinancing strategy and plan**

27. SADEP’s financing and cofinancing includes IFAD financing of US$9.8 million (24 per cent of the total costs); the additional financing of US$10.8 million will fully cover the financing gap identified at design (US$9.8 million), with the remaining US$1 million to be used to rehabilitate climate-resilient community access roads. Cofinancing from GEF/LDCF is estimated at US$8.93 million (22 per cent of the total costs). The AfDB parallel financing for the project is estimated at US$9.5 million (23 per cent of the total costs), to be provided through the Climate-Resilient Agrifood Systems Transformation Project. Cofinancing from the Government is estimated at about US$1.17 million (3 per cent of the total costs), and the in-kind contribution of the target participants is estimated at about US$1.6 million (4 per cent of the total costs).

28. **Disbursement.** The disbursement procedures will remain largely consistent with those anticipated at design, except that IFAD will disburse funds directly to the implementing partner, in line with the approach adopted by other IFAD projects and other international financial institutions. The flow of funds arrangements under the original financing will also follow this same approach. The Ministry of Agriculture and Food Security will open and maintain separate designated bank accounts in United States dollars, along with a corresponding operating account in South Sudanese pounds (SSP) at a commercial bank acceptable to IFAD to receive funds from IFAD. The implementing partner will open and maintain separate bank accounts in United States dollars to receive funds from IFAD and GEF. The implementing partner will have an adequate chart of accounts to segregate IFAD and GEF sources and the use of funds from other projects and financiers. Service providers will open and maintain separate accounts to receive funds from the implementing partner.

29. Report-based disbursement will be the mechanism used by the Ministry of Agriculture and Food Security and the implementing partner to withdraw funds from IFAD. Disbursements will be based on submission of quarterly interim financial reports. The Ministry of Agriculture and Food Security will be responsible for the submission of all withdrawal applications.

30. Parallel cofinancing will be provided by AfDB, with which the Government will enter into a separate financing agreement. Funds will flow through AfDB to project

accounts opened by the Ministry of Agriculture and Food Security (single project coordinating unit [SPCU]) for the AfDB funds.

31. Neither IFAD nor GEF funds will be used for the payment of taxes or duties.

**Summary of benefits and economic analysis**

32. The original project design targeted 18,700 households (with 112,200 household members). This number has been revised upward by 1,050 to 19,750 households (118,500 members), primarily because of the additional 14 km of community access roads to be rehabilitated, which will expand the project coverage (see section II.C for details). About half of the households will be headed by men and about half by women. The cost per household has been estimated at US$1,635 and the cost per household member at US$273. SADEP is projected to yield an economic internal rate of return of 26 per cent, with a positive economic net present value of US$21.8 million, equivalent to SSP 2.83 billion (US$1 = SSP 130). This implies that SADEP will be a viable investment. A sensitivity analysis has been undertaken to test the robustness of the overall project analysis and measure different variations due to unforeseen factors and relevant risks presented in the integrated project risk matrix. The results of the sensitivity analysis indicate that SADEP remains economically and financially viable under the various assumptions considered.

**Exit strategy and sustainability**

33. SADEP's exit strategy and the sustainability of successful interventions will rely on: (i) a community-driven development (CDD) approach, which ensures that project activities align with community needs and priorities; and (ii) the involvement and capacity-building of government institutions at the national, state and county levels. These institutions will be involved in preparing annual workplans and budgets, overseeing activity implementation and monitoring implementation progress. Their capacities will be strengthened in various ways. For example, the TPIA will be required to work through government front-line extension agents; the capacities of these extension agents will be augmented to ensure their effective participation. The expected operation, maintenance and management of all the project infrastructure will be overseen by community committees, whose capacities will also be strengthened.

# III. Risk management

## A. Risks and mitigation measures

34. Risk categories assessed as high are country context, institutional capacity and financial management, while risks related to project scope, sector strategies and procurement are assessed as substantial. The following are identified as the highest-risk areas related to the additional financing that could affect implementation and the achievement and sustainability of development outcomes:

(i) **Political commitment.** The 2018 Revitalized Agreement on the Resolution of the Conflict in the Republic of South Sudan remains the principal framework for peace and political transition in South Sudan, although implementation has been slow. Presidential elections, originally scheduled for December 2024, were postponed and are now planned for December 2026. The postponement has contributed to continued political uncertainty and a volatile operating environment. To mitigate these risks, SADEP will maintain close coordination with the Government, humanitarian actors and the United Nations system, drawing on established security analysis and early warning mechanisms to inform implementation decisions. The project's modular, community-driven implementation approach provides operational flexibility, enabling activities to be sequenced, adapted or temporarily paused in response to evolving conditions. During the initial implementation phase, emphasis will be placed on lower-risk, high-readiness activities that can be implemented with limited disruption – including community mobilization, cluster identification, and planning and capacity-building led by the TPIA.

Activities with greater exposure to election-related risks, particularly community access road rehabilitation and other infrastructure investments, will be initiated as early as operationally feasible and adjusted as necessary should the security situation deteriorate.

(ii) **Fragility and security.** In South Sudan, political, social and economic marginalization and ethnic divisions, corruption and power struggles have historically resulted in tensions. This situation has given rise to conflict, the breakdown of governance structures and law and order, and the disruption of community institutions that support livelihoods. There are also ongoing inter-community conflicts due to competition for natural resources. The country is vulnerable to natural disasters (drought, floods) and plagues of desert locust, which have devastating food security implications. Mitigation measures include use of the CDD approach, which fosters community governance and cohesion; adaptive programming with scenario-based planning, which enhances responsiveness to security risks in different locations; and compliance with security standards and engagement of and supervision by the TPIA during volatile periods.

(iii) **Governance.** South Sudan struggles with a high level of corruption and ranks among the world's most corrupt nations on Transparency International's Corruption Perceptions Index. Despite efforts to improve transparency and accountability since the country gained independence in 2011, its anticorruption framework remains weak. Capacity and system deficits in public sector institutions hinder the effective implementation of projects such as SADEP, and these deficits are compounded by a lack of established standards for financial reporting. Additionally, the incomplete decentralization policy adds complexity, potentially affecting coordination between central and local governments. These challenges highlight the hurdles facing initiatives in navigating South Sudan's governance landscape. In the short term, this risk is being mitigated by implementing the project through a TPIA. In the long term, IFAD and other development partners will work with the Government to strengthen capacity in public sector institutions.

(iv) **Implementation arrangements.** The Ministry of Agriculture and Food Security lacks the necessary capacity and systems to effectively manage the project in line with the financing agreement and relevant IFAD documents. This risk will be mitigated through the use of a TPIA. In addition, the CDD approach will empower communities to plan and execute investments, with operational and management capacities developed at local levels. In addition, IFAD will continue to organize targeted capacity-building initiatives to enable the Ministry of Agriculture and Food Security to manage and supervise the project.

IFAD has agreed that the National Audit Chamber will audit the project, following the World Bank approach used for the SPCU. The limited practical independence and capacity of the National Audit Chamber may lead to delayed or lower-quality audit reports, potentially affecting financial oversight and compliance with international standards, but this risk will be mitigated through ongoing technical assistance from the World Bank to gradually strengthen audit quality, with IFAD providing regular feedback on the audit reports and guidance on its auditing requirements.

(v) **Vulnerability to climate change.** Rural populations in South Sudan face significant vulnerability to climatic hazards, particularly erratic rainfall patterns and droughts, which can result in disasters. This poses a risk to the project, as participants may be unable to fully engage in long-term productive investments, potentially impacting project outcomes. The use of the CDD approach will empower communities to identify climate-resilient livelihood options, enhancing their ability to withstand extreme weather events.

(vi) **Implementation readiness and start-up delay.** The 16-month delay between effectiveness and project launch, resulting from the protracted period required to recruit the TPIA, has reduced the implementation period available before the original completion date of 31 March 2032. This risk will be mitigated by the immediate deployment readiness of the TPIA, as key personnel were recruited as part of the competitive selection process and reviewed by IFAD during technical evaluation. In addition, the SPCU is fully staffed, and key technical groundwork, including the national drought plan and the climate risk analysis and vulnerability assessment, has been completed. Enhanced implementation support will be provided through monthly IFAD–SPCU review meetings and a first supervision mission, scheduled for September 2026.

## B. Environment and social category

35. SADEP's environmental and social risk is classified as substantial, consistent with the original design. The project poses potential risks to biodiversity conservation, resource efficiency, pollution prevention and cultural heritage, but the impacts are expected to be generally minor or moderate in nature and often confined to small areas or temporary in duration. Although there are potential impacts on vulnerable people, and labour and working conditions, these are either minor or well regulated, indicating a moderate risk. While there is possibility of negative impacts on community health and safety, these are expected to be manageable within the project's scope. SADEP specifically targets women and young people, indicating an awareness and mitigation of social risks related to these groups.

## C. Climate risk classification

36. The climate risk classification for SADEP is substantial. This classification is based on various factors assessed through a multi-step process. The project area is expected to face multiple climate-related hazards, such as floods, landslides, cyclones, water scarcity, extreme heat and wildfires. SADEP is located in areas exposed to weather-related natural hazards, including tropical and semi-arid zones and riverbanks. However, as a mitigation measure, SADEP seeks to enhance the resilience of communities and ecosystems to the adverse impacts of climate change. It includes investments in climate-adaptive agricultural practices and technologies to help communities better manage and withstand climatic stresses such as droughts, floods and variable rainfall. The project will support the development of climate-resilient water infrastructure, such as multiple water use systems that are designed to provide water for irrigation, livestock and domestic use.

