



## Zimbabwe COVID-19 Emergency Response and Essential Health Services Project Additional Financing (P180160)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

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*The Zimbabwe Covid-19 Response and Essential Health Services Additional Financing (P180160) Environmental and Social Management Framework (ESMF) is intended to provide complete documentation for the requirements of a holistic Environmental and Social Safeguards management system. This ESMF contains the findings of a study conducted for the health sector of Zimbabwe and the instrument has been developed based on local conditions and findings.*

This Report is available from:

The Minister of Health and Child Care

**Attention: The Secretary of Health  
Ministry of Health and Child Care  
Harare  
Zimbabwe**

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## FOREWORD

The Constitution of Zimbabwe gives every citizen and permanent resident of Zimbabwe the right to have access to basic health-care services, including reproductive health-care services. Environmental rights enshrined in the constitution of the Republic also give every Zimbabwean the right to a clean environment that is not harmful to their health and well-being. Currently poor health care waste management is one of the pertinent issues confronting the health sector throughout Zimbabwe. The Covid-19 pandemic compounds these challenges.

The Government of Zimbabwe (GoZ), through the Ministry of Health and Child Care (MoHCC), has received funding for the World Bank Global Financing Facility for the Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160).

The project development objective of the Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) project is to support the Government of Zimbabwe to deploy and manage COVID-19 vaccines and strengthen related health system capacity for pandemic preparedness and deliver essential health services, particularly reproductive, maternal, new-born, child, and adolescent health (RMNCAH).

The Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) is consistent with Zimbabwe's National Development Strategy 1 (NDS 1) 2021-2025 and the National Health Strategy (NHS) 2021-2025. The NHS 2021-2025 aims to improve health outcomes by strengthening essential health services and pandemic preparedness and response.

The Project will have overall significant positive environmental and social impacts as it will contribute to epidemic/pandemic preparedness, monitoring, surveillance, and response, specifically about combating the transmission of COVID-19 and vaccine deployment and particularly reproductive, maternal, new-born, child, and adolescent health (RMNCAH). However, there are also substantial environmental and social risks and impacts that will need to be assessed and managed through a risk-based approach during implementation necessitating the preparation of this Environmental and Social Management Framework (ESMF). The ESMF has been prepared as a guide for the various activities of the proposed project and how to assess and mitigate any negative environmental and social impacts, which would require attention prior to project implementation. This ESMF is to be used by the Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) project to ensure that all environmental and social safeguards are adequately addressed. The actions and activities in this ESMF will be underpinned by enablers such as capacity building, community mobilization, education and training, research, monitoring and review as well as awareness raising of all stakeholders to better understand and participate in project implementation to improve the environmental and social performance of the project. The framework supports effective stakeholder engagement and mobilization, strengthening of Environmental and Social Impact Assessment (ESIA), institutional arrangements to improve implementation and enforcement. The MOHCC hopes that implementation of this framework will improve environmental and social risk assessment, risk planning, reduction, mitigation and stakeholder participation.

Lastly, we would like to thank all those who made it possible to have this Environmental and Social Management Framework and the World Bank Global Financing Facility and Cordaid for the technical assistance.



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**Dr A. J. V Maunganidze**

**Secretary for Health and Child Care**

## LIST OF ABBREVIATIONS

<b>ACRWC</b>	African Charter on the Rights and welfare of the Children
<b>AEFI</b>	Adverse Events Following Immunisation
<b>ACFP</b>	Archaeological Chance Finds Procedure
<b>AIDS</b>	Acquired Immunodeficiency Syndrome
<b>CBO</b>	Community Based Organisation
<b>CFC</b>	Chlorofluorocarbon
<b>COVID-19</b>	Corona Virus Disease 2019
<b>CRC</b>	Convention on the Rights of the Child
<b>DoR</b>	Department of Roads
<b>DDF</b>	District Development Fund
<b>DC</b>	District Councils
<b>E&amp;S</b>	Environment and Social
<b>EA</b>	Environmental Assessment
<b>EHS</b>	Environment, Health, and Safety
<b>EHSG</b>	Environment, Health, and Safety Guidelines
<b>EIA</b>	Environmental Impact Assessment
<b>EMA</b>	Environmental Management Agency
<b>EOC</b>	Emergency Operations Committee
<b>ESA</b>	Environmental and Social Assessment
<b>ESF</b>	Environmental and Social Framework
<b>ESIA</b>	Environmental and Social Impact Assessment
<b>ESIRT</b>	Environment and Social Incidence Response Toolkit
<b>ESMF</b>	Environmental and Social Management Framework
<b>ESMP</b>	Environmental and Social Management Plan
<b>ESSC</b>	Expanded Supply Side Community
<b>FFS</b>	Food and Food Standards
<b>FTCT</b>	Fast Track COVID-19 Facility
<b>GBV</b>	Gender Based Violence
<b>GDP</b>	Gross Domestic Product
<b>GFF</b>	Global Financing Facility
<b>GIIP</b>	Good International Industry Practice
<b>GoZ</b>	Government of Zimbabwe
<b>GRM</b>	Grievance Redress Mechanism
<b>GWP</b>	Global Warming Potential
<b>HCRW</b>	Health Care Risk Waste
<b>HCW</b>	Health Care Waste
<b>HCWM</b>	Health Care Waste Management
<b>HCWMP</b>	Health Care Waste Management Plan



<b>HIV</b>	Human Immunodeficiency Virus
<b>HSDSP AF-(V)</b>	Health Sector Development Support Project, Additional Financing-V
<b>HPA</b>	Health Professions Authority
<b>HSSP</b>	Health Sector Strategic Plan
<b>ICC</b>	Interagency Coordinating Committee
<b>ICWMP</b>	Infection Control and Waste Management Plan
<b>IECCD</b>	Integrated Early Childhood Care and Development
<b>IPPF</b>	Indigenous Peoples' Planning Framework
<b>LMP</b>	Labour Management Procedure
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MNCH</b>	Maternal, New-born and Child Health
<b>MoHCC</b>	Ministry of Health and Child Care
<b>MOPSLSW</b>	Ministry of Public Service, Labour and Social Welfare
<b>MLGPW</b>	Ministry of Local Government, and Public Works.
<b>MECTHI</b>	Ministry of Environment, Climate, Tourism and Hospitality Industry
<b>NAC</b>	National Aids Council
<b>NEP</b>	National Environmental Policy
<b>NGO</b>	Non-Governmental Organization
<b>NIHR</b>	National Institute of Health Research
<b>NIP</b>	National Implementation Plan
<b>NMMZ</b>	National Museums and Monuments of Zimbabwe
<b>NMRL</b>	National Microbiology Reference Laboratory
<b>NVDP</b>	National Vaccine Deployment Plan
<b>OAU</b>	Organisation of African Union
<b>OHS</b>	Occupational Health and Safety
<b>ODS</b>	Ozone Depleting Substance
<b>PHC</b>	Primary Health Care
<b>PCU</b>	Program Coordination Unit
<b>PDO</b>	Project Development Objective
<b>PIE</b>	Project Implementing Entity
<b>POPs</b>	Persistent Organic Pollutants
<b>PPE</b>	Personal Protective Equipment
<b>PRS</b>	Poverty Reduction Strategy
<b>PSEAH</b>	Prevention of Sexual Exploitation, Abuse and Harassment
<b>PV</b>	Photovoltaic
<b>RBF</b>	Results Based Financing
<b>RMNCAH-N</b>	Reproductive Maternal, Neonatal, Child, and Adolescent Health and Nutrition
<b>SDD</b>	Solar Direct Drive
<b>SEA</b>	Sexual Exploitation and Abuse

<b>SEP</b>	Stakeholder Engagement Plan
<b>SGBV</b>	Sexual and Gender Based Violence
<b>SI</b>	Statutory Instrument
<b>TA</b>	Technical Assistance
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>UV</b>	Urban voucher
<b>CHW</b>	Community Health Workers
<b>WASH</b>	Water, Sanitation, and Hygiene
<b>WB</b>	World Bank
<b>WHO</b>	World Health Organization
<b>WHO EUL</b>	World Health Organisation Emergency Use Listing
<b>WHO VAC</b>	World Health Organisation Vaccine Acceptance Criteria
<b>ZCERP</b>	Zimbabwe COVID-19 Emergency Response Project
<b>ZCEREHSP</b>	Zimbabwe COVID-19 Emergency Response and Essential Health Services Project

## EXECUTIVE SUMMARY

### Background

The government of Zimbabwe, through the Ministry of Health and Child Care (MOHCC), received US\$6.575 million for the Zimbabwe COVID-19 Emergency Response Project (ZCERP) and is also set to receive US\$15.0 million grant from the Global Financing Facility (GFF) for the Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160).

Given the disruptions to the health systems caused by the COVID-19 pandemic, an acute economic challenge threatens to reverse gains made for Reproductive Maternal, Neonatal, Child, and Adolescent Health and Nutrition (RMNCAH) in Zimbabwe. Pre-pandemic, Zimbabwe had made progress in the provision of RMNCAH services at all levels of care. Findings from the 2019 Multiple Indicator Cluster Survey (MICS) reflect successes of the decade-long investments into the RMNCAH program by the government and its partners. In the second half of 2019, due to the decreased value of their salaries, over 500 junior doctors went on strike for several months, and nurses reduced their working hours. The Government introduced measures to remedy the situation (e.g., increasing its health sector budget, adjusting salaries, providing additional allowances, etc.) but was unable to fully cushion the impact of inflation rates that reached 522 percent by the end of 2019. The COVID-19 pandemic further affected health service delivery due to the national lockdowns and related social distancing restrictions to minimize the risk of COVID-19 transmission. While some RMNCAH indicators improved in 2022 when compared to the same reporting period in 2020 and 2021, their performance is still below pre-pandemic levels.

The Global Financing Facility (GFF) has approved a US\$15 million grant for the Government of Zimbabwe to support the continuity of essential health services (EHS). Given the nature of the EHS grants, which is to help countries adapt and strengthen their primary health care delivery system to address immediate needs as part of a comprehensive COVID-19 response, project preparation and implementation are expected to be carried out in the shortest possible time for recipient countries. Therefore, the EHS grants are incorporated into existing World Bank-supported projects. The EHS grant in Zimbabwe is proposed to be prepared as additional financing (AF) to the ongoing ZCERP. This way the AF would supplement the system strengthening interventions of the ZCERP and provide support to essential health services disrupted by COVID-19 and the concomitant major economic crisis.

### **Rationale for the Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) Environmental and Social Management Framework (ESMF)**

The objective of the ESMF is to assess and mitigate potential negative environment and social (E&S) risks and impacts of the Project consistently with the Environmental and Social Standards (ESSs) of the World Bank Environmental and Social Framework (ESF) and national requirements. Specific objectives of the ESMF are to: (a) assess the potential E&S risks and impacts of the proposed ZCERP and AF activities and propose their mitigation measures; (b) establish procedures for the E&S screening, review, approval, and implementation of activities; (c) specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring E&S issues/concerns related to the activities; (d) identify the training and capacity building needed to successfully implement the provisions of the ESMF; (e) address mechanisms for public consultation and disclosure of project documents as well as redress of possible grievances; and (f) establish the budget requirements for implementation of the ESMF.

The Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) will include vaccine deployment and related health system strengthening and will have considerable positive outcomes as it aims to prevent, detect, and respond to the threat posed by the COVID-19 and strengthen national systems for public health preparedness and support essential health services disrupted by COVID-19. The intervention has positive implications for the social and economic wellbeing of individuals with benefits also accruing to the vulnerable and marginalized groups. However, the COVID-19 strengthening and preparedness and related health systems strengthening activities can also have potential adverse environmental, health and safety risks if an appropriate system for collection, transportation and disposal of health care waste is

not put in place. Furthermore, Occupational Health and Safety risks may arise from fuelling and maintenance of vehicles (spills and waste disposal) as well as the installation and operation of energy generation equipment. These activities will be located at various locations throughout the country affecting their physical and social environments, requiring the preparation of safeguards instruments, and in this case the Environmental and Social Management Framework (ESMF).

This ESMF, which builds on the ESMF prepared for the parent project, follows the World Bank ESF mandates defined in key documents issued for this AF: the ESMF, and the Stakeholder Engagement Plan (SEP). The ESMF contains Labor Management Procedures (LMP).

This ESMF has been prepared as a guide for the various activities of the proposed project and how to assess and mitigate any negative environmental and social impacts, which would require attention prior to project implementation. This ESMF is to be used by the Zimbabwe COVID-19 Response and Essential Health Services Additional Financing to ensure that all environmental and social safeguards are adequately addressed and that the relevant capacity building and training needs are established for the recommended measures to be implemented effectively. Furthermore, the ESMF has been prepared as a guide for the integration of environmental and social considerations into the design, planning and implementation of the proposed project activities. It also provides a basis for specific environmental and social assessments of all activities to be carried out under this proposed World Bank financing.

The Zimbabwe COVID-19 Response project (ZCERP) component is national in scope and is being implemented over 18 months from April 2022 – August 2023. The vaccination activities as well as supply and installation of Solar Direct Drive (SDD) refrigerators, and installation of energy generation equipment is being conducted in existing health facilities. However, for vaccinations, some facilities are operating outreach centres for hard-to-reach areas.

In addition, the ZCEREHSAFP is supporting the 25 facilities in 8 rural provinces across the country. This project will allow the country to strengthen the health system's capacity to increase access, quality, and equity of RMNCAH services. This will be achieved through integrated outreach services, community health services including disease surveillance, procure and supply of commodities for RMNCAH, revitalization and utilization of maternity waiting homes, health system digitalisation and related innovations.

Cordaid Zimbabwe is the Project Implementing Entity (PIE) and is receiving World Bank-GFF funds through a Designated Account. Cordaid is in the process of purchasing goods and services required for the successful implementation of the COVID-19 emergency response project in collaboration with the MoHCC to cover vaccine deployment and related risk communication and community engagement activities, climate friendly and related health system strengthening and overall project coordination, monitoring and evaluation.

The AF Includes a new component called **Sustaining Essential Health Services** which will be financed by the US\$15 million EHS Grant from the GFF. This will increase the total project amount to US\$21.575 million. The new component will include five subcomponents that will support the implementation of key priorities:

- (a) **Integrated Outreach Service Delivery Model.** To support the provision of a comprehensive package of essential health services closer to the communities even during lockdown restrictions, this sub-component will finance the procurement of (i) 300 solar-powered tricycles; (ii) 8 outreach vans equipped to provide a range of services, including those requiring privacy, to cover 8 rural provinces and target poorly performing districts; and (iii) equipment (e.g., solar power, refrigerators, exam couches, tents, screens, etc.). It will also support operational costs for the integrated outreach teams and costs related to the RMNACH mentorship program which involves specialists from central and provincial hospitals mentoring district level doctors.
- (b) **Community Health Services including Disease Surveillance.** This sub-component will finance: (i) training of 2,000 village health workers (VHWs); (ii) refresher trainings for 5,000 VHWs; (iii) supervision and mentorship of VHWs in three provinces; (iv) procurement of commodities to support VHWs; (v) strengthening community transport systems for transferring maternity and neonatal emergency cases from communities; as well as (vi) procurement of Environmental Health Technician (EHT) motorcycles for conducting community surveillance activities.
- (c) **Commodity Security.** In view of the 85 percent cut in contraceptive funding from development partners who traditionally financed Zimbabwe's Family Planning Program, this

sub-component will finance procurement of family planning commodities to cover the gap. It will also fund equipment for rural health facilities, beds, and sundries for RMNCH, and commodities to support Integrated Management of Childhood Illnesses and both basic and comprehensive emergency obstetric and new-born care (EmONC).

- (d) **Revitalization of Maternity Waiting Homes (MWHs).** This sub-component will support the revitalization and improvement of quality of services provided in the MWHs/shelters to ensure that MWHs are utilized. This will include (i) renovation and refurbishment of existing MWHs based on specific needs; (ii) provision of commodities including food items for nutritional support for mothers staying at the MWHs; and (iii) training of service providers in EmONC).
- (e) **Health System Digitalization and Related Innovations.** To complement the integrated outreach model, the AF will also fund the following: (i) capacity building on using Electronic Health Records (EHR) as well as data utilization at points of generation and subnational level managers; (ii) development of the EHR's costing module; (iii) capacity building on blockchain technology within the MoHCC, particularly of the internal technical team that works on health informatics and data analytics, including the EHR Team. This phase's outcome will then guide the MoHCC and the World Bank on the way forward regarding implementation of blockchain technology in the health sector; and (iv) strengthening the routine weekly monitoring system set up by the MoHCC to include private sector facilities that have not been reporting through rapid phone surveys. This will also entail implementing the Early Warning System using machine learning and artificial intelligence to detect service disruptions.

### The ESMF Development Process

The ESMF development process consisted of the following aspects:

- (i) establishment of baseline socio-environmental conditions,
- (ii) review of policy, regulations, institutional framework,
- (iii) assessment of potential environmental impacts,
- (iv) assessment of potential social impacts,
- (v) preparation of the environmental mitigation plan and a monitoring plan,
- (vi) providing guidelines for the implementation of the measures.

The process involved extensive review of related literature from published and unpublished documents, field surveys and investigations and a high degree of consultations with the various stakeholders. The rationale for these extensive consultations is to take on board views from a cross section of the stakeholders, at least from local level, district level, and central government level in the health sector and related sectors.

Overall, the ESMF will ensure that the substantive concerns of the relevant World Bank Environmental and Social Standards (ESSs) and the Zimbabwean legislation will be considered during the implementation of the Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) activities.

### Policy, Legal and Institutional Framework

The policy and legal review established that the Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) is being and will continue to be supported by a host of laws, regulations and institutions that promote a sustainable health environment and well-being of the people of Zimbabwe. The said instruments are guided by the governing laws and the Constitution which majors on sustainable development and the management of the environment so that current generation benefits but without endangering future generations' full rights to the environment and benefits as well.

The World Bank remains committed to mainstreaming social, environmental and climate change solutions into World Bank financed projects; thus Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) was designed and informed by the World Bank's Environmental and Social Framework (ESF). The ten Environmental and Social Standards (ESSs) contained in the ESF serve to ensure the identification, avoidance and management of potential environmental and social risks and benefits associated with Bank operations. The ESMF describes



a process that will ensure that the substantive concerns of the relevant World Bank applicable standards in the ESF and Zimbabwe legislation are addressed during the implementation of the selected activities. However, where the Bank ESSs are more stringent than the national standards, the Bank standards will prevail. It is important to also note that the World Bank Group Environmental, Health, and Safety Guidelines including the General Guidelines as well as those for Health Facilities and Retail Petroleum Networks (which may provide limited vehicle repair services) also guide the project on relevant reference levels and relevant management approaches.

### Project Categorization

The World Bank environmental and social risk rating for Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) is substantial because of the enormity of the COVID-19 challenge (its infectiousness, mortality, pandemic nature), the new vaccines and Zimbabwe's macroeconomic situation. The additional minor works associated with installing solar panels will be in already existing health care facilities and minimal risks are posed to cultural, natural habitats or biodiversity. The project will continue to support strengthening of medical waste management and disposal systems in permanent and temporary healthcare facilities on an as needed basis since the main environmental issue associated with this project's activities is health care waste management.<sup>1</sup>

Considering the proposed AF activities, such as the integrated outreach service delivery model, community health services including disease surveillance, commodity security, revitalization of MWHs, and health system digitalization and related innovations, the most significant foreseen social risks are related to: (i) exclusion of vulnerable social groups (poor, disabled, elderly, isolated communities, refugees, and people and communities living far from the health facilities, etc.) from access to the essential health services, (ii) inadequate personal data protection under the health system digitalization and related innovations activities, which involve capacity building for using electronic health records and implementing the early warning system using machine learning and artificial intelligence to detect service disruption, (iii) poor labour and working conditions due to a failure to abide by national legislation and the ESS2 requirements on working hours, wages, overtime, compensation and/or benefits; and (iv) sexual exploitation and abuse (SEA), and sexual harassment (SH) among project workers, with stakeholders and/or local communities. The activities to revitalize MWHs will involve minor civil works such as renovation and refurbishment of existing MWHs, and no land acquisition or involuntary resettlement impacts are expected. Key Environment risks include i) construction related risks including EHS and Occupational Health and Safety (OHS) (dust, noise, construction waste, working at height, being hit by objects etc.) emanating from refurbishment of maternity waiting homes; ii) road traffic incidents due to operation of tricycles supporting community health services, vans and motorcycles for health centre monitoring ; iii) exposure to hazardous, medical and e-wastes emanating from immunization, and health care operations and digitization and solar powered equipment, if improperly managed; iv) OHS risks during operation of maternity waiting home and management of child illnesses including traps, falls and general wastes management.

With the addition of the AF, the environmental risk classification for the project remains substantial under the World Bank ESF mainly due to risks linked to the management of biomedical waste and also risks linked to the renovation of Maternity Waiting Homes in health facilities. Labour management and health and safety risks will be taken into account given the grown capacity of the PIE on these issues. These risks will be mitigated by; capacity building activities, preparing required ESMPs for all renovations and ensuring the Environmental and Social Safeguards Specialists continue to support the MOHCC and PCU with the implementation of environmental and social provisions.

<sup>1</sup>Temporary health care facilities will need to factor in safe water, sanitation, and hygiene facilities (meeting quality standards; separation of infected vs. non-infected patients).

## Environmental and Social Assessment Process

The proposed AF will expand on and complement the activities initiated under the parent project. In order to ensure that potential environmental and social impacts are identified and ultimately adequately addressed, a number of safeguards instruments have been developed for the ZCERP project and will be updated to reflect the AF project and its activities and they include (i) the Environmental and Social Management Framework (ESMF) which includes an Infection Control and Waste Management Plan (ICWMP), an Indigenous Peoples Planning Framework (IPPF – Appendix 1, and Labour Management Procedures (LMP) – Appendix 2); (ii) a Grievance Redress Mechanism (GRM); and (iii) a Stakeholder Engagement Plan (SEP). Although the Project does not anticipate any physical cultural resources, the ESMF contains an Archaeological Chance Finds Procedure (Appendix 3) in case such resources are unexpectedly encountered during project activities. The project also anticipates mitigating, handling and addressing cases of Gender Based Violence and a GBV Action Plan has also been appended to that effect (Appendix 12).

The safeguards instruments, like this ESMF were developed with stakeholder consultations, which are part of an overall continuous stakeholder consultation process described in this ESMF. The process involves identifying the concerned/affected stakeholders for each project activity, soliciting their views and continuously checking if their views are being taken care of as the project implementation progresses.

Because of the current limitations imposed by the COVID-19 Pandemic, full-scale site visits could not be conducted. The strategy that was applied included the following:

- ▶ Limited site visits,
- ▶ Virtual Zoom Meetings done with some of the key stakeholders like MoHCC management, Environmental Management Agency (EMA) head office, etc.,
- ▶ Administration of an electronic questionnaire was done to all key stakeholders in MoHCC, participating Ministries, and Agencies.

The ESMF emphasizes the need for continuous consultations with stakeholders throughout the project cycle to achieve successful implementation and monitoring and the AF will ensure stakeholders are continuously engaged, appraised and meaningfully engaged. Detailed guidance on stakeholder engagement process is outlined in the project SEP which was disclosed in May 2023 with further details on this link <https://healthprojectzim.org.zw/2023/05/12/strengthening-stakeholder-engagement-the-project-updates-its-stakeholder-engagement-plan/>. The PIE will have the responsibility to effectively engage stakeholders in achieving the project objectives for the benefit of all.

An important facet of the stakeholder consultation process is the **Grievance Redress Mechanism (GRM)**. The GRM is a system by which queries or clarifications about the project will be responded to, problems with implementation will be resolved, and complaints and grievances will be addressed efficiently and effectively. The GRM was developed from what is generally being practiced in the Health Facilities. It is mainly serving the purpose of responding to the needs of beneficiaries and addressing and resolving their grievances.

## Environmental and Social Concerns and Mitigation of Impacts

The potential risks and impacts associated with the project were analysed and mitigation measures for the identified impacts were proffered. The planned installation of solar panels to enhance energy generation, fuelling and maintenance of vehicles at facilities will not have any significant impacts. However, the enhanced vaccination activities will result in increased generation of infectious waste. Therefore, the main safeguards issues will be related to the management of infectious health care waste and the occupational health and safety of workers handling the waste, and community health and safety of the communities who may come into contact with infectious waste, and Adverse Events Following Immunizations (AEFIs) for the people who are vaccinated,

The ESMF establishes a unified process for addressing all environmental and social issues in project activities from preparation, through review and approval, to implementation. The Project has an Infection Control and Waste Management Plan (ICWMP) to govern the management of healthcare waste. Installation of solar power equipment at facilities will be screened. The proponents of such installations, be they health care facilities or contractors, must then formulate an Environmental and Social Management Plan (ESMP) using as a basis ESMP formats and templates provided in Appendices 5 and 6. Those ESMPs will be reviewed and approved or rejected by the Project Implementing Entity, Cordaid, Environmental and Social Specialists. Solar power installation activities must have an ESMP approved by the PIE before they start. Screening (and potentially an ESMP) is required for truck installations of refrigerators if those activities will take place at only a few (like 4 or less) locations to prevent and avoid impacts from concentrated activities. If truck installations will take place at numerous locations (thus resulting in diffuse insignificant impacts), responsible project proponents or contractors are to apply the relevant measures in Table 5-5, although they do not need to be screened or to develop any ESMP. Facilities that will provide vaccinations with financing from Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) will develop their own facility level ICWMP guided by the ZCERP ICWMP and this ESMF to manage the impacts from generating waste, namely the infectious needles. All other project activities should apply the measures outlined in Table 6-6, the ZCERP general ESMF to manage their impacts. Appendix 4 contains the Code of Conduct and Appendix 8 contains Environmental and Social Guidelines for any contractors delivering project activities.

The universe of possible mitigation measures, as part of the comprehensive ESMP for the ZCERP, in Table 6-6 provides guidelines for the management of potential environmental and social aspects at all possible project activities. The mitigation or enhancement measures will reduce the negative impacts and enhance the positive impacts.

Implementation of the AF project activities will be positive and urgently needed. The Integrated Outreach Service Delivery Model, the Community Health Services including Disease Surveillance, the Commodity security component and the Revitalization of Maternity Waiting Homes (MWHs) have limited, if any, impacts. The risks and impacts from the implementation of these components need to be addressed. The upgrading and revitalization of several MWHs will require following practical environmental and social risk and impact management measures. The potential negative impacts from these activities are expected to be moderate, localized, and temporary that can be mitigated through the implementation of the existing Environmental and Social Management instruments of the Project. Attention is required to ensure all Good International Industry Practices (GIIP) and WHO guidance is applied to the COVID-19 waste stream and other infectious waste as part of the medical waste management system in place by the MOHCC.

All civil works planned to be executed under this project will be located on public lands within the compound of health centres or referral hospitals. These rehabilitations/upgrades/renovations of WMHs at health care facilities may generate limited adverse impacts such as dust, noise, vibration, building waste, wastewater, traffic obstruction, safety issue, construction workers hygiene and sanitation to the environment and surrounding residents. These impacts are assessed to be site-specific, temporary and can be mitigated with good design and construction practices.

A generic concern with such construction upgrades is exposure to asbestos if such materials were used in past building programs. The MOHCC will verify that asbestos is not present in existing structures and if that is not the case adhere to appropriate occupational health and environmental mitigation measures. These measures are addressed in the ESMP checklist for Renovations and Upgrades.

As a result of the COVID-19 pandemic, the MOHCC created a call centre to support COVID-19 surveillance activities and for enquiries and other COVID-19 related calls. The Call Centre is an important communications link to the public and is a significant source of contact for public



requesting information on COVID-19 and any other health related information, and the primary contact point for responding to public and media inquiries. The Call Centre centrally manages all calls coming into the centre via a dedicated toll-free hotline telephone number (2019) using normal simple phones. The project will mitigate the risk of SEA by applying the WHO Code of Ethics and Professional Conduct ("Codes of Conduct" using WB's terminology) for all workers in the quarantine facilities as well as the provision of gender-sensitive infrastructure, such as segregated toilets and enough light in quarantine and isolation centres. The LMP also includes provisions to prevent SEA/SH and/or violence against children (VAC). Training on community interaction and SEA/SH/VAC will be provided for all teams, staff (civil servants and outsourced staff/contractors) to ensure the teams respect local communities and their culture and will not be involved in misconduct. The ESMF checklist also guides appropriate measures for dealing with SEA/SH and VAC risks in the contracts (for contracted workers) in line with relevant national laws and legislations to be adopted and applied under the project.

The ESMF places special emphasis on the empowering of women and youth and their protection from any form of abuse. Of note are the measures to avoid, minimise, manage, and mitigate any Gender Based Violence (GBV)/ Sexual Exploitation and Abuse (SEA); Sexual Harassment (SH) risks, which may arise especially at the installation sites. These measures are detailed in the GBV Action Plan in Appendix 15. The World Bank Code of Conduct for Contractor has been incorporated as part of this ESMF (Appendix 4) and all contractor workers are expected to sign and abide before commencing any work.

### Capacity Building

The successful implementation and monitoring of the ESMF will require that target groups and stakeholders who play a role in the implementation of the ESMF be provided with appropriate training and awareness. This is necessary because the implementation of the activities will require input, expertise and resources which will be adequately taken care of if the concerned parties are well capacitated. Careful and strategic identification of training recipients should be carried out at the beginning of the Project. The ESMF capacity building is directed to staff in the MOH, relevant government institutions, contractors and subcontractors, and communities. The capacity improvement and training program will be organized to cover a selection of key topics such as:

- Training topics/themes will cover the following topics as mentioned above in section 8:
- The Project ESMF approach
- MOH actions and environmental and social considerations
- Good international industry practices (e.g., WHO, CDC, OSHA) concerning OHS
- Managing construction waste, general Medical Health Care Waste
- Labor management practices
- ESSs, OHS and COVID-19 Considerations for all Civil Works Subprojects – Contractors and Subcontractors
- Grievance redress mechanisms
- Consultations, communications and feedback
- Ensuring all people are given equal access and rights.
- Understanding concerns with gender-based violence, violence against children, social stigma
- Monitoring and reporting at all levels

These workshops will be funded as stipulated in the Budget section on training. Each workshop has a designated target audience, a time frame for delivery and identification of who will facilitate the workshop. A separate budget is also allocated for relevant ESIA studies that will be commissioned from independent consultants or consultancy firms. Based on social distancing protocols and COVID19 precautions, these workshops can be delivered via remote connections and distance learning.

The MOHCC is well experienced in infection prevention and control, healthcare waste management, communication and public awareness for emergency situations. Regarding the COVID-19 experience, the MOHCC continues to lead sharing knowledge around the capacity to manage the project health risks across all project components. These initiatives have already been brought to the ESMF context across all environmental and social capacity training. Generally, MoHCC and the PIE at national, provincial, district and community levels have limited capacity in the application of the ESMF and the relevant environmental and social standards. The PIE has conducted trainings to increase their capacity on the implementation of ESMF for national, provincial and district MOHCC staff under HSDSP AF (V). In addition, the PIE and MOHCC will continue to participate in the planned ESF trainings from World Bank.

## ESMF Budget

The total estimated amount needed to cover all the work to be carried out under the ESMF preparation and implementation for the project activities is US\$214,000 for the eighteen months of project implementation. The key indicative aspects that would require a cost budget include training and capacity building for the project PIE; training and capacity building for the project district and local level teams; and Implementation of the stakeholder engagement plan.

## Conclusions and Recommendations

The proposed project has the potential to significantly improve the country's health delivery system and the emergence preparedness and response to the COVID-19 pandemic and deliver essential health services, particularly RMNCAH. Improved health systems benefit communities, which translates to improved livelihoods as people become productive again and this will ultimately improve the economy.

The project is designed to address the COVID-19 threat reducing its risks and impacts through supporting Zimbabwe's vaccination response as well as improving access and utilization of RMNCAH services. Most of the project's activities will generate insignificant negative impacts which are localized and manageable. The enhanced health delivery system will result in increase in the generation of infectious waste and associated risks to the occupational health and safety of workers including to COVID-19 itself. These will be mitigated through the implementation of the project's ICWMP which outlines the management of infectious healthcare waste. These envisaged negative environmental and social impacts will be localized, minimal, short term and can be mitigated. The Project will have overall positive environmental and social impacts on community especially women by rehabilitating maternity waiting homes (MWHs), contributing to community/public health safety through treatment and surveillance of disease, and good environmental management practices by increasing efficiency and reducing waste paper through digitization of health system. The final benefits of this project to the nation will outweigh any potential negative effects. Further, the project will overall not have any significant environmental and social impacts if the recommended mitigation measures are carried out.

## 1.0 INTRODUCTION

### 1.1 Project Background

The Government of Zimbabwe (GoZ), through the Ministry of Health and Child Care (MoHCC), has prepared a Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) that will receive World Bank technical and financial support. The GoZ has prepared this Environmental and Social Management Framework (ESMF) to identify and address the environmental and social risks and possible impacts of the project. This ESMF fulfils the environmental and social assessment requirement by the Government of Zimbabwe through the Environmental Management Act (Chapter 20:27) and in line with the World Bank Environmental and Social Framework (ESF) through the Environmental and Social Standards on Environmental risk assessment and management (ESS1). The national legislation requires that environmental and social assessments be conducted on projects listed in Schedule 1 of the Act. GoZ and the WB require that the environmental and social assessments (ESA) (commensurate with project activity risks) be shared with stakeholders and project affected people. No project activity will require an in-depth full Environmental and Social Impact Assessment (ESIA) as understood by the WB. This ESMF covers the Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) which include activities under the Energy Sector Management Assistance Program (ESMAP)<sup>2</sup> grant and Health Emergency Preparedness Trust (HEPRT) Fund. The project will be co-financed by a US\$5 million grant from the Health Emergency Preparedness and Response Trust Fund (HEPRTF)<sup>3</sup> and the \$1,575 million ESMAP grant. ZCERP is being implemented over 18 months (April 2022 to August 2023), complementing activities being supported under the Zimbabwe Health Sector Development Support Project (HSDSP AF (V))<sup>4</sup>.

This Additional Financing (AF) will enable the Government of Zimbabwe to sustain essential health services during an acute economic challenge. The COVID-19 pandemic left many people in Zimbabwe unable to visit health clinics due to prevention and containment measures, national lock downs and associated fears of contracting the virus. As a result, many missed out on immunization, reproductive and maternal health services. More than 80 percent of health facilities reported a decline in uptake of essential health services prompting the Government of Zimbabwe to take action to ensure that communities could get the services they need while maintaining the safety of both patients and health workers. This AF will complement ongoing efforts by the GoZ, the private sector, and development partners.

This Project will be national in scope, comprising various activities<sup>5</sup> with different levels of environmental and social impacts and located at various locations throughout the country. The project activities have a bearing on physical and social environments, necessitating the preparation of environmental and social safeguards instruments that will be used to mitigate such impacts. The safeguards instruments for this project include:

<sup>2</sup>ESMAP is a partnership between the World Bank and 19 partners to help low and middle-income countries reduce poverty and boost growth through sustainable energy solutions. Through the World Bank Group (WBG), ESMAP works to accelerate the energy transition required to achieve Sustainable Development Goal 7 (SDG7) to ensure access to affordable, reliable, sustainable and modern energy for all. It helps to shape WBG strategies and programs to achieve the WBG Climate Change Action Plan targets.

<sup>3</sup>The HEPR Umbrella Trust Fund/TF Program supports countries that are not eligible for IDA/IBRD funding such as Zimbabwe to improve their capacities to prepare for, prevent, respond, and mitigate the impact of epidemics on populations. It was set up as a flexible mechanism to provide catalytic, upfront, and rapid financing at times that other sources of funding are not available for health emergency preparedness and to fill specific gaps in terms of health emergency responses. The Partnership Council endorsed an allocation of \$5m to Zimbabwe to support COVID-19 response. The funding was intended to support all aspects of Zimbabwe's COVID-19 response, including COVID-19 vaccine deployment.

<sup>4</sup>HSDSP AF-(V) is a continuation and enhancement of the ongoing Health Sector Development Support Project (HSDSP; P173132), which is a US\$53 million grant-funded project which has been supporting the GOZ to increase coverage and quality of maternal and child health (MCH) services using an RBF approach for the since 2011 and has had four additional funding since its approval in September 2011.

<sup>5</sup>These are the individual activities within the ZCERP such as the installation of solar energy generation equipment in a facility, project activity

- (i) This Environmental and Social Management Framework (ESMF) which includes an Infection Control and Waste Management Plan (ICWMP), an Indigenous Peoples Planning Framework (IPPF – Appendix 1), and Labour Management Procedures (LMP – Appendix 2)
- (ii) Grievance Redress Mechanism (GRM) and
- (iii) Stakeholder Engagement Plan (SEP)
- (iv) GBV Action Plan – Appendix 12.

