



**OFFICE OF
THE AUDITOR GENERAL**
OF THE FEDERAL REPUBLIC OF SOMALIA

PERFORMANCE AUDIT REPORT ON THE SOMALIA CRISIS RECOVERY PROJECT

August 2024

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Ref.: OAG/AG-540/2024

Date: 30/08/2024

The Speaker of the House of the People, FRS

The Speaker of the Upper House, FRS

Mogadishu, Somalia

PERFORMANCE AUDIT REPORT ON THE SOMALIA CRISIS RECOVERY PROJECT

Honorable Speaker,

I am pleased to submit to you the Performance Audit Report of the Office of the Auditor General of the Federal Republic of Somalia (OAGS) on the Somalia Crisis Recovery Project (SCRP) for the fiscal years 2020 to 2023. This report marks the first instance in which I have audited and issued a performance audit report on the Federal Republic of Somalia (FRS).

The performance audit primarily focused on ensuring the management of the Project Implementation Unit (PIU) under the Ministry of Finance (MoF) for the SCRCP achieved principles of effectiveness, economy, and efficiency in the rehabilitation of river embankment implementation in flood-affected districts in the states of Hirshabelle, South-West, and Jubbaland covering the financial records and activities over four fiscal years starting from FY 2020 through FY 2023.

In accordance with Chapter 3, Article 5 (17) of the Law of the Office of the Auditor General of the Federal Republic of Somalia (Law. No. 14, 10th September 2023) and the International Standard of Supreme Audit Institutions for Performance Auditing (ISSAI 3000), this standard requires that we plan and perform the audit to obtain sufficient, appropriate evidence that provides a reasonable basis for our findings and conclusions in relation to my audit objectives. The evidence obtained provides a reasonable foundation for the findings and conclusions based on these audit objectives.

I would like to thank my staff who carried out this audit. I would also like to extend my appreciation to the staff of the SCRCP Project Implementation Unit at the Ministry of Finance for their assistance and cooperation offered to my staff during the audit period.



H.E. Ahmed Isse Gutale

Auditor General, FRS

30th August 2024

LIST OF ABBREVIATIONS & ACRONYMS

AOAP	Annual Overall Audit Plan
CSO	Civil Society Organizations
DINA	Drought Impact Needs Assessment
FAO	Food and Agriculture Organization
FGS	Federal Government of Somalia
FINA	Flood Impact Needs Assessment
FMS	Federal Member States
IDPs	Internally Displaced People
MDAs	Ministries, Departments & Agencies
MoF	Ministry of Finance
MoPIED	Ministry of Planning, Investment & Economic Development
NDP	National Development Plan
NRC	Norwegian Refugee Council
OAGS	Office of Auditor General of Somalia
PAD	Project Appraisal Document
PIU	Project Implementation Unit
POM	Project Operations Manual
RRF	Recovery and Resilience Framework
SCRIP	Somali Crisis Recovery Project
SPT	State Project Teams
UN	United Nations
UNOPS	United Nations Office for Project Services

EXECUTIVE SUMMARY

Flooding in Somalia is a recurring and devastating environmental disaster. Flooding occurs when water overflows its natural or artificial confines, swamping land that is normally dry. Somalia, with its semi-arid climate and erratic rainfall patterns, is particularly vulnerable to this phenomenon. The country's fragile ecosystems coupled with poor infrastructure exacerbate the impact of floods, leading to a loss of life, property damage, and displacement of communities.

Effective flood response is crucial for community resilience. Recurring floods cause significant damage and loss of life in Somalia. As a result, The Somalia Crisis Recovery Project (SCRCP), a US \$187.5 million initiative funded by the World Bank (WB) was launched. The project is implemented by the Project Implementation Unit (PIU) under the Ministry of Finance (MoF), in partnership with the Ministry of Planning, Investment & Economic Development (MoPIED), and relevant ministries at the federal and state level. The project aimed to support the recovery of livelihoods and rehabilitation of flood risk management infrastructure. This included the implementation of flood risk reduction measures such as riverbank protection, afforestation of riverbanks, localized embankment repair works, and restoration of storm-water drainage in critical flooding areas.

Despite project interventions, media reports highlighted the severe impact of floods along the Shabelle and Jubba rivers, especially in Beledweyn, Jowhar, and Afgoye. Government officials have appealed for measures to address flood-related damages. This motivated the Office of the Auditor General of the Federal Republic of Somalia (OAGS) to conduct a pilot performance audit to assess the effectiveness of flood risk management infrastructure activities in the affected districts. The audit focused on river embankment rehabilitation packages implemented by the PIU between FY 2020 and FY 2023 in the flood-affected districts.

Key audit findings include:

1. Significant gaps in the gabion walls at 9 sites, out of the 24 sites sampled for field study, compromising flood protection;
2. Ineffective planning led to the absence of essential drainage systems, reducing the effectiveness of flood risk reduction measures;
3. Construction works that did not meet the required standards, affecting the overall project outcomes; and
4. Delays in project implementation hindered timely flood protection for affected communities.

Overall, the audit concluded that there was ineffective planning and community engagement, as well as ineffective supervision of contractors. This led to gaps in the sites and poor construction quality, ultimately limiting the flood protection capacity of the rehabilitated river embankments.

The audit recommends that the PIU should address gaps in river embankments, enhance community engagement, and integrate essential drainage mechanisms into construction planning processes to prevent farmland from turning into swamps. We further recommend that the PIU ensure the improvement of construction quality and timely implementation of river embankment rehabilitation works to the contracted standards.

CHAPTER 1 — INTRODUCTION

1.1 Background

The SCRCP is a flood and disaster recovery and reconstruction initiative with a budget of US \$187.5 million. It is financed by the WB through the Federal MoF. The project implementation is managed by a PIU hosted within the MoF, in collaboration with the MoPIED.

The project commenced in 2020 and is set to continue for five years, until 2025. It aims to address the recovery and resilience needs identified during a Drought Impact and Needs Assessment (DINA) and Floods Impact and Needs Assessment (FINA), as well as the subsequent National Recovery and Resilience Framework (RRF). The project is in line with the National Development Plan (NDP-9), and specifically with the RRF. The SCRCP's goal is to aid in the recovery of livelihoods and infrastructure in flood and drought-affected areas, as well as to enhance disaster preparedness capacity across the country. More specifically, the project aims to assist over 300,000 households and nearly 160,000 livestock in over 40 communities impacted by floods and drought, as well as locust infestation.¹

In 2019, heavy rainfall led to severe flooding along the Shabelle River, causing deaths and damage to infrastructure, crops, property, and livestock. Over half a million people in 17 districts across ten (10) regions were affected. Economic losses exceeded US \$270 million due to damage to critical infrastructure and livelihood sources.² Affected communities in the Federal Member States (FMS) and the Federal Government of Somalia (FGS) have acknowledged the need for implementing comprehensive, long-term interventions to mitigate future risks stemming from climate-related disasters.

In pursuit of this goal, the SCRCP initiated collaborative work to develop financing strategies for immediate recovery, reconstruction, and future investments in Disaster Risk Management (DRM). This includes long-term flood response and preparedness efforts instead of isolated and unsustainable interventions. The approach considers the interrelated nature of floods and the necessity for coordinated actions across various government agencies and levels. It's crucial to improve disaster prevention and preparedness within the FMS to reduce associated future humanitarian costs. Establishing strong prevention and preparedness systems can significantly reduce loss of life and amplify the impact of development efforts in Somalia.³

1.2 Motivation for the Audit

¹ Ministry of Finance, Federal Government of Somalia (2023) Retrieved online from <https://mof.gov.so/the-ministry/programs/somalia-crisis-recovery-project>.

² The World Bank, SCRCP - Project Appraisal Document. Available online at <https://rb.gy/cxqas>.

³ Ibid.

An effective response to the shocks of floods is important to strengthen the livelihood and resilience of communities where recurring floods shake the lives of millions in Somalia each year. The media reports frequently on the damages and loss of lives caused by floods particularly in Beledweyn, Jowhar and Afgooye⁴. Additionally, the river levels reported at cities neighboring river Jubba such as Baardhere and Luuq surpassed the high flood risk threshold and caused loss of lives, significant destruction of property and farmlands⁵.

Officials in the high-level echelons of the FGS have made repeated appeals to the international and donor communities for their support and intervention in dealing with the recurring floods causing deaths and destruction of livelihoods of people living in the floodplains of Jubba and Shabelle Rivers.

In May 2018, Somalia's Deputy Prime Minister and Chairperson of the National Flood Response Committee launched an appeal for US \$80 million to provide immediate help to people affected by flooding in the country's south-central regions⁶. In October 2019, the following rainy season, the Federal Parliament of Somalia (FPS) held sessions to address relief efforts in the regions affected by the heavy floods appointing a Flood Relief Committee⁷. In December 2019, a joint exercise initiated by FGS and the WB to assess the losses and damages caused by the floods and to develop a strategy for immediate recovery and longer-term resilience building estimated the damages the flooding caused more than US \$270 million.⁸

The SCRP was launched in April 2020 to promote a 'whole-of-government' approach to incentivizing cooperation and enhancing state-citizen-trust through state-led responses to multiple crises confronting the country, including floods and the resulting food insecurity. The lack of coordination around disaster management, economic resilience, and inclusion will undermine a cohesive approach and risk long-term confusion. The timeliness of this intervention is therefore important, laying the foundation of the future system for managing and mitigating disaster risks. Additionally, Somalia's history has been of cyclical short-term humanitarian responses and a failure to invest in more durable solutions and essential infrastructure. As a result, the economic multipliers include long-term operational efficiencies, gains from minimizing the risks of duplication, and the positioning of more effective solutions that save lives and protect livelihoods at a lower cost.⁹

⁴ BBC Somali (March 2023). Retrieved online from <https://www.bbc.com/somali/articles/c51j09j9qleo>.

⁵ UN FAO's Somalia Water and Land Information Management database (2023). Retrieved online from http://faoswalim.org/resources/site_files/Juba_river_flood_advisory.pdf.

⁶ Nile Post (2018). Retrieved online from <https://nilepost.co.ug/2018/05/21/somali-government-un-appeal-for-80-million-for-flood-victims-following-heaviest-rainfall-in-decades/>

⁷ <https://goobjoog.com/golaha-shacabka-oo-ka-hadlay-fatahaadaha/>

⁸ The World Bank, SCRP - Project Appraisal Document. Available online at <https://rb.gy/cxqas>

⁹ Ibid.

The SCRCP, with a US \$187.5 million budget, has disbursed over US \$95 million in the fiscal years 2022 and 2023. The project specifically allocated US \$12.6 million to deal with the rehabilitation of broken or non-functioning flood control systems.¹⁰ However, data from the Food and Agriculture Organization - Somalia Water and Land Information Management (FAO SWALIM), yet indicated flood-originated, still open existing gaps that have no signs of intervention/rehabilitation.¹¹

Despite the interventions of the project, Shabelle River flooding submerged the City of Beledweyne on May 8, 2023, causing widespread destruction of farms, public infrastructure, and other livelihood assets¹². In March 2023, flash floods in Bardere District in Gedo Region, have reportedly displaced thousands, destroyed property, and created critical needs in shelter, health, water and sanitation, and non-food items.¹³ As a result, district Commissioners in flood-affected areas are tired of flood risk reduction interventions that only handle the emergency issues that existed during crises and advise the government to devise effective solutions prior to the emergencies.¹⁴ In addition to that, the financial report for the year ended 2022 of the OAGS highlighted irregularities in the allocation of funds under the SCRCP and other similar projects.

As part of the 2023 Audit Plan of the OAGS and based on the above reasons and consequences associated with flood risk, the OAGS decided to carry out a performance audit on the SCRCP to evaluate whether the flood risk management measures implemented so far by the PIU have effectively prevent or reduce flood risks in the districts it has implemented its activities.

¹⁰ FGS Financial Statements, Supporting Schedule FY 2022

¹¹ <http://frrims.faoswalim.org/rivers/breakages>

¹² ReliefWeb Portal (2023). Retrieved online from <https://reliefweb.int/report/somalia/actionaid-press-release-beledweyne-flooding-response-19th-july-2023>.

¹³ UN FAO's SWALIM database (2023). Retrieved online from <https://reliefweb.int/report/somalia/somalia-gu-rainy-season-2023-flash-floods-update-no-1-23-march-2023>

¹⁴ MoPIED (2023). Retrieved online from <https://mop.gov.so/flood-risk-management-infrastructure-river-embarkments/>

CHAPTER 2 — AUDIT DESIGN AND METHODOLOGY

2.1 Audit Objective

The objective of the audit was to evaluate whether the flood risk management measures implemented by the PIU so far, have effectively prevented or reduced flood risks in the flood-affected districts in Jubbaland, Hirshabelle, and South-West States where such implementation has been effected.

The specific audit objectives were to assess whether:

1. The PIU managed the planning and implementation of the river embankment work packages to mitigate flood risks effectively; and
2. The river embankments rehabilitation packages have been completed on time and have achieved the intended outcomes.

2.2 Audit Questions, Assessment Criteria, and Sources

To assess the performance of the PIU in the rehabilitation of river embankments, assessment criteria were drawn from different sources. These sources were Project Appraisal Documents (PAD), Project Operations Manual (POM), Supplier Contracts, and Work Plans.

Table 1 - Audit Questions, Assessment Criteria, and Sources

Audit Questions	Assessment Criteria	Source
<p>Audit question 1 – Did the PIU manage the planning and implementation of the river embankment work packages to mitigate flood risks effectively?</p>		
<p>Sub-question 1.1 – Did the PIU plan the river embankment work packages to mitigate flood risks effectively?</p>	<p>The PIU should conduct mapping of the affected areas using spatial data and satellite imagery, align the construction sites with the NDP-9 priorities, and consider the contribution of the intervention to the PDOs of improving resilience and disaster risk reduction.</p>	<p>POM</p>
<p>Sub-question 1.2 – To what extent do the implemented river embankment packages have adequate quality to efficiently contribute to community needs?</p>	<p>According to the POM, the PIU is responsible for overall quality and process oversight, the State Project Teams (SPT) are responsible for the review, compliance, and supervision of works, while the FGS and FMS MDAs are responsible for site supervision and technical quality assurance and that the river embankment works should have appropriate quality and community relevance.</p>	<p>POM</p>

Audit question 2 – Did the PIU ensure that the river embankment rehabilitation packages are implemented on time and achieve the intended outcome?		
Sub-question 2.1 – Have the river embankment packages protected communities from flood risks after completion?	According to the POM, the river embankment rehabilitation works as part of component 2 are designed to address future flooding through flood risk reduction works.	POM
Sub-question 2.2 – Were the constructed river embankments concluded at the scheduled time?	The river embankment rehabilitation works should be completed within the agreed-upon timeline in accordance with the contracts the PIU signed with the implementing partners (contractors).	POM, Contracts
Sub-question 2.3 – Will the constructed river embankments provide sustainable flood protection in the long term?	According to the POM, the embankments should be designed and constructed in accordance with the Build Back Better standards and must improve preparedness for future flood risks.	PAD

Source: OAGS Performance Audit team compilation (November 2023).

2.3 Audit Scope & Limitation

The main audited entity was the PIU under the MoF, which has been mandated to ensure that the river embankment rehabilitation works are completed effectively and efficiently. The audit covered the rehabilitation of river embankment implementation in flood-affected districts in the states of Hirshabelle, South-West, and Jubbaland.

The audit examined the financial records and activities over four years, starting from FY 2020 and running through to FY 2023. This time frame was chosen due to the project's commencement in May 2020, and it allowed for a comprehensive review of the project's performance and effectiveness over the stated period. Due to security concerns, the audit team faced restrictions on accessing remote sites and limited visiting time spent on each site.

2.4 Methods of Data Collection

A. Documents Reviews

The audit team reviewed relevant documents on the planning and implementation of river embankment rehabilitation works. We also reviewed design documents to determine if they were complete, adequate, and could be used to guide the implementation of river embankment works.

A detailed list of documents and files we reviewed is presented in Table 3 in **Appendix II**.

B. Interviews

The audit team interviewed beneficiaries of the river embankments implemented under the SCRP. Additionally, the team interviewed key project staff including site engineers, project engineers, Monitoring and Evaluations (M&E) specialists, and the project coordinator. This was done to obtain clarifications, confirmations, and explanations on issues we noted from document reviews. Additionally, it was intended to assess the impact of the project on communities, the extent of collaboration with and involvement of beneficiaries in the planning and implementation of river embankment works.

Refer to Table 4 in **Appendix II** for the detailed list of individuals interviewed.

C. Site Visits

The audit team visited and inspected the twenty-four (24) river embankment sites sampled to verify their existence and inspect the quality of works against the specifications detailed in the signed contract with suppliers. The audit team was accompanied by a site engineer and a state engineer from the PIU during all site visits. Details of the sites visited are in Table 5 presented in **Appendix III**.

The sites visited were selected using a purposeful sampling technique. The audit team sampled 24 river embankment sites, out of 129 project sites implemented in Somalia. This involved considering geographical location, flood effects, accessibility, budget allocations for each city, and security. The goal was to ensure comprehensive and balanced coverage of the three states where the SCRP is being implemented. The 24 selected project sites were known flooding hotspots purposefully sampled from three states: Hirshabelle, Jubbaland, and South-West. The main reason for sampling the selected sites was to understand how the river embankment rehabilitation works generally support the flood risk reduction and resilience capacity of target communities. In addition to that, the purpose was to observe the physical conditions of the sites and whether those infrastructures were up to the contracted standard.

The selected cities (Beledweyn, Dolow, and Afgoye) from these three states together make up fifty-six percent (56%) of the total budgets allocated for river embankment packages, and eighteen percent (18%) of the total number of the project sites. Details of the sampling method for the selected sites are shown in Table 2 presented in **Appendix I**.

2.5 Audit Standards

We carried out the audit in accordance with the International Standards of Supreme Audit Institutions (ISSAI 300), relevant to performance auditing.

These standards require that the audit is planned and performed to obtain sufficient and appropriate evidence to provide a reasonable basis for the audit findings and conclusions based on the audit objectives.

CHAPTER 3 — DESCRIPTION OF THE AUDIT AREA

3.1 The Need for Robust Flood Risk Management Infrastructures

Floods are the most prevalent form of natural disasters along the Jubba and Shabelle Rivers in Southern Somalia, whereas flash floods are common occurrences along the intermittent streams in the northern part of the country. Both riverine and flash floods cause high numbers of casualties and economic impacts. As the population grows and urban development encroaches into traditional floodplain areas in the riverine areas, the potential for loss of life and property rises dramatically.

The SCRIP is a government intervention funded by the WB that supports flood recovery to provide immediate support and infrastructure rehabilitation in Hirshabelle, Southwest, and Jubbaland states in Somalia. The project development objective is to support the recovery of livelihoods and infrastructure in flood and drought-affected areas and strengthen capacity for disaster preparedness nationwide. To address future flooding, the project, under component 2(c), implemented flood risk reduction works, including riverbank protection, afforestation of riverbanks and localized embankment repair works in critical flooding rivers; restoration of storm-water drainage; the rehabilitation of pre-existing river irrigation channels which has a key role in flood risk management; and selective dredging to restore original river channels that have silted up.

3.2 Legal Framework

The project is being implemented by the PIU in the federal MoF, and it derives its mandate from the Financing Agreement — between the FGS and the WB—, the PAD, and the POM. In addition to that, the project works conducted by implementing partners are guided by contractual agreements between the PIU and the Implementing Partners (IPs).

3.3 Funding

Table 6A outlines the revised budget and actual disbursements in USD for different components of the project. Table 6B below shows project budget allocations for flood risk management infrastructures.

Table 6A — Funding Arrangements of the Project Components

Component(s)	Revised Budget (in USD)	Actual Disbursement in USD) ¹⁵
Component 1 - Immediate basic services and livelihood support	30,000,000.00	23,047,403.00
Component 2 - Medium-term flood recovery	41,000,000.00	11,576,507.14
Component 3 - Longer-term disaster risk preparedness	37,755,679.00	11,256,374.00
Component 4 - Project Management	17,000,000.00	8,982,491.99
Component 5 - Contingency Emergency Response Component	16,744,321.00	16,744,321.74
Component 6 - Anticipatory & Recovery Support for Addressing Food Insecurity	45,000,000.00	24,110,840.00
Total	187,500,000.00	95,717,937.87

The river embankment rehabilitation works include protecting riverbanks, restoring storm-water drainage, rehabilitating river irrigation channels, and selectively dredging to restore original river channels and fall under component 2(c). Details are shown in Table 6B:

Table 6B — Budget Allocation for Flood Risk Management Infrastructures

Component 2 Medium-term flood recovery	Revised Budget (in USD)	Actual Disbursement in USD) ¹⁶
Rehabilitating Water Resources and Flood Risk Management Infrastructure	12,600,000.00	6,015,495.40
Technical Assistance (Design and Supervision, Quality Control, Environmental and Social Safeguards, etc.) – United Nations Project Services (UNOPS)	1,045,454.00	1,045,454.00
Total	14,645,454.00	7,060,949.40

Source: PIU Financial Statements

¹⁵ This is the actual budget disbursement of the project as of August 28, 2023.

¹⁶ Actual budget disbursement of the project as of August 2023.

3.4 Roles and Responsibilities of Key Actors Involved in the Project

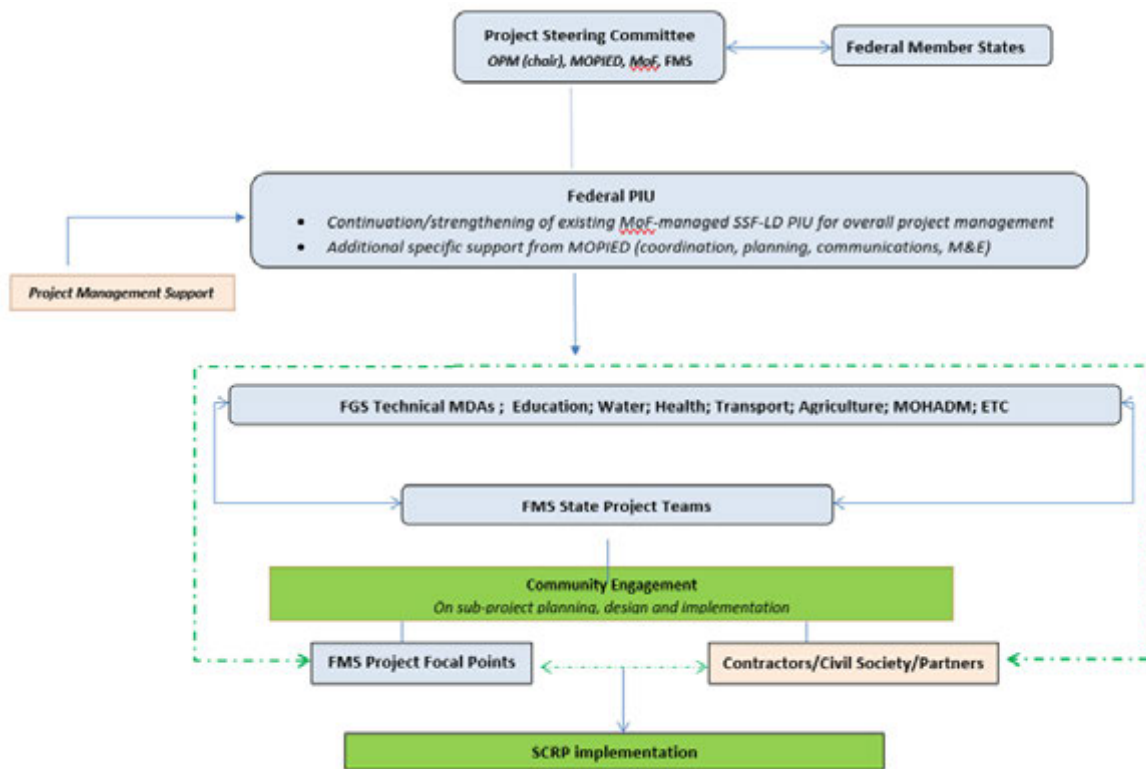
The following table highlights the key roles and responsibilities of the key actors involved in the project.

Table 7—Roles and Responsibilities of Key Actors Involved in the Project

Key Player	Roles and Responsibilities
PIU	Coordination of prioritizing and sequencing exercises, investment planning, quality and process oversight, procurement of goods and services, seeking WB's no-objections and approvals, contract management oversight and controls, and financial management and reporting.
Ministries, Departs, and Agencies (MDAs)	Identification of subproject interventions under the investment plans, preparation of subproject designs, preparation of subproject bidding documents, and supervision of consultants.
SPTs	District-level community consultations, review, compliance, and supervision and monitoring of works.
Project Steering Committee	Review and approve state investment plans, component activity designs, and procurement plans. Provide strategic decision-making, and policy guidance, and liaise with enforcement agencies for project security.

FMS institutions are responsible for implementing medium-term recovery interventions and rehabilitating flood risk management infrastructures. They identify sub-project interventions, prepare designs, oversee contractor supervision, and work with external agencies for support. Private Consultants, Contractors, and Civil Society Organizations are also involved in implementing sub-projects.

Additionally, the Project aimed to improve coordination between state and federal governmental agencies and flood-affected communities to rebuild trust in the government and strengthen the relationship between the state and its citizens. The Project will promote cooperation among different government levels and with communities, which is crucial for managing potential risks and enhancing state-citizen trust. The institutional implementation model - developed in consultation with the FGS and FMS - is seen in Figure 1.



3.5 Process Description

The processes involved in the rehabilitation of river embankments are indicated in the figure below:

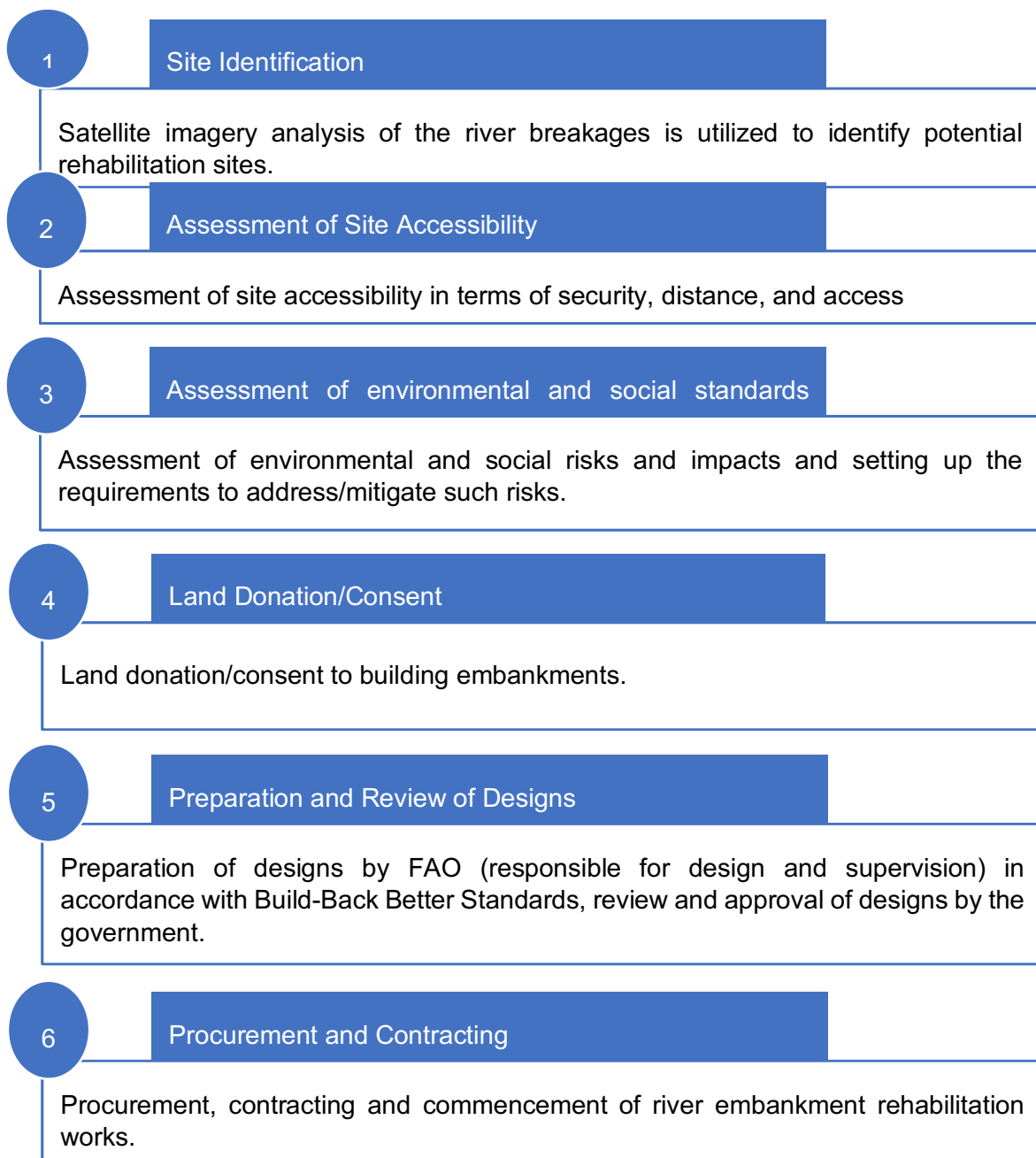


Figure: River embankment works process description

Source: OAGS Audit team

CHAPTER 4 — FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

4.1 Gaps in River Embankment Rehabilitation Sites

According to POM, the PIU should conduct a community needs assessment and engagement process that uses the information and recommendations from the Famine Impact and Needs Assessment (FINA) as the main source for identifying and targeting the needs of the communities affected by the recurrent floods in Somalia, and applies a demand-driven and well-defined methodology for selecting and implementing the interventions that address the most urgent and relevant needs of the communities.

Our site inspections revealed gaps in the gabion wall throughout the site inspection in Dhagahtur 2, and Baalgorey site in Afgoye district. The gabion wall construction on this site had gaps due to beneficiaries refusing the extension of portions of the wall to their farmland as the case is in Dhagahtur 2, and because of the ferryboat crossing in the Baalgorey site.

Picture Grid 1	
Gap at the end of the gabion wall at the Dhagahtur 2 site in Afgoye	Gap at the end of the gabion wall at the Baalgorey site in Afgoye
	

Source: OAGS Audit team field visit on 14th January 2024.

Also, the audit team observed gaps in Qansahley site, and the Site Engineer revealed to the audit team that there is an accumulative gap of approximately 800 meters between sites. Additionally, the audit team in their field visit noted gaps Qase 1, 2, 3, Sulgudud/Nasteh, Sulgudud 1, 2, 3, and Sulgudud Abdirashid sites in Dolow. The reason for this was lack of community awareness and engagement that could help address this issue and foster cooperation in extending the gabion wall for enhanced protection and project effectiveness.

Moreover, the audit team observed gaps in and at the gaps at the end of Sigalow/Yusuf A and Hawatako 4 sites in Beledweyn. This caused a passage for the flooding that affected farmland and surrounding areas.

Picture Grid 2:

Sigalow – Yusuf A site in Beledweyn: A gap at the end of masonry wall



Hawatako 4 site in Beledweyn: A gap at the end of masonry wall



Source: OAGS Audit team field visit in January 2024

We found in the Imaraat 2 site in Afgoye district an incomplete gabion wall as the contractor did not extend the gabion wall at the end of the site as per the required specifications. Instead, the contractor used sandbags to fill the gap created due to the farm owners' request for a separate wall. According to PIU engineer, the gap at this site was a result of challenges to securing farmer's consent. Therefore, this incomplete wall compromised the effectiveness of the river embankment, allowing water to leak through and causing erosion of the soil behind the wall. Additionally, the irrigation chamber designed to facilitate farmers' access to river water at this site caused water to overflow during the last rainy season. The resulting overflow led to dissatisfaction among the farm owners where the chamber was located, prompting them to close the water inlet with a concrete seal.

Picture Grid 3:

Sandbags are used at the end of the gabion wall in Imarat 2 site in Afgoye to fill a gap



Swamped farmland destroying fruit producing trees in Kuweyt 1 site in Afgoye



Source: OAGS Audit team field visit on 17th January 2024.

Conclusion

There were community engagement activities, but the gaps in the soil embankment and gabion walls are a result of unresolved community issues in the community engagement initiatives undertaken by the project, stemming from a lack of consent in the provision of land, resulting in inadequate flood protection. As a result, the effectiveness of the river embankments at these sites has been significantly compromised.

Recommendation

We recommend that the PIU should address these gaps, and place a high priority on comprehensive community engagement, should consider community needs and concerns, the advice of site assessments conducted by site engineers.

Management Response

This gap at the end of the masonry wall at (Sigalow/Yusuf A) was identified during the assessment, but the landowner refused to donate the space needed for the embankment construction. Due to social safeguard issues, that section was not selected for rehabilitation. Additionally, the Bank safeguard policy does not allow using force to acquire land. This site (Hawa Tako 4) was protected from the riverside, but the adjacent farmland, which had not been rehabilitated, contributed to the flooding in the area. The landowner was interviewed during the audit exercise and confirmed that the embankment constructed at her farm effectively protected against flooding from the riverside. The embankment length [at Imarat 2] was fully constructed. However, the farm owner refused the closure of this gap and indicated that he would use sandbags to address it if needed. Additionally, one of the major challenges

in Afgoye was securing farmers' consent. Some refused to donate land, while others intentionally created gaps by damaging the rehabilitated embankments.

The PIU has conducted thorough community engagement in the project locations to ensure that the community understands the importance of flood protection efforts. This initiative aims to foster community ownership and emphasize the importance of their involvement in safeguarding the rehabilitated embankment sites. However, the target was to repair the weak and damaged riverbanks that were identified by SWALIM.

4.2 Lack of Water Inlet/Outlet Mechanism for Gabion Walls

According to the POM, the project Rehabilitating Water Resources and Flood Risk Management Infrastructure should address future flooding through flood risk reduction works, including: (i) river bank protection, afforestation of river banks and localized embankment repair works in critical flooding rivers; (ii) restoration of storm-water drainage; (iii) and the rehabilitation of pre-existing river irrigation channels which play a key role in flood risk management; and (iv) selective dredging to restore original river channels that have silted up.

During site visits, we observed that the Kuweyt 1 and Aytiro 1 sites in Afgoye district lacked drainage or water inlet/outlet. The lack of a drainage mechanism indicated a significant planning issue that was overlooked.

The inefficient water flow management due to the lack of proper planning and implementation of a drainage system has led to several issues. Rainwater gets trapped in the farmland, causing water to encroach on the foundation of the gabion wall, which leads to leakages. Additionally, farmers have resorted to tearing and damaging the wall, which could potentially harm the effectiveness of the constructed river embankment. This embankment is meant to allow trapped water to escape to prevent the farmland from turning into swamps, thus protecting the fruit-producing trees in the farms.

Picture Grid 4:

Kuweyt 1 site as farmer trying to tear the gabion wall to let the water out



Stormwater getting trapped in the farmland at the Aytiro 1 site in Afgoye



Source: OAGS Audit team field visit on 14th January 2024

Conclusion

The approach to riverbank protection in Afgoye district, as observed at the Kuweyt 1 and Aytiro 1 sites, is causing negative consequences due to the lack of drainage systems caused by poor planning. This shortcoming significantly reduces the effectiveness of the implemented flood risk reduction measures.

Recommendation

We recommend that the PIU conducts a comprehensive review of the planning and construction processes for riverbank protection works. This review should ensure the inclusion of essential drainage systems in current and all future projects to optimize water management and safeguard the integrity of constructed infrastructure.

Management Response

As a lesson learned from the recent El Niño floods, the PIU is considering the construction of inlet and outlet drainage culverts to address this issue.

4.3 Inadequate Quality of the Construction Works

According to the POM, the PIU is responsible for overall quality and process oversight, the SPT is responsible for the review, compliance, and supervision of works, while the FGS and FMS MDAs are responsible for site supervision and technical quality assurance that the river embankment works are constructed to the appropriate standard and will be of relevance to the beneficiary community. These include engineering standards, safety, as prescribed in the Bill of Quantities (BoQs), contract technical specifications, and alignment with community requirements.

We assessed PIU’s implementation of their planned activities to complete river embankment rehabilitation works in terms of the protection it provided and the quality of final outputs. Our site inspection in Hawatako – Bundada Kawanka site in the Baladweyne town, revealed significant quality defects: missing embankment and breakage backfilling, absence of required stone pitching, missing stone pitching at the toe, and riverbank collapse and damage.

Picture Grid 5: Example of defected river embankment site at Hawatako – Kawanka in Beledweyne town

The riverbank in Hawatako – Kawanka has completely collapsed, causing trees and parts of a house to be swept into the river.



Traces of the stone pitching for the soil embankment is seen as most of it slid into the river



Source: OAGS Audit team field visit on 18th January 2024

We observed in Baalgorey 2, Afgoye district, a significant defect in the gabion wall. The stonework was subpar, with loose and broken pieces. The wire mesh, which is responsible for holding the stones together, was of poor quality, torn in some sections, and lacked proper fastening and security. This will affect the sustainability of the gabion wall as parts of the stonework and wire mesh are coming apart.

Additionally, the constructed embankment, intended for flood prevention, lacks a riverside slope crucial for water drainage and preventing sediment and debris accumulation. The site inspection revealed a significant deficiency, deviating from the prescribed design specifications. This omission compromises the effectiveness of flood prevention measures, highlighting a critical oversight in the embankment's construction.

In the Helo Keliyo-Hadole site, Baladweyne district, we noted that a section of the stone pitching necessary to support the soil embankment, measuring approximately 15 meters, was found to be damaged and displaced because of two consecutive flooding episodes. The purpose of the stone pitching was to safeguard the soil embankment by preventing erosion caused by water flow. However, due to the high-level water pressure, the stone pitching failed to fulfill its protective function, leading to defects in the structure. The defective stone-pitching portion poses a risk of further deterioration and potential collapse of that section of the embankment.

During the site inspection in Bilisdiid 2 in Baladweyn, we observed the river embankment exhibited partial construction in accordance with the designated design specifications and standards, the starting and ending points of the site, remained unconstructed, resulting in a noticeable gap within the embankment structure. This gap is attributed to the contractor's failure to fulfill the project within the stipulated timeframe. The deficiency in construction has subsequently undermined the effectiveness and efficiency of the river embankment. This issue not only deviates from the intended functionality of the embankment but also poses a threat to the safety and well-being of the adjacent communities.

We noted during the site inspection in Hawotako 4, Beledweyn in Hirshabelle state, the countryside slope of the soil embankment has not been constructed, leaving the soil exposed and susceptible to erosion and potential collapse. This exposes the project to environmental risks, including soil erosion, and compromises the long-term stability of the embankment. This increases the chances of soil displacement and potential collapse, posing a significant threat to the overall integrity of the project.

Picture Grid 6:	
Bilisdiid 2: A gap in one end of the site caused flooding in surrounding areas.	Helo Keliyo – Hadole: A portion of the stone pitching (about 15m) is defective
	

Source: OAGS Audit team field visit on 18th January 2024

During site visits in Sulgudud/Nasteh, Sulgudud/1, 2, 3, and Sulgudud/Hussein Ibrahim, we found defects at the edges of the site caused by floods. This shows that the rehabilitation works implemented have limited sustainability. Field engineers indicated that gabion walls are more reliable than soil embankments and require less space.

Picture Grid 7:

A portion of the stone pitching is washed away by floods in Sulgudud 1 site Dolow



A portion of the gabion wall is collapsed Sulgudud/Hussein site Dolow



Source: OAGS Audit team field visit on 23rd June 2024

Conclusion

The identified deficiencies, such as incomplete construction, missing slopes, or flood-induced damage, pose significant risks to the embankment’s integrity, community safety, and sustainability of the protection provided by the rehabilitated sites. Furthermore, it indicates that supervision and monitoring conducted by the PIU were ineffective and did not address the issues accordingly.

Recommendation

We recommend that urgent corrective actions be taken by PIU on all the affected sites to rebuild collapsed sections, and repair washed-away portions, to enhance the effectiveness of the embankment and make them sustainable.

Management Response

The refusal of the farmers and community to donate land resulted in the construction of embankments with reduced width. Due to this safeguard issue, this site [Hawatako – Kawanka] was dropped.

The El Nino flood has damaged [the Helo Keliyo – Hadole site], and PIU is planning to rehabilitate the site with the modified and enhanced design gabion embankments.

The embankment [at Bilisdid 2] length and width are not completed as per design due to lack of sufficient space.

This project [Hawatako 4] was not completed to 100% specification. Only 80% of the work was finished due to challenges related to safeguard and social issues (please refer to the attached).

4.4 Delay in the Implementation of River Embankment Rehabilitation Works

According to the contracts signed with service providers, the river embankment rehabilitation works should be completed within agreed timelines.

A review of documents revealed construction delays and safeguard issues were discovered in Siigalow - Yusuf A in Beledweyne town. The construction was delayed due to various safeguard issues that necessitated design modification. These issues included the absence of environmental and social impact assessments, inadequate consultation and participation of stakeholders, insufficient compensation and resettlement of affected individuals, and poor management of waste and debris generated during construction. The design modification required additional time and resources, impacting the quality, structure, and performance of the river embankment. Similarly, there was a delay in the Balguri 2 rehabilitation works.

Additionally, progress reports showcased delayed and halted construction in Dhagahtur 2, Afgoye district. The construction of the river embankment was not completed before the flooding season. Additionally, the construction work was halted due to the occurrence of floods. This situation exposed the communities in the area to the risks and consequences of the floods without the protection provided by the embankment.

A review of monitoring reports conducted by the IVA highlighted delays in the procurement process. For instance, bidding evaluations of twenty-three (23) river embankment rehabilitation sites located in Jowhar (5), Dollow (12), Luuq (4), and Afgoye (2) districts were submitted to the WB for approval did not receive approval from the Bank, leading the PIU to re-bid these contracts with limited circulations in the fourth quarter of 2022, leading to delays in work commencement. In general, the completion reports for the construction carried out in Afgoye indicated that each site experienced a minimum delay of four (4) months. These delays may have a detrimental effect as river embankment works are time-sensitive, and delays may expose beneficiary communities.

Conclusion

The project's failure to adhere to contractual timelines and safeguard requirements raises concerns about its effectiveness in achieving its intended purpose. The delays exposed communities to flood risks and compromised the overall functionality of the embankments.

Recommendation

We recommend that in the future, the PIU should strictly enforce contractual timelines, prioritize thorough environmental and social impact assessments before construction, involve stakeholders throughout the project, and improve risk management for potential flooding during construction.

Management Response

Some delays were caused by the following: sourcing gabion materials from abroad, farmers denying truck access, rain affecting site accessibility, security challenges, absence of a national land policy governing the acquisition of riverine locations targeted for rehabilitation.

APPENDICES

Appendix I

Table 2 — Sampling of the Site Visit Based on State Representation and Budget Allocations

Cities	Budget/Allocated to Federal Member States (in USD)			Total	%
	Hirshabelle	Jubaland	South-West		
Jowhar	2,659,684.58			2,659,684.58	27%
Dolow		2,152,268.98		2,152,268.98	22%
Beledweyn	2,089,279.44			2,089,279.44	21%
Afgoye			1,277,641.22	1,277,641.22	13%
Bardere		777,897.76		777,897.76	8%
Luq		551,134.58		551,134.58	6%
Kismayo		354,139.16		354,139.16	4%
Total	\$4,748,964.02	\$3,835,440.48	\$1,277,641.22	\$9,862,045.72	
Percentage of total	48%	39%	13%		

Appendix II

Table 3 — Documents Reviewed and Purpose of Review

Document	Focus of Review
PAD	To examine if terms and conditions agreed upon were considered during the project implementation stage and specifically, understand the responsibilities of MoFs (PIU), Steering Committee, and co-managing MoPIED in management and oversight of the project implementation.
Financing Agreement	To understand project context, rationale, objectives, beneficiaries, components, results chain, the rationale for WB involvement, the role of partners, technical analysis for project planning, implementation, and monitoring of results.
POM	To outline operational guidelines and procedures to be followed in implementing the project components, including the processes of identifying, preparing, selecting, procuring, managing, and monitoring the implementation of all other related project activities.
Progress Reports	To assess whether the project activities were implemented as planned; and evaluate whether there were challenges or deviations from plans that may constitute a performance risk.
Contracts and Designs	To evaluate whether the project objectives, specifications, standards, and outcomes are clearly defined and aligned with the project scope and budget. The auditor can also identify any gaps, deviations, defects, or deficiencies in the contracts and designs that may affect the quality, efficiency, effectiveness, and sustainability of the construction works.

Appendix III

Table 4 — Interviews Conducted and Purpose

Entity	Individual Interviewed	Purpose of Interview
PIU (MoF)	Project Coordinator	To gain an understanding of the overall management of the project in terms of execution and status of each component.
	M&E Specialist	To gain an understanding of M&E processes including the status of the project, challenges reported, and mechanisms for mitigating risks.
	Financial Specialist	To gain knowledge on how the project is financed, allocations, and status of disbursements made at the current stage of the project.
	Procurement Specialist	To gain an understanding of various processes undertaken in the procurement of goods and services and the mechanisms for seeking WB no-objections.
FAO	Site Engineer(s)	To gain an understanding of the various engineering processes in planning, scheduling, and assessment of construction activities with contractors (construction drawings, BOQs, specifications, and other technical requirements).
SPT	Project Engineer	To understand the various engineering processes involved in implementing and assessing construction activities with contractors, including construction drawings, BOQs, specifications, and other technical requirements.
Beneficiaries	Farmers	To get firsthand accounts of flood impacts on agriculture, assess protection measures' effectiveness, identify vulnerable areas, evaluate recovery efforts, and capture local knowledge of flood patterns.
	Residents	To acquire detailed accounts of past flood events and assess the effectiveness of mitigation measures, the community's coping mechanisms, damage assessments, and preferences for future mitigation strategies.

Appendix IV

Table 5 —Distribution of sites and cities by state

State	City	No.	Site
Southwest	Afgoye	1.	Balguri 2
		2.	Kuweyt 1
		3.	Imarat 2
		4.	Aytiro 1
		5.	Dhagahtur 2
Hirshabelle	Beledweyne	6.	Hawatako - 4 (Left)
		7.	Hawatako
		8.	Helo kaliyo to Hoodley
		9.	Helo Kaliyo/Isse Hadole
		10.	Siigaalow/Yusuf A
		11.	Bilisiid - 2
Jubaland	Dolow	12.	Hawatako - Kawanka
		13.	Sulgudud/Mudey 1
		14.	Sulgudud/Mudey 2
		15.	Sulgudud/Mudey 3
		16.	Sulgudud/Nasteh
		17.	Sulgudud/Abdirashid
		18.	Sulgudud/Hussein
		19.	Sulgudud/Adam
		20.	Sulgudud/Ali Sharif
		21.	Qansahley
		22.	Qase 1
		23.	Qase 2
		24.	Qase 3

Source: Compiled by the OAGS Audit Team (June 2024)



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