ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

FOR THE PROPOSED RESPONSE TO THE SUDAN REFUGEE CRISIS IN SOUTH SUDAN PROJECT (SRCSSP) IN MABAN COUNTY, UPPER NILE STATE, SOUTH SUDAN

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IMPLEMENTING ORGANIZATION	CONSULTANT	FUNDING AGENCY
UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES (UNHCR)	SETAC ENGINEERING COMPANY LTD	THE AFRICAN DEVELOPMENT BANK GROUP (AfDB)

MAY 2025

CERTIFICATION

The proponent commissioned SETAC Engineering Company Limited to undertake an Environmental and Social Impact Assessment (ESIA) for the proposed **Response to the Sudan Refugee Crisis in South Sudan Project (SRCSSP)**. The report has been prepared in accordance with the existing legislations of South Sudan and African Development Bank the African Development Bank (AfDB) Environmental and Social Safeguards.

All information in this ESIA report is accurate to the best of our knowledge.

Proponent: United Nations High Commissioner for Refugees (UNHCR)

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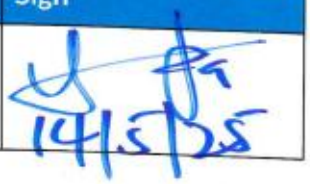
Amias Aryampa Ampurire	Associate Livelihoods and Economic Inclusion Officer amiasary@unhcr.org	

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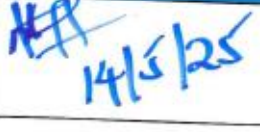
Nicholas Serser	Project Manager serser.nicholas@setac.so	

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EXECUTIVE SUMMARY

Overview of the Project

Response to the Sudan Refugee Crisis on South Sudan Project (SRCSSP) is a two-year (24-month) project implemented by the United Nations High Commissioner for Refugees (UNHCR) together with Ministry of Interior (Commission for Refugee Affairs (CRA)) under the oversight of the Ministry of Finance and Planning.

The project's overall development objective is to build peace, inclusiveness, and resilience in the South Sudanese communities affected by the current conflict in Sudan.

Specifically, the project aims at

a. Supporting the inclusive and peaceful integration of refugees and returnees into the communities,
b. Social cohesion strengthening amongst refugees and host communities, and
c. Enhancing the socio-economic well-being of the affected communities.

Components

The project has four (4) components, namely,

- Component 1: Enhancing Jobs and livelihoods amongst the refugees and host communities;
- Component 2: Restoration and improvement of basic social services in the refugee and host communities;
- Component 3: Restoration of the environment in the refugee and host communities; and
- Component 4: Project management and capacity building.

Project outcomes

Project outcomes are;

- Outcome 1: Improved self-reliance and economic well-being,
- Outcome 2: Displaced and host populations supported to access basic services (health, education, water, sanitation, and shelter) and markets,
- Outcome 3: Strengthened climate resilience of refugees' host communities and other displaced persons, and
- Outcome 4: Institutional capacity of government strengthened, and project managed and delivered effectively.

Output

Output 1: The crisis affected communities of refugees and their hosts supported with skills development and climate-smart agricultural production practices; and increased income-generation opportunities for the most vulnerable to empower them to create new sustainable and climate-responsive livelihood opportunities.

Output 2: The essential service delivery systems (health, education, WASH, camp infrastructure, etc.) are supported through rehabilitation and expansion of the systems and improving access and quality of services; in effect, enhancing the well-being of the crisis-affected communities.

Output 3: Enhanced resilience and adaptive capacity of displaced people (refugees) and host communities to climate-related and other environmental risks will be enhanced through well-established and environmentally sustainable early warning systems and preparedness measures; and

Output 4: Local institutions supported with capacity building and key equipment to facilitate their daily operations so that the leadership and capacity of these institutions can be more sustainable to advance peaceful coexistence efforts, resulting in improved coping capacities and strengthened peaceful coexistence and social cohesion among refugees and other host communities.

Project Site

Maban County is in the Upper Nile state of South Sudan, near the border with the Republic of Sudan and Ethiopia. It is bordered by Sudan's Blue Nile State to the east, Longochuk County to the south, and Renk and Melut Counties to the west. Maban covers an area of 11,817.85 km^2 in size and the population is estimated to be at 65,117, with a refugee population of about 168,000 people.

Maban County has been the home of Sudanese refugees residing in four refugee camps - Doro, Gendrassa, Yusuf Batil, and Kaya. As a result of violent tensions in neighbouring Blue Nile State in Sudan in 2011, a significant number of Sudanese refugees were displaced, sought refuge in South Sudan, and are expected to stay there in the foreseeable future. With continued conflicts in Sudan, the camps are experiencing growing numbers from new arrivals and returnees.

Kaya Refugee settlement was opened in June 2023 and has a maximum capacity of 70,000 persons. It is located at GPS coordinates: N:10.09349 E:33.57579 and covers an area of about 712 hectares. Yusuf Batil Refugee Settlement was opened in May 2012 and is located at N:9.98272 E:33.58442, covers an area of 703 hectares, and has a capacity of up to 60,000 individuals. Yusuf Batil refugee settlement is divided into 12 villages comprising 9,399 households led by 91 traditional leaders (Sheikhs) and 10 paramount chiefs (Umdas). Gendrassa settlement was opened in May 2012 and is located at N:9.98395 E:33.61348. It covers an area of 385.6 hectares and has a maximum capacity of 30,000 persons. The settlement comprises 3,965 households, and is divided into 4 villages, led by 26 traditional leaders (Sheikhs), 04 paramount chiefs, and 01 overall paramount chief (Nasir).

Without intervention, the high influx of forcibly displaced people into South Sudan is constraining the capacity of the Government to provide basic services and has the

potential to increase intra and inter-communal friction and security risks and deterioration of the well-being of refugees and communities that are hosting them. The competition for scarce sources of livelihood (e.g., food, shelter, medicines, water) will exacerbate frictions in the host communities.

With the intervention, there will be an extension and strengthening of basic social services through infrastructure and technical development, provision of basic services for those arriving, promotion of livelihoods opportunities, increasing food production and availability of goods that no longer come from Sudan because of the closure of the borders; promotion of peaceful co-existence and social cohesion between refugees and with host communities and insurance of safety and well-being of refugees and host communities in a complex operating environment.

Institutional and Legal Framework

There is no operational legal system for ESIA in South Sudan. However, several legal and policy frameworks apply to the proposed SCRSSP project components such as the Comprehensive Peace Agreement (CPA), The Revitalized Agreement for Resolution of Conflict in South Sudan (R-ARCSS), The Transitional Constitution of the Republic of South Sudan of 2011 amended 2015, The National strategy for climate change Adaptation and Mitigation 2021 and Environment Bill 2023 (draft) among others.

Draft National Environmental Bill 2023 (approval still pending) of South Sudan provides for the establishment of an autonomous South Sudan Environmental Management Authority (EMA) to act as the watchdog on all public institutions, private companies, and individuals defaulting against the stipulated environmental laws and regulations. Until the Authority is fully established, the duties and functions of the Authority are delegated to the Ministry responsible for the environment and forests. Other relevant institutions include the Ministry of Agriculture and Food Security (MAFS), the Ministry of Water Resources and Irrigation, the Ministry of Health, the Ministry of Education, and the Commission for Refugee Affairs (CRA).

Impacts

Positive Impacts

Livelihood improvement and skills development - The project activities target priority sectors such as improvement in agriculture, trade, seed multiplication, and post-harvest management for crisis-affected communities of refugees and their hosts. The expected skills development and promotion of climate-smart agricultural production practices will result in increased income opportunities for the most vulnerable and empower them to create new, sustainable, and climate-responsive livelihood opportunities.

Improvement in infrastructure for health, education, sanitation: The proposed SCRSSP will improve infrastructure for essential service delivery systems (health, education,

WASH, camp infrastructure, etc.). Specifically, rehabilitation and expansion of the systems and improving access and quality of services will be a significant milestone in improving living conditions of crisis-affected communities;

Enhanced climate resilience and adaptation to climate change – Establishment of environmentally sustainable early warning systems and preparedness measures will greatly lead to enhanced resilience and adaptive capacity of displaced people (refugees) and host communities to climate-related and other environmental risks. In addition, the introduction of sustainable energy solutions will reduce reliance on energy sources such as wood and charcoal.

Institutional strengthening and capacity development: The project will lead to capacity building of key institutions like CRA to facilitate their daily operations to advance peaceful coexistence efforts, resulting in improved coping capacities and strengthened peaceful coexistence and social cohesion among refugees and other host communities.

Creation of Employment opportunities -The project will directly create employment for a large group of people, both directly and indirectly; this will be in the construction, occupation, and decommissioning phases. The project shall provide temporary employment opportunities to the locals as unskilled workers during the construction phase and further professional workers. The resultant effect on the employment of a significant number of people will be improved lifestyles and living conditions, and that of their dependents. Benefit is also bound to trickle down to service providers and producers (of raw materials and construction products).

Negative effects

The proposed development may produce some negligible negative environmental and social impacts that may necessitate appropriate mitigation measures. These include but are not confined to;

Noise and Vibration

Relatively low noise levels are expected in all projects involving civil works. Noise control measures should be implemented in the construction area if the noise levels exceed 90dB (A) for a continuous 8-hour exposure. In addition, protection against the effects of the noise exposure among the workers should be monitored. Noise pollution is not foreseen during the operation phase.

Soil Erosion

The project sites are generally dry, and there is an increased risk of erosion and increased dust during excavation and movement of the machinery in the proposed sites. Soil movement is also common during the laying of foundations (earthworks) for

the projects and site clearing. The contractors should adopt comprehensive soil erosion measures that include the following;

Increased Water Demand

The increase in demand for water will occur for all the project components that entail civil works, e.g, proposed construction and rehabilitation of the various facilities under the SCRSSP. Water will be sourced from existing water yards and boreholes in the project sites. The consultant will also be advised to undertake rainwater harvesting during the rainy season to supplement the water supply from the common sources, namely, boreholes and water yards.

Air Quality (dust pollution)

The civil works on the proposed sites will result in increased dust and gas emissions. Dust particles caused by vibrations of machines and vehicle movement are suspended in the air mostly during dry spells.

Fire

Wildfires are common occurrences in areas adjacent to the proposed project sites in Maban. Some of the wildfires are started by human activities or natural causes due to the extreme heat. In addition, fire may be caused by the machinery used during civil works or operations of the installations.

Solid waste

Huge quantities of solid waste are normally generated from construction activities. Such wastes include stones, wood, broken glass, containers, rods of metal, pieces of iron sheets, etc. There is a need for proper management (proper disposal) of the solid waste expected from the site during construction phase.

Besides, other wastes such as medical waste, menstrual hygiene kits, and other solid waste materials, and other sanitation wastes will be generated from provision of goods and services under the project. The situation is further affected by a lack of a functional solid waste management system in the public or private sector. Therefore, it is important to put in place practical measures and infrastructure for waste minimization, material recovery, reuse, and safe disposal of all types of waste in the project sites.

Ecological impacts

The sites in Maban have no vegetation of conservation value, hence the project will have no impact on ecology. It is, however, prudent to consider introduction of vegetation on site as part of an environmental conservation initiative during the operation phase.

Occupational Health and Safety (OHS)

During civil works, there will be increased dust, air, and noise pollution. These are considered negative impacts as they significantly lower the quality of the environment.

Security

The security condition in the proposed project sites is generally volatile. Therefore, it is imperative for the relevant stakeholders, comprising UNHCR, GoSS, and the contractor, to reinforce security measures to avoid any losses or destruction of materials and facilities. This involves employing a guard to control movement within the site, especially for intruders. During Occupation/completion of the project, security of the premises occupants is also paramount.

Public Consultations

Stakeholder consultation was conducted from March 26th, 2025, to April 1st, 2025. A combination of KII and FGDs was utilized, targeting various stakeholders, namely, GoSS (Ministry of Education, RCC), LWF, RI, Payams, County government officials, WFP, CEN radio Salam, CRA, Local police, School management committee, refugee and host communities. Below is a summary of the schedule.

Local Government and local administration units		**March 26**
CRA	Key Informant Interview (KII)	Afternoon hours
County officials/RRC		Afternoon
Relief International (RI)	KII	Evening
Refugee & Host communities		**March 27**
Kaya Refugees	FGD	morning
Jinkuata Payam	FGD	Mid-morning
Batil market traders and vendors	FGD	Afternoon
Batil livestock farmers and traders	FGD	Afternoon
Host community & Refugees		**March 28**
Women & Youth self-help groups, organisations, associations, and subsistence farmers (Host)	FGD	Morning
Batil Camp CECs, Sheikhs, Umda & refugee household representatives	FGD	Mid-Morning
Batil SME (Business Guarantee) & TVET trainees (Both host & refugees)	FGD	Afternoon
Transect walk through Batil Market Center and the camp.		Evening
Host community & Refugees		**March 29**
Transect walk along the main water channel that leads to flooding in Maban.		Morning

Visit to supplies of stationary to schools in Maban.		Mid-morning
Host community & Refugees		**March 31**
Gendrassa SME (business guarantees) & TVET trainees (Host & Refugees)	FGD	Morning
Gendrassa Camp CECs, Sheikhs, Umda & refugee household representatives	FGD	Mid-morning
Kaya SME (business guarantees) & TVET trainees (Host & Refugees)	FGD	Afternoon
Transect walk to Kaya & Gendrassa market center.		Evening
Host community & Refugees		**April 1**
Doro School Management Committee, teachers, LWF	FGD	Morning
Doro SME & TVET trainees (Host & Refugee)	FGD	Mid-morning
CEN Radio Salam	KII	Afternoon
WFP	KII	Afternoon

The details of the stakeholder engagement sessions are summarized below.

KII WITH COMMISION FOR REFUGEE AFFAIRS (CRA) ON 26TH MARCH, 2025

- CRA monitors and supervises the activities of a humanitarian organization.
- Provide a conducive environment for actors in the humanitarian sector.
- There are 4 refugee camps in Maban County, namely Doro, Batil, Kaya, and Gendrassa.
- WFP provides food to refugees. The refugees are entirely dependent on the food rations and do not do any work to sustain themselves.
- Vocational trainees have been graduating with those from Doro graduating on 26th March, 2025.
- Both host community and the refugees should be included in the training.
- Training aimed at making beneficiaries self-sufficient and reducing dependence on WFP food rations.
- NGOs should consider giving jobs such as electrical installation and plumbing to the beneficiaries of the training.
- Even though skills have been acquired, there is no capital for the beneficiaries to start up own enterprises.
- Putting up businesses will improve the likelihood of community members.
- Kaya camp experiences most floods. The dykes constructed by refugees often lead to flooding on the host community. To avoid this engagement should be done to both refugee and host communities before construction of dykes. Dykes not done to completion usually affect those residing downstream.
- Such engagements of both parties will also minimize instances of conflicts related to land.
- Disaster management committee has been empowered to dig up drainages and build dykes.

DISCUSSIONS WITH COUNTY LEADERS 26TH MARCH, 2024

- RI facilitated trainings for both refugee and host communities from October to December 2024. Graduation ceremonies have been held.
- The trainings are important in the sense that they empower locals with skills in the 5 traits: Plumbing & pipe fitting, electrical installation, Digital Learning (computer), Catering /Bakery, and Cosmetology/Hairdressing.
- The project has also overseen the issuance of revolving grants, which are passed on to new beneficiaries after one year.
- Computers, Wi-Fi, and trainers are available. Both teachers and students at the school are benefiting from this training.
- The leaders welcomed the idea of the transfer of grants as it would ensure more people benefit from the program.
- The leaders did not anticipate any conflict arising from the implementation of the project. They believe that stakeholder engagement before the commencement and during the implementation of the project will sort out issues relating to conflicts.

The leaders had the following recommendations:

- Increase the number of beneficiaries in the project, both for grants and vocational training.
- Consider both refugee and host communities for the project. The feeling is that more advantage is given to refugees.
- Engage community leaders before implementation of the project.
- Increase the learning time to at least 6 months to ensure that trainees grasp the skills and knowledge effectively.
- Include community members who are not learners as beneficiaries of the digital learning. Schedules can be made separately for both students and non-students to avoid conflicts of any nature.
- Flood issues should be well addressed. Early preparation of dykes should be done. The current dyke should be extended further.
- At the end of dykes water pans (Hafir) should be done to harvest and store water that can be used for irrigation of crops and watering livestock during dry seasons.

DISCUSSIONS WITH HEALTH PROVIDERS (RI – Relief International) ON 26TH MARCH, 2025

- RI deals with Health, Food security, and WASH issues.
- On **Health and Nutrition,** IR piloted integration of kitchen gardens to ensure food security and dieting to reduce malnutrition (especially for under 5s) at the household level.

- High birth rate with low household food levels mostly affects children under 5 and lactating mothers.
- Under the **Targeted Supplementary Feeding Program (TSFP),** pregnant and lactating mothers are referred to 'agrinutional' centers where they are provided with vegetables and vegetable seeds for kitchen gardening. This is in a bid to solve malnutrition and anemic issues witnessed in the camp.
- Provision of seeds is done to farmers through seed fairs.
- Horticultural farmers are supported with farm inputs to boost agribusiness.
- Community is encouraged to plant drought-weather resilient crops such as sorghum.
- Value addition is low as farmers lack knowledge on turning food into more storable forms.
- On curative treatment, it is recognized that food is important in boosting immunity.
- Inadequate land for cultivation, floods, and low yields have posed a great threat to communities living in Maban in terms of food security.
- Refugees have no stable sources of income that can sustain their families.
- Grants can be used to start up businesses, and the profit used to purchase food for households.
- For morbidities, Diarrhea is common, especially among children. Malaria is a result of stagnant water and conditions in houses which make it easy for mosquitoes to access and bite the occupants. Pneumonia is also experienced as a result of the poor housing conditions. All these illnesses have a potential of slowing productivity.
- The kitchen garden initiative has been taken to schools to provide vegetables to students.
- There is high energy demand used in food preparation. Woodlots were created to cater for communities' firewood needs. Use of solar energy (E – Cooker stoves) in health facilities to boil milk for newborns has led to reduction in use of charcoal and promotion of clean energy.
- A pilot project was done on making briquettes using organic matter.
- Support reafforestation activities in the camps. RI has 2 tree nurseries with a capacity of producing over 80,000 assorted tree seedlings per year. The seedlings are donated to residents to plant at household and woodlot levels.
- Donated fruit trees have also led to increased food security as fruits such a guava, Paw Paw, and mangoes can be harvested and consumed at the household level. Surplus is taken to the market to earn the farmers a living.
- On **Economic Inclusion**, skills obtained through vocational training empower beneficiaries to be independent and able to earn a living.
- VSLA activities provide access to loans and savings. Loans have been used to set up business enterprises.

- Training on financial literacy and provision of revolving grants have empowered community members. The revolving grant has shown a success rate of over 80%. The Camp executive council and food security help in tracking and recovery of grants.
- The disaster management committee has been empowered to detect risks and enhance early warning systems. They have been trained to prepare and respond to flooding incidents.

Recommendations:

- Train farmers on value addition to locally produced food.
- Create a market for local produce to sustain livelihoods.
- Engage RCA, RCC, and other government officials to allocate more land to refugees.
- Have more sustainable projects based on health needs with a focus on impact ratio.
- Invest in rainwater harvesting to ensure farming throughout the year, to enhance food security and livelihood.
- Improve road infrastructure. During rainy seasons, food commodity prices go up as a result of poor roads.
- Construct the bridge to increase access to farmlands.
- Construct an abattoir to increase the sanitary conditions under which meat is handled.
- Collaborate with WFP to support food production.
- Encourage the production of root tubers such as cassava and potatoes. These can be planted year in, year out, and value can be added to them.
- Support fight against malnutrition and child mortality.
- Improve household conditions to curtail the spread of TB and other respiratory diseases. Proper screening and mass education should be done

FGD AT KAYA COMMUNITY CENTER WITH CECs, CAMP SHEIKHS, UMDA, AND REFUGEE HOUSEHOLD REPRESENTATIVES ON 27TH MARCH, 2025

Benefits of the project include:

- Dykes are helpful in flood mitigation.
- Vocational training leads to the acquisition of skills that will enhance self-reliance when it comes to solving projects in the camp (eg, plumbing issues) and earn beneficiaries an income through practice.
- Grants from VSLA to be used to set up businesses and help refugees become self-reliant.
- The problem with the projects is that they only benefit a small faction of the community, while the majority don't get to benefit.

Recommendations include:

- Increase the number of beneficiaries in the training.
- Increase the grant amount to enable beneficiaries to set up more sustainable business ventures.
- Increase the VSLA amount.
- Equip graduates with tools to enable them to put their skills to use.
- Extend the dyke and do a water pan to harvest water to be used for agriculture during dry season.
- Support given in times of disaster, such as floods, should be distributed equally. The complaint was raised about some victims receiving more money or construction wood than others.
- Alongside seeds and seedlings, farmers should be provided with fertilizers to improve productivity.
- Support in terms of water pumps and tractors should be given to farmer groups.
- Close follow-up and monitoring of the project to ensure the community benefit.

<u>FGD WITH JINKUOTA PAYAM ADMINISTRATOR, BOMAS/VILLAGE CHIEFS, AND PARAMOUNT CHIEFS AT GENTILE PEACE HOUSE HDC</u>

- The project has led to business growth. (VSLA and Grants).
- Revolving the grant ensures continuity and reaches many people. However, it may not be feasible due to the possibility of emigration.
- No conflict is foreseen. Leaders should be engaged before rolling out the project.
- Disaster risk reduction committee prepares community for floods by digging channels and moving the community to higher ground, such as the school.
- Floods often wash roads, and the ECDE center gets flooded, thereby negatively impacting learning.

Recommendations:

- Engage community in deciding on projects that may be beneficial to them.
- Engage the host community more in the projects. The number of beneficiaries from host community should equal that of refugees. Currently, more slots are given to refugees.
- Involve more women in decision-making and selection made by the payam administrators.
- If possible, drill boreholes to address water shortage challenges.
- Rehabilitate foot bridge leading to the farm lands.
- Rehabilitate access roads destroyed by the floods.
- Increase number of beneficiaries in the project.
- Improve drainage to better manage floods.

- Focus to be put on training that may benefit community members. Computer training may help the students, but may have little impact on the adults.

FGD WITH BATIL MARKET TRADERS AND VENDORS ON 27TH MARCH, 2025 AT CHAMBER OF COMMERCE, BATIL MARKET.

- They have experienced business growth. Small-scale traders have shown increased purchasing power by buying and stocking more.
- There has been increased cash flow in the community as a result of the grants and VSLA activities.
- The grants and VSLA activities have also enabled traders to explore new markets by dealing in goods that initially they could not due to a lack of capital.
- The project will boost agricultural production, thereby providing food commodities to be traded on. This ensures business continuity and food security.
- Provision of seeds has also led to the introduction of new crops, which were initially not grown in the area. An example is the dry okra, which was being imported from Khartoum but is currently being locally produced.
- Since land is owned by the host community, they should be engaged before the start of the project to avoid land-related conflicts.
- Floods may affect farms.
- Conflict and tension may arise since only a few members of the community are selected to benefit from the project.

Recommendations:

- Harvest water to ensure two planting seasons, dry and rainy seasons.
- Modernize agriculture by providing support in terms of tractors and water pumps to groups.
- Increase the number of beneficiaries.
- Revise selection criteria to accommodate small-scale traders.
- Leaders to do early mobilization of farmers.
- Local leaders to avail land for agriculture.
- More training on agriculture to increase productivity.

FGD WITH LIVESTOCK FARMERS AND TRADERS AT BATIL MARKET ON 27TH MARCH, 2025

- Construction of an abattoir will improve sanitation and attract more customers.
- The status of the market will increase the status of the market.
- The increased sanitary conditions and grants will attract more traders to the market, thereby improving business.

- Dogs and intruders will be kept away from the abattoir, hence increasing security and sanitation.
- No foreseen conflict would arise from the project. Engage payam administrators and other government officials to avoid land disputes.

Recommendations:

- Provide support in terms of grants to purchase animals.
- Construction of abattoirs should consider waste management to control flies and bad smell.

MEETING WITH BATIL CAMP CECs, SHEIKHS, UMDA & REFUGEES HOUSEHOLD REPRESENTATIVE HELD AT BATIL COMMUNITY CENTERS:

- The project will enhance environmental conservation through the afforestation project.
- Trained farmers gained knowledge on vegetable production, kitchen gardening, farming processes right from preparation of nursery to transplanting and finally harvesting.
- Improved standards of living owed to income earned from sale of vegetables.
- VSLA has been a key economic activity for women, especially those who were not engaged in business before. Knowledge gained in savings enabled them to save, start up businesses, and make a profit.
- Families were provided with seedlings for both shade and fruit trees. Farmers can harvest fruits such as mangoes and guava and sell them to earn income.
- Dividends obtained during the VSLA sharing out have enabled families to purchase personal supplies, food, and livestock.
- The revolving grants have been used to set up business ventures, and no issues related to transferring the grant have been witnessed so far.
- Both genders benefited from the technical training. The instructors were keen on ladies who took technical courses such as electrical installation, which was thought to be for males.
- The training gained gave beneficiaries knowledge that can be helpful when they decide to set up business ventures relating to their area of study, for instance, starting an electrical and electronic shop.
- Water pans will be very helpful in sustaining agricultural production even during the dry season. Animals can be watered, and irrigation farming will also boost food production through vegetable and fruit farming.

Challenges experienced:

- The community is unable to get food to supplement the vegetables, eg, sorghum.
- Host communities sometimes steal livestock from refugees.

- Planting is restricted to only rainy season. Lack of reliable water sources makes it difficult to carry out irrigation farming. This makes it difficult for the farmers to apply the skills and knowledge that they acquired from trainings.
- A good number of refugees have neither livestock nor land to till. This may lead to conflicts with the host communities on land-related issues.
- Lack of computers and the inability to obtain them make it difficult for trainees in digital learning to apply the knowledge and skills obtained from training.
- There is inadequate infrastructure at the schools. The most affected is the secondary school, where water availability is also a challenge.

Recommendations:

- Monitoring of the project should be done to ensure that it is implemented as planned.
- Trainees to be given support in terms of tools and equipment, such as computers, to enable them to practice.
- Peaceful coexistence of the host community and refugees could lead to sharing of resources and shared prosperity.
- Enhanced water harvesting to support agricultural activities such as vegetable farming and livestock (including poultry) farming.
- Increased amount of agricultural land for refugees to enhance food security.
- Increase the number of VSLA groups.
- Increase the number of beneficiaries of the revolving cash grants.
- Increase the number of classrooms and desks in the schools.
- Increase the number of TVET trainees.
- Increase the number of computers used in the training.
- Provide support to farmers in terms of tractors and pest management measures.

<u>FGD WITH WOMEN AND YOUTH SELF-HELP GROUPS, ORGANISATIONS, ASSOCIATIONS, AND SUBSISTENCE FARMERS (HOST) AT GENTIL PEACE HOUSE</u>

- The tree seedling distribution project has provided farmers with fruits for consumption and trading to earn income.
- VSLA has led to self-employment among women. Share out used to buy food, livestock, and personal effects for family members.
- Grants have enabled beneficiaries to set up businesses and be self-reliant.
- Water pans have enabled agricultural production, livestock rearing, vegetables such as okra and tomatoes, and aquaculture. All these assists in income generation and improve living standards for families.
- Infrastructural development in government promotes good governance and service delivery due to an improved work environment.

- Vocational training, business, and agricultural support lead to crime reduction since individuals are engaged in income-generating activities.

Challenges:

- Refugees receive more VSLA and TVET training support than host communities. This may lead to conflicts since the host community already feels that presence of refugees has led to them losing resources such as pasture land and water resources.
- There is no follow-up done after distribution of the seedlings to ensure success of the project.
- Termites pose a real threat to crops and trees.

Recommendations:

- Prompt follow-ups and monitoring to be done to ensure success of the project.
- Focus on both refugees and host community to benefit from the project.
- Water harvesting structures to be prioritized.
- Support youth initiatives that aim at promoting peaceful coexistence.

<u>FGD WITH BATIL SMALL AND MEDIUM ENTERPRISES (BUSINESS GUARANTEES AND TVET TRAINEES) HELD AT RI TREE NURSERY - BOTH REFUGEE AND HOST COMMUNITIES.</u>

- Vocational trainees have graduated.
- Business plans have been submitted to RI awaiting the review process.
- Trainees are glad and thankful for the opportunity, as they have acquired important skills. Such skills will be used to earn income and solve problems faced in the community, such as the repair of broken pipes and taps. Trainees in catering and baking have learned to prepare meals they never knew how to prepare before, such as pizza and biscuits.
- Certificates were issued to trainees. These are useful when in search of employment opportunities.
- Some of the graduates have already started applying their knowledge and skills as electrical appliance and phone repair technicians. They decide to do this to earn an income and put their skills to use.
- Revolving grants have enabled them to establish businesses and grow the existing ones.
- Income earned from skills learned in TVET trainings and business support is used to cater for family needs and reduce dependence on provisions given by WFP.
- No challenge anticipated in passing of grants to the next beneficiaries.

Challenges:

- Lack of tools and equipment to put the skills to use.
- Training took a short time.
- A beneficiary bought cattle and goats with the grants. Most of the livestock were stolen.

Recommendations:

- Increase training duration to at least 6 months. Currently being offered 3 days a week for 3 months.
- Increase the number of trainees and beneficiaries of the grants.
- Lin graduates with partners who can equip them with tools or provide employment opportunities.

NB: All the other FGDS provided findings similar to the ones discussed above.

DISCUSSION WITH LOCAL POLICE:

- The chief inspector of police for Maban county mentioned that the police are responsible for ensuring peaceful coexistence between refugees and host communities.
- CRA acts as the link between the police and UNHCR.
- CRA offers mobility support to the officers in case they need to be transported.
- Police have been deployed to the camps to maintain law and order.
- Mobility challenges make it difficult for officers to respond to emergencies promptly.
- Requesting to be supported with fencing of the police station with iron sheets, as currently they are exposed to danger without a fence, as some of the community members are armed.

<u>DISCUSSIONS WITH COMMUNITY ENGAGEMENT NETWORK (CEN) – RADIO SALAM- STATION MANAGER</u>

- Radio Salam operates in Maban.
- Helps in awareness creation on the projects undertaken by partners in the county. They gather information on the impact of the projects from refugee and host communities and share it with partners.
- Also have programs for youth and women.
- Boda boda program involves o motorcycle with a speaker and stickers mounted on it to pass information to members of communities.
- Skill training and training in agriculture will enable beneficiaries to earn income from skills and be able to produce agriculturally. This will lead to increased income generation.

- From their engagement with the community, it is evident that the project is well appreciated and received.
- The grants and trainings have led to the creation and expansion of business enterprises.
- Community members would like the number of beneficiaries to be increased.
- Financial constraints limit the organization's ability to reach everyone.
- Lack of knowledge on the program and spread of inaccurate information leads to loss of trust from the residents. The media can be used to increase awareness and relay information to the listeners hence countering false narratives. Most people trust what they hear from the radio and they get an opportunity to call in live and as questions.

DISCUSSIONS WITH WFP

- Offers interventions in both refugee and host communities. They provide food assistance in kind and cash to refugees every month. Donations in cash are mostly done during the dry season when the roads are in good state and food gets to reach markets.
- The host community is supported to produce food.
- Nutritional support offered to both refugees and hosts in the health facilities. Supplementary feeding is provided for under 2-year-olds.
- School feeding programs done in collaboration with teachers and PTAs. Currently done in 34 schools; 24 in the camps and 10 in host communities.
- Awareness creation through skill transfer on self-sustenance activities such as farming.
- Rations given by WFP can only cover 15 days hence the need for self-sustenance to cover the deficit.
- Training on modern farming practices done in partnership with Relief International and Samaritan Purse.
- School rehabilitation will create a conducive environment for learning.
- WFP forms part of Disaster Risk Reduction Committee and provides empty sacs that are used in flood mitigation.
- There is still more to be done in flood mitigation as floods cut off main supply route hampering food distribution.
- Tillage services should be provided to enhance food production and reduce dependence on rations.
- VSLA will boost income generation and lead to self-reliance.
- Assistance offered should cover both refugees and host community. Consider returnees in all program.

Environmental & Social Management Plan (ESMP)

Construction phase ESMP

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
1. Minimize extraction site impacts and ensure efficient use of raw materials in construction				
High Demand for Raw Material	**1.** Source building materials from local suppliers who use environmentally friendly processes in their operations.	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	2. Ensure accurate budgeting and estimation of actual construction material requirements to ensure that the least amount of material necessary is ordered.	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	3. Ensure that damage or loss of materials at the construction site is kept minimum through proper storage.	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	4. Use at least 5%-10% recycled, refurbished, or salvaged materials to reduce the use of raw materials and divert material from landfills	UNHCR, Project Management Unit, contractor	Throughout construction period	0
2. Reduce stormwater, runoff, and soil erosion				
Increased stormwater, runoff, and soil erosion	**1.** Surface runoff and roof water shall be harvested and stored in underground reservoir for reuse.	UNHCR, Project Management Unit, contractor	Throughout construction period	15,000
	2. A storm water management plan that minimizes impervious area infiltration by use of recharge areas and use of detention and/or retention with a graduated outlet control structure will be designed.	The Civil Engineer, Mechanical Engineer, and UNHCR	Throughout construction period	

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
3. Minimize solid waste generation and ensure efficient solid waste management during construction				
Increased solid waste generation	**1.** Use of an integrated solid waste management system, i.e., through a hierarchy of options: 1. Source reduction 2. Recycling 3. Composting and reuse 4. Combustion 5. Safe disposal in designated sites	UNHCR, Project Management Unit, contractor	Throughout construction period	10,000
	2. Accurate estimation of the sizes and quantities of materials required, order materials in the sizes and quantities they will be needed, rather than cutting them to size, or having large quantities of residual materials.	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	3. Ensure that construction materials left over at the end of construction will be used in other projects rather than being disposed of.	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	4. Ensure that damaged or wasted construction materials, including doors, plumbing and lighting fixtures, and glass, will be recovered for refurbishing and use in other projects	UNHCR, Project Management Unit, contractor	Throughout construction period	8,000
	5. Donate recyclable/reusable or residual materials to local community groups, institutions, and individual residents or homeowners (within the refugee settlement and host communities)	UNHCR, Project Management Unit, contractor	Project completion	0
	6. Use of durable, long-lasting materials that will not need to be replaced as often, thereby reducing the amount of construction waste generated over time	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	7. Provide facilities for proper handling and storage of construction materials to reduce the amount of waste caused by damage or exposure to the elements	UNHCR, Project Management Unit, contractor	Throughout construction period	12,000

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
	8. Use building materials that have minimal or no packaging to avoid the generation of excessive packaging waste	UNHCR, Project Management Unit, contractor	Throughout construction period	0
4. Reduce dust emissions				
Dust emission	**1.** Ensure strict enforcement of on-site speed limit regulations	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	2. Avoid excavation works in extremely dry weather	UNHCR, Project Management Unit, contractor	Throughout construction period	12,000
	3. Sprinkle water on graded access routes when necessary to reduce dust generation by construction vehicles	UNHCR, Project Management Unit, contractor	Throughout construction period	
	4. Personal Protective equipment to be worn	UNHCR, Project Management Unit, contractor	Throughout construction period	
	5. Construction materials on site to be covered to prevent them from being blown off by the wind	UNHCR, Project Management Unit, contractor	Throughout construction period	
5. Minimization of exhaust emissions				
Exhaust emission	**1.** Vehicle idling time shall be minimized	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	2. Alternatively, fueled construction equipment shall be used, where feasible equipment shall be properly tuned and maintained	UNHCR, Project Management Unit, contractor	Throughout construction period	0

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
	3. Sensitize truck drivers to avoid unnecessary racing of vehicle engines at loading/offloading points and parking areas, and to switch off or keep vehicle engines while at the site	UNHCR, Project Management Unit, contractor	Throughout construction period	0
6. Minimization of Noise and Vibration				
Noise and vibration	**1.** Sensitize construction vehicle drivers and machinery operators to switch off engines of vehicles or machinery not being used.	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	2. Sensitize construction drivers to avoid gunning of vehicle engines or unnecessary honking, especially when passing through sensitive areas, e.g, the refugee settlement, market, and host community	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	3. Ensure that construction machinery is kept in good condition to reduce noise generation	UNHCR, Project Management Unit, contractor	Throughout construction period	10,000
	4. Ensure that all generators and heavy-duty equipment are insulated or placed in enclosures to minimize ambient noise levels.	UNHCR, Project Management Unit, contractor	Throughout construction period	7,000
	5. The noisy construction works will be entirely planned to be during game time, when most learning sessions are not on. Also can be done during weekends (these refer to the construction and rehabilitation of school infrastructure, classrooms)	UNHCR, Project Management Unit, contractor	Throughout construction period	0
7. Minimization of Energy Consumption				

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
Increased energy consumption	**1.** Ensure electrical equipment, appliances, and lights are switched off when not being used	UNHCR, Project Management Unit, contractor	Throughout construction period	0
	2. Install energy-saving fluorescent tubes at all lighting points instead of bulbs, which consume more electricity	UNHCR, Project Management Unit, contractor	Throughout construction period	5,000
8. Minimize water consumption and ensure more efficient and safe water use				
High Water Demand	**1.** Promptly detect and repair water pipe and tank leaks	UNHCR, Project Management Unit, contractor	Continuous	5,000
	2. Ensure taps are not running when not in use	UNHCR, Project, Management Unit, contractor	Continuous	0
	3. Install a discharge meter at water outlets to determine and monitor total water usage	UNHCR, Project, Management Unit, contractor	Throughout construction period	4,000
	4.proper recycling of water from other uses for sprinkling dusty pavements	UNHCR, Project, Management Unit, contractor	Throughout construction period	4,000
9. Minimize occupational health and safety risks				
Unavailability and wrong use of Personal Protective Gear (PPG)	▪ Always ensure the general safety and security by providing day and night security guards and adequate lighting within and around the premises.	UNHCR, Project, Management Unit, contractor	Throughout construction period	2,000
	▪ Suitable overalls, safety footwear, dust masks, gas masks, respirators, gloves, ear protection equipment etc should be	UNHCR, Project, Management Unit, contractor	Throughout construction period	

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
	made available and construction personnel must be trained to use the equipment			
Accidents resulting from disregard of Health and safety impacts	• Implement all necessary measures to ensure health and safety of workers and the general public during construction	UNHCR, Project, Management Unit, contractor	Throughout construction period	3,000
Injuries	Well well-stocked first aid box, which is easily available and accessible, should be provided within the premises	UNHCR, Project Management Unit, contractor	Throughout construction period	2,000
	Provision must be made for persons to be trained in first aid, with a certificate issued by a recognized body.	UNHCR, Project Management Unit, contractor	Throughout construction period	2,000
Fire incidents	Firefighting equipment, such as fire extinguishers, should be provided at strategic locations such as stores and construction areas.	UNHCR, Project Management Unit, contractor	Throughout construction period	5,000
	Regular inspection and servicing of the equipment must be undertaken by a reputable service provider, and records of such inspections must be maintained.	UNHCR, Project Management Unit, contractor	Every 3 months	4,000
	Fire escape routes and assembly points are to be marked	UNHCR, Project Management Unit, contractor	Throughout construction period	4,000
	Signs such as “NO SMOKING” must be prominently displayed within the premises, especially in parts where inflammable materials are stored	UNHCR, Project Management Unit, contractor	Throughout construction period	3,000

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
GBV, teen pregnancy, forced marriages, HIV/AIDs	Awareness creation on thematic issues, including prevention of GBV, teenage pregnancies, HIV/AIDs Strengthening local leadership structures to respond to emergencies as well as training on effective conflict resolution, both at the household level and among the refugees, host communities, and returnees.	UNHCR, Project Management Unit, contractor	Throughout construction period	4,000
Total				121,000

Project operation phase ESMP

The necessary mitigation measures, allocation of costs and responsibilities about prevention, minimization, and monitoring of significant negative impacts, and maximization of positive impacts associated with the operational phase of project components are outlined below.

Operation Phase ESMP

Expected Negative Impact	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD) per annum
1. **Fire risks**	1. Install fire extinguishers 2. Mark fire exit points and the fire assembly area 3. Provide sand buckets at strategic locations 4. Workers should be trained on firefighting skills by a qualified trainer	UNHCR & Project Management Unit	Operation phase	4,000

Expected Negative Impact	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD) per annum
	5. Fire drills should be conducted at least once a year 6. A firefighting team should be established 7. Warning and informational signs should be displayed appropriately 8. Regular testing and servicing of fire-fighting equipment and appliances			
2. Solid waste Management (Littering, soil, and surface water pollution).	1. Provision of waste collection bins 2. Segregation of wastes at the source 3. Waste should be disposed of at the designated site 4. Solid waste should be managed according to the waste management regulations. 5. Prepare a waste management plan. 6. Stop deposition of waste in open pits, open burning, or burying of waste 7. Designate and construct an appropriate waste collection facility or provide covered refuse skips; 8. Monitor waste volumes;	UNHCR & Project Management Unit	Operation period	7,000
3. Waste water management	1. Conduct wastewater monitoring to check compliance	UNHCR & Project Management Unit	Continuous	4,000
4. Workers	1. Provide workers with PPE	UNHCR & Project Management Unit	Operation period	5,000

Expected Negative Impact	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD) per annum
Welfare (risks such as accidents, disregard of safety, and wellness)	2. Provide adequate washrooms and changing rooms for workers 3. Training of workers 4. Provision of first aid and other welfare facilities 5. Provision of an Insurance cover 6. Regular medical check-ups 7. Respect for workers' rights			
5. Air pollution	1. Ensure that the machines (at the hospital), diesel generators are maintained to the manufacturer's specifications, records are maintained and availed whenever there is a need; 2. Ensure that tank vents are located away from sensitive receptors;	UNHCR & Project Management Unit	Continuous	4,000
6. Increased Energy Resource Utilization	1. Switch off electrical equipment, appliances, and lights when not being use	UNHCR & Project Management Unit	Continuous	0
	2. Install occupancy sensing lighting at various locations, such as storage areas, which are not in use all the time	UNHCR & Project Management Unit	Operation phase	0
	3. Install energy-saving fluorescent tubes at all lighting points within the flats instead of bulbs, which consume more electrical energy	UNHCR & Project Management Unit	Operation phase	3,000
	4. Monitor energy use during the operation of the project and set targets for efficient energy use	UNHCR & Project Management Unit	Operation phase	3,000
	5. Sensitize occupants of the facilities and communities to use energy efficiently	UNHCR & Project Management Unit	Operation phase	3,000

Expected Negative Impact	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD) per annum
7. Increased water demand/Water consumption	1. Promptly detect and repair water pipe and tank leaks	UNHCR & Project Management Unit	Operation phase	4,000
	2. Ensure taps are not running when not in use	UNHCR & Project Management Unit	Operation phase	0
	3. Install water-conserving taps that turn off automatically when water is not being used	UNHCR & Project Management Unit	Operation phase	4,000
8. Increased incidences of social vices (GBV, theft, social intolerance, HIV/AIDs)	Awareness creation on the thematic sectors, namely prevention of GBV, HIV/AIDs) Strengthening of local institutions and leadership structures on conflict resolution, emergency response. Promoting coordination between different actors – NGO and civil society, police and GoSS agencies to promote peaceful coexistence, and minimize insecurity.	UNHCR & Project Management Unit	Operation phase	5,000
Total				46,000

Project Decommissioning ESMP

Information pertaining to the decommissioning of the project at the end of its life cycle and associated impacts, proposed measures to return the site as far as possible to its suitable state, or rehabilitation measures has been elaborated below.

Parameter	Impacts	Mitigation Measures	Phase	Responsible entity	Estimated cost (USD)
Noise and Dust	Noise and dust pollution	Working during daytime Provide breathing masks to workers	During the demolition phase	UNHCR & Project Management Unit	5,000
Solid waste	Environmental pollution	Putting in place proper waste management Systems, including waste recycling and reuse of debris	During decommissioning phase	UNHCR & Project Management Unit	3,000
Workers' Health	Exposure of workers to pollution and accidents during demolition	Workers to be provided with PPE Training on safe demolition Methods and handling of hand tools.	At the Beginning of decommissioning phase.	UNHCR & Project Management Unit	3,000
Rehabilitation	Visual intrusion	Re-contouring by trimming slopes to a safe angle All topsoil areas will be vegetated	Decommissioning phase	UNHCR & Project Management	5,000
Revegetation of the site	Visual Intrusion	Re-grassing of open areas must be completed according to landscaping plans. Areas identified as potentially subject to erosion must be vegetated with indigenous grass species	Decommissioning phase	UNHCR & Project management	5,000

Removal of all waste building materials and machinery	Land pollution: Visual intrusion	Demarcation of the rehabilitated site to prevent access to these areas Appropriate disposal of all left- over material likely to be harmful to persons and nature Removal of all materials that will not be used for other purposes to licensed disposal sites	Decommissioning phase	Proponent	10,000
Total					**31,000**

Environmental and social impact monitoring scheme

Mitigation Measure	Monitoring Objective	Indicator/Parameters to be monitored	Method/ Measurement	Frequency
All the construction contractor's HSE, labor welfare, and social requirements	Compliance	Existence and quality, depending on the measure	Visual inspection, reports	Daily/ weekly
Ecological Protection	To determine the area and ecological functioning (quality) of terrestrial and aquatic ecology	Area in good condition	Visual inspection	Monthly
Waste management	To monitor impacts on the biophysical environment	To determine proper waste disposal and treatment operations to minimize any adverse environmental impacts To determine the effectiveness of the recycling, composting, and disposal operations	Visual inspection/weighing	Monthly
Social protection	To check on the status of vulnerable Households, GBV, refugees, etc.	Economic status of at-risk households	FGD/KII	Yearly
Health protection	To determine the effectiveness of the mitigation measures and to obtain early warning of changes in health risks.	Illness cases	Visual evidence, changes in baseline health indicators,	Annually
All the operators conform to HSE, labor welfare, and social requirements	Compliance	Existence and quality, depending on the measure	Visual inspection, reports	Quarterly

Grievance Redress Mechanisms (GRM)

The GRM in the proposed project will be adapted under the guidance provided in the Bank's ISS through its ESIA Guidelines Notes. The first step is to determine the primary goal of the GRM, which would generally be to resolve specific grievances in a manner that meets both project management and community needs, but with important local variations. The scope of the grievances that may legitimately be brought forward by the communities and/or individuals affected shall be defined in advance. That scope will generally cover most, if not all, of the issues raised in a typical Environmental and Social Assessment: natural resources, pollution, cultural property, land acquisition, the welfare of vulnerable groups, etc. A summary of the Grievance Redress Mechanism is shown below.

Step	Process	Description	Time frame	Other information
1	Identification of grievance	Face to face; phone; letter, e-mail; recorded during public/community interaction; others	1 Day	Email address, hotline number, Responsible: community leader (host, returnees, refugees)
2	Grievance assessed and logged.	Significance assessed and grievance recorded or logged (i.e., in a log book)	4-7 Days	Significance criteria Level 1 –one-off event; Level 2–complaint is widespread or repeated; Level 3- any complaint (one off or repeated) that indicates breach of law or policy or these ESIA provisions.
3	Grievance is Acknowledged	Acknowledgement of grievance through the appropriate medium	7-14 Days	Responsible: staff, CRA, and contractor
4	Development of response	-Grievance assigned to the appropriate party for resolution; -Response development with input from management/ relevant stakeholders	4-7 Days 10-14 Days	UNHCR, CRA, Payam
5	Response signed off	-Redress action approved at the appropriate Levels	4-7 Days	
6	Implementation and communicatio	-Redress action implemented, and update of progress on	10-14 Days	

	n of the response	resolution communicated to Complainant		
7	Complaints Response	-Redress action recorded in the grievance log book -Confirm with the complainant that the grievance can be closed or determine what follow-up is necessary	4-7 Days	Payam, peace, committee, UNHCR, CRA
8	Close Grievance	Record the final sign-off of the grievance -If the grievance cannot be closed, return to step 2 or refer to the sector minister, or recommend third-party arbitration, or resort to court of law	5 days	Payam, UNHCR, CRA

Estimated Budget for the ESMP

The overall ESMP cost is estimated at USD 198,000 comprising USD 121,000 for construction phase, USD 46 000 per year during the project operation phase and decommissioning phase USD 31,000.

Contents

ABBREVIATIONS

AfDB	African Development Bank
AoI	Area of Influence
CPA	Comprehensive Peace Agreement
CRA	Commission for Refugee Affairs
CSS	Climate Safeguards System
EAC	East African Community
EPI	Expanded Programme for Immunization
ESIA	Environmental and Social Impact Assessment
ESMP	Environment and Social Management Plan
FGD	Focus Group Discussions
GoSS	Government of South Sudan
IDPs	Internally Displaced Persons
IGAD	Intergovernmental Authority on Development
KII	Key Informant Interview
NGOs	Non-Governmental Organizations
PAPs	Project Affected Persons
PPE	Personal Protective Equipment
PWDs	Persons With Disabilities
R-ARCSS	Revitalized Agreement on the Resolution of the Conflict in the Republic of South Sudan
RRC	Relief and Rehabilitation Commission
SEP	Stakeholder Engagement Plan
SRCSSP	Sudan Refugee Crisis in South Sudan Project
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
WASH	Water, Sanitation & Health

CHAPTER ONE: INTRODUCTION

1.1. Project Background

The ongoing conflict in Sudan, characterized by brutal and violent clashes, hostilities, and human rights violations, is the primary driver of the cross-border displacement to South Sudan. The vast majority of the displaced people are settled in Upper Nile, Ruweng Administrative Area, Central Equatoria, and Northern Bahr El Ghazal state.

As of February 2025, the total refugee and asylum-seeker population in South Sudan increased to **548,036** refugees, including **3,038** asylum-seekers. Sudan remains the main country of origin for refugees, constituting **95% (516,959)** of the total refugee population. This is followed by the Democratic Republic of the Congo 3% (14,166), Ethiopia (1%), the Central African Republic (0.6%), and Burundi (0.1%)[1]. Children make up over half **(57%)** of the refugee population, while women and children combined account for **80%** of refugees. The largest concentration of refugees is in Upper Nile State, hosting **268,617** refugees, followed by Ruweng Administrative Area RAA (Jamjang) with **132,698** refugees. Doro camp remains the top hosting camp with **102,403** refugees, followed by Batil with **56,129** refugees in Upper Nile State, while **61,880** are at other locations in South Sudan.[2].

In January 2025, **15,070** new refugee arrivals were registered across South Sudan. Additionally, **1,150** newborns were registered within existing cases. A total of **45,756** new arrivals were recorded in February 2025, including **25,044** Sudanese, **20,605** South Sudanese returnees from Sudan, and 107 third-country nationals. This is an increase of **18%** compared to January 2025[3]. The majority of the refugees are hosted in rural areas in camps that have been established for over a decade, as well as in the Aweil settlement, which was established in 2023.

The influx of refugees has greatly increased pressure on the limited natural resources. The high influx of forcibly displaced people into South Sudan is constraining the capacity of the State to provide basic services, and it has the potential to increase intra- and inter-communal friction and security risks. The competition for scarce sources of livelihood, e.g, food, shelter, medicines, is exacerbating frictions in host communities, especially in the context of the reduced fiscal space, the already overstretched WASH services, and the high levels of malnutrition.

Given the complex political and conflict nature of the refugee displacement and the need to scale up the response, UNHCR, together with the Commission for Refugee Affairs (CRA), under the oversight of the Ministry of Finance and Planning, will implement the Response to the Sudan Refugee Crisis in South Sudan Project (SRCSSP).

[1] UNHCR-IOM (link)
[2] UNHCR-IOM (link)
[3] UNHCR-IOM (link)

The ongoing political instability in Sudan suggests that refugees are unlikely to return to their country anytime soon. The presence of these refugees is expected to create environmental and social risks, which are intensified by the ongoing efforts of humanitarian organizations and other support groups involved in the Response to the Sudan Refugee Crisis in South Sudan Project.

According to the African Development Bank Integrated Safeguard System Environmental and Social Risk classification, the project has been categorized as Category 2, indicating moderate risks. Therefore, an environmental and social impact assessment (ESIA) was conducted in the project location in Maban, leading to the development of the Environmental and Social Management Plan (ESMP) proportionate to the level and complexity of the project components.

CHAPTER TWO: SCOPE OF WORK

2.1. Response to the Sudan Refugee Crisis on South Sudan Project (SRCSSP)

The proposed **Response to the Sudan Refugee Crisis on South Sudan Project (SRCSSP)**, is a two years (24 month) project implemented by the United Nations High Commissioner for Refugees (UNHCR) together with Ministry of Interior (Commission for Refugee Affairs (CRA)) under the oversight of the Ministry of Finance and Planning.

The project's overall development objective is to build peace, inclusiveness, and resilience in the South Sudanese communities affected by the current conflict in Sudan.

Specifically, the project aims at

a. Supporting the inclusive and peaceful integration of refugees and returnees into the communities,

b. Social cohesion strengthening amongst refugees and host communities and

c. Enhancing the socio-economic well-being of the affected communities.

2.1.1. Components

The project has four (4) components, which encompass urgent, quick, and impactful activities over 2 years (24 months). The project components include;

Component 1: Enhancing Jobs and livelihoods amongst the refugees and host communities;

The objective under this component is to increase sustainable food production and food security, enhance skills of youth and women for self-reliance and wage employment, develop infrastructure for agriculture and peace, and support micro, small, and medium enterprise development for economic inclusion. This component will include skills profiling leveraging human capital of skilled refugees/returnees through job matching schemes (in education, health, and engineering fields) for the public and private sectors, and also enhancing skills in business and entrepreneurship development. It includes settling-in grants. Additionally, entrepreneurship development involves microcredit grants for refugee and host community entrepreneurs, market infrastructure improvements, and supporting the development of multipurpose centers for business incubation and digital learning. The component will also support agricultural production and self-reliance through seed multiplication, value chain development, and skills training with a focus on certified seed production. The component will support increased agricultural production through the use of productivity mechanized equipment, training extension officers, and establishing seed production blocks. Value chain development will involve medium-sized mills and post-harvest handling equipment. For market connectivity and agricultural production, emergency livelihood support farm tool kits will be provided, and with climate-smart

multi-cropping systems and demarcation of farmlands. A total of 6,440 households will be supported under this component.

Sub-component 1.1: Skills profiling and job matching (Juba). This subcomponent aims to develop a system that supports refugees in gaining employment through skills profiling and job placement. The activities include organizing mobilization workshops, updating the socioeconomic progress data for profiling socioeconomic data, organizing registration campaigns, and facilitating government liaison for job matching opportunities. The target beneficiaries are refugees who will benefit from Integration activities targeting both highly skilled and junior professionals. English language courses to overcome communication barriers and aid integration will be supported, and a job space platform will be developed that allows collaboration with various government and private sectors to match employment. Additionally, the project aims to provide a settling-in grant and essential information on public services to aid in workplace integration to at least 400 refugees who are successfully placed in government and private sector jobs. Advocacy efforts with government agencies will be strengthened, aiming to foster a supportive environment for refugee employment and societal integration within the government system. This holistic approach not only assists refugees in finding work but also ensures they have the necessary tools and support for successful workplace integration, and also benefits the hosting country with specialized expertise.

Sub-component 1.2: Micro-Credit and Business Support for Enterprise Development (Aweil, Jamjang, and Maban). The primary goal of this subcomponent is to empower refugees by enhancing their economic prospects through targeted micro-credit support to agricultural enterprises. This support aims to unlock the potential of these enterprises, fostering sustainable income generation and economic resilience. The activities include providing access to tailored revolving finance as working capital, for agro investment, to 600 agro entrepreneurs. Technical assistance will also be offered, focusing on enterprise selection and management. The project provides affordable revolving business development capitalisation grants to businesses showing potential for expansion. 280 individual businesses will be targeted and provided with business advice to create investment plans for scaling up operations, diversification, and value addition to enhance income levels and promote economic integration. This comprehensive approach aims to build sustainable income generation ventures and productive assets for refugees, contributing to their long-term well-being and creating thriving communities. Existing community sectoral structures will be engaged to promote awareness and engagement between the host community and refugees to support the above activities as part of the community engagement strategy of the project.

Sub-component 1.3: Strengthen capacity of Community-Based Enterprise Groups for Resilience (Aweil, Jamjang, and Maban). This subcomponent will foster resilient

communities through the establishment of 47 enterprise groups at the village or Boma level, targeting vulnerable populations. These groups will work to enhance local collaboration and knowledge sharing, focusing on addressing agricultural challenges, income generation, and overall community well-being. The groups will receive basic training in climate-smart multi-cropping systems, optimizing land use, crop rotation, water management, and Pama gardening, which is designed to grow diverse crops efficiently in limited spaces, ensuring water conservation and increased yields. Furthermore, the project will introduce on-farm mechanization to improve productivity and expand the area under crop production by procuring 12 tractors with essential equipment for ploughing, coupled with training refugees in the safe and efficient operation to ensure the sustainability of the equipment. Three 3 water wells will be drilled to provide farmers whose farming areas are 15 - 20 kilometres away from the settlement in Jamjang.

Target beneficiaries are primarily vulnerable community members and refugee farmers, who will be empowered for the development of improved seed systems and crop productivity. The project will collaborate with local seed multipliers to provide climate-adapted foundation seed kits to 4200 farmers and encourage climate-smart agricultural practices such as crop rotation, intercropping, and agroforestry to improve soil health, conserve water, and bolster resilience against climate variability, ultimately promoting sustainable agriculture within refugee-hosting areas. To promote healthy handling and marketing of meat products, the project will construct one improved abattoir in Maban to enhance development in the livestock sector. Over 360 members of the host community will be supported through a livestock restocking programme. The project will construct a foot bridge to create commercial opportunities through improving access to farmland, markets for goods, and commodity trading. Existing community sectoral structures will be engaged to promote awareness and engagement between the host community and refugees to support the above activities as part of community engagement strategy of the project.

Sub-component 1.4: Strengthening Private Sector Seed Multiplication for Certified Seed Production and post-harvest handling (Aweil, Jamjang, and Maban). To boost certified seed production within the refugee-hosting locations, the project will leverage private sector engagement to enhance agricultural productivity and food security across the target locations. The project will also construct four (4) post-harvest handling storage facilities to serve as seed storage, a showroom, and offer market services for crop produce. The storage facilities will be strategically located near seed production blocks in the respective locations to offer proper storage facilities. The facilities will serve to ensure the timely availability of crop seed for refugees during planting seasons and reduce post-harvest losses. 100 seed inspectors will be trained to enhance their capacity to monitor seed multiplication activities, ensuring adherence to standards to ensure the produced seeds meet the certification criteria, and receive official certification to boosting their market value and reliability.

The project will identify suitable areas within refugee settlements and host communities to establish 18 seed production blocks across the project locations, which will serve as dedicated spaces for growing high-quality seeds. Working with private companies, the local community/refugees will select resilient crop varieties that are well-adapted to local conditions. 400 outgrower farmers will be chosen for their expertise and commitment to seed multiplication using foundation seeds and will receive specialized training about seed selection, planting techniques, disease management, proper seed handling, and production within the production blocks. To optimize farmland preparation and productivity, the project will map and demarcate agricultural farmlands allocated to refugees in the respective project locations. Existing community sectoral structures will be engaged to promote awareness and engagement between the host community and refugees to support the above activities as part of community engagement strategy of the project.

Component 2: Restoration and improvement of basic social services in the refugee and host communities (*Aweil, Jamjang, and Maban).*

This component aims to enhance the quality and accessibility of basic social services and infrastructure in areas impacted by forced displacement. The activities encompass a broad range of initiatives aimed at educational, health, nutrition, sanitation, and safety improvements. Specifically, the component will focus on the expansion and equipping of primary and secondary school facilities, and the offering of vocational training. In the health sector, the component aims to strengthen the capacity of health facilities to provide comprehensive services addressing the multifaceted health and nutrition issues arising from displacement, including maternal and child healthcare, mental health, and malnutrition support. Sanitation and hygiene are also a priority, with plans to increase clean water access through boreholes and water networks, and to promote hygiene practices by provision of sanitary kits. Lastly, the component seeks to bolster safety and security measures by enhancing community structures, installing solar lighting, and fostering community safety initiatives. The target beneficiaries are primarily refugees and individuals from host communities who are directly affected by displacement, with a focus on ensuring they receive the necessary support to improve their living conditions and integrate successfully into the community.

Sub-component 2.1: Rehabilitation and Upgrade of school infrastructure (Aweil, Jamjang, and Maban). This subcomponent will improve educational outcomes for refugees and the host community by upgrading educational infrastructure and providing training programs. The activities include constructing an additional two (2) blocks of 4 classrooms each for secondary schools and three (3) blocks of 4 classrooms each for primary schools within refugee hosting areas, which will allow for more students to be enrolled, leading to a more effective learning environment. In Aweil 2, early childhood development centres in Aweil will be constructed to create a conducive environment for early education. In Maban 5, school classrooms will be upgraded from

semipermanent to permanent classrooms, while in Jamjang 3 classrooms, in Aweil 2 classrooms, the selected schools will be upgraded.

Furthermore, the Albunj secondary school Complex block will be renovated to serve as a digital center, offering computer training to equip students with vital skills, and rehabilitate facilities at the school for vocational training to provide vocational skills for both refugees and host community members. Rehabilitate/set up the skills incubation centre in Aweil and Jamjang, and Maban, where youth can access skills training. To ensure human capacity development, vocational skills training, or skilling, will be provided, targeting 380 beneficiaries from the refugee population and the host community, with a focus on enabling them to acquire employable skills. Existing community sectoral structures will be engaged to promote awareness and engagement between the host community and refugees to support the above activities as part of community engagement strategy of the project.

Sub-component 2.2: Improvement of WASH facilities for sustainable water services (Aweil, Jamjang, and Maban). This subcomponent will improve water access for refugees and the host community through a multi-faceted approach to accommodate the influx of new arrivals. This will involve the rehabilitation/maintenance of existing boreholes and the construction and solarization of 7 new boreholes, water network infrastructure to include solar technology to enhance the efficiency of water distribution within the settlement. Distribute sanitary kits through cash or in-kind to the targeted 1500 women in Awiel, Maban, and Jamjang to promote personal hygiene practices for women and girls. In Jamjang, drilling of 5 water wells to provide water to individuals whose farming areas are 15 - 20 kilometres away from the settlement. Existing community sectoral structures will be engaged to promote awareness and engagement between the host community and refugees to support the above activities as part of community engagement strategy of the project.

Sub-component 2.3: Community empowerment and psychosocial (Mental health) support. (Aweil, Jamjang and Maban). This subcomponent will support to refugees and local community members to strengthen capacity to respond to gender-based violence, sports and cultural events by organizing celebrations, including commemoration of 16 Days of Activism and International Women's Day, sports events to allow refugees to connect with their cultural heritage and promote to promote refugee-host community social integration and foster connections. While the establishment of safe houses across the project locations will offer a haven for those at heightened GBV risk and offer psychosocial support targeting 200 individuals. The construction of sports facilities will be constructed within the project locations will reinforce the community's sports activities, contributing to a more inclusive society and strengthened social bonds, and shared understanding and respect of human rights. A community centre will be established in Maban and Jamjang for the host community to strengthen youth and women empowerment activities and for social cohesion, and enable communities to

participate in peacebuilding activities within the host community. Existing community sectoral structures will be engaged to promote awareness and engagement between the host community and refugees to support the above activities as part of community engagement strategy of the project.

Sub-component 2.4: Facilitate access to integrated health and nutrition services. (Aweil, Jamjang and Maban). The project subcomponent will provide multipurpose cash assistance to 5646 vulnerable refugees and members of the host community households to support the nutritional health and food security, ensuring they have the means to purchase essential food items. It aims to alleviate immediate nutritional challenges and contribute to the long-term resilience and stability, and integration of the new arrivals. Existing community sectoral structures will be engaged to promote awareness and engagement between the host community and refugees to support the above activities as part of community engagement strategy of the project.

Sub-component 2.5: Provide sustainable lighting energy solutions for improved settlement security. (Aweil, Jamjang and Maban). This sub-component aims to improve the quality of life for refugees and the host community. Sustainable lighting solutions will be provided. These will include the installation of 804 solar lighting in critical areas within the settlement, such as streets and water points or community safe structures, to ensure safe access during nighttime and enhance security. Furthermore, solar lamps will be distributed to 5200 vulnerable households to help in personal safety and daily living activities. The project also aims to empower community safety committees through financial and material support, fostering a sense of resilience and self-reliance within the community, and addressing immediate safety concerns. Existing community sectoral structures will be engaged to promote awareness and engagement between the host community and refugees to support the above activities as part of community engagement strategy of the project.

Component 3: Restoration of the environment in the refugee and host communities *(Aweil, Jamjang, and Maban).*

Under this component, the project will support the rehabilitation of degraded areas due to deforestation for firewood and construction because of the high influx of displaced people, as well as by host communities. The degraded forest and land resources will be restored, losses to farm crops will be reduced, and effects of flooding on farmlands will also be reduced, while providing access to energy and energy efficiency. In line with the Government's pledge on climate action under the Nationally Determined Contributions (NDC), this component will include tree planting (adoption of household and institutional tree planting approaches), construction of water reservoirs (Haffirs/water pans) for water source management, and climate-smart agriculture. It will also promote access to clean cooking solutions to prevent environmental degradation. About 5,210 households will be supported under this component.

Sub-component 3.1: Community preparedness for Disaster Risk Reduction and Early Warning Systems (Aweil, Jamjang, and Maban). This project subcomponent aims to bolster the resilience of communities in climate-vulnerable refugee-hosting areas by equipping them with the tools and knowledge to effectively respond to climate-related disasters. The activities include establishing and facilitating 13 community committees in Maban, Jamjang, and Aweil, responsible for setting up and supervising community-led disaster risk reduction projects and local early warning systems. These committees will play a pivotal role in fostering a proactive approach to disaster preparedness. Additionally, the activities aim to empower refugee farmers and livestock keepers by providing them with up-to-date climate information, thereby enabling them to make well-informed decisions that enhance their adaptability to environmental changes and secure their livelihoods against erratic weather patterns. To combat the threat of flooding, the project will support the construction of flood protection structures, including 6 valley dams (Haffirs) and a drainage line of up to 6 km, which are essential in strengthening communities from floods. To respond to the impacts of perennial flooding to strengthen the resilience of at least 1000 individuals. The project will provide cash for labour intensive public work targeting 800 individuals to promote community led flood mitigation and preparedness actions for improvement of drainage in market places, public facilities at the risk of floods to respond to flooding impacts, this will empower individuals to take swift and effective measures in adapting to flood risks ensuring they have the means to protect and sustain their way of life in the face of such challenges. Existing community sectoral structures will be engaged to promote awareness and engagement between the host community and refugees to support the above activities as part of community engagement strategy of the project.

Sub-component 3.2: Enhancing access to clean cooking options and training on clean cooking access. (Aweil, Jamjang and Maban). This component will foster the adoption of clean cooking technologies among refugee and host communities, aligning with sustainable cooking practices. The component will encourage the production of alternative cooking fuels, such as briquettes, and construct improved cook stoves. These activities aim to empower 3960 new arrivals by, giving them voucher assistance for cooking energy, briquette fuel to improve access to cooking fuel and reduce environmental impact through efficient use of biomass cooking fuel the Cash and Voucher assistance is intended to ensure access to cooking energy, thereby supporting daily life while encouraging a shift towards cleaner energy sources. Additionally, the project will support women stove producers to produce fuel-efficient stoves and distribute them among 450 other vulnerable refugees to improve cooking fuel efficiency at the household level. At the institutional level, the project will support the construction of improved institutional cook stoves in 10 primary schools. Through these efforts, the project aspires to create a model of sustainability and self-sufficiency. Existing community sectoral structures will be engaged to promote awareness and

engagement between the host community and refugees to support the above activities as part of community engagement strategy of the project.

Sub-component 3.3: Build community capacity to promote environmental protection, agroforestry, and community tree planting. (Jamjang and Maban). The subcomponent will strengthen the capacity of communities in refugee-hosting areas for environmental preservation and rehabilitation. This initiative will engage community members in activities designed to reduce protection risks, foster peaceful coexistence, and improve environmental conservation. The core activities include the establishment and rehabilitation of tree nurseries for a diverse range of tree species, ensuring a continuous supply of seedlings for reforestation projects. A significant effort will be the distribution of over 200,000 fruit and shade tree seedlings among refugees and host communities, for household tree planting and establishment of a woodlot, which aims to encourage widespread tree planting and ultimately enhance the local ecosystem. Existing community sectoral structures will be engaged to promote awareness raising through community outreach engagements between the host community and refugees to promote environmental protection, and as part of community engagement strategy of the project.

Component 4: Project management and capacity building.

The objective under this component is to ensure smooth and effective implementation and management of the project. This component will support the Project Steering Committee (involving relevant stakeholders dealing with refugee affairs at the central and local levels) to oversee the execution of the project and strengthen the institutional capacity of the Commission for Refugee Affairs through the provision of equipment, rehabilitation of infrastructure, and mission/capacity building visits. This component will also support refugee and host community-led peaceful co-existence, including building the capacity of the peace committees.

Sub-component 4.1: Local/county government capacity building and infrastructure improvement (Aweil, Jamjang, and Maban). This subcomponent will promote peaceful coexistence and development among refugee and host communities (340 individuals) through targeted interventions aimed at enhancing the capacity for dialogue, cooperation, and local governance. Activities will include providing the peace committees in the project locations with incentive cash support for Peacebuilding community activities, procurement of motorcycles for the Police and renovating the police office in Aweil, bicycles for Peaceful committees and uniforms to facilitate their work, and rehabilitating Maban county offices with solar power for better administrative functions.

Sub-component 4.2: CRA institutional capacity building (Aweil, Jamjang, Juba, and Maban). This subcomponent will provide capacity building to CRA, through which it will support the implementation of project activities. Capacity building support will also

enhance inter-government coordination between the CRA and UNHCR, as well as strengthen the operational capacity of the Commission for Refugee Affairs through the provision of equipment activities conducting a livelihood study, mobilisation, field missions, among others. The project also involves equipping the Commission with laptop computers for institutional capacity development.

Sub-component 4.3: Programme management and learning (Aweil, Jamjang, Juba, and Maban). This subcomponent will facilitate project location stakeholder inception workshops, day-to-day project management, monitoring, coordination, and information sharing. It will support the overall project management by the implementing agency, the project management unit (PMU) to be established, monitoring and evaluation processes, and knowledge sharing. Additionally, it will assist in onboarding necessary human resources and technical assistance for implementing planned activities. The project will continue using the approved UNHCR monitoring and evaluation framework under the country's multi-year strategy and adapting it as needed. This will include a PMU oversight annual supervisory mission to ensure timely monitoring, tracking progress, and addressing implementation challenges promptly. A learning agenda that will also capture lessons learned and knowledge to inform the scale-up of the integration and resilience interventions.

2.1.2. Project Outcomes

Project outcomes are;

- **Outcome 1:** Improved self-reliance and economic well-being,
- **Outcome 2:** Displaced and host populations supported to access basic services (health, education, water, sanitation, and shelter) and markets,
- **Outcome 3:** Strengthened climate resilience of refugees' host communities and other displaced persons, and
- **Outcome 4:** Institutional capacity of government strengthened, and project managed and delivered effectively.

2.1.3. Project Outputs

Output 1: The crisis affected communities of refugees and their hosts supported with skills development and climate-smart agricultural production practices; and increased income-generation opportunities for the most vulnerable to empower them to create new sustainable and climate-responsive livelihood opportunities.

Output 2: The essential service delivery systems (health, education, WASH, settlement infrastructure, etc.) are supported through rehabilitation and expansion of the systems and improving access and quality of services; in effect, enhancing the well-being of the crisis-affected communities.

Output 3: Enhanced resilience and adaptive capacity of displaced people (refugees) and host communities to climate-related and other environmental risks will be enhanced through well-established and environmentally sustainable early warning systems and preparedness measures; and

Output 4: Local institutions supported with capacity building and key equipment to facilitate their daily operations so that the leadership and capacity of these institutions can be more sustainable to advance peaceful coexistence efforts, resulting in improved coping capacities and strengthened peaceful coexistence and social cohesion among refugees and other host communities.

2.2. Project Location

Maban County is in the Upper Nile state of South Sudan, near the border with the Republic of Sudan and Ethiopia. It is bordered by Sudan's Blue Nile State to the east, Longochuk County to the south, and Renk and Melut Counties to the west. Maban covers an area of 11,817.85 km^2 in size and the population is estimated to be at 65,117, with a refugee population of about 168,000 people.

The county is classified as part of the Northern sorghum and livestock livelihood zone (FEWSNET 2018). It is climatically semi-arid, with extreme heat and arid temperatures during the dry season and flooding during the rainy season, as shown in Figure 1. Maban is part of a large, flat flood plain that eventually drains into the White Nile. The Yabus River is Maban's only permanent river, located in the southern part of the county. However, there are also other rivers such as Ahmar, Yale and the Tombak rivers. Yabus and other rivers have their origins in Ethiopia running through Sudan, into Maban and west towards the River White Nile.

The capital of the county is Bunj town, located at 9°58′45″N 33°45′0″E.

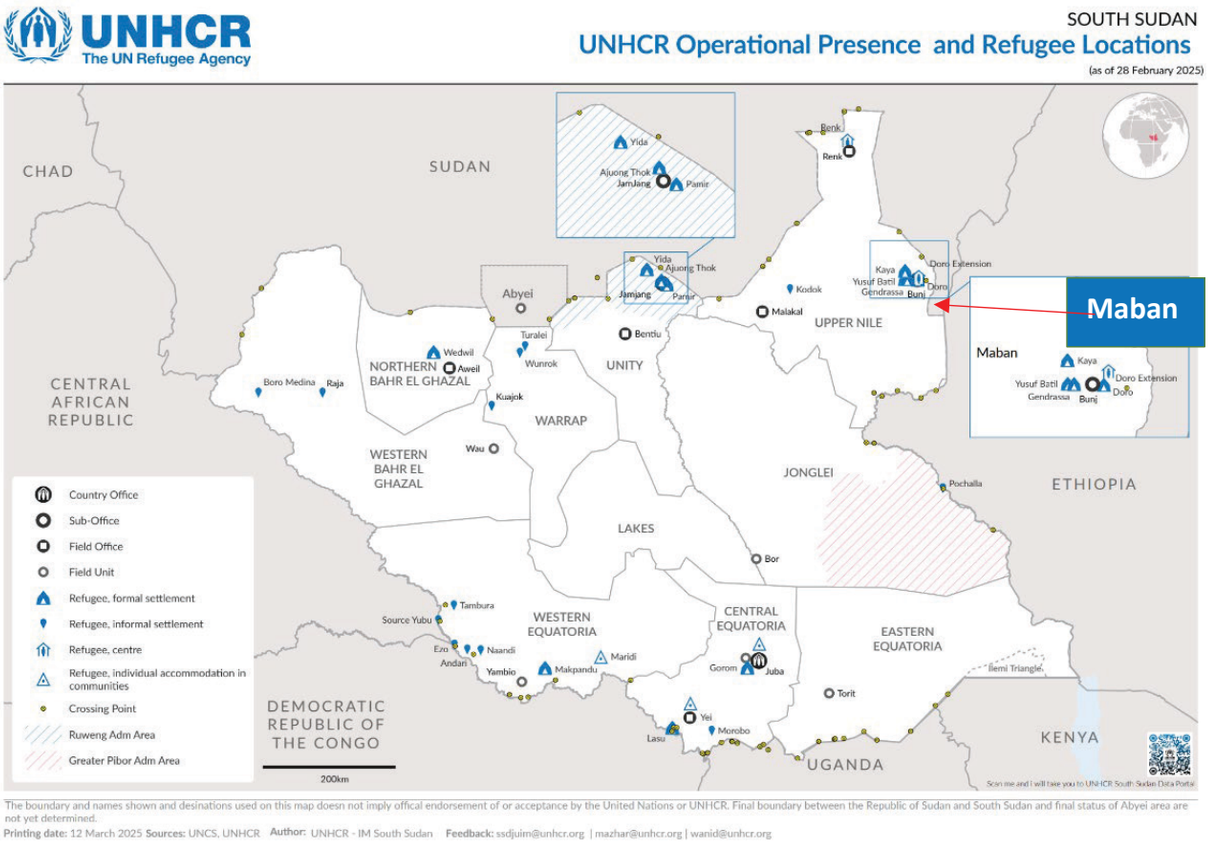

Figure 1: Administrative units/states

2.3. General layout, size, and capacity

The proposed SCRSSP project components mainly classified into Goods, services and civil works and will be implemented concurrently in the four main sites namely Kaya, Yosuf Batil, Gendrassa and Doro.

2.4. Area of Influence of the Project

Maban County has been the home of Sudanese refugees residing in four refugee camps - Doro, Gendrassa, Yusuf Batil, and Kaya. As a result of violent tensions in neighboring Blue Nile State in Sudan in 2011, a significant number of Sudanese refugees were displaced, sought refuge in South Sudan, and are expected to stay there in the foreseeable future. With continued conflicts in Sudan, the camps are experiencing growing numbers from new arrivals and returnees.

2.4.1. Kaya Refugee Settlement

The settlement was opened in June 2023 and has a maximum capacity of 70,000 persons. It is located at GPS coordinates: N:10.09349 E:33.57579 and covers an area of about 712 hectares.

The settlement hosts 5,227 refugee households that are led by 54 Sheikhs and 03 paramount chiefs (Umdas). The Refugee Camp Executive Committee comprising 05 members.

WASH: Water supply is from 4 motorized boreholes pumped over a 5km distance from the source, with 58 tap stands and 349 taps. The construction of 40 household shared latrines and 6 stances of institutional latrines. Several latrines per hygiene promoter is 191.

Shelter: 50.77% of households (2,654) live in semi-permanent shelters, while 49.23% still live in emergency shelters.

Education: There are 5 primary schools, with an enrollment of 80%. There is one secondary school with an enrollment of 7%.

Health: There is 1 Primary Health Care Centre and 1 Primary Health Care Unit offering 24/7 health, reproductive health, and nutrition services. The 3 main morbidities are respiratory tract infections, malaria, and diarrhea. Referrals are sent to the Bunj hospital and Gentil PHCC+.[4]

2.4.2. Yosuf Batil Refugee Settlement

The settlement, which was opened in May 2012, is located at N:9.98272 E:33.58442, covers an area of 703 hectares, and has a capacity of up to 60,000 individuals. Yusuf Batil refugee settlement is divided into 12 villages comprising 9,399 households led by 91 traditional leaders (Sheikhs) and 10 paramount chiefs (Umdas)[5].

WASH: Water supply is drawn from 5 motorized boreholes, 4 solar-generator boreholes, 6 boreholes with hand pumps, 83 tap stands, and 494 taps. Construction of 70 household latrines, and construction of 12 stances of institutional latrines. Several refugees per hygiene promoter is 279.

Shelter: 32.30% of households (3,036) live in semi-permanent shelters, while 67.70% still live in emergency shelters

Education: There are 7 primary schools. With an enrolment of 75% and 1 secondary school with an enrolment of 14%, which serves both Batil and Gendressa camps[6].

Health: There is 1 Primary Health Care Centre and one Primary Health Care Unit offering 24/7 health and reproductive services. The 3 main morbidities are respiratory

[4] Kaya Refugee Settlement profile (link)
[5] South Sudan: Yusuf Batil Refugee Settlement Profile (link)
[6] South Sudan: Yusuf Batil Refugee Settlement Profile (link)

tract Infections, malaria and diarrhea. Referrals are sent to the Bunj hospital and Gentil PHCC+.

Energy: 99.47% of refugees received portable solar lamps for household lighting needs

2.4.3. Gendrassa Refugee Settlement

The settlement was opened in May 2012 and is located at N:9.98395 E:33.61348. It covers an area of 385.6 hectares and has a maximum capacity of 30,000 persons. The settlement comprises 3,965 households, and is divided into 4 villages, led by 26 traditional leaders (Sheikhs), 04 paramount chiefs, and 01 overall paramount chief (Nasir). The Refugee Camp Executive Committee, comprising 05 members, was voted into power on 11 September 2019[7].

WASH: 7 motorized boreholes connected to solar generator power, 19 hand pumps, 22 tap stands, and 131 draw-offs. The number of persons per tap is 67. Construction of 30 household latrines, 6 stances of institutional latrines.

Shelter: 56.55% of households (2,236) live in semi-permanent shelters, while 43.45% still live in emergency shelters.

Education: There are 4 primary schools. With a gross enrolment of 108%

Health: There is 1 Primary Health Care Centre offering 24/7 health, reproductive, and nutrition services. The 3 main morbidities are respiratory tract infections, malaria, and diarrhea. Referrals are sent to the Bunj hospital and Gentil PHCC+

Energy: 99.41 % of refugee households received portable solar lamps for household lighting needs

2.4.4. Doro Refugee Settlement

The settlement was opened in November 2011 and occupies an area of about 1,368 hectares. The GPS coordinates are N 09.98268, E33.74548, and it has a capacity of up to 80,000 persons.[8].

Doro is a spontaneous refugee settlement comprised of 13,682 households, located 23km from the border. The area is divided in four zones: A, B, C and Extension Site, having 23 villages represented by 76 traditional leaders (Sheikhs) and 21 paramount chiefs (Umdas).

WASH: 16 motorized boreholes connected to solar and generator power, 17 hand pumps, 101 tap stands and 602 drop-offs. Flushing, cleaning and development of 15

[7] South Sudan: Gendrassa Refugee Settlement (link)
[8] Doro Refugee Settlement (link)

wells (7 in host) carried out. Chlorination of water sources carried out. Procurement of 4 generator done. Construction of 8 stances of institutional latrines. Construction of 70 household latrines made. Number of refugees per hygiene promoter is 279.

Shelter: 27.22% of households (3,722) live in semi-permanent shelters, while 72.78% still live in emergency shelters

Education: There are 8 primary schools with an enrolment of 41%

Health: 1 Primary Health Care Centre and 2 Primary Health Care Units are offering 24/7 health, reproductive health, and nutrition services. The 3 main morbidities are respiratory tract infections, malaria, and diarrhea. Referrals are sent to the Bunj hospital.

Energy: 95.9 % of refugee households received portable solar lamps for household lighting needs

2.4.5. Leadership structure of the settlements

The leadership of the settlement comprises the following

- Block leaders and deputy leaders
- Women's Committee
- Youth Committee
- WASH Committee
- Community Watch Team
- Older Persons' Committee
- Conflict Resolution Committee
- Child Protection Committee
- Project Management Committee
- Health Committee
- Shelter Committee
- Environment Committee
- Religious Leaders Committee
- Art and Cultural Committee

2.5. Pre-construction

SCRSSP will be implemented over 24 months (two years). This means that the implementation of the project activities will run concurrently in various sites within Maban County. The proposed activities are broadly categorized into the provision of goods, the provision of services, and civil works.

The first phase will entail confirmation of data and accuracy of topographical survey; Mobilization of the Labor force, equipment, and plant for construction works; Transportation of equipment, workers, materials, and storage;

The second phase will entail securing/hoarding off the project sites and installing a construction board indicating the kind of project, work, and professionals and organizations involved, including UNHCR, CRA, and GoSS. The site facilities will be temporary in nature (for the duration of the construction phase) and will include site offices, and other temporary facility for the contractor. The contractor will have to comply with ESIA requirements including environmental and social management plan (ESMP) for prevention, minimizing and mitigating likely impacts including gender-based violence. During the site preparation, both skilled and unskilled temporary employment opportunities will be created, of which, priority will be given to the local people and youths (returnees, host community and refugees, where applicable)

In the third phase. UNHCR jointly with the project partners namely CRA and GoSS will identify suppliers of required goods. The main construction material including construction blocks (hard red stone, and burned bricks), steel, cement and sand will be sourced from accredited suppliers and installed by certified technicians. In Maban, for example, the local community including youths should be subcontracted to provide burned bricks for the construction of schools, and Laboratory among other civil works.

Other materials and equipment such as sanitary kits and other WASH equipment will be sourced from reliable suppliers selected by UNHCR and approved by project partners.

Great emphasis will be laid on procurement of material from the local area or within South Sudan which will make both economic and environmental sense as it will reduce negative impacts of long-distance transportation of materials to the project site, saving a lot of money and boosting economy of the Republic of South Sudan.

The selected sites have sufficient space left hence storage of bulk building materials such as sand, stones, ballast, bricks, Tanks will not be a challenge. The contractors will install separate storage facilities for other materials such as Sanitary kits and photovoltaic equipment.

To avoid pilling large quantity of materials on site, the project implementing agency is advised to order bulky materials in bits and on demand. Materials such as cement, sand, paint among others will be purchased when required and stored in a temporary storage structure within the sites.

2.6. Construction activities and other project activities

Earthworks

Construction works will involve excavation of the topsoil to prepare the site for construction of foundation. This will involve the use bulldozers and human labor. However, care and architectural specifications should be followed strictly at this stage. Approved anti-termite will be applied before work commenced and approved dump proof course (D.P.C.) will be provided under the walling. The excavated materials will be

carted away from the site to approved local dump site. Some of the carted material shall be selected for re-use and general filling of the site where required.

Masonry, concrete works and related activities.

Once earthwork is complete, the contractor will commence construction of concrete foundations for establishing respective facilities. General masonry and related activities will include stone shaping, concrete mixing, plastering, slab construction, construction of foundation. These activities are known to be labour intensive hence will be supplemented by machinery such as concrete mixers, vibrators where necessary.

Plumbing

Pipe work will be done to connect drainage of storm water from the roof top into the roof harvesting system. Plumbing will include metals and plastic cutting, the use of adhesives, metal grinding and wall drilling among others.

Electrical Works

Electrical works will be installation of lighting, electrical conduits, distribution boards, and undertaking wiring of the facility.

Landscaping

To improve the aesthetic value and visual quality of the site once construction is complete, open places will be landscaped by the contractor. This will include removal of waste from the site, ground leveling and establishing flowers gardens and lush grass lawns so as to replenish the top soil and improve the visual quality of the site. Locally available indigenous species will be given priority in landscaping unless where it unavoidably calls for exotic species.

Processes, Equipment, Materials, Output and Expected Waste

Short-term impacts to the environment such as dust pollution, and noise that will result from the construction are predictable and manageable with appropriate mitigation measures proposed. No negative impacts on destruction of critical ecosystems, and sites of cultural importance are foreseen in the project sites.

The full implementation of the ESMP will be essential in minimizing adverse environmental and social impacts of the project. Although the sub-projects will have minimal negative impacts, these will be carefully monitored and mitigated throughout implementation, with regular and consistent monitoring, and timely interventions to mitigate and prevent the potential negative impacts. and CRA will be expected to ensure full compliance with the proposed Environmental and Social Management Plan (ESMP).

Utilities

Water: The following are some of the sources of water that the project may consider:

Ground water sources: Borehole with handpumps and water yards are the main sources of water in the project sites. The water resources e.g water yards are available for use during the construction phase. The water management committee will also support the construction team by allocating water for other uses.

Rainwater Harvesting: The use of rainwater is recommended to reduce the volume of water extracted from the borehole during times of rainfall, thus conserving the underground aquifer supply. Harvested rainwater may be used for potable uses or for irrigation of soft landscape areas

Sewerage: There is no existing trunk sewer line in Maban. The sewerage discharge from the development will be taken offsite, on site retention or on-site sewerage treatment.

Flood/ Storm Water Drainage: The topography of project area of Influence is generally flat and it may be assumed that the entire development site will be impermeable, whether through building development or hard landscape areas and roads.

2.7. Schedule of project activities

The schedule of project activities will be developed jointly by UNHCR, CRA and partners including NGOs and CSOs. The ESIA recommends that all activities that involve civil works should be undertaken during the wet seasons to minimize dust, erosion and water abstraction from the already stretched ground and surface water sources in Maban.

2.8. Staffing and Support

The project will be implemented by the UNHCR field office in Maban jointly with partners including the CRA, and NGO and civil society actors. The overall supervision will be undertaken by the UNHCR country office based in Juba, South Sudan in collaboration with the African Development Bank office. The key contact persons in the field office will include the Shelter and Planning officer and the livelihood officer who will monitor progress and update the UNHCR office in Juba.

Besides, there is an existing leadership structure by the refugees that will also play a role in implementation of the various project activities. The leadership of the settlement comprise the following

- Block leaders and deputy leaders
- Women's Committee
- Youth Committee
- WASH Committee
- Community Watch Team
- Older persons' Committee
- Conflict Resolution Committee

- Child Protection Committee
- Project Management Committee
- Health Committee
- Shelter Committee
- Environment Committee
- Religious Leaders Committee
- Art and Cultural Committee

2.9. Facilities and services

The following facilities are available in Maban

- Reception centres - The reception center is located in each of the four camps
- food distribution centres in all the camps
- Primary Health Care Centers (PHCC), Primary Health Care Unit (PHCU), Nutrition Centre across the camps. Gentil PHCC serves Batil, Gendrassa and Kaya camps. Doro camp is served by Doro PHCC, Benamayo PHCC, Doro extension PHCU and Mayak PHCU.
- patients from all the four camps are referred to Bunj Hospital for cases which can't be handled at the PHCC and PHCU.
- Several primary schools across all the camps serve both host and refugee communities.
- 3 secondary schools namely Kaya, Yusuf Batil and Bunj Complex Secondary School. ICT centre for the entire Maban county is hosted at Bunj Complex Secondary School.
- Child Friendly Spaces
- Early Childhood Development Centres across all camps
- Vocational Training Centres
- solarised boreholes
- Field Offices: NGOs and Civil society organizations

Existing Initiatives in Maban

UNHCR and actors including NGOs and Civil Society Organizations (CSOs) initiated small scale projects to build capacity of the refugees and host communities, to facilitate a transition from dependence on humanitarian support to self-reliance. The proposed SRCSSP will support the expansion of these initiatives to create a tangible impact on the refugees, host communities and returnees in the proposed project areas. Below is a description of the existing projects whose components align with the proposed SRCSSP.

Maban Vocational Training Center (VTC)

The VTC shown in Figure 2 is located at the center of the Maban is managed jointly by the UNHCR and Relief International (RI). The VTC has different departments comprising hair dressing and cosmetology, Plumbing, electrical installation, Catering and bakery and ICT. Students both from the host community and refugees are offered scholarship to pursue their preferred course based on merit. Besides, they are supported with seed capital to establish businesses upon successful completion of the courses.

Figure 2: Maban Vocational Training Center

Apart from the vocational training, UNHCR has established infrastructure for other livelihood programs within the VTC, as discussed below and shown in the figures.

Tree nursery

The tree nursery is managed by RI with the main purpose of preparing seedlings for both fruit and shade trees which are then planted within the community and the refugee settlements. The site also has small scale kitchen gardens that are managed by the learners. **Error! Reference source not found.** shows the agricultural initiatives in Maban

Figure 3: Agri-nutritional farm

Poultry farming – Poultry farming is undertaken at the Gendressa camp mainly to supplement the nutritional needs of the households and as an alternative source of livelihood for the refugees. The structure for the poultry farm is shown in Figure 3

Figure 3: Poultry House -Gendrassa refugee settlement

Farmlands

UNHCR is implementing various initiatives to improve food security among the host and refugee communities in Maban. Through collaboration with CRA, farmlands have

been demarcated and handed over to the refugee communities. Every household is allocated up to 2 feddans, but with the option of further expanding the sizes. The proposed project will further support the purchase of equipment, e.g, tractors for mechanization of the farm. Figure 4 It is a section of the farmland in Maban.

Figure 4: Farmlands Maban

CHAPTER THREE: BASELINE INFORMATION

3.1. Physical environment

Topography and Hydrology of the project site

The county is classified as part of the Northern sorghum and livestock livelihood zone (FEWSNET 2018). It is climatically semi-arid, with extreme heat and arid temperatures during the dry season and flooding during the rainy season. Maban is part of a large, flat flood plain that eventually drains into the White Nile. The Yabus River is Maban's only permanent river, located in the southern part of the county. However, there are also other rivers such as Ahmar, Yale, and the Tombak rivers. Yabus and other rivers have their origins in Ethiopia, running through Sudan, into Maban, and west towards the River White Nile. The capital of the county is located at 9°58′45″N 33°45′0″E.

Geology and soils

There is limited information regarding the specific geological details for Maban County. However, the general geology of South Sudan consists mainly of the Precambrian crystalline basement rock, Mesozoic sedimentary rocks and Cenozoic deposits. Maban is influenced by the broader geological trends of South Sudan including the presence of unconsolidated alluvial deposits along rivers and floodplains in the Upper Nile State.

The soils are predominantly the black cotton soils and loams found in the villages, Laterite soils are sparce and are used for extracting gravel for road construction. The soil composition is influenced by the semi-arid climate and the seasonal flooding that occurs in the area, which can lead to soil erosion and nutrient depletion.

While specific hydrogeological data for Maban County is limited, the broader region of South Sudan features unconsolidated alluvial sediments that form aquifers with variable productivity. These aquifers are generally unconfined and have a shallow water table, which can be influenced by surface water features. In areas with coarser grained deposits, transmissivity can be high, but drilling challenges such as collapsing sands are common.

Climate

Dry Season: The dry season is marked by high temperatures and arid conditions, typically lasting from November to April. During this period, the region experiences minimal rainfall and high evaporation rates, leading to dry soil conditions.

Rainy Season: The rainy season, from May to October, brings heavy rainfall that often results in extensive flooding. This flooding is exacerbated by the county's location on a large, flat floodplain that drains into the White Nile River.

Temperature: Daytime temperatures during the dry season are about 38°C, while nighttime temperatures may drop significantly. During the rainy season, temperatures remain high but are often accompanied by high humidity.

Humidity: The humidity levels are generally low during the dry season but increase significantly during the rainy season due to the heavy rainfall and flooding.

Maban County has faced severe and prolonged flooding, which has been exacerbated by climate change. This flooding has destroyed homes, crops, and infrastructure, significantly impacting both local communities and refugee populations. Efforts to mitigate these effects include projects to build dykes and support farmers in adapting to changing climate conditions.

The climatic conditions in Maban County significantly affect agricultural activities and livelihoods. The flooding can both enhance and disrupt crop production, depending on the timing and intensity. Farmers often rely on seasonal rainfall for agriculture, but the unpredictability of flooding poses challenges to consistent crop yields.

Water Resources

Surface water resources

Rivers: The county is traversed by several rivers, including the Yabus River, which is the only permanent river in the area. Other rivers, such as Ahmar, Yale, and Tombak, are seasonal and originate from Ethiopia before flowing westward towards the White Nile River.

Flooding: Maban County experiences severe flooding during the rainy season, which can both replenish surface water sources and disrupt access to them. Flooding often renders roads impassable and affects infrastructure, including water supply systems.

Groundwater Resources

Groundwater is a critical resource in South Sudan, with the Umm Ruwaba unconsolidated geological formation being a significant source. However, specific data on groundwater availability in Maban County is limited. Generally, groundwater tables in similar regions are shallow but can vary significantly. Refugee communities in Maban County are heavily reliant on humanitarian assistance for access to clean water. The WASH (Water, Sanitation, and Hygiene) situation is challenging, with ongoing efforts to improve water supply infrastructure. Flooding not only disrupts access to water but also contaminates existing water sources, exacerbating health risks. Humanitarian responses often focus on providing safe water and sanitation facilities

3.2. Flora and Fauna

Maban County is part of the Sudan savannas, a phytogeographical zone characterized by savanna woodlands, grasslands, and seasonally waterlogged marshlands. The dominant vegetation includes: Savanna woodlands vegetation cover of 30-60%, with tree species like **Acacia senegal** (Gum arabic tree), **A. seyal** (Red acacia), **A. nilotica**, **A. sieberiana**, **Adansonia digitata** (Baobab), and **Anogeissus leiocarpus** (Ameth). Many grasslands are man-made due to extensive tree clearing for agriculture and pasture. Protected trees like **Balanites aegyptiacus** (Heglig, Lalob, or Thou) often remain

The fauna in Maban County is limited due to recurrent fighting and poaching, which have led to the depletion of wildlife. However, some bird species are abundant, e.g, **Black crowned-crane**, **Marabou**, **Sacred ibis**, **African open-billed stork**, and **Helmeted guinea fowl** are common in the area.

3.3. Socioeconomic environment

The socio-economic activities in the county are influenced by its natural resources, cultural practices, and the presence of refugee populations. Farming is a crucial livelihood activity, with crops such as sorghum, maize, beans, cowpeas, groundnuts, sesame, and okra being commonly grown. Most farming is done at a subsistence level, with any surplus often bartered for other goods. Non-migratory livestock such as cattle, goats, sheep, pigs, and chickens are raised. Historically, migratory pastoralism was significant, but it has been disrupted by conflict. Refugees in the area are involved in small-scale trading, selling accessories, fabrics, and retail trading.

CHAPTER FOUR: LEGISLATIVE, POLICIES, AND ADMINISTRATION FRAMEWORK

4.1. Legislative and policy framework

There is no operational legal system for ESIA in South Sudan. The Draft National Environmental Bill 2023 (approval still pending) of South Sudan provides for the establishment of an autonomous South Sudan Environmental Management Authority (EMA) to act as the watchdog on all public institutions, private companies, and individuals defaulting against the stipulated environmental laws and regulations. Until the Authority is fully established, the duties and functions of the Authority are delegated to the Ministry responsible for the environment and forests.[9].

The ESIA will entail a description of the pertinent regulations and standards governing the environmental quality, health and safety, protection of sensitive areas, land use control at the International, national, and local levels; a summary of the legal statutes that will be reviewed, including but not limited to the ones presented in Table 1.

Table 1: Policy and Legislative Framework

Policy/Legislation	Description
The Comprehensive Peace Agreement (CPA)	Signing of the CPA in January of 2005 brought peace to Southern Sudan by enabling Southern Sudan to acquire the mandate to legislate laws for internal governance ranging from the State to the Local Authority level. It also paved the way for the secession of South Sudan through a referendum in 2011. Under Schedule B of the CPA, GoSS is mandated to coordinate service provision within its territories. GoSS is also under obligation to set standards for environmental management which essentially requires that all development projects consider precautionary principles, which underscores the importance of undertaking an ESIA to determine the potential positive impacts, negative impacts and mitigation measures.
The R-ACRSS	The Revitalized Agreement for Resolution of Conflict in South Sudan (R-ARCSS) in Articles 1.10.3.7, 4.6.1.3, 4.9.1, and 4.9.2 sets the foundation for; Establishment of the national Ministry of Environment and Forestry under the Economic Cluster; and creation of the **Environmental Management Authority (EMA)** upon commencement of the transitional period to oversee policy implementation and compliance. The Ministry of Environment and Forestry is the governing body of all natural resources in South Sudan. In addition, the creation of the EMA would imply that all development projects and/ or feasibility studies of any

[9] Netherlands Commission for Environmental Assessment (link)

	project must include an environmental impact certificate from the Ministry of Environment and Forestry.
The Transitional Constitution of the Republic of South Sudan of 2011 was amended in 2015	Section 44 of the Constitution stipulated the right of every person and community to a clean and healthy environment; It also emphasizes the importance of safeguarding the environment for the benefit of present and future generations, through reasonable legislative action and other measures that: a. prevent pollution and ecological degradation; b. promote conservation; and c. Secure ecologically sustainable development and use of natural resources while promoting rational economic and social development to protect genetic stability and biodiversity of Southern Sudan. The ESIA is widely considered as a planning tool for any development project specifically aimed at ensuring early identification of all adverse impacts such as destruction of natural ecosystem, pollution sources and recommendation of practical mitigation measures to safeguard the environment. It is on this basis that the ESIA for the proposed SRCSSP was undertaken to ensure compliance and safeguard the quality of life of the citizens and the environment.
REFUGEE ACT, 2012	The Refugee Act of 2012 in South Sudan is designed to implement international refugee protection standards within the country. It provides a framework for the reception of asylum seekers, the application and recognition of refugee status, and outlines the rights and obligations of refugees. It provides for the establishment of the Commission of Refugees Affairs (CRA) to oversee refugee matters, sets up a Refugee Eligibility Committee to assess applications for refugee status, and includes a Refugee Appeals Board for appeals against decisions The refugees must be recognized and entitled to legal protection, identity documents, and Convention Travel Documents. They also have the right to seek employment and access basic health services and primary education similar to South Sudanese nationals. Refugees must obey all laws of South Sudan. The proposed SRCSSP has components relating to the protection of refugees and offering opportunities for self-reliance through job opportunities. Therefore, the Refugee Act 2012 is vital in the design and implementation of the proposed project by enabling equal treatment and consideration in the existing opportunities arising from its implementation.
South Sudan Vision 2040: Towards Freedom, Equality,	The vision emphasizes creation of a diversified economy, driven by sectors like agriculture, industry, mining, manufacturing, tourism, and services. However, these should be utilized in a manner that does not affect their long-term sustainability.

Justice, Peace and Prosperity for All.	The 2040 vision underscores the significance of precautionary principles in development and utilization of natural resources for economic growth. The ESIA is a planning tool that enables early identification of potential risks resulting from implementation of a project as well as recommendation of practical mitigation measures.
South Sudan National Environment Policy 2015 – 2025	The objectives of the GoSS Draft Environmental Policy are to:- 1) Enhance equitably the livelihoods of Southern Sudanese citizens; 2) Conserve and protect ecosystem processes and biological diversity; 3) Integrate environmental considerations into public-sector development policies, plans, programs, and projects at all levels of government; 4) Promote effective, widespread, public participation in the consideration and incorporation of environmental considerations into development activities. The strategic goal of the policy is to ensure the protection, conservation and sustainable use of the natural resources of South Sudan without compromising the tenets of inter-generational equity. This policy introduces a national environmental response framework and strategies to be implemented by all key actors in the public, private, and community domains. The foundation of the National Environmental Policy is to protect and improve the environment in a manner that contributes to the quality of life of both present and future generations. The objectives of this policy are integral in impact identification and formulation of ESMP.
National Land Policy 2023 (draft)	The **purpose of this Bill** is to provide for establishment of a legal and institutional framework for addressing land governance challenges and promoting sustainable management of the environment. This Bill is drafted in accordance with the provisions of Article 4.6.1.3, 4.9 of the **R-ARCSS and 41 of the Transitional Constitution, 2011**, which grants the Government of South Sudan concurrent authority over protection and management of the environment. Specifically, it establishes a framework for sustainable framework for allocating and protecting collective and individual land rights for all South Sudanese. The bill describes a category of land ownership, namely public land – all land owned, held, or otherwise acquired by any level of government (including land owned by Bomas, Counties, States, and federal government or administration and all land that is not otherwise designated as community or private). This means that all land that is not claimed automatically belongs to the government community land – all land traditionally and historically held or used by local communities or their members (including grazing lands for animals, hunting grounds, or locations of traditional sacrifices and worship)

	private land including registered land held by a person under leasehold tenure, investment land acquired under lease from the government, and other land designated as private land in accordance with the law. This means that all investment land is acquired from the government through the leasehold tenure. It is on this basis that all matters pertaining to acquisition and transfer of ownership for project implementation is handled by the CRA in collaboration with other GoSS departments.
The National strategy for climate change Adaptation and Mitigation 2021	South Sudan's climate change strategy emphasizes building resilience, promoting sustainable development, and addressing the impacts of climate change through comprehensive adaptation and mitigation measures The policy outlines the measures for i. the development of a national strategy for climate change adaptation and mitigation; ii. the formulation of the climate change policy; and iii. increasing the country's efforts to reduce communities' vulnerability to climate variability and change. The project prioritizes Adaptation actions through agricultural improvement, improved water infrastructure and sustainable energy, as well as protection of the communities from adverse impacts such as flooding and extreme hunger.
Health Policy 2016-2025	The National Health Policy 2016-2025 aims to improve health services by aligning health service delivery, health financing, strategic information, leadership and governance, human resources for health, and access to essential medicines. The project aligns with the guiding principles including: i. health and health services as a human right; ii. primary health care approach; iii. decentralization; iv. partnerships; v. international conventions and guidance; vi. gender mainstreaming; vii. community participation; viii. efficiency and effectiveness; ix. respect for values and cultures.
South Sudan Forest Policy (2019)	The policy broadly aims to achieve ecological stability of river systems, the lakes, swamps, agricultural production and other natural ecological systems. It is also meant to ensure that there are optimal benefits from forestry and agro-forestry activities for food security and poverty alleviation among our rural communities through provision of woody and non-wood forest products. The policy integrates forest sector actions with rural development efforts to ensure that the rural population of South Sudan has access to

	basic needs which include sustainable household food security, shelter, wood fuel, safe clean water, as well as sanitation and health facilities.
Government of Southern Sudan Water Policy (2007)	Water policy provides a guiding framework for all water sector activities and an important point of reference for future development of more detailed implementation strategies. Water is an important natural resource that is commonly owned by all riparian people. The Government of South Sudan must ensure effective development and use of water resources for the benefit of all, including poor and vulnerable groups. Access to sufficient water of acceptable quality to satisfy basic needs is considered a human right and shall be given the highest priority in the development of water resources. The proposed SRCSSP takes into consideration the optimal allocation of available resources based on social equity, economic efficiency, system reliability, and environmental sustainability.
Environment Bill 2023 (draft)	The purpose is to protect the environment and to promote ecologically sustainable development that improves the quality of life for both the present and future generations. Section 18 of the South Sudan Draft Environmental and Protection Bill introduces the requirement for Environmental Impact Assessments. An Environmental Impact Assessment (EIA) is defined as a systematic examination conducted to determine whether or not a project will have any adverse impact on the environment and prescribe mitigation measures. In addition, Section 32, Cap 5, proposes the requirement for Environmental Audits which is defined as the systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing in conserving the environment and its resources. Section 20, Cap 5, intends to introduce the requirement for Environmental Monitoring. It is defined as the continuous determination of actual and potential effects of any activity or phenomenon on the environment, whether short or long term. The bill mandates the line ministries to: Monitor environmental phenomena to assess possible changes in the environment and their possible impacts.
The Land Act, 2009	Land Act promotes a land management system, which can protect and preserve the environment and ecology for the sustainable development of South Sudan. The Land Act reinforces the Government's recognition of customary land tenure: 'Customary land rights, including those held in common, shall have equal force and effect in law with freehold or leasehold rights.' Community land can be allocated to investors as long as investment activity 'reflects an important interest for the community' and 'contributes economically and

	socially to the development of the local community'. It also requires that state authorities approve land acquisitions above 250 feddans (105 hectares) and create a regulated ceiling on land allocations. The Land Act requires the Government to consult local communities and consider their views in decisions about community land. The Act also gives pastoralists special protection: 'No person shall, without permission, carry out any activity on the communal grazing land which may prevent or restrict the residents of the traditional communities concerned from exercising their grazing rights'. Project proponents must also conduct environmental and social impact assessments (ESIAs) before undertaking any activity that might affect people or the environment.
The Public Health (Water and Sanitation) Act (2008)	It encompasses the measures to address the pollution of water with a focus on water for consumption. The act stipulates that providers of water for consumption, including frozen food, should ensure that the water conforms to the portability regulations; Management and disposal of hazardous wastes; and storage of wastes on the premises of waste generators. The Public Health Act (2008) also emphasises enforcement of regulations and measures necessary to combat all elements of pollution and protect the natural level of the environment and public health. The provisions of the Act have been taken into account in the formulation of the ESMP to safeguard water resources from potential contamination that could result from the proposed SRCSSP.
The Labour Act (Act No. 64 of 2017)	The Act establishes a legal framework for the minimum conditions of employment, Labor relations, Labor institutions, dispute resolution and provisions for health and safety in the workplace. It further reinforces the right to equal remuneration for work of equal value as guaranteed by the constitution. Section 6(1) of the Labour Act provides that 'No person shall discriminate, directly or indirectly, against an employee or job applicant in any work policy or practice'. Section 6(2) also forbids discrimination by any Trade Union, Employers Association or Federation. Section 6(3) defines discrimination as 'any distinction, exclusion or preference with the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation' based on a series of grounds including sex and pregnancy or childbirth. The legislation is important in the implementation of the proposed SRCSSP specifically enabling equal employment opportunities for the qualified individuals comprising host communities, returnees and refugees during the construction, operation and decommissioning of the project.
Child Act (Act No. 10 of 2008):	The Child Act regulates the prohibition on child Labor. The project will put measure to ensure that the law is adhered to during the preconstruction, construction and operation phase of the project. Only persons who have

	attained the required legal age should be employed or engaged in the project activities from the construction, operation and decommissioning phases.
South Sudan Durable Solutions Strategy and Plan of Action for Refugees, Internally Displaced Persons, Returnees and Host Communities, 2024	This is a framework designed to provide sustainable solutions for refugees, internally displaced persons (IDPs), returnees, and host communities. It aims to create conditions for safe, dignified, and voluntary returns, local integration, and recovery. The strategy is guided by the Revitalized Agreement on the Resolution of the Conflict in South Sudan (R-ARCSS) and involves a government-led process with participation from various stakeholders. It is anchored on the R-ARCSS and aligns with international frameworks like the UN Secretary-General's Action Agenda on Internal Displacement. The proposed SRCSSP comprise the key objectives and priority actions for ensuring safety and wellbeing of the refugees, and returnees. These are illustrated as follows. **Objectives include** • To establish a framework supporting durable solutions for displaced populations. • To guide government and partners in coordinating efforts for safe returns and integration. **Priority Actions:** • **Secure Environment:** Create a secure and safe environment for achieving durable solutions. • **Basic Services:** Provide basic services to support and sustain durable solutions. • **Integration and Livelihoods:** Support integration of refugees, IDPs, returnees, and host communities, and improve their livelihoods. • **Institutional Strengthening:** Strengthen government capacities and relations at all levels.
Government of South Sudan Pledges Global Refugee Forum 2023	The Government of South Sudan made significant commitments at the 2023 Global Refugee Forum (GRF), building on its previous pledges from 2019. These pledges are part of the country's broader strategy to enhance services for refugees, internally displaced persons (IDPs), returnees, and host communities. These pledges are aligned with the Revitalized Agreement on the Resolution of Conflict in South Sudan (R-ARCSS) and the Revised National Development Strategy (R-NDS) 2021-2024. The National Technical Committee on Durable Solutions (NTC) plays a crucial role in coordinating these efforts, supported by UNHCR and IGAD **The** proposed SRCSSP is aligned to the **key pledges and commitments namely** **Education and Livelihoods:** The government pledged to increase access to quality education for refugees and host communities.

	Expand economic opportunities to ensure equitable economic development in refugee-hosting areas. **Environmental Sustainability:** Commitment to provide sustainable and green energy solutions for refugees and host communities. **Statelessness:** Address statelessness by acceding to the 1954 and 1961 Conventions and adopting a National Action Plan to eradicate statelessness. **New Initiatives:** South Sudan committed to six new initiatives aimed at enhancing services for refugees and host communities, aligning with the Global Compact on Refugees and the country's national development strategies.

GoSS of South Sudan is also a signatory to other international agreements. A review of policies and frameworks is shown in the Table 2

Table 2 Policy Framework (International)

Framework	Description
African Convention on the Conservation of Nature and Natural Resources 1969	The African Convention on Nature and Natural Resources emphasizes the need for conservation, utilization, and development of natural resources in Africa by scientific principles and with due regard to the best interests of the people. It requires parties to establish land use plans based on scientific investigations when implementing agricultural practices and agrarian reforms. Projects should utilize agricultural scientific knowledge and interventions in the conservation, utilization, and development of natural resources.
United Nations Convention to Combat Desertification (UNCCD) 1996	The main goal is to combat desertification and mitigate the effects of drought in countries seriously affected by droughts, especially in Africa, Latin America, the Caribbean, Asia, and the Northern Mediterranean. The Convention seeks to achieve this objective through integrated approaches to development, supported by international cooperation and partnership arrangements, in the affected countries. It emphasizes long-term strategies that focus on improved productivity of land and the rehabilitation, conservation, and sustainable management of land and water resources, leading to improved living conditions, in particular at the community level.
United Nations Framework Convention on	The Convention seeks to regulate levels of greenhouse gas (GHGs) concentration in the atmosphere, to avoid the occurrence of climate change at levels that would harm economic development or that would impede food production. The Convention is founded on the

Framework	Description
Climate Change (1992)	principle that contracting parties should take action, in respect of their economic and social activities, and about the Convention's specific requirements, that will protect the global climate to ensure sustainable development.
The Nile Treaties	The riparian countries are under obligations under general international law to permit the lower riparian States an equitable share of the water, but the exact modalities are subject to negotiations. The Nile Basin Initiative is currently addressing the issue of equitable utilization of the common Nile Basin water resources. The Nile Basin Initiative (NBI) seeks to harness the tremendous potential of the Nile for the benefit of the people of the Basin, both for now and for generations to come. This becomes a major challenge because as economic development accelerates, population increases, and demand for water grows. NBI's Shared Vision is to advance the concept of sustainable economic development from the use of the River Nile waters for the benefit of all people of the Nile basin
The World Heritage Convention	The Convention sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them. By signing the Convention, each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage. The Convention stipulates the obligation of States Parties to report regularly to the World Heritage Committee on the state of conservation of their World Heritage properties.
The United Nations Framework Convention on Climate Change (UNFCCC)	The UNFCCC's goal is to prevent "dangerous" human interference with the climate system. The ultimate objective of the Convention is to stabilize greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with the climate system." It states that "such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner.
Basel Convention	The overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of hazardous wastes. Its scope of application covers a wide range of wastes defined as "hazardous wastes" based on their origin and/or composition and their characteristics, as well as two types of wastes defined as "other wastes" - household waste and incinerator ash. The provisions of the Convention Centre around the following principal aims: This is considered in the pest management in agricultural production

Framework	Description
Convention on the Rights of the Child	The Convention on the Rights of the Child from 1989 is the most comprehensive compilation of international legal standards for the protection of the human rights of children. It acknowledges children as individuals with rights and responsibilities according to their age and development, as well as members of a family or community. This includes non-discrimination, the best interest of the child, the right to life, survival and development and the right to participation. South Sudan has been party to the Convention since 23 January 2015.This is to ensure that child labour will not be practiced in the project Activities
ILO 182 Worst Forms of Child Labor Convention (1999)	The convention calls for immediate action to prohibit and eliminate the worst forms of child labor. The predefined forms of child labor include all forms of slavery, trafficking of children, debt bondage or any other form of bonded labor, forced or compulsory labor, and commercial sexual exploitation of children, prostitution and the production of pornography, as well as work that is likely to harm the health, safety or morals of children. South Sudan ratified the convention in 2012.
Convention on the Elimination of all forms of Discrimination against Women	CEDAW places explicit obligations on states to protect women and girls from sexual exploitation and abuse, among other issues. South Sudan ratified the CEDAW in 2014. The accession to CEDAW enabled the country to address issues of customary law involving women's right to inherit and own productive assets, as well as their lack of voice and decision making in family and community matters and the denial of their right of choice to found a family especially in rural settings.
ILO Convention 111 on Discrimination	The convention calls upon states to enable legislation prohibiting all forms of discrimination and exclusion on any basis, including race, sex, religion, etc. South Sudan ratified the convention in 2012.
The African Development Bank (AfDB) Environmental and Social Safeguards	The integrated Safeguards System (ISS) promotes growth that is socially inclusive and environmentally sustainable through the implementation of the 5 Operational Safeguards. The aim is to identify environmental and social risks and impacts, reducing development costs, and improving project sustainability. Therefore, benefiting project targeted beneficiaries and ensure environmental conservation. This ESIA report has an embedded ESMP which has been prepared to forestall environmental and social impacts that will arise during the development and operational implementation of this project and has suggested mitigation measures to address those impacts.

The project was also reviewed taking into account AfDB operational safeguards shown in the Table 3

Table 3: AfDB Operational Safeguards

Operational safeguard	Triggered	Policy objectives	Trigger for the policy
OS1- Environmental Assessments	**YES**	To identify and assess the environmental and social impacts (including gender) and climate change vulnerability issues of Bank lending and grant-financed operations in their area of influence To avoid or if not possible minimize, mitigate and compensate for adverse impacts on the environment and on affected communities; To ensure that affected communities have timely access to information in suitable forms about Bank operations and are consulted meaningfully about issues that may affect them	This OS is triggered and the reason for the Environmental and Social Screening Process. It will assist in the categorization of the project based upon its potential environmental and social risks and impacts Observed.
OS2 **Involuntary Resettlement: Land Acquisition, Population Displacement & Compensation**	**NO**	To avoid involuntary resettlement where feasible, or minimize resettlement impacts where involuntary resettlement is unavoidable through project design; To ensure that displaced people receive significant resettlement assistance, preferably under the project, so that their	This OS is NOT triggered as the projects does not require the involuntary acquisition of land, involuntary acquisition of other assets or restrictions on land use and on access to local natural resources which result in: Relocation or loss of shelter by the people in the project area;

Operational safeguard	Triggered	Policy objectives	Trigger for the policy
		standards of living, income earning capacity, production levels, and overall means of livelihood are improved beyond pre-project levels; To set up a mechanism for monitoring the performance of involuntary resettlement programs in Bank operations and remedying problems as they arise to safeguard against ill-prepared and poorly implemented resettlement plans	Loss of assets or restriction of access to assets including national parks, protected areas or natural resources; or Loss of income sources or means of livelihood due to the project, whether or not the PAPs are required to move.
OS3 Biodiversity and Ecosystem Services	**NO**	To preserve biological diversity by avoiding, or if not possible, reducing and minimizing impacts on biodiversity; In cases where some impacts are unavoidable, to endeavor to reinstate or restore biodiversity including, where required, the implementation of biodiversity offsets to achieve "not net loss but net gain" of biodiversity; To protect natural, modified and critical habitats; To sustain the availability and productivity of priority ecosystem services to maintain benefits to the affected	This OS is NOT triggered as the project is to be located in a habitat where with limited potential biodiversity impacts and the area does not provide ecosystem services upon which potentially affected stakeholders are dependent for survival, sustenance, livelihood, or primary income, or which are used for sustaining the project. There is limited extensive interference with the ecosystem.

Operational safeguard	Triggered	Policy objectives	Trigger for the policy
		communities and to sustain project performance. To inhibit introduction of new organisms into a local environment	
OS 4: Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials	**YES**	To manage and reduce pollutants likely to be caused by a project so that they shall not pose harmful risks to human health and the environment, including hazardous, non-hazardous waste and GHG emissions. To set a framework for efficiently utilizing all a project's raw materials and natural resources especially focusing on energy and water.	This OS is triggered as the project is likely to cause significant adverse environmental or social impacts owing to the emission of pollutants, waste or hazardous materials.
OS 5 Labour Conditions, Health and Safety	**YES**	To protect the workers' rights and to establish, maintain, and improve the employee-employer relationship; -To promote compliance with national legal requirements and provide due diligence in case national laws are silent or inconsistent with the OS; -To provide broad consistency with the relevant International Labour Organization (ILO) Conventions, ILO Core	This OS is triggered as the project involves the establishment of a temporary and/or permanent workforce.

Operational safeguard	Triggered	Policy objectives	Trigger for the policy
		Labour Standards and the UNICEF Convention on the Rights of the Child in cases where national laws do not provide equivalent protection; -To protect the workforce from inequality, social exclusion, child labour and forced labour; and	

4.2. Institutional Framework for ESIA Implementation

Ministry of Environment and Forestry

The Ministry of Environment and Forestry is the competent government Authority in South Sudan regarding environmental matters. It is, therefore, the responsible ministry in the ESIA process. It ensures that the proponent complies with the requirements of the ESIA process; maintains the operations and consultations between the different sectorial agencies throughout the ESIA process and maintains a close relationship with the proponent as well as providing guidance on the process. The Ministry evaluates and takes decisions on the documents that arise from the EIA process, including site visit, monitoring and auditing of environmental performance of the project (periodic and independent re-assessment of the undertaking).

Ministry of Agriculture and Food Security (MAFS)

The Ministry of Agriculture and Food Security (MAFS) is responsible for promoting agricultural development and improving livelihood of the populations. Based on the stakeholder consultations, the Ministry is planning to transform agricultural practices from subsistence to modern, market-oriented sector that involves mechanization and use of improved seeds that are drought resistant. The proposals align with the proposed SRCSSP project components including support for smallholder and large-scale farming to increase food production, investment in agroforestry, seed multiplication and storage.

Ministry of Water Resources and Irrigation

The proposed SRCSSP prioritizes investments in drilling boreholes, establishing infrastructure for distribution of water and flood control infrastructure. These initiatives are primarily domiciled at the Ministry of Water Resources and Irrigation (MWRI) in

South Sudan, which is responsible for managing the country's water resources to support sustainable development, agriculture, and livelihoods. The ministry is responsible for developing and implementing policies, guidelines, master plans, and regulations for water resources development, conservation, and management and oversees the design, construction, and management of dams and other surface storage infrastructure for irrigation, human consumption. Therefore, it would be important to collaborate with the ministry and adhere to the safety standards regarding the establishment, supply and utilization of water resources in the project sites.

Ministry Of Education

The proposed project has components on improvement of infrastructure for education. Ministry of Education is responsible for primary and secondary education, aims to provide equitable access to quality lifelong learning opportunities for all, including developing policies, managing the education system, and ensuring teacher training and deployment

Ministry Of Health

The proposed project has components on ensuring equitable, accessible, and quality healthcare for all citizens, focusing on improving health outcomes and strengthening the health system through policy development, service delivery, and capacity building

Commission for Refugee Affairs (CRA)

The Commission for Refugee Affairs (CRA) is the national agency responsible for managing all issues related to refugees, including regulating their presence and legal status, and coordinating with other government bodies and international organizations

CHAPTER FIVE: STAKEHOLDER INVOLVEMENT

5.1. Introduction

The stakeholder's consultation is enshrined in the South Sudan constitution, and is part of the decision-making process, which allows integration of diverse views and perceptions of the project by stakeholders, creating conditions suitable for implementing the project and its integration at community and national levels. Consultation with the public and stakeholders is considered as an important activity of the environmental assessment study for the project. It provides valuable input to bring about sustainable and acceptable project design as well as ease of implementation and operation to user community. Consultation with the public in the project area were made at the project site and through key informant interview and focused group discussions.

Public consultation in this project was done with the following aims:

- To inform stakeholders namely host communities, refugees, government agencies and humanitarian agencies about the proposed project and its objectives.
- To seek views, concerns and opinions of local residents and other people around the proposed project sites
- To establish if the stakeholders foresee any positive or negative environmental effects from the proposed project activities and if so, how they would wish the perceived impacts to be addressed.

Objectives of Public participation

The specific aims of the consultation process during the EIA study stage were:

- To inform the local people, entities and other stakeholders about the proposed project;
- Obtain the main concerns and perceptions of the population and their representatives regarding the project.
- Obtain opinions and suggestions directly from the affected communities on their preferred mitigation measures;
- To find out if there are issues or places of cultural/or religious importance to the local communities that could be negatively impacted upon by the project and infrastructure; and
- To improve project design and, thereby, minimize conflicts and delays in implementation;

5.2. Stakeholder Identification

Prior to detailed design and implementation, extensive consultations were held with stakeholders to gather information about the selected project site and to get the consensus and involvement of the various players, including identifying and coming up with the mitigation measures to address social and environmental concerns.

During the stakeholders' consultations and engagements with local authorities, the overview of the proposed project and objective of the ESIA was presented. Furthermore, the challenges that could impede the implementation of the project and the support needed from all stakeholders to ensure smooth implementation were also discussed.

Stakeholder engagement methodology

The following methods were used to gather information from the stakeholders:

- Key informant interviews.
- Observations; and
- Public participation was mainly achieved through direct interviews, observations.

5.3. Stakeholder engagement plan

Stakeholder consultation was conducted from March 26th 2025 – 1st April 2025. A combination of KII and FGDs were utilized targeting various stakeholders namely, GoSS (Ministry of Education, RCC), LWF, RI, Payams, County government officials, WFP, CEN radio Salam, CRA, Local police, School management committee, refugee and host communities.

The Table 4 shows the stakeholder consultation plan in Maban and the dates.

Table 4: Public consultation Maban

Local Government and local administration units		**March 26**
CRA	Key Informant Interview (KII)	Afternoon hours
County officials/RRC		Afternoon
Relief International (RI)	KII	Evening
Refugee & Host communities		**March 27**

Kaya Refugees	FGD	morning
Jinkuata Payam	FGD	Mid morning
Batil market traders and vendors	FGD	Afternoon
Batil livestock farmers and traders	FGD	Afternoon
Host community & Refugees		**March 28**
Women & Youth self-help groups organisations, associations and subsistence farmers (Host)	FGD	Morning
Batil Camp CECs, Sheikhs, Umda & refugee huosehold representatives	FGD	Mid Morning
Batil SME (Business Guarantee) & TVET trainees (Both host & refugees)	FGD	Afternoon
Transect walk through Batil Market Center and camp		Evening
Host community & Refugees		**March 29**
Transect walk along the main water channel that leads to flooding in Maban		Morning
Visit to supplies of stationary to schools in Maban		Mid morning
Host community & Refugees		**March 31**
Gendrassa SME(business guarantees) & TVET trainees (Host & Refugees)	FGD	Morning
Gendrassa Camp CECs, Sheikhs, Umda & refugee huosehold representatives	FGD	Mid morning
Kaya SME(business guarantees) & TVET trainees (Host & Refugees)	FGD	Afternoon
Transect walk to Kaya & Gendrassa market center		Evening
Host community & Refugees		**April 1**
Doro School Management committee, teachers, LWF	FGD	Morning
Doro SME & TVET trainees (Host & Refugee)	FGD	Mid-morning
CEN Radio Salam	KII	Afternoon
WFP	KII	Afternoon

The stakeholder engagement sessions are illustrated in the

Figure 5

Figure 5: Stakeholder consultation in pictures

KII with radio Salam station manager

FGD session

Findings of the stakeholder consultation forums are summarized below

KII WITH COMMISION FOR REFUGEE AFFAIRS (CRA) ON 26TH MARCH, 2025

- CRA monitors and supervises activities of humanitarian organization.
- Provide conducive environment for actors in the humanitarian sector.
- There are 4 refugee camps in Maban county namely Doro, Batil, Kaya and Gendrassa.
- WFP provides food to refugees. The refugees are entirely dependent on the food rations and do not do any work to sustain themselves.

- Vocational trainees have been graduating with those from Doro graduating on 26th March, 2025.
- Both host community and refugees should be included in the trainings.
- Trainings aimed at making beneficiaries to be self-sufficient and reduce dependence on WFP food rations.
- NGOs should consider giving jobs such as electrical installation and plumbing to the beneficiaries of the training.
- Despite the fact that skills have been acquired, there is no capital for the beneficiaries to start up own enterprises.
- Putting up businesses will improve the likelihood of community members.
- Kaya camp experiences most floods. The dykes constructed by refugees often lead to flooding on the host community. To avoid this engagement should be done to both refugee and host communities before construction of dykes. Dykes not done to completion usually affect those residing downstream.
- Such engagements of both parties will also minimize instances of conflicts related to land.
- Disaster management committee has been empowered to dig up drainages and build dykes.

DISCUSSIONS WITH COUNTY LEADERSON 26TH MARCH, 2024

- RI facilitated trainings for both refugee and host communities from October to December 2024. Graduation ceremonies have been held.
- The trainings are important in the sense that they empower locals with skills in the 5 traits; Plumbing & pipe fitting, electrical installation, Digital Learning (computer), Catering /Bakery and Cosmetology/Hairdressing.
- The project has also overseen issuance of revolving grants which are passed on to new beneficiaries after one year.
- Computers, Wi-Fi and trainers are available. Both teachers and students at the school are benefiting from this training.
- The leaders welcomed the idea of transfer of grants as it would ensure more people benefit from the program.
- The leaders did not anticipate any conflict arising from the implementation of the project. They believe that stakeholder engagements before the commencement and during implementation of the project will sort issues relating to conflicts.

The leaders had the following recommendations:

- Increase the number of beneficiaries in the project; both for grants and vocational trainings.
- Consider both refugee and host communities for the project. The feeling is that more advantage is given to refugees.

- Engage community leaders before implementation of the project.
- Increase the learning time to at least 6 months to ensure that trainees grasp the skills and knowledge effectively.
- Include community's members who are not learners as beneficiaries to the digital learning. Schedules can be made separately for both students and non-students to avoid conflicts of any nature.
- Flood issues should be well addressed. Early preparation of dykes should be done. The current dyke should be extended further.
- At the end of dykes water pans (Hafir) should be done so as to harvest and store water that can be used for irrigation of crops and watering livestock during dry seasons.

DISCUSSIONS WITH HEALTH PROVIDERS (RI – Relief International) ON 26TH MARCH, 2025

- RI deals with Health, Food security and WASH issues.
- On **Health and Nutrition** IR piloted integration of kitchen gardens to ensure food security and dieting to reduce malnutrition (especially for under 5s) at household level.
- High birth rate with low household food levels mostly affects children under 5 and lactating mothers.
- Under the **Targeted Supplementary Feeding Program (TSFP)** pregnant and lactating mothers are referred to 'agrinutional' centers where they are provided with vegetables and vegetable seeds for kitchen gardening. This is in a bid to solve malnutrition and anemic issues witnessed in the camp.
- Provision of seeds is done to farmers through seed fairs.
- Horticultural farmers are supported with farm inputs to boost agribusiness.
- Community encouraged to plant drought weather resilient crops such as sorghum.
- Value addition is low as farmers lack knowledge on turning food into more storable forms.
- On curative treatment it is recognized that food is important in boosting immunity.
- Inadequate land for cultivation, floods and low yield have posed a great threat to communities living in Maban in terms of food security.
- Refugees have no stable sources of income that can sustain their families.
- Grants can be used to star up businesses and the profit used to purchase food for households.
- For morbidities, Diarrhea is common especially among children. Malaria is as a result of stagnant water and conditions of houses which make it easy for mosquitoes to access and bite the occupants. Pneumonia is also experienced as

a result of the poor housing conditions. All these illnesses have a potential of slowing productivity.

- The kitchen garden initiative has been taken to schools to provide vegetables to students.
- There is high demand for **energy** used in food preparation. Woodlots were created to cater for communities' firewood needs. Use of solar energy (E – Cooker stoves) in health facilities to boil milk for newborns has led to reduction in use of charcoal and promotion of clean energy.
- Pilot project was done on making briquette using organic matter.
- Support reafforestation activities in the camps. RI has 2 tree nurseries with a capacity of producing over 80,000 assorted tree seedlings per year. The seedlings are donated to residents to plant at household and woodlot levels.
- Donated fruit trees have also led to increased food security as fruits such a guava, Paw Paw and mangoes can be harvested and consumed at the household level. Surplus is taken to the market to earn the farmers a living.
- On **Economic Inclusion**, skills obtained through vocational trainings empower beneficiaries to be dependent and able to earn a living.
- VSLA activities provide access to loans and savings. Loans have been used to set up business enterprises.
- Trainings on financial literacy and provision of revolving grants have empowered community members. The revolving grant has shown a success rate of over 80%. Camp executive council and food security help in tracking and recovery of grants.
- Disaster management committee has been empowered to detect risks and enhance early warning systems. They have been trained to prepare and respond to flooding incidents.

Recommendations:

- Train farmers on value addition to locally produced food.
- Create market for local produce to sustain livelihoods.
- Engage RCA, RCC and other government officials to allocate more land to refugees.
- Have mare sustainable projects based on health needs with focus on impact ratio.
- Invest in rain water harvesting to ensure farming throughout the year to enhance food security and livelihood.
- Improve road infrastructure. During rainy seasons food commodity prices go up as a result of poor roads.
- Construct the bridge to increase access to farmlands.
- Construct an abattoir to increase the sanitary conditions under which meat is handled.

- Collaborate with WFP to support food production.
- Encourage production of root tubers such as cassava and potatoes. These can be planted year in year out and value can be added to them.
- Support fight against malnutrition and child mortality.
- Improve household conditions to curtail spread TB and other respiratory diseases. Proper screening and mass education should be done

FGD AT KAYA COMMUNITY CENTER WITH CECs, CAMP SHEIKHS, UMDA AND REFUGEE HOUSEHOLD REPRESENTATIVES ON 27TH MARCH, 2025.

Benefits of the project include:

- Dykes are helpful in flood mitigation.
- Vocational training leads to acquisition of skills that will enhance self-reliance when it comes to solving projects in the camp (eg plumbing issues) and earn beneficiaries an income through practice.
- Grants from VSLA to be used to set up businesses and help refugees become self-reliant.
- The problem with the projects is that they only benefit a small faction of the community while majority don't get to benefit.

Recommendations include:

- Increase the number of beneficiaries in the trainings.
- Increase grant amount to enable beneficiaries set up more sustainable business ventures.
- Increase the VSLA amount.
- Equip graduates with tools to enable them put their skills to use.
- Extend the dyke and do a water pan to harvest water to be used for agriculture during dry season.
- Support given in times of disaster such as floods should be distributed equally. Complaint was raised about some victims receiving more money or construction wood than others.
- Alongside seeds and seedlings, farmers should be provided with fertilizers to improve productivity.
- Support in terms of water pumps and tractors should be given to farmer groups.
- Close follow up and monitoring of the project to ensure the community benefit.

FGD WITH JINKUOTA PAYAM ADMINISTRATOR, BOMAS/VILLAGE CHIEFS AND PARAMOUNT CHIEFS AT GENTILE PEACE HOUSE HDC

- The project has led to business growth. (VSLA and Grants).

- Revolving the grant ensures continuity and many people are reached. However, it may not be feasible due to possibility of emigration.
- No conflict is foreseen. Leaders should be engaged before rolling out the project.
- Disaster risk reduction committee prepares community for floods by digging channels, and moving community to higher grounds such as the school.
- Floods often wash roads and the ECDE center gets flooded thereby negatively impacting learning.

Recommendations:

- Engage community in deciding for projects that may be beneficial to them.
- Engage the host community more in the projects. The number of beneficiaries from host community should equal that of refugees. Currently more slots are given to refugees.
- Involve more women in decision making and selection done by payam administrators.
- If possible, drill boreholes to address water shortage challenges.
- Rehabilitate foot bridge leading to the farm lands.
- Rehabilitate access roads destructed by the floods.
- Increase number of beneficiaries in the project.
- Improve drainage to better manage floods.
- Focus to be put on training that may benefit community members. Computer training may help the students but may have little impact on the adults.

FGD WITH BATIL MARKET TRADERS AND VENDORS ON 27TH MARCH, 2025 AT CHAMBER OF COMMERCE, BATIL MARKET

- They have experienced business growth. Small scale traders have shown increased purchasing power by buying and stocking more.
- There has been increased cash flow in the community as an effect of the grants and VSLA activities.
- The grants and VSLA activities have also enable traders to explore new markets by dealing in goods that initially they could not due to lack of capital.
- The project will boost agricultural production thereby providing food commodities to be traded on. This ensures business continuity and food security.
- Provision of seeds has also led to introduction of new crops which were initially not grown in the area. An example is the dry okra why was being imported from Khartoum but is currently being locally produced.
- Since land is owned by the host community, they should be engaged prior to the start of the project to avoid land related conflicts.
- Floods may affect farms.
- Conflict and tension may arise since only a few members of the community are selected to benefit from the project.

Recommendations:

- Harvest water to ensure two planting seasons; dry and rainy season.
- Modernize agriculture by providing support in terms of tractors and water pumps to groups.
- Increase the number of beneficiaries.
- Revise selection criteria to accommodate small scale traders.
- Leaders to do early mobilization of farmers.
- Local leaders to avail land for agriculture.
- More training on agriculture to increase productivity.

FGD WITH LIVESTOCK FARMERS AND TRADERS AT BATIL MARKET ON 27TH MARCH, 2025

- Construction of abattoir will improve sanitation and attract more customers.
- The status of the market will increase the status of the market.
- The increased sanitary conditions and grants will attract more traders in the market thereby improving business.
- Dogs and intruders will be kept away from the abattoir hence increasing security and sanitation of.
- There is no foreseen conflict that would arise from the project. Engage payam administrators and other government officials to avoid land disputes.

Recommendations:

- Provide support in terms of grants to purchase animals.
- Construction of abattoirs should consider waste management to control flies and bad smell.

MEETING WITH BATIL CAMP CECs, SHEIKHS, UMDA & REFUGEES HOUSEHOLD REPRESENTATIVE HELD AT BATIL COMMUNITY CENTERS

- The project will enhance environmental conservation the afforestation project.
- Trained farmers gained knowledge on vegetable production, kitchen gardening, farming processes right from preparation of nursery to transplanting and finally harvesting.
- Improved standards of living owed to income earned from sale of vegetables.
- VSLA has been a key economic activity for women especially those who were not engaged in business before. Knowledge gained in savings enabled them save, start up businesses and make profit.
- Families were provided with seedlings for both shade and fruit trees. Farmers are able to harvest fruits such as mangoes and guava and sell them to earn income.

- Dividends obtained during the VSLA sharing out has enabled families to purchase personal supplies, food and livestock.
- The revolving grants have been used to set up business ventures and no issues related to transferring the grant has been witnessed so far.
- Both genders benefited from the technical trainings. The instructors were keen on ladies who took technical courses such as electrical installation which was thought to be for males.
- The training gained gave beneficiaries knowledge that can be helpful when they decide to set up business ventures relating to their area of study for instance starting an electricals and electronic shop.
- Water pans will be very helpful in sustaining agricultural production even during the dry season. Animals can be watered and irrigation farming will also boost food production through vegetable and fruit farming.

Challenges experienced:

- The community is unable to get food to supplement the vegetables eg sorghum.
- Host communities sometimes steal livestock from refugees.
- Planting is restricted to only rainy season. Lack of reliable water sources make it difficult to carry out irrigation farming. This makes it difficult for the farmers to apply the skills and knowledge that they acquired from trainings.
- A good number of refugees have neither livestock nor land to till. This may lead to conflicts with the host communities on land related issues.
- Lack of computers and the inability to obtain them make it difficult for trainees in digital learning to apply the knowledge and skills obtained from trainings.
- There is inadequate infrastructure at the schools. The most affected being the secondary school where water availability is also a challenge.

Recommendations:

- Monitoring of the project should be done to ensure that it is implemented as planned.
- Trainees to be given support in terms of tools and equipment such as computers to enable them practice.
- Peaceful coexistence of the host community and refugees could lead to sharing of resources and shared prosperity.
- Enhanced water harvesting to support agricultural activities such as vegetable farming and livestock (including poultry) farming.
- Increased amount of agricultural land to refugees to enhance food security.
- Increase the number of VSLA groups.
- Increase the number of beneficiaries of the revolving cash grants.
- Increase the number of classrooms and desks in the schools.
- Increase the number of TVET trainees.

- Increase the number of computers used in the training.
- Provide support to farmers in terms tractors and pest management measures.

FGD WITH WOMEN AND YOUTH SELF HELP GROUPS, ORGANISATIONS, ASSOCIATIONS AND SUBSISTANCE FARMERS (HOST) AT GENTIL PEACE HOUSE

- Tree seedling distribution project has provided farmers with fruits for consumption and trading to earn income.
- VSLA has led to self-employment among women. Share out used to buy food, livestock and personal effects to family members.
- Grants have enabled beneficiaries to set up businesses and be self-reliant.
- Water pans have enabled agricultural production; livestock rearing, vegetable such as okra and tomatoes and aquaculture. All these assists in income generation and improve living standards for families.
- Infrastructural development in government promotes good governance and service delivery due to improved work environment.
- Vocational training, business and agricultural support leads to crime reduction since individuals are engaged in income generating activities.

Challenges:

- Refugees receive more VSLA and TVET training support than host communities. This may lead to conflicts since host community already feel that presence of refugees has led to them losing resources such as pasture land and water resources.
- There is no follow up done after distribution of the seedlings to ensure success of the project.
- Termites pose a real threat to crops and trees.

Recommendations:

- Prompt follow ups and monitoring to be done to ensure success of the project.
- Focus on both refugees and host community to benefit on the project.
- Water harvesting structures to be prioritized.
- Support youth initiatives that aim at promoting peaceful coexistence.

FGD WITH BATIL SMALL AND MEDIUM ENTERPRISES (BUSINESS GUARANTEES AND TVET TRAINEES) HELD AT RI TREE NURSERY - BOTH REFUGEE AND HOST COMMUNITIES

- Vocational trainees have graduated.
- Business plans have been submitted to RI awaiting the review process.
- Trainees are glad and thankful for the opportunity as they have acquired import skills. Such skills will be used to earn income and solve problems faced in the

community such as repair of broken pipes and taps. Trainees in catering and baking have learned to prepare meals they never knew to prepare before such as Piza and biscuits.

- Certificates were issued to trainees. These are useful when in search of employment opportunities.
- Some of the graduates have already started applying their knowledge and skills as electrical appliance and phone repair technicians. They decide to do this to earn an income and put their skills to use.
- Revolving grants have enabled them to establish businesses and grow the existing ones.
- Income earned from skills learned in TVET trainings and business support used to cater for family needs and reduce dependance on provisions given by WFP.
- No challenge anticipated in passing of grants to the next beneficiaries.

Challenges:

- Lack of tools and equipment to put the skills to use.
- Training took a short time.
- A beneficiary bought cattle and goats with the grants. Most of the livestock were stolen.

Recommendations:

- Increase training duration to at least 6 months. Currently being offered 3 days a week for 3 months.
- Increase the number of trainees and beneficiaries of the grants.
- Lin graduates with partners who can equip them tools or provide employment opportunities.

NB: all the other FGDS provided findings similar to the ones discussed above.

DISCUSSION WITH LOCAL POLICE

- Chief inspector of police for Maban county mentioned that the police are responsible for ensuring peaceful coexistence between refugees and host communities.
- CRA acts as the link between the police and UNHCR.
- CRA offers mobility support to the officers in case they need to be transported.
- Police have been deployed to the camps to maintain law and order.
- Mobility challenges make it difficult for officers to respond to emergency situations promptly.

- Requesting to be supported with fencing of the police station with iron sheets as currently they are exposed to danger without a fence as some of the community members are armed.

DISCUSSIONS WITH COMMUNITY ENGAGEMENT NETWORK (CEN) – RADIO SALAM- STATION MANAGER

- Radio Salam operates in Maban.
- Helps in awareness creation on the projects undertaken by partners in the county. They gather information on the impact of the projects from refugee and host communities and share with partners.
- Also have programs for youth and women.
- Boda boda program involves of o motorcycle with speaker and stickers mounted on it to pass information to members of communities.
- Skill training and training in agriculture will enable beneficiaries earn income from skills and be able to produce agriculturally. This will lead to increased income generation.
- From their engagement with the community, it is evident that the project is well appreciated and received.
- The grants and trainings have led to creation and expansion of business enterprises.
- Community members would like the numbers of beneficiaries to be increased.
- Financial constraints limit organization's ability to reach everyone.
- Lack of knowledge on the program and spread of inaccurate information leads to loss of trust from the residents. The media can be used to increase awareness and relay information to the listeners hence countering false narratives. Most people trust what they hear from the radio and they get an opportunity to call in live and as questions.

DISCUSSIONS WITH WFP

- Offers interventions in both refugee and host communities. They provide food assistance in kind and in cash to refugees on a monthly basis. Donations in cash are mostly done during the dry season when the roads are in good state and food gets to reach markets.
- Host community is supported to produce food.
- Nutritional support offered to both refugees and hosts in the health facilities. Supplementary feeding is provided for under 2-year-olds.
- School feeding programs done in collaboration with teachers and PTAs. Currently done in 34 schools; 24 in the camps and 10 in host communities.
- Awareness creation through skill transfer on self-sustenance activities such as farming.

- Rations given by WFP can only cover 15 days hence the need for self-sustenance to cover the deficit.
- Training on modern farming practices done in partnership with Relief International and Samaritan Purse.
- School rehabilitation will create a conducive environment for learning.
- WFP forms part of Disaster Risk Reduction Committee and provides empty sacs that are used in flood mitigation.
- There is still more to be done in flood mitigation as floods cut off main supply route hampering food distribution.
- Tillage services should be provided to enhance food production and reduce dependance on rations.
- VSLA will boost income generation and lead to self-reliance.
- Assistance offered should cover both refugees and host community. Consider returnees in all program.