Although the Project does not anticipate any physical cultural resources, this ESMF contains an Archaeological Chance Finds Procedure in case such resources are unexpectedly encountered during project activities.

This ESMF is to be used by Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) to ensure that all environmental and social risks and impacts are adequately addressed and that the relevant capacity building and training needs are established for the recommended measures to be implemented effectively.

## 1.2 ESMF Objectives

The ESMF objectives are:

- ▶ To establish clear procedures and methodologies for the environmental and social assessment, review, approval, and implementation of investments to be financed under Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160),
- ▶ To specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to project investments,
- ▶ To determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF,
- ▶ To establish the project funding required to implement the ESMF requirements,
- ▶ To provide practical resources for implementing the ESMF, including general guidance on development of ESMPs and their implementation.

## 1.3 Significance of the ESMF

This ESMF was prepared because the location, design, and magnitude of the impacts of the eventual project activities is not yet known at project appraisal stage, even though the types of potential project activities are outlined. It provides a guide for the integration of environmental and social considerations into the planning and implementation of the ZCEREHSP, together with its expanded emergency COVID-19 response mandate and supporting the implementation of high-impact essential services to improve health outcomes for women, children, and adolescents with a focus on improving health service quality and addressing inequity that Zimbabwe is proposing. It further provides a basis for environmental and social assessments of all activities to be carried out under this proposed additional financing.

This ESMF focuses on the nature and extent of significant adverse environmental and social impacts that may result from any of the ZCEREHSP activities including the COVID-19 emergency response and serves as a framework for screening environmental and social issues for all the possible activities that will be undertaken. It establishes a unified process for addressing all environmental and social safeguards issues of project activities from preparation, through review and approval, to implementation.

This ESMF also describes a process that will ensure that the substantive concerns of the relevant World Bank Safeguard Policies and Zimbabwe law are addressed during the implementation of the selected response activities.

## 1.4 ESMF Methodology

This ESMF builds on the ZCERP ESMF and provides principles and specific process and technical guidance to the Project implementing agencies and their stakeholders to assess the E&S risks and impacts of the Project activities. These include ensuring that individuals or groups who, because of their circumstances, may be disadvantaged or vulnerable, have access to the development benefits resulting from the Project. This ESMF will be applied to all activities (e.g., works, good/services, technical assistance, and research activities) to be financed by the AF and Parent Project and/or its subprojects.

The primary source for describing institutional, policy and legal frameworks was existing legal instruments (Acts and Regulations) complemented by existing literature both physical and electronic. Information on the status and performance of Zimbabwe HCF was obtained from the consultant site visits and other reports contained in the HSDSP ICWMP on which the Zimbabwe COVID-19 Response and Essential Health Services Additional Financing (P180160) ICWMP is based, reports from Vital Medicines Availability and Health Services Survey, stakeholder consultations conducted for HSDSP, National Infection Prevention and Control Guidelines (2019) and the Country profile: Health care waste management in the context of COVID-19 by UNDP among others.

Secondary sources of information were obtained through a review of available documents, as well as consultations held with key stakeholders across the Country.

From the literature, all possible envisaged environmental and social impacts were listed and evaluated based on policy and legal requirements. The data on geology and soils, climate, water resources, biodiversity, human and ecosystems were obtained from existing literature, especially from developing partners like the UNDP, World Bank, etc. The following table 1-1 shows some of the sources of information:

**Table 1-1 Sources of Information**

No.	REFERENCES
1.0	<p><b>UNDP, 2017;</b> Zimbabwe Human Development Report, Climate Change and Human Development: Towards Building a Climate Resilient Nation, 2017, UNDP, Harare, Zimbabwe</p> <p><b>Issues covered:</b></p> <p>UNDP has looked into issues which affect pandemic responses and related activities in their book Zimbabwe Human Development Report, Climate Change and Human Development: Towards Building A Climate Resilient Nation (2017), health issue come into play.</p>
2.0	<p><b>WB 2009;</b> Good Practice Note: Asbestos: Occupational and Community Health Issues, World Bank Group, Washington, May 2009</p> <p><b>Issues covered:</b></p> <p>The World Bank Group Environmental Health and Safety General Guidelines (2007).</p>
3.0	<p><b>Ncube, G and G.M. Gomez,</b> Remittances in rural Zimbabwe: From Consumption to Investment, in: International Journal of Development and Sustainability, Volume 4.2, p.181-195 Trading Economics, Zimbabwe unemployment rate, accessed at: <a href="https://tradingeconomics.com/zimbabwe/unemployment-rate">https://tradingeconomics.com/zimbabwe/unemployment-rate</a></p> <p><b>Issues covered:</b></p> <p>Ncube et al in remittances in rural Zimbabwe aptly states and shows how unemployment has a bearing on health issues and other downstream activities.</p>
4.0	<p><b>GoZ, 2016;</b> Zimbabwe National Statistics Agency, Government of Zimbabwe. Zimbabwe Demographic and Health Survey, November 2016, accessed at: <a href="https://dhsprogram.com/pubs/pdf/FR322/FR322.pdf">https://dhsprogram.com/pubs/pdf/FR322/FR322.pdf</a></p> <p><b>Issues covered:</b></p> <p>The Government of Zimbabwe journal, Zimbabwe national statistics agency (November 2016) demography and health issues are contrasted, and a direct relationship was shown to occur.</p>
5.0	<p><b>Maplecroft, 2018;</b> Climate Change Vulnerability Index 2018, accessed at <a href="https://www.maplecroft.com/solutions/environment-climate-change/">https://www.maplecroft.com/solutions/environment-climate-change/</a></p> <p><b>Issues covered:</b></p> <p>Maplecroft in his analysis, of Climate Change Vulnerability Index (2018), looks at the way climate change has affected food security, health, and life expectancy of the general population. He emphasises the need to relate to the continuous change occurring in climate and adapt to it to maintain the health of the population on an acceptable index.</p>
6.0	<p><b>WB, 2018;</b> Zimbabwe, Human Development Indices and Indicators, World Bank, 2018 Statistical Update, accessed at: <a href="http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/ZWE.pdf">http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/ZWE.pdf</a>.</p> <p><b>Issues covered:</b></p> <p>Finally, the World Bank, Zimbabwe Human Development Indices, and Indicators Statistics (2018) show how development is related to the population and indicators of development are shown in this narrative.</p>



## 1.5 Project Description: The Zimbabwe COVID-19 Response and Essential Health Services Additional Financing Project (P180160)

The Zimbabwe Covid-19 Response and Essential Health Services Additional Financing (P180160) is funded by the Health Emergency Preparedness and Response Trust Fund (HEPRTF) and the Energy Sector Management Assistance programme (ESMAP), and the Global Financing Facility (GFF) through the World Bank. The Project Development Objective (PDO) of the parent ZCER project is to support the Government of Zimbabwe to deploy and manage COVID-19 vaccines and strengthen related health system capacity. support the Government of Zimbabwe to deploy and manage COVID-19 vaccines and strengthen related health system capacity Zimbabwe Covid-19 Emergency Response and Essential Health Services activities will be implemented by the Catholic Organisation for Relief and Development Aid (Cordaid).

The parent ZCERP Project is currently filling critical gaps in technical areas that are noted in the country's prepared and response plan. These include:

- ▶ Risk Communication and Community Engagement interventions.
- ▶ National laboratories.
- ▶ Infection prevention and control.
- ▶ Vaccine deployment, and
- ▶ Response coordination, monitoring and evaluation.

These were identified to immediately strengthen the local capacity to respond and address the current COVID-19 potential challenges in timely manner, while working within the country's existing systems and providing technical assistance as needed for local entities. Emphasis will be placed on strengthening capacities at all levels.

The new revised Project Development Objective (PDO) for the ZCEREHSP AF is "to support the Government of Zimbabwe to deploy and manage COVID-19 vaccines and strengthen related health system capacity for pandemic preparedness and deliver essential health services, particularly RMNCAH." The ZCEREHSP AF will support prioritized but unfunded interventions in the National Health Strategy and Health Sector Investment Case 2021-2025 that contribute toward ensuring access to essential services. These proposed additional activities will be included under a new ZCEREHSP AF component.

The additional activities will be incorporated through a new component of the parent project as described below:

Components 1 and 2 remain unchanged. A new component for the activities financed by the proposed AF is added as Component 3, and Component 3 under the parent project is changed to Component 4.

**Component 1. Vaccine Deployment and Related Risk Communication and Community Engagement** (HEPRTF: US\$3.52 million). This component will support deployment of vaccines that meet World Bank Vaccine Approval Criteria (WB VAC). At present, Zimbabwe is using five vaccines that meet WB VAC: Sinopharm, Sinovac, Sputnik V, Covaxin, and Johnson and Johnson. The country expects to avail this year of World Health Organisation Emergency Use Listing (WHO EUL) vaccines from the African Union and COVAX Facility.

**Sub-component 1.1 Vaccine Deployment.** This sub-component will contribute toward strengthening the public health system's capacity to deploy vaccines through capacity building, eligible allowances, goods, and equipment. It will also monitor whether deployment is proceeding according to the National Deployment and Vaccination Plan (NDVP) and strengthen vaccine related waste management transportation systems. Activities to be funded include:

- ▶ Outreach and vaccine distribution including fuel, repair, and maintenance service of vehicles used for vaccine distribution.
- ▶ Supervision and monitoring of vaccine deployment including ensuring implementation of the NDVP. Special attention will be given to women, people with disabilities, and others among targeted groups who may face barriers to access information and services.
- ▶ TA to the MOHCC to revise, update, and implement the safety monitoring plan to enable swift detection of any AEFI.
- ▶ Procurement of PPE for public COVID-19 vaccination centres and capacity building for rational use of PPE, including the development of guidance tools and training through physical and virtual methods.
- ▶ Supportive supervision and visits through strategic use of Information, Communication, and Technology (ICT).
- ▶ Procurement of electronic data capturing tools for health facilities
- ▶ Vaccine efficacy monitoring / checks.
- ▶ Set up and implementation of Impilo COVID-19 Vaccination Authentication. This is an Electronic Health Record mobile application solution that will enable a QR code to be assigned to every COVID-19 vaccination certificate.<sup>6</sup> This application captures personal information including patient health status, contact address while also keeping information secure.
- ▶ Vaccine waste management training and logistics such as transport of wastes related to vaccine deployment for off-site incineration, and M&E.

**Sub-component 1.2. Risk Communication and Community Engagement.** This sub-component will also finance TA, eligible allowances, equipment and supplies to support risk communication and engagement at the community level to complement NDVP implementation:

- ▶ Community feedback mechanisms at local level such as the use of registers or rumour logbooks and suggestion boxes, Grievance Redress Mechanisms (GRMs), seconding Health Promotion Officers (HPOs) to EOCs, as well as ensuring community feedback is transmitted to high level meetings.
- ▶ Psychosocial support systems for both healthcare workers and general population by building capacity of community health workers, and national psychosocial centre.
- ▶ Community discussion forums with local and traditional leaders and school heads to share information about gender-based violence (GBV), sexual exploitation, abuse and harassment (SEA-H) and GRM. Priority will be given to the Tshwa and Doma districts which tend to be the most vulnerable and often forgotten areas.
- ▶ Public-address vehicles.<sup>7</sup>



**Component 2. Climate Friendly Related Health System Strengthening** (ESMAP: US\$1.575 million). This component will support complementary strategic activities to facilitate the implementation of the COVID-19 NDVP, focusing on climate friendly health system strengthening activities that support vaccine deployment. It will finance capacity building, goods, purchase and use of climate-friendly cold chain equipment including cold boxes and 250 solar direct drive refrigerators; installation of refrigerators on 8 trucks; and installation and maintenance of solar energy in 29 health facilities.

**Component 3: Sustaining Essential Health Services** (Original: US\$0; AF: US\$ 12.9 million, GFF TF). This is a new component that will support the continuity of EHS. The proposed activities to be financed under this component are:

**Subcomponent 3.1: Integrated Outreach Service Delivery** (Original: US\$0; AF:US\$3.67 million, GFF TF). This subcomponent will support the provision of a comprehensive package of essential health services including immunization, antenatal and postnatal care to communities without access to

health facilities. This sub-component will finance the procurement of: (i) 76 solar-powered tricycles to be used by health facilities for outreach services, within a 20km radius. There are 1950 registered health facilities, and prioritization of distribution of the 76 tricycles will be based on need. There is complementary support from other projects that are procuring 544 tricycles. To cover the remaining gap of 1218 tricycles, the project will work together with other development partners and the GoZ, to lobby for the necessary support. (ii) 8 well equipped outreach vans to provide a range of services, including those requiring privacy to cover 8 rural provinces while targeting poorly performing and prioritized districts, beyond the hard-to-reach areas. The equipment for each of the outreach vans includes an Ultrasound Scan, Laboratory, Solar Powered Refrigerators for medicines and vaccines, exam couches, tents, and screens to be used during the outreach. (iii) Procurement of eight by 18-seater rough terrain minibuses that will be used to carry the integrated outreach teams. This subcomponent will also support (iv) operational costs for the integrated outreach teams and (v) costs related to the RMNCAH mentorship program which involves specialists from central and provincial hospitals mentoring district level doctors.

**Subcomponent 3.2: Strengthening Community Health Services including Disease Surveillance** (Original US\$0; AF: US\$1.07 million, GFF TF). This sub-component will finance: (VHWs); (i) Upskilling/refresher trainings and support for 5,450 VHWs on the new/expanded community health package of services; including how to handle climate-related shocks, integrating gender responsive service delivery and adolescent sexual and reproductive health education. Other funding streams will support upskilling of an additional 5000 VHWs, leaving a gap of approximately 11500. The project will support upskilling of VHWs, rather than train new cadres, as stipends for the additional VHWs are not assured and (ii) procurement of motorcycles for environmental health technicians to conduct community surveillance activities.

**Subcomponent 3.3: Commodity Security** (Original US\$0; AF:US\$6.7 million, GFF TF). Maternal and Perinatal Death Surveillance and Response (MPDSR) reports show that most maternal and perinatal deaths in Zimbabwe are avoidable and are due to the 3<sup>rd</sup> delay i.e., delay in getting appropriate care at the health facility including inadequate biomedical equipment and commodities at health facilities. One of the focus areas of the Ministry of Health and Child Care is ensuring that health facilities are suitably equipped to provide safe deliveries in a bid to save the lives of women and babies. This subcomponent will fund (i) equipment for both basic and comprehensive emergency obstetric and new-born care to ensure that the supported facilities are able to offer both safe normal deliveries and Caesarean Section deliveries safely. Minor theatre renovation will be made to ensure adequate preservation and security of installed equipment and improved theatre outlook. Medical Oxygen reticulation will be included to suit some of the targeted facilities. Twenty-five (25) health facilities have been selected for this support to complement other MoHCC initiatives. The project will also support (ii) the procurement of family planning commodities to complement the major contribution from MoHCC in line with the Family Planning Investment Compact.

**Subcomponent 3.4: Revitalization of Maternity Waiting Homes (MWHs)** (Original US\$0; AF:US\$0.5 million, GFF TF). This sub-component will support the revitalization and improvement of quality of services provided in the MWHs to increase the utilization of the MWHs to promote institutional deliveries by bringing pregnant women closer to health facilities. An assessment conducted in Zimbabwe in 2017 showed high utilization of the MWHs, which was also linked to high institutional deliveries. The study, however, identified quality of care for mothers admitted as a major gap. In line with the proffered recommendations, the Ministry developed guidelines setting the standards of operations and care provided in MWHs. Support from the project will therefore include (i) refurbishment and minor renovations of existing MWHs based on the guidelines including establishment of nutrition gardens. (ii) training of service providers at MWHs in emergency obstetric

and neonatal care (EmONC) and sensitization on the MWHs guidelines. For a more comprehensive approach, this component will also support orientation of Health Care workers on the Maternity Waiting Homes guidelines which developed in 2020.

**Subcomponent 3.5: Health System Digitalization and Related Innovations** (Original US\$0; AF:US\$0.96 million, GFF TF): This sub-component of the project aims to improve the efficiency and effectiveness of the health system in Zimbabwe through the use of digital technologies and innovations. To complement the integrated outreach model, the AF will finance the following activities:

- ▶ *Support decentralization of the Electronic Health Record (EHR) System implementation:* This activity will involve supporting the decentralization of the EHR implementation to the 25 supported district hospitals. Some complementary activities will include:
  - Development of an e-learning platform on training on the use of EHR would be a strategic investment to scale up capacity building for EHR use in a sustainable way: This sub-activity will involve the development of an e-learning platform to train health care workers on the use of the EHR system. The platform will provide training on how to use the EHR system effectively and efficiently.
  - Develop SOPs and guidelines on EHR: This sub-activity will involve the development of Standard Operating Procedures (SOPs) and guidelines on the use of the EHR system. The SOPs and guidelines will provide a framework for the use of the EHR system and ensure that health care workers are using the system in a standardized manner.
  - Installation of EHR in the 25 supported district hospitals: This sub-activity will involve the installation of the EHR system in the 25 supported district hospitals. The installation will be done using the equipment that has already been procured by the Government of Zimbabwe with support from partners.
  - Capacitating health care workers in the 25 supported district hospitals on EHR: This sub-activity will involve the training of health care workers in the 25 supported district hospitals on the use of the EHR system. The training will be provided to ensure that health care workers are able to use the system effectively and efficiently.
- ▶ *Development of the Costing and Electronic Maternal and Perinatal Death Notification System (eMPDNS) modules in the EHR.* This costing module will allow for billing of services while eMPDNS module will enable health care workers to report on timely notification of maternal and perinatal deaths.
- ▶ Capacity building on blockchain technology within MOHCC, particularly of the internal technical team that works on health informatics, data analytics and M&E, including the EHR Team. This phase's outcome will then guide the MOHCC and WB on the way forward regarding piloting and implementation of blockchain technology in the health sector.
- ▶ Development and piloting of a Digitized Community Transport Dispatch System for emergency services. This innovation that is proposed to work as an "Uber" type of model to link women and children needing emergency services in the community with the nearest transport provider to transport them to the nearest health facility. Activities will entail undertaking a feasibility analysis, developing the system, enrolment of providers, and piloting in select sites.
- ▶ Strengthening the MOHCC monitoring and evaluation system including implementation of an Artificial Intelligence driven Early Warning System on Health System Disruptions. The project will support operationalization of the health situation room system as a priority for data visualization from MoHCC Top management utilizing already existing infrastructure in MoHCC Top Management Offices and cover the gap where necessary. Leveraging an existing Early Warning System prototype developed in a previous collaboration between the Ministry and the World Bank, this activity will focus on implementation through use cases such as the Weekly Routine Monitoring System. Activities will include sensitization of health managers and training of a core technical team within MOHCC and at sub-national level, conducting integrated monitoring and supportive visit to supported districts and reviewing, printing and distribution of M&E tools including VHW registers and referral slips. The project will also support development of private sector reporting framework.

Overall, this sub-component will enhance the capacity of the health system in Zimbabwe to utilize digital technologies and innovations, leading to improved health outcomes for the population.

**Component 4: Overall Response Coordination and Project Management, Monitoring & Evaluation** (Original US\$1.48 million, HEPR TF; AF: US\$2.1 million, GFF TF). The implementation of activities under the parent project will continue as detailed in the Financing Agreement. Funding for the component is increased to support the new Component 3 activities and increase in overall costs of operation of PIE.

## 1.6 Environmental and Social Risk Management Approach

The project will have overall positive environmental and social impacts as it will contribute to epidemic/ pandemic preparedness, monitoring, surveillance, and response specifically with regards to combating the transmission of COVID-19 and vaccine deployment and strengthening essential health services provision. However, there are substantial environmental and social risks that will need to be assessed and managed through a risk-based approach during the project implementation. The overall residual risk to achieving the PDO was and continues to be Substantial. Residual macroeconomic and fiduciary risks remain high. The key risks that may negatively impact AF project implementation are as follows: political and governance, macroeconomic, institutional capacity for implementation and sustainability, and environmental and social.

Different safeguards instruments will be developed to guide the identification and management of project related risks and impacts. The SEP has been prepared and disclosed to guide the stakeholder engagement process. Since the ZCERP was an emergency project the development of the ESMF together with the ICWMP was required 45 days after the project effectiveness. The LMP, IPPF and a generic ESMP have been prepared as part of parent ZCERPESMF.

Specific interventions will be identified during project implementation. This updated ZCEREHS AF ESMF provides guidelines for screening all project activities, determination of requirements for assessment, and preparation of any further documentation in accordance with the World Bank ESF including environmental and social safeguard instruments such as ESMPs.

The parent ZCERP safeguards approach also emphasized the optimization of land-use to avoid/ minimize adverse impacts such as resettlement footprints, deforestation, landslides/soil erosion and obstruction of communities from their resources.

## 1.7 Risk Classification

The World Bank environmental and social risk classification of ZCEREHS remains Substantial because of the activities related to the renovations and refurbishment of maternity of waiting homes and the construction related risks, poor labour and working conditions, risks related to sexual exploitation, harassment and abuse, traffic incidents due to operation of tricycles supporting community health services, vans and motorcycles for health center monitoring, exposure to hazardous, medical and e-wastes emanating from immunization, and health care operations and digitization and solar powered equipment. Effective administrative, infection-controls, engineering controls and environmental safety controls must be put in place to minimize these serious risks. The parent ZCERP ICWMP outlines these measures to provide infection control and waste management in the project.

## 1.8 Exclusion Criteria/ Negative list

The list below identifies activities which will not be eligible for financing under ZCEREHSP AF.

- ▶ Acquisition of land and physical or economic displacement of people.
- ▶ Block the access to or use of land, water points and other livelihood resources used by others.
- ▶ Encroach onto fragile ecosystems, marginal lands or important natural habitats (e.g., ecologically sensitive ecosystems; protected areas; natural habitat areas, forests and forest reserves, wetlands, national parks or game reserve; any other environmentally sensitive areas)<sup>8</sup>.
- ▶ Impact on physical or intangible cultural resources of national or international importance and conservation value.<sup>9</sup>
- ▶ Have risks assessed as requiring biosafety levels BSL-3<sup>10</sup> and BSL-4<sup>11</sup> containment<sup>12</sup>.
- ▶ Activities that may cause long-term, permanent and/or irreversible (e.g., loss of natural habitat) adverse impacts such as dam construction and other greenfield construction among others.
- ▶ Activities that have high probability of causing serious adverse effects to human health and/or the environment not related to treatment of COVID-19 cases.
- ▶ Activities that may have adverse social impacts and may give rise to significant social conflict.
- ▶ Activities that may affect lands or rights of indigenous people or other vulnerable minorities.

<sup>8</sup>Fragile ecosystems include such places as wetlands, which quickly degrade if not properly used. Marginal lands include lands that has little or no agricultural or industrial value, often has poor soil or other undesirable characteristics and often located at the edge of desolate areas and can very easily be degraded if abused. So, these are ecologically sensitive areas which must be protected from any development that may adversely affect them.

<sup>9</sup> A physical cultural resource (PCR) is a movable or immovable object or site of historical, architectural religious, or other cultural significance. Development should not impact on these important resources.

<sup>10</sup>Biosafety level-3 (BSL-3) laboratory is designed and provided for work with microbes that can either be indigenous and exotic and can cause serious or potentially lethal disease through respiratory transmission for example *Yersinia pestis*, *Mycobacterium tuberculosis*, SARS, rabies virus, west Nile, hanta virus.

<sup>11</sup>A biosafety level-4 (BSL-4) laboratory is designed for analysis of dangerous and exotic microbes posing high risk of aerosol transmission. Infections caused by these microbes are frequently fatal and without treatment or vaccines such as Ebola and small pox virus.

<sup>12</sup> Biosafety level (BSL), or pathogen/protection level, is a classification system for the biocontainment precautions required to isolate dangerous biological agents in an enclosed laboratory facility. The levels of containment range from the lowest biosafety level 1 (BSL-1) to the highest at level 4 (BSL-4). At the lowest level of biosafety, precautions may consist of regular hand-washing and minimal protective equipment. At higher biosafety levels, precautions may include airflow systems, multiple containment rooms, sealed containers, positive pressure personnel suits, established protocols for all procedures, extensive personnel training, and high levels of security to control access to the facility.

## 2.0 POLICY, LEGAL AND REGULATORY FRAMEWORK

### 2.1 Introduction

In this chapter, relevant Zimbabwe regulations and policies are assessed that guide the environmental and social assessment for the Zimbabwe Covid-19 Emergency Response and Essential Health Services AF activities, as well as relevant World Bank Environmental and Social Standards and international conventions. The objective is to ensure that project activities and implementation processes are consistent with local laws and policies and World Bank ESF. Also, to point out possible gaps in local legislation in view of full compliance with World Bank standards.

The proposed Zimbabwe Covid-19 Emergency Response and Essential Health Services AF project will be subject to a number of these pieces of legislation. The following list highlight some selected policies and laws which are applicable in the planning and implementation of the COVID-19 response project, and they include:

- ▶ Constitution of Zimbabwe of 2013
- ▶ Public Health Act (CAP15:17)
- ▶ Mental Health Act (CAP 15:12)
- ▶ Labour Act (cap28:01)
- ▶ Water Act 20:24
- ▶ Environmental Management Act (CAP 20:27)
- ▶ Impact Assessment Policy 1997
- ▶ Environmental Management (Effluent and Solid Waste Disposal) Regulation SI 6 of 2007
- ▶ Environmental Management (Hazardous Substances Pesticides and Other Toxic Substances) Regulation (SI 218 of 2018)
- ▶ Environmental Management (Atmospheric Pollution Control) S1 72 of 2009
- ▶ Environmental Management (Environmental Impact Assessment and Ecosystems Protection) SI 7 of 2007
- ▶ Hazardous Waste Regulation (SI 10 of 2007)
- ▶ Local Government Act of 1997.



## 2.2 The Constitution of Zimbabwe

Stipulates that Zimbabwe will adopt policies designed to protect and enhance the natural and cultural environment of Zimbabwe for the benefit of both present and future generations and shall endeavour to ensure all citizens a sound and safe environment adequate for their health and well-being.

### Section 73. Environmental rights

The Constitution outlines the Environmental rights and stipulates that everyone has the right to:

- a) an environment that is not harmful to their health or well-being and
- b) have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that:
  - i. prevent pollution and ecological degradation,
  - ii. promote conservation and,
  - iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

It further states that the State must take reasonable legislative and other measures, within the limits of the resources available to it, to achieve the progressive realization of the rights set out in this section.

### Section 76. Right to health care

The Constitution of Zimbabwe also articulated health as one of the principles of Equality and Justice in the Constitution of The Republic of Zimbabwe. Health, according to the Constitution is important and the Zimbabwean government shall adopt policies aimed at ensuring the highest attainable standard of physical and mental health for its citizens, including policies designed to:

1. Every citizen and permanent resident of Zimbabwe has the right to have access to basic health-care services, including reproductive health-care services.
2. Every person living with a chronic illness has the right to have access to basic healthcare services for the illness.
3. No person may be refused emergency medical treatment in any health-care institution.
4. The State must take reasonable legislative and other measures, within the limits of the resources available to it, to achieve the progressive realisation of the rights set out in this section.

The Zimbabwean Government further committed itself to give equitable access to standard quality health service to all its citizens without discrimination on religious, political, colour, income levels, disabilities, geographical location, and wealth. The Government has set a good baseline for the implementation of good health care delivery for all. The activities of the project will ultimately feed into the National Development Strategy 1 (2021-2025) and the 2030 National Vision.

Since ZCERP activities may have a potential to disrupt the wellbeing of the environment and thus affect the people's health, its implementation must adopt approaches that will conform to the requirement of the Constitution.

## 2.3 Overview of Relevant Zimbabwe Polices and Plans

Over the years, the Government of Zimbabwe pursued national policies that had a major bearing on social protection outcomes. These policies sought to ensure that the poor and vulnerable are protected through a network of social transfer programmes. They ranged from policies on labour market participation; price controls; user fee exemptions for accessing basic social services; coordination of humanitarian assistance and regulating the work of non-governmental organizations (NGOs), among others. They also included policies that target specific vulnerable groups that included the Gender Policy; Orphan Care Policy; HIV/AIDS Policy Framework; National Action Plan for Orphans and other Vulnerable Children; agricultural inputs support; and others. Policies relevant to this project are listed in Table 3-1.

### 2.3.1 Relevant Policies

The table below outlines different policies in Zimbabwe that are relevant to the project. The table outlines the relevant policy and its interpretation in project context and finally describes its relevance to the project.

**Table 2-1 Relevant Policies**

No.	RELEVANT POLICIES	INTERPRETATION	RELEVANCE TO ZCEREHSP
1.	<b>National Environmental Policy, 1998</b>	<p>Zimbabwe's National Environmental Policy is linked to its overall development policy and plans. Although this development model has been considered relatively successful, much of the country's natural resource base is being threatened by human activities.</p> <p>In many respects, Zimbabwe is one of the leading countries in Africa in terms of work on the environment. This for example is reflected in the economically important wildlife sector. Although some species are endangered due to habitat destruction, the country's rich wildlife resources have been professionally managed. Several innovations, which have promoted sustainable utilisation of wildlife, could serve as a model for other countries.</p> <p>Environmentally sensitive areas have been designed and gazetted as national parks and forest reserves.</p> <p>There is no lack of environmental legislation per se, but existing regulations are fragmented and difficult to enforce. This is also reflected in the large number of ministries responsible for enforcing environmental legislation.</p> <p>The National Response Conference to the Rio Earth Summit convened in Harare in late 1992 presented an elaborate set of future priorities. Building upon the National Conservation Strategy of 1987, the government is planning to develop a comprehensive Action Plan for the Environment.</p>	<p>The policy goes a long way in aiding health issues.</p> <p>The environment determines the health issues i.e., air water and dust play a major role to name but a few.</p>

No.	RELEVANT POLICIES	INTERPRETATION	RELEVANCE TO ZCEREHSP
2.	<b>Water policy</b>	<p>Water use in Zimbabwe is governed by the Water Act of 1998. The Act is one of the key outcomes of the water sector reforms which took place in the mid-90s. However, traditional systems also exist whereby traditional leaders hold power to declare water protection areas especially where quality is an issue.</p> <p>This policy designates Urban Local Authorities (ULAs or Urban Councils) and Rural District Councils (RDCs) as Water Services Authorities who have a duty to ensure efficient, affordable, and sustainable access to water services are provided for all their current and potential consumers</p> <p>The responsibility at operational level of providing water supply and sanitation services may be delegated by a ULA or RDC to a designated Water Services Provider which is a legal entity capable of carrying out water supply and sanitation services on behalf of the ULA or RDC. Service Authorities will have the power and authority (through a revision of the Urban Councils Act and the Rural District Councils Act), to enter into contractual agreements with Service Providers if they do not supply the services themselves. Service Providers will be legal entities (public, private, or mixed) that have the capacity to provide water supply and sanitation services to Service Authorities</p> <p>The Constitution further provides, in Section 77 that every person has a right to safe, clean, and potable water, and sufficient food (Food Security, Quality and Safety). These human rights are related to peoples' health as it not possible to divorce the living conditions of people from their health risks and status. This great national health strategy is indeed subordinate to these constitutional provisions and the State has the responsibility to create a conducive environment in which it is possible for all people in Zimbabwe to access basic health services whenever they need them.</p>	<p>Water is inextricably related to health of the population and to harness the health of the population, responsible use of water must be done. This policy is pertinent and relevant to ZCEREHSP</p>



No.	RELEVANT POLICIES	INTERPRETATION	RELEVANCE TO ZCEREHSP
3.	<b>Zimbabwe National Sanitation and Hygiene Policy (Draft)</b>	<p>The policy aims to create an open defecation free Zimbabwe by 2030 in line with the Sustainable Development Goals. To achieve this, the demand-led Sanitation Focused Participatory Health and Hygiene Education (SafPHE) has been adopted and is being implemented in the 45 UNICEF-supported rural districts in the country.</p> <p>The Government, of Zimbabwe with support from UNICEF and other partners, has approved a new gender-sensitive Sanitation and Hygiene Policy. The policy aims to create an open defecation free Zimbabwe by 2030 in line with the Sustainable Development Goals in place. To achieve this, the demand-led Sanitation Focused Participatory Health and Hygiene Education (SafPHE) has been adopted.</p>	<p>Particularly useful with regards to ZCEREHSP sanitation is the central item in health-related issues and consequently if executed correctly a healthy population ensues.</p>
4.	<b>Environmental Health Public Policy (Draft)</b>	<p>Environmental health is a fundamental public health approach that affects the whole population and provides a foundation for modern living. Neglect of this service has resulted in an increase in diseases associated with environmental factors such as TB.</p> <p>The policy creates the legal framework for the protection of public health in Zimbabwe for this purpose provides for powers of the administration to regulate and control slaughter of animals, food production and handling, food and water supply, animal diseases and other related issues.</p>	<p>Relevant to ZCEREHSP the public must be protected at all costs and this policy makes it imperative to take care of the public environs</p>
5.	<b>Food Security and Nutrition Policy</b>	<p>The Government of Zimbabwe is fully committed to strengthening national capacity in food and nutrition security through primarily reinforcement and supporting local communities' capacity for food and nutrition security.</p> <p>The country is geared on ensuring that food security occurs because as a country the Policy in place will go a long way in food production. A healthy population is thus assured.</p>	<p>Without food security the health of the population is compromised. The policy is relevant to ZCEREHSP.</p>

No.	RELEVANT POLICIES	INTERPRETATION	RELEVANCE TO ZCEREHSP
6.	<b>National Infection Prevention and Control Policy</b>	<p>The Zimbabwe Infection Control and Prevention (ZIPCOP) project will work to support the Ministry of Health and Child Care (MOHCC) in improving infection control practices in health care facilities nationwide to prevent the transmission of infectious diseases, including TB, among patients and staff.</p> <p>The policy largely focuses on:</p> <ul style="list-style-type: none"> <li>▶ Development and implementation of infection control plans.</li> <li>▶ Curriculum development, training, and development of IEC materials</li> <li>▶ Provide and adapt Infection Control tools that MSH has used internationally.</li> <li>▶ Capacity building to improve leadership, governance, and management structures.</li> <li>▶ Development of the National IPC policy, strategic plan, guidelines, and protocols</li> </ul>	<p>Health and the citizens go hand in glove; hence this is relevant to ZCEREHSP.</p>

### 2.3.2 Relevant Operational Manuals, Procedures and Guidelines

The GoZ has a number of operational manuals, procedures and guidelines to facilitate the implementation of COVID-19 response activities and support to the health care delivery system. Table below outlines the relevant operational manuals, procedures and guidelines which and their relevance to the project.

**Table 2-2 Relevant Operational Manuals, Procedures and Guidelines**

No.	RELEVANT OPERATIONAL MANUALS, PROCEDURES AND GUIDELINES	INTERPRETATION	RELEVANCE TO ZCEREHSP
1.	<p><b>Environmental Health Standard Operating Procedures</b></p>	<p>Environmental Health Standard Operating Procedures (SOPs) should be implemented to ensure safe working procedures for staff have been identified and assessed.</p> <p>Standard Operating Procedures (SOPs) are a required supplement to the Laboratory and Research Safety Plan to reduce the risks involved in working with hazardous materials or performing other potentially hazardous operations in the laboratory. In all working environments, these standards must be maintained and adhered to. These include SOP on Environmental Cleaning, SOP Waste Management, SOP on Admission of an Infectious Patient, SOP on Disinfection and Environmental Cleaning, Laboratory Health and Safety Manual.</p> <p>The guidelines go a long way in ensuring that environmental health standards are adhered to.</p>	<p>According to ZCEREHSP if the procedures of the environmental health standard operating procedures are adhered to then the health of the population can be safeguarded. Many SOPs to be observed are referenced or included in the ZCEREHSPICWMP which is part of this ESMF.</p>

No.	RELEVANT OPERATIONAL MANUALS, PROCEDURES AND GUIDELINES	INTERPRETATION	RELEVANCE TO ZCEREHSP
2.	<b>BVIP Manual</b>	<p>The Blair toilet has been used in both rural and semi-rural Zimbabwe to ensure that waste is correctly managed and does not end up in the rivers, dams, and weirs. The "Blair" is popular because it doubles as a washroom and the square spiral structure has become the most popular amenity in rural areas.</p> <p>The Blair toilet is easy to construct and a manual to assist in the process is available. This means that the initial cost is extremely low, but a range of moveable upgradeable structures can be built on top of the pit.</p> <p>Various methods of recycling the organic and constructional components of this unit are also possible. Various manuals related to this model and the construction of the standard BVIP are also available.</p>	<p>Relevant to ZCEREHSP. Health population because a hygienic Blair system results in a super spreader system of diseases.</p>

No.	RELEVANT OPERATIONAL MANUALS, PROCEDURES AND GUIDELINES	INTERPRETATION	RELEVANCE TO ZCEREHSP
3.	<p><b>National Health Strategy</b></p>	<p>The vision of the Zimbabwe Ministry of Health and Child Care is to have the highest possible level of health quality of life for all its citizens. To achieve this Government has placed several acts and SIs in place. This SI goes a long way in ensuring that the strategy succeeds.</p> <p>The National Health Strategy (2021-2025) is the product of a long and complex process of intensive consultations, teamwork on specific assignments, detailed studies and information gathering.</p> <p>The National Health Strategy 2021-2025 derives from the national vision and provides a framework for attaining health and health related goals and objectives. It assumes the spirit of the Zim-Asset that seeks to attain "quick wins" and is structured around the Results Based Management system that focuses on a clear vision, mission, values, key results areas, goals, and objectives.</p> <p>Unlike past strategies, the NHS 2016-20 is complemented by a detailed monitoring and evaluation framework that will be used to assess progress through mid-term and end term evaluations</p> <p>The Constitution further provides, in Section 77 that every person has a right to safe, clean, and potable water, and sufficient food (Food Security, Quality and Safety). These rights are related to peoples' health as it is not possible to divorce the living conditions of people from their health risks and status.</p>	<p>The Strategy is relevant to ZCEREHSP because it plans for eventualities and is proactive and avoids being reactionary.</p>

No.	RELEVANT OPERATIONAL MANUALS, PROCEDURES AND GUIDELINES	INTERPRETATION	RELEVANCE TO ZCEREHSP
4.	<p><b>National Sanitation and Hygiene Strategy</b></p>	<p>Zimbabwe's National Action Committee on Water, Sanitation and Hygiene has developed a sanitation and hygiene strategy. The Institute of Water and Sanitation Development (IWSA) says "the strategy puts in place key measures for sustained sanitation and hygiene service delivery in Zimbabwe to eliminate open defecation and other related ills.</p> <p>In the year 2010, the Zimbabwe National Action Committee created its Water Sanitation and Hygiene (WASH) Sector. WASH has helped to combine Zimbabwe's urban and rural sanitation efforts to gain a more organized action plan on how to improve sanitation, restore leadership throughout urban and rural areas, institutionalize Government responsibilities and support sector development.</p>	<p>Ensures that health delivery occurs even in remote areas. Strategy creates a nation that is health conscious</p>
5.	<p><b>Approved Health Care Waste Management Plan for Zimbabwe (2011)</b></p>	<p>The Government of ZIMBABWE has put in place a mechanism to ensure that Health Care Waste (HCW) is taken care of within the institution so as not to endanger the public with contaminated waste. In place in hospitals are incinerators, bottle pits, autoclaves, and other safe waste disposal systems</p> <p>A temporary holding place should be in place in all hospitals. Colour coded lined bins should be at every waste collection point and the temporary waste holding place should be fenced, locked, and guarded.</p> <p>The country is in the process of updating this plan.</p>	<p>This plan is relevant to ensure that citizens benefit from Government programs and waste is dealt with according to recommended methods. This plan was the Environmental Assessment for ZCEREHS's parent project, the Health Sector Development Support Project (HSDSP) up until the fifth Additional Financing.</p>

No.	RELEVANT OPERATIONAL MANUALS, PROCEDURES AND GUIDELINES	INTERPRETATION	RELEVANCE TO ZCEREHSP
6.	<p><b>Draft Water Quality Monitoring and Water Safety Plan</b></p>	<p>Zimbabwe does not have a comprehensive water quality and monitoring and evaluation plan in place, but EMA and ZINWA carry out monitoring and water quality evaluation on all seven catchment areas. A draft has been proposed which integrates all relevant issues.</p> <p>The plan involves several coordinated activities including river surveillance, water monitoring, and land use monitoring and other related activities.</p> <p>EMA and ZINWA used to carry out water quality monitoring and evaluation. Building on this plan can go a long way in coming up with the required document.</p>	<p>It is a major input in the ZCEREHSP. Quality water or portable water is important for the health of the population. Water is critical in the fight against COVID-19 pandemic</p>
7.	<p><b>National Sanitation and Hygiene Investment Plan</b></p>	<p>At the 2014 Sanitation and Water for All High-Level Meeting (SWA HLM), the Government of Zimbabwe made a commitment to develop a sanitation and hygiene policy.</p> <p>Zimbabwe also committed to the act of sustaining participatory health and hygiene education. Zimbabwe has plans to reach all disadvantaged groups such as the poor populations and those living in the most remote or inaccessible areas.</p>	<p>The plan is relevant to the ZCEREHSP. The plan makes possible to chart a way forward and be proactive.</p>



No.	RELEVANT OPERATIONAL MANUALS, PROCEDURES AND GUIDELINES	INTERPRETATION	RELEVANCE TO ZCEREHSP
8.	<p><b>Hygiene Promotion Guidelines for Urban Areas (draft)</b></p>	<p>Poor hygiene that is now prevalent in urban areas of Zimbabwe should be dealt with through the guidelines. To respond to the emerging challenges, stakeholders have embarked on hygiene promotion programmes in urban areas but there are no clear guidelines in place to guide the Zimbabwean population</p> <p>It should be noted that all HHP approaches should link water supply, sanitation and hygiene promotion to service delivery and health.</p>	<p>Health issues play a major part in ZCEREHSP without these urban areas can be a hot bed of disease spreading and epicentre of pandemics and epidemics</p>
<p><b>Infection Prevention and Control Guidelines and Standard Operating Procedures in Health Facilities for Covid-19 (2020), Addendum to the National Infection Prevention and Control Guidelines, 2019</b></p>	<p>The guidance provides measures to reduce the risk of Covid-19 transmission in health care settings.</p> <p>It also provides standards operating procedures for donning and doffing PPE, hand hygiene, respiratory hygiene and cough etiquette, isolation precautions, linen management for Covid-19 care areas, disinfection and sterilization of patient care equipment, environmental cleaning for Covid-19 care areas, waste management for Covid-19 and handling of deceased bodies.</p>	<p>This is relevant to ZCEREHSP as without these guidelines and procedures the risk of COVID-19 transmission in health care settings is very high.</p>	
<p><b>Zimbabwe Covid-19 National Deployment and Vaccination Strategy</b></p>	<p>This is a guiding document that provides an outline of strategies for planning, coordination, identification of target populations, preparation of supply chains, waste management, human resources management and training, management of adverse events and monitoring and evaluation. All these areas are key for successful deployment of vaccines.</p>	<p>Relevant to ZCEREHSP for successful vaccine deployment.</p>	
<p><b>Covid-19 Risk Communication and Community Engagement Preparedness, Readiness and Response Strategy, 2021</b></p>	<p>It is a guiding document for Risk Communication and Community Engagement (RCCE) activities. RCCE are essential components of a broader public health emergency preparedness and response action plans.</p>	<p>This is relevant to the ZCEREHSP as RCCE prevents spread of disease, saves lives, protects national and local economies.</p>	



No.	RELEVANT OPERATIONAL MANUALS, PROCEDURES AND GUIDELINES	INTERPRETATION	RELEVANCE TO ZCEREHSP
	<b>National Development Strategy 1, 2020-2025</b>	<p>The overarching goal of NDS1 is to ensure high, accelerated, inclusive and sustainable economic growth as well as socio-economic transformation and development as the country moves towards an upper middle-income society by 2030. The document will guide the country in attaining its 2030 Vision through interventions the government is going to take while also addressing global aspirations of SDGs and Africa Agenda 2063.</p> <p>NDS1 identified among other national priorities climate resilience, environmental protection, health and wellbeing, human capital development, governance etc. it is underpinned by integrated Results Based Management (IRBM) system which inculcates a culture of high performance, quality service delivery, continuous improvement and accountability across the public sector.</p> <p>However, the success of NDS1 is preconditioned on a number of factors among them global recovery from Covid-19 pandemic.</p>	This is relevant to the ZCEREHSP.
	<b>Guidelines for Household and Community Infection Prevention and Control (IPC)</b>	This guidance document was developed to advise on the safe management of people with suspected or confirmed COVID-19 infection in community and home settings, including recommendations on the safe home care for suspected or confirmed COVID-19 patients presenting with mild symptoms.	This is relevant to ZCEREHSP since safe management of Covid-19 patients at community level will go a long way in reducing COVID-19 transmission.
	<b>Zimbabwe Guidelines for Disposal of Expired and Obsolete Pharmaceutical Supplies, 2012</b>	The guidelines were adapted from WHO's "Guidelines for Safe Disposal of Unwanted pharmaceuticals in and after Emergencies: Interagency Guidelines," (Geneva 1999). They provide guidance on possible disposal methods and request that, before destroying any expired medical supplies, approval be sought from the appropriate authority, as outlined in the treasury instructions.	This is relevant to the project to guide the project in the safe disposal of expired pharmaceutical supplies.

## 2.4 Relevant Zimbabwean Legislation

### 2.4.1 Relevant Zimbabwe Acts

Table 2-3 below discusses the relevant Zimbabwe legislation, their interpretation and relevance to the ZCEREHSP Project. On implementation, ZCEREHSP must recognize the requirements of these acts.

**Table 2-3 Relevant Zimbabwe Legislation**

No.	LEGISLATION	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
1.	<b>Environmental Management Act (2002)</b>	<p>An Act to provide for the sustainable management of natural resources and protection of the environment; the prevention of pollution and environmental degradation; the preparation of a National Environmental Plan and other plans for the management and protection of the environment; the establishment of an Environmental Management Agency and an Environment Fund.</p> <p>The Environmental Management Act attempts to harmonize all pieces of legislation governing the environment. It deals to satisfactory levels with both the brown and green issues. Environmental Impact assessments are also an integral part of the act and are now compulsory.</p> <p>Some of the objectives of this Act are to provide for the sustainable management of natural resources and protection of the environment, and the prevention of pollution and environmental degradation. The Act, in section 3 (2) further states that if any other law is in conflict or inconsistent with it, then the Environmental Management Act shall prevail.</p>	<p>Implementation of the ZCEREHSP</p> <p>This law requires the preparation of an environmental assessment (which is the purpose of this ESMF) and that each project activity be assessed for environmental and social risks and impacts and an ESMP be prepared as necessary in accordance with the provisions of the EMA and that EIA regulations where applicable. No ZCERP activities are expected to have environmental or social impacts of such magnitude that would require a full Environmental and Social Impact Assessment however some activities may require the preparation of an ESMP.</p>

No.	LEGISLATION	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
3.	<p><b>Labour Act (CAP 28:01) (1985)</b></p>	<p>This is an act to declare and define the fundamental rights of employees; to define unfair labour practices; to regulate conditions of employment and other related matters; to provide for the control of wages and salaries; to provide for the appointment and functions of workers committees; to provide for the formation, registration and functions of trade unions, employers organizations and employment councils; to regulate the negotiation, scope and enforcement of collective bargaining agreements; to provide for the establishment and functions of the Labour Court; to provide for the prevention of trade disputes, and unfair labour practices;</p> <p>Furthermore, the act is there to regulate and control collective action; to regulate and control employment agencies; and to provide for matters connected with or incidental to the foregoing.</p> <p>The Labour Act hedges against malpractice against workers and against employees. In fact, the act puts in place best work practices. These ensure that all workers are given equal opportunities, safe environment to work in, PPE and insurance. Most portions of the act zero in on the rights of workers, the employer, and the employee.</p> <p>However, no collective job action may be recommended or engaged in by persons who are engaged in an essential service. Essential services are defined in Section 102(a) of the Labour Act as "any services the interruption of which endangers immediately the life, personal safety or health of the whole or any part of the public" and health care services are part of essential services.</p> <p>The Labour Act further requires employers not to punish the striking workers and prohibits hiring of replacement workers. The Law restricts the exercise of this right to maintain essential services.</p>	<p>The project will involve employing project staff, it will also involve working with MoHCC staff and staff of other participating Ministries. The Labour act will be relevant to protect the welfare of all these workers. It will take a pivotal role in how people will be treated, including their employment conditions.</p> <p>However, it is worth noting that Health care workers are considered essential services and cannot freely exercise this right to engage in collective job actions. The Law restricts the exercise of this right to maintain essential services.</p> <p>This requirement for Health staff not to conduct job actions applies to all Health Care Workers. Thus, this Act is important to the project because if the workers were to go on strike, the project would be affected, and delayed since its implementation is essentially through the Health Care workers.</p> <p>Labour practices and conditions of work for the different categories of project workers are outlined in detail in the Labour Management Procedures of this ESMF (Appendix 2).</p>

No.	LEGISLATION	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
4.	<p><b>The Public Health Act (Chapter 15:17)</b></p>	<p>The Public Health Act has sections that deal with sanitation and buildings (housing). The Act prohibits the creation of nuisance. The act looks at how actions of others may end up affecting the health of the public. Case in point is the air, water and land pollution which consequently leads to lung and other respiratory diseases. This Act has sections which deal with emergency situations, epidemics, etc. such as COVID-19.</p> <p>Sections 35 to 45 deal with emergencies and epidemics:</p> <ul style="list-style-type: none"> <li>▶ Special Provisions Regarding Formidable Epidemic Diseases</li> <li>▶ Powers of Minister where local authority fails adequately to deal with any formidable epidemic disease.</li> <li>▶ Regulations regarding formidable epidemic diseases.</li> </ul> <p>The public health act leaves no stone unturned in the pursuance of guarding the public against being violated and ensuring that citizens get health delivering. Some of the sections of the acts focus on how the public has their health safe guarded.</p>	<p>Sanitation and state of health facilities must be such that the patient's health is not compromised. The act will be used to make sure that public health is at all times looked after.</p>
5.	<p><b>Health Service Act (Chapter 15:16) of 2004</b></p>	<p>The health service act highlights the need to provide for the establishment of the Health Service Board and its functions; to constitute the Health Service and to provide for its administration and the conditions of service of its members, to provide for the transfer of persons engaged in public health service delivery from the Public Service to the Health Service.</p>	<p>This allows for safe work practices and working conditions during project lifespan. As doctors and nurses work the environment should be conducive and their welfare should be catered for since they are frontline workers.</p>

No.	LEGISLATION	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
6.	<p><b>Health Professions Act. Chapter 27:19 of 2000.</b></p>	<p>The act seeks to establish a Health Professions Authority of Zimbabwe,</p> <ul style="list-style-type: none"> <li>▶ a Medical and Dental Practitioners Council of Zimbabwe,</li> <li>▶ an Allied Health Practitioners Council of Zimbabwe,</li> <li>▶ a Natural Therapists Council of Zimbabwe,</li> <li>▶ a Nurses Council of Zimbabwe,</li> <li>▶ a Pharmacists Council of Zimbabwe,</li> <li>▶ a Medical Laboratory and Clinical Scientists Council of Zimbabwe,</li> <li>▶ an Environmental Health Practitioners Council of Zimbabwe and a Medical Rehabilitation Practitioners Council of Zimbabwe,</li> <li>▶ and to provide for the composition and functions of the Authority and those councils.</li> <li>▶ to provide for the registration of persons in health professions and the issue of practicing certificates to registered persons.</li> <li>▶ to provide for the exercise of disciplinary powers in relation to registered persons.</li> <li>▶ to provide for disabilities of and offences by unregistered persons who perform acts specially pertaining to health professions in respect of which a register is kept or who represent themselves to be practitioners in any such health profession.</li> <li>▶ to provide for the registration and control of health institutions and the regulation of services provided therein or there from.</li> </ul>	<p>Health issues are relevant to ZCEREHSP) people in this profession must have governing principles and work ethics which will ensure proper health delivery</p>

No.	LEGISLATION	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
7.	<b>The Medical Services Act. (1999).</b>	<p>The act stipulates that every citizen and permanent resident of Zimbabwe has the right to have access to basic healthcare services, including reproductive health care services, and Secondly: No person may be refused emergency medical treatment in any health care institution in Zimbabwe.</p> <p>The Bill seeks to provide for the establishment of the Medical Aid Authority, confer functions on such authority in relation to registration and control of certain activities of medical aid societies, to provide for the appointment of the Registrar of Medical Aid Societies, to protect the interests of members of medical aid societies, to amend the Medical Services Act [Chapter 15:13] and the Income Tax Act [Chapter 23:06], and to provide for matters incidental to or connected with the foregoing.</p>	<p>Relevant to ZCEREHSP since services from the medical fraternity should be regulated and guided accordingly to ensure safe health all round.</p>
8.	<b>Mental Health Act, (1983)</b>	<p>The Mental Health Act (1983) is the main piece of legislation that covers the assessment, treatment, and rights of people with a mental health disorder. People detained under the Mental Health Act need urgent treatment for a mental health disorder and are at risk of harm to themselves or others.</p> <p>The services of the Mental Health Department will be essential during this stressful Pandemic period. The Department of Mental Health Services coordinates provision of comprehensive mental health and psychiatric services (promotive, preventive, curative and rehabilitative) including substance abuse (Alcohol, Drug and Tobacco Control).</p>	<p>The rights of this vulnerable group always must be safeguarded during the lifespan of the project. If overlooked most may become affected by diseases which could otherwise have been preventable.</p>



No.	LEGISLATION	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
9.	<p><b>Social Welfare Assistance Act: Chapter 17:06, (1988)</b></p>	<p>The Social Service Act provides for the granting of social welfare assistance to persons in need and their dependents; and to provide for matters incidental thereto or connected therewith.</p> <p>The social Welfare assistance applies to any destitute or indigent person, who can apply to the Director in the prescribed form for social welfare assistance in terms of this Act.</p> <p>It must be noted that the Form of social welfare assistance that is granted under this act include financial form in such amount as, having regard to the circumstances of the beneficiary, the Director deems reasonable and sufficient, but shall not exceed such rate as may be prescribed.</p> <p>Various other financial forms may take any of the following forms</p> <ul style="list-style-type: none"> <li>▶ rehabilitation, institutional nursing, boarding or foster home care.</li> <li>▶ counselling services.</li> <li>▶ the provision of orthopaedic and orthotic appliances.</li> <li>▶ occupational training.</li> <li>▶ pauper burials.</li> <li>▶ the supply of food or clothing.</li> </ul>	<p>The population groups which are affected and are vulnerable must fall back on the Social Welfare contingency plans for assisting them.</p>

No.	LEGISLATION	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
10.	<b>Local Government Acts, (2009)</b>	<p>The Local Government Acts cover several pertinent acts which the Local Government machines. The juridical framework for local government is set out in several pieces of legislation.</p> <p>The principal Acts governing local authorities in Zimbabwe, the Urban Councils Act and the Rural District Councils Act set local authorities as separate and autonomous legal corporate institutions. The main Acts for local governance purposes are the Urban Councils Act (Chapter 29:15), Urban Councils Amendment Act (Chapter 29:16), Rural District Councils Act (Chapter 29:13), Chiefs and Headmen Act (Chapter 29:01), Communal Land Act (Chapter 20:04), the Provincial Councils and Administration Act, the Customary Law and Local Courts Act (No. 2) of 1990 and the Traditional Leadership Act of 1998.</p> <p>In addition, there are several statutory instruments defining the legal parameters of local government</p>	<p>The Government buy-in heavily depends on the Local Government Acts being religiously adhered to. The local government is the heart of the people and the acts will cover the population and ensure their safety and wellbeing</p>
11.	<b>National Museums and Monuments Act, (2006)</b>	<p>The National Museum and Monuments Act looks at all issues dealing with archaeological matters. The act protects all areas of historical, architectural, archaeological, and paleontological value.</p> <p>Such sites cannot be altered, excavated, or damaged and material on them cannot be removed without the written consent of the Executive Director of the National Museums and Monuments of Zimbabwe (NMMZ).</p> <p>The law requires that any monument or relic discovered must be reported in writing to the Executive Director of the NMMZ by the discoverer and the owner of the land on which it is found. Detailed chance find procedures are in Appendix 8 of this ESMF.</p>	<p>This is relevant to the project in that the project activities should not alter areas of historical, archaeological and paleontological value.</p>
12.	<b>Medicines and Allied Substances Act (Chapter 33:10)</b>	<p>The act provides for the establishment of the Medicines Control Authority of Zimbabwe (MCAZ) which a regulatory board mandated to approve and register all medicines to be introduced into the country.</p> <p>The act outlines the procedures required for the registration of medicines among other things.</p>	<p>This is relevant to ZCEREHSP as all vaccines to be used are subject to approval and registration by MCAZ.</p>

No.	LEGISLATION	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
	<b>Public procurement and Disposal of Public Assets Act (Chapter 22:23)</b>	The act provides for the control and regulation of acquisition and disposal of public assets. The act ensures that the disposal of public assets is done in a manner that is transparent, fair, honest, cost effective and competitive.	This is relevant to ensure that any disposal of unusable, unserviceable or obsolete equipment is disposed of in a manner that is fair, honest, cost effective and competitive.
	<b>Road Traffic Act (Chapter 13:11)</b>	An Act to provide for the licensing of drivers of motor vehicles; for the issue and recognition of international driving permits and foreign drivers licences; for compulsory insurance against third party risks arising out of the use of motor vehicles; for traffic signs and police directions; for the control of certain advertisements; for certain offences connected with road traffic; for prohibition from driving and endorsement of licences and for the powers and duties of various persons.	The act is relevant to the ZCEREHSP since safe use of motor vehicles will ensure safety of passengers and the public. Proper insurance of vehicle will provide cover for the passengers and the vehicle in the event of a road traffic accident. The project is going to provide support for the transportation vaccines, medical supplies, health care workers and ancillary staff and waste transportation.
<b>15</b>	<b>Freedom of Information Act (CAP 10:33)</b>	The act gives effect to section 62 of the Constitution of Zimbabwe which provides for the right to access information as enshrined in the declaration of rights.  It sets out procedures for access to information held by public institutions or information held by any person. It also sets out considerations for making available on a voluntary basis by entities, certain categories of information thereby removing the need for formal request for such information  It also sets out the scope and limitations on the right of access to information	This is relevant to ZCEREHSP in that the information generated during the course of project implementation has to be accessible to the public.  This ESMF is a public document and therefore to be disclosed as per national environmental laws.

## 2.4.2 Relevant Statutory Instruments

Table 2-4 below further identifies the subsidiary legislation which supports the legislation in table 3-3. These are the regulations which give teeth to the legislation and on implementation, ZCEREHSP must recognize the requirements of these regulations.

**Table 2-4 Relevant Statutory Instruments (SI)**

No.	STATUTORY INSTRUMENT	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
1.	<b>Environmental Management (EIA and Ecosystems Protection) Regulations, 2007</b>	<p>Of note is the fact that these regulations stipulate regulations for ecosystems protection, conditions for clay and sand extraction and lay out conditions for the submission and review of environmental impact prospectus and reports.</p> <p>Failure to adhere to these regulations may result in a fine or imprisonment for a period not exceeding five years. Once issued, a permit for extraction is valid for a period of one year and is not transferable. The proposed contractor to obtain permits through the EMA for the extraction of clay and sand deposits for construction, and the extraction of gravel for the roads in accordance with requirements of these regulations.</p> <p>Regarding fire, any land user, owner, or designated authority is required to put in place appropriate fire prevention measures on their land/premises. Aply put, the regulations also prohibit the deliberate lighting of fire that cannot be extinguished and causes damage to the environment, property, or life and the lighting of fire outside residential or commercial premises during 31 July to 31 October each year.</p> <p>Considering the review periods for the Prospectus and ESIA report, the project activity implementation scheduling needs to put the environmental clearances well ahead of the project implementation processes to ensure the environmental clearances will not be the bottleneck to the project implementation. ESMPs must be in place before any work can commence especially for the installation of solar energy.</p>	<p>Before, during and after the project the environment must be protected so that future generations can utilize it.</p> <p>ZCEREHSP PIE will ensure proactive engagement of EMA where such environmental clearances are required for respective project activities. Each such project activity will develop an approved ESMP before any work can commence.</p>

No.	STATUTORY INSTRUMENT	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
2.	<b>Environmental Management (Effluent and Solid Waste Disposal) Regulations, (SI 6 of 2007)</b>	<p>This statutory instrument (SI 6 of 2007) covers sections (60-62, 69-70) of the Environment Management Act (CAP 20:27). It goes on to set minimum requirements for the granting of an effluent and solid waste disposal license as well as the conditions for the validity of the license. Section 23 specifically makes littering a criminal offence punishable by fine or imprisonment. Required licences, permits and clearances later in this section.</p> <p>The regulation falls in line with the statute that requires all project vehicles have a waste receptacle that is emptied and a designated waste collection point.</p> <p>The project work areas should also be kept litter free through availability of waste receptacles and disposal in authorized points. Contractors shall also ensure that in all project areas that require and do not have toilets, they provide mobile toilets to ensure that there will be no open defecation.</p>	Waste disposal. solid or liquid must be done within hygienic parameters. The project is to function within this paradigm to achieve maximum efficiency.
3.	<b>SI 76 of 2020 Civil Protection of State of Disaster: Rural and Urban Areas of Zimbabwe)</b>	This SI under the Civil Protection Act allows the civil protection authorities to use the special powers available to them under the Act to respond to a declared state of disaster. The declaration places the whole country in a state of disaster with effect from the promulgation of this notice.	Declares Zimbabwe to be in a state of disaster hence relevant. To make people ready for any eventualities.

No.	STATUTORY INSTRUMENT	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
4.	<b>SI 77 of 2020 Public Health (COVID-19) Prevention, Containment and Treatment) Regulations, 2020</b>	<p>These regulations were made by the Minister of Health and Child Care under the "new" Public Health Act of August 2018. The Act gives the Minister wide powers to legislate measures to prevent, contain and treat the incidence of "formidable epidemic diseases".</p> <p>As a new virus, COVID-19 was not on the existing list of "formidable epidemic diseases" in section 64 of the Public Health Act. It was, therefore, necessary for the Minister of Health and Child Care to make it a "formidable epidemic disease" by a declaration in a statutory instrument under the same section. Section 3 of these regulations contains that declaration called the "FED declaration", which will be in effect until 20th May 2020, unless before that date the Minister extends it.</p> <p>The FED declaration allowed the Minister to invoke the special regulation-making powers conferred on him by section 68 of the Act.</p> <p>The scope of the regulations is indicated by the subjects covered in the headings to sections 5 to 8:</p> <ul style="list-style-type: none"> <li>▶ Prohibition of gatherings [of more than 100 persons, whether wholly or partly in the open air or in a building]</li> <li>▶ Compulsory testing, detention, etc., to contain COVID-19</li> <li>▶ Places of quarantine and isolation</li> <li>▶ Ministerial orders [to be published in the Government Gazette, for controlling traffic and movements of persons, including curfews; closure of places of worship, entertainment, recreation, or amusement; controlling the sale of liquor; prohibiting gatherings of fewer than 100 persons; regulating removal of bodies and conducting of burials; compelling the evacuation, closing, alteration or demolition of premises likely to favour the spread of COVID-19].</li> <li>▶ There are steep maximum penalties on conviction of breaches of the regulations or orders issued under them: a fine not exceeding level 12 [Zw \$36 000] or one year's imprisonment or both.</li> </ul> <p>The point of this bulletin is to draw attention to the statutory instruments and to outline what they say. A more in-depth examination of the statutory instruments is planned for a separate bulletin.</p>	<p>This SI is relevant to the ZCEREHSP because it looks at ways of prevention, how to contain and treat the disease.</p>



No.	STATUTORY INSTRUMENT	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
6.	<b>SI 78 of 2020 The Management Training Bureau Regulations</b>	A board should be in place to monitor and regulate the usage of funds and resources during any Government project lifespan. The board is made up people from various departments	ZCEREHSP will need this input. Training will ensure that safe methods and the use of funds are adopted.
7.	<b>SI 81 of 2020 Labour Relations (Specification of Minimum Wages) (Amendment) Notice, 2020</b>	The minimum wage issue takes the forefront and conditions to exempt paying of the wages must be brought to the ministry for review.	To provide or give incentives to front line workers the issue of wages and allowances must be looked at
8.	<b>SI 82 of 2020 Public Health (COVID -19 Prevention Containment and Treatment) (Amendment) Regulation, 2020</b>	The SI puts in place regulations to reduce the number of people allowed to gather in groups. The SI encourages law enforcing officers to ensure that regulations are adhered to. The issue of prevention, containment and treatment was dealt with. Ministerial orders must be followed and adhered to according to laid down guidelines.	Relevant for ZCEREHSP since it deals with prevention, containment and treatment.
9.	<b>SI 83 of 2020 Public Health (COVID-19 Prevention, Containment and Treatment) (National Lockdown) Order</b>	The SI looks at the National Lockdown and the prohibition of gatherings and the extension of permits for residence of Foreign Nationals, closure of airports, and aerial transportation. The power to close borders and enforcement issues are dealt with and the resultant penalty is dealt with. A phased relaxation of the lockdown is also dealt with in this SI.	The SI is relevant to ZCEREHSP because the issue of public health is dealt with and prevention, containment and treatment is pertinent.

No.	STATUTORY INSTRUMENT	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
10.	<b>SI 84 of 2020 Public Health (COVID-19 Prevention, Containment and Treatment) (Amendment) regulations, 2020.</b>	<p>The SI focuses on the amendments on issues highlighted in SI 83. The number of hospital patients is looked at and the issue that queuing people in cars should remain in cars until served.</p> <p>People can go out to get basic foodstuff for ablution facilities and re-fuelling of cars, generators, and other engines.</p>	<p>The SI is relevant since issue of patients is highlighted and movement is allowed carefully</p>
11.	<b>SI 86 of 2020 Public Health (COVID-19 Prevention, Containment and Treatment) (National Lockdown) (Amendment) Order</b>	<p>It deals with the production and distribution of medical supplies, the issue of funerals, funeral parlours and making, manufacturing and sale of coffins. The conduct of agricultural activities on farms and harvest of crops is closely monitored.</p> <p>Agricultural inputs and stock feed were also an issue and distribution of medical equipment for domesticated farm animals was regulated.</p>	<p>This is relevant because it deals with funeral gatherings and how to proceed.</p>
12.	<b>S.I 103 of 2020 Public health (COVID 19 prevention, containment, and treatment) (amendment) regulations, 2020</b>	<p>The SI makes screening and testing mandatory and must remain in force even after expiry of the national lockdown. For all workers who were on lockdown and are coming to work should be screened and tested for the virus.</p> <p>The use of Rapid Diagnostic Tests (RDT) in Zimbabwe according to the World Health Organisation guidelines is in place.</p> <p>Persons who provide essential services should be tested regularly. Sanitizers and hand washers should be put on all office entrances. A law enforcement officer can randomly visit any workplaces without notice.</p> <p>The officer can close any premise as they see fit, by writing or other formal means. Persons who fail to comply will be fined</p>	<p>Relevant since screening is made mandatory to save the lives of others.</p>

No.	STATUTORY INSTRUMENT	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
13.	<p><b>SI 102 of 2020</b></p> <p><b>Public health (COVID 19) SI 102 of 2020.</b></p>	<p>The SI empowers law enforcement officers to gain access to any land or premises where exempted persons are present or employed and demand documentary proof of RDT or other tests.</p>	<p>Relevant since this allows officers to enforce compliance.</p>
14	<p><b>Public Finance Management (Treasury Instructions), 2019, SI 144 of 2019</b></p>	<p>This SI provides for the acquisition, custody, control, issue, transfer and disposal of public assets. It applies to government ministries, agencies, and institutions. It provides guidance and procedures for the disposal of unserviceable, obsolete and excess assets.</p> <p>The SI provides for the establishment of the disposal committee which shall preside over the disposal of the public assets following this SI and the parent Act. The disposal shall be done in a fair, transparency, honest, cost effective and competitive manner.</p>	<p>This is relevant to ZCEREHSP since the project is to support the procurement and installation solar direct drive refrigerators at health facilities. It will guide the disposal of the existing refrigerators and equipment which might be obsolete or in surplus.</p>
16	<p><b>Model Building Bylaws</b></p>	<p>The Model Building Bylaws have been published by the Ministry of Local Government and National Housing in Zimbabwe in 1977 in accordance with the Urban Councils Act and the Rural District Councils Act. They cover issues related to structural design and control, foundations, masonry and walling, water supply, lighting, drainage, and sewage, ventilation and fire protection and public safety. In essence the bylaws define the aspects in construction of building alteration, subdivision, conversion, reconstruction or addition to a building.</p>	<p>They are relevant to the project as there is going to be installation of SDD refrigerators, and solar lighting and refrigeration</p>

### 2.4.3 Relevant Licences and Permits

Table 2-5 below outlines the licences and permits which are relevant to the implementation of ZCEREHSP. Participating institutions must apply for the relevant licences so that their operations may remain within the legal requirements of Zimbabwean law.

**Table 2-5 Relevant Licences and permits**

No.	STATUTORY INSTRUMENT	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
1.	<p><b>Environmental Management (Control of Hazardous Substances) (General) Regulations, 2018.</b></p>	<p><b>Hazardous Waste Transportation Licence</b></p> <p>The Hazardous Waste Transportation licences are issued by EMA, as per the Environmental Management (Control of Hazardous Substances) (General) Regulations, 2018. The licences are issued according to the same classification system as the incinerator emission licences.</p> <p>No operator can transport any type of a hazardous substance consignment whether by air, road, water, pipeline, or rail without a licence issued to the operator by the Agency.</p> <p>The permits can be obtained from the Environmental Management Authority upon submission of facility details, quantity and quality of waste being handled. It takes an average of two weeks to obtain the permit.</p> <p>The average fee is \$322.89 per annum.</p>	<p>Most of the project health care facilities do not have incinerators and depend on other nearby health facilities which have incinerators. To transport the waste the institutions will need to apply for a hazardous waste transportation license. If they are using a private transporter, the transporter will need to apply for the permit. This is relevant to both ZCEREHSP</p>

No.	STATUTORY INSTRUMENT	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
2.	<p><b>Environmental Management (Control of Hazardous Substances) (General) Regulations, 2018</b></p>	<p><b>Waste Enterprise Licence</b></p> <p>A Waste Enterprise licence is a licence issued to a business that handles waste, i.e., collects, stores, treats and disposes the final residue properly. Waste Enterprise licence is issued in terms of the Environmental Management (Control of Hazardous Substances) (General) Regulations, 2018. The licences are issued according to the same classification system as the incinerator emission licences.</p> <p>The permits can be obtained from the Environmental Management Authority upon submission of facility details, quantity and quality of waste being handled.</p> <p>It takes an average of two weeks to obtain the permit.</p> <p>The average fee is \$ 134.65 per year.</p>	<p>Businesses that handle waste, i.e., store, treat and dispose final residue need to have this license so health facilities and transporters need this license. This SI will be applicable to the project as waste generated from the participating facilities will need to be treated and disposed of properly.</p>
4.	<p><b>Food and Food Standards (Inspection and Certification) Regulations, 2015</b></p>	<p>Among other things the SI provides for the management and monitoring of water quality for potable purposes, Section 9. (1) outlines that the Secretary shall monitor the quality and safety of water and ascertain the status of drinking water in any area and, for that purpose, direct local authority, environmental or other health officers or inspectors to collect and submit to the Government Analyst Laboratory for analysis, according to a specified regular schedule, water samples from communal boreholes and distribution systems.</p>	<p>This SI will be utilised by the participating institutions which will be assisted with Water Tanks. The PIE will have to ascertain that the water quality of the source (Borehole) was analysed and if not cause it to be analysed. Also, the water quality will have to be periodically checked.</p>
5.	<p><b>Zimbabwe Food and Food Standards (FFS) (Mineral and Bottled Water) Regulations 2002</b></p>	<p>This SI, the Food and Food Standards (FFS), provides for the standardisation of Natural, Mineral Water and Bottled Water for potable purposes. The FFS are equivalent to the WHO Guidelines for Drinking Water Quality, 2011 and are used in determining the suitability of a water source for drinking purposes.</p>	<p>This SI will be utilised by the participating institutions which will be assisted with Water Tanks. The PIE will have to ascertain that the water quality of the source (Borehole) meets the laid down standards in this SI.</p>

No.	STATUTORY INSTRUMENT	INTERPRETATION OF LEGISLATION	RELEVANCE TO THE PROJECT
6.	<p>in line with:</p> <ul style="list-style-type: none"> <li>▶ Section 9 (1) of the Food and Food Standards (Inspection and Certification) Regulations, 2015.</li> <li>▶ the Zimbabwe Food and Food Standards (Mineral and Bottled Water) Regulations 2002</li> </ul>	<p><b>Water Quality Analysis</b></p> <p>Once the borehole has been drilled for potable water purposes, the quality of the water has to be ascertained in line with Section 9 (1) of the Food and Food Standards (FFS) (Inspection and Certification) Regulations, 2015, together with requirements of the Zimbabwe Food and Food Standards (FFS) (Mineral and Bottled Water) Regulations 2002 (Which are equivalent to the WHO Guidelines for Drinking Water Quality). Poor quality water poses a serious risk to humans, crops, livestock and the environment. This is in line with the General EHSG 2007 "Water Quality" states "water quality should comply with national acceptability standards or in their absence the current edition of with WHO Drinking Water Guidelines."</p> <p>Water quality for more sensitive well-being-related demands such as water used in health care facilities or food production require stringent, industry-specific guidelines or standards, as provided for by the FFS.</p>	<p>The drinking water quality of all participating Institutions which will get assistance in the drinking water supplies, must tested regularly; quarterly for groundwater and monthly for surface water sources.</p>
7.	<p><b>Environmental management (Atmospheric Pollution Control) regulations of 2009</b></p>	<p>The legal provision provides for the prevention, control and abatement of air pollution to ensure clean and healthy ambient air. It covers pollution from static as well as mobile sources (motor vehicles). Incinerators need to be licensed by EMA to allow for a coordinated monitoring of as well as receiving advice and guidance on best practices. EMA also monitors vehicle emissions. Unlike point source monitoring, the regulations do not require motor vehicles to be licensed for emissions, but the vehicles may be stopped at road blocks for the purposes of testing these emissions.</p>	<p>This is relevant to the project as emissions from incinerators and motor vehicles are subject to monitoring by EMA.</p>



### 2.4.4 EHSg Emissions and Effluent Standards

This section presents the emission standards for the project related to emissions from incinerators and motor vehicles. Emissions from project-supported vehicles will comply with national standards as outlined in the national Environmental Management (Atmospheric Pollution Control) regulations of 2009 in accordance with the EHSg General Guidelines for Environment: Air Emissions and Air Quality that vehicles should follow national programs. For the incinerators, the WB EHSg Guideline for Health Care Facilities, listed below in Table 3-6, is applicable.<sup>13</sup>

**Table 2-6 Air Emission Levels for Hospital Waste Incineration Facilities<sup>14</sup>**

Air Emission Levels for Hospital Waste Incineration Facilities <sup>b</sup>		
Pollutants	Units	Guideline Value
Total Particulate matter (PM)	mg/Nm <sup>3</sup>	10
Total organic carbon (TOC)	mg/Nm <sup>3</sup>	10
Hydrogen Chloride (HCl)	mg/Nm <sup>3</sup>	10
Hydrogen Fluoride (HF)	mg/Nm <sup>3</sup>	1
Sulphur dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	50
Carbon Monoxide (CO)	mg/Nm <sup>3</sup>	50
NO <sub>x</sub>	mg/Nm <sup>3</sup>	200-400 <sup>(a)</sup>
Mercury (Hg) z	mg/Nm <sup>3</sup>	0.05
Cadmium + Thallium (Cd + Tl)	mg/Nm <sup>3</sup>	0.05
Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V	mg/Nm <sup>3</sup>	0.5
Polychlorinated dibenzodioxin and dibenzofuran (PCDD/F)	ng/Nm <sup>3</sup> TEQ	0.1

**Notes:**

- 200 mg/m<sup>3</sup> for new plants or for existing incinerators with a nominal capacity exceeding 6 tonnes per hour; 400 mg/m<sup>3</sup> for existing incinerators with a nominal capacity of 6 tonnes per hour or less
- Oxygen level for incinerators is 7 percent.

<sup>13</sup>WB (2007) p. 14.

<sup>14</sup> Source: Table 3 in the EHSg Guideline for Health Care Facilities, 2007, p14.

**Table 2-7 Zimbabwean Emission Standards for Motor Vehicles**

POLLUTANTS	UNITS	ZIMBABWE EMISSION STANDARD
Total Particulate matter (PM <sub>10</sub> )	mg/Nm <sup>3</sup>	50.
Particulate matter (PM <sub>2.5</sub> )	mg/Nm <sup>3</sup>	-
Sulphur dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	500
Carbon Monoxide (CO)	mg/Nm <sup>3</sup>	100
NOX	mg/Nm <sup>3</sup>	200
Pb	mg/Nm <sup>3</sup>	0.5-1
Ozone	Ng/m <sup>3</sup>	120

The effluent guidelines below in Table 38 are applicable for direct discharges of treated effluents to surface waters for general use. They are taken from the EHSO Guidelines for Health Care Facilities (2007).<sup>15</sup> Site-specific discharge levels may be established based on the availability and conditions in the use of publicly operated sewage collection and treatment systems or, if discharged directly to surface waters, on the receiving water use classification as described in the General EHSO Guidelines. These levels should be achieved, without dilution, at least 95 percent of the time that the plant or unit is operating, to be calculated as a proportion of annual operating hours. Any deviation from these levels in consideration of specific, local project conditions will be justified in the environmental assessment, the facility level ICWMPs to be produced. Table 3-8 lists the Healthcare Facility EHSO Effluent Discharge Standards (2007).<sup>16</sup>

**Table 2-8 EHSO Effluent Discharge Standards<sup>17</sup>**

Effluent Levels for Health Care Facilities		
Pollutants	Units	Guideline Value
pH	S.U	6 - 9
Biochemical oxygen demand (BOD <sub>5</sub> )	mg/L	50
Chemical oxygen demand (COD)	mg/L	250
Oil and grease	mg/L	10
Total suspended solid (TSS)	mg/L	50
Cadmium (Cd)	mg/L	0.05
Chromium (Cr)	mg/L	0.5
Lead (Pb)	mg/L	0.1
Mercury (Hg)	mg/L	0.01

<sup>15</sup>Page 14.<sup>16</sup>p 14.<sup>17</sup>Source: Table 2 in the EHSO Guideline for Health Care Facilities, 2007, p14.

<b>Chlorine, total residual</b>	mg/L	0.2
<b>Phenols</b>	mg/L	0.5
<b>Total coliform bacteria</b>	MPN <sup>a</sup> / 100ml	400
<b>Polychlorinated dibenzodioxin and dibenzofuran (PCDD/F)</b>	Ng/L	0.1
<b>Temperature increase</b>	°C	<3 <sup>b</sup>

**Notes:**

a. MPN = Most Probable Number

b. At the edge of a scientifically established mixing zone which takes into account ambient water quality, receiving water use, potential receptors and assimilative capacity

### 2.4.5 Noise Exposure Limits

The country has no set limits for noise exposure. WHO noise exposure limits are used which state that The World Health Organization (WHO) recommends that noise exposure levels should not exceed 70 dB over a 24-hour period, and 85 dB over a 1-hour period to avoid hearing impairment

## 2.5 International Conventions and Treaties

Zimbabwe is a signatory and party to more than twenty-one international, conventions, treaties, and protocols. Of the many treaties, the following listed below in Table 2-9 are relevant to ZCERP:

**Table 2-9 Overview of the relevant *International Conventions and Treaties***

No.	INTERNATIONAL CONVENTIONS	SUMMARY	RELEVANCE TO ZCEREHSP
1	<b>International Health Regulations Minamata Declaration</b>	<p>The Minamata Convention is a legally binding agreement that aims to protect human health and the environment from the adverse effects of mercury. It includes a ban on primary mercury mining; the phase-out of existing mines and the phase-out and phase-down of mercury use in several products and processes; control of mercury releases into the environment and management of contaminated sites</p> <p>The purpose and scope of the International Health Regulations (2005) are "to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade"</p>	<p>Health of the population should be safeguarded.</p>
2	<b>Libreville declaration</b>	<p>The main outcome of that historic meeting was the adoption of the Libreville Declaration, which recognized that human health is intimately related to the state of the environment. The participating nations committed themselves to 11 priority actions for addressing the continent's most pressing health and environment challenges.</p> <ul style="list-style-type: none"> <li>▶ It must be noted that the Libreville Declaration was a springboard for tackling the environmental risks to human health and ecosystem integrity across the African continent, including the great considerable health impacts of climate change.</li> <li>▶ WHO played a pivotal role in the in the development of the Declaration</li> </ul>	<p>The declaration is relevant to ZCEREHSP</p>

No.	INTERNATIONAL CONVENTIONS	SUMMARY	RELEVANCE TO ZCEREHSP
3	<p><b>Stockholm Convention</b></p>	<p>The Stockholm Convention on Persistent Organic Pollutants is a multilateral international environmental agreement to protect human health and the environment from chemicals, known as POPs. These so-called POPs have harmful impacts on human health or on the environment at large.</p> <p>The Stockholm Convention on Persistent Organic Pollutants is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health or on the environment</p>	<p>The Convention specifically targets incinerators. Among other actions, it will require countries to develop and implement actions to address the release of dioxins and furans; Article 5 will require measures to reduce dioxin/furan releases from incinerators with the goal of their "ultimate elimination;" and countries are required to promote the use of alternatives including the use of the best available techniques/ technologies. Under the Stockholm Convention, standard incinerators are not a preferred technique due to their potential to emit POPs. Only highly controlled incinerators with air pollution control equipment and operational practice specifically designed to minimize dioxin formation and release could be considered the best available technology. ZCEREHSP will use incineration technology.</p>

No.	INTERNATIONAL CONVENTIONS	SUMMARY	RELEVANCE TO ZCEREHSP
5	The Basel Convention	<p>The <b>Basel Convention Technical Guidelines</b> focus on reducing the impacts on health and the environment of biomedical and healthcare wastes that is based on the major classification in Annexes I, II, VII of the Basel Convention, but specified for practical use in the healthcare sector. This guideline focuses on, (i) a strict definition and classification of the relevant waste streams, (ii) the segregation at source of the waste and (iii) the access to the best available information for the identification of waste.</p>	<p>The activities of the ZCEREHSP project may induce an increase in the use of medical facilities and hence an increase in the generation of Health care Waste. The project will manage these anticipated increases through the ICWMP.</p>
	Montreal Protocol	<p>This Protocol was subsequently adjusted and/or amended in London in 1990, Copenhagen in 1992, Vienna in 1995, Montreal in 1997 and Beijing in 1999.</p> <p>Under the amendments and adjustments to the Protocol, non-Article 5<sup>18</sup> parties were required to phase out production and consumption of: halons by 1994; chlorofluorocarbons (CFCs), carbon tetrachloride, hydrobromochlorofluorocarbons and methyl chloroform by 1996; bromochloromethane by 2002; and methyl bromide by 2005. Article 5 parties were required to phase out production and consumption of hydrobromochlorofluorocarbons by 1996, bromochloromethane by 2002, and CFC's, halons and carbontetrachloride by 2010. Article 5<sup>19</sup> parties must still phase out production and consumption of methyl chloroform and methyl bromide by 2015. Under the accelerated phase-out of HCFC's adopted at Meeting of the Parties 19 to the Montreal protocol (MOP-19), HCFC production and consumption by non-article 5 parties was frozen in 2004 and is to be phased out by 2020, while for Article 5 parties, HCFC production and consumption is to be frozen by 2013 and phased out by 2030 (with interim targets prior to those dates, starting in 2015). There are exemptions to these phase-outs to allow for certain uses lacking feasible alternatives.</p>	<p>Use of refrigerant gases and blowing agents is governed by the Montreal Protocol on Substances that Deplete the Ozone Layer. ZEREHS supporting purchase and installation solar direct drives refrigerators and installation of refrigeration units in trucks transporting Covid-19 Vaccines.</p>

<sup>18</sup>Parties to the Montreal Protocol that have an ODS consumption of greater than 0.3kg per capita on the date of entry of the Montreal Protocol, or at any time thereafter within ten years of the date of entry into force of the Protocol.

<sup>19</sup>Parties to the Montreal Protocol whose annual per capita consumption and production of ozone depleting substances (ODS) is less than 0.3 kg to comply with the control measures of the Protocol. Currently, 147 of the 196 Parties to the Montreal Protocol meet these criteria (they are referred to as Article 5 countries).



No.	INTERNATIONAL CONVENTIONS	SUMMARY	RELEVANCE TO ZCEREHSP
	<b>Paris Agreement</b>	<p>The Paris Agreement establishes the main framework for cooperative action on climate change beyond 2020 and will replace the Kyoto Protocol. The Agreement is a treaty as a matter of international law, which means that ratifying countries will be bound to one another by its terms when it comes into effect.</p> <p>The agreement aims to substantially reduce global greenhouse gas emissions in an effort to limit the global temperature increase in this century to 2 degrees Celsius above preindustrial levels, while pursuing the means to limit the increase to 1.5 degrees. The agreement includes commitments from all major emitting countries to cut their climate pollution and to strengthen those commitments over time.</p>	Relevant to the ZCEREHSP projects for adoption climate friendly intervention

## 2.6 World Bank Environmental and Social Framework (ESF)

The World Bank ESF contains ten (10) Environmental and Social Standards (ESS) that a establishes the responsibilities of the MOHCC and PIE to plan, evaluate, screen, manage and monitor environmental and social risks and impacts during the implementation of the Project at each stage. These standards seek to avoid or mitigate adverse impacts to people and the environment because of project implementation. The project activities to be implemented under ZCEREHSP are required to follow the ESF. Projects are expected to avoid, minimise, and mitigate adverse impacts in proportion to the size of the risk. That is greater risks and impacts get more attention than less important risks and impacts. A brief analysis of ESSs relevant to ZCEREHSP are discussed in the table below:

### 2.6.1 Relevant Environmental and Social Standards

The World Bank ESF is intended to avoid, mitigate, or minimise adverse environmental and social impacts of projects supported by the Bank. Table 3-8 below is a summary of the ESS that are relevant to ZCEREHSP:

**Table 2-10 Environmental and Social Standards**

No.	ENVIRONMENTAL AND SOCIAL STANDARDS	Relevant	Application
1.	ESS1- Assessment and Management of Environmental and Social Risks	Yes	<p>Potential environmental impacts related to the minor civil works activities such as minor renovations of the maternity waiting homes, operating theatres, the installation energy generation equipment for health facilities, installation of direct drive solar refrigerators, fuelling and maintenance of vehicles under ZCEREHSP. The supported activities will increase generation of health care waste, issues related to supply and usage of Personal Protective Equipment (PPE), procurement and usage of family planning commodities. There are also risks as a result exposure to Covid-19 for health care workers, logistical challenges related to storage and transportation of vaccines, marginalised groups also not being able to access vaccine of provision, family planning commodities, facilities and services designed to enhance RNMCAHN services and to combat the Covid-19 disease, Gender Based Violence (GBV) and Sexual Exploitation and Abuse-Harassment (SEA-SH) among health care providers and patients in relation to the distribution of vaccines and family planning products, inappropriate data protection measures and insufficient stakeholder communication on access to family planning commodities, and vaccine deployment strategy and information about vaccines could result in rumours about the effects of vaccines on one's health and also risks associated with AEFIs. The minor renovations and installation activities will be site-specific and will not have any significant environmental impacts on the ground. All of these project activities will have environmental and social risks and impacts which must be analysed and assessed and so ESS1 is applicable to this project.</p> <p>The ESMF and ICWMP carry out ESS1 and will guide on the best practices for waste management and any other safeguards concern that may be identified including any necessary labour management measures (outlined in the Labour Management Procedures). The ICWMP will present mitigation measures that consider the limited capacity level of the health sector.</p> <p>To manage and mitigate GBV/ SEA-H risks, the project has prepared and will implement the GBV action plan, code of conduct and GBV/SEA-H. They shall also be integrated into all contracts and contracting documents.</p> <p>ESMPs will be prepared as needed during implementation.</p>

No.	ENVIRON- MENTAL AND SOCIAL STANDARDS	Rele- vant	Application
2.	ESS2- Labour and Working Conditions	Yes	<p>The ZCEREHSP project has project workers including (i) Direct workers such as civil servants employed by MOHCC, PIE personnel, (ii) Contracted workers such as construction workers for minor civil works for installation of solar systems at health facilities, providers of transportation for vaccines and waste from vaccination activities under ZCEREHSP, (iii) community workers such as community health workers who will be engaged in community awareness raising, contact tracing and data collection of cases in the community.</p> <p>A main project risk is the spread of COVID-19 and other contagion illnesses to project workers. The project will implement Occupational Health and Safety (OHS) measures as outlined in the ESMF, project ICWMP and WHO Guidelines (Water, sanitation, hygiene, and waste management for SARS-CoV-2, the virus that causes COVID-19: Interim guidance, 2020). The project will regularly integrate the latest guidance by WHO as it develops over time and experience addressing COVID-19 globally. There are also OHS risks from health care waste management, fueling and maintenance of vehicles, installation of energy generation equipment and its operation. The LMP will provide guidance on how workers' safety including road traffic safety hazards, GBV/ SEA/SH, poor working conditions, risk of COVID-19 transmission at work places, will be managed in accordance with the national law as well as the requirements of ESS2.</p> <p>The project has a basic and responsive grievance redress mechanism (GRM) that will allow all workers to quickly inform their immediate management of labour issues.</p>

No.	ENVIRON- MENTAL AND SOCIAL STANDARDS	Rele- vant	Application
3.		Yes	<p>COVID-19 contributes to the infectiousness of health care waste and contact with it could severely impact human health especially health care workers if it is not handled properly. Medical and chemical waste such as reagents, infected materials from health care facilities could have a significant environmental impact including on natural habitats and human health including nearby communities if not properly managed. Wastes that may be generated from health care facilities include liquid contaminated waste, sharps, chemicals and other hazardous materials. These wastes, wastes, if they have not been managed appropriately (such as incomplete burning, if they are left accessible to unauthorized personnel or if they have contaminated the soil) historically, could present a risk to the public, patients and workers. These waste could have emanated from improperly functioning incinerators and waste has not been fully destroyed and the area could be accessible to patients, staff and the community which could harm them. Medical waste will also be generated from the procure and utilisation of family planning commodities which the project will support. Waste from Electrical and Electronic Equipment maybe generated from procurement and use of solar powered tricycles, and motorcycles and solar direct drive refridgerators. Issues related to wastewater discharge from HFs include leakage of wastewater into the surrounding environment due poorly functioning wastewater reticulation system contaminating the soil posing a risk to people. The project short-term vaccination efforts represent a small amount of the wastewater stream produced by an HCF over very small period of time; therefore, this is not a significant concern.</p> <p>If vaccines are not stored, transported and administered at the right temperature can be rendered less potent and or/ less effective. The project will support MOHCC to develop and implement country specific vaccine cold chain supply management and operational precedures using WHO and CDC guidelines on vaccine cold chain supply management. The cold chain supply management should be managed for efficient use of inputs.</p> <p>Fueling and maintainence of vehicles could cause pollution if not managed appropriately. This ESMF contains measures to ensure these activities areadequately managed according to WB general EHSG (2007). However, under the Additional Financing, sustainable and energy efficient solar powered tricycles will be procured and used for integrated mobile outreach activities. The cold chain system will be energy efficient, and will also rely on on sustainable energy sources whenever practicable as supported by the ESMAP grant. WHO and CDC guidelines on vaccine cold chain supply management are examples of GIIPs (Good International Industry Practice) that Zimbabwe could use its own country-specific vaccine cold chain supply management plan and operational procedures.</p> <p>Contaminated land is of concern because of the potential risks to human health and ecology, and the liability it may pose to the polluter/ health facility owners. Land contamination can be due to anthropogenic releases of hazardous materials, wastes, or oil, including naturally occurring substances. Releases of these materials may be the result of historic or current site activities, including, but not limited to, accidents during their handling and storage, or due to their poor management or disposal.</p> <p>Contamination of land should be prevented to avoid risk to health and ecological receptors. The preferred strategy for land decontamination is to reduce the level of contamination at the site while preventing the human exposure to contamination.</p>

No.	ENVIRON- MENTAL AND SOCIAL STANDARDS	Rele- vant	Application
4.	ESS4- Community Health and Safety	Yes	<p>Inappropriate handling of COVID-19 samples and patients can expose community and could lead to further spread of the disease. Non-provision of medical services to disadvantaged or vulnerable groups is a potential risk under the project. The project ICWMP will contain guidelines on specific measures to prevent the spread of diseases in the community from infectious medical waste. This ESMF contains measures to ensure health and safety in the community from project activities and safety of services as they relate to health care facilities, vaccine roll out, emergency preparedness measures including measures to address a plan for cold chain storage during power outages and natural disasters in Appendix 16. GBV/ SEA/SH risks will be ameliorated through training of every worker engaged in the project on OHS and GBV/ SEA/SH risks and be required to sign a code of conduct.</p> <p>COVID-19 vaccine safety and surveillance will be guided by the existing MOHCC's Adverse Events Following Immunisation surveillance and the WHO Vaccines Safety Surveillance Manual. The project will regularly integrate the latest guidance by WHO as it develops over time and experience addressing COVID-19 globally especially with respect to reducing the risk of the project spreading COVID-19 to the public in general. Additionally, the project will conduct risk communication and community engagement activities to raise awareness and dispel misinformation in the affected areas including the vulnerable and marginalised groups, use of proper PPE for COVID-19 prevention measures</p> <p>No one will be forced to get the vaccine.</p> <p>The project will abide by Section 3.3 (Life and Fire Safety) of the World Bank Group ("WBG") General Environmental, Health and Safety Guidelines (EHSG) as it relates to fire and other safety standards for new buildings and existing buildings programmed for renovation with the use of the World Bank funding since the HCF are servicing the public which is relevant to ESS4's coverage of Safety of Services. These requirements apply to buildings programmed for renovation, whether occupancy type is maintained (e.g., a hospital renovation) or changed (e.g., an office building is converted to a hospital).</p> <p>The use of the Military or Security Personnel is not currently envisioned for any activities related to the Project.</p> <p>Since the project will support vehicles and transportation (for waste, fuelling and maintenance and for vaccinations), procurement and use of solar powered tricycles, motorcycles and vans for integrated outreach services, EHSG and ESS4 guidance on Traffic and Road Safety are relevant. Finally, Emergency Preparedness and Response are pertinent to project activities since the HCFs are subject to natural disasters and man-made events.</p>



No.	ENVIRON- MENTAL AND SOCIAL STANDARDS	Rele- vant	Application
5.	ESS5- Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	No	No project activities require land acquisition or adversely impact livelihoods. Financing may support rehabilitation and minor upgrades at existing facilities which include minor renovations of the maternity waiting homes, operating theatre renovations
6.	ESS6- Biodiversity, Conservation and Sustainable Management of Living Natural resources	No	This project does not include significant civil works and is not likely to impact natural resources, natural habitats or biodiversity since any activities to set up energy-generating equipment will be for already existing facilities. In addition, this ESMF has screening procedures that would identify any project that may impact natural habitats.
7.	ESS7- Indigenous Peoples/ Sub-Saharan African Historically Underserved Traditional-Local Communities	Yes	<p>There is a possibility that indigenous communities could be present in or near several areas targeted by both projects. If their presence is confirmed, the project will address any risks posed to them and measures put in place to ensure that they receive culturally appropriate benefits. This will be done through the specific targeting of stakeholder engagement activities relevant to Indigenous Peoples (IPs) that meet the requirements of ESS7 and that a Social Assessment (SA) is carried out prior to any activities that would impact them. Following the SA, and as appropriate: (i) a stand-alone plan or framework may be developed; (ii) or key elements of risk mitigation and culturally appropriate benefits will be included in the ESMF. In case where indigenous communities will be affected by quarantine provisions or other targeted impacts, site-specific approaches will ensure adequate consideration of their specific cultural needs in accordance with ESS7 to the satisfaction of the Bank.</p> <p>Public consultations with representatives of indigenous communities and their organizations are provided for in the ESMF and will be further developed in subsequent IPPFs as appropriate considering their circumstances. IP organizations and representatives will be consulted during the preparation of the ESMF and IPPFs as necessary.</p>

No.	ENVIRONMENTAL AND SOCIAL STANDARDS	Relevant	Application
8.	ESS8- Cultural Heritage	No	The standard on Cultural Heritage is currently not relevant as the project does not involve any activities that may impact tangible or intangible cultural heritage or access to heritage sites. Most project sites are existing facilities so any culturally or historically important resources would most likely be already identified and secured. In any case, the ESMF contains chance finds procedures to be followed in case any archeological or other resources with historical or cultural value are discovered unexpectedly during the execution of project activities (Appendix 8 Archaeological Chance Finds Procedures).
9.	ESS9- Financial Intermediaries	No	The standard on Financial Intermediaries is not currently relevant for the proposed project activities.
10.	ESS10- Stakeholder Engagement and Information Disclosure	Yes	The project will establish a structured approach to engagement with stakeholders that is based upon meaningful consultation and disclosure of appropriate information, considering the specific challenges associated with Covid-19. People affected by the project will be provided with accessible and inclusive means to raise their concerns and grievances. The Project guidance is in the SEP.

### 2.6.2 World Bank Group General Environmental Health and Safety Guidelines (EHSG)

In addition to the Environmental and Social Standards, the project will follow the World Bank Group Environment, Health and Safety Guidelines (EHSG). For details, refer to: [www.ifc.org/ehsguidelines](http://www.ifc.org/ehsguidelines).

World Bank Group EHSG<sup>20</sup> are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP). They define acceptable pollution prevention and abatement measures and emission levels in World Bank financed projects.

The EHSG contains the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. Application of the EHSG to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them.

The environmental and social assessment process may recommend alternative (higher or lower) levels or measures, which, if acceptable to the World Bank, become project or site-specific requirements.

If less stringent levels or measures than those provided in the EHSG are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment. When host country regulations differ from the levels and measures presented in the EHSG, projects are expected to achieve whichever is more stringent.

<sup>20</sup>A complete list of industry-sector guidelines can be found at:

For this project, the WHO and the World Bank Group EHS for Healthcare Facilities are directly relevant. Additionally, the World Bank Group General EHS have important provisions which are applicable to various components of the proposed project namely hazardous waste management, occupational health and safety (against biological and chemical hazards), community health and safety during project operation, rehabilitation and decommissioning works. Finally, the EHS for Retail Petroleum Networks may also have useful information for the project's activities with respect to vehicles since retail petroleum networks may provide limited vehicle repair and servicing.

The Project will apply the General Guidelines, including (i) Environmental, (ii) Occupational Health and Safety, (iii) Community Health and Safety [with Life and Fire Safety (L&FS)] and (iv) Construction and Decommissioning, those for Health Care Facilities (2007) as well as the EHS for Retail Petroleum Networks. All buildings programmed for installation or renovation activities accessible to the public should be planned, executed, and operated in full compliance with Zimbabwe Model Building By-Laws of 1977. Other EHSs may prove relevant during project implementation.

**Box 2.****General EHSG**

1. Environmental
  - 1.1 Air Emissions and Ambient Air Quality
  - 1.2 Energy Conservation
  - 1.3 Wastewater and Ambient Water Quality
  - 1.4 Water Conservation
  - 1.5 Hazardous Materials Management
  - 1.6 Waste Management
  - 1.7 Noise
  - 1.8 Contaminated Land
  
2. Occupational Health and Safety
  - 2.1 General Facility Design and Operation
  - 2.2 Communication and Training
  - 2.3 Physical Hazards
  - 2.4 Chemical Hazards
  - 2.5 Biological Hazards
  - 2.6 Radiological Hazards
  - 2.7 Personal Protective Equipment (PPE)
  - 2.8 Special Hazard Environments
  - 2.9 Monitoring
  
3. Community Health and Safety
  - 3.1 Water Quality and Availability
  - 3.2 Structural Safety of Project Infrastructure
  - 3.3 Life and Fire Safety (L&FS)
  - 3.4 Traffic Safety
  - 3.5 Transport of Hazardous Materials
  - 3.6 Disease Prevention
  - 3.7 Emergency Preparedness and Response
  
4. Construction and Decommissioning
  - 4.1 Environment
  - 4.2 Occupational Health and Safety
  - 4.3 Community Health and Safety

## 2.7 Gap Analysis

### 2.7.1 Zimbabwean Legislation and Applicable World Bank Environmental and Social Standards

This section presents the gap analysis between the Zimbabwean Legislation and applicable World Bank ESSs. This gap analysis specifies aspects where there are gaps between national and international standards, analyses the gap and states actions to be undertaken by the HSDSP regarding these aspects.

**Table 2-11 Gap Analysis - Zimbabwean Legislation and applicable WB Environmental, Health and Safety Guidelines**

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
<b>1.</b>	ESS1- Assessment and Management of Environmental and Social Risks			
<b>1.1</b>	<p>ESS1- Assessment and Management of Environmental and Social Risks outlines Bank requirements for the assessment and management of environmental and social risks of Bank-financed projects. The funding recipient, in this case GoZ, is responsible for environmental and social assessment and management; hence, it is responsible for this ESMF. The funding recipient undertakes environmental and social screening of each proposed activity to determine the appropriate extent and type of mitigation.</p> <p>Assessment is initiated as early as possible in project processing and is integrated closely with the economic, financial, institutional, social, and technical analyses of all proposed projects.</p>	<p><b>The Environment Management Act (CAP 20:27)</b> of 2012 defines the environmental management principles for the country, including the consideration of people and their needs. It sets out environmental standards that should be complied with, including waste management and hazardous substances management.</p> <p><b>The Environmental Impact Assessment Policy (1997)</b> guides the implementation of environmental impact assessments and was designed to attract environmentally responsible investment and development in Zimbabwe; maintaining the long-term ability of natural resources to support human, plant and animal life; avoid irreversible environmental damage and minimize such environmental damage where it cannot be avoided; conserving broad diversity of plants, animals and ecosystems and the natural processes that they rely on; conserving the social, historical and cultural values of people and their communities; meeting the basic needs of people affected or likely to be affected by development proposals, including food, water, shelter, health and sanitation.</p> <p>The first schedule of the Act stipulates the activities that are prescribed for full environmental impact assessments (EIA). This includes drainage and irrigation, forestry, and water supply.</p>	<p>There are no significant gaps between the ESS and national laws.</p> <p>The EMA Act and WB ESSs both require Environmental and Social Assessment however national laws do not require as much detail on social issues that WB ESS require. The screening process is different since EMA uses a prescriptive list while the WB uses a screening guideline. So, it is possible for some projects that may not be in the EMA prescribed list, to require ESIA from the WB required screening process or vice versa.</p> <p>Therefore, the screening process need to be merged as follows:</p> <ul style="list-style-type: none"> <li>▶ If a project activity's ESIA is prescribed by EMA while WB does not, ESIA will be done.</li> <li>▶ If WB requirements for screening require ESIA while EMA did not prescribe the project for ESIA, ESIA will be conducted.</li> </ul> <p>For all assessment and management activities, in case of a conflict between national and international requirements, the most stringent requirements will prevail unless local conditions or other agreed criteria make it unnecessary or impossible.</p>	<p>Screening of key environmental and social risks and impacts of the project activities must always be undertaken and appropriate mitigation measures identified, as laid out in this ESMF.</p> <p>The project will use the ESMF, SEP and potentially future instruments to guide management of social issues not required by the EMA Act.</p> <p>If a project activity has adverse impacts, an ESMF must be developed and submitted to PIE for review.</p> <p>This Project will apply the ICWMP waste and IPC requirements as major mitigation measures.</p> <p>Depending on the screening outcomes, some project activities may require site-specific ESMFs.</p>



No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
1.2	<p><b>Project Screening and Categorization</b></p> <p>The <b>World Bank</b> requires that all projects financed by the Bank are screened for their potential environmental and social impacts to determine the appropriate extent and type of environmental work. The Bank classifies proposed projects into one of four categories as follows:</p> <p>High Risk. Substantial Risk. Moderate Risk or Low Risk. In determining the appropriate risk classification, relevant issues are considered such as the type, location, sensitivity, and scale of the project; the nature and magnitude of the potential environmental and social risks and impacts; and the capacity and commitment of GoZ to manage the environmental and social risks and impacts in a manner consistent with the ESSs. The classification of a project can change throughout project implementation. Changes in the classification of a project will be disclosed on the Bank's website.</p>	<p>The <b>Zimbabwe legislation</b> classifies projects and activities into three types as follows:</p> <p><b>Type 1: listed in the Schedule</b>, have significant adverse impacts; projects require a full EIA.</p> <p><b>Type 2: listed in the Schedule</b>, less significant impacts, easy to predict. Mitigatable, do not require a full EIA.</p> <p><b>Type 3: not listed in the Schedule</b>, unlikely to cause any significant impacts, do not require any additional environmental assessment.</p>	<p>The Bank requires that all projects be screened, and the requisite environmental assessment work be carried out based on these screening results. To ensure that future small-scale project activities are implemented in an environmentally and socially sustainable manner the project has developed an environmental and social screening process for small scale project activities with WB ESF ESS1</p> <p>High risk and substantial risk project as per WB classification are equivalent of Zimbabwe's Type 1 projects where the projects are classified as having significant impacts. Moderate risk (WB classification) and Type 2 projects in Zimbabwe have less significant impacts and are predictable and mitigatable. In Zimbabwe, Projects under Type 3 category are not listed in the Schedule and are unlikely to cause any significant environmental impact and thus do not require any additional environmental assessment.</p> <p>The Zimbabwe EA screening procedures uses a prescriptive list while the WB ESF has a screening guideline. So, it is possible for some projects that may not be in the EMA prescribed list, to require ESIA from the WB screening process or vice versa.</p>	<p>Therefore, ZCEREHSP will use the environmental and social screening process as described in this report</p>

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
1.3	<p><b>Environmental and Social Management Framework (ESMFs)</b></p> <p><b>The World Bank</b> recommends the use of an ESMF as the form of the required Environmental and Social Assessment where the sites and potential adverse localized impacts cannot be identified prior to the appraisal of the project.</p>	<p><b>The Zimbabwe legislation</b> has no provision for screening of project activities where the sites and potential adverse localized impacts cannot be identified prior to the appraisal of the project.</p> <p>Currently the country has no law or control guidelines on e-waste- management in Zimbabwe.</p>	<p>There is no provision for screening of project activities where the sites and potential adverse localized impacts cannot be identified prior to the appraisal of the project in Zimbabwe.</p> <p>Unavailability of e-waste laws and regulation makes it difficult for the existing regulatory institutions to police e-waste management effectively.</p>	<p>The project will use the ESMF as a guiding tool for assessment and management of environmental and social risks and impacts associated with the project. Project activity risks will be evaluated once sites and activities have been identified and selected.</p> <p>The project will use the project ESMF as a guiding instrument for risk assessment and management for risks and impacts associated with the project.</p>
1.4	<p><b>Environmental and Social Management Plans (ESMPs)</b></p> <p><b>The World Bank</b> requires ESMPs for each set of activities (e.g., project activities) that may require specific mitigation, monitoring and institutional measures to be taken during implementation</p>	<p>In addition to EIS for category 3 projects, in the EMA Act, no other plans are prepared.</p>	<p>No provision for further EA work in Zimbabwean Legislation.</p>	<p>ESMPs will be prepared for project activity as and when required and will include specific mitigation, monitoring and institutional measures to be taken during implementation</p>
2	<b>ESS2 Labour and Working Conditions</b>			

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
	<p>The <b>World Bank</b> requires promotion of safety and health at work, fair treatment and equal opportunities, with an emphasis on protection of vulnerable workers, respect for labour organising and ability for workers to raise concerns in the workplace. ESS2 requires measures to prevent all forms of forced labour and child labour.</p>	<p>Factories and Works Act (CAP 14:08) OF 1996 (S.I 168 of 2004) The Act aims at reducing occupational accidents, by prescribing a comprehensive safety and health management system is required at all workplaces.</p> <p>Labour Relations Act (1984). Sets out freedom of association, collective bargaining, and industrial relations. Labour Relations (Specification of Minimum Wages) Notice from 1996 sets out minimum wages.</p>	<p>National legislation only protects formally contracted workers. While minimum wage is provided in legislation there is a lack of enforcement.</p> <p>There have been prior bans on protects and limitations on the ability to organise collectively.</p>	<p>The project has adopted the higher standards in ESS2 and addresses the gaps in the LMP, which includes measures to address OHS risks, including applying the project ICWMP and WHO guidelines. The LMP also addresses workers' safety in relation to road traffic safety hazards, GBV/ SEA/ SH, poor working conditions, risk of COVID-19 transmission at work places.</p> <p>The project has a basic and responsive grievance redress mechanism (GRM) that will allow all workers to quickly inform their immediate management of labour issues.</p>

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
3	<p><b>ESS3 Resource Efficiency</b> requires the prevention of all forms of pollution and the management of any waste generated through the implementation of the ESMFs. Projects should promote the sustainable use of resources, including energy, water, and raw materials.</p>	<p><b>Environment Management Act (CAP 20:27) of 2002</b></p> <p>The Act sets out environmental standards that should be complied with, including waste and hazardous substance management. It utilizes the following statutory instruments:</p> <p>i) <b><u>Statutory Instrument 6 of 2007 (water pollution control and waste management.)</u></b></p> <p>The instrument defines the EMA water pollution control and waste management objectives.</p> <p>ii) <b><u>Statutory Instrument 12 of 2007 (Hazardous Substances, Pesticides and Toxic Substances Regulations)</u></b></p> <p>This statutory instrument defines the provisions and standards of handling Hazardous Substances, Pesticides and Toxic Substances. It also stipulates the procedures to be followed when there is an accidental spillage of the substance. In addition, any person whose substances affect the environment are liable to pay for the cost of restoring the environment.</p>	<p>In accordance with the WB EHSGs, