



1. Project Data

Project ID P129156	Project Name SD-Sustainable NRM (PSG)
Country Sudan	Practice Area(Lead) Environment, Natural Resources & the Blue Economy

L/C/TF Number(s) TF-16134,TF-A7607,TF-B3243,TF-B3244	Closing Date (Original) 30-Nov-2023	Total Project Cost (USD) 11,325,214.87
--	---	--

Bank Approval Date 18-Dec-2013	Closing Date (Actual) 30-Nov-2023
--	---

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	19,172,140.00	14,605,930.00
Revised Commitment	19,172,140.00	14,605,930.00
Actual	11,325,214.87	11,325,214.87

Prepared by Shashidhara Laxman Kolavalli	Reviewed by Avjeet Singh	ICR Review Coordinator Avjeet Singh	Group IEGSD (Unit 4)
---	------------------------------------	---	--------------------------------

2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) stated identically in Global Environment Facility (GEF) Grant Agreement (p. 6) and Project Appraisal Document (PAD) (p.7) is “to increase the adoption of sustainable land and water management (SLWM) practices in targeted landscapes.”

b. Were the project objectives/key associated outcome targets revised during implementation?



Yes

Did the Board approve the revised objectives/key associated outcome targets?

Yes

Date of Board Approval

c. Will a split evaluation be undertaken?

No

d. Components

The project had three components:

Component 1: Institutional and Policy Framework (Appraised: US\$1.5 million; Revised: US\$2.8 million; Actual: US\$1.9 million)

This component aimed to:

1. Carry out a capacity development program designed to strengthen the capacity of select MDAs to formulate, implement and monitor programs and projects geared towards sustainable management of natural resources and biodiversity conservation including: (a) developing inter-agency collaboration mechanisms at the central and state level; (b) assisting communities in preparing and implementing investments under integrated land management plans; and (c) supporting village development committees to manage, monitor, and maintain infrastructures.
2. Carry out a program of activities designed to develop a policy and legislative framework that addresses sustainable forest and land use management in an integrated and multi-sector way, such a program to include such activities as: (a) preparing a strategy with practical recommendations, measures and policies for effective cooperation at federal-state-local and community levels for the protection and conservation of Sudan's natural resource base; and (b) strengthening policy framework and legislation for sustainable land and water management and biodiversity conservation.
3. Carry out a program of activities designed to address information and knowledge barriers to broader adoption of sustainable land and water management and biodiversity conservation practices, including designing and implementing a communication plan to disseminate information concerning processes, results and lessons learned through the project

Component 2: Community based sustainable management of rangelands, forests and biodiversity (Appraised: US\$5.2 million; Revised: US\$14.1 million; Actual: US\$7.5 million)

This component aimed to:

1. Support the preparation of integrated land management plans for Wad Bagul reserve in the Gezira State, Telkuk forest reserve in Kassala state, and the rangelands in White Nile State.
2. Carry out a program of activities to implement the plans prepared under Part 2.1 above in order to rehabilitate and restore the forest ecosystem of Telkuk forest reserve and Wad Bagul reserve and support sustainable rangeland management such a program to include such activities as gazetting of forest reserves; restoration of native vegetation (by reforestation, enrichment planting or natural



regeneration); establishment of shelter belts for sand dune fixation, demarcation of animal migration routes, rotation of grazing land, establishment of nurseries for rangeland rehabilitation and clearing and opening of fire lines to protect rangelands.

Component 3: Project Management, Monitoring and Evaluation (Appraised: US\$1.0 million; Revised: US\$1.7 million; Actual: US\$2.3 million)

This component aimed to:

1. Design and implement a monitoring and evaluation system designed to track the Project results, including those registered in the Global Environmental Fund (GEF) tracking tools for biodiversity, land degradation and sustainable forest management.
2. Carry out Project management, including coordination, financial management, procurement, audits, and monitoring and evaluation, and provision of goods and Operating Costs required for the purpose.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

a. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Costs

The original cost was US\$7.73 million. With additional financing the project was expected to cost US\$19.17 million; the actual cost was US\$11.32 million.

Financing

The Project was funded through three GEF grants totaling US\$19.17 million.

Borrower Contribution,

The borrower was not expected to contribute.

Dates

The project was approved in December 2013 and became effective in May 2014. The Mid-Term Review (MTR) was organized in May 2017. The project was originally scheduled to close in June 2019 and it closed in November 2023. However, project activities and disbursements were paused in October 2021 following the activation of OP7.30 (Dealing with De facto Governments) due to the military takeover of the government.

Restructurings and/or additional financing

The project went through two restructurings:

August 2018: Additional Financing (AF) (US\$5.5 million) in response to request from the Government of Sudan (GoS) to use part of its GEF-6 allocation to expand the coverage of the ongoing project. It resulted in



(i) extension of closing date to June 30, 2022, (iii) revisions to RF, (iv) scaling up of implementation to additional three states.

July 2020: AF (US\$5.5 million) in response to GoS’s request to expand the coverage of the ongoing Sudan Sustainable natural Resources Management Project (SSNEMP) practices to the most vulnerable areas in Gadarif and Khartoum province. It resulted in (i)changes to RF, (ii) components and costs, and (iii) extension of loan closing date to November 2023.

Changes to components

The components mostly remained consistent through the restructurings but the scope was modified slightly to respond to changing contexts and lessons learned. For example, both restructurings did not finance biodiversity conservation as there was a separate project. First restructuring prioritized support for water management. The second restructuring directed more funds to activities that aimed to enhance resilience to climate change (ICR, para 26 to 28). The project was initially implemented in 3 states. The first and second restructurings added 3 and 2 states respectively to take the total to eight (ICR, para 31).

Changes to Results Framework (RF)

The changes to RF at the first restructuring included:

- Revision upwards of targets for most indicators
- Addition of four new PDO level indicators, one of which was a corporate results indicator (CRI) and
- Replacement of an Intermediate results indicator (IRI) with a new one

The changes to RF at the second restructuring included:

- Revision upward of most PDO and intermediate indicators
- Addition of 5 new indicators at intermediate level

The addition of indicators and revision of targets during the two restructurings are summarized in the following table:

Action	Indicator	Original	Revised at restructuring	
		target	1st	2nd
Revised	Land area under sustainable landscape management practices (ha)	104,000	164,000	221,000
Revised	Areas brought under enhanced Biodiversity protection (ha)	17,400	23,400	23,400
Revised	Direct Project beneficiaries	50,000	85,000	110,000
Revised	Female beneficiaries (percent)	35	35	40
New	No of farmers adopting improved technologies		5,000	6000
New	Net greenhouse gas emissions (tons per year)		16,142,426	



New	The composition of female participation in the Village Development Committees (percent)		30	45
New	Female headed household recipients of the livelihood activities (percent)		30	48

Split Rating

The restructurings revised upwards the targets for key outputs and outcomes. As the restructurings made the project more ambitious, this review will not apply a split rating.

3. Relevance of Objectives

Rationale

Country Context

Following the secession of South Sudan, which resulted in significant loss of oil revenue, Sudan faced multiple economic shocks, including high inflation, a deteriorating trade balance, and significant currency devaluation (ICR, para 2). Over 46 percent of its population lived in poverty, with its impact far more pronounced in rural areas where poverty rate reached 58 percent compared to urban areas where 26 percent were poor. The agricultural sector, including the crops, livestock, and forestry, accounted for 40 percent of GDP and employed over 80 percent of the population. Traditional farming, involving shifting cultivation and subsistence livestock rearing made up to 60 to 70 percent of agricultural output. Extensive conversion of forests and rangelands into agricultural zones, had led to significant biodiversity loss, land degradation, and increased carbon emissions (ICR, para 6).

Sudan was among the first African countries to establish environmental legislation, demonstrating commitment to environment protection and sustainable management of natural resources, but its policies and investment responses had remained inadequate and fragmented because of insufficient resources, weak capacity, overlapping institutional mandates, and inadequate community engagement (ICR, para 3). Annual deforestation was estimated to be between 0.4 and 0.7 million ha making it one of the top ten countries with the highest deforestation rates (ICR, para 5). Located within the fragile Sudano-Sahelian and sub-Saharan zones, the country was highly vulnerable to desertification and drought.

Country strategy

The PDO was relevant to GoS’ National Biodiversity Strategy Action Plan (NBSAP), which sought to build capacity to conserve the country’s flora and fauna, and Sudan National Action Program to Combat Desertification, as it contributed to combatting land degradation and restoring degraded ecosystems. The PDO continues to be relevant for GoS as it aligns with the Sudan Poverty Reduction Strategy Paper (2021-2023), its objective 6.4 under pillar 2 of which seeks protection of natural resources and environment (ICR, para 41). The strategy of GoS to achieve it is by creating an enabling environment, halting degradation of natural resources, and strengthening community resilience to climate change.



World Bank strategy

The PDO was consistent with (i) vulnerability and resilience pillar of the World Bank African Strategy that focused on enhancing resilience in dryland areas, and (ii) World Bank's FY2014-2015 Interim Strategy Note (ISN) for Sudan which sought to support extreme poverty reduction (ICR, para 8). The PDO remains relevant to World Bank's FY2021-2022 Country Engagement Note (CEN) for Sudan as it contributes to Focus Area 2 on strengthening resilience by supporting NRM (ICR, para 41).

The level at which pitched

The PDO to increase the adoption of sustainable land and water management (SLWM) practices in targeted landscapes was pitched at a short term outcome in the theory of change. The achievement of this objective could potentially lead to the long term outcomes of reduced land degradation, improved resilience of targeted communities and reduced GHG emission, which directly contributed to meeting the strategic objectives of the country.

Summary: Losing nearly three-quarters of the oil production to South Sudan when it seceded, Sudan faced multiple economic shocks, with nearly one half of the population living in poverty. Traditional farming that involved shifting cultivation and subsistence livestock rearing had led to extensive conversion of forests and rangelands resulting in biodiversity loss, land degradation, and increased carbon emissions. Located in a fragile environment, it was vulnerable to desertification and drought and climate change was projected to lead to water scarcity. The PDO to increase the adoption of sustainable land and water management (SLWM) practices in targeted landscapes, pitched at a short term outcomes level, was appropriate given the fragile environment and highly relevant to GoS's strategy to halt degradation of natural resources and strengthen community resilience and the World Bank's strategy to strengthen resilience by supporting NRM.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To increase the adoption of sustainable land and water management (SLWM) practices in targeted landscapes.

Rationale

Theory of Change (ToC)



The retrospectively developed ToC presented in the ICR (paras 12 to 14 and Figure 1) states that the project aimed to tackle the challenges of land degradation by addressing the key barriers to implementation of SLWM practices: knowledge and technology, policy and institutional, and economic and financial.

It hypothesized that project inputs/activities which (1) create an enabling environment for the adoption of SLWM practices (by closing knowledge and policy gaps, improving institutions and multisector coordination, sensitizing communities, and enabling them to participate in decision making), (2) directly support the adoption of SLWM practices in degraded landscapes (by rehabilitating and gazetted forests, improving rangelands, and helping communities implement their plans), and (3) develop livelihood opportunities in communities to reduce their dependence of forest, producing outputs such as, number of staff trained in formulation, monitoring and implementation of policies, number of nationally designated wildlife and/or forest sites brought under improved biodiversity conditions, and number of households that benefit from livelihood activities, would lead to increased adoption of SLWM practices, thus contributing to reduce land degradation and improved climate resilience.

The theory was plausible if some critical assumptions held: i) the activities to develop an enabling environment lead to improved public institutions, coordination, and decision making at community levels that results in the development of effective plans and their implementation, ii) communities are convinced that the adoption of SLNM practices benefit them, and iii) activities to develop livelihoods are effective in discouraging communities from exploiting the forests.

Information on the achievement of intermediate and PDO indicators are presented below. The project did not collect information on Indicators that were introduced during the second restructuring and some of those that were expected to be measured only at the end of the project, as project activities were paused 26 months before the project closed.

Outputs

- 210 staff were trained in formulation, monitoring and implementation of policies for SLWM and biodiversity conservation, falling short of the target of 280
- Of them, 36 percent were female, falling short of the target of 40
- 1,164 staff were trained in provision of extension services regarding SLWM and biodiversity conservation practices, falling short of the target of 1,500
- Of them, 47 percent were female, falling short of the target of 50 percent
- A communication plan was designed and implemented as planned
- 36,801 ha of forested areas were reforested and rehabilitated as a result of the project, falling short of the target of 39,150 ha
- 28 nationally designated wildlife and/or forest sites were brought under improved biodiversity conservation, meeting the target of 28
- 6,000 ha of forest were gazetted as result of the project, falling short of the target of 11,700 ha
- 18,132 ha of rangeland were rehabilitated, falling short of the target of 25,000
- 13 landscape management plans that incorporated Sustainable Land and Water Management (LSMW) and biodiversity conservation practices were designed and their implementation was initiated, falling short of the target of 18
- No information on whether malaria studies were conducted and their findings disseminated in Sudan as planned



- No information on the number of direct beneficiaries from the new/improved climate information systems and the proportion of them that were women, with targets of 8,750 and 50 percent, respectively
- No information on the number of direct beneficiaries with diversified and strengthened livelihoods and sources of income and the proportion of them that were women, with targets of 5,700 and 30 percent respectively
- No information on the number of entrepreneurs supported to enhance climate resilience and the proportion of them that were women, with targets 5,700 and 30 percent, respectively

Outcomes

- Sustainable land management practices were adopted on 133,081 ha, falling short of the revised target of 221,000 ha
- 20,693 ha were brought under enhanced biodiversity, falling short of the target of 23,400 ha
- 83,427 people benefited directly from the project, falling short of the revised target of 110,000
- Of them, 36 percent were female, falling short of the target of 40 percent
- No information on the number of farmers adopting technologies, with a target of 6,000
- 13,511,589 tons per year of net carbon emissions were reduced over a period of 20 years, falling short of the target of 16,142,426 tons per year
- 46 percent of participants in village development committees were female, exceeding the revised target of 45 percent
- 14 percent of the households that benefited from livelihood activities were female headed, falling short of the target of 40 percent

As the conditions were not safe to travel in the country, the ICR is based on a desk review of internal reports including information from M&E and an independent evaluation and impact assessment of phase 1 (implementation in first three states before the first restructuring), which was completed in January 2021 (ICR, para 46).

The two PDO indicators that directly measured the outcomes related to the PDO were the area on which sustainable land management practices were adopted and the area brought under enhanced biodiversity. The project met 60 and 88 percent, respectively of the targets for the two indicators. The project reached 76 percent of the targeted population and met 84 percent of the target for net greenhouse gas emissions. The target for women participation in VDCs was met but not that of their share among the recipients of livelihood activities.

The project created an enabling environment for the adoption of SLWM practices through training (of staff in Natural Resource Management (NRM) institutions and in the extension system), establishment of VDCs, a communication strategy to sensitize the public, targeted investments (in degraded farmland, rangeland, and forests), and improved water supply to villages.

The project brought areas under biodiversity protection by formally converting an area into a protected area and establishing a functioning management system or improving the management system of an existing protected area.



The project delivered direct benefits through establishment of tree nurseries, food security interventions, such as distribution of seeds, provision of water resources, and creation of job opportunities. The project also distributed improved cooking stoves to reduce households' dependence on forests.

In delivering these outputs, the project nearly met the targets, more than three-quarters of the targets, except in the case of forest area gazetted as a result of the project where only 50 percent of the target was met.

An impact study that was conducted in 2021 (covering only the three states in which the project was implemented before the restructurings) based on information collected from 425 respondents indicated that the population had benefited from the project. Overall, 74 percent, 83.5 percent, and 47.3 percent of the respondents in White Nile, Gezira, and Kassala states respectively reported having enough food because of the project (ICR, para 54). Improved water services had decreased the average time required to access and collect water; in Kassala, the time had reduced from 150 to 82 minutes. Also, improved cooking stoves supplied by the project had reduced fuelwood consumption of recipient households by 40 percent and their cooking time by 40 percent.

The same impact study showed that yields of millet, sesame and vegetables had increased by 20-700 percent (the study did not estimate productivity improvements at all sites) and the beneficiaries reported an average increase in income from agriculture of 138 percent. The results also showed that the project had increased the forage biomass by 94 percent, and beneficiaries' income from animal production had increased by 67 percent.

Summary: While the project made progress in meeting (60 and 88 percent) some of the key targets for the project, the area on which the land and water management practices were adopted and the area brought under enhanced biodiversity, there are considerable evidence and outcome concerns. The project fell short of PDO targets against 6 of the 8 indicators and did not provide information on one of the others. In addition, the impact study engaged a very small cohort and while useful as a means of triangulating information, any evidence on yield improvements do not stand up against the various counterfactual limitations of the study. In short, IEG does not believe that the activities and associated evidence provides adequate justification for project success against the expected 'adoption' of SLWM practices.

Rating
Modest

OVERALL EFFICACY

Rationale

The ToC employed hypothesized that project inputs/activities that create an enabling environment for the adoption of SLWM practices, directly support the adoption of SLWM practices in degraded landscapes, and develop livelihood opportunities in communities that decrease their dependence on forests would lead to increased adoption of SLWM practices. The project fell short of the associated targets to illustrate this achievement, and while areas were brought under enhanced biodiversity and there was a reduction in net



carbon emissions these were of limited success and fell short of designated targets. Thus, the efficacy with which the objective is achieved is rated modest with considerable shortcomings.

Overall Efficacy Rating
Modest

Primary Reason
Low achievement

5. Efficiency

Economic Efficiency

The PAD noted that the benefits from project would include: (i) increased primary production of ecosystems; (ii) increased biodiversity; (iii) increased recharge of groundwater, and (iv) increased carbon sequestration (para 49). The project was expected to make natural resource base of the country more sustainable and offer local communities benefits, such as improved soil fertility, increase in agricultural productivity and fodder availability, and improved access to water resources (PAD, Annex 7, para 1).

At appraisal and at the two restructurings, ex-ante economic and financial analysis were not conducted due to lack of reliable environmental information in Sudan, challenges in monetizing environmental and social benefits, and the security situation which hindered collection of required data (ICR, para 57). A financial and economic analysis of the Sudan Community watershed management project, which had similar activities had showed that innovation to be introduced for crop and livestock models would increase the yields of representative crops by 50-200 percent. The economic rate of return from the selected farm models ranged from 32 to 50 percent (PAD, Annex 7, para 3)

At the end of the project too, collecting data for a comprehensive cost benefit analysis was not possible because of the volatile situation in the country (ICR, para 58). The impact assessment study, which covered only three states, had shown that sesame productivity had increased from 0.5 sacks to 2.1 sacks per ha; sorghum yields from 3.2 to 3.4 sacks per ha; and vegetables from 0.4 to 1.2 sacks per ha (ICR, Annex 6, para 2). An analysis based on this information showed that SLWM practices were financially attractive for sesame and vegetables, with NPVs in the range of US\$90 to US\$500 per ha.

The results of the ex-Anti Carbon-Balance Tool (EX-ACT) applied at completion showed that the project generated a net greenhouse gas (GHG) emissions reduction of about 13.5 tCO₂e over 20 year period from reversing land degradation through afforestation and reforestation, rangeland restoration, and the adoption of sustainable land management practices (ICR, para 59).

According to the ICR, the project was cost effective with unit costs of US\$136 per beneficiary, slightly lower than the estimate at appraisal but within the range observed in other African countries (para 60).

Administrative Efficiency

Several governance issues slowed down implementation and brought the project to an early end.

- Deteriorating security situation prevented the World Bank missions from traveling out of the capital city, affecting the quality of supervision they provided.



- Although the project steering committee worked as expected, frequent changes in governance structures and leadership positions limited its effectiveness (ICR, para 82).
- A government decision in 2018 to reduce the number of ministries by a third resulted in the dissolution of the implementing organization, Ministry of Environment, Natural Resources and Physical Development (MoENRPD). Selecting a replacement and conducting the necessary assessments required a couple of months. Frequent changes in key government positions affected continuity in leadership (ICR para 83).
- The military takeover, which took place in October 2021, triggered the activation of OP7.30, which halted project activities and disbursements (ICR, para 45). It brought project activities to an end 25 months before it was to close, when only 68 percent of the total funds had been disbursed.

The project management costs, including operational expenses (14 percent) and M&E activities (3 percent) accounted for 17 percent of the total disbursements, exceeding the allocated 12 percent (ICR, para 64). The ICR notes that the higher than planned management costs can be largely attributed to inflation and exchange rate fluctuations, although it notes that the project earned savings of approximately US\$3.5 million from devaluation of the local currency (para 62).

The project was implemented without delay, with satisfactory performance in the early stages attracting additional funding to the project. Because of weak evidence of returns from the project, the pausing of activities which jeopardized the investments made and prevented full use of available resources, and higher than planned management costs, the efficiency with which the project is implemented is rated Modest.

Efficiency Rating

Modest

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

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

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

6. Outcome

Traditional farming that involved shifting cultivation and subsistence livestock rearing had led to extensive conversion of forests and rangelands resulting in biodiversity loss and land degradation in Sudan. Located in a fragile environment, the country was also vulnerable to desertification and drought, which the climate change was expected to amplify. The PDO to increase the adoption of sustainable land and water management (SLWM) practices in targeted landscapes was highly relevant to GoS's and World Bank's strategies to halt degradation and strengthen community resilience. However, the project did not meet the designated targets for



the key outcomes. It delivered outputs meeting nearly three-quarters of the targets, but there is limited evidence of the benefits to the targeted population and information on improved crop yields, access to water and forage biomass for livestock draws on an extremely small sample with limited additional information. The efficacy with which the objective was achieved was rated modest with considerable shortcomings. The project was implemented without delays, but the management costs were higher than planned and governance issues resulted in pausing of the activities before the available resources could be utilized. As there was limited evidence of returns, the efficiency was rated Modest. The overall outcome of the project is, therefore, rated Moderately Unsatisfactory.

a. Outcome Rating

Moderately Unsatisfactory

7. Risk to Development Outcome

The ICR identifies several risks to development outcomes (paras 102 to 106).

Conflict related

The ongoing conflict poses risk to development outcomes (ICR, para 102). The suspension of activities in October 2021 impeded the full implementation of sustainability measures. The Gezira State, where activities were fully implemented, has become a conflict zone. The other six states are disrupted by significant influx of internally displaced people (IDPs).

Pressure on forests

The influx of IDPs poses risks to long-term viability of the forests restored by the project because the IDPs are likely to increase pressures on the forests for fuelwood.

Government commitment

Government has not been able to consistently pay civil servants since the conflict began. Their inability poses risk to sustainability of biodiversity-rich sites which were protected with forest patrols and enforcement measures.

Village institutions

Possible weakening of village institutions supported by the project poses another risk to development outcome. The project established community water committees, trained them on operations and maintenance (O&M), established a revolving fund for maintenance costs, and arranged for proper hand-over agreements with local government. They were expected to maintain the project-built water facilities.

8. Assessment of Bank Performance



a. Quality-at-Entry

The project design was appropriate to achieve the objective of the country, to arrest degradation of its natural resources. Design aspects were based on a rigorous technical assessment and on lessons learned from previously implemented projects in Sudan, such as the GEF/World Bank's Community watershed management project (ICR, para 74). The design also relied on tested technologies and interventions.

The project included activities that together would contribute to more sustainable management of resources. They focused on creating a conducive environment for the adoption of sustainable practices, direct investments in improving private lands, rangelands, and forests, and support to livelihoods in communities that would discourage them from using resources in unsustainable ways.

The RF included clear and measurable PDO indicators that adequately captured the short term outcomes of project activities. Five indicators were gender disaggregated.

Implementation plans include measures to mitigate some of the risks. As the project was multi-focal and multi sectoral, the design included the establishment of multi-sectoral national Project steering committees at different levels to ensure adequate representation, ownership and synergies among the different stakeholders (PAD, annex 4, p. 57).

Summary: The project was designed incorporating components and interventions, which had been proven to be effective in the country and elsewhere; the components could be expected to achieve the strategic objective of the country. The RF had limitations on the one dimensional nature of how it sought to illustrate progress, but its focus on gender disaggregation, was adequate to monitor activities and the targeting of women. Implementation plans included measures to mitigate risks. The Quality at entry is thus rated Satisfactory.

Quality-at-Entry Rating

Satisfactory

b. Quality of supervision

Despite the challenging operating environment, the World Bank team provided adequate supervision support throughout the project; The team conducted 12 joint implementation support missions (9 in-country and 3 virtual) (ICR, para 100). The Task Team comprised staff based in Washington, DC and Khartoum (country office) which allowed for effective supervision, particularly during travel restrictions. There were four changes in Task Team Leaders, but the transitions were seamless, maintaining implementation momentum (ICR, para 100).

The team was responsive, demonstrated by organizing two additional financings to meet the requirements of the country. The team established excellent relationships with government counterparts and other partners and demonstrated flexibility and responsiveness when faced with changes in the country's context.



The missions' Aide Memoires provided clear guidance on advancing project implementation, with consistent follow-up on agreed-upon actions; ISRs were filed on time and provided candid reflections and fair ratings on progress (ICR, para 100). The Bank team provided support to the PCU on fiduciary, safeguards, and technical matters.

As the World Bank team provided adequate supervision responding to the requirements of the country, Quality of supervision is rated satisfactory.

Summary: The project design – with aspects that had proven to be effective in the country – was appropriate to meet a strategic objective of the country. The RF, with clear and measurable PDO indicators and attention to gender disaggregation, was adequate to monitor activities including targeting. The implementation plan addressed the identified critical risks. The team provided adequate supervision, responding to the country's request to bring additional funds to expand the geographical coverage of the project. So while operational aspects were difficult to navigate, the Overall Bank Performance is rated satisfactory.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The PDO indicators were appropriate, clear, and measurable. The M&E was adequate to capture the outcomes of the project and monitor the project activities. There were 9 Intermediate Results Indicators (IRIs), not counting the five that were added during the second restructuring, on which no information was collected. The IRIs related to outputs on training, implementation of communication strategy, plans designed and initiated and activities related to replanting, and rehabilitation and gazettement of forests and rangelands.

Considerable attention was given to gender disaggregating data, with five indicators disaggregated – three of them were PDO indicators. The system also ensured monitoring of the accomplishments of the targets as established by the GEF Biodiversity, Land Degradation and Sustainable Forest Management tracking tools.

Considerable changes were made during restructurings by adding indicators to track reduction in greenhouse gas emissions, female participation in the VDCs, and targeting of livelihood benefits to female-headed households. AF2 aimed to address some of the moderate shortcomings in the design of the M&E system and introduce new indicators to monitor the impact of the additional climate interventions.



The project could have benefited from conducting a baseline survey before implementation to ensure robust measurement of results from the start (ICR, para 99). As mentioned earlier, while the RF measured progress on capacity building, it lacked specific indicators to assess advancements in policy support.

b. M&E Implementation

The M&E was implemented satisfactorily with a specialist at the PCU, supported by M&E officers at the SPIUs.

The PCU conducted regular field visits to verify reported progress. In addition, the M&E team actively engaged with stakeholders, especially targeted communities, to gather feedback and insights, fostering a participatory approach to M&E.

In May 2017, a mid-term evaluation was successfully conducted by an independent consultant. Furthermore, an independent impact evaluation study for Phase I was conducted in 2021. The project adopted GPS technology for field data collection and integrated this data into a Geographic Information System (GIS). This approach enabled better specification of M&E indicators, allowing the project to accurately track progress on land restoration and biodiversity conservation. Additionally, the project utilized the BRICKS-developed Geo-portal for data analysis and sharing, which enhanced monitoring and reporting systems.

While the project implementation was paused, the conditions did not permit collection of any data through field visits. Hence, no information was collected on indicators that were introduced during the second restructuring.

c. M&E Utilization

The M&E data were routinely used to guide project management and decision making. The M&E system played a crucial role in (i) evaluating implementation performance against expected outcomes, outputs, and budget, (ii) identifying implementation challenges and taking prompt corrective actions, and (iii) documenting lessons learnt.

These reports provided valuable insights into the project's progress and identified implementation challenges, allowing for timely corrective actions when necessary.

The system allowed for re-prioritizing activities at different stages of the project. Insights from the MTR, for example, provided valuable information for guiding the direction of subsequent activities. During missions, the Task Team reviewed and discussed M&E data with the PCU to follow up on implementation.

On several occasions, the M&E data were instrumental in identifying bottlenecks and challenges, allowing for timely interventions and corrective actions. The Bank's team also relied on M&E data as a basis for discussions with government counterparts. Since the SSNRMP is part of the boarder SAWAP, its M&E results were incorporated into the regional M&E system designed for the SAWAP portfolio.



The M&E, with clear and measurable outcome indicators, was sufficient to capture the outcomes of the project and monitor implementation of activities and test some links in the ToC. The changes to RF at restructurings strengthened to gender targeting. The system was implemented as planned and the information generated was used to make management decisions. The M&E design, implementation, and utilization is rated substantial.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

Environmental and Social

The project was classified as Category B and originally triggered the following E&S safeguard policies: (i) **environmental assessment** (OP/BP 4.01), (ii) **natural habitats** (OP/BP 4.04), (iii) **forests** (OP/BP 4.36), (iv) **pest management** (OP/BP 4.09), and (v) **involuntary resettlement** (OP/BP 4.12). Under AF1, the safeguard policy on **safety of dams** (OP/BP 4.37) was triggered.

During preparation, an Environmental and Social Management Framework (ESMF) and Process Framework (PF) were prepared and disclosed in-country and through Infoshop on October 22, 2013. The ESMF and PF were updated during the preparations for the restructurings (ICR, para 94).

A Bank mission in 2017 noted deficiencies in screening and documenting sub-projects for their E&S impacts. In the initial years, the project had only an E&S safeguard consultant. In 2018, the project recruited a full-time E&S safeguard specialist, following the advice of the Bank, to strengthen oversight and operationalize the ESMF and PF (ICR, para 95). The subsequent missions noticed the improvements and rated the safeguards performance as satisfactory.

Initially, the project did not have a formal grievance redress mechanism (GRM) and complaints were primarily resolved through village leaders. Consultations revealed that communities did not trust the GoS's GRM institutions (ICR, para 96). A project-level GRM was then established to address complaints at the local level. Communities were made aware of the GRM procedures. The GRM was functional with only one complaint lodged with the Bank in February 2022, which was resolved.

Overall, the project demonstrated steady performance on safeguards, consistently receiving Moderately Satisfactory rating on the ISRs (ICR, para 96).

b. Fiduciary Compliance



Financial Management (FM)

The project had acceptable accounting, reporting, and audit arrangements in place. Interim Financial Reports (IFRs) and withdrawal applications were submitted in a timely manner, with occasional delays. The project also submitted reports of audits conducted by the National Audit Chamber in a timely manner. The latest report for the year ending in December 31, 2021, was submitted on time, with an unqualified audit opinion (ICR, para 97). The breakout of the conflict, however, prevented the submission of subsequent IFRs and audited reports. All the project expenditures were fully documented and completed in the Bank systems. The project disbursed 68.56 percent of the total revised budget before disbursements were paused. Two limited waivers were approved during the OP7.30 pause. The first allowed the Bank to make direct payments to contractors, suppliers, consultants and PCU staff (for contracts signed before October 25, 2021), while the second allowed covering the salaries of the key PCU staff through December 31, 2022. FM performance was rated Moderately Satisfactory.

Procurement.

Project appraisal rated the procurement risk as high. The limited capacity within the implementing agency to execute procurement was addressed by recruiting procurement specialist. Additionally, the unit was trained in World Bank procedures and procurement processes. The World Bank’s procurement team also provided hands-on support to the PCU by reviewing documentation to ensure that they complied with World Bank guidelines. The procurement performance was generally rated Moderately Satisfactory during implementation.

c. Unintended impacts (Positive or Negative)

The project contributed to poverty reduction through creation of income generating activities, improvements in farm productivity, and capacity building focused on business development. According to the impact study, the project increased the incomes of beneficiaries in the three states; beneficiaries reported 33 percent, 155 percent, and 233 percent increase in incomes in White Nile, Gezira, and Kassal states, respectively (ICR, para 72).

The project’s rangeland interventions reduced conflicts between farmers and pastoralists (ICR, para 73). According to the impact assessment study, 75.5 percent of respondents in Gezira state and 100 percent of the respondents in the White Nile state reported that project interventions had reduced conflicts.

d. Other

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
---------	-----	-----	----------------------------------



Outcome	Moderately Satisfactory	Moderately Unsatisfactory	Progress against the PDO targets was limited and evidence of any expected impact is limited.
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	Substantial	

12. Lessons

The ICR identified several lessons. Three that are rooted in project experience and likely to be widely applicable are presented here with some adjustments.

Establishing inter-agency mechanisms can be an effective way to obtain engagement across various government sectors (ICR, Para 108). The establishment of such mechanisms at the central and state levels was instrumental in fostering a shared sense of ownership and effective oversight across government sectors. They greatly facilitated the project’s adoption of an integrated land approach, as demonstrated by the effective integration of wildlife conservation measures into forest and rangeland interventions.

By involving communities through participatory management, projects can build social capital and empower communities to take ownership of natural resources (ICR, para 109). The communities organized by the project took part in planning and implementation. For example, they took the lead in managing community nurseries. Community-led restoration of degraded land and other initiatives helped reduce conflicts between farmers and pastoralists.

Participating in regional knowledge platforms, such as Building Resilience through innovation Communication and Knowledge Services (BRICKS), can benefit projects by enhancing M&E performance and building capacity (ICR, Para 111). The BRICKS platform offered this project continuous guidance on M&E data collection, analysis, and reporting. The guidance and tools provided by BRICKS/Sahara and Sahel Observatory (OSS) helped the project adopt GPS technology to collect field data and integrate the data into a Geographical Information System. Through knowledge exchange on community-led restoration, the project gained insights from the experiences of other counties in implementing community-led restoration initiatives.

13. Assessment Recommended?

No

14. Comments on Quality of ICR



The report comprehensively covers the required aspects of the report. Although handicapped by having to limit the report preparation to a desk review, the report makes effective use of available information from a wide range of internal documents to assess the outcomes. The information is presented in sufficient detail along with the sources from which they are derived.

Taking a reasonable approach, the report argues that the objectives were nearly met and links the project outputs to the outcomes achieved. However, the limited information from the impact assessment became too pivotal to the project's ratings and would have benefited from triangulation of other data. The writing is clear, and the report is internally consistent.

Overall, the ICR is rated Substantial.

a. Quality of ICR Rating
Substantial