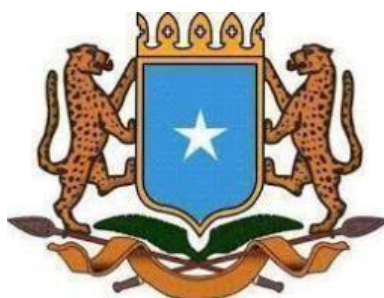


**FEDERAL GOVERNMENT OF SOMALIA**



Ministry of Health and Human Services (MoH)

Improving Health Care Services in Somalia Project (Damal Caafimaad) (P178876)

Environmental and Social Management Plan (ESMP)

Rehabilitation of Kismayo Regional Hospital – Jubaland

Amended 20 November 2025



## Table of Contents

<b>Table of Contents</b> .....	<b>2</b>
<b>List of Tables</b> .....	<b>3</b>
<b>List of Figures</b> .....	<b>3</b>
<b>ACRONYMS AND ABBREVIATIONS</b> .....	<b>4</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>5</b>
<b>1. INTRODUCTION</b> .....	<b>8</b>
1.1 Project Background .....	8
1.2 Purpose of The Environmental and Social Management Plan (ESMP).....	9
1.3 ESMP Approach and Methodology .....	10
<b>2. POLICY AND LEGAL FRAMEWORK</b> .....	<b>11</b>
2.1 NATIONAL FRAMEWORK .....	11
<b>3. BIOPHYSICAL AND SOCIO-ECONOMIC ENVIRONMENT</b> .....	<b>14</b>
3.1 Proposed Sub-Project Location .....	14
3.2 Biophysical Environment .....	15
3.3 Socio-Economic Environment Population .....	20
<b>4. PROJECT DESCRIPTION</b> .....	<b>24</b>
4.1 Kismayo Regional Hospital.....	24
4.2 Proposed Facilities .....	27
4.3 Applicable Design Standards and Codes of Practice.....	31
4.4 Design Functions .....	32
4.5 Project Activities .....	34
<b>5. ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS</b> .....	<b>37</b>
5.1 Positive Impacts Related to the Sub Project:.....	37
5.2 Negative Impacts Related to the Sub Project:.....	37
<b>6. RISKS AND IMPACTS AND MITIGATION MEASURES</b> .....	<b>39</b>
<b>7. IMPLEMENTATION ARRANGEMENTS</b> .....	<b>79</b>
7.1 Government and UNOPS Responsibilities .....	79
7.2 Contractor .....	79
<b>8. REPORTING ON ESMP COMPLIANCE</b> .....	<b>82</b>
<b>9. CAPACITY BUILDING AND TRAINING</b> .....	<b>84</b>
<b>10. STAKEHOLDER CONSULTATIONS</b> .....	<b>85</b>
<b>11. GRIEVANCE REDRESS MECHANISMS</b> .....	<b>89</b>
<b>12. IMPLEMENTING BUDGET</b> .....	<b>92</b>
<b>Annex 1: Stakeholder Consultations</b> .....	<b>93</b>
<b>Annex 2: Environmental and Social Monitoring Template</b> .....	<b>101</b>
<b>Annex 3: Code of Conduct for Workers</b> .....	<b>83</b>

<b>Annex 4: Chance Find Procedures</b> .....	<b>86</b>
<b>Annex 5: E&amp;S Screening</b> .....	<b>87</b>
<b>Annex 6: Emergency Preparedness and Response Plan</b> .....	<b>91</b>
<b>Annex 7: Occupational Health and Safety Plan</b> .....	<b>98</b>

List of Tables

Table 1 Facilities providing health care services on the site .....	24
Table 2 Design functions.....	31
Table 3 ESMP Table .....	40
Table 4 Institutional partners responsibilities .....	60
Table 5 ESMP Monitoring and Compliance Reports .....	63
Table 6 Implementing Budget .....	73
Table 7 Medical Waste Management Plan.....	92

List of Figures

Figure 1 Location of Kismayo Regional Hospital .....	15
Figure 2 Average monthly weather pattern for Kismayo.....	16
Figure 3 Monthly average high and low temperatures in Kismayo .....	17
Figure 4 Temperatures.....	17
Figure 5 Average monthly rainfall for Kismayo.....	18
Figure 6 Daily chance of precipitation in Kismayo.....	18
Figure 7 Humidity levels in Kismayo .....	19
Figure 8 wind speed in mph for Kismayo .....	20
Figure 9 Site Layout .....	24
Figure 10 Existing Facility at Kismayo Hospital .....	25
Figure 11 Proposed Kismayo Regional Existing layout .....	27
Figure 12 Site Demolition Layout .....	28
Figure 13 Proposed ICU and OPDL – perspectives.....	28
Figure 14 Main building ground floor layout.....	29
Figure 15 Measles Ward ground floor layout .....	29
Figure 16 3D view of concept design .....	32
Figure 17 Meeting with women's groups, Kismayo, January 2024.....	68
Figure 18 Meeting with elders, Kismayo, January 2024 .....	68
Figure 19 Stakeholder Engagement meeting .....	69
Figure 20 Meeting with the director general of the facility as part of site assessment and scope of work prioritization .....	6
.....	9
Figure 21 GRM contacts .....	72
Figure 22 Participants list of stakeholder meeting in July 2024.....	74
Figure 23 Stakeholder consultations July 2024 .....	80
Figure 24 Stakeholder Consultations, January 2024.....	80
Figure 25 Meeting with the DG of the Hospital .....	81

## ACRONYMS AND ABBREVIATIONS

CoC	Code of Conduct
E&S	Environmental & Social
EHSG	Environmental, Health and Safety Guidelines
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standards
FGS	Federal Government of Somalia
FMS	Federal Member State
FRS	Federal Republic of Somalia
GBV	Gender-Based Violence
GIIP	Good International Industry Practices
GRM	Grievance Redress Mechanisms
HCF	Health Care Facility
ICU	Intensive Care Unit
IDA	International Development Association
IDP	Internally Displaced Person
IFC	International Finance Corporation
LMP	Labor Management Procedures
MDR-TB	Multidrug-resistant TB
MoH	Ministry of Health
OHS	Occupational Health and Safety
OPD	Outpatient department
OT	Operational Theatre
PCIU	Project Coordination and Implementation Unit
PPE	Personal Protective Equipment
PSEA	Prevention of Sexual Exploitation and Abuse
PV	Photo voltaic
RCH	Reproduction & Child Health
SEA	Sexual Exploitation and Abuse
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SMP	Security Management Plan
UK	United Kingdom
UNOPS	United Nations Office for Project Services
VCT	Voluntary Counselling and Testing
WB	World Bank
WHO	World Health Organization

## EXECUTIVE SUMMARY

The Improving Healthcare Services in Somalia Project (Damal Caafimaad) has been implemented since May 2021 and is planned to end in December 2026. Its Project Development Objective (PDO) is to ‘improve the coverage of essential health and nutrition service in project areas and strengthen stewardship capacity of Ministries of Health’. The project seeks to scale up high-impact health services across the population in project target regions and develop the Federal And State Ministry of Health services across the population in project target regions and develop the Federal and State Ministry of Health capacities to act as stewards of the health sector, effectively governing and building core functions that will be able the Government to lead and manage the sector.

One of the health facilities slated to benefit from this activity is the Kismayo Regional Hospital, which is located in Kismayo, the capital of Jubaland State. Currently, Kismayo Regional Hospital is a referral hospital which operates although some of its infrastructure have high structural safety and integrity concerns hence needs demolition, rehabilitation and reconstruction. This is as per the detailed site and technical assessments conducted by UNOPS. The scope of works to be implemented include:

- Demolitions of army ward building, temporary measles ward building, septic tanks and boundary wall.
- Renovation of Operation theatre (OP) building and external works and relocation of services and;
- Construction of Outpatient department (OPD), Intensive Care Unit (ICU), Oxygen piping and measles ward

The proposed rehabilitation of the Hospital was originally planned under the Somalia COVID-19 Emergency Vaccination Project (P176956), which is a World Bank-funded initiative designed to support the Government of Somalia in addressing COVID-19 through effective vaccine deployment. However, the Project is currently closing, and the planned rehabilitation is shifted to the Improving Healthcare Services in Somalia Project (Damal Caafimaad). The government, through the Ministry of Health, has, with the support of the United Nations Office for Project Services (UNOPS) opted to invest in the refurbishment of health facilities. With UNOPS technical backstopping, the sub-project will enhance health facilities.

This Environmental and Social Management Plan (ESMP) is prepared as a detailed plan to identify and manage the anticipated project environmental and social risks and impacts. To make the plan conclusive, robust and scalable it was prepared in consultation with all the relevant stakeholders within the project scope i.e. the local health authorities governed by World Bank procedures. The demolition and construction works have been designed by UNOPS with input from the local communities and local health authorities governed by detailed technical assessments conducted.

There are significant positive impacts that are expected from the reconstruction of parts of the Hospital. The primary beneficiaries are the surrounding populations that use the Hospital. Adverse risks and impacts are mainly associated with the rehabilitation works and include risks related to occupational health and safety of workers, such as increased level of dust, noise and vibration from moving of vehicles and machinery, community health and safety risk, risks associated with labor rights and management, e.g. child labor and/or forced labor and sexual exploitation and abuse – sexual harassment due to increase in labor related

population in the project site.

Environmental concerns during the demolition and construction process include, for instance, dust and air pollution, as the dismantling of structures generates a significant amount of airborne particulate matter. This dust can affect air quality in the surrounding area, impacting patients, nearby residents, and the workforce. To manage this, dust suppression techniques will be employed, such as regularly spraying water over debris and work areas, which helps reduce dust dispersion. Additionally, barriers will be installed around the demolition site to contain

particles, while all workers will be provided with appropriate PPE, including masks and respirators, to protect them from inhaling harmful particulates.

Noise and excessive vibrations from demolition and construction activities present another significant risk, especially given the proximity of patients and local residents who may be disturbed by the constant sounds of heavy machinery. To mitigate this, works will be restricted to daytime hours to minimize disruption during resting periods. Noise-dampening equipment will be used whenever possible, and communities nearby will be engaged about the nature, duration, and timing of demolition and reconstruction related noise, helping set clear expectations. Workers will also be provided with ear protection, and a buffer zone will be established around the site to shield the community from the brunt of the noise.

Occupational health and safety (OHS) risks are a top priority, as demolition, rehabilitation and reconstruction tasks inherently expose workers to hazards such as falling debris, heavy machinery, waste generation and potential exposure to harmful materials. To address these risks, all workers will undergo safety training covering demolition protocols, construction best international practises and emergency response procedures. Workers will be supplied with essential PPE, including hard hats, gloves, steel-toed boots, and safety harnesses for high-risk related tasks. Clear access controls will be set up to prevent unauthorized entry into the work zones, and first-aid facilities will be available onsite for immediate response to any injuries.

Waste management during demolition and construction is another major consideration, as the process generates a substantial amount of solid waste. Without proper management, this waste could lead to environmental contamination and degradation. The project's existing sustainable waste management plan will be updated, with new sections now categorizing waste types and specifying handling procedures for recyclable, hazardous, and general waste.. Where feasible, materials such as bricks and metals will be sorted for reuse or recycling, minimizing the overall waste footprint of the project.

Community health and safety is also another area of concern, as residents, the patients' families, the occasional hospital visitors, and staff could be exposed to hazards such as falling debris, dust, noise pollution, water pollution and increased heavy vehicle traffic. To ensure public safety, fencing and prominent warning signs will be installed around the demolition and construction area. Traffic control measures will be implemented, with designated routes established for demolition and construction vehicles to avoid populated areas. Additionally, community engagement efforts will keep local residents informed of the demolition and construction timeline, site hazards, and safety protocols in place.

Social impacts, include potential disruptions to hospital functions and community inconvenience due to noise and dust, child labour, Sexual Exploitation and Abuse (SEA) / Sexual Harassment (SH) among others. The project's Stakeholder Engagement Plan (SEP) will be adopted and implemented in the context of the site to keep the community involved and informed about the new interventions in Kismayo. To facilitate responsive communication,

UNOPS will also put in place a grievance redress mechanism (GRM) for the workers, residents and users of the health facility to voice concerns or complaints and receive timely responses. Communicating the benefits of the project and expected timelines will help address community anxieties and foster positive perceptions of the development.

Following the detailed E&S screening of the proposed sub-project, as per process described in the previous project's approved ESMF,<sup>1</sup>the sub-project fits into a 'Moderate Risk' category, as per the levels defined in the ESMF. The project team believes that an Environmental and Social Management Plan (ESMP) would best guide the risk management for the sub-project.

The ESMP lists the project-specific risks and impacts and mitigation measures, lays out institutional arrangements for implementing and monitoring the risk mitigation measures and proposes monitoring indicators for measurement and monitoring of E&S performance. It shows what must be done, by whom, when, and to what standard; and shows who will monitor its implementation and when and what the budget implications for mitigation measures and monitoring activities are. It further includes a description of the Project Grievance Redress Mechanism (GRM), which needs to be applied during the, demolition and construction period and operational phase, and lists stakeholder consultations that have been conducted in the lead up to the project design.

---

<sup>1</sup> Ministry of Health, Environmental and Social Management Framework, Somalia COVID-19 Emergency Vaccination Project (P176956), March 2022, p.103

## 1. INTRODUCTION

### 1.1 Project Background

The overall Project will support the delivery of a package of health services to beneficiaries, which includes procurement of health commodities (including medicines), procurement of key equipment including provision of solar power generation and green cooling equipment, and development of policies and mechanisms that would regulate safer disposal of obsolete cold chain equipment, as well as developing capacity of the regional level to manage health service delivery including support for HMIS, and supportive supervision.

In addition, the Damal Caafimaad project aims to respond to the institutional, operational, and technical capacity needs in Somalia's Ministries of Health (MoHs). At the request of the Federal Ministry of Health (FMoH), this project will strengthen the FMoH public financial management capacity (PFM) in fiduciary and contract management in the short, medium and long-term. Short-term activities will be supported during project preparation using WB executed financing, and longer-term activities will help build credible PFM systems in Somalia's MoHs in a consistent and phased approach. The FP initiative expands the EPHS with a dedicated family planning service line, offering short and long contraceptive methods free of charge through private providers.

The Project has four components as described in the sections below:

- (i) Component 1: Expanding the coverage of high-impact health and nutrition services in select geographic areas.
- (ii) Component 2: Strengthening Government's stewardship to enhance service delivery.
- (iii) Component 3: Project Management and Knowledge Management and Learning.
- (iv) Component 4: Contingency Emergency Response Component (CERC).
- (v) Under AF, new interventions and activities are introduced under Components 1 and 3.

Kismayo Regional Referral Hospital, is situated in Kismayo City, a vital component of the Jubaland State of Somalia. It has a total area of around 19,036 m<sup>2</sup> with an average perimeter of 665m. the hospital has a total of 350 bed capacity. Established in 1930 during the Italian colonial era, the hospital stands as a crucial referral centre for the region, extending its services to residents from neighbouring areas. Currently under the management of the Ministry of Health, Jubaland State of Somalia, the hospital encompasses twenty-six health related departments and facilities, including surgery, maternity care, paediatric health, nutrition, outpatient and inpatient treatment, a laboratory, pharmacy, and facilities for dialysis patients, a mosque, solar powered desalination plant, oxygen plant, surgical ward, cholera treatment centres among others. Continuous interventions have been implemented over the years, perpetuating its growth and functionality. However, much of the hospital infrastructure are dilapidated and a major refurbishment is required, which necessitates demolitions of out-patient buildings that have been condemned as unfit for human habitation and construction of new hospital infrastructure to improve on service delivery to the community. The proposed sub-project for the demolition, rehabilitation and construction of Kismayo regional Hospital in Jubaland will include:

- Demolitions of army inpatient building
- Demolition of temporary measles ward building

- Demolition of septic tanks
- Demolition of the boundary wall
- Renovation of Operation Theatre (OT) building
- Construction of OPD Building
- Construction of ICU of 20 bed capacity.
- Laying of oxygen piping
- Construction of measles ward
- External works and relocation of services which includes but not limited to: rehabilitation of one water well, fix fire alarm detection of the OPD & ICU and design of nurse calls for the ICU.

The sub-project team has undertaken an Environmental and Social (E&S) screening of the sub-project, as per the process described in the Annex I-A (Environmental and Social Screening Template) of the Project Environmental and Social Management Framework (ESMF)<sup>2</sup>. The screening resulted in classifying the sub-project as a moderate risk category project as per the levels defined in the ESMF. E&S Screening findings recommended preparation of the Environmental and Social Management Plan (ESMP) as its adequate in managing the anticipated adverse negative impacts and risks related to the sub- project.

## **1.2 Purpose of The Environmental and Social Management Plan (ESMP)**

This ESMP provides a robust framework in identifying and managing the anticipated negative environmental and social risks related to the sub-project during demolition, rehabilitation, construction and operation phase of Kismayo Regional Hospital. This ESMP provides a consolidated summary of all the Environmental and Social (E&S) commitments relevant during demolition, rehabilitation, construction and operation phase. E&S commitments and standards to be adhered to include but not limited to Occupational Health & Safety (OHS) standards, Local labour laws, international labour standards, site specific E&S assessments and zero tolerance to Sexual exploitation and abuse (SEA). The measures focus on environmental aspects such as emissions and environmental contamination and social aspects such as communication with local stakeholders and safety of workers and communities. The ESMP lists the sub-project- specific risks and impacts and mitigation measures, lays out the institutional arrangements of the implementation and monitoring of the mitigation measures, and proposes monitoring indicators for measurement and monitoring of E&S performance.

The objective of this ESMP is to provide management strategies and actions to mitigate adverse risks and impacts in consistence with national institution, legal and policy frameworks, relevant WB Environmental and Social Standards (ESSs) and the IFC Environmental, Health and Safety Guidelines (EHSGs) for both general and healthcare facilities, as well as Good International Industry Practices (GIIP), such as technical guidance by the World Health Organization (WHO).

### 1.3 ESMP Approach and Methodology

The ESMP was prepared based on World Bank Environmental and social standards (ESS) and the project environmental and social commitment plan (ESCP). It included a community lead participatory approach and high-level stakeholders' engagement approaches. The approach involved identifying the scope of work (demolition, rehabilitation and reconstruction component) which clearly stipulates the nature and magnitude of anticipated environmental and social risk and impacts. The risks were determined during environmental and social screening process. Before the screening process, a desk study review was done where grey literature and other World Bank environmental and social standards (ESSs) were reviewed by the UNOPS technical unit dealing with the environmental and social safeguards. All the adverse negative risks and impacts anticipated during project components demolition, rehabilitation and re/ construction were clearly and adequately mapped out without forgetting the anticipated positive impacts associated with sub project. Risk mitigation hierarchy was adopted as a standard operating procedure in managing the risks and impacts anticipated.

All the anticipated negative risks were either avoided, reduced, mitigated or offset/compensated for the residual impact. The ESMP template was prepared which includes anticipated impacts, mitigation measures, responsible party to deal with the risk incurred, the occurring frequency of the risk and the budget amount to offset the impacts.

Many stakeholders including the local communities and the local health workers were involved in a high-level stakeholder engagement process as best international practice of increasing project acceptability, project transparency and project ownership (see Section 10 for details). The contractor will be expected to comply with all the set standards, and the mitigation measures provided as the bare minimum.

---

<sup>2</sup> Ministry of Health, Environmental and Social Management Framework, Somalia COVID-19 Emergency Vaccination Project (P176956), March 2022, p. 103, accessed at: <https://moh.gov.so/so/wp-content/uploads/2023/10/COVID-19-Additional-Financing-ESMF-updated-29-May-clean.pdf>

## 2. POLICY AND LEGAL FRAMEWORK

A summary of the national policies, laws and the World Environment and Social Standards is highlighted below.

### 2.1 NATIONAL FRAMEWORK

The Provisional Constitution of the Federal Republic of Somalia

*Article 10 – Human Dignity:* Human dignity is the basis for all human rights. It is inviolable and must be protected by all. The State power must not be exercised in a manner that violates human dignity.

*Article 11 – Equality:* All citizens, regardless of sex, religion, social or economic status, political opinion, clan, disability, occupation, birth or dialect shall have equal rights and duties before the law. The State must not discriminate against any person on the basis of age, race, color, tribe, ethnicity, culture, dialect, gender, birth, disability, religion, political opinion, occupation, or wealth. Thus, all laws, or political and administrative actions that are designed to achieve full equality for individuals or groups who are disadvantaged, or have suffered from discrimination in the past, shall be deemed to be not discriminatory.

*Article 24 – Labor Relations:* Every person has the right to fair labor relations. All workers, particularly women, have a special right of protection from sexual abuse, segregation and discrimination in the workplace. And, every labor law and practice shall comply with gender equality in the workplace.

*Article 31 – Language and Culture:* The state shall promote the positive traditions and cultural practices, whilst striving to eliminate customs and emerging practices, which negatively impact the unity, civilization and wellbeing of the Somali society. And, the state shall promote the cultural practices and local dialects of minorities.

*Article 32 – Right of Access to Information:* Every person has the right of access to information held by the state, and the right of access to any information that is held by another person which is required for the exercise or protection of any other just right.

*Article 111J – The Office of the Ombudsman:* The office is protected against interference from any other person or entity. As such, independence, integrity and effective service delivery are also maintained. The Ombudsman shall: (i) Investigate complaints against government workers regarding: allegations/ outright violations concerning basic rights and freedom, abuse of power, unfair behavior, mercilessness, lack of clemency, indiscipline or disrespect, corruptive act, illegal behavior, or those that could lead to mischief or injustice; (ii) Investigate complaints in relation to the activities of the Public Service Commission and other administrative institutions of the government, including defense and police forces that could lead to unequal services, unfair recruitment, or administration; (iii) Take appropriate steps to rectify or change items mentioned in earlier clauses through a fair, and appropriate process of consultations and sacrifices among the people concerned; (iv) Report on the complaints and issues raised and submit to the head of the offender; (v) Forward cases to the Attorney General and bring them before a court, as appropriate.

*Article 111H – National Security Commission:* A National Security Commission shall be established to study and develop an integrated security framework to address present and future needs of Somalia. It shall present proposals to ensure that human security is prioritized and incorporated into such a framework, through which the public may provide oversight and monitor security related expenditure and seek redress from abuses by security personnel.

Article 45 (—Environment)) states that the government shall give priority to the protection, conservation, and preservation of the environment against anything that may cause harm to natural biodiversity and the ecosystem. Furthermore, all people have a duty to safeguard and enhance the environment and participate in the development, execution, management, conservation and protection of the natural resources and the environment. The FGS and the governments of the FMS affected by environmental damage shall take urgent measures to clean up hazardous waste dumped on the land or in the waters of the FGS; take necessary measures to reverse desertification, deforestation and environmental degradation, and to conserve the environment and prevent activities that damage the natural resources and the environment of the nation, among other measures.

Article 115 (—Civil service)) outlines civil service values and protection of their rights.

#### Relevant National Policies

**Somalia 's National Environmental Policy** was approved by Cabinet, on February 13, 2020 the stated goal of environmental policy is to improve the health and quality of life of the Somali people. The Federal Government has drafted, or is in the process of drafting, the following policy, legal and regulatory frameworks: National Environmental Protection and Management Act 2024; Draft National Environmental and Social Impact Assessment Regulations; Draft National Ozone Layer Protection Regulation; Draft National Forest Management Policy; and Draft National Charcoal Policy. All of these have some relevance, in one way or another, for the Somalia COVID-19 Additional Financing Project.