# IV. Implementation

## A. Compliance with IFAD policies

37. There are no changes to the objectives or outcomes of the project. The project structure also remains unchanged.

## B. Organizational framework

### Management and coordination

38. SADEP's organizational framework and governance will not be changed for the additional financing. The Ministry of Agriculture and Food Security will remain the lead implementing agency for SADEP and will work through an implementation structure established at the national, state and county levels. The ministry will use the existing SPCU to ensure overall coordination and implementation of the SADEP activities undertaken with the additional financing. Technical implementation of these activities will be the responsibility of the TPIA.

39. The existing governance structure will provide oversight of the implementation of SADEP activities supported by the additional financing. This structure comprises the National Advisory Committee and the National Technical Committee.

**Financial management, procurement and governance**

40. Financial management will remain largely as designed, with the exception of direct disbursement of funds by IFAD to the implementing partner and the external audit to be conducted by the National Audit Chamber. The procurement and governance arrangements will remain unchanged. The Ministry of Agriculture and Food Security, as the lead implementing agency, will oversee fiduciary management and will coordinate procurement management through the SPCU, consistent with the original design. All procurement documentation issued to bidders will include and comply with the relevant safeguard provisions.

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

41. The original planning, monitoring and evaluation arrangements will be used for the additional financing activities. SADEP's monitoring and evaluation system will be based on the logical framework and will incorporate project-specific indicators and IFAD core indicators to guide continuous performance assessment of the project. The monitoring and evaluation system will continue to track both physical and financial progress, along with progress being made towards achieving set targets. The system will serve as a key management tool.

42. The system will use information collected by project staff, service providers/ implementing partners (for outputs) and core outcome indicator surveys (for outcomes) and will be managed through the project management information system. All data will be disaggregated by sex and age.

## D. Proposed amendments to the financing agreement

43. The signed financing agreement will be amended to reflect the additional amount that IFAD will be contributing, as per cost table 2. The additional financing will be allocated as shown in table 3. The financing agreement will reflect any consequential changes to the implementation, funding flow, disbursement, financial reporting and audit arrangements that may be required. The remaining provisions of the financing agreement will continue to apply.

# V. Legal instruments and authority

44. The financing agreement between the Republic of South Sudan and IFAD will constitute the legal instrument for extending the proposed additional financing to the recipient. The signed financing agreement will be amended following approval of the additional financing.

45. The Republic of South Sudan is empowered under its laws to receive financing from IFAD.

46. 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

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

> RESOLVED: that the Fund shall provide a Debt Sustainability Framework grant to the Republic of South Sudan in an amount of ten million eight hundred thousand United States dollars (US$10,800,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Alvaro Lario
President

# Updated Logical Framework Incorporating the Additional Financing

| Results Hierarchy | Indicators | | | | AF Target | Revised End target | Means of Verification | | | Assumptions |
|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Baseline | Mid-Term | End Target | | | Source | Frequency | Responsibility | |
| **Outreach** | **1 Persons reached by project-supported activities** | | | | | | Progress report | 6 months | Implementing Agencies | 50% of persons receiving project support are women 50% of persons receiving project support are men 40 % of persons receiving project support are the youth (50% of them are women). A youth is defined as a person aged between 16 and 35 (inclusive). HHs that receive project support are 30% female headed 6 members on average in one HH . CARs are assumed to benefits 75 households per kilometre. All household members are assumed to benefit directly from theroad infrastructure. |
| | Males - Males | | 4675 | 9350 | 5050 | 14400 | | | | |
| | Females - Females | | 4675 | 9350 | 5050 | 14400 | | | | |
| | Young - Young people | | 3740 | 7480 | 4040 | 11520 | | | | |
| | Total number of persons receiving services - Number of people | | 9350 | 18700 | 10100 | 28800 | | | | |
| | Persons with disabilities - Number | | 468 | 935 | 505 | 1440 | | | | |
| | **1.a Corresponding number of households reached** | | | | | | Progress report | 6 months | Implementing Agencies | |
| | Women-headed households - Households | | 2805 | 5610 | 315 | 5925 | | | | |
| | Non-women-headed households - Households | | 6545 | 13090 | 735 | 13825 | | | | |
| | Households - Households | | 9350 | 18700 | 1050 | 19750 | | | | |
| | **1.b Estimated corresponding total number of households members** | | | | | | Progress report | Annually | SADEP - PMU/IA | |
| | Household members - Number of people | | 56100 | 112200 | 6300 | 118500 | | | | |
| **Project Goal** Contribute to enduring development and peace by improving food and nutrition security and reducing poverty among women, youth and rural communities | **Households with increased resilience** | | | | | | Resilience Scorecard Tool (RDMT) surveys | Baseline and endline | SADEP-PMU/IA | Government of national unity will continue to be effective for peace and stability to continue prevailing; Continued Government commitment and implementation of the reforms agenda under Revitalized Peace Agreement; Investments in climate resilient infrastructure and agricultural technologies promote increased production; Increased income is used on household improvements |
| | Percentage of Households - Percentage (%) | | 25 | 60 | | 60 | | | | |
| **Development Objective** Contribute to Enhanced | **20% reduction in food insecurity measured through Food insecurity experience scale (FIES)** | | | | | | Progress report | Mid-term/endline | Implementing Agencies | A 20% reduction assumed from the current FIES |

| Results Hierarchy | Indicators | | | | | | Means of Verification | | | Assumptions |
|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Baseline | Mid-Term | End Target | AF Target | Revised End target | Source | Frequency | Responsibility | |
| resilience, food and nutrition security and reduced poverty | FIES (Moderate) - Percentage (%) | | 10 | 20 | | 20 | | | | |
| **Outcome**<br>Outcome 1: Increased production, productivity and availability of nutritious foods | **3.2.2 Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices** | | | | | | COI Survey | Base line, Mid-term surveys, completion | SADEP - PMU/IA | Assuming all target beneficiaries will be supported with climate friendly technologies.<br>Nutrition awareness will be carried out to all target beneficiaries.<br>50% of those that receive targeted production support interventions and adopt them.<br>Assuming production on 1 ha piece of land and assuming 50% of post-harvest losses. |
| | Total number of household members - Number of people | | 33660 | 67320 | | 67320 | | | | |
| | Households - Percentage (%) | | 50 | 60 | | 60 | | | | |
| | Households - Households | | 5610 | 11220 | | 11220 | | | | |
| | **1.2.9 Households with improved nutrition Knowledge Attitudes and Practices (KAP)** | | | | | | COI Survey | Base line, Mid-term surveys, completion | SADEP - PMU/IA | |
| | Households (number) - Households | | 5610 | 11220 | | 11220 | | | | |
| | Households (%) - Percentage (%) | | 30 | 60 | | 60 | | | | |
| | Household members - Number of people | | 33660 | 67320 | | 67320 | | | | |
| | **1.2.4 Households reporting an increase in production** | | | | | | COI Survey | Base line, Mid-term surveys, completion | SADEP - PMU/IA | |
| | Total number of household members - Number of people | | 16830 | 33660 | | 33660 | | | | |
| | Households - Percentage (%) | | 25 | 50 | | 50 | | | | |
| | Households - Households | | 2805 | 5610 | | 5610 | | | | |
| | **Percentage increase in yields of supported value chains** | | | | | | Outcome surveys | Annually | SADEP - PMU/IAs | |
| | Average Increase - Percentage (%) | | 17 | 56 | | 56 | | | | |
| | Sorghum - Percentage (%) | | 10 | 33 | | 33 | | | | |
| | Sesame - Percentage (%) | | 19 | 64 | | 64 | | | | |
| | Ground Nuts - Percentage (%) | | 21 | 71 | | 71 | | | | |
| | Fishing - Percentage (%) | | 28 | 91 | | 91 | | | | |
| | Value added fish - Percentage (%) | | 5 | 17 | | 17 | | | | |
| **Output**<br>Output 1.1 Capacity for community driven planning | **Community Driven Development Plans Developed** | | | | | | Progress reports/MIS | Annually | SADEP - PMU/IA | |
| | CPs - Number | | 263 | 526 | | 526 | | | | |
| | **Community groups capacity built** | | | | | | | Annually | SADEP - PMU/IA | |

| Results Hierarchy | Indicators | | | | | | Means of Verification | | | Assumptions |
|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Baseline | Mid-Term | End Target | AF Target | Revised End target | Source | Frequency | Responsibility | |
| and prioritization developed | Number of community groups receiving capacity building support. - Number | | 263 | 526 | | 526 | Progress reports/MIS | | | |
| **Output** Output 1.2 Climate adaptive, nutrition sensitive agriculture and sustainable fisheries practices and technologies developed and promoted | **3.1.4 Land brought under climate-resilient practices** | | | | | | Progress reports/MIS | Annually | SADEP - PMU/IA | Communities will be engaged in the plantation of tree seedlings. Assuming the groups are 25members are in size. All targeted beneficiaries will be targeted with nutrition awareness activities. 70% of these are assumed to be sorghum-based systems producers and 30% fisher folks. |
| | Hectares of land - Area (ha) | | 10000 | 20000 | | 20000 | | | | |
| | **3.1.1 Groups supported to sustainably manage natural resources and climate-related risks** | | | | | | Service providers reports, project M/E data and report | Supervision missions, Annual reports MTR, completion | Services providers and IA | |
| | Total size of groups - Number of people | | 9350 | 18700 | | 18700 | | | | |
| | Groups supported - Groups | | 374 | 748 | | 748 | | | | |
| | Males - Males | | 4675 | 9350 | | 9350 | | | | |
| | Females - Females | | 4675 | 9350 | | 9350 | | | | |
| | Young - Young people | | 3740 | 7480 | | 7480 | | | | |
| | **1.1.8 Persons provided with targeted support to improve their nutrition** | | | | | | Service providers reports, project M/E data and report | Supervision missions, Annual reports MTR, completion | Services providers and IA | |
| | Total persons participating - Number of people | | 9350 | 18700 | | 18700 | | | | |
| | Males - Males | | 4675 | 9350 | | 9350 | | | | |
| | Females - Females | | 4675 | 9350 | | 9350 | | | | |
| | Households - Households | | 9350 | 18700 | | 18700 | | | | |
| | Household members benefitted - Number of people | | 56100 | 112200 | | 112200 | | | | |
| | Young - Young people | | 3740 | 7480 | | 7480 | | | | |
| | **1.1.4 Persons trained in production practices and/or technologies** | | | | | 0 | Progress reports/MIS | Annually | SADEP - PMU/IA | |
| | Men trained in crop - Males | | 3273 | 6545 | | 6545 | | | | |
| | Women trained in crop - Females | | 3273 | 6545 | | 6545 | | | | |
| | Young people trained in crop - Young people | | 2618 | 5236 | | 5236 | | | | |
| | Men trained in fishery - Males | | 1403 | 2805 | | 2805 | | | | |
| | Women trained in fishery - Females | | 1403 | 2805 | | 2805 | | | | |
| | Young people trained in fishery - Young people | | 1122 | 2244 | | 2244 | | | | |

| Results Hierarchy | Indicators | | | | | | Means of Verification | | | Assumptions |
|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Baseline | Mid-Term | End Target | AF Target | Revised End target | Source | Frequency | Responsibility | |
| | Total persons trained in crop - Number of people | | 6546 | 13090 | | 13090 | | | | |
| | Total persons trained in fishery - Number of people | | 2806 | 5610 | | 5610 | | | | |
| **Outcome** Outcome 2 Enhanced Community Infrastructure and Post-Harvest Management capacity | **Households reporting improved physical access to sorghum based systems and fish based infrastructure** | | | | | | Outcome surveys | Baseline, Midline and Completion | SADEP - PMU/IA | Assuming 25% of the supported organizations will improve value and quality of products. 25% of supported beneficiaries are assumed to be new jobs. 105 women and 105 youth groups within Pos will be supported to acquire/access threshers /shellers on cost sharing basis and offer services to the POs members and as businesses. |
| | Households reporting improved physical access to sorghum-based system infrastructure - Number | | 2301 | 4603 | | 4603 | | | | |
| | Households reporting improved physical access to sorghum-based system infrastructure - Percentage (%) | | 18 | 35 | | 35 | | | | |
| | Size of Households - Sorghum based systems - Number | | 13808 | 27615 | | 27615 | | | | |
| | Households reporting improved physical access to Fish based infrastructure - Number | | 1403 | 2805 | | 2805 | | | | |
| | Households reporting improved physical access to Fish based infrastructure - Percentage (%) | | 8 | 15 | | 15 | | | | |
| | Size of Households - Fish based - Number | | 8415 | 16830 | | 16830 | | | | |
| | **2.2.5 Rural producers' organizations reporting an increase in sales** | | | | | | COI Surveys | Baseline, Midline and Completion | SADEP - PMU/IA | |
| | Number of Rural POs - Organizations | | 66 | 132 | | 132 | | | | |
| | Total number of POs members - Number | | 1644 | 3288 | | 3288 | | | | |
| | Women PO members - Number | | 822 | 1644 | | 1644 | | | | |
| | Men PO members - Number | | 822 | 1644 | | 1644 | | | | |
| | Young PO members - Number | | 658 | 1315 | | 1315 | | | | |
| | **2.2.1 Persons with new jobs/employment opportunities** | | | | | | COI Survey | | | |

| Results Hierarchy | Indicators | | | | | | Means of Verification | | | Assumptions |
|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Baseline | Mid-Term | End Target | AF Target | Revised End target | Source | Frequency | Responsibility | |
| | Males - Males | | 1169 | 2338 | | 2338 | | Base line, Mid term surveys, completion | Implementation Agencies | |
| | Females - Females | | 1169 | 2338 | | 2338 | | | | |
| | Young - Young people | | 935 | 1870 | | 1870 | | | | |
| | Total number of persons with new jobs/employment opportunities - Number of people | | 2338 | 4676 | | 4676 | | | | |
| | **Reduction in post harvest Losses** | | | | | | Reduction in post harvest Losses | | | |
| | Reduction Percentage - Percentage (%) | 0 | 15 | 50 | | 50 | | | | |
| **Output**<br>Output 2.1:Appropriate and inclusive climate resilient community infrastructure developed | **1.1.2 Farmland under water-related infrastructure constructed/rehabilitated** | | | | | | Progress reports/MIS | Annually | SADEP-PMU/IAs | |
| | Hectares of land - Area (ha) | | 50 | 100 | | 100 | | | | |
| | **Climate resilient community infrastructure developed** | | | | | | Progress reports/MIS | Annually | SADEP-PMU/IAs | |
| | Water points - Number | 0 | 10 | 20 | | 20 | | | | |
| | Fish drying racks - Number | 0 | 150 | 300 | | 300 | | | | |
| | Energy efficient ovens - Number | 0 | 30 | 60 | | 60 | | | | |
| | fish tent dryers - Number | 0 | 10 | 20 | | 20 | | | | |
| | Kilometers of roads - Number | 0 | 25 | 50 | 14 | 64 | | | | |
| **Output**<br>Output 2.2:Appropriate climate adapted and nutrition sensitive Postharvest technologies and practices promoted and adopted | **2.1.2 Persons trained in income-generating activities or business management** | | | | | | Service providers reports, project M/E data and report | Supervision missions, Annual reports MTR, completion | Services providers and IA | Assuming 25 members in the 526POs targeted for support |
| | Males - Males | | 3288 | 6575 | | 6575 | | | | |
| | Females - Females | | 3288 | 6575 | | 6575 | | | | |
| | Young - Young people | | 2630 | 5260 | | 5260 | | | | |
| | Persons trained in IGAs or BM (total) - Number of people | | 6576 | 13150 | | 13150 | | | | |
| | **2.1.3 Rural producers' organizations supported** | | | | | | Progress reports/MIS | Annually | SADEP-PMU/IAs | |
| | Total size of POs - Organizations | | 6576 | 13150 | | 13150 | | | | |
| | Rural POs supported - Organizations | | 263 | 526 | | 526 | | | | |
| | Males - Males | | 3288 | 6575 | | 6575 | | | | |
| | Females - Females | | 3288 | 6575 | | 6575 | | | | |
| | Young - Young people | | 2630 | 5260 | | 5260 | | | | |
| **Outcome**<br>Outcome 3: Strengthened institutional capacities and rural sector coordination | **Policy 3 Existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment** | | | | | | National statistics from Ministry of Justice, MOA, | Annual, MTR and completion | SADEP - PMU/IAs | New agriculture, rural development and climate action policies are approved (A) |
| | Number - Number | | 2 | 4 | | 4 | | | | |

| Results Hierarchy | Indicators | | | | | | Means of Verification | | | Assumptions |
|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Baseline | Mid-Term | End Target | AF Target | Revised End target | Source | Frequency | Responsibility | |
| | | | | | | | National Assembly | | | |
| | **SF.2.1 Households satisfied with project-supported services** | | | | | | COI Surveys | Annual, MTR and completion | SADEP - PMU/IAs | |
| | Household members - Number of people | | 42075 | 84150 | 4725 | 88875 | | | | |
| | Households - Percentage (%) | | 38 | 75 | 75 | 75 | | | | |
| | Households - Households | | 7013 | 14025 | 788 | 14813 | | | | |
| | **SF.2.2 Households reporting they can influence decision-making of local authorities and project-supported service providers** | | | | | | COI Surveys | Annual, MTR and completion | SADEP - PMU/IAs | |
| | Household members - Number of people | | 28050 | 56100 | 3150 | 59250 | | | | |
| | Households - Percentage (%) | | 25 | 50 | 50 | 50 | | | | |
| | Households - Households | | 4675 | 9350 | 525 | 9875 | | | | |
| **Output** Output 3.1: Institutional and policy capacity for rural development and coordination strengthened | **Policy 1 Policy-relevant knowledge products completed** | | | | | | National statistics from Ministry of Justice, MOA, National Assembly | Annual, MTR and completion | NSPCU | |
| | Number - Knowledge Products | | 3 | 6 | | 6 | | | | |
| **Output** Output 3.2: Efficient and Effective Project Management | **Supported Government Institutions** | | | | | | Project reports - AI and SPCU | Annual, MTR and completion | NSPCU | |
| | Institutions - Number | | 3 | 7 | | 7 | | | | |

# Updated summary of the economic and financial analysis

Table A
**Financial cash flow models**

| A) | Financial analysis | | | | | | |
|---|---|---|---|---|---|---|---|
| | Farm models' net incremental benefits (in SSP) | | | | | | |
| Project Year | Sorghum model | Sesame model | Groundnut models | Fish Model | Fish Value Addition model | Ice making model | Groundnut processing |
| PY1 | (10,420) | (23,980) | (13,760) | (350,000) | (113,365) | (4,446,000) | (176,533) |
| PY2 | (1,780) | (160) | 17,950 | 108,000 | 83,698 | 4,854,000 | 56,230 |
| PY3 | 8,360 | 9,700 | 48,660 | 252,000 | 93,710 | 6,954,000 | 56,230 |
| PY4 | 21,500 | 68,640 | 94,440 | 348,000 | 93,710 | 7,654,000 | 56,230 |
| PY5 | 20,000 | 67,140 | 92,940 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY6 | 21,500 | 68,640 | 94,440 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY7 | 20,000 | 67,140 | 92,940 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY8 | 21,500 | 68,640 | 94,440 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY9 | 20,000 | 67,140 | 92,940 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY10 | 21,500 | 68,640 | 94,440 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY11 | 20,000 | 67,140 | 92,940 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY12 | 21,500 | 68,640 | 94,440 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY13 | 20,000 | 67,140 | 92,940 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY14 | 21,500 | 68,640 | 94,440 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY15 | 20,000 | 67,140 | 92,940 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY16 | 21,500 | 68,640 | 94,440 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY17 | 20,000 | 67,140 | 92,940 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY18 | 21,500 | 68,640 | 94,440 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY19 | 20,000 | 67,140 | 92,940 | 549,600 | 93,710 | 7,654,000 | 56,230 |
| PY20 | 21,500 | 68,640 | 94,440 | 495,600 | 93,710 | 7,654,000 | 56,230 |
| | | | | | | | |
| IRR | 77% | 89% | 229% | 74% | 79% | 132% | 32% |
| NPV (SSP) @6% | 178,560 | 583,021 | 868,452 | 4,635,773 | 870,578 | 73,295,959 | 425,366 |
| B/C Ratio | 2.23 | 3.34 | 2.97 | 3.18 | 1.21 | 3.57 | 1.14 |
| Return to Family Labour (SSP) | 1,188.3 | 2,139.4 | 2,162.3 | 6,563.3 | 4,101.9 | N/A | 2,274.3 |

Table B
**Project costs and logframe targets**

| PROGRAMME COSTS AND INDICATORS FOR LOGFRAME | | |
|---|---|---|
| **TOTAL PROGRAMME COSTS** (in million USD ) | | |
| **Number of household members** | **118,500** | **People** |
| **Cost per individual** | **273** | **US$/Person** |
| | | |
| **Number of household** | **19,750** | **HHs** |
| **Cost per household** | **1,635** | **US$/HHs** |
| Number of women receiving project support - 50% | **9,875** | HHs |
| Number of women receiving project support - 50% | **9,875** | HHs |
| **Components and Cost (USD million)** | | |
| A. EnhancedClimate-Adaptive Production, Productivity and Availability of Nutritious Food. | 8.1 | US$ million |
| B. Enhanced Community Infrastructure and Post-Harvest Management capacity | 16.2 | US$ million |
| C. Institutional and Policy Strengthening, Project Coordination and | 8.0 | US$ million |
| **Total** | **32.3** | US$ million |

Table C
**Main assumptions and shadow prices**

| MAIN ASSUMPTIONS & SHADOW PRICES | | | | | |
|---|---|---|---|---|---|
| | | Yields (Annually) Kg | | | |
| | Model | Unit of measure | WOP | WP | Price (SSP) |
| FINANCIAL | Sorghum model | Kg | 900 | 1,200 | 100 |
| | Sesame model | Kg | 550 | 900 | 200 |
| | Groundnut models | Kg | 700 | 1,200 | 150 |
| | Groundnut processing | Kg | N/A | 2,040 | 400 |
| | Fish Model | Kg | 10,000 | 15,000 | 70 |
| | Fish Value Addition model | Kg | 4,224 | 4,950 | 200 |
| | Ice making model | Kg | - | 490,000 | 20 |
| | | | | | |
| Economi c | Conversion Factor - Goods | 0.91 | Discount rate for Financial Analysis | | 6.0% |
| | Labour Conversion Factor | 0.88 | Discount rate for Economic Analysis | | 12.0% |
| | Unemployment Rate | 12.00% | VAT rate on imports | | 0.18 |

Table D
**Beneficiary adoption rates and phasing**

| Household Phasing | | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 | Y7 | Y8 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **No. of Beneficiaries Phased by Year** | **19,750** | **1,662** | **5,462** | **4,792** | **3,685** | **2,367** | **1,782** | **-** | | |
| **Cumulative Number of Households** | | **1,662** | **7,124** | **11,916** | **15,601** | **17,968** | **19,750** | | | **19,750** |
| **Adoption Rate** | **60%** | | | | | | | | | |
| **Beneficiary Aggregation** | | | | | | | | | | |
| Beneficiaries in Y1 | | 997 | 3,277 | 2,875 | 2,211 | 1,420 | 1,069 | | | |
| Beneficiaries in Y2 | | | 997 | 3,277 | 2,875 | 2,211 | 1,420 | 1,069 | | |
| Beneficiaries in Y3 | | | | 997 | 3,277 | 2,875 | 2,211 | 1,420 | 1,069 | |
| Beneficiaries in Y4 | | | | | 997 | 3,277 | 2,875 | 2,211 | 1,420 | 1,069 |
| Beneficiaries in Y5 | | | | | | 997 | 3,277 | 2,875 | 2,211 | 1,420 |
| Beneficiaries in Y6 | | | | | | | 997 | 3,277 | 2,875 | 2,211 |
| Beneficiaries in Y7 | | | | | | | | 997 | 3,277 | 2,875 |
| Beneficiaries in Y8 | | | | | | | | | 997 | 3,277 |
| Beneficiaries in Y9 | | | | | | | | | | 997 |
| **Total Beneficiaries** | | **997** | **4,275** | **7,150** | **9,361** | **10,781** | **11,850** | **11,850** | **11,850** | **11,850** |

Table E
**Economic cash flow**

| Project year | Incr. Economic Benefits | | | Incremental Fam Benefits (SSP million) | Economic Project Costs (SSP'000) | | Cash-flow |
|---|---|---|---|---|---|---|---|
| | Benefits from Farm and Fishing Models | Road Infrastructure benefits | Ice Making Facilities | | Project Costs | Total Economic Costs | |
| **PY1** | (32,198) | - | | (32,198) | 413,871 | *413,871* | **(446,069)** |
| **PY2** | (53,110) | - | | (53,110) | 911,700 | *911,700* | **(964,810)** |
| **PY3** | 49,657 | 114,298 | - | 163,955 | 541,594 | *541,594* | **(377,639)** |
| **PY4** | 209,058 | 166,584 | (3,827) | 371,816 | 664,595 | *664,595* | **(292,779)** |
| **PY5** | 416,353 | 193,404 | 292 | 610,050 | 474,343 | *474,343* | **135,707** |
| **PY6** | 600,436 | 298,577 | 2,236 | 901,249 | 316,234 | *316,234* | **585,015** |
| **PY7** | 762,954 | 386,634 | 3,351 | 1,152,938 | 226,159 | *226,159* | **926,780** |
| **PY8** | 864,778 | 386,634 | 5,981 | 1,257,393 | 63,409 | *63,409* | **1,193,984** |
| **PY9** | 925,518 | 386,634 | 6,552 | 1,318,704 | 63,409 | *63,409* | **1,255,295** |
| **PY10** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| **PY11** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| **PY12** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| **PY13** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| **PY14** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| **PY15** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| **PY16** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| **PY17** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| **PY18** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| **PY19** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| **PY20** | 946,775 | 386,634 | 6,695 | 1,340,103 | 63,409 | *63,409* | **1,276,694** |
| NPV@ 12% (SSP'000 ) | | | | | | | **2,838,892** |
| NPV@ 12% (US$ '000) | | | | | | | **21,837.6** |
| EIRR | | | | | | | **26%** |
| | | | **NPV/b** | **5,458,998** | **NPV/c** | **2,620,106** | **2.1** |

Table F
**Sensitivity analysis**

| **Sensitivity analysis matrix** | | | | | | |
|---|---|---|---|---|---|---|
| | | **%** | **IRR** | **NPV (US$'000)** | **B/CR** | **Link between EFA and IPRM** |
| **Base Scenario** | | | **26%** | **21,838** | **2.1** | |
| **Decrease of Project benefits** | | **-10%** | **24%** | **17,638** | **1.9** | The risk of spatial and temporal distribution of water as well as scarcity of rainfall, drought is the single most important production risk factor. Excess rainfall that leads to flooding is another substantial risk. The country is vulnerable to Desert locust phenomenon which may be devastating food and nutrition security |
| | | **-20%** | **21%** | **13,439** | **1.7** | |
| | | **-30%** | **19%** | **9,240** | **1.5** | |
| **Cost Increase** | | **10%** | **24%** | **19,822** | **1.9** | The South Sudanese Pound (SSP) is facing high inflation, resulting in volatility of exchange rate and a thriving black market. The discrepancy between official exchange rate and the black market may distort the profitability analysis of the project in the EFA. |
| | | **20%** | **22%** | **17,807** | **1.7** | |
| | | **50%** | **18%** | **12,448** | **1.4** | |
| **Delay of benefits** | | **1 Year** | **22%** | **16,384** | **2.0** | The possibility of conflict arising between weary parties after myth of election which may result to closure or suspension of the programmes in the Country. |
| | | **2 Years** | **18%** | **11,515** | **1.97** | |
| **Increase of benefits** | | **10%** | **28%** | **26,037** | **2.3** | Higher uptake of the proposed intervention compared to is anticipated in the benefits aggregation |
| | | **20%** | **30%** | **30,236** | **2.5** | |