CHAPTER SIX: ANALYSIS OF PROJECT ALTERNATIVES TO THE PROPOSED PROJECT

6.1. Introduction

This section analyses the project alternatives in terms of technology scale and waste management. Alternatives to a proposal can be generated or refined, either directly or by reference to the key issues identified. A comparison of alternatives will help to determine the best method of achieving project objectives while minimizing environmental impacts or], more creatively, indicate the most environmentally friendly or best practicable environmental option.

Based on an environmental standpoint, not carrying out the development ("No Project Alternative") may be the best option, as the sites would remain a relatively undisturbed. However, it is also clear that the sites will continue to be impacted by influx of refugees, returnees and host communities.

Besides, from a socio-economic perspective the "no action" alternative may not be the best alternative as the numerous benefits to be gained from the development both locally and nationally would not be realized and the resources in the area would continue to be underutilized and/ or degraded. In addition, incidences of conflicts between refugees, returnees and host communities over access and control of the existing resources would be rampant. Poverty levels will increase and access to basic services such as decent shelter, health, food and water will not be achieved.

The consultant team assessed several alternatives to the proposed project and associated activities to seek different ways of minimizing impacts on the environment and at the same time achieve its objectives. This not only justifies the course of action (base case) but also enables the risk management to follow a hierarchy of:

- Avoidance: Temporal and spatial;
- Elimination and minimization: non-structural *ex-ante* mitigation
- Elimination and minimization: structural *ex-ante* mitigation
- Elimination and Response: structural *ex-post* mitigation
- Elimination, Recovery and Development: non-structural *ex-post* mitigation

The Alternatives were reviewed considering the following aspects: spatial and temporal aspects, design and technology to be employed, inputs, existence and the base case with mitigation. The stakeholder consultation and site visits during the ESIA provided basis for identifying and qualifying the alternatives.

6.2. Alternative sites

This option involves pursuing the project and the project activities but on a different site to prevent environmental and social impacts that are relevant to the proposed sites. The avoidance of any potential impacts was identified as the main benefit, but this will require the identification of a different site away from the current sites. In the context of the of the proposed SCRSSP, identification, demarcation and allocation of land/sites for installation of facilities for the refugees, and returnees is a lengthy process that is coordinated by the GoSS through the CRA. The land transfer of ownership of these sites were already completed, while some are underway.

Therefore, alternative sites are also not readily available since availability of land is limited and the proposed sites have pre-existing infrastructure for the refugees, returnees and host communities. The selected sites are within or adjacent to the refugee settlements, and completion of the projects would greatly improve well being, peaceful co-existence and integration of the host and refugees. There are no foreseen relocation or destruction of vital ecosystem systems.

In addition, UNHCR and CRA would spend long period of time on design and approvals of the plans by the relevant government departments and host communities. This will increase the cost and require time extension. On the other hand, the war in Sudan is ravaging resulting into influx of refugees and returnees to South Sudan. These people require an urgent assistance and infrastructure to safeguard their rights, the environment and the society where they settle.

6.3. Alternative schedule

This option entails carrying out the proposal at a later time thereby offsetting its impacts to that time. Only benefit is if there are improvements in baseline conditions and technologies that may be involved with the proposal. However, in this case, there are no guarantee and it may only lead delays in development, therefore carrying out the proposed project with mitigation would be a preferred option due to this uncertainty. In addition, carrying out the proposed project at later time may lead to more operational and logistic costs due to increasing inflation and standards of living.

6.4. Alternative design

This option entails undertaking the project but with different infrastructural designs that encompass buildings layouts and location of supporting infrastructure. The presented project design was however achieved by considering the options available that would ensure achieving the humanitarian objectives and avoid or reduce environmental and social impacts as much as possible. in collaboration with CRA settled on the proposed design after thorough consultation with different within the humanitarian context.

6.5. Resource alternative

The materials used to construct the project structures are coarse aggregates of different size, fine aggregates, cement, water, angle iron, sand and selective materials. These materials are sourced from the project surrounding areas. To prevent the occurrence of impacts on the natural environment excessive retrieval of construction materials from one source should be avoided.

The goods and services will be provided by suppliers pre-qualified by UNHCR . The prequalification is based on strict measures that include adherence to the environmental and social safeguards of the UNHCR and AfDB.

The alternatives are analyzed based on the technical feasibility; economic viability and environmental acceptability conditions. They are also compared and analyzed in terms of site location, design type, time schedule, raw materials (resources) availability, climate smart technologies. Finally, the “No Action” alternative has been rejected and the project implementation option is accepted by examining the project benefits to the local community and due to low negative impacts of the project on the environment and the community.

6.6. The no Project Alternative

The No Project Alternative option in respect to the proposed project implies that no humanitarian intervention relating to the SCRSSP will be achieved. This option is a suitable alternative from an extreme environmental and social impact perspective as it ensures returning the site to its previous natural condition. Under the No Project Alternative, the proposed project would not be constructed and services will be foregone and the anticipated impacts however minimal resulting from provision of goods and services, and civil works will not occur. This option however involves several losses not only to the project but also to the GoSS, the refugees, host communities and returnees.

The socio-economic impacts resulting from the site activities will not be realized, and the vision for a peaceful coexistence, economic stability and safe integration of the returnees will be foregone. The economic benefits especially during provision of services and goods aimed to alleviate suffering as well as provision of jobs for skilled and non-skilled workers, vocational training and expansion of the agricultural sector will not be realized.

The anticipated country’s response to humanitarian need and refugee crisis may not be realized. On the other hand, the anticipated insignificant environmental impacts resulting from construction, and operation activities would not occur. From the above analysis it becomes apparent that the No *Project Alternative* is the least favorable to the UNHCR , GoSS, local population, returnees and refugees in general. This option is best

adopted more so if the project sites are ecologically fragile. However, based on site investigations and stakeholder consultations, the sites are not fragile and have been carefully selected in collaboration with the host communities and the CRA.

The advantages of 'No Action Alternative' include:

- Minimum environmental and social disturbance

Disadvantage of 'No Action Alternative' include:

- The humanitarian gains as a result of implementation of the proposed SCRSSP project in Maban are foregone
- The refugees who are arriving from Sudan as well as returnees and host communities in South Sudan continue to live in deplorable environment, overstretched facilities such as health, education and sanitation facilities.
- Prevalence of conflicts between the host communities and refugees,

6.7. The proposed development

This option means that the ESIA report for the proposed SCRSSP will be presented to the AfDB and the ESMP will be implemented during the entire project cycle to prevent any adverse social and environmental impacts. The implementation to ensure that all environmental measures are complied with during provision of goods and services, and civil works. The alternative consists of the 's and CRA's final proposal with the inclusion of the AfDB and GoSS guidelines and regulations and procedures.

This Environmental Assessment report addressed both environmental and socio-economic issues concerned with its development and operation. Environmental issues have been given due consideration during project design, making the benefits of the project to be maximized, while reducing the environmental and social cost of the development.

Considering environmental and social-economic concerns, the project sites were determined to be more suitable due to availability of land, the land use system, accessibility, potential use and acceptability by all the stakeholders.

6.8. Analysis of alternative construction materials and technology

There is a wide range of construction and furnishing materials which can be sourced locally most of which shall be low maintenance and environmentally sound. The proposed project components that entail civil works will be constructed using concrete, natural stones for the foundation, cement for plaster works, structural steel, metal scaffolds (height access) and formwork. The concrete foundation will be built using locally sourced sand, cement, metal bars and fittings that meet the GoSS standards.

The metal scaffolds will be advantageous than timber because it will reduce the wasting of precious trees, has a longer lifetime, provides a steady and firm standing, easily assembled and dismantled and it increases the work efficiency.

The goods and services will be provided by prequalified suppliers, selected by UNHCR through a vigorous and competitive process.

6.9. Domestic wastewater management alternatives

Two most suitable technologies are discussed below: -

Alternative one: Connection to sewer system

Connection to a main sewer line will solve the waste water management issue at a very minimal cost and in an environmental efficient manner. Currently this option is not possible since the sewer is not available. The recommended course of action for this site would be to consider connection to soak pits

Alternative two: Use of Soak pits/Pit latrine

This involves digging of a pit and filling with gravel/stones of different sizes in order to absorb waste water. In the absence of a sewer line, this remains the most appropriate option for the developer.

Solid waste management alternatives

An integrated solid waste management system is recommendable. First, the proponent will give priority to Reduction at Source of the materials. This option will demand a solid waste management awareness programme in the management and the residents. Secondly, Recycling, Reuse and compositing of the waste will be the second alternative in priority. This will call for a source separation programme to be put in place. The recyclables will be sold to waste buyers within the surrounding areas. Finally, disposal in dumpsites will be the last option for the proponent to consider.

CHAPTER SEVEN: IDENTIFICATION, ANALYSIS AND ASSESSMENT OF POTENTIAL IMPACTS

7.1. Introduction

This part includes impacts during implementation/civil works, operation phase and decommissioning phases on the following issues: soil degradation; air quality; noise; water resources; solid and liquid waste management; drainage, terrestrial ecology, visual and landscape; public comfort; occupational health and safety. Most of these key issues were identified during the scoping exercise and are clearly elaborated as follow:

7.2. Impact Identification

Sources of Impacts

The impacts associated with the proposed project components in Maban, will emanate mainly from *project inputs*, *activities and outputs*.

These will be related to the following activities

- Sourcing and extracting materials
- Transportation of materials to the site
- Construction activities
- Handling of construction wastes
- Decommissioning activities

Receptors of Impact

i. Social Environment

The components of human environment that will be affected by the proposed activities are:

- Settlements within project vicinity (mainly comprising host communities and returnees)
- General public occupying and visiting the area
- Public health concern during construction and operation stages

ii). Physical environment

- Soil, water and air are potential of the negative impact.

iii) Biological environment

- These are primarily the vegetation of the area

7.3. Expected Impacts

Positive Impacts

Livelihood improvement and skills development - The project activities target priority sectors such as improvement in agriculture, trade, seed multiplication and post-harvest management for crisis affected communities of refugees and their hosts. The expected skills development and promotion of climate smart agricultural production practices will result to increased income opportunities for the most vulnerable and empower them to create new sustainable and climate responsive livelihood opportunities.

Improvement in infrastructure for health, education, sanitation: The proposed SCRSSP will improve infostructure for essential service delivery systems (health, education, WASH, camp infrastructure, etc.). Specifically, rehabilitation and expansion of the systems and improving access and quality of services will be a significant milestone to improving living conditions of crisis-affected communities;

Enhanced climate resilience and adaptation to climate change – Establishment of environmentally sustainable early warning systems and preparedness measures will greatly lead to enhanced resilience and adaptive capacity of displaced people (refugees) and host communities to climate-related and other environmental risks. In addition, introduction of sustainable energy solutions will reduce reliance on energy solutions such as wood and charcoal.

Institutional strengthening and capacity development: The project will lead to capacity building of key institutions like CRA to facilitate their daily operations to advance peaceful coexistence efforts resulting in improved coping capacities and strengthened peaceful coexistence and social cohesion among refugees and other host communities.

Creation of Employment opportunities -The project will directly create employment for a large group of people both directly and indirectly; this will be in the construction, occupation and decommissioning phases. The project shall provide temporary employment opportunities to the locals as unskilled workers during the construction phase and further professional workers. The resultant effect to the employment of a significant number of people will be improved lifestyles and living conditions and that of their dependents. Benefit is also bound to trickle down to service providers and producers (of raw materials and construction products).

Negative effects

The proposed development may produce some negligible negative environmental and social impacts that may necessitate appropriate mitigation measures. These include but are not confined to;

Noise and Vibration

Relatively low noise levels are expected in all projects involving civil works. Noise control measures should be implemented in the construction area if the noise levels exceed 90dB (A) for a continuous 8 hours exposure. In addition, protection against the effect of the noise exposure among the workers should be monitored. Noise pollution is not foreseen during the operation phase.

Soil Erosion

The project sites are generally dry and there is the increased risk of erosion and increased dust during excavation and movement of the machinery in the proposed sites. Soil movement is also common during laying of foundations (earthworks) for the projects and site clearing. The contractors should adopt comprehensive soil erosion measures that include the following;

Increased Water Demand

The increase in demand for water will occur will occur for all the project components that entail civil works e.g proposed construction and rehabilitation of the various facilities under the SCRSSP. Water will be sourced from existing water yards and boreholes in the project sites. The consultant will also be advised to undertake rain water harvesting during the rainy season to supplement the water supply from the common sources namely boreholes and water yards.

Air Quality (dust pollution)

The civil works on the proposed sites will result to increased dust and gas emissions. Dust particles caused by vibrations of machines and vehicle movement suspends in the air mostly during dry spells.

Fire

Wild fires are common occurrences in areas adjacent to the proposed project sites in Maban. Some of the wildfires are started by human activities or natural causes due to the extreme heat. In addition, fire may be caused by the machineries used during civil works or operations of the installations.

Solid waste

Huge quantities of solid wastes are normally generated from construction activities. Such wastes include stones, wood, broken glasses, containers, rods of metal, pieces of iron sheets etc. There is need for proper management (proper disposal) of the solid wastes expected from the site during construction phase.

Besides, other wastes such as medical waste, menstrual hygiene kits, and other solid waste materials and other sanitation wastes will be generated from provision of goods and services under the project. The situation is further affected by lack of a functional solid waste management system by the public or private sector. Therefore, it is important to put into place practical measures and infrastructure for waste minimization, material recovery, reuse and safe disposal of all types of wastes in the project sites.

Ecological impacts

The sites in Maban have no vegetation of conservation value hence the project will have no impact on ecology. It is however prudent to consider introduction of vegetation on site as part of environmental conservation initiative during the operation phase.

Occupational Health and Safety (OHS)

During civil works there will be increased dust, air and noise pollution. These are considered as negative impacts as they significantly lower the quality of the environment.

Security

The security condition in the proposed project sites is generally volatile. Therefore, it is imperative for the relevant stakeholders comprising UNHCR , GoSS, and contractor to reinforce security measures to avoid any losses or destruction of materials and facilities. This involves employing a guard to control movement within the site especially for the intruders. During Occupation/completion of the project, security of the premise occupants is also paramount

CHAPTER EIGHT: MITIGATION MEASURES

The mitigation measures are provided in Table 5

Table 5: Mitigation measures

Type Of Impact (S)	Proposed Mitigation Measures
Destruction of soil structure and ground profile	• Provision of soil conservation structures on erosion prone areas to control occurrence of soil movement. • Avoid unnecessary movement of soil materials from the site. • Good management of the runoff/storm water to reduce its impact on loose soil especially during the rainy season. • Control construction activities especially during rainy / wet conditions. • Landscaping: Re-surface open areas on completion of the project and introduce appropriate vegetation where applicable. • Provide appropriate drainage systems to manage surface runoff.
Noise and Vibration	• Construction work should be carried out during the specified time i.e. from 0730 hrs to 1700hrs; noise generated during the day is not quite disturbing as compared to it being generated at night hours • Sensitize construction vehicles driver and machinery operators to switch off engines of vehicles when not in use. • Workers should be provided with relevant Personal Protective Equipment (PPE)/ materials such as earmuffs and earplugs; when operating noisy machinery and when in noisy environment. These provide a physical barrier that reduces inner ear noise levels and prevent hearing loss from occurring. • Suppressors or silencers on equipment or noise shields; for instance, corrugated iron sheet structures.

Type Of Impact (S)	Proposed Mitigation Measures
	• Machineries should be maintained regularly to reduce noise resulting from friction. • Manual labour is recommended in the construction phase, to reduce the noise emitted by construction machinery
Increased Water Demand	• Encourage water reuse mostly during construction phase. • Roof catchments of the building structures should be provided with rainwater harvesting systems (gutters, down pipes and water storage facilities) to enhance collection and storage of the run-off. Such water can be used in watering flower gardens, cleaning etc. • Provide notices and information signs i.e. *„keep/leave the tap closed'*, etc. This will awaken the civic consciousness with regard to water usage and management. • Install water-conserving taps that turn-off automatically when water is not in use.
Loss of vegetation Cover	• Designing and implementation of a landscaping programme to help re-vegetate the site after construction activities are completed • Introduction of vegetation (trees, grasses) in open spaces and after completion of construction activities with proper maintenance
Blockage of storm water drains along the road alignment	• Use of reinforced concrete culverts at points of access and exit from the main road alignment • All dug up soil and other loose material on site resulting from site clearance to be promptly removed and appropriately disposed off • Control of construction works during rainy season
Increased surface run-off and soil erosion	• Installation of drainage structures properly and proper management of excavation activities

Type Of Impact (S)	Proposed Mitigation Measures
	• A storm water management plan that minimizes impervious area infiltration by use of recharge areas and use of detention and/or retention with graduated outlet control structures will be designed. • Surface run-off and roof water to be harvested and stored in underground water reservoirs for use in general site cleaning and in the lavatories.
Land degradation / Piling of loose soil and other debris on site	• Use excavated soils (spoils) to fill up abandoned quarries and neighboring gullies that have been left open (backfilling purposes). • All dug up soil to be removed promptly and disposed of to appropriate areas approved by GoSS and relevant agencies • Construction materials to be supplied on demand and right quantities for use in time to avoid pilling of materials on site
Fire Risk	• Workers to be trained on fire preparedness and response • An elaborate fire risk policy to be adopted by the proponent • Liaise with the County fire department in case of emergency • Contractor to station an Environment, Health and Safety Officer in charge during the project implementation period to supervise and monitor implementation of the ESMP specifically environment, health and Safety Components • In addition to the above, the project management should consider the following:- ✓ Conduct regular fire drills/simulations to sensitize workers during construction phase. Adapt an

Type Of Impact (S)	Proposed Mitigation Measures
	emergency response plan for the entire project during operational phase. ✓ Ensure that all firefighting equipment are strategically positioned, regularly maintained and serviced. ✓ Provide fire hazard signs such as 'No Smoking' signs, Direction to exit in case of any fire incidence and emergency contact numbers should be provided. ✓ Provisions of marked fire exits and ensure that all fire exits are unobstructed at all times. ✓ and CRA should collaborate to provide basic fire training targeting selected members from the refugee, returnee and host community to support emergency responses.
Solid Wastes generation	• Install bins for separate collection of dry and wet waste or different fractions of waste in the respective facilities that are constructed or rehabilitated and within the refugee camps. • Encourage youths in the refugee camps, and host communities to embrace waste collection and material recovery as an alternative source of income and where possible train them on value addition, recycling, or repurposing. • Use of an integrated solid waste management system i.e. through a hierarchy of options: reduction, sorting, re-use, recycling (where applicable) and proper disposal • Refuse must be placed in designated skips or bins which must be regularly emptied. These should remain within the demarcated areas and should be designed to prevent refuse being wind-blown • Incorporate suitable facilities for collection, segregation and safe disposal of solid wastes.

Type Of Impact (S)	Proposed Mitigation Measures
	• Temporary toilets to be provided to construction staff and the toilets must not cause pollution to water sources • Ensure a continuous review of waste management procedures with changing technology and regulatory changes. • Use of construction materials that need minimal packaging to reduce packaging wastes on site • Through accurate estimation of the sizes and quantities of materials required, order materials in the sizes and quantities they will be needed, rather than cutting them to size, or having large quantities of residual materials. • Creation of awareness on proper solid waste disposal methods among the construction staff.
Air pollution	• Sprinkling stockpile with water regularly or cover with a membrane to prevent them from being blown away. Sprinkling water on the unpaved surface over which construction vehicles and machinery driven • Workers on site to use nose-muffs during construction works • Covering of all materials/loads leaving or entering the site • Switching off vehicles' engines while refuelling or awaiting to refuel • Regular maintenance of standby generator and run it on good quality fuel; perhaps low sulphur fuel • The Proponent is to install vapour recovery system and train employees on correct filling procedures • Soil compaction

Type Of Impact (S)	Proposed Mitigation Measures
Occupational Health and Safety risks	**<u>During construction</u>** • Appropriate signage and a demarcated construction area must be established around the construction site creating awareness of employees on-site and the public of the potential health and safety risks • All construction employees on-site must be trained in the implementation of effective Health and Safety policies • A First Aid Team must be appointed, trained and equipped with adequate equipment should a health and safety incident occur • All workers and visitors should be provided with appropriate safety/ protective equipment and gear while on site • Contractor to station an Environment, health and Safety Officer in charge during the project implementation period to supervise and monitor implementation of the EMP specifically environment, health and Safety Components • Unattended public access to the construction site to be highly restricted • The and contractor should take appropriate insurance cover for the various project activities and personnel • Ensure that provisions for reporting incidents, accidents and dangerous occurrences during the entire period of construction using prescribed forms obtainable from the Directorate of Occupational Health and Safety Office.

Type Of Impact (S)	Proposed Mitigation Measures
	Operation Phase • Develop and enforce OHS safety procedures, Safety kits and emergency facilities should be provided in case of any accidents and incidents common to projects of such a nature. These should be placed in strategic locations on site • All H&S regulations required in Kenya must be adhered to • Develop and implement workplace health and safety plan • First aid team should be appointed, trained and equipped • Train the employees on workplace safety • Regular inspection and servicing of the equipment must be undertaken by a reputable service provider and records of such inspections maintained • Always ensure general safety and security by providing day and night security guards and adequate lighting within and around the project site • Establish liaison with the UNHCR, CRA and other emergency service providers such as Hospitals and the police.
Insecurity	• Consider installing solar lighting systems and backup generator to ensure steady supply of power to the facilities. • Provide lighting systems that illuminate the area well. Security alarms should be installed in strategic points all over the site area after completion of the project. • Contractor should provide adequate security during the construction period when there is no work going on at the site. E.g. during the night and weekends.

Type Of Impact (S) Measures	Proposed Mitigation
	• Station some guards to man the facilities and install steel gate and regulate movement in and out of the site
Decommissioning of the project	• Develop and implement decommissioning and Rehabilitation Management Plan • This report recommends that an elaborate ESIA must be carried out for the decommissioning activities so as to effectively address the negative impacts that may result from the same. • Assisting those who will still be employed on site to search for alternative employment elsewhere • Contracting of qualified persons to carry out the demolition works • Proper collection, sorting and disposal of all types of resultant wastes • Ensuring that materials that can be re-used are well stored and or transported elsewhere. • Ensuring that any hazardous wastes are carefully removed, sorted and properly disposed of if any

Summary of recommendations for the prevention and mitigation of adverse impacts

- Since the project will provide employment opportunities especially during construction phase, the locals should be given priority during recruitment of local labor force. In relation this, the contractor to work closely with the local administrative in recruitment
- Minimize accidents through proper warning signs, establishing proper emergency handling procedures during construction and operation phase, Warning signs should also deliberately target motorist, the general public and the employees
- Ensure that worker's occupational health and safety standards are maintained through capacity building, proper training, and providing protective clothing

- The proponent/contractor should ensure that the proposed Environmental management plan is fully implemented
- All activities concerning construction and maintenance such as, work execution, site inspection, and material testing, shall be strictly monitored by a qualified engineer and/or project manager. This is important to ensure quality of maintenance works. Engineers and/or project manager shall be trained and experienced enough to judge the appropriateness of the work executed in order to carry out the monitoring.
- Construction activities must be undertaken only during the day i.e. between 08:00 hours to 17:00hours. This will minimize disturbance to the general public within the proximity of the project site.
- All solid waste materials and debris resulting from construction activities must be disposed offsite to approve dumpsites. There should be proper waste segregation to allow for recycling. Some excavation waste such as stone materials should be used for backfilling.
- The Contractor should station an environment, Health and Safety officer to enforce and Supervise the implementation of the ESMP as provided and stipulated in this ESIA report

CHAPTER NINE: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

9.1. Introduction

The Environmental and Social Management Plan (ESMP) has been developed to assist in prioritizing the key findings of the EIA, suggesting necessary mitigation actions and allocating responsibilities and the estimated cost of implementation. From EMP, a schedule for the project implementation could also be drawn that takes into consideration all issues that could develop into serious risks to environment, health and safety during construction and operational phases.

The key aspects of the environmental management plan are based on the following:

- Environmental policy
- Nature and scale of operations,
- Pollution prevention strategies,
- Legal compliance,
- Objectives and targets,
- Employees' involvement

Planning

- Identification of potential impacts and their sources,
- Setting objectives and targets,
- Developing an environmental management programme

Implementation and operations

- Allocate responsibilities and cost involved,
- Undertake training and capacity building,
- Ensure communication at all levels.
- Corrective actions
- Scheduled monitoring and measurements,
- Identification of area not conforming to standards,

- Carry out prevention and corrective measures/actions,
- Carry out environmental audits.

9.2. Construction Phase ESMP

The necessary objectives, activities, mitigation measures, and allocation of costs and responsibilities pertaining to prevention, minimization and monitoring of significant negative impacts and maximization of positive impacts associated with the construction phase as shown in ***Table 6***.

Table 6: Environmental Management Plan for Maban (Construction phase)

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
1. Minimize extraction site impacts and ensure efficient use of raw materials in construction				
High Demand of Raw material	**1.** Source building materials from local suppliers who use environmentally friendly processes in their operations.	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	2. Ensure accurate budgeting and estimation of actual construction material requirements to ensure that the least amount of material necessary is ordered.	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	3. Ensure that damage or loss of materials at the construction site is kept minimal through proper storage.	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	4. Use at least 5%-10% recycled, refurbished or salvaged materials to reduce the use of raw materials and divert material from landfills	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
2. Reduce stormwater, runoff and soil erosion				
Increased storm water, runoff and soil erosion	**1.** Surface runoff and roof water shall be harvested and stored in underground reservoir for reuse.	UNHCR, Project, Management Unit, contractor	Throughout construction period	15,000
	2. A storm water management plan that minimizes impervious area infiltration by use of recharge areas and use of detention and/or retention with graduated outlet control structure will be designed.	The Civil Engineer, Mechanical Engineer and UNHCR	Throughout construction period	

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
3. Minimize solid waste generation and ensure efficient solid waste management during construction				
Increased solid waste generation	**1.** Use of an integrated solid waste management system i.e. through a hierarchy of options: 1. Source reduction 2. Recycling 3. Composting and reuse 4. Combustion 5. Safe disposal in designated sites	UNHCR, Project, Management Unit, contractor	Throughout construction period	10,000
	2. Accurate estimation of the sizes and quantities of materials required, order materials in the sizes and quantities they will be needed, rather than cutting them to size, or having large quantities of residual materials.	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	3. Ensure that construction materials left over at the end of construction will be used in other projects rather than being disposed off.	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	4. Ensure that damaged or wasted construction materials including doors, plumbing and lighting fixtures, and glass will be recovered for refurbishing and use in other projects	UNHCR, Project, Management Unit, contractor	Throughout construction period	8,000
	5. Donate recyclable/reusable or residual materials to local community groups, institutions and individual local residents or home owners (within the refugee settlement and host communities)	UNHCR, Project, Management Unit, contractor	Project completion	0
	6. Use of durable, long-lasting materials that will not need to be replaced as often, thereby reducing the amount of construction waste generated over time	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	7.Provide facilities for proper handling and storage of construction materials to reduce the amount of waste caused by damage or exposure to the elements	UNHCR, Project, Management Unit, contractor	Throughout construction period	12,000

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
	8. Use building materials that have minimal or no packaging to avoid the generation of excessive packaging waste	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
4. Reduce dust emissions				
Dust emission	**1.** Ensure strict enforcement of on-site speed limit regulations	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	2. Avoid excavation works in extremely dry weather	UNHCR, Project, Management Unit, contractor	Throughout construction period	12,000
	3. Sprinkle water on graded access routes when necessary to reduce dust generation by construction vehicles	UNHCR, Project, Management Unit, contractor	Throughout construction period	
	4. Personal Protective equipment to be worn	UNHCR, Project, Management Unit, contractor	Throughout construction period	
	5.construction materials on site to be covered to prevent to be blown off by wind	UNHCR, Project, Management Unit, contractor	Throughout construction period	
5. Minimization of exhaust emissions				
Exhaust emission	**1.** Vehicle idling time shall be minimized	UNHCR, Project, Management Unit, contractor	Throughout construction period	0

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
	2. Alternatively fueled construction equipment shall be used where feasible equipment shall be properly tuned and maintained	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	3. Sensitize truck drivers to avoid unnecessary racing of vehicle engines at loading/offloading points and parking areas, and to switch off or keep vehicle engines while at the site	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
6. Minimization of Noise and Vibration				
Noise and vibration	**1.** Sensitize construction vehicle drivers and machinery operators to switch off engines of vehicles or machinery not being used.	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	2. Sensitize construction drivers to avoid gunning of vehicle engines or unnecessary hooting especially when passing through sensitive areas e.g the refugee settlement, market, host community	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	3. Ensure that construction machinery are kept in good condition to reduce noise generation	UNHCR, Project, Management Unit, contractor	Throughout construction period	10,000
	4. Ensure that all generators and heavy-duty equipment are insulated or placed in enclosures to minimize ambient noise levels.	UNHCR, Project, Management Unit, contractor	Throughout construction period	7,000
	5. The noisy construction works will entirely be planned to be during games time when most learning sessions are not on. Also can be done during weekends (these refer to construction and rehabilitation of school infrastructure, classrooms)	UNHCR, Project, Management Unit, contractor	Throughout construction period	0

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
7. Minimization of Energy Consumption				
Increased energy consumption	**1.**Ensure electrical equipment, appliances and lights are switched off when not being used	UNHCR, Project, Management Unit, contractor	Throughout construction period	0
	2. Install energy saving fluorescent tubes at all lighting points instead of bulbs which consume higher electric energy	UNHCR, Project, Management Unit, contractor	Throughout construction period	5,000
8. Minimize water consumption and ensure more efficient and safe water use				
High Water Demand	**1.** Promptly detect and repair of water pipe and tank leaks	UNHCR, Project, Management Unit, contractor	Continuous	5,000
	2. Ensure taps are not running when not in use	UNHCR, Project, Management Unit, contractor	Continuous	0
	3. Install a discharge meter at water outlets to determine and monitor total water usage	UNHCR, Project, Management Unit, contractor	Throughout construction period	4,000
	4.proper recycling of water from other uses for sprinkling dusty pavements	UNHCR, Project, Management Unit, contractor	Throughout construction period	4,000
9. Minimize occupational health and safety risks				
Unavailability and wrong use of Personal	▪ Always ensure the general safety and security by providing day and night security guards and adequate lighting within and around the premises.	UNHCR, Project, Management Unit, contractor	Throughout construction period	2,000

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
Protective Gear (PPG)	▪ Suitable overalls, safety footwear, dust masks, gas masks, respirators, gloves, ear protection equipment etc should be made available and construction personnel must be trained to use the equipment	UNHCR, Project Management Unit, contractor	Throughout construction period	
Accidents resulting from disregard of Health and safety impacts	• Implement all necessary measures to ensure health and safety of workers and the general public during construction	UNHCR, Project, Management Unit, contractor	Throughout construction period	3,000
Injuries	Well stocked first aid box which is easily available and accessible should be provided within the premises	UNHCR, Project, Management Unit, contractor	Throughout construction period	2,000
	Provision must be made for persons to be trained in first aid, with a certificate issued by a recognized body.	UNHCR, Project, Management Unit, contractor	Throughout construction period	2,000
Fire incidents	Firefighting equipment such as fire extinguishers should be provided at strategic locations such as stores and construction areas.	UNHCR, Project, Management Unit, contractor	Throughout construction period	5,000
	Regular inspection and servicing of the equipment must be undertaken by a reputable service provider and records of such inspections maintained	UNHCR, Project, Management Unit, contractor	Every 3 months	4,000
	Fire escape routes and assembly point to be marked	UNHCR, Project, Management Unit, contractor	Throughout construction period	4,000

Expected Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD)
	Signs such as "NO SMOKING" must be prominently displayed within the premises, especially in parts where inflammable materials are stored	UNHCR, Project, Management Unit, contractor	Throughout construction period	3,000
GBV, teen pregnancy and forced marriages, HIV/AIDs	Awareness creation on thematic issues including prevention of GBV, teenage pregnancies, HIV/AIDs Strengthening local leadership structures to respond to emergencies as well as training on effective conflict resolution both at household level and among the refugees, host communities and returnees.	UNHCR, Project, Management Unit, contractor	Throughout construction period	4,000
Total				121,000

9.3. Project Operation Phase

The necessary objectives, activities, mitigation measures, and allocation of costs and responsibilities pertaining to prevention, minimization and monitoring of significant negative impacts and maximization of positive impacts associated with the operational phase of project components are outlined in Table &

Table 7: Project operation ESMP

Expected Negative Impact	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD) per annum
1. Fire risks	1. Install fire extinguishers 2. mark fire exit points and the fire assembly area	UNHCR & Project Management Unit	Operation phase	4,000

Expected Negative Impact	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD) per annum
	3. Provide sand buckets at strategic locations 4. Workers should be trained on firefighting skills by a qualified trainer 5. Fire drills should be conducted at least once a year 6. A firefighting team should be established 7. Warning and informational signs be displayed appropriately 8. Regular testing and servicing of fire-fighting equipment and appliances			
2. Solid waste Management (Littering, soil, and surface water pollution).	1. Provision of waste collection bins 2. Segregation of wastes at the source 3. Waste should be disposed at the designated site 4. Solid waste should be managed according to the waste management regulations. 5. Prepare a waste management plan; 6. Stop deposition of waste in open pits; open burning or burying of waste 7. Clearly designate and construct an appropriate waste collection facility or provide covered refuse skips; 8. Monitor waste volumes;	UNHCR & Project management Unit	Operation period	7,000

Expected Negative Impact	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD) per annum
3.Waste water management	Conduct wastewater monitoring to check compliance	UNHCR & Project management Unit	Continuous	4,000
4.Workers Welfare (risks such as accidents, disregard of safety and wellness)	1. Provide workers with PPEs 2. Provide adequate washrooms and changing rooms for workers 3. Training of workers 4. Provision of first aid and other welfare facilities 5. Provision of an Insurance cover 6. Regular medical check-ups 7. Respect for workers' rights	UNHCR & Project management Unit	Operation period	5,000
5.Air pollution	1. Ensure that the machines (at the hospital), diesel generators are maintained to manufactures specifications, records maintained and availed whenever, there is need; 2. Ensure that tank vents are located away from sensitive receptors;	UNHCR & Project management Unit	Continuous	4,000
6. Increased Energy Resource Utilization	1. Switch off electrical equipment, appliances and lights when not being used	UNHCR & Project management Unit	Continuous	0
	2. Install occupation sensing lighting at various locations such as storage areas which are not in use all the time	UNHCR & Project management Unit	Operation phase	0
	3. Install energy saving fluorescent tubes at all lighting points within the flats instead of bulbs which consume higher electrical energy	UNHCR & Project management Unit	Operation phase	3,000

Expected Negative Impact	Recommended Mitigation Measures	Responsible Party	Time Frame	Cost (USD) per annum
	4. Monitor energy use during the operation of the project and set targets for efficient energy use	UNHCR & Project management Unit	Operation phase	3,000
	5. Sensitize occupants of the facilities and communities to use energy efficiently	UNHCR & Project management Unit	Operation phase	3,000
7. Increased water demand/Water consumption	1. Promptly detect and repair water pipe and tank leaks	UNHCR & Project management Unit	Operation phase	4,000
	2. Ensure taps are not running when not in use	UNHCR & Project management Unit	Operation phase	0
	3. Install water conserving taps that turn-off automatically when water is not being used	UNHCR & Project management Unit	Operation phase	4,000
8. Increased incidences of social vices (GBV, theft, social intolerance, HIV/AIDs)	Awareness creation on the thematic sectors, namely prevention of GBV, HIV/AIDs) Strengthening of local institutions and leadership structures on conflict resolution, emergency response. Promoting coordination between different actors – NGO and civil society, police and GoSS agencies to promote peaceful coexistence, and minimize insecurity.	UNHCR & Project Management Unit	Operation phase	5,000
Total				46,000

9.4. Project Completion and Decommissioning

Information about the decommissioning of the project at the end of its life cycle and associated impacts, proposed measures to return the site as far as possible to its suitable state, or rehabilitation measures has been elaborated and provided in the Table 8

Table 8: ESMP for Project decommissioning

Parameter	Impacts	Mitigation Measures	Phase	Responsible entity	Estimated cost (USD)
Noise and Dust	Noise and dust pollution	Working during daytime Provide breathing masks to workers	During demolition phase	UNHCR & Project Management Unit	5,000
Solid waste	Environmental pollution	Putting in place proper waste management Systems, including waste recycling and reuse of debris	During decommissioning phase	UNHCR & Project Management Unit	3,000
Workers' Health	Exposure of workers to pollution and accidents during demolition	Workers to be provided with PPEs Training on safe demolition Methods and handling of hand tools.	At the Beginning of decommissioning phase.	UNHCR & Project management Unit	3,000
Rehabilitation	Visual intrusion	Re-contouring by trimming slopes to safe angle All topsoil areas will be vegetated	Decommissioning phase	UNHCR & Project management	5,000

Revegetation of site	Visual Intrusion	Re-grassing of open areas must be completed according to landscaping plans. Areas identified as potentially subject to erosion must be vegetated with indigenous grass species.	Decommissioning phase	UNHCR & Project management	5,000
Removal of all waste building materials and machinery	Land pollution: Visual intrusion	Demarcation of rehabilitated site to prevent access to these areas Appropriate disposal of all leftover material likely to be harmful to persons and nature Removal of all materials that will not be used for other purposes to licensed disposal sites	Decommissioning phase	Proponent	10,000
Total					**31,000**

9.5. The Grievance Redress Mechanism

Grievance Redress Mechanism (GRM) as a systematic process for receiving, evaluating, and facilitating the resolution of affected people's project-related concerns, complaints and grievances about the borrower's/client's social and environmental performance on a project.

The project promoter should be aware of and respond to stakeholders' concerns related to the project in a timely manner. In OS 1, the Bank requires the borrower/client to establish a "credible, independent and empowered local grievance and redress mechanism to receive, facilitate and follow up on the resolution of the affected people's grievances and concerns regarding the environmental and social performance of the project. The local grievance mechanism needs to be sufficiently independent, empowered and accessible to the stakeholders at all times during project cycle and all responses to grievances shall be recorded and included in project supervision formats and reports."

The process by which the GRM is designed should be integrated into the overall approach to project preparation as prescribed in the Bank's ISS. AfDB Guidelines Notes provides guidance on development and Implementation of GRM. It should also be included in the concrete actions required in the Environmental and Social Management Plan (ESMP) for Category 1 projects and, on a case-by-case basis, for Category 2 projects that exhibit specific potential social tensions, in particular risks of the presence of particularly vulnerable groups (refugees, returnees and host communities) in the project's area of influence.

AfDB has also established its own accountability mechanism, the Independent Recourse Mechanism (IRM). The IRM seeks to assess whether a Bank approved project complies with relevant sections of the AfDB's ISS. The IRM makes itself accessible to any group (a minimum of 2 persons living in the project's area of influence) actually or potentially negatively affected by a Bank- funded project. The IRM reports to the Bank's Board of Directors and is thus independent of Bank management. The IRM has been set up by the Bank to achieve more transparency. It is also a costly mechanism to trigger. The establishment of local GRMs can help to alleviate the need for plaintiffs to resort to the IRM, while problem-solving can be more rapidly and cost-effectively done locally. The cultural context in which GRMs operate also helps to defuse complaints and to find appropriate and commensurate solutions.

The grievance redress mechanism will adapt the UNHCR community feedback and referral mechanism while making provision for two tier amicable mediation and settlement. The first tier will involve the grievance redress committee resolving the issue at the community level involving the host community, refugees and returnees. If the issue is not resolved at the local level, then the 2nd tier should involve CRA, UNHCR and the funded partners to constitute an appropriate team including regional/national stakeholders including the Administration head for the area (or his/her representative)

to resolve the matter. When these two tiers of amicable mediation arrangement fail, the complainant is free to seek redress at the court of law.

9.5.1. GRM at project level

The GRM in the proposed project will be adapted under the guidance provided in the Bank's ISS through its (ESIA) Guidelines Notes. The first step is to determine the primary goal of the GRM which would generally be to resolve specific grievances in a manner that meets both project management and community needs, but with important local variations. The scope of the grievances that may legitimately be brought forward by the communities and/or individuals affected shall be defined in advance. That scope will generally cover most, if not all, of the issues raised in a typical Environmental and Social Assessment: natural resources, pollution, cultural property, land acquisition, the welfare of vulnerable groups, etc.

The second step is to design the GRM by:

- Preparing a preliminary design.
- Selecting ways and means to receive, register, assess and respond to grievances.
- Select grievance resolution approaches.
- Design a means to track and monitor grievances.
- Develop the grievance mechanism infrastructure.
- Review and refine the design.

The GRM shall be designed based on the following principles:

1. Involvement of individuals of mixed levels and functions from the entity (, refugees' settlements, Payam, returnees and host community). Staffing the design team from just one function such as community relations or human resources is unwise.
2. The inclusion of a balanced group of representatives from target beneficiaries in Maban while keeping the team small enough to be responsive.
3. GRM Relying upon clear terms of reference and a work plan that outlines team goals, roles, and responsibilities, level of decision-making authority, reporting lines, tasks, time frame, and products.
4. Making the use of multiple channels (e.g., face to face, phone conversation, mail, text or e- mail, message on a dedicated website), sensitive to cultural customs and traditional methods that may influence or impede the expression of grievances.
5. The existence of a central point of contact that will receive complaints and log them into a central register.
6. Existence and operation of designated complaint resolution staff.
7. Processes for acknowledging the receipt of a grievance and informing the complainant about the time frame in which a response can be expected.

9.5.2. Appointing members of Grievance Redress Committees (GRC)

The project will involve the formulation of Grievance Redress Committees (GRCs) at project level in Maban. The consultant recommends the use of existing structures such

as within the Payam e.g the Peace Committee. Generally, the stakeholders including UNHCR funded partners, CRA and UNHCR will take on grievance handling as a responsibility. The GRM members should be qualified, experienced, and competent personnel who can win respect and confidence of the affected communities. It is also important to maintain a gender balance within the GRMs. Criteria for selecting members of GRMs will include the following

- Knowledge of the project, its objectives, and outcomes
- Technical knowledge and expertise to understand project design and requirements;
- Understanding of the social, economic, and cultural environments and the dynamics of the communities;
- Capacity to absorb the issues dealt with and to contribute actively to decision-making processes;
- Social recognition and standing; and
- Equitable representation of males and females.

The GRC at project level shall constitute among other members, members from the (UNHCR, CRA, returnees, refugees, and host communities). The GRC shall have the right to request the project technical staff to attend the meetings and provide information. A complainant has the right to appear in person, to be accompanied by a community member, and/or to request to be represented by a community elder. GRCs shall be established at the project level to assure accessibility for aggrieved persons.

9.5.3. Procedures, complaints channels and time frame for Grievance Redress Mechanisms

As there is no ideal model or one-size-fits-all approach to grievance resolution, the best solutions to conflicts are generally achieved through localized mechanisms that take account of the specific issues, cultural context, local customs, and project conditions and scale. The process by which a complaint will be accepted or rejected needs shall be carefully designed, and shall maximize interactivity and cultural sensitivity. The acceptance/rejection of a complaint will go through a discussion stage where the plaintiff and the **GRM staff** interact on the grounds and motives of the complaint, after which the plaintiff should clearly and transparently be told whether or not the complaint is eligible and will be processed.

The acceptance/rejection of the complaint shall be based on objective criteria that are posted by the GRM, including a written copy displayed in the public access area of the GRM in an appropriate language.

The processing of the complaint, if accepted should go through various phases:

- Filing of the complaint and labelling with an identification code communicated immediately to the plaintiff.
- Assessment of the complaint (including severity of the risk/impact).

- Formulation of the response.

Selection of the grievance resolution approach is a key. There are four general approaches to choose from:

- The project's management proposes a solution.
- The community and the project's management decide together.
- The project's management and the community defer to a third party to decide.
- The project's management and the community utilize traditional or customary practices to reach a solution.

The Bank ISS recommends the application of a "Decide together" approach that is usually the most accessible, natural and unthreatening ways for communities and a project's management to resolve differences. With the potential to resolve perhaps the majority of all grievances, "decide together" should be the center-piece of any grievance mechanism's resolution options.

The grievance mechanism will comprise of the following primary components:

- Receive and register a complaint.
- Screen and validate the complaint (based on the nature and type of a complaint).
- Formulate a response.
- Select a resolution approach, based on consultation with affected person/group.
- Implement the approach.
- Settle the issues.
- Track and evaluate results.
- Learn from the experience and communicate back to all parties involved.

The time for the Grievance Redress Committees to be held shall be agreed and documented, depending on the nature and severity of the complaint. A number of mechanisms will be available to aggrieved parties to access redress. These shall include institutions specific (internal) to a project and set up from its inception or others that might have emerged over time in response to needs identified while the project evolved. Other institutions which are already established within a country's judicial, administrative, and/or political systems and exist outside a project shall also be used. These include the government bureaucracy; judicial institutions; and political institutions such as District Councils, Village Councils, etc. In addition, the Bank itself sometimes shall provide a forum for grievance redress. GRMs shall include avenues for resolving conflicts between aggrieved persons or other stakeholders and can provide information sought by the public on the project.

The channels of presenting complaints could include the presentation of complaints via third parties (e.g., village elites/traditional leaders, community-based organizations, lawyers, non- government organizations [NGOs], etc.); face-to-face meetings; facsimile, telephone, and email communications; written complaints; etc.

If the complainant is not satisfied, the complainant will have to appeal. A summary of the Grievance Redress Mechanism is shown in Table 9

Table 9: Grievance Redress Mechanism

Step	Process	Description	Time frame	Other information
1	Identification of grievance	Face to face; phone; letter, e-mail; recorded during public/community interaction; others	1 Day	Email address; hotline number; Responsible: community leader (host, returnees, refugees)
2	Grievance assessed and logged	Significance assessed and grievance recorded or logged (i.e. in a log book)	4-7 Days	Significance criteria Level 1 –one off event; Level 2–complaint is widespread or repeated; Level 3- any complaint (one off or repeated) that indicates breach of law or policy or this ESIA provisions.
3	Grievance is Acknowledged	Acknowledgement of grievance through appropriate medium	7-14 Days	Responsible: staff, CRA and contractor
4	Development of response	-Grievance assigned to appropriate party for resolution; -Response development with input from management/ relevant stakeholders	4-7 Days 10-14 Days	UNHCR, CRA, Payam
5	Response signed off	-Redress action approved at appropriate Levels	4-7 Days	
6	Implementation and communication of response	-Redress action implemented and update of progress on resolution communicated to Complainant	10-14 Days	

7	Complaints Response	-Redress action recorded in grievance log book -Confirm with complainant that grievance can be closed or determine what follow up is necessary	4-7 Days	Payam, peace committee, UNHCR, CRA
8	Close Grievance	Record final sign off of grievance -If grievance cannot be closed, return to step 2 or refer to sector minister or recommend third-party arbitration or resort to court of law	5 days	Payam, UNHCR, CRA

CHAPTER TEN: CONCLUSION AND RECOMMENDATIONS

Conclusions

The Environmental and Social Impact Assessment (ESIA) for the SCRSSP in Maban has both positive and adverse impacts. The positive impacts include improve cohesion and living standards, as well as environmental protection. The potential adverse impacts include pollution, increased waste and other social challenges like GBV. Nonetheless, these are negligible impacts compared to the net positive gains that will be achieved over the project implementation phase. Therefore, the ESIA study provide a holistic ESMP and action plans for mitigating the adverse impacts.

Recommendations:

Environmental Mitigation:

- Implement sustainable practices in water management and agricultural activities to prevent overuse of resources and environmental degradation.
- Ensure proper waste management and pollution control measures during construction and operation phases.
- Conduct regular environmental monitoring to assess the effectiveness of mitigation strategies.

Social Impact Mitigation:

- Develop and implement a comprehensive stakeholder engagement plan to address community concerns and ensure inclusive decision-making.
- Integrate HIV/AIDS awareness and prevention programs, as well as GBV prevention measures, into community activities.
- Establish a grievance mechanism to handle any social or environmental complaints promptly.