**Somalia National Gender Policy (2016)** includes strategies to eradicate harmful traditional practices such as female genital mutilation/cutting (FGM/C) and child marriage and to improve services for the management of GBV/SEAH cases.

#### Environmental Protection and Management Act, 2024:

The act guarantees the right to a clean, safe and healthy environment, provides requirements for waste management including hazardous wastes. The act requires the application of the polluter pay and precautionary principle in environment management. The Kismayu regional hospital construction project is required to adhere to all the relevant requirements prescribed by the act.

#### Environmental and Social Impact Assessment and Audit Regulations (ESIA) 2024

Part III, regulations 13, 16 and 17, guides public participation, collection and incorporation of views from the general public.

Environmental and Social Framework (ESF) and in particular the five Environmental and Social Standards (ESS) that apply to the project and which are as follows:

**ESS1 – Assessment and Management of Environmental and Social Risks and Impacts:** This standard is fundamental for all project activities, requiring, where necessary, Environmental and Social Management Plans (ESMPs) to manage potential risks. For the Kismayo Regional Hospital demolition, rehabilitation and construction, ESS1 necessitates an ESMP specifically addressing issues like dust, waste management, pollution control mechanisms, noise and excessive vibration protocols and community health and safety.

**ESS2 – Labour and Working Conditions:** This standard ensures safe and fair labour practices, including working conditions, worker health and safety, and grievance redress mechanisms for workers. The demolition, rehabilitation and construction works at Kismayo Hospital require strict adherence to ESS2 to protect workers from hazards like heavy equipment use and ensuring proper remunerations for all the project workers respective of their gender, disability status, age, race, minority or ethnic affiliation.

**ESS3 – Resource Efficiency and Pollution Prevention and Management:** ESS3 is relevant to managing pollution and ensuring resource efficiency. For the Kismayo Hospital sites, it applies to managing dust, noise, and waste during demolition, rehabilitation and construction, ensuring minimal environmental impact, and applying best practices in resource usage during reconstruction.

**ESS4 – Community Health and Safety:** Focused on protecting the health and safety of nearby communities, ESS4 is critical for the Kismayo regional hospital upgrading sub-project to mitigate potential risks from dust, debris, noise, and hazardous material exposure, as well as SEA/SH. Measures include fencing, hoarding of demolition sites, safety signage, controlled traffic access, controlled working hours, and communication with residents about safety precautions will be adopted throughout the project lifecycle.

**ESS8: Cultural Heritage** recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future. ESS8 sets out measures designed to protect cultural heritage throughout the project life-cycle. Construction works may encounter chance finds.

**ESS10 – Stakeholder Engagement and Information Disclosure:** ESS10 emphasizes the need for continuous, adequate and meaningful stakeholders and community engagement and constant information dissemination as the best international practice for project acceptability, transparency and ownership with increased impact to the target communities. For the Kismayo Referral Hospital project, this involves engaging stakeholders about demolition, rehabilitation and construction timelines, risks, and benefits and establishing a grievance mechanism to address concerns. This process will be managed by the stakeholder engagement plan (SEP) already in place which will need frequent updating to ensure all stakeholders are clearly mapped and engaged meaningfully and throughout the project lifecycle.

### 3. BIOPHYSICAL AND SOCIO-ECONOMIC ENVIRONMENT

This section describes the overall baseline condition of the area around the Kismayo Regional Hospital, in regard to the biological and physical environment, as well as the socio-economic and cultural background of the sub-project area. The target location is the Kismayo Regional Hospital and its periphery in Jubaland. The environment is largely an urban environment with an already build up area of the hospital facility.

#### 3.1 Proposed Sub-Project Location

The sub-project is located in Kismayo city, in Jubaland State in Somalia. Kismayo in (Somali: *Kismaayo*) is a port city in the southern Lower Juba region of Somalia. It is the commercial capital of Jubaland . The city is situated 528 kilometres (328 miles) southwest of the capital of Mogadishu, near the mouth of the Jubba River, where it empties into the Indian Ocean. Kismayo's population is estimated at 557,549.<sup>4</sup>

Kismayo is located in the fertile Juba Valley in southeastern of Somalia, on the Somali coast. Nearby settlements include to the northeast Xamareyso (5.0 nm), to the north Dalxiiska (1.3 nm), to the northwest Qeyla Dheere (6.4 nm), to the west Saamogia (0.9 nm), to the southwest Iach Bulle (10.0 nm), and to the south Qandal (6.5 nm). The largest cities in the country most proximate to Kismayo are Jamaame (52 km), Jilib (97 km), and Merca (337 km).

During the Middle Ages, Kismayo and its surrounding area was part of the Ajuran Empire that governed much of southern Somalia and eastern Ethiopia, with its domain extending from Hafun in the north, to Qelafo in the west, to Kismayo in the south. The GPS Coordinates are -0°21'49"N 42°32'47"E.

---

Some of the receptors likely to be affected by the proposed project include the patients, hospital workers and frequent visitors during demolition, rehabilitation and construction of the hospital facilities. All mitigation measures and set standards will be adopted to cushion them from these impacts. The local community will also be affected since during demolition, rehabilitation and reconstruction of the hospital infrastructure little inpatient and outpatient activities will be experienced. Noise, hazardous waste and dust particles from the proposed project site will negatively affect the community if not well managed. Adjacent Water sources are also likely to be impacted since the project scope might result to generation of hazardous waste which if it gets its way into the water sources (adjacent ocean waters) the biodiversity will be affect and water quality will be greatly compromised. The local community might also be affected due to project labor influx which might deteriorate the cultural beliefs and increase social evils. Due to labour influx the project adjacent resources might be stressed as the demand for natural resources might increase resulting to conflicts and overexploitation. The project labour management procedures will be complied with to manage and maximise project related labour.

<sup>4</sup> World Population Review, 2024, accessed at:  
<https://worldpopulationreview.com/cities/somalia/kismaayo>

The construction works will be undertaken at the location of the current hospital. below shows the location of the proposed sub-project site.



Figure 1 Location of Kismayo Regional Hospital

Source: Kismayo topo survey report

### 3.2 Biophysical Environment

#### Topography

For the purposes of this report, the geographical coordinates of the project are -0.358 degrees latitude, 42.545 degrees longitude, and 36 ft elevation.

The topography within 2 miles of Kismayo contains only *modest* variations in elevation, with a maximum elevation change of 187 feet and an average elevation above sea level of 42 feet. Within 10 miles also contains only *modest* variations in elevation (289 feet). Within 50 miles also contains only *modest* variations in elevation (371 feet).

The area within 2 miles of Kismayo is covered by *shrubs* (46%), *water* (41%), and *artificial surfaces* (11%), within 10 miles by *water* (51%) and *shrubs* (48%), and within 50 miles by *water* (50%) and *shrubs* (38%).

## Geology and Soil

The geology of Somalia is built on more than 700-million-year-old igneous and metamorphic crystalline basement rock. It is covered in thick layers of sedimentary rock formed in the last 200 million years.<sup>5</sup>

## Climate

The climate in Kismayo is hot, oppressive, extremely windy, and partly cloudy. Over the course of the year, the temperature typically varies from 75°F to 88°F and is rarely below 74°F or above 90°F

In view of the above climate data provided it is suggested construction should be undertaken during the time when the weather and rainfall is suitable and conducive to reduce adverse impacts on to the environment and local communities.

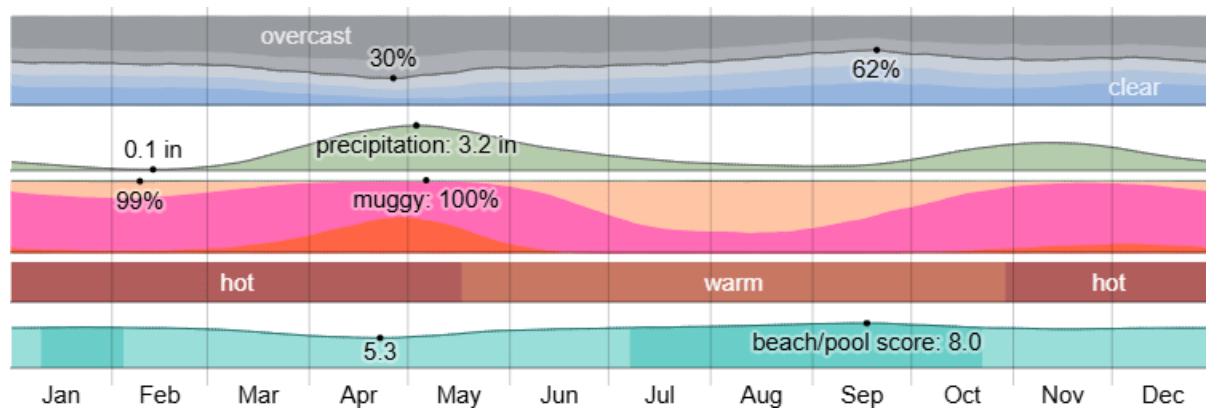


Figure 2 Average monthly weather pattern for Kismayo

## Average Temperatures in Kismayo

The temperature in Kismayo varies so little throughout the year that it is not entirely meaningful to discuss hot and cold seasons.

---

<sup>5</sup> Geology of Somalia, Mogadishu topographic map, accessed at: <https://en-gb.topographic-map.com/mapd3w1h/Mogadishu/?center=1.60067%2C49.87364&popup=1.98015%2C45.39276&zoom=15>

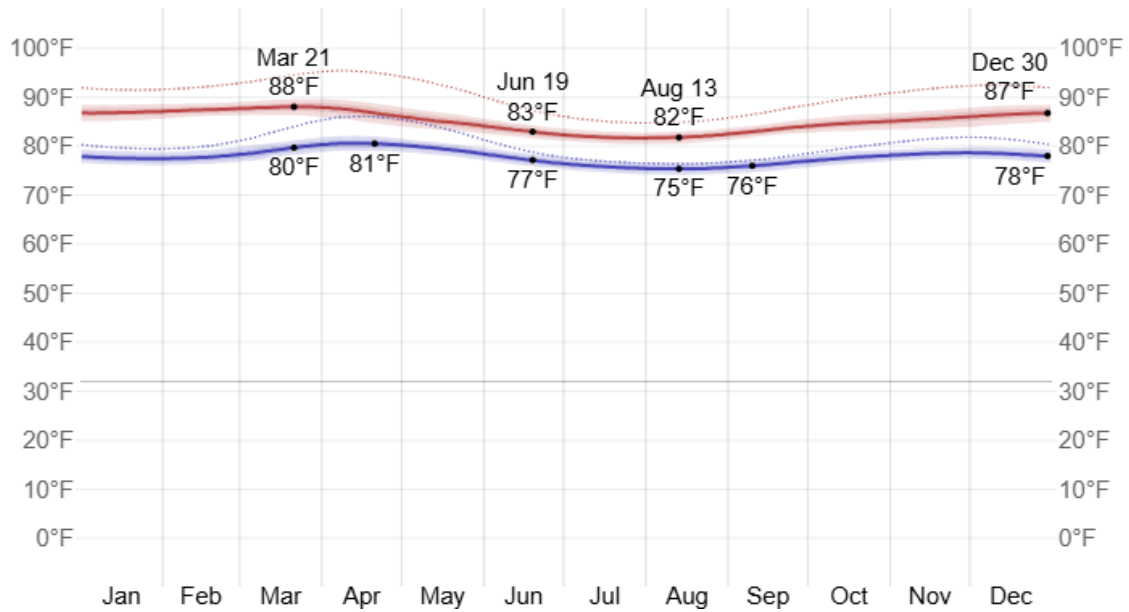


Figure 3 Monthly average high and low temperatures in Kismayo

The daily average high (red line) and low (blue line) temperature, with 25th to 75th and 10th to 90th percentile bands. The thin dotted lines are the corresponding average perceived temperatures.

Average	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
High	87°F	87°F	88°F	87°F	85°F	83°F	82°F	82°F	83°F	85°F	86°F	86°F
Temp.	81°F	82°F	83°F	83°F	82°F	80°F	78°F	78°F	79°F	81°F	81°F	82°F
Low	78°F	78°F	79°F	80°F	79°F	77°F	76°F	75°F	76°F	78°F	78°F	78°F

Figure 4 Temperatures

### Rainfall intensity

To show variation within the months and not just the monthly totals, we show the rainfall accumulated over a sliding 31-day period centered around each day of the year. Kismayo experiences *significant* seasonal variation in monthly rainfall.

The *rainy* period of the year lasts for *10 months*, from *March 8* to *January 8*, with a sliding 31-day rainfall of at least *0.5 inches*. The month with the most rain in Kismayo is *May*, with an average rainfall of *2.9 inches*.

The *rainless* period of the year lasts for *2.0 months*, from *January 8* to *March 8*. The month with the least rain in Kismayo is *February*, with an average rainfall of *0.1 inches*

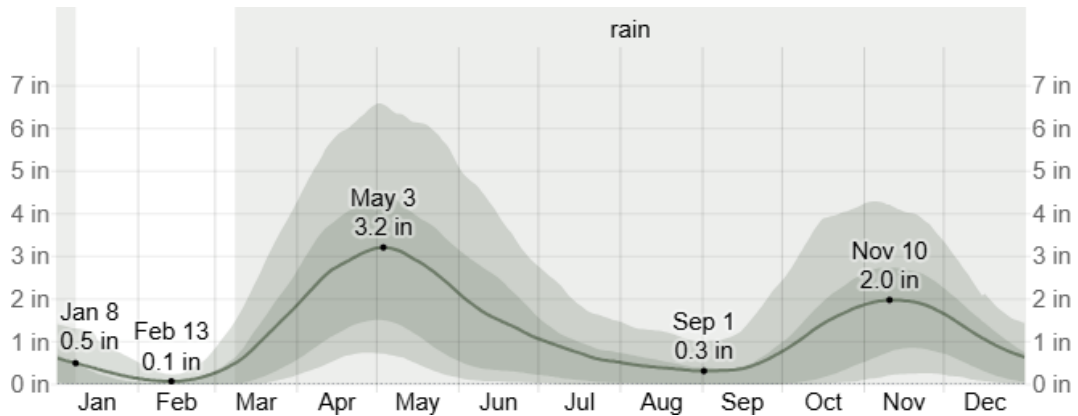


Figure 5 Average monthly rainfall for Kismayo

(Source: <https://weatherspark.com/y/102269/Average-Weather-in-Kismayo-Somalia-Year-Round>)

### Precipitation

A *wet day* is one with at least *0.04 inches* of liquid or liquid-equivalent precipitation. The chance of wet days in Kismayo varies significantly throughout the year.

The *wetter season* lasts *8.5 months*, from *March 27* to *December 11*, with a greater than *21%* chance of a given day being a wet day. The month with the most wet days in Kismayo is *April*, with an average of *10.9 days* with at least *0.04 inches* of precipitation.

The *drier season* lasts *3.5 months*, from *December 11* to *March 27*. The month with the fewest wet days in Kismayo is *February*, with an average of *0.5 days* with at least *0.04 inches* of precipitation.

Among wet days, we distinguish between those that experience *rain alone*, *snow alone*, or a *mixture* of the two. The month with the most days of *rain alone* in Kismayo is *April*, with an average of *10.9 days*. Based on this categorization, the most common form of precipitation throughout the year is *rain alone*, with a peak probability of *41%* on *April 22*.

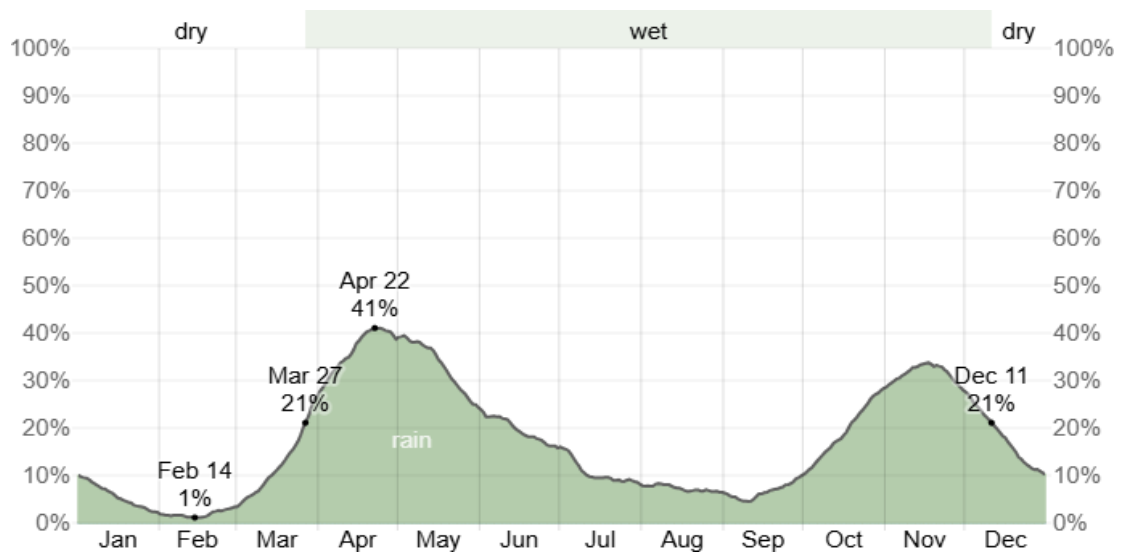


Figure 6 Daily chance of precipitation in Kismayo

The average rainfall (solid line) accumulated over the course of a sliding 31-day period centered on the day in question, with 25th to 75th and 10th to 90th percentile bands. The thin dotted line is the corresponding average snowfall.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall	0.4"	0.1"	0.9"	2.7"	2.9"	1.5"	0.7"	0.4"	0.4"	1.4"	2.0"	1.1"

**Source:** <https://weatherspark.com/y/102269/Average-Weather-in-Kismayo-Somalia-Year-Round>

### Humidity

Unlike temperature, which typically varies significantly between night and day, dew point tends to change more slowly, so while the temperature may drop at night, a muggy day is typically followed by a muggy night.

The perceived humidity level in Kismayo, as measured by the percentage of time in which the humidity comfort level is *muggy*, *oppressive*, or *miserable*, does not vary significantly over the course of the year, staying within 1% of 99% throughout.

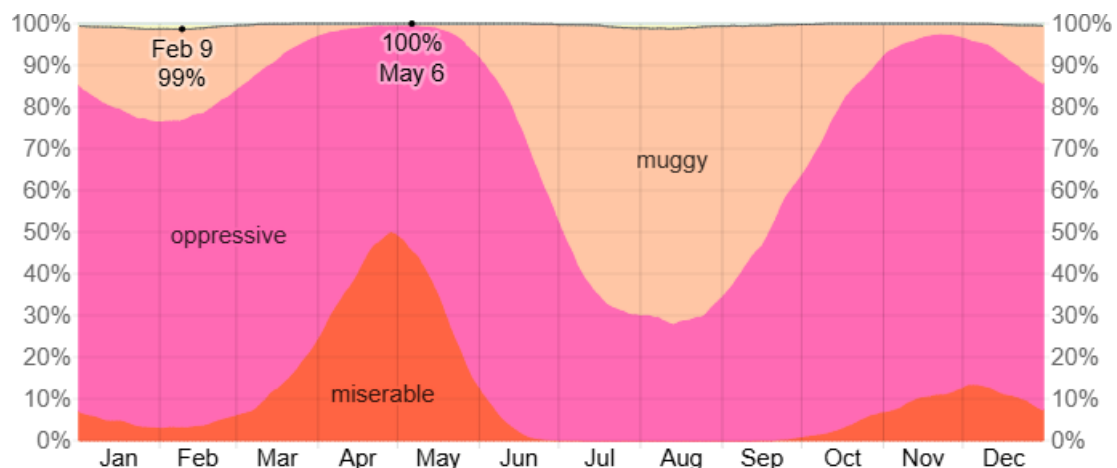


Figure 7 Humidity levels in Kismayo

**Source:** <https://weatherspark.com/y/102269/Average-Weather-in-Kismayo-Somalia-Year-Round>

### Wind

The wind experienced at any given location is highly dependent on local topography and other factors, and instantaneous wind speed and direction vary more widely than hourly averages.

The average hourly wind speed in Kismayo experiences *significant* seasonal variation over the course of the year.

The *windier* part of the year lasts for 4.5 months, from May 21 to October 3, with average wind speeds of more than 14.9 miles per hour. The *windiest* month of the year in Kismayo is July, with an average hourly wind speed of 18.7 miles per hour.

The *calmer* time of year lasts for 7.5 months, from October 3 to May 21. The *calmest* month of the year in Kismayo is November, with an average hourly wind speed of 11.3 miles per hour.

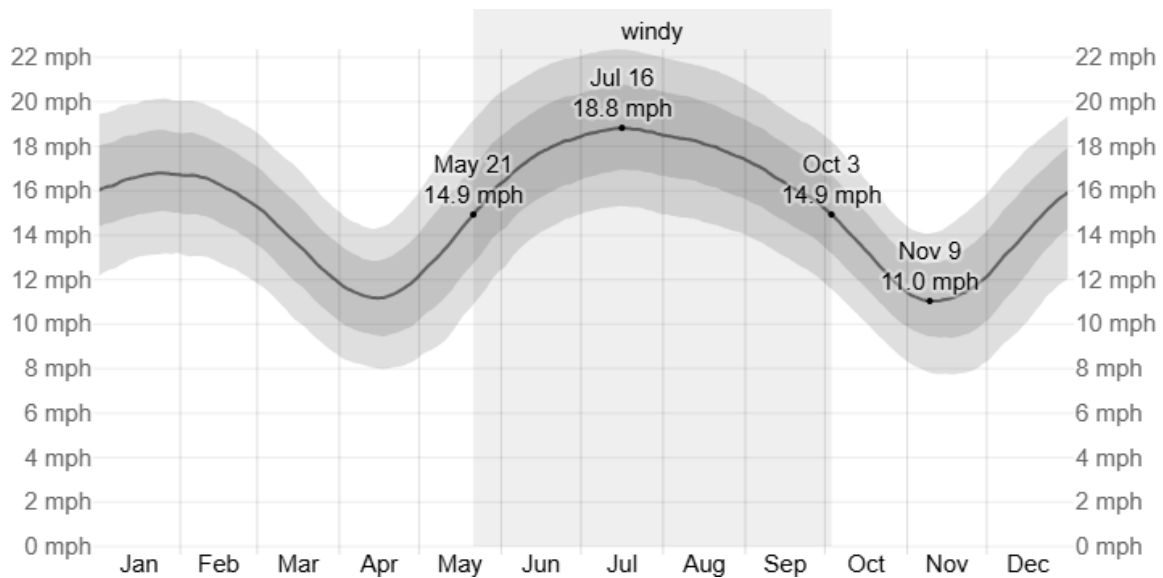


Figure 8 wind speed in mph for Kismayo

The predominant average hourly wind direction in Kismayo varies throughout the year.

The wind is most often from the *south* for 6.8 months, from April 9 to November 2, with a peak percentage of 100% on June 7. The wind is most often from the *east* for 5.2 months, from November 2 to April 9, with a peak percentage of 99% on January 1

Source: <https://weatherspark.com/y/102269/Average-Weather-in-Kismayo-Somalia-Year-Round>

### Water Resources and Hydrology

Kismayo Regional Hospital is located near the sea shore just 335 m away. The adjacent soils are salty. After reaching the surface, rainwater infiltrates into the soil. Most of the water in the soil and on the wet surface evaporates or is transpired back into the atmosphere.<sup>6</sup> Groundwater is the major source of drinking water for Kismayo <sup>7</sup> Due to the rapid increase of population in the city the use of groundwater supplies has grown over time and created concern about quality and quantity of water available. Due to high level of salty content the water is desalinated for various uses: domestic uses, hospital use among other uses.

### 3.3 Socio-Economic Environment Population

Kismayo's 2024 population is now estimated at **557,549**. In 1950, the population of Kismayo was **3,328**. Kismayo has grown by 22,913 in the last year, which represents a 4.29% annual change. These population estimates and projections come from the latest revision of the UN World Urbanization Prospects. These estimates represent the Urban agglomeration of Kismayo, which typically includes Kismayo's population in addition to adjacent suburban areas.

### Livelihood and employment

<sup>6</sup> Technical report Somalia: Groundwater assessment accessed at <https://documents1.worldbank.org>

Kismayo's economic vitality is anchored by the port, the revenue from which is a significant contributor to the City's economy underpinning various sectors from logistics to trade.<sup>8</sup> Kismayo has flourished as an economic centre in Somalia with a vibrant port and business community.<sup>9</sup>

Gender-based Violence (GBV): Somalia is a patriarchal society with firmly entrenched gender roles that often subjugate women and girls. GBV is pervasive, particularly female genital mutilation/cutting (FGM/C), early marriage and psychological abuse. GBV is a major risk especially for women and girls in Somalia and Kismayu is not an exception.

### **Infrastructure**

Kismayo is one of the fastest growing cities in Somalia with constantly deteriorating urban conditions due to the lack of institutional, financial and human capacity to manage the urban expansion and provide services on the one hand, and the total absence of control mechanisms over land on the other.<sup>10</sup> The city has still only one main tarmac road that connects the city and its port to the south of the country. The port-area, Kismayo most important asset, is seriously deteriorating due to an increasing number of trucks, which transport goods from the port and in & out of town, an overall increase of cars and trucks and the total absence of traffic management, parking or loading and offloading options for the heavy vehicles. The port area, the main tarmac road and other major roads are overwhelmingly exhausted by congestion through the increased traffic and blocked by parking trucks. They are in poor condition with no pavement and potholes and irregular road-widths. The access to and from the port and to all businesses in town is chaotic and not functional, characterized by a confusing system of narrow alleys filled with informal structures and with no sufficient and clear access from the main tarmac road.<sup>11</sup>

### **Solid waste disposal**

Solid waste management is a rising concern that has engulfed all metropolitan centres across Somalia, owing to the country's volatile past, particularly in the previous quarter century.<sup>12</sup> as per the proposed sub project site Kismayo regional hospital has an already established medical waste management infrastructure that's the incinerators. To manage the waste from demolition, rehabilitation and reconstruction activities an existing waste management plan will be updated.

### **Health Services**

While there has been positive progress in Somalia's health sector, the Jubaland still faces enormous challenges especially in the delivery of better health services as envisaged in the 'Somali Compact' and the 'New Deal Initiative'. The sector is particularly challenged by, among others, shortage of professional staff to provide better healthcare services.<sup>13</sup>

## Education

The protracted nature of fragility, vulnerability, conflict and crisis in Somalia has had a profound effect on the education system. The problem is compounded by humanitarian crisis; on-going insecurity; weak governance systems and limited capacities to deliver effective social services

10 Northeast Somalia accessed at

<https://staging.unhabitat.org/content.asp?cid=8409&catid=577&typeid=61>

11 Ibid

12 Environment and Health implication of solid waste accessed at

<https://journalppw.com/index.php/jpsp/article/download/1510/794/1733>

13 Improving access to health and service delivery in kismayo town and its environs in the juba land state of Somalia accessed <https://weblog.iom.int/improving-access-health-and-service-delivery-kismayp-and-its-environs-puntland-state-somalia>

such as education, lack of teaching and learning materials; and lack of qualified teachers with qualified female teachers being the scarcest.<sup>14</sup>

### **Telecommunications**

There is no telecommunications infrastructure on site but there is mobile phone network available in the area. The mobile phone network provides good internet access to the population.

### **Storm water drainage**

There are no elaborate storm water drainage structures within the sub project area. This has resulted to area flooding. Storm water and water harvesting infrastructure have been proposed in the new interventions.

### **Access to Water and Electricity:**

The sub-project Kismayo Regional Hospital is supplied by Piped water from 3 No. of wells pumped by generators. Surface pumps within the sub-project site are undersize and frequently breaks. The water is distributed around the health facility by pipes; where surface piping in some areas is exposed to weather. The sub project site also has 2 No. desalination tanks 83 L/Hr and 4,000 L/Hr. 83 L/Hr has a water storage tank outside the desalination area where it is fixed with pipes which provide clean water for drinking. 4,000 L/Hr on the other hand is fitted with tanks which supplies water to critical units within the facility. Desalination takes place during the night. Little maintenance is subjected to the desalination plants affecting its efficiency. There is no-grid (WESCO) connected power supply, as the proposed sub-project facility is powered by 4 No. genset. 80 kVA is used at night for 13 hours, 165 kVA is used during the day for 11 hours, 150 kVA used as back-up and 325 kVA used for the oxygen generation plant. The project area also has solar PV where its inverters and batteries are not functioning. Water desalination plant also has functional solar PV plant.

---

14 Education Sector Programme Implementation Grant (ESPIG) Program document accessed at [https://www.globalpartnership.org/node/document/download?file=document/file/2020-9-Somalia%20juba land- Program%20Document.pdf](https://www.globalpartnership.org/node/document/download?file=document/file/2020-9-Somalia%20juba%20land-Program%20Document.pdf)

## 4. PROJECT DESCRIPTION

### 4.1 Kismayo Regional Hospital

Kismayo Regional Hospital, is situated in Kismayo City, a vital component of Jubaland. It has a total area of around 19,036 m<sup>2</sup> with an average perimeter of 665m. the hospital has a total of 350 bed capacity. Established in 1930 during the Italian colonial era, the hospital stands as a crucial referral centre for the region, extending its services to residents from neighbouring areas. Currently under the management of the Ministry of Health, Jubaland State of Somalia, the hospital encompasses twenty-six health related departments and facilities, including surgery, maternity care, paediatric health, nutrition, outpatient and inpatient treatment, a laboratory, pharmacy, and facilities for dialysis patients, a mosque, solar powered desalination plant, oxygen plant, surgical ward, cholera treatment centres among others. Continuous interventions have been implemented over the years, perpetuating its growth and functionality<sup>15</sup>

The proposed topographic survey area is situated within the historic quarter of Kismayo City, Jubaland, providing 24-hour free healthcare services for all residents of Jubaland. The geographical location can be visualized through the Google Earth image provided in the survey map as shown below.

The land under which the facility is domiciled belongs to the Department of Medical Services, Ministry of Health and Human Services. All works will be undertaken on the existing hospital site and its premises and there will be no land acquisition or resettlement impacts. A perimeter wall currently defines the land boundaries which is also earmarked for demolition.

---

<sup>15</sup> See UNOPS, Kismayo Hospital Project, Design Brief, 2024.



Figure 9 Site Layout

The site has at least 26 No. facilities providing health care services as shown in the Table below.

Table 1 Facilities providing health care services on the site

1. PCR Unit 2. GBV one stop centre 3. OPD 3A. OPD Waiting & triage 3B. Incinerator 4. Cholera treatment unit 5. Pharm goods store 6. Admin office 7. Cold chain 8. Cold chain 9. logistics office	10. Male and female staff resting area 11. Surgical block 12. Army male ward 13. Laundry room 14. measles ward and stores 15. paediatric 16. security room and ambulance shed 17. Mortuary room 18. Maternity ward	19. Emergency ward 20. Nutrition ward 20 B. Toilets for male and females 21. Oxygen plant 22. Generator, battery and fuel area. 23. incineration plant 24. mosque 25. water tanks, wells, desalination plant 26. Fence
---	--	--



*Figure 10 Existing Facility at Kismayo Hospital*

### **Topographical Surveys of the site**

---

The hospital currently benefits from well-functioning water and electricity utilities connected to the facilities generators. The proposed sites for improvement seamlessly integrate into these existing grids, where the power house will not be relocated as it will be retained in its current position to avoid relocation of cables. The hospital's sewage system is in satisfactory condition, requiring no immediate attention. The structural layout of Kismayo Regional Hospital exhibits a lack of organization in its original design. Although the main building remains in good condition, subsequent constructions over the years lacked proper planning, resulting in a congested environment with no available space. This congestion, coupled with haphazard additions, restricts the possibility of incorporating new departments. Key challenges revolve around the disorganized layout of the hospital, with densely packed structures impeding accessibility. These structural constraints hinder the ease of movement for both patients and service providers, posing a significant challenge to the overall functionality of the hospital. Addressing these challenges is paramount for enhancing the hospital's efficiency and ensuring a conducive environment for healthcare delivery.<sup>16</sup>UNOPS conducted detailed structural integrity assessments on 26 structural components of the hospital and find some under the risk of collapse while others were found to be structurally safe as per the structural assessments report.<sup>17</sup> Additionally, electromechanical assessments were conducted and found that there is need for the expansion and relocation of the solar system,

<sup>16</sup> See UNOPS, Kismayo Hospital Project, Kismayo Topo Survey Report, 2024.

<sup>17</sup> See UNOPS, Kismayo Hospital Project, Structural Assessment Report, 2024

drainage system problem, supply of new and higher capacity generator and changing the tube light fittings and CFL lights to energy saving led lamps.<sup>18</sup>

## 4.2 Proposed Facilities

The proposed scope of works under phase 1 will include

- Demolitions of army inpatient building
- Demolition of temporary measles ward buildings
- Demolition of septic tanks near the measles ward
- Demolition of the boundary wall
- Renovation of Operation Theatre (OT) building
- Construction of OPD Building
- Construction of ICU of 20 bed capacity.
- Laying of oxygen piping
- Construction of measles ward
- External works and relocation of services which includes but not limited to: rehabilitation of one water well, fix fire alarm detection of the OPD & ICU and design of nurse calls for the ICU.

The design includes the meeting of all needs of women, girls, and persons with disabilities, as per UNOPS Gender Equality and Social Inclusion (GESI) Guidelines.

No land and resettlement impacts are anticipated because the proposed site is on land that has an existing health care facility. The land is owned by the Department of Medical Services, Ministry of Health and Human Services. Community consultations have further shown that there are also no encroachments on the land. The site is secured and has four accesses with a perimeter wall along the land boundaries earmarked for demolition.

Furthermore, the project will engage local personnel for manual removal of non-structural elements such as interior walls, doors, windows, to manually collect and segregate small debris, to operate water spray systems to suppress and for safety inspection and enforcement and other labour requirements. These local labourers will be coming from within the local community and therefore there will be no need for the establishment of a workers' campsite. The engineers and supervisors will likely be from the city and not require accommodation. There will be a site office within the designated project area but there will not be any need for a workers' camp.

The below drawing depicts the proposed general hospital:

---

<sup>18</sup> See UNOPS, Kismayo Hospital Project, Electromechanical Assessment Report, 2024

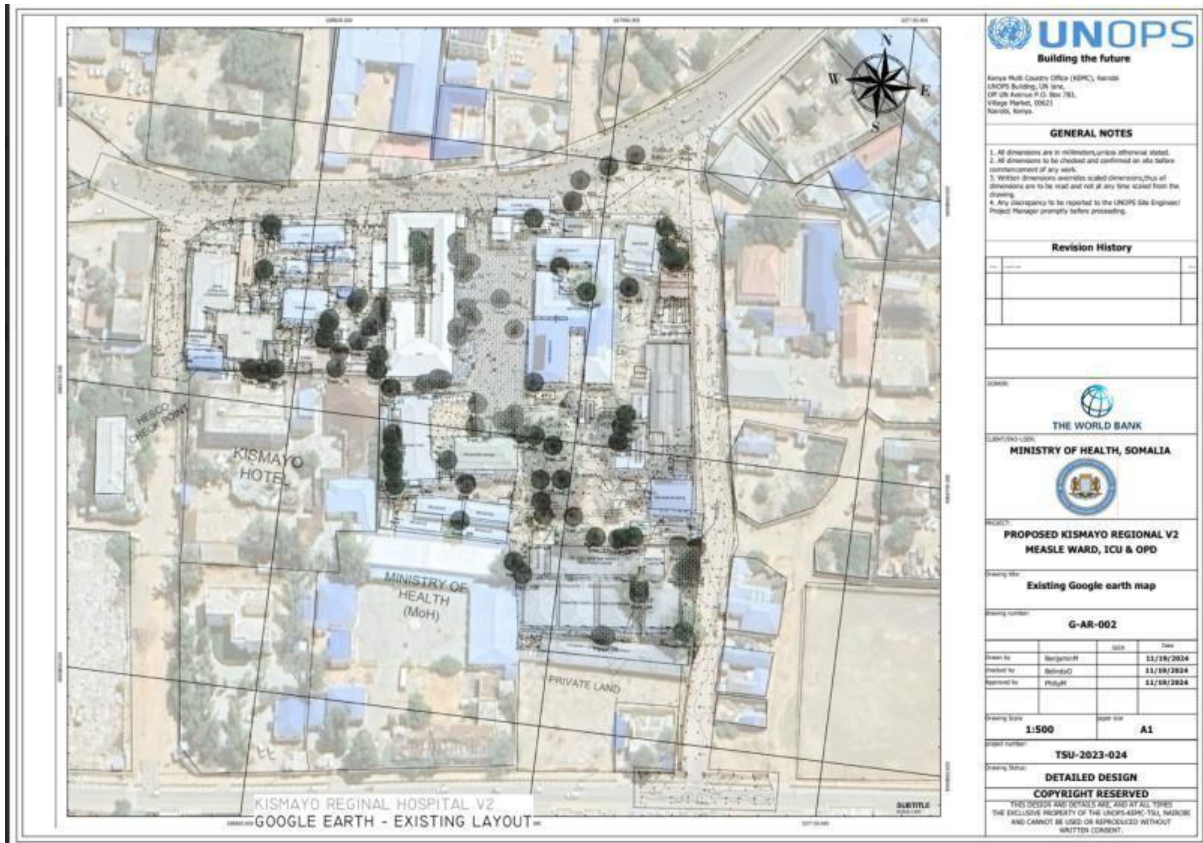


Figure 11 Proposed Kismayo Regional Existing layout

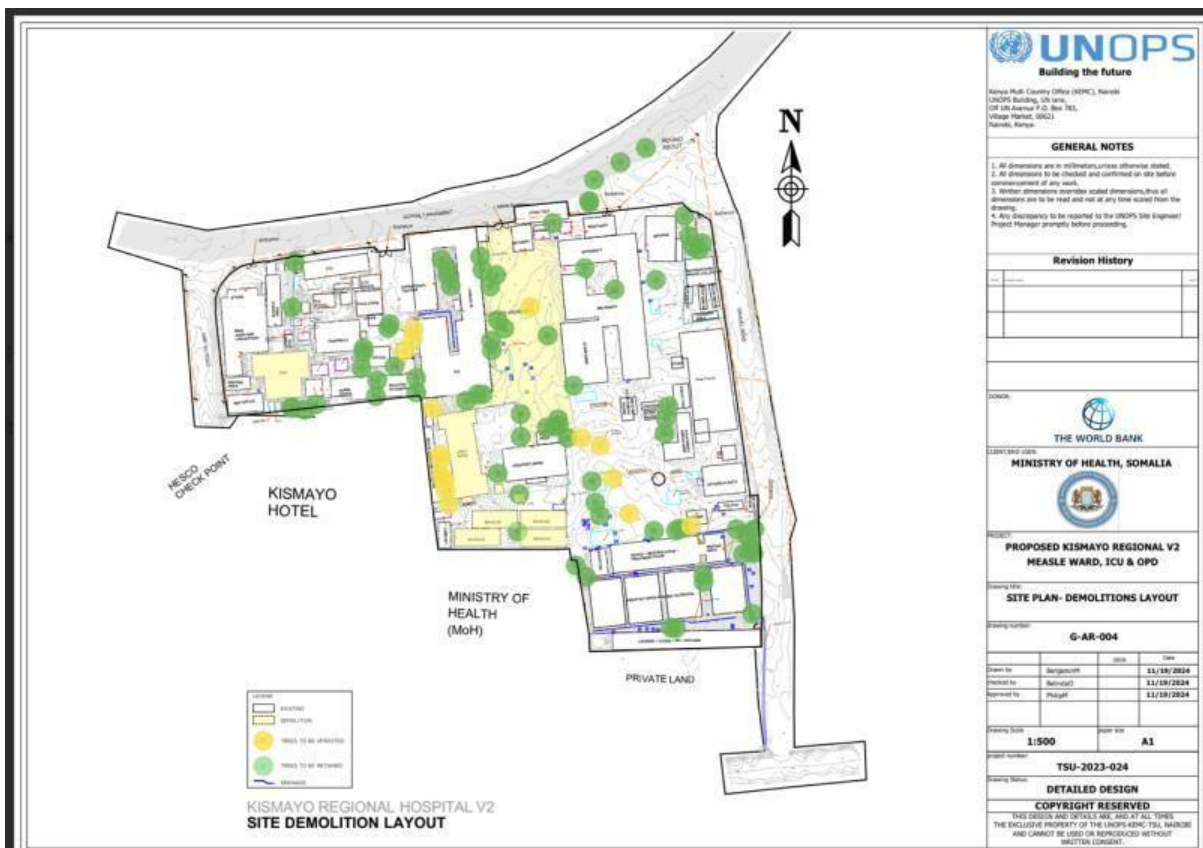


Figure 12 Site Demolition Layout

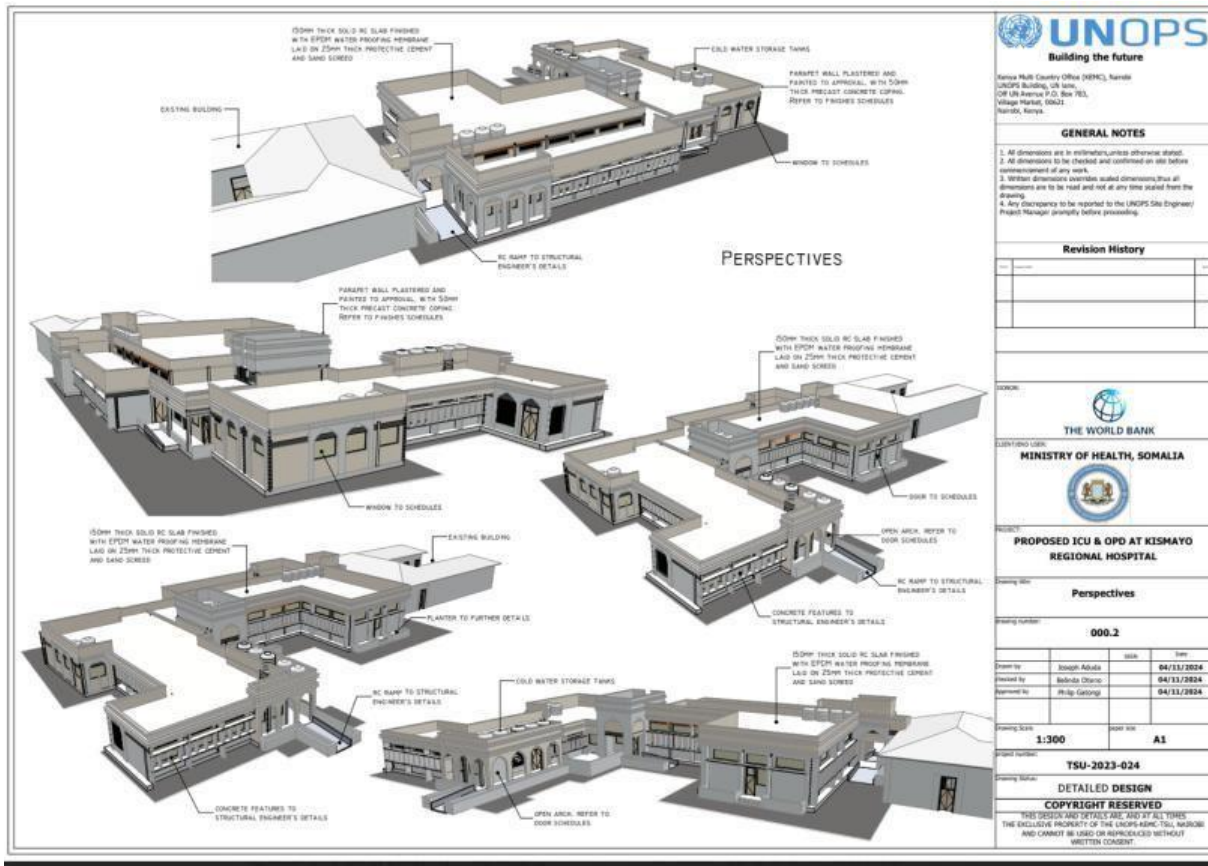


Figure 13 Proposed ICU and OPDL – perspectives

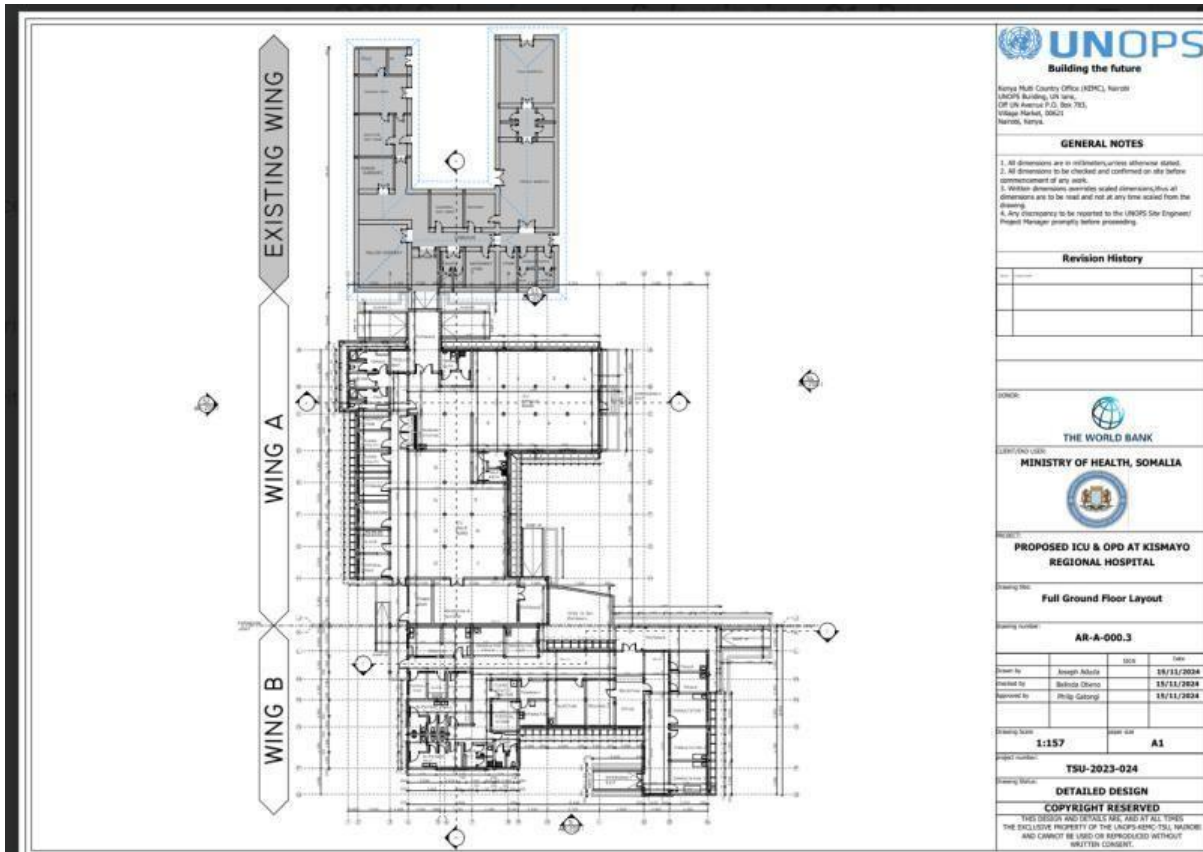


Figure 14 Main building ground floor layout

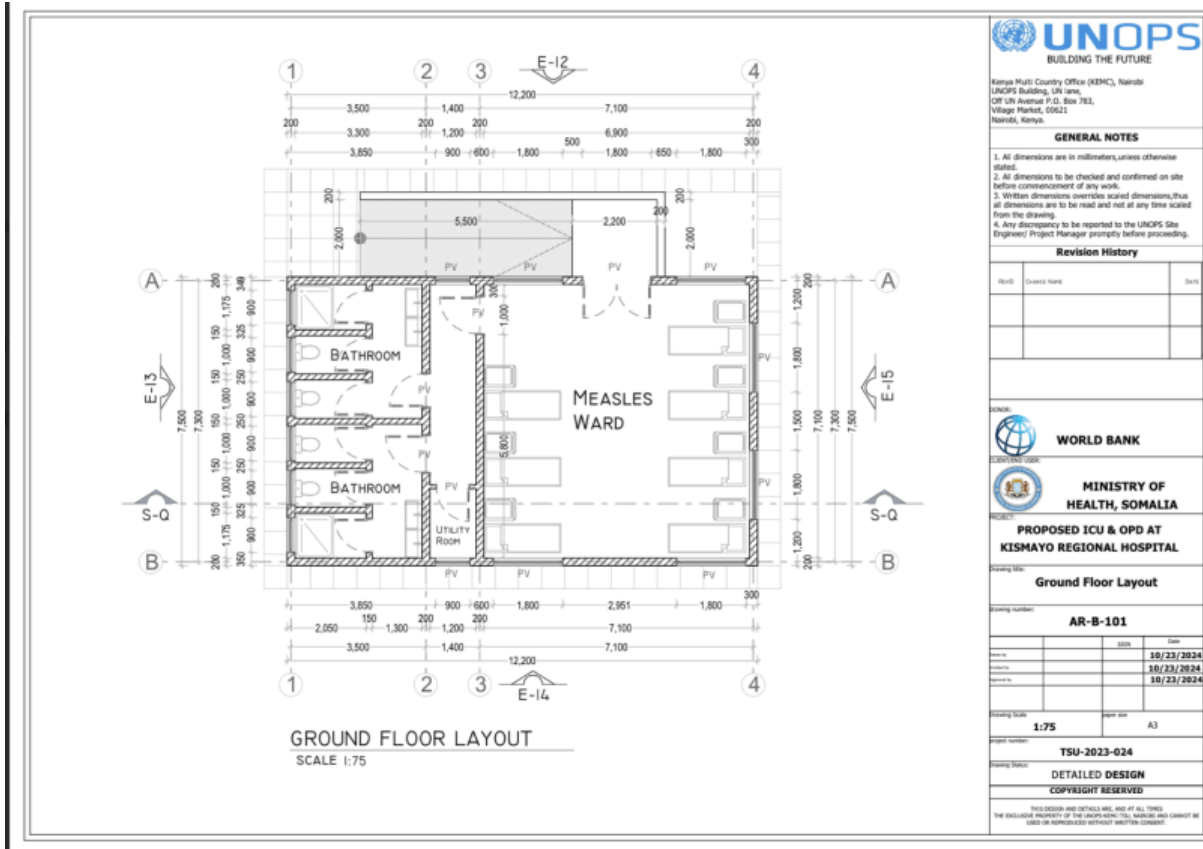


Figure 15 Measles Ward ground floor layout

### **4.3 Applicable Design Standards and Codes of Practice**

The design adopted the following codes, standards and guides. The references are used in a complementary manner. Where requirements of two or more codes or standards are found to conflict, the more stringent of them is adopted for the purpose of this project.

#### **Architectural Standards and Codes**

- International Health Facilities Guidelines - Version 6th May 2016
- NHS Standards Volumes 1-10(2014)
- UNOPS Design Planning Manual for Buildings
- Eurocode 1-8 and relevant annexes
- Relevant Code of Practice (CP)

#### **Structural Standards and Codes**

- UNOPS Design Planning Manual for Buildings,
- EN 1990 2002 Eurocode - Basis of structural design
- EN 1991-1-1 Eurocode 1: Actions on structures – Part 1-1: General actions - Densities, self-weight, imposed loads for buildings
- EN 1991-1-4:2005 Eurocode 1: Actions on structures Part 1-4: General actions Wind actions 19
- EN 1992-1-1 2004 Eurocode 2: Design of concrete structures (EN 1992) Part 1-1: General rules, and rules for buildings
- EN 1993-1-1 2005 Eurocode 3: Design of steel structures (EN 1993) Part 1-1: General rules, and rules for buildings
- BS 5268-2: 1996 Structural use of timber — Part 2: 1996 Code of practice for permissible stress design, materials and workmanship
- EN 1996-1-1:2005 Eurocode 6: Design of masonry structures — Part 1-1 General rules for reinforced and unreinforced masonry structures
- EN 1992-1-1 2004 Eurocode 2: Design of concrete structures (EN 1992) Part 3: Liquid and containing structures
- Manual for Design of Reinforced Concrete Structures to Eurocode 2 by IstructE/ICE
- Earthquake Risk in Africa: Modified Mercalli Scale, 2007” by UNOCHA
- Other relevant references.

#### **Mechanical Standards and Codes**

- UNOPS Design Planning Manual for Buildings
- Regulations of the Government of Somalia
- Chartered Institute of Building Services Engineers (CIBSE) Design Guides
- NFPA 10: Standards for Portable Fire Extinguishers
- NFPA 14: Standards for Hose Systems
- 2013 ASHRAE Pocket Guide for Air Conditioning, Heating, Ventilation and Refrigeration

- ASHRAE 62.1: Ventilation for Acceptable Indoor Air Quality
- HVAC Engineers Handbook
- HVCA DW 172 & DW 144
- ASHRAE 170-2017: Ventilation of Health Care Facilities

#### Electrical Standards and Codes

- UNOPS Design Planning Manual for Buildings
- Relevant IEC Standards
- The National Fire Protection Association (NFPA) - Fire Safety
- EN BS7671- IET Wiring Regulations British Standards for Electrical Installations.
- IEEE Photovoltaic Standards 2004 Eurocode 2: Design of concrete structures (EN 1992) Part 1-1: General rules, and rules for buildings
- EN 12464-1:2021 - Lighting of workplace

#### 4.4 Design Functions

The design functions of the new building to be constructed after demolition of outdated structures with low structural integrity will encompass outpatient department (OPD), Intensive Care Unit (ICU) and measles ward. Any functions not listed below will be provided within the current existing facility e.g. functions such as health care for army will be transferred to the already exist health facility within the hospital compound.<sup>19</sup>

*Table 2 Design functions*

<p><b>OPD</b></p> <ul style="list-style-type: none"> <li>• Officer in charge</li> <li>• 3 consultation &amp; examination</li> <li>• Observation</li> <li>• Triage (separate M/F)</li> <li>• Injection</li> <li>• Dressing</li> <li>• Sluice &amp; sterilisation</li> <li>• Staff rest area &amp; charging room (separate M/F)</li> <li>• Patient &amp; toilets (separate M/F)</li> <li>• Storage</li> <li>• Cashier and records</li> <li>• Wating area</li> </ul>	<p><b>ICU</b></p> <ul style="list-style-type: none"> <li>• Entrance lobby &amp; reception</li> <li>• Nursing station, resuscitation &amp; imaging</li> <li>• Bedspace</li> <li>• Staff changing room</li> <li>• Sluice, dirty utility &amp; disposal hold</li> <li>• Sterilization</li> <li>• Storage</li> <li>• Janitors</li> <li>• Accessible toilets (2)</li> </ul> <p><b>Measles ward</b></p> <ul style="list-style-type: none"> <li>• Bedspace</li> <li>• Washrooms</li> </ul>
---	---

---

<sup>19</sup> See UNOPS, Hospital Project, Built Drawings, 2024



*Figure 16 3D view of concept design*

The building is designed in a way that it allows for future expansions. The facility will be provided with:

#### **External works**

The external works provided will include;

- Re-do the drainage within the hospital and figure out connection to the drainage system outside the hospital
- Re-design and re-align septic tanks and soak pits.
- Installation of new gutters and rainwater collection storage tanks.
- Demolition and reinstallation of parking pavement with proper levelling and drainage for the new building.

#### **Architectural & Civil Works**

The design practitioners, have undertaken the design for Intensive Care Unit (ICU), Outpatient department, and relocation of demolished temporary measles ward.

#### **Mechanical works**

- **Water Source-** rehabilitation of the 1 No. water well and provide new cover. Determine well capacities and design correct submersible pumps.
- **Water Distribution** - Rehabilitation of water pipe distribution from the high-level water tank to the proposed building.
- **Water Treatment-** providing maintenance of the existing desalination units, test the treated water for compliance to the WHO standards. Providing additional capacity R.O units to expand the existing plants to provide more treated water for critical areas. This is to be done by the project team.
- **Hot Water** – Introduce solar water heating systems for new buildings.
- **External Foul Drainage-** construct a new septic tank serving the OPD & ICU. Connect the measles ward to existing septic.

- **Sanitary fittings-** providing good quality sanitary findings in the new buildings.
- **Rainwater Drainage-** Provide gutters and downpipe for proper drainage. Provide rainwater harvesting in the new buildings.
- **Fire Protection-** Provide new Hose Reel system for new building above 500 m<sup>2</sup> and replacement of all fire extinguishers.
- **Ventilation** – provide proper natural and mechanical ventilation in the new building units.
- **Air Conditioning** - Provide appropriate AC in the new building units.

#### **Electrical works**

- To retain the power house at the current location to prevent re-location of main cables
- Power supply to the new blocks direct from the genset to a new feeder pillar close to the construction site of ICU and OPD.
- Design of Nurse calls for the ICU.
- Fire alarm detection for the OPD and ICU.

#### **4.5 Project Activities**

**Design Phase:** The design phase included the following activities:

- Technical assessments i.e. the site assessments, structural integrity assessments, geotechnical studies, surveying, environmental and social impact assessments.
- Preparation of technical assessment reports to inform the design review process and tender documents.
- Stakeholder mapping and Engagement
- Design of a layout plan
- Detailed Design (architectural, civil, structural, mechanical & electrical) of Kismayo regional hospital.

**Demolition and Construction Phase:** This phase will mainly include the following activities:

#### **Preliminaries:**

- Preparation and implementation of C-ESMP
- Preparation and implementation of E&S Specific sub plans i.e. Waste management plan, Stakeholders engagement plan, incident management plan, emergency response and awareness plan, local labor management plan etc
- Installation of temporary site offices, toilets and space for stores for the workers.
- Provision of water and electricity within the site for the duration of the contract.
- Approval of method statement of the works.
- Clearing up of the site.
- Establishing controlled work areas - this includes erecting barriers or enclosures around the work area to prevent unauthorised access

- Demolition of buildings with low structural integrity i.e. Temporary measles wards, external pavements, Outpatient department
- Disposal of the material from the demolition to the disposal site.
- Levelling the ground in preparation for the new construction.
- Equipment and furniture procurement

### **Construction of Facilities**

- Excavation works for a new foundation.
- Backfilling.
- Foundation works for the stone strip foundation.
- Structural works (strip reinforced concrete foundations; ground beams and slab on grade; reinforced concrete columns and walls; reinforced concrete solid slabs)
- External walling
- Doors, windows and grills; complete with all accessories
- Installation of Rainwater collection system
- Soil, waste and vent pipe for drainage
- Electrical and low current system
- Equipment and furniture Installation
- Site structural components related to the external works, including water tanks and septic tanks, generator block, maintenance block, waste disposal block, guards room block, internal roads and paving and storm water drainage channels.
- Renovation to replace the roof for the operation and theatre.
- Ventilation and air conditions
- Realigning the firefighting system
- Cabling works.
- Testing and commissioning.

Outdated structures with structural integrity issues will be demolished to pave way for renovation and space for set up on state-of-the-art health facility. The basic material requirements to undertake the renovation and construction of the hospital Unit are building sand, stone aggregates, Solar PV, cement, concrete blocks, plumbing accessories etc. Labor management requirements and risk mitigation measures listed below also apply for this process. For building sand and aggregate, the contractor shall have the responsibility to source for a legal site where sand can be extracted from and this shall be approved by the engineer prior to engagement, in consultation with the local authority and any other relevant government institutions. The rest of the material can easily be sourced from block making sites. Plumbing materials shall be procured locally unless this proves a challenge; the material can be sourced from other towns. Procuring locally materials is although highly recommended as it will spur the economic growth of the project area while also reducing the carbon footprint related to the project implementation.

**Operational Phase:** The operational phase activities will include:

- Training of the health workers in the management of generated clinical and other waste and recycling opportunities.
- Establishment of Standard Operating Procedures for the hospital, including emergency response procedures.
- Ensuring adherence to OHS standards for the workers
- Operation of the hospital in compliance with the Infection Control and Medical Waste Management Plan (ICMWMP) (see Project ESMF) provided towards the end of this documents (annex 6).
- Management of community exposure to health problems arising from ineffective infection control and inadequate healthcare waste management.

### **Decommissioning phase**

This report does not address the decommission phase of the project, it is envisioned that the hospital will undergo further expansion due to the high population it serves and need for more services. An environment and social management plan shall be prepared for any reason it is found necessary to decommission the hospital.

## 5. ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

### 5.1 Positive Impacts Related to the Sub Project:

The health sector has been overstretched due to the population growth rate that is exponential as a result population influx in towns, increased climate sensitive diseases, and the demand for well- equipped medical facilities by patients. This has led to increased mortality rates among the expectant mothers and those suffering from chronic illness and other climate sensitive diseases. Renovation and reconstruction of new state of art health facility (Kismayo Regional Hospital) in Juba land state in Somalia will greatly impact the local community increasing access to health care. Anticipated positive will include but not limited to:

- Rehabilitation and reconstruction of the health facility will increase access to quality health care for the community lead to improved community health.
- The project will spur economic growth as a result of local sourcing of materials and patient influx in the hospital for treatment.
- The project will also improve living standards of the local community as a result of local sourcing of labour: semi-skilled, unskilled and skilled where possible.
- Water quantity and quality in the hospital will increase due to installation of water harvesting systems and desalination of water to critical units of the hospital.
- Landscaping and greening with native plants around the constructed building will assist sequesterate carbon from the atmosphere while improving the aesthetic area of the hospital.
- Project technical team working closely with the community skilled practitioner will result to knowledge transfer increasing the technical capacity of the community members for future engagements.
- Storm water will be managed as the area has been flooding; introduction of storm water infrastructure will greatly reduce flood related risks.

### 5.2 Negative Impacts Related to the Sub Project:

Any project to be implemented if not critically assessed and analysed on the potential environmental and social risks and impacts associated with it, can have adverse impacts both on the environment and the local community in sub-project area. The activities associated with the demolition, rehabilitation and construction of the main hospital building and the auxiliary buildings will likely generate adverse site-specific risks and impacts, including:

#### Design Phase:

- Inadequate consultation and stakeholder engagement.
- Exclusion of vulnerable and marginalized groups during stakeholders' engagement
- Lack of access to functional and anonymous based GRM

#### Demolition and Construction Phase:

- Sourcing of materials, an activity which may degrade the surrounding environment,
- Use of existing borrow pits which may further deteriorate the surrounding environment
- Increased level of dust, noise and vibration from moving of construction vehicles and machinery,

- Increased level of air pollution through operation of heavy equipment and vehicles, and possible use of hazardous materials during demolition, construction and rehabilitation.
- Fall of material or bricks during demolition, rehabilitation and construction,
- Generation and improper management of demolition, rehabilitation and construction waste,
- Security for project operations including the protection of project workers and beneficiaries, and assets,
- Labor influx and associated risks of Sexual Exploitation and Abuse/Sexual Harassment,
- Risks associated with labor and workers conditions, e.g., child labor, forced labor and unequitable remuneration of the project workers, extended working hours and unfair dismissal.
- Occupational health and safety of workers, including risk of slips and trips; working at height; working without proper PPEs; working in confined spaces; work with electrical equipment; working in hot environment,
- Traffic and /road hazards,
- Challenges in access to beneficiaries for meaningful stakeholder and community engagements as well as access to grievance redress and monitoring,
- Disruption in healthcare services for the current and potential patients,
- Traffic risks during rehabilitation and construction,
- Potential impacts to patients and health care workers who will be using the existing facility during renovations and demolitions,
- Stormwater (build stormwater discharge system)
- Hot climate: narrow windows to reduce solar radiation with double glazed aluminium profiles)

#### **Operational Phase:**

- Community health and safety risk: water and sanitation safety, life and fire safety, protection from infectious disease.
- Potential impacts to patients and health care workers who will be using the existing facility
- Waste management
- Medical wastes, wastewater and air emissions leading to contamination of the environment and the workers,
- Risk of infection among health professionals,
- Risk of infection to the handlers
- Physical hazards (for example, handling of sharps),
- Electrical and explosive hazards,
- Fire
- Ergonomic hazard; OHS hazards related to healthcare and non-healthcare daily operations,
- Radioactive hazard,
- Poor sanitation conditions at the facility leading to discomfort and poor aesthetic values
- Community health and safety: carriage of healthcare waste through public streets can be a risk in case of an accident or mere spill of health care waste.
- Lack of access for vulnerable groups, including women, disabled, minorities

- Exclusion from ongoing consultations of vulnerable groups
- Risks of GBV/SEA to the communities especially to vulnerable persons.
- Risks related to incinerator operation, increased air emissions.

#### **Decommissioning Phase:**

Decommissioning of the hospital is not planned, and there is potential for future expansion. If decommissioning becomes necessary, an Environment and Social Management Plan will be prepared.

#### **RISKS AND IMPACTS AND MITIGATION MEASURES**

The below lays down a phase out framework by identifying the specific adverse environmental and social risks and impacts anticipated of the sub-project and the respective mitigation measures required to reduce or eliminate the associated risks and impacts. This matrix forms the core of the ESMP, as it clearly maps out the anticipated social and environmental impacts, provides robust mitigation measures, the party to address the risk the timeframe of implementation, the monitoring indicator as well as the cost for compensation/ offsetting the residual impacts.

Table 3 ESMP Table

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
ESS1 Assessment and management of Environmental and social risk and impacts						
<b>Demolition and Construction Phase</b>						
	Risk of poor implementation of the mitigation measures and adherence to the set standards and procedures	<p>Enhance capacity of all implementers on E&amp;S risk assessment and mitigation measures through training sessions</p> <p>Provide capacity building opportunities to the E&amp;S teams working on the subprojects on understanding and implementing assessment and management requirements of the WB's ESF and WBG's EHSs.</p> <p>Provide H&amp;S training to the to the construction workforce (including subcontractors, temporary workers, and drivers). Raise awareness of workers regarding the implementation of the ESMP tailored to the project scope, through toolbox talks and other platforms</p>	Implementation UNOPS and monitoring: PCIU	500 USD for logistics	<p># of awareness sessions provided to workers</p> <p># of training sessions provided to project team</p>	<p>Before the beginning of construction activity</p> <p>PCIU budget</p>
ESS 2: Labour and Working Conditions						
<b>Demolition and Construction Phase</b>						

Risk of insecurity affecting project workers	PCIU to provide actions according to the Project Security Management Framework and UNOPS adopt actions and cascade them to contractors. Contractors to implement security risk management mitigation measures according to the SMF.	PCIU / UNOPS/Contractor	Costs for security risk implementation as part of contractor budget	# Security Risk Assessments updated # records of SMPs # records of security incidents	Prior to commencement of activity and during construction activities PCIU budget
Labor and working	Implement and monitor the LMP and ensure each	Implementation by	Included in	Availability of	Monthly

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monit ing Indicator	Monitoring Frequency
	conditions are not in compliance with WB and Somali legislation	<p>employee has a contract or defined terms of engagement.</p> <p>Listing of all staff and titles, new hires and departures</p> <p>Site visited and review of records, major findings, and actions taken by contractor, engineer, or others, including authorities—to include date, inspector or auditor name.</p>	Contractors Monitoring by PMT/PCIU and engineering Firm	contractor staff costs Cost of monitoring is included in the project/ operational cost.	register Availability of logbook showing site visited and actions taken Incidents reports	Incidents to be reported within 48 hours Cost of monitoring is included in the project/ operational cost.

	<p>OHS risks, including impacts of dust, noise, vibration, ergonomics, extreme temperatures, struck by objects, slips and trips, working at height, working in confined spaces</p>	<p><u>Dust:</u> Watering the soil to dampen the surface to be used to reduce dust Wear PPE (including safety glasses and gloves and dust masks). Use dust suppression techniques, such as water spraying on demolition sites and debris. Use dust barriers or screens around the site to contain airborne particles. Ensure all workers wear appropriate personal protective equipment (PPE), like masks and respirators <u>Noise:</u> Provide hearing protection where necessary (when sound level over 8 hours reaches 85 dB(A)) Use of acoustic insulating materials, isolation of noise source, and other engineering controls No noise from machine breakers if used during evening hours <u>Vibration:</u> Control vibration through choice of equipment, installation of vibration dampening pads or devices, and limiting the duration of exposure <u>Heat:</u> Provide temporary shelters to protect against the elements during working activities or for use as rest areas.</p>	<p>UNOPS/Contract or PCIU E&amp;S specialist to monitor adherence to requirements</p>	<p>Included in Contractor budget</p>	<p>Frequency of watering and number of dust masks provided to staff and being used</p> <p># of sensitization workshops on use of PPEs</p> <p># of temporary shelters available</p> <p># of training for industrial vehicle operators conducted</p> <p># of rest and stretching breaks per work day</p> <p># of OHS</p>	<p>Monthly reports Incident and accidents to be reported within 24 hours</p>
--	--	--	---	--------------------------------------	--	--

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitori ng Indicator	Monitoring Frequency
		<p>Monitor weather forecast for outdoor work Adjust work and rest periods according to temperature</p> <p>Use of mechanical assists to eliminate or reduce exertions required to lift materials, hold tools and work objects</p> <p>Implement quality control and maintenance programs that reduce unnecessary forces and exertions</p> <p><u>Confined spaces/excavations:</u></p> <p>Safe access and egress into the excavation area, for example a sufficiently long &amp; secured ladder.</p> <p>Daily and weekly inspections to be carried out as per excavation permit and daily checklist</p> <p>Fencing to be erected around the excavations area, external site fencing with visible signage to be installed to prevent unauthorised entry</p> <p>Ensure materials are located/ unloaded in designated locations and not adjacent to excavation edges</p> <p>Workers/operatives to use appropriate PPE</p> <p><u>Ergonomics</u></p> <p>Incorporate rest and stretching breaks into work processes and conduct job rotation</p> <p><u>Struck by objects</u></p>			<p>related incidents</p> <p>% of workers with appropriate PPE</p> <p># of health and safety work plans</p> <p># of site speed limit signs at construction site</p> <p>Records of rest and stretching break</p> <p>Records of heath awareness sessions</p> <p>Signage for designated and restricted</p>	

		<p>Use designated and restricted waste drop or discharge zone</p> <p>Conduct sawing, cutting, grinding with proper guards and anchoring</p> <p>Provide appropriate PPE, including safety glasses with side shields, face shields, hard hats and safety shoes</p> <p><u>Working at height</u></p>			<p>waste drop zone</p> <p># of temporary fall protection measures</p> <p>-Records of safety harness with lanyards provided</p> <p>Record of</p>	
--	--	--	--	--	---	--

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
		<p>Use of temporary fall protection measures Training and use of personal fall arrest systems Use of safety harness with land yards</p> <p><u>General:</u> Preparation of an Emergency Preparedness Plan and emergency alert systems Provision of adequate PPE (safety harness, gloves, safety glasses, hard hat, safety boots, dust mask, safety vests) Regular training for workers on workplace safety Preparation of health and safety plan Contractor shall provide UNOPS with method statements for the works to be implemented in a safe manner.</p>			<p>emergency preparedness and response plans</p> <p>Records of PPE provided and reports on usage</p> <p>Training records</p> <p>Health and safety plan records</p> <p>Record of method statement provided to UNOPS</p> <p># records of trainings for</p>	

					industrial vehicle operators conducted	
					# and duration of rest and stretching breaks per work day	
					# of OHS related incidents % of workers	

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitori ng Indicator	Monitoring Frequency
					with appropriate PPE  Records of health and safety work plans  # of site speed limit signs at construction site Records of rest and stretching breaks  Records of heath awareness and education sessions  Signage for designated and restricted	

					waste drop zone  # of temporary fall protection measures -Records of safety harness with lanyards provided  Record of emergency preparedness and response	
--	--	--	--	--	--	--

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
					plans  Records o PPE provided and reports on usage  Training records  Health and safety plan records  Record of method statemen t provided to UNOPS	

	Risk of labor influx increases social ills and SEA/SH cases	Enforce All workers to sign CoCs. Dedicated reporting channel for victims through Project GRM Provide GBV and GRM awareness training to workers Develop workforce management plan	UNOPS/Contractor Monitoring PCIU/PMT	Incl in contractor staff costs / PCIU costs	% of workers that signed COCs  # of training sessions of SEA/SH provided  Workforce management plan implemented	At commencement of project activity and throughout the project cycle. PCIU budget
	Discrimination against women and vulnerable groups in employment	Contractor to develop recruitment and retention policies that enable fair working conditions and women's safe and equitable participation. Contractor to track the vulnerable persons engaged in the project. Continuous GRM awareness campaigns.	UNOPS/Contractor Monitoring PCIU/PMT	Included in staff costs	Record of contractor's recruitment and retention policy in place	At start of project Quarterly Staff time

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitori ng Indicator	Monitoring Frequency
		Comply with LMP			# of vulnerable groups engaged in the sub- project	
	Delayed payment or underpayment of workers, leading to complaints and conflict	Ensure provision of timely and equitable payment system Ensure provision of an effective workers' GRM Ensure information on workers' GRM is provided	UNOPS/Contractor Monitoring PCIU/PMT	Included in contractor staff costs	Records of recruitment and retention policies available  # of women and vulnerable groups employed in comparison to the total number of people employed in the activity	Monthly UNOPs staff time

<p>Child and forced labor resulting in employing of underage children and human trafficking</p>	<p>Implementation of GRM to ensure their voices / complaints are heard  Contractor to maintain staff records, ID copies Minimum age for workers to be set at 18 years and validate that through the ID or any other identity documents.  Regular monitoring inspections</p>	<p>UNOPS/Contract or Monitoring PCIU/PMT</p>	<p>Included in contractor staff costs</p>	<p># of workers' grievances filed # of GRM cases filed   Record of all workers IDs and contract or consent to work.   # of workers' grievances filed and of GRM cases filed, resolved or pending</p>	<p>Throughout project implementation   UNOPS staff time</p>
---	---	--	---	--	---

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
					Records of cases of child and forced labor reported	
	Risk of SEA/SH among workers	All workers to sign CoC. Dedicated reporting channel for victims through Project GRM Provide gender segregated closet toilets for workers Provide GBV awareness training to workers Awareness on the GBV service providers in the area.	UNOPS/Contractor Monitoring PCIU/PMT	Included in the budget of PCIU and contractor	% of workers that signed COCs  # of training sessions provided	Monthly PCIU budget
	Hot climate	Continuous supply of drinking water to project workers Contractor to ensure construction works is done mostly during colder periods.	Contractor	Incl. budget for contractor	# of times construction workers are provided with water  Time of the day when construction works is done	

	Lack of proper information disclosure and workers grievance redress mechanism	Ensure information is disclosed as per the SEP and all adequately informed of all the relevant information. Ensure there is known GRM system in place and workers are notified about it.	Contractor and PIU		# of information disclosed in the notification area. Presence of the workers GRM GRM channels sensitization	Quarterly
<b>Operational Phase</b>						
	Risk of medical wastes, wastewater and air emissions leading to contamination of	Ensure waste is segregated at point of generation to the extent possible for easy handling Ensure the segregated waste is appropriately packaged in colored containers using standard clinical waste color codes for respective waste	Kismayo Regional Hospital administration  Monitoring: MoH	Incl. budget of hospital	# of labelled secure bags for generated medical waste	Quarterly  MoH budget

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
	the environment and the workers	type, and stored for final disposal consistent with the WHO standards <sup>20</sup> Sensitisation of workers on sustainable medical waste management practices Rigorously segregate waste so that no PVC (IVs, etc.) waste is incinerated and instead directed to the appropriate waste bag for appropriate disposal			# of wastewater and air emissions analytical results available	
	Risks of physical hazards (for example, handling of sharps); Electrical and explosive hazards; Fire; Chemical use OHS hazards related to healthcare and non- healthcare daily operations	Ensure a local risk assessment (identification of risks at work) is conducted for each process step, that is, from sample collection to disease isolation to identify specific hazards and for each identified risk, appropriate risk control measures must be defined. Provide safety training in the management of hazards identified other than those related to sample handling Provide review of Infectious Preventive Control training for the health care facility staff, including Health Care Workers charged with the responsibility to handle and dispose of the medical waste Ensure conducting regular fire drills. . All fire and life safety measures follow applicable good practice standards such as those under ESS4, and the IFC EHS for Fire Prevention and Life Safety (see Annex	Kismayo Regional Hospital administration  Monitoring: MoH	Incl. budget of Hospital	# Local risks assessment conducted every year and specific hazards identified for each and way forward  # of regular safety training provided  # of reviews of training provided  # of fire drills conducted	Monthly Budget of MoH

		6) Monitor compliance with the Labor Management Plan (LMP).			# of OHS incident reports	
	Risk of infection among health professionals	Ensure appropriate training on Infection Prevention and Control for healthcare workers and other staff. WHO prescribed protocols for personal	Kismayo Regional Hospital administration	Incl. budget of Hospital	# of training sessions held and workers who has been	At start of the clinical operations MoH budget

<sup>20</sup> <https://www.who.int/publications-detail-redirect/9789241548564>

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
		protection of healthcare professionals is to be enforced at all times. Ensure training in Health care waste management systems, which enable health care waste to be managed responsibly, without harming the community or the environment.	Monitoring: MoH		trained  # of protocols available at location	
	Risk of GBV/SEAH among workers	All workers to sign CoCs (see Annex 3). Dedicated reporting channel for survivors through Project GRM Provide GBV awareness training to workers	Kismayo Regional Hospital administration	Incl. budget of Hospital	% of signed COCs  GBV/SEAH road map generated  # of training sessions provided	Monthly  MoH budget
	OHS risks for hospital workers	Provision of adequate PPE Regular training for workers on workplace safety, Preparation and implementation of health and safety plan	Kismayo Regional Hospital administration	Incl. budget of Hospital	# of training sessions provided  # of health and safety plans available	Monthly  MoH budget
ESS 3: Resource Efficiency and Pollution Prevention and Management						
<b>Demolition and Construction Phase</b>						

	Lack of management and disposal of material generated from Rehabilitation activities, including rubble / waste management	<p>Contractor to provide Waste Management Plan for site, including specifications for waste disposal.</p> <p>Reuse and recycling of the waste generated should be prioritized</p> <p>Ensure disposal of generated solid waste at designated and authorized disposal site in consistence with the local and international requirements (see WBG General EHS Guidelines) [1], such as:</p>	Contractor  Monitoring: UNOPS/PCIU	Incl in contractor budget	<p>Records of amount of solid waste re-used, recycled, disposed, where and when</p> <p>Records of waste tracing sheets from the premises to the</p>	Quarterly  UNOPS budget
--	---	--	---	---------------------------	---	-------------------------------

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitori ng Indicator	Monitoring Frequency
		<p>Institute good housekeeping and operating practices - including inventory</p> <p>Control to reduce the amount of waste Institute procurement measures that recognize opportunities to return usable materials</p> <p>Implement stringent waste segregation to prevent mixing hazardous and non-hazardous wastes Identify potentially recyclable materials</p> <p>Provide on-site or off-site transportation of waste to prevent or minimize spills, releases and exposure to employees and public</p> <p>Ensure mechanisms exist for community to bring forth any complaints/feedback concerning the waste disposal by the contractor – Project GRM Carry out disposal of solid waste in a manner that does not negatively affect the drinking water sources, the existing waste management system in the area, local routes, and general aesthetic value of the area.</p>			<p>disposal sites</p> <p>Grievances filed related to Waste management plans</p> <p>Report on implementation of the waste management</p>	

	<p>Poor sanitation facilities and sanitation conditions at work site</p>	<p>Provide proper water closet toilet facilities at work sites.          Do not allow water to run out in toilets.          Maintain all toilets in clean and sanitary condition. Do not allow site workers to defecate in the open spaces on the site or in its vicinity.          Add the use of sanitation arrangements in toolbox talks</p>	<p>Contractor          Monitoring:          UNOPS</p>	<p>Included in the Budget of contractor</p>	<p># of water closet toilet facilities available            % of toilets leaking            # of Toilets are well maintained            # of toolbox talks with Sanitary arrangements</p>	<p>Monthly UNOPS budget</p>
--	--	---	---	---	---	-----------------------------

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
	<p>Risk of pollution on surface water and groundwater sources</p> <p>From waste generated during demolition and construction phases</p>	<p>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.</p> <p>Ensure that construction materials left over at the end of construction will be used in other projects rather than being disposed of.</p> <p>Ensure that damaged or wasted construction materials will be recovered for refurbishing and use in other projects</p> <p>Donate recyclable/reusable or residual materials to local community groups, institutions and individual local s or home owners.</p> <p>Dispose waste more responsibly by dumping at designated dumping sites or landfills only.</p> <p>Waste collection bins to be provided at designated points on site.</p> <p>Ensure segregated waste is handled/disposed by the licenzed waste service providers.</p> <p>Prepare and implement sustainable waste management plan.</p>	<p>Contractor</p> <p>Monitoring: UNOPS</p>	<p>Incl. in contractor staff costs</p>	<p>Volume of construction materials left over at the end</p> <p>Volume of waste at construction site is disposed of appropriately</p> <p># of waste bins available at construction sites</p> <p># of waste related complaints</p>	<p>Throughout project implementation</p> <p>UNOPS budget</p>

		Prepare and implement an emergency awareness and response plan				
	Air quality impacts from construction machinery and material transport	<p>Install emission control devices, such as diesel particulate filters or oxidation catalysts on older machinery</p> <p>Ensure equipment or vehicle is properly maintained to operate efficiently and emit fewer pollutants</p>	UNOPS/Contractor	Incl. in contractor budget	<p>Availability of emission control device</p> <p>Record of maintenance is available</p>	Throughout construction phase
	Risk of water consumption	<p>Manage water consumption, including through</p> <ul style="list-style-type: none"> <li>- On-site water recycling</li> <li>- Rainwater harvesting</li> </ul>	UNOPS/Contractor	Incl. in contractor budget	<p>Availability of water recycling</p> <p>Availability of</p>	Throughout construction phase

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
		Conduct regular inspections to identify and fix leaks in pipes, hoses and tanks.			inspection record	
	Prevention of spills during refuelling	Apply spill containment trays  Inspect and maintain fuel hose and connection to prevent leaks.	UNOPS/Contractor	Incl. in contractor budget	Availability of containment trays  Availability of inspection record	Throughout construction phase
	Hazardous material storage and disposal	Empty paints cans store in closed drums or isolated area from soil and water at Contractor store, then handle as recycled metal scrap.  Store any chemicals and hazardous waste at designated areas, insulated from the ground  Ensure trained personnel handle hazardous chemicals and wastes.	UNOPS/Contractor	Incl. in contractor budget	Availability of material safety data sheets in areas where chemicals are used or stored  Availability of eye wash stations  Training records on	Throughout construction phase

					handling of hazardous chemicals	
<b>Operational Phase</b>						
	Stormwater	Build stormwater discharge system	Contractor Monitoring: UNOPS	Contractor budget	Availability of stormwater discharge system	During construction phase UNOPS budget
	Hot Climate	Build narrow windows to reduce solar radiation with double glazed aluminium profiles	Contractor Monitoring: PCIU/PMT	Contractor budget	Availability of narrow windows	During construction phase UNOPS budget
	Impacts of air emissions from incinerator	Conduct preventative periodic maintenance of incinerator Ensure compliance with national standards and	Kismayo Regional Hospital administration	Budget of Hospital	# of maintenance events	During operational phase MoH Budget

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
		<p>the Stockholm Convention's Best Available techniques (BAT) and Best Environmental Practice (BEP)</p> <p>Do not use single-chamber, drum and brick incinerators</p> <p>Operate through qualified personnel only Ensure auditing and reporting systems Conduct routine inspections of the furnace and air pollution control systems</p> <p>Implement ICMWMP (See Project ESMF)</p>			# of routine inspections	

	Increase in medical waste due to increased hospital operations	Sensitization of health workers on proper and sustainable medical waste management process. Ensure all medical waste are handled by licensed medical waste practitioners Ensure waste is properly disposed after incineration to avoid the medical ash getting into ground water sources and surface water sources. Fix scrubbers and other pollutant prevention strategies on chimneys at waste incineration point to avoid air pollution and subsequent water and soil pollution Conduct regular maintenance of the incinerators	Kismayo Regional Hospital administration Monitoring: PCIU/PMT	Included in the budget of Hospital	# of sensitization workshops conducted sustainable medical waste management plans in place.  Type and the licensing status of the service providers  Final disposal points of the incinerated waste.  # of maintenance conducted	Throughout the operation stage of the facility  Budget of MoH
	Increased solid waste due to increased No. of	Ensure colour coded waste segregation bins and placed strategically within the hospital's vicinity Use of posters within the health facilities on	Kismayo Regional Hospital administration	Included in the budget of Hospital	# of colour coded waste receptacles	Throughout the operation stage of the facility

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monit ori ng Indicator	Monitoring Frequency
	patients using the facility	proper way of solid waste disposal			placed within the health facility or its vicinity  # No of posters on sustainable waste management strategically placed.	Budget of MoH
	Risk of water consumption	Manage water consumption, including through - On-site water recycling - Rainwater harvesting Conduct regular inspections to identify and fix leaks in pipes, hoses and tanks	UNOPS/Contract or	Incl. in contractor budget	Availability of water recycling  Availability of inspection record	Throughout construction phase
ESS 4: Community Health and Safety						
<b>Construction Phase</b>						

	<p>Increased GBV/SEAH cases and risks of sexual exploitation and abuse or sexual harassment, such as requests for sexual favors by project workers</p>	<p>GBV awareness sessions for community members</p> <p>GBV awareness sessions for workers</p> <p>Engage a dedicated service provider to support oversight and management of these risks</p> <p>Workers to sign COC</p> <p>Provide continuous awareness on GRM for SEA/SH channels to all workers</p>	<p>PCIU</p>	<p>Included in PCIU staff and travel costs</p>	<p>Records of GBV awareness sessions to staff and the community members</p> <p>% of workers that have signed CoC</p> <p># of GBV-</p>	<p>monthly</p>
--	--	--	-------------	--	---	----------------

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
		Implement the SEA/SH Action Plan.			related incidents reported	
	Spread of communicable diseases (Sexually Transmitted Diseases SIs, HIV/AIDS, etc..) between workers and the community	Periodic community and workers awareness sessions on communicable diseases including HIV/AIDS Provide hand washing stations for workers	Contractors / PCIU / UNOPS  Monitoring: UNOPS	Included in PCIU staff costs and contractor budget	# of community sensitization  % of workers that have signed CoC  # of related complaints filed in GRM	Monthly  UNOPS budget

<p>Exposure of community members to physical hazards on project sites.</p>	<p>Undertake safety precautions to address safety hazards for the nearby community, Sensitize the local community and inform them about construction risks and the restricted access to the site Restrict access to construction site through signage Remove hazardous conditions on site that cannot be controlled effectively with site access restrictions, such as covering openings to small, confined spaces, ensuring means of escape for larger openings Lock storage of hazardous material</p>	<p>Contractor  Monitoring; UNOPS/PCIU/PM T</p>	<p>Included in Contractor budget</p>	<p>Number of sensitization sessions for the communities  # of signage available around construction site  % of small openings that have been covered  % of larger openings that have an escape opening  #of locked storage facilities for hazardous materials</p>	<p>Throughout activity  UNOPS budget</p>
--	---	--	--------------------------------------	---	--

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
	Increased level of dust, noise and vibration from moving of construction vehicles and machinery	High level maintenance of the project vehicles and equipment as per the manufactures specifications to reduce air, water and soil pollution. Selecting equipment with lower sound power levels Installing suitable mufflers on engine exhausts and compressor components equipment casing Planning activities in consultation with local communities so that activities with the greatest potential to generate noise are planned during periods of the day that will result in least disturbance. Spray work area with water to avoid dust Install no hooting sign and ensure it is enforced	Contractor  Monitoring: UNOPS	Included in Contractor budget	% of vehicles adhering to maintenance schedule  % of engine exhausts with mufflers installed  % of activities implemented during the days  Signage for no hooting	Throughout the project cycle  UNOPS budget
	Disruption in health services for current and future patients	Ensure alternative and accessible health centres are mapped and communicated and patients transferred particularly patients in critical units	Kismayo Regional Hospital administration  Monitoring; PCIU	Included in MoH budget	# of GRM cases filed in relation to site closure	Throughout activity  PCIU staff time

	Potential impacts to patients and health care workers who will be using the existing facility	Put in place an effective GRM Provide signage and fencing to guard access between the demolition site and the remaining hospital site	UNOPS/Contractor Monitoring: UNOPS	Included in contractor budget	# of GRM cases filed  # of safety signages installed  # of fencing installed	Throughout activity  UNOPS budget
	Transport/road hazards and traffic risks during construction	Prepare implement a traffic management plan  Training and licensing of industrial vehicle operators in the safe operation of specialized vehicles.	Contractor Monitoring: UNOPS	Included in contractor budget	% of industrial vehicle operators with license	Monthly  UNOPS budget

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
		<p>Ensure drivers undergo medical surveillance</p> <p>Establish rights of way, site speed limits, vehicle inspection requirements, operating rules and procedures</p> <p>CoC signing by drivers and operators</p> <p>Ensure drivers undergo medical surveillance</p> <p>Ensure the vehicle are in good and serviceable conditions</p> <p>Avoid traffic in the night or when and where there are no sufficient lights</p> <p>Ensure there are visible traffic signs in and around the construction site.</p>			<p>% of drivers and equipment operators who have signed the CoC</p> <p>% of vehicle operators who have undergone medical surveillance</p> <p>Traffic signage installed</p> <p>Record of traffic management plans</p> <p>Grievances related to traffic and vehicle operation</p>	

					S	
		Encourage contractor to recruit women for the works in view of creating gender parity	Contractor Monitoring: PCIU/PM T	Incl. in contractor budget	# of women included in the workforce	Monthly UNOPS budget
<b>Operational Phase</b>						
	Risk of poor sanitation conditions at the HCF leading to discomfort and poor aesthetic values	Provide cleaning staff with adequate cleaning equipment, materials and disinfectant. Provide adequate facilities to disinfect the cleaning equipment and dispose of the used consumables in a safe manner;  Review general cleaning systems, training cleaning	Kismayo Regional Hospital Administration	Incl. budget of Hospital	# of cleaning equipment available  % of cleaners trained	Monthly MoH Budget

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitori ng Indicator	Monitoring Frequency
		<p>staff on appropriate cleaning procedures and appropriate frequency in high use or high-risk areas.</p> <p>Train cleaners in proper hygiene (including handwashing) prior to, during and after conducting cleaning activities; how to safely use PPE (where required); in waste control (including for used PPE and cleaning materials)</p>				
	Communities' exposure to health problems arising from ineffective infection control and inadequate health care waste management	Implement MWMP	MoH and HCF administration	running costs of HCF	See MWMP	Monthly
ESS 8: Cultural Heritage						
Demolition and Construction phase						

	Risk of Chance Finds	Implement Chance Find procedures (see Annex 4)	Contractor UNOPS monitoring	Contractor budget	Report on chance find procedures implementation # of occasions Chance find procedures are implemented	Monthly UNOPS budget
ESS 10: Stakeholder Engagement and Information Disclosure						
Demolition and Construction phase						
	Challenges in access to beneficiaries for meaningful stakeholder and community engagements as	Implementation and monitoring of GRM Implementation of Project SEP on stakeholder engagement especially those living around the hospital vicinity.	PCIU / UNOPS	UNOPS GRM budget	% of complaints filed and addressed # of site-specific incident logs # of	Monthly UNOPS budget

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility	Budget for mitigation (in USD)	Monitoring Indicator	Monitoring Frequency
	well as grievance redress and monitoring				consultations conducted# of vulnerable groups engaged	
	Risks of lack of information on access to GRM leads to lack of accountability	Awareness raising on GRM and all the available channels	PCIU / UNOPS	PCIU budget for GRM	# of awareness sessions on GRM	Quarterly UNOPS budget
	Lack of information disclosure leads to lack of transparency and suspicions of mismanagement of the sub project	Conduct in- depth community engagement, providing information on the sub project  Implement SEP on information disclosure	PCIU, UNOPS, Contractors	PCIU budget for stakeholder engagement	# of community engagement sessions held	biannually PCIU budget

## 6. IMPLEMENTATION ARRANGEMENTS

### 7.1 Government and UNOPS Responsibilities

The overall responsibility for the works sits with the Ministry of Health (MoH) as the main recipient and implementer of the project. The work is overseen by the Project Coordination and Implementation Unit (PCIU) embedded within the Project's institutional structures. The Project is contracting UNOPS as a sub-implementer for the rehabilitation and reconstruction of 6 hospitals, including Kismayo Regional Hospital.

UNOPS has designed the works and is preparing the bidding documents for a contractor to be recruited to perform the works. UNOPS will oversee the works and the compliance with the ESMP-specific E&S mitigation measures. The construction companies will implement the project including all Environmental and Social (E&S) mitigation measures defined in this ESMP.

For Kismayo Regional Hospital Rehabilitation works, one contractor will be hired.

Below is the list of Government institutions involved in the implementation, with their respective roles and interests.

*Table 4 Institutional partners responsibilities*

MoH	The MoH is responsible for the overall implementation of the Project. It will deploy supervision consultants to monitor the implementation of the Project
Hospital Administration	The Hospital Administration has agreed to the design of the Rehabilitation works and will support the Rehabilitation.
UNOPS	UNOPS Engineers and E&S safeguard team have prepared the design for the works and this ESMP. They will oversee the implementation of the works by the contractor.
Contractor	The contractor will implement the Rehabilitation works at Kismayo Hospital based on the agreed design and this ESMP.

### 7.2 Contractor

The contractor is responsible for complying with requirements for all field activities covered by this ESMP, the contractor is also responsible to ensure that all its sub-contractors follow the ESMP and other ESF instruments that apply to this sub project. The contractor will have contractual clauses specifying compliance with the mitigation measures listed in the ESMP and in the WBG EHS Guidelines, in addition to national requirements and to indicate measures taken in cases of non-compliance. The contractor is also responsible for the actions of any sub-contractors they may engage. Sub-contractors also have to comply with all E&S standards as laid out in this ESMP. Contractor's responsibilities include:

- Ensuring that all operations comply with the mitigation measures laid out in this ESMP, for which the contractor is responsible.
- The contractor to prepare and implement extensive site-specific E&S sub plans recommended in this ESMP.
- Ensuring that the control measures provided for in the ESMP are both understood and implemented by site personnel.
- Complying with accident and incident reporting framework as laid out in the ESMF. All severe incidents must be reported to UNOPS/PCIU within 48 hours of occurrence.
- Setting up plans for action to be taken in the event of spills or leakages of hazardous materials, and other environmental emergencies.
- Monitoring the ESMP implementation, against the monitoring indicators laid out in the ESMP Table.
- Participating in community consultative meetings.
- Identifying additional significant matters pertaining to environmental and social compliance.
- Liaising with UNOPS on the need for corrective action in the event of unexpected environmental or social problems emerging during the course of operations.
- Communicating with all staff regarding E&S compliance requirements and other matters of importance.
- Identifying additional environmental mitigation or corrective measures that are deemed to be necessary during project implementation.
- Preparing reports on all aspects of E&S compliance.
- Maintaining lists of all workers, including their age and gender.
- Maintaining a workers' grievance mechanism
- Preparing and maintaining an OHS Plan and provide training to all workers on OHS Plan.
- Ensuring signing of code of conduct by every worker, including issues of Sexual Harassment, children exploitation and abuse (CEA), Gender-Based Violence (GBV) and Sexual Exploitation and Abuse.
- Implementing the Security Management Plan.
- Ensuring technical milestone during project are in tandem with E&S milestones.
- Ensuring alternative health facilities are mapped out for the community to use before commencement of works.
- The contractor is obliged to implementing this ESMP with all risk mitigation measures assigned to it.
- E&S Safeguards or Environmental Health and Safety (EHS) Specialist: The contractor will deploy an E&S or EHS Specialist to ensure operationalization of this ESMP, including monitoring, supervision and reporting on mitigation measures. The key tasks of the Specialist is to;
  - Ensure PPEs for workers are available and workers are trained on their use
  - Provide OHS training to all workers, based on the OHS Plan
  - Ensure health and safety of all workers and visitors at the construction site
  - In case of a non-compliance with the technical team on E&S aspects, stop the works to ensure safety and compliance.
  - Maintain records of accidents and incidents and ensure appropriate reporting of incidents to UNOPS.
  - Ensure sustainable waste management procedures are followed closely.

- Ensure the health and safety of the community is not compromised during works implementation.
- Ensure availability of water and sanitation facilities for all workers at site and at the campsite
- Conduct toolbox talks for workers
- Train all workers in the CoC and ensure that CoC is signed by every worker
- Liaise closely with the UNOPS and the PCIU on training workers on GBV issues, as well as community awareness on GBV
- Maintain workers' lists indicating age, gender and vulnerability aspect (persons living with disabilities, etc)
- Maintain records of Workers' GRM
- Ensure all grievances are lodged, acknowledged, resolved and closed within the specific timelines set by the sub-project.
- Ensure all the provisions of this ESMP are implemented.

## 7. REPORTING ON ESMP COMPLIANCE

UNOPS will prepare periodic monitoring reports, including inputs from the contractor on the status of implementation of this ESMP. The reports will be submitted to the PCIU for its review and feedback. Details of these reports and their content are given in the **Error! Reference source not found.** below. A template for E&S Monitoring report is included in Annex 2.

*Table 5 ESMP Monitoring and Compliance Reports*

#	Title of the Report	Contents of the Report	Frequency of Report Preparation	Report to be prepared by
1	ESHS Monitoring Report to UNOPS	Compliance status of the Project with the E&S mitigation and monitoring measures. The report should cover: Environmental incidents; Health and safety incidents, child and forced labor; Health and safety supervision; Usage of PPEs by workers; Highlights of inspection; Training conducted, and workers participated; Worker's grievances.	Monthly	Contractor
2	ESMP Monitoring Report to PCIU	Compliance status of overall Project with ESMP requirements	Monthly	UNOPS
3	Incident Reports to PCIU	Incident investigation reports for all major incidents covering details of the incident, root cause analysis, and corrective actions taken to address the future recurrence of this event	Initial investigation report for severe incidents within 24 hours. Detailed Investigation Report within ten days	UNOPS
	Stakeholder community engagement activities and GRM awareness campaigns	Stakeholder and community engagement activities conducted over the report period and the GRM awareness campaign and initiatives undertaken	Monthly	UNOPS
	Training and capacity building	Workers training on the OHS, workers' GRM, SEAH and GBV issues, emergency preparedness and drills	Monthly	UNOPS
4	Incidents reports from PCIU to WB	Incident investigation reports for all major incidents covering details of the incident, root cause analysis, and actions taken to address the future	Initial investigation report for severe	PCIU

		recurrence of this event	incidents	
			within 24 hours. Detailed Investigation Report within ten days	

## 8. CAPACITY BUILDING AND TRAINING

The implementation of this ESMP is highly dependent on the capacity and awareness of the contractors' staff, the surrounding community and the concerned stakeholders. Training workshops are required to increase the awareness of all individuals concerned with the Project and to train and follow up with the workers who are specifically involved in the site operation.

On-site workers should receive appropriate training to undertake the duties of implementing the necessary mitigation measures. The training workshops should be undertaken prior to commencement of construction activities and as capacity building exercise throughout the project demolition, rehabilitation and construction phase. The recipients of the training are all workers engaged. The training sessions are to be included in the budget of the contractor. The only trainings to be provided by the UNOPS include GBV/SEA/SH prevention. One initial training on mitigation measures will be provided to the contractor.

The training for the workers should cover at least the following issues:

- Occupational and public health and safety.
- Mitigation measures to be applied.
- GBV/SEA/SH prevention and response
- Accidents and emergency plans
- Roll-out of GRM among workers and communities
- Appropriate segregation, transportation, final disposal of solid waste.
- COC

The E&S induction training for the contractors is currently scheduled for 18 December 2025

This will be achieved through the implementation of small workshops in the induction phase for the workers. During the construction phase, refresher trainings will be held.

Next to the training of workers, communities at the site will receive awareness raising sessions should cover at least the following topics:

- heighten awareness of environmental and social risks and impacts and mitigation measures
- GRM
- GBV prevention and response

The Project team will further sensitize the Hospital leadership on the requirements for a Hospital Workers' Grievance Redress Mechanism (GRM) to be implemented during the operational phase.

## 9. STAKEHOLDER CONSULTATIONS

The preparation of this ESMP and design process of the sub-project was highly dependent on stakeholder consultations, conducted as per the Stakeholder Engagement Plan (SEP).

Once the rehabilitation of the Kismayo regional Hospital as one of the 6 hospitals to be rehabilitated and reconstruction was decided on, follow-on site visits, technical site assessments and stakeholder engagements were undertaken in July 2024. The design team met with the PCIU Project Coordinator among other key stakeholders who had extensively been mapped. It was through extensive stakeholders' engagement process that the phasing out of the hospital was agreed upon.

In January 2024 initial stakeholder consultations with state, district level stakeholders, community members and vulnerable groups were undertaken. State and district level authorities indicated that the main challenges in health service provision include lack of supplies and financial support; power challenges; septic tank issues; drinking water challenges; emergency preparedness deficiency; lack of preparedness for outbreaks and climate-related crisis; absence of standard operation theaters and intensive Care Units; and a shortage of specialist doctors. In terms of infrastructure enhancement, stakeholders suggested infrastructure upgrades to ensure the hospital is equipped with necessary facilities that meet the evolving healthcare needs of the community. This may include improving the physical structure of the hospital, upgrading medical equipment, and enhancing the overall healthcare environment.

E&S risks anticipated by stakeholders included:

Waste Management: During the hospital rehabilitation, there may be an increase in waste generation due to construction activities, demolition, and renovation. This waste can include materials contaminated with hazardous substances, construction debris, and other potentially infectious materials. Inadequate management of Hospital waste generated during rehabilitation poses risks of contamination and pollution. If not handled properly, infectious materials can enter the soil and water, affecting both the immediate construction site and surrounding areas. This has been taken into account in the preparation of this ESMP.

Septic tank issues, particularly dislodging during heavy rains, can pose health and environmental risks. Contaminated water from overflowing septic tanks can introduce harmful pathogens into the environment, impacting both human health and local ecosystems. This has been addressed by the design team.

Further risks and impacts mentioned included vibration and noise pollution, water usage, energy consumption, air pollution, and traffic congestion; risks which have been considered in this ESMP. Stakeholders did not anticipate land issues, as the hospital is situated on land owned by the hospital itself. Assurances have been given that there has never been any problem related to the hospital's land during previous reconstruction efforts at different times. No specific concerns or issues related to labor impacts during construction were mentioned in the provided response. However, stakeholders pointed out that it is essential to ensure fair labor practices, including worker safety and welfare, during the construction phase. Vulnerable groups identified in the consultation process include mothers and children, Elderly Population; Internally displaced people (IDP); Persons with Disabilities (PWDs); Low-Income Families; People living chronic diseases (High blood pressure and diabetic patients).

Community level stakeholders generally felt that their current health needs are well-covered by the hospital. The Kismayo Regional Hospital plays a crucial role in providing essential healthcare services to our community. They appreciate the efforts of the hospital staff in ensuring their well-being. However, they expressed that there is always room for improvement, to any improvements that can enhance the hospital's services. Continuous enhancement of healthcare facilities and services is something we welcome and support for the betterment of our community's health.

Community members stated that the most vulnerable groups in the community are infants and mothers, elderly people, IDPs, PWDs, and low-income families.

Community members expressed that anticipated environmental problems include noise and vibration resulting from construction activities, air pollution, and dust. Additionally, challenges in waste and wastewater management were identified as potential issues. While these concerns are recognized, the community remained optimistic that, with proper planning and mitigation strategies, the rehabilitation project can proceed in an environmentally responsible manner.

Members of vulnerable groups expressed concern that there is a potential risk of excluding disadvantaged and vulnerable groups from the benefits of the rehabilitation project, particularly in terms of employment opportunities during the construction phase.

It was expressed that during the rehabilitation process, the involvement of labor from diverse backgrounds may pose health and safety risks to the local community. This could include concerns about the introduction of diseases such as HIV and STDs. It was suggested to implement rigorous health and safety protocols, including health screenings for workers, community health awareness programs, and effective communication to address and mitigate potential health risks.

Community members expressed concerns about the terms and conditions of work, including issues related to regular payments, overtime, and time off for the workforce involved in the rehabilitation and suggested the establishment of fair labor practices, ensuring that workers are provided with proper contracts, fair compensation, and adherence to labor laws. Maintain open channels for communication and dispute resolution to address labor-related concerns promptly. They named the possibility of clan-based conflicts fuelled by perceptions of nepotism or favoritism in the project.

Community level stakeholders also did not express any concerns over land issues, as everybody recognizes that the land belongs to the hospital.

Women stated that construction activities are often male-dominated. However, women can still actively participate and benefit by diversifying economic activities. Rather than direct involvement in construction, women can explore opportunities such as providing essential goods and services required during the construction phase.



*Figure 17 Meeting with women's groups, Kismayo, January 2024*



*Figure 18 Meeting with elders, Kismayo, January 2024*

On 8 July the UNOPS team met with the General Hospital Director, staff of the Ministry of Health and Hospital staff and presented the project design. Responding to community requests, the design includes gender-segregated latrines. Stakeholders agreed on the priorities during the rehabilitation, the exact location of buildings, and other design items. For example, the The initial proposal was to demolish the transmittable disease treatment area at the Southeastern corner and construct new ones next to the measles ward inside the hospital. However, the hospital requested the new building for ICU and OPD be constructed inside and the transmittable disease treatment area be maintained as it is for future replacement.



*Figure 19 Stakeholder Engagement meeting*



*Figure 20 Meeting with the director general of the facility as part of site assessment and scope of work prioritization.*

## 10. GRIEVANCE REDRESS MECHANISMS

One of the key objectives of ESS 10 (Stakeholder Engagement and Information Disclosure) is 'to provide project-affected parties with accessible and inclusive means to raise issues and grievances and allow borrowers to respond and manage such grievances. This Project GRM facilitates the Project to respond to concerns and grievances of the project-affected parties related to the environmental and social performance of the project. The Project provides mechanisms to receive and facilitate resolutions to such concerns. This section lays out the grievance redressal mechanisms (GRM) for the Project.

The PCIU has the responsibility to resolve all issues related to the Project in accordance with the laws of FGS and the World Bank ESSs through a clearly defined GM that outlines its process and is available and accessible to all stakeholders. The entry point for all grievances is the social specialists at the FGS and FMS/BRA levels, who receives grievances by phone, text, in person or email. The PCIU will publicized mobile phone lines and email addresses and all channels available receive grievances. The social safeguards specialists will acknowledge, log, forward, follow-up grievance resolution and inform the complainant of the outcome. The complainant has the right to remain anonymous, in which case the identifying details will not be logged. The PCIU senior social specialist will carry out training of FMS/BRA social officers and project officers on complaints handling and reporting. Grievances may also be submitted to UNOPS or the contractor. Both will aim to handle grievances and solve them or feed the cases into the established Project GRM described here where applicable.

A Grievance Committee (GC) is established at federal level, consisting of the project coordinator, and relevant staff, with the social safeguards' specialist acting as the secretary to the meeting and taking minutes and follow up the grievance resolution process. The GRM offers different channels to enable a confidential and sensitive approach to GBV-related cases that ensures the safety of survivors and enables survivor-centred care. The GC meets every two months throughout the project implementation period to review non-urgent appeals and the functioning of the GM.

The PCIU and UNOPS conduct public awareness campaigns about the respective GRMs to inform all communities and staff on the mechanism. A one-pager provides summary details on the GM, while a poster and leaflet are prepared for the project site. Various mediums are used to sensitize the communities on the project GRM including social media and FM radio to reach out to communities at the Project locations, including call-ins with panels including community and government representatives. The GRM details will are also published on the MoH website indicating a phone number, email address and physical address for further information (see below). The GRM is represented in simple visual formats as well as in Somali dialects, as needed. UNOPS will conduct its own awareness for its GRM in the vicinity of the site.

The GRM includes an appeals process if the complainant is not satisfied with the proposed resolution of the complaint. Once all possible means to resolve the complaint have been proposed and if the complainant is still not satisfied, then he/she should be advised of his/her right to legal recourse. Anonymous grievances can be raised and addressed.

Uptake channels include:

- Toll-free telephone hotline/Short Message Service (SMS) line;
- E-mail;
- Letter to Grievance Focal Points at local health facilities and vaccination sites;
- Complaint form to be lodged via any of the above channels; and
- Walk-ins may register a complaint on a grievance logbook at healthcare facility or suggestion box at clinic/hospitals.

To avoid the risk of stigmatization, exacerbation of the mental/psychological harm and potential reprisal, the GRM has different channels and protocols to enable a confidential and sensitive approach to GBV/SEAH related cases that ensures the safety of survivors and enables survivor-centred care. Women, girls and other at-risk groups often have less access to information and available services. They are also more likely to receive inaccurate information due to existing unequal power structures and/or create opportunities for exploitation. Specifically, targeted information campaigns, radio and other means of communication modalities will be used. The information shared includes messages on GBV/SEAH risks related to the Project and potential response services.

The Project will identify clear channels for reporting as well develop tools to track complaints related to GBV/SEAH. Where such a case is reported to the GRM, actions taken will ensure confidentiality, safety and survivor-centred care for survivors. Any survivors reporting through the GRM are offered immediate referral to the appropriate service providers based on their preference and with informed consent, such as medical, psychological and legal support, emergency accommodation, and any other necessary services. Project workers will also have the right to lodge complaints related to GBV/SEAH through the GM operator, with any supervisor (contractor) at any level, with the UNOPS in the case of a subcontractor, or directly with the PCIU. All personnel shall be trained appropriately in receiving such cases and in providing appropriate referrals. Only the nature of the complaint (what the complainant says in her/his own words), whether the complainant believes the perpetrator was associated with Project and additional demographic data, such as age and gender, will be collected and reported, with informed consent from the survivor. If the survivor does not wish to file a formal complaint, referral to available services will still be offered. The preference of the survivor will be recorded, and the case will be considered closed. Recorded GBV/SEAH cases should be reported to the World Bank project team within 24 hours.
































 <b>Damal Caafimaad and C-19 Vaccination</b> <b>Projects GRM Channels</b> <b>PCIU Functioning GRM Channels (FGS Level)</b>		 <b>DAMAL CAAFIMAAD</b> <small>By using traditional Somali medicine</small>
 <a href="mailto:fmoh.complaint@gmail.com">fmoh.complaint@gmail.com</a> and <a href="mailto:fmoh.complaints.seah@gmail.com">fmoh.complaints.seah@gmail.com</a>		
 0615466666  +252615466666  Call center still not functioning		 <small>U qaabka qayb-baahinta ee kani ay ah.</small>
<b>PMT functioning GRM Channels (FMS Level)</b>		
 <p><b>PUNTLAND</b></p>  <a href="mailto:mohpl.grm.complaints@gmail.com">mohpl.grm.complaints@gmail.com</a>  0907477639  +252907477639	 <p><b>GALMUDUG</b></p>  <a href="mailto:projects.complaints@moh.gm.so">projects.complaints@moh.gm.so</a>  0771598695  +252771598695	
 <p><b>HIRSHABELLE</b></p>  <a href="mailto:Hssmohcomplaint@gmail.com">Hssmohcomplaint@gmail.com</a>  +252610909045  +252610909045	 <p><b>JUBALAND</b></p>  <a href="mailto:Feedback@mohjubalandstate.so">Feedback@mohjubalandstate.so</a>  0771635044  +25261771635044	
 <p><b>SOUTHWEST</b></p>  <a href="mailto:swscomplain@moh.sw.so">swscomplain@moh.sw.so</a>  0613003040  Whatsapp: +25261613003040	 <p><b>BRA</b></p>  <a href="mailto:bra.complaint@gmail.com">bra.complaint@gmail.com</a>  0613180288  +252613180288	

Figure 21 GRM contacts

## 11. IMPLEMENTING BUDGET

*Table 6 Implementing Budget*

	Required Resources	Costs
<b>UNOPS – Monitoring of ESMP</b>		
1.	Human Resources: 1 ES/EHS Specialist (50 percent of time)	UNOPS staff costs
2.	1 Security Specialist (20 percent of time)	UNOPS staff costs
3.	Logistics / Travel	UNOPS travel budget
4.	Training for contractor	500 USD
5.	Community engagement	2,000 USD
<b>Implementation of Risk Mitigation Measures Contractor</b>		
6.	Human Resources 1 EHS Specialist x 4 months	Bidder to assess and estimate
7.	Cost of PPE	Bidder to assess and estimate
8.	Cost of OHS and other mitigation measures and Training	Bidder to assess and estimate
9.	Construction Waste Disposal	Bidder to assess and estimate
10.	Safety Signages	Bidder to assess and estimate
11.	Latrines	Bidder to assess and estimate
12.	Security risk mitigation	Bidder to assess and estimate
13.	Community Engagement	Bidder to assess and estimate

Annex 1: Stakeholder Consultations

Participants of stakeholder meeting in July 2024, Kismayo:

Kismayo Hospital Stakeholders Meeting.

Date: 08/07/2024      Presentation of Master Plan / Concept Design.

No	Name	Position	Contact	Signature
1	Solomon Gebremedhi	Senior project manager (UNOPS)	SolomonG@unops.org	
2	CAHAT Kerechite	KCH H-Director	cahatk@kch.or.ke	
3	Abdinasir Mohammed	AIMO	Abdinasir@aimo.org	
4	Mohamed Saleh Ado	DMO	MohamedSalehAdo@dmk.or.ke	
5	Gezahe A. Isack	Planning - JICA	gezahe@jica.go.jp	
6	Mariam M. Yousef	Obstetrics Doctor	planning@jica.go.jp	
7	Mohamed Saleh Ado	HOB Matron	dr.mohamed.saleh@kch.or.ke	
8	Fayez Aden Ibrahim	Logistician	fayez@kch.or.ke	
9	Mohamed Abdour Hassan	Nutrition supervisor	mohamed.abdour@kch.or.ke	
10	Abdour Abdour Mohamed	LAB-supervisor	abdour.abdour@kch.or.ke	
11	Mama David	physician, nutrition department, KCH	Dr. Mama David@kch.or.ke	
12	Muawm Njogu	Community surgeon	MuawmNjogu@kch.or.ke	
13	Muawm Njogu	Electrical Engineer	MuawmNjogu@kch.or.ke	
14	Phostive Wekasa	Civil structural Engineer	phostive@kch.or.ke	
15	Sorah Kimpaye	Mechanical Engineer	sorahk@kch.or.ke	
15	Belinda Tiju	Architect	belinda@kch.or.ke	

Figure 22 Participants list of stakeholder meeting in July 2024

The minutes of the meeting with Hospital staff in July 2024 are listed below:

**MEETING MINUTES, 08 July 2024**

<b>Project Title</b>	Building Emergency Capacity of Six Hospitals in Somalia	<b>Meeting Number</b>	
<b>Meeting Purpose</b>	Design team to meet the stakeholders and to agree on the requirements for Jowhar Hospital		
<b>Meeting Location</b>	Kismayo , UN Compound	<b>Meeting Date &amp; Time</b>	08 July 2024 15hr00 – 17hr30
<b>Present</b>	<ol style="list-style-type: none"> <li>1. Dr. Arab Ibrahim - Kismayo General Hospital Director</li> <li>2. Abdinaser Mohamed- RMO -Ministry of Health</li> <li>3. Mohamed Sheik Ado - DMO - Ministry of Health</li> <li>4. Solomon Gebremedhin-UNOPS PM</li> <li>5. Garad A. Issack - J MoH - Planning</li> <li>6. Dr. Mahad Ali Yusuf - Obst. and Gynecologist, Kismaayo Gen. hospital</li> <li>7. Mohamed Shikh Ahmed - Logistician - Kismayo General Hospital</li> <li>8. Faisal Aden Ibrahim - Nutrition Supervisor - Kismayo General Hospital</li> <li>9. Mohamed Abshir Hassan- Lab supervisor - Kismayo General Hospital</li> <li>10. Absir Adan Mohamed - Physician Nutrition Department - Kismayo General Hospital</li> <li>11. Maina David - Quantity Surveyor - UNOPS</li> <li>12. Mwaura Njogu - Electrical Engineer - UNOPS</li> <li>13. Phostien Wekesa - Civil Structural Engineer - UNOPS</li> <li>14. Sarah Kimpaye - Mechanical Engineer - UNOPS</li> <li>15. Belinda Otieno - Architect - UNOPS</li> </ol>		
<b>Distribution</b>	All participants		
<b>Minutes prepared by</b>	Solomon Gebremedhin	<b>Distribution Date</b>	08 July 2024
<b>Minutes verified by</b>	Solomon Gebremedhin		

Item	Agenda/Item	Action by
	<p>The following agenda was followed:</p> <ul style="list-style-type: none"><li>• Introductions, Opening remarks and Meeting Overview</li><li>• <b>Presentation of the concept (proposal) design and outline of the zoning for master plan</b></li><li>• Collect information for the design team including the design requirements and priorities;</li><li>• Gain practical insights through the site visit , meeting, and get feedback of the stakeholders on the draft concept layout</li><li>• <b>Discussions, questions</b></li><li>• Update on outstanding key Items</li></ul>	

1.	<p><b>Introductions, Opening remarks and Meeting Overview</b></p> <p>The meeting was chaired by Solomon Gebremedhin who commenced by appreciating all in attendance for making time to attend the meeting to resolve the outstanding issues.</p> <p>The chairman warmly welcomed all and expressed his gratitude to the Jubaland Ministry of Health, all the hospital community members and the Hospital Director for their swift organization of the event and their presence at the meeting.</p> <p>The delegates from the Jubaland Ministry of Health apologized on behalf of the Director General, Hussain Muallim, who had planned to attend the meeting but could not make it due to another meeting that conflicted with this one.</p> <p>UNOPS PM requested the representatives from the Jubaland Ministry of Health and the Kismayo General Hospital to actively participate in the discussions so that the detailed design proceeds as per the requirements agreed.</p>	A
2.	<p><b>Presentation of the concept (proposal) design</b></p> <p>Solomon Gebremedhin provided an overview of the project and detailed the project's scope and the status of the project. He also introduced the design team to the meeting and detailed discussion on the requirements of the hospital, the priorities of the hospital, the location of the site for the priorities, preparatory works that can be done in parallel while the design proceeds were discussed.</p> <p>Following the background briefing of the hospital, Belinda Otieno took the floor to explain the proposed designs for the new sections of the hospital. She provided a detailed walkthrough of the proposed rehabilitation and reconstruction and the proposed phases.</p> <p>This includes implementations under phase 1 comprising OPD, ICU, Oxygen piping &amp; measles ward, renovation of OT building, external works and relocation of external services, and demolition of existing buildings to construct new ones.</p> <p>Arc. Belinda explained that a thorough assessment of the existing hospital structures had been conducted. The findings revealed that several older buildings are beyond repair and pose a risk of collapse, potentially endangering patients' safety. Consequently, these structures will require complete demolition followed by the construction of new facilities as part of this comprehensive project.</p> <p>She also pointed out that not all buildings would need demolition. Structures in good condition, such as the emergency unit, the OT, Laboratory, maternity, female wards, nutrition department, will all be preserved. Furthermore, the external works will be enhanced to mitigate the drainage problem and to improve aesthetics and functionality. The new ICU will accommodate up to 20 beds and the existing OT will be renovated and a new OPD department will be constructed next to the ICU.</p> <p>During the construction phase, the existing temporary buildings for the measles isolation ward will be demolished and a new permanent measles ward will be constructed. This expansion aims to significantly improve the hospital's capacity to manage higher patient volumes from referrals effectively.</p>	

<p>3.</p>	<p>Additionally, the construction plan includes a new inpatient section and the addition of new gender-segregated latrines to enhance privacy and accessibility. Responding to a critical need identified by the community and the hospital.</p> <p>The UNOPS team has acknowledged these community concerns and requests, committing to incorporate them into the hospital design wherever feasible. They have pledged to make every effort to address these needs, reflecting the community's input in the final implementations.</p> <p>Following the presentation by Arch. Belinda, the stakeholders requested for reflections and following intense discussion proposed useful recommendations on the priorities.</p> <p>▪ <b>Discussions, questions, and feedback</b></p> <p><b>Summary of key questions and concerns from the community:</b></p> <ol style="list-style-type: none"> <li>1. Location of new building and demolition of existing buildings: UNOPS to liaise with the hospital and the hospital to undertake preparations to address the concerns related to the demolition of old structures and its impact on hospital operations. The new site was agreed to be next to the OT and the paediatric unit and demolishing the temporary measles ward structures.</li> <li>2. ICU department- Reevaluate the proposed number of beds to ensure adequacy for and increase as much as possible.</li> <li>3. New structures: The initial proposal was to demolish the transmittable disease treatment area at the Southeastern corner and construct new ones next to the measles ward inside the hospital. However, the hospital requested the new building for ICU and OPD be constructed inside and the transmittable disease treatment area be maintained as it is for future replacement.</li> <li>4. Patient Privacy Measures-Discussed measures to ensure patient privacy, particularly in bed arrangements and ward designs.</li> <li>5. It was agreed that the priority order for the interventions follow -ICU - 20 beds, OPD, Demolish &amp; reconstruct one measles ward., Oxygen piping,ICU, OT,ward, Emergency &amp; Maternity, Renovation of maternity &amp; neonatal centre, Renovation of pediatric unit, Solar power system renovation, Renovation of surgical block, All other proposed renovations as detailed in the structural assessment report, Blood bank.</li> <li>6. Standardisation Across New Sections- Ensure that all new sections of the hospital meet standardisation criteria for healthcare facilities.</li> <li>7. The site planning exercise took consideration of the existing buildings and infrastructure.</li> <li>8. Proposal on functional zoning for future expansion.</li> <li>9. The planning also considered location of services such: Waste management, water and electrical reticulation.</li> <li>10. Internal roads and pathways are incorporated for fire safety.</li> <li>11. Building setbacks provided as per the best international practices but taking into consideration the local practise.</li> <li>12. Multiple access to site provided, however, the operation of the accesses will depend on the hospital security</li> </ol>
-----------	---

Name:	Title	Signature:
1. Dr. Arab Ibrahim	Kismayo General Hospital Director	
2. Abdinaser Mohamed	RMO -Ministry of Health	
3. Mohamed Sheik Ado	DMO - Ministry of Health	
4. Solomon Gebremedhin	UNOPS PM	
5. Garad A. Issack	J MoH - Planning	
6. Dr. Mahad Ali Yusuf	Obst. and Gynecologist, Kismaayo Gen. hospital	
7. Mohamed Sheik Ahmed	Logistician - Kismayo General Hospital	
8. Faisal Aden Ibrahim	Nutrition Supervisor - Kismayo General Hospital	
9. Mohamed Abshir Hassan	Lab supervisor Kismayo General Hospital	
10. Absir Adan Mohamed	Physician Nutrition Department - Kismayo General Hospital	
11. Maina David	Quantity Surveyor - UNOPS	
12. Mwaura Njogu	Electrical Engineer - UNOPS	
13. Phostien Wekesa	Civil Structural Engineer - UNOPS	
14. Sarah Kimpaye	Mechanical Engineer - UNOPS	
15. Belinda Tuju Otieno	Architect - UNOPS	



*Figure 23 Stakeholder consultations July 2024*



*Figure 24 Stakeholder Consultations, January 2024*



*Figure 25 Meeting with the DG of the Hospital*

**Annex 2: Environmental and Social Monitoring Template**

This annex present a template that should be used for the E&S monitoring process by the UNOPS E&S team. This template will be based on the EMSP Table above (Table 4), it will list all the above-mentioned risks and impacts, mitigation measures, indicators, responsibilities, monitoring frequency as per the table above. Prior to the commencement of the works, targets will be added to the indicators, after consultation with the contractors. The findings and observation column will be filled upon reviews, supervision and inspection as well as based on reporting by the contractors. The corrective action column will be filled in when non-compliances have been discovered, and corrective actions have been agreed on jointly with the contractor.

**Environment and social monitoring Template**

<i>Risks and Impacts</i>	<i>Mitigation Measures</i>	<i>Indicators</i>	<i>Responsibility</i>	<i>Monitoring Frequency</i>	<i>Findings/Observations</i>	<i>Corrective Action</i>

### Annex 3: Code of Conduct for Workers

I, \_\_\_\_\_ acknowledge that adhering to environmental, social, health and safety (ESHS) standards, following the project's occupational health and safety (OHS) requirements, and preventing gender-based violence (GBV) and violence against children (VAC) is important. All forms of GBV or VAC are unacceptable in the workplace or when interacting with communities. The organization considers that failure to follow ESHS and OHS standards or to partake in GBV or VAC activities, constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or potential termination of employment. Prosecution of those who commit GBV, or VAC may be pursued if appropriate.

I agree that while working on the project I will:

- Attend and actively partake in training courses related to ESHS, OHS, HIV/AIDS, GBV and VAC as requested by my employer.
- Follow my employers' guidance on prevention of the spread of infectious diseases, including Covid 19;
- Follow my employers' guidance on security and safety, including not causing conflict or exposing myself, other colleagues, stakeholders including community members, project facilities or assets to risks;
- Treat women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
- Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
- Not participate in sexual contact or activity with children (anyone age 18 or under) – including grooming or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent from the child is also not a defense or excuse. Not engage in any form of sexual harassment of a co-worker - for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behavior. E.g. Looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; giving personal gifts; making comments about somebody's sex life etc. Sexual harassment constitutes acts of serious misconduct and are therefore grounds for disciplinary measures, including summary dismissal.
- Not engage in any form of sexual exploitation or abuse – for instance, exchanging money, employment, goods or services for sex or sexual favors, or making promises or favorable treatment dependent on sexual acts – or other forms of humiliating, degrading or exploitative behavior. This includes any project-related assistance due to community members. Sexual exploitation and sexual abuse constitute acts of serious misconduct and are therefore grounds for disciplinary measures, including summary dismissal.
- Not engage in sexual misconduct, use the project resources or funds to exploit community members.
- Report any suspected or actual GBV or VAC by a fellow worker, whether employed by my organization or not or any breaches of this Code of Conduct through the reporting mechanism.

The standards set out above are not intended to be an exhaustive list. Other types of sexually exploitive or sexually abusive behaviour may be grounds for administrative action. With regard to children under the age of 18:

- Wherever possible, ensure that another adult is present when working in the proximity of children.
- Not invite unaccompanied children unrelated to my family into my home unless they are at immediate risk of injury or in physical danger.
- Use any computers, mobile phones, or video and digital cameras appropriately, and never to exploit or harass children or to access child pornographic material through any medium (see also "Use of children's images for work-related purposes" below).
- Refrain from physical punishment or discipline of children.
- Refrain from hiring children for domestic or other labor, which is inappropriate given their age or developmental stage, which interferes with their time available for education and recreational activities or places them at significant risk of injury.
- Comply with all relevant local legislation, including labor laws in relation to child labor.
- Use of children's images for work-related purposes
- When photographing or filming a child for work-related purposes, I must:
- Before photographing or filming a child, assess and endeavor to comply with local traditions or restrictions for reproducing personal images.
- Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this I must explain how the photograph or film will be used.
- Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.
- Ensure images are honest representations of the context and the facts.
- Ensure file labels do not reveal identifying information about a child when sending images electronically.
- Sanctions
  - I understand that if I breach this Individual Code of Conduct, my employer will take disciplinary action, which could include:
    - Informal warning.
    - Formal warning.
    - Additional training.
    - Loss of up to one week's salary.
    - Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
    - Termination of employment; and
    - Report to the police if warranted.

I hereby acknowledge that I have read the foregoing Individual Code of Conduct, agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, GBV and VAC issues. I understand that any action inconsistent with this Individual Code of Conduct or failure to take action mandated by this Individual Code of Conduct may result in disciplinary action and may affect my on-going employment.

Signature: \_\_\_\_\_ Name \_\_\_\_\_  
Title: \_\_\_\_\_ Date: \_\_\_\_\_

#### Annex 4: Chance Find Procedures

This procedure was developed in accordance with the World Bank's ESS8 (to protect cultural heritage from the impacts of project activities and support its preservation, to address cultural heritage as an integral aspect of sustainable development, to promote meaningful consultation with stakeholders regarding cultural heritage. To promote the equitable sharing of benefits from the cultural heritage).

This procedure is included as a standard provision in the implementation of Public Works contracts to ensure the protection of cultural heritage (Archaeological and Historical Sites). All implementers / contractors will be required to observe this procedure as documented hereafter.

Excavation in sites of known archaeological interest should be avoided. Where this is unavoidable, prior discussions must be held with the PCIU and the World Bank in order to undertake pre-construction excavation or assign an archaeologist to log discoveries as construction proceeds. Where historical remains, antiquity or any other object of cultural or archaeological importance are unexpectedly discovered during construction in an area not previously known for its archaeological interest, the following procedures should be applied.

- Stop construction activities;
- Delineate the discovered site area;
- Secure the site to prevent any damage or loss of removable objects. In case of removable antiquities or sensitive remains, a full-time guard should be present until the responsible authority takes over;
- Notify the responsible foreman/archaeologist, who in turn should notify the PIU and the World Bank and local authorities (within less than 24 hours);
- The significance and importance of the findings will be assessed according to various criteria relevant to cultural heritage including aesthetic, historic, scientific or research, social and economic values;
- Decision on how to handle the finding will be reached based on the above assessment and could include changes in the project layout (in case of finding an irrevocable remain of cultural or archaeological importance), conservation, preservation, restoration or salvage;
- Implementation of the decision concerning the management of the finding;
- Construction work can resume only when permission is given from the respective authorities, PIU and World Bank after the decision concerning the safeguard of the heritage is fully executed;

In case of delay incurred in direct relation to archaeological findings not stipulated in the contract (and affecting the overall schedule of works), the contractor may apply for an extension of time. However, the contractor will not be entitled for any kind of compensation or claim other than what is directly related to the execution of the archaeological findings works and protections.

## Annex 5: E&S Screening

This E&S screening form was completed in view of the sub-project design.

Subproject Name	Kismayo Regional Hospital
Subproject Location	Jubaland
Subproject Proponent	
Estimated Investment	US\$1.87 million
Start/Completion Date	Feb 2025 - Oct 2025

Questions	Answer		ESS relevance	Due diligence / Actions
	Yes	no		
Does the subproject involve civil works including new construction, expansion, upgrading or rehabilitation of healthcare facilities, vaccine cold storage units and/or waste management facilities?	yes		ESS1	ESIA/ESMP, SEP
Does the subproject involve land acquisition and/or restrictions on land use?		No	ESS5	RAP/ARAP, SEP
Does the subproject involve acquisition of assets for quarantine, isolation or medical treatment purposes?		No	ESS5	ESIA/ESMP, SEP
Is the subproject associated with any external waste management facilities such as a sanitary landfill, incinerator, or wastewater treatment plant for healthcare waste disposal?		No	ESS3	ESIA/ESMP, SEP
				Septic tank on Site
Is there a sound regulatory framework and institutional capacity in place for healthcare facility infection control and healthcare waste management?		No	ESS1	ESIA/ESMP, SEP

Does the subproject have an adequate system in place (capacity, processes and management) to address waste?	Yes			
Does the subproject involve recruitment of workers including direct, contracted, primary supply, and/or community workers?	Yes		ESS2	LMP, SEP
Does the subproject have appropriate OHS procedures in place, and an adequate supply of PPE (where necessary)?	Yes			SEP
Does the subproject have a GRM in place, to which all workers have access, designed to respond quickly and effectively?		No		GRM, ESMP, SEP
Does the subproject involve transboundary transportation (including Potentially infected specimens may be transported from healthcare facilities to testing laboratories, and transboundary) of specimen, samples, infectious and hazardous materials?		No	ESS3	ESIA/ESMP, SEP
Does the subproject involve use of security or military personnel during construction and/or operation of healthcare facilities and related activities?	Yes		ESS4	ESIA/ESMP, SEP, SMP
Is the subproject located within or in the vicinity of any ecologically sensitive areas?		No	ESS6	ESIA/ESMP, SEP
Are there any indigenous groups (meeting specified ESS7 criteria) present in the subproject area and are they likely to be affected by the proposed subproject negatively or positively?		No	ESS7	Indigenous Peoples Plan/other plan reflecting agreed terminology
Is the subproject located within or in the vicinity of any known cultural heritage sites?	Yes		ESS8	ESIA/ESMP, SEP
Does the project area present considerable Gender-Based Violence (GBV) and Sexual Exploitation and Abuse (SEA) risk?	Yes		ESS1	ESIA/ESMP, SEP

Does the subproject carry risk that disadvantaged and vulnerable groups may have unequitable access to project benefits?	Yes		ESS1	ESIA/ESMP, SEP  Low risk
--	-----	--	------	--------------------------------

Is there any territorial dispute between two or more countries in the subproject and its ancillary aspects and related activities?		No	<i>OP7.60 Projects in Disputed Areas</i>	Governments concerned agree
Will the subproject and related activities involve the use or potential pollution of, or be located in international waterways <sup>38</sup> ?		No	<i>OP7.50 Projects on International Waterways</i>	Notification (or exceptions)

**Conclusions:**

1. **Proposed Environmental and Social Risk Ratings (High, Substantial, Moderate or Low). - ESMP will be required.**
2. **Proposed E&S Management Plans/ Instruments. - ESMP will be required.**

## Annex 6: Emergency Preparedness and Response Plan

During construction, and as the hospital enters its operational phase, an “**Emergency Preparedness and Response Plan**” (EPRP) is essential to ensure safety, efficiency, and resilience in handling emergencies. This plan focuses on preparedness, response, and recovery measures for Kismayo Hospital’s specific context, in alignment with international best practices, ensuring that the hospital is resilient and well-prepared for emergencies, enhancing patient and staff safety while ensuring continuity of healthcare services.

### Emergency Risk Assessment

This risk assessment identifies potential hazards based on Kismayo hospital’s location, infrastructure, and operational environment.

#### Overview of Risks, Impact Levels and Mitigation Measures

Risk Category	Potential Hazards	Impact Level	Mitigation Measures
2.1 Natural Disasters	Earthquakes, floods, droughts	High	Seismic reinforcement, flood barriers, emergency water supply
2.2 Fire Hazards	Electrical faults, flammable materials	High	Fire alarms, extinguishers, evacuation routes
2.3 Health Emergencies	Disease outbreaks (cholera, COVID-19, malaria)	High	Infection control, isolation units, vaccination programs
2.4 Security Threats	Armed conflict, terrorism, theft	High	Perimeter security, emergency lockdown procedures
2.5 Technological Failures	Power outages, IT system failure	Medium	Backup generators, redundant IT systems

### Emergency Preparedness Measures

Preparedness ensures that Kismayo hospital is equipped to handle emergencies effectively

97

#### Overview of Emergency Preparedness Measures for Kismayo Hospital

Preparedness Component	Measures Implemented
3.1 Emergency Response Team (ERT)	Establishes a trained multidisciplinary team for rapid response
3.2 Training & Drills	Conducts regular fire drills, CPR training, and active shooter drills
3.3 Early Warning Systems	Installs alarms for fire, biohazards, and security threats
3.4 Medical Supplies	Maintains emergency stockpiles (medications, PPE, oxygen)
3.5 Evacuation Planning	Develops and posts clear evacuation routes

<b>3.6 Emergency Communication</b>	Implements radio and satellite phone backup communication
<b>3.7 Community Engagement</b>	Engages with local authorities for coordinated response

## Emergency Response Protocols

This section outlines actions during emergencies based on the type of incident.

### Overview of Emergency Response Protocols for Kismayo Hospital

Emergency Type	Response Steps	Details
<b>4.1 Fire Response</b>	<b>4.1.1 Alert</b>	Activate fire alarm and notify the Fire Department.
	<b>4.1.2 Evacuate</b>	Follow designated exit routes and use stairwells.
	<b>4.1.3 Contain</b>	If safe, use fire extinguishers to control small, manageable fires.
	<b>4.1.4 Assist</b>	Help vulnerable patients evacuate safely.
	<b>4.1.5 Assess &amp; Report</b>	Document incident(s) and review fire safety measures.
<b>4.2 Disease Outbreak Response</b>	<b>4.2.1 Detection</b>	Isolate symptomatic patients and notify public health authorities.
	<b>4.2.2 Containment</b>	Implement infection control protocols (PPE, sanitation, restricted access).
	<b>4.2.3 Treatment</b>	Provide medical care based on protocols (antivirals, antibiotics, IV fluids).
	<b>4.2.4 Communication</b>	Issue public health advisories and coordinate with the Ministry of Health.
	<b>4.2.5 Recovery</b>	Conduct decontamination and review hospital's policies.
<b>4.3 Security Threat Response</b>	<b>4.3.1 Lockdown</b>	Secure all hospital entrances and limit movement.
	<b>4.3.2 Alert Authorities</b>	Notify police/ military for assistance.
	<b>4.3.3 Patient &amp; Staff Safety</b>	Move non-essential personnel to safe areas.
	<b>4.3.4 Incident Management</b>	Coordinate security response and debrief staff.
	<b>4.3.5 Post-Incident Review</b>	Assess security vulnerabilities and improve protocols.

## Recovery and Business Continuity

Post-emergency recovery ensures a smooth return to normal hospital operations.

### Overview of Post-emergency Recovery Actions for Kismayo Hospital

Recovery Phase	Actions
<b>5.1 Damage Assessment</b>	Identify affected hospital areas and necessary repairs

<b>5.2 Patient Care Continuity</b>	Arrange temporary care facilities if needed
<b>5.3 Staff Support</b>	Provide psychological/ psychosocial first aid for affected personnel
<b>5.4 Infrastructure Restoration</b>	Restore power, water, and medical supplies
<b>5.5 Policy Review</b>	Update emergency protocols based on lessons learned

### Summarised Schedule of Coordination with External Agencies

The table below outlines the structured coordination with external emergency response agencies under the Benadir Regional Administration framework, and is intended to ensure efficient emergency response, reduce response time, and enhance Kismayo Hospital’s preparedness to handle health crises effectively.

Coordination Schedule for Kismayo Hospital with External Agencies

Agency	Role	Coordination Frequency	Formal Agreement
<b>Regional Health Office</b>	Supervision and outbreak response coordination.	Quarterly & during emergencies	MoU with Ministry of Health
<b>Fire and Rescue Department</b>	Fire safety, emergency evacuation, and fire drills.	Bi-annual training & drills	Emergency Response Protocol
<b>Ambulance Service</b>	Patient transfer and emergency medical support.	As needed & annual review	Service Agreement
<b>Police Force</b>	Security support during emergency responses and hospital safety.	Monthly review meetings	Security Collaboration Agreement
<b>WHO &amp; UN Agencies</b>	Technical support for infection prevention and control.	Annual assessment & emergency responses	UN Coordination Framework
<b>Environmental Health Department</b>	Waste management and environmental health inspections.	Quarterly audits	Compliance MoU

### <sup>97</sup>Key Actions:

- Annual review of agreements with external agencies to ensure effectiveness.
- Joint simulation exercises with emergency responders every six months.
- Centralized emergency response hotline to facilitate rapid response.

## Emergency Evacuation Plan (EEP) for Kismayo Hospital

### Introduction

The Emergency Evacuation Plan (EEP) for the Hospital ensures the safe, rapid, and coordinated evacuation of all individuals in the event of a fire, security threat, natural disaster, or other emergency. This plan aligns with regional risks specific to the Region, including security challenges and limited emergency response capacity.

### Objectives

Objectives of the Emergency Evacuation Plan (EEP) for the Hospital

Objective	Description
Safe Evacuation	Ensure all patients, staff, and visitors evacuate quickly and safely.
Minimize Panic	Implement structured procedures to avoid confusion during emergencies.
Assist Vulnerable Groups	Provide priority evacuation for ICU, maternity, and disabled patients.
Coordination with Emergency Services	Ensure seamless interaction with fire, ambulance, and police services.
Regular Drills	Conduct scheduled drills to maintain high preparedness levels.

### Evacuation Procedures

Overview of the 4-Step Evacuation Procedure for the Hospital

Step	Action
Step 1: Alert & Notification	Activate alarms and notify emergency services.
Step 2: Staff Response & Coordination	Assign personnel to assist with patient movement.
Step 3: Evacuation & Assembly	Guide evacuees to designated <b>safe zones</b> outside the hospital.
Step 4: Headcount & Reporting	Conduct roll calls and report missing individuals.

### Evacuation Routes & Exits

Overview of the Proposed Evacuation Routes & Exits for the Hospital

Element	Specification
Exit Signage	Clearly marked, illuminated, and unobstructed.
Stairwell Access	NO elevator use during fire/ power failures. Wide staircases prioritized.
Assembly Points	Pre-designated areas away from the hospital for regrouping.

### Evacuation for Special Needs Patients

### Overview of the Proposed Evacuation Protocols for Special Needs Patients

Category	Evacuation Plan
Non-Ambulatory (ICU, Disabled)	Use <b>stretchers and wheelchairs</b> , assigned evacuation teams.
Critical Care Patients	Immediate transfer with <b>life support assistance</b> .
Maternity & Pediatric Patients	Nurses assist <b>mothers with newborns</b> for safe relocation.
Visitors & General Staff	Directed to the <b>nearest exits</b> by security personnel.

### Coordination with External Agencies

#### Overview of Evacuation Coordination Measures with External Agencies

Agency	Role in Evacuation	Coordination Frequency
Mogadishu Fire & Rescue Service	Fire suppression, rescue operations, hazard control.	Bi-annual training & drills.
Benadir Ambulance Service	Emergency transport for critical patients.	On-demand response.
Mogadishu Police	Security management, crowd control, protection.	Quarterly security drills.
Benadir Regional Health Office	Medical support coordination, outbreak control.	Annual review.

### Emergency Drills & Training

#### Overview of Emergency Drills & Trainings

Activity	Frequency	Responsible Team
Full Evacuation Drill	Twice a year	Emergency Response Team (ERT)
Fire Safety Training	Quarterly	Fire & Rescue Service
Security Threat Response Drill	Every 6 months	Mogadishu Police
Evacuation Route Updates	Annually	Hospital Safety Committee

### <sup>97</sup>Emergency Equipment & Communication

#### Overview of Emergency Equipment and Communication Infrastructure for the Hospital

Equipment	Location	Maintenance Frequency
Fire Extinguishers	Every hospital wing	Monthly inspections
Emergency Lighting	Stairwells, corridors	Quarterly maintenance
First Aid Kits	Nurses' stations, exits	Bi-monthly replenishment
Emergency Call System	All hospital wards	Monthly system test
Evacuation Maps	Posted in hallways	Reviewed annually

## Post-Evacuation Procedures

### Overview of Post-Evacuation Procedures for the Hospital

Action	Responsibility
Headcount & Accountability	Supervisors confirm all evacuees are accounted for.
Medical Assessments	Emergency medical teams treat injuries.
Incident Report & Review	Management documents events for process improvement.
Debriefing Sessions	Staff feedback gathered to enhance future responses.

## Fire Safety Equipment Inspection and Maintenance Schedule

This section outlines minimum requirements for fire extinguishers, fire alarm systems, and associated safety devices. All inspections must be documented in the Fire Safety Logbook and reported to the Safety and Security Officer.

### 1. Fire Extinguishers

#### 1.1 Monthly Visual Inspection

Verify extinguishers are present, mounted properly, and unobstructed.  
Check pressure gauge is in the operable range.  
Ensure safety pin and tamper seal are intact.  
Confirm no visible damage, corrosion, leakage, or blocked nozzle.  
Record inspection date, initials, and any noted deficiencies.

#### 1.2 Annual Maintenance (by certified technician)

Conduct full mechanical inspection and internal condition assessment.  
Weigh extinguishers (if applicable) to verify correct charge.  
Replace tamper seals and clean equipment.  
Repaint or replace damaged labels and operating instructions.  
Perform hydrostatic testing according to manufacturer's schedule (typically every 5 years).

### 2. Fire Alarm and Detection Systems

#### 2.1 Weekly/Monthly Checks

Confirm control panel shows normal operation (no trouble signals).  
Test manual call points/alarms on a rotating schedule to avoid disruption.

Inspect smoke/heat detector locations for dust, obstruction, or damage.

#### 2.2 Quarterly Testing

Test a representative sample of smoke detectors, heat detectors, and notification devices (sirens, strobes).

Verify battery backup functionality.

#### 2.3 Annual System Test (by qualified technician)

Full functional test of all detectors, alarm circuits, annunciator panels, and communication links.

Clean smoke detectors following manufacturer instructions.

Document all faults and corrective actions.

### **3. Emergency Lighting and Exit Signs**

#### Monthly Inspection

Check lights and signs for proper illumination.

Ensure batteries or backup power systems are operational.

#### Annual Test

Conduct a full 90-minute discharge test of emergency lighting systems.

### **4. Fire Hose Reels, Hydrants, and Sprinkler Systems (if present)**

#### Monthly

Confirm equipment is accessible and free of obstruction.

Check hoses, nozzles, valves, and fittings for visible wear.

#### Annual (or per manufacturer standard)

Pressure-test hose reels and hydrants.

Inspect pumps, tanks, and sprinkler valves.

Conduct flow tests and verify adequate water pressure.

---

### **5. Documentation and Reporting**

All inspections should be recorded using standardized forms.

Any deficiencies must be reported immediately to the Safety Officer and corrected within agreed timelines.

Maintain maintenance records for a minimum of 5 years or as required by hospital policy.

## Annex 7: Occupational Health and Safety Plan

The purpose of this OHS Plan is to provide guidance for the systematic identification, evaluation, prevention and control of general workplace hazards, specific job hazards, potential hazards and environmental impacts that may arise during the implementation of the hospital rehabilitation. The measures are based on the IFC's Environmental, Health and Safety Guidelines (EHSG).

This plan shall be followed by all workers of the sub-project.

**Types of Incidents & Their Reporting:** The three categories of Incident are as follows:

**Non-Reportable Cases:** An incident where the injured person is given medical help and discharged for work without counting any lost time.

**Reportable Cases:** In this case the injured person is disabled for 48 hours or more and is not able to perform his duty.

**Injury Cases:** These are covered under the heading of non-reportable cases. In these cases, the incident caused injury to the person, but he/she still continues his duty.

## HSE ORGANIZATION

**Number of Safety Officers:** The contractor must deploy one safety officer. In addition, there must be one safety-steward/safety-supervisor for every 100 workers.

### Responsibilities

#### Site In -Charge of Contractor

- Shall engage qualified safety officer(s) and steward (s) as per clause;
- Shall adhere to the rules and regulations mentioned in this code, practice very strictly in his area of work in consultation with his concerned engineer and the safety coordinator;
- Shall screen all workers for health and competence requirement before engaging for the job and periodically thereafter as required;
- Shall not engage any employee below 18 years of age;
- Shall arrange for all necessary PPEs like safety helmets, belts, full body harness, shoes, face shield, hand gloves etc. before starting the job;
- Shall ensure that no person lifts, carries or move any load which, by reason of its weight, is likely to injure his health or jeopardize his safety;
- Shall ensure that all Tools & Plants (T&Ps) engaged are tested for fitness and have valid certificates from competent person;
- Shall ensure that provisions for the welfare of the employees such as canteen, rest rooms/washing facilities are provided for at the site;
- Shall adhere to the instructions laid down in Operation Control Procedures (OCPs) available with the site management;
- Shall ensure that person working above 2.0 meter should use Safety Harness tied to a lifeline/stable structure;

- Shall ensure that materials are not thrown from height. Cautions to be exercised to prevent fall of material from height;
- Shall report all incidents (Fatal/Major/Minor/Near Miss) to the Site engineer /HSE officer;
- Night work is forbidden;
- Shall ensure that all personnel working under contractor are working safely and do not create any Hazard to self and to others;
- Shall ensure display of adequate signage/posters on OHS;
- Shall ensure conductance of OHS audit, mock drills, medical camps, induction training and training on OHS at site;
- Shall ensure full co-operation during OHS audits;
- Shall ensure submission of look-ahead plan for procurement of HSE equipment's and PPEs as per work schedule;
- Shall ensure good housekeeping;
- Shall ensure adequate valid fire extinguishers are provided at the worksite;
- Shall ensure availability of sufficient number of toilets /restrooms and adequate drinking water at work site and labor colony;
- Shall ensure adequate emergency preparedness;
- Shall be member of site OHS committee and attend all meetings of the committee;
- Temporary fencing should be done for open edges if Hand – railings and Toe-guards are not available.

#### **Health, Safety and Environment Officer of Contractor**

- Carry out safety inspection of Work Area, Work Method, workers, Machine & Material, processes and materials and other tools;
- Facilitate inclusion of safety elements into Work Method Statement;
- Highlight the requirements of safety through toolbox talks/ other meetings;
- Help concerned heads of sections to prepare Job Specific instructions for critical jobs;
- Conduct investigation of all incident/dangerous occurrences & recommend appropriate safety measures;
- Advice & co-ordinate for implementation of HSE permit systems;
- Convene HSE meeting & minute the proceeding for circulation & follow-up action;
- Plan procurement of PPE & Safety devices and inspect their healthiness;
- Report to OHS specialist on all matters pertaining to status of safety and promotional program at site level;
- Facilitate administration of First Aid;
- Facilitate screening of workmen and safety induction;
- Conduct fire Drill and facilitate emergency preparedness;
- Design campaigns, competitions & other special emphasis programs to promote safety in the workplace;
- Notify site personnel non-conformance to safety norms observed during site visits / site inspections;
- Recommend to Site In-Charge, immediate discontinuance of work until rectification of such situations warranting immediate action in view of imminent danger to life or property or environment;
- To decline acceptance of such PPE / safety equipment that do not conform to specified requirements;
- Encourage raising Near Miss Report on safety along with, improvement initiatives on safety.

**Mobilization of Machinery/Equipment/Tools by Contractor:** As a measure to ensure that machinery, equipment and tools being mobilized to supplier or consultant are fit for purpose and are maintained in safe operating condition and complies with legislative and owner requirement, inspection shall be arranged by in-house competent authority for acceptance as applicable.

**Mobilization of Personpower by Contractor**

- The Contractor shall arrange induction and regular health check of their employees as per requirement in the Labor Code.
- The Contractor shall take special care of the employees affected with occupational diseases. The employees not meeting the fitness requirement should not be engaged for such a job.
- Ensure that the regulatory requirements of excessive weight limit (to carry/lift/ move weights beyond prescribed limits) for male and female workers are complied with.
- Appropriate accommodation to be arranged for all workers in hygienic condition.

**Provision of PPEs:** PPEs, in adequate numbers, will be made available at site & their regular use by all concerned will be ensured.

- All the PPEs shall be checked for their quality before issue and the same shall be periodically checked. The users shall be advised to check the PPEs themselves for any defect before putting them on. The defective ones shall be repaired/ replaced.
- The issuing agency shall maintain register for issue and receipt of PPEs.
- The helmets shall have logo or name (abbreviation of agency name permitted) affixed or printed on the front.

**Drinking water:** Drinking water shall be provided and maintained at suitable places at different elevations. Container should be labeled as “Drinking Water”

**Washing Facilities:** In every workplace, adequate and suitable facilities for washing shall be provided and maintained. Separate and adequate cleaning facilities shall be provided for the use of male and female workers. Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition and dully illuminated for night use.

**Latrines and Urinals**

- Latrines and urinals shall be provided in every workplace.
- They shall be adequately lit and shall be maintained in a clean and sanitary condition at all times, by appointing a designated person.
- Separate facilities shall be provided for the use of male and female worker if any.

**Provision of Shelter During Rest:** Proper Shed & Shelter shall be provided for rest during break.

**Medical Equipment:** To be available nearby/at site:

- Medical Centre
- First Aider
- First Aid Box
- Health Check Up

**HSE Induction Training:** All persons entering into the project site shall be given HSE induction training by the HSE officer of Contractor before being assigned to work.

In-house induction training subjects shall include but not limited to:

- Briefing of the Project details.
- Safety objectives and targets.
- Site HSE rules.
- Site HSE hazards and aspects.
- First aid facility.
- Emergency Contact No.
- Incident reporting.
- Fire prevention and emergency response.
- Rules to be followed in the camp
- Proper safety wear & gear must be issued to all the workers being registered for the induction (i.e., Shoes/Helmets/Goggles/Leg guard/Apron etc.)
- They must arrive fully dressed in safety wear & gear to attend the induction.
- Anyone failing to conform to this safety wear & gear requirement shall not qualify to attend.
- On completing attending Contractor's in-house HSE induction, each employee shall sign an induction training form to declare that he/she has understood the content and shall abide to follow and comply with safe work practices. They may only then be qualified to be issued with a personal I.D. card, for access to the work site

**HSE Toolbox Talk:** HSE toolbox talk shall be conducted by frontline foreman/supervisor of Contractor to specific work groups prior to the start of work. The agenda shall consist of the followings:

- Details of the job being intended for immediate execution.
- The relevant hazards and risks involved in executing the job and their control and mitigating measures.
- Specific site conditions to be considered while executing the job like high temperature, humidity, unfavorable weather etc.
- Recent non-compliances observed.
- Appreciation of good work done by any person.
- Any doubt clearing session at the end.
- Tool box talk to be conducted at least once a week for the specific work.

#### **HSE Training During Project Execution**

- Other HSE training shall be arranged by Contractor as per the need of the project execution and recommendation of HSE committee of site.
- The topics of the HSE training shall be as follows but not limited to:
  - o Hazards identification and risk analysis (HIRA)
  - o Work Permit System
  - o Incident investigation and reporting
  - o Fire fighting
  - o First aid
  - o Fire-warden training
  - o T&Ps fitness and operation

- Storage, preservation & material handling
- A matrix shall be maintained to keep an up-to-date record of attendance of training sessions carried out.

### **HSE Promotion-signage, Posters, Competition, Awards etc**

**Display of HSE posters and banners:** Site shall arrange appropriate posters, banners, slogans in local languages at workplace

**Display of HSE signage:** Appropriate HSE signage shall be displayed at the work area to aware workmen and passersby about the work going on and dos and don'ts to be followed

**Competition on HSE and award:** Contractor shall arrange HSE awareness program periodically on different topics including medical awareness for all personnel working at site

**Incident Reporting:** The Contractor shall submit report of all incidents, fires and property damage etc., not later than 24 hours of the occurrence. The Engineer shall report the same to the OHS Specialist immediately. Such reports shall be furnished in the manner prescribed by the implementer. (Refer to HSE procedure for incident investigation, analysis and reporting for details).

In addition, periodic reports on safety shall also be submitted by the Contractor to the implementer from time to time. Compiled monthly reports of all kinds of incidents, fire and property damage to be submitted to the Specialist as per prescribed formats.

HSE incidents of site shall be reported to the implementer site Management as per Procedure for Incident Investigation and Reporting. Corrective action shall be immediately implemented at the workplace and compliance shall be verified by the implementer's OHS Specialist and until then, work shall be put on hold by the Construction Manager.

**Work Permit System:** "HSE Procedure for Work Permit System" shall be followed while implementing permit system.

- Permit applicant shall apply for work permit of particular work activity at particular location before starting of the work with Job Hazard Analysis.
- Permit signatory shall check that all the control measures necessary for the activity are in place and issue the permit to the permit holder.
- The permit holder shall implement and maintain all control measures during the period of permit. He will close the permit after completion of the work.
- The closed permit shall be archived in HSE Department of site.

**Safety During Work Execution:** Respective Operation Control Procedures are to be followed and adhered to and the same would be contractually binding.

### **Electrical Handling**

- Providing an adequate number of 24 V sources and ensuring that no hand lamps are operating at voltage level above 24 Volts.
- Fulfilling safety requirements at all power tapping points.

- High/ Low pressure welders to be identified with separate color clothing. No welders will be deployed without passing appropriate tests and holding valid welding certificates. Approved welding procedure should be displayed at workplace.
- The Contractor shall not use any hand lamp energized by Electric power with supply voltage of more than 24 volts in confined spaces like inside water boxes, turbine casings, condensers etc.
- All portable electric tools used by the Contractor shall have a safe plugging system to source of power and be appropriately earthed. Only electricians licensed by appropriate statutory authority shall be employed by the Contractor to carry out all types of electrical works. Details of earth resources and their test date to be submitted to OHS specialist.
- The Contractor shall use only properly insulated and armored cables which conform to the requirement.
- The implementer reserves the right to replace any unsafe electrical installations, wiring, cabling etc. at the cost of the Contractor.
- All electrical appliances used in the work shall be in good working condition and shall be properly earthed.
- No maintenance work shall be carried out on live equipment.
- The Contractor shall maintain adequate number of qualified electricians to maintain his temporary electrical installations.
- Area wise Electrical safety inspection is to be carried out on monthly basis as per “Electrical Safety Inspection checklist’ and the report is to be submitted to the implementer’s safety officer
- Adequate precautions shall be taken to prevent danger to electrical equipment. No materials on any of the sites of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public
- The Contractor shall carefully follow the safety requirement of the implementer/ the purchaser with regard to voltages used in critical areas.

### **Fire Safety**

- Providing appropriate firefighting equipment at designated workplace and nominating a fire officer/warden adequately trained for his job.
- Contractor shall provide enough fire protection equipment of the types and numbers at his office, stores, temporary structure in labor colony etc. Such fire protection equipment shall be easy and kept open at all times.
- The fire extinguishers should be properly refilled and kept ready, which should be certified at periodic intervals. The date of change should be marked on the Cylinders.
- All other fire safety measures as laid down in the emergency preparedness and response plan shall be followed.
- Non-compliance with the above requirement under fire protection shall in no way relieve the Contractor of any of his responsibility and liabilities to a fire incident occurring either to his materials or equipment or those of others.
- Emergency contact numbers must be displayed at prominent locations
- Tarpaulin being inflammable should not be used (instead, only non-infusible covering materials shall be used) as protective cover while preheating, welding, stress relieving etc. at site.

### **Lifting Safety**

- It will be the responsibility of the Contractor to ensure safe lifting of the equipment, taking due precaution to avoid any incident and damage to other equipment and personnel.
- All requisite tests and inspection of handling equipment, tools & tackle shall be periodically done by the Contractor by engaging only the Competent Persons as per law.
- Defective equipment or uncertified goods shall be removed from service.
- Any equipment shall be loaded more than its recommended safe working load.

**Environmental Control:** Environmental damage is a major concern of the principal Contractor and every effort shall be made, to have effective control measures in place to avoid pollution of Air, Water and Land and associated life. Chlorofluorocarbons such as carbon tetrachloride and trichloroethylene shall not be used. Waste disposal shall be done in accordance with the guidelines laid down in the Waste Management Plan. Any chemical, including solvents and paints, required for construction shall be stored in designated bonded areas around the site as per Material Safety Data Sheet (MSDS).

In the event of any spillage, the principle is to recover as much material as possible before it enters drainage system and to take all possible action to prevent spilled materials from running off the site. The Contractor shall use appropriate MSDS for clean-up technique.

All Contractors shall be responsible for the cleanliness of their own areas.

The Contractors shall ensure that noise levels generated by plant or machinery are as low as reasonably practicable. Where the Contractor anticipates the generation of excessive noise levels from his operations the Contractor shall inform the Construction Manager accordingly so that reasonable and practicable precautions can be taken to protect other persons who may be affected. The Contractor shall carry out periodic air and water quality check and illumination level checking in his area of workplace and take suitable control measure.

**Housekeeping:** Keeping the work area clean/ free from debris, removed scaffoldings, scraps, insulation/sheeting wastage /cut pieces, temporary structures, packing woods etc. will be in the scope of the Contractor. Such cleanings have to be done by Contractor on a daily basis by an identified group. If such activity is not carried out by Contractor is not satisfied, then the implementer may get it done by other agency and actual cost along with overheads will be deducted from contractor's bill. Such decisions shall be binding on the Contractor.

- Proper housekeeping to be maintained at workplace and the following are to be taken care of on a daily basis.
- All surplus earth and debris are removed/disposed of from the working areas to identified locations.
- Unused/Surplus cables, steel items and steel scrap lying scattered at different places/elevation within the working areas are removed to identified locations.
- All wooden scrap, empty wooden cable drums and other combustible packing materials, shall be removed from the workplace to identified locations. Sufficient waste bins shall be provided at
- Different workplaces for easy collection of scrap/waste. Scrap chute shall be installed to remove scrap from high location.

- Access and egress (staircase, gangways, ladders etc.) path should be free from all scrap and other hindrances.
- Workmen shall be educated through toolbox talk about the importance of housekeeping and encourage not to litter.
- Labor camp area shall be kept clear and materials like pipes, steel, sand, concrete, chips and bricks, etc. shall not be allowed in the camp to obstruct free movement of men and machineries.
- Fabricated steel structures, pipes & piping materials shall be stacked properly.
- No parking of trucks/trolleys, cranes and trailers etc. shall be allowed in the camp, which may obstruct the traffic movement as well as below LT/HT power line.
- Utmost care shall be taken to ensure overall cleanliness and proper upkeep of the working areas

**Waste Management:** Take suitable measures for waste management and environment related laws/legislation as a part of normal construction activities. Compliance with the legal requirements on storage/ disposal of paint drums (including the empty ones), Lubricant containers, Chemical Containers, and transportation and storage of hazardous chemicals will be strictly maintained.

**Inspection on HSE** for different activities being carried out at site shall be done to ensure compliance to HSE requirements. The Contractor shall maintain and ensure necessary safety measures as required for inspection and tests as applicable, to enable inspection agency for performing Inspection. If any test equipment is found not complying with proper safety requirements, then the Inspection Agency may withhold inspection, till such a time the desired safety requirements are met.

#### **HSE PERFORMANCE**

- Contractor shall be assessed on a monthly basis for HSE Compliance by Safety In-charge at the site.
- The implementer shall reserve the right to use this assessment for evaluating bidder's capacity for future tenders
- Suitable HSE reward system shall be developed at site level to promote HSE compliance amongst workmen by the Contractor. To decide HSE reward, performance towards HSE shall be evaluated for workers and it shall be awarded regularly in public gathering.
- If safety record of the Contractor in execution of the awarded job is to the satisfaction of safety department of the implementer, issue of an appropriate certificate to recognize the safety performance of the Contractor may be considered by the implementer after completion of the job.

**NON-COMPLIANCE:** *NONCONFORMITY OF SAFETY RULES AND SAFETY APPLIANCES WILL BE VIEWED SERIOUSLY AND UNOPS HAS THE RIGHT TO IMPOSE PENALTIES ON THE CONTRACTOR FOR EVERY INSTANCE OF VIOLATION NOTICED:*

**HSE AUDIT/INSPECTION:** Regular HSE Audit/inspection shall be carried out by Contractor as per Site HSE audit calendar. HSE checklist shall be used for carrying out audit/inspection and report shall be submitted to site management.

All non-conformities and observations on HSE identified during internal or external HSE audit shall be disposed of by site in a time bound manner and reported back the implementation status

Corrective action and Preventive action on HSE issues raised by certification body issued by Regional HQs shall be implemented by site and reported to Site management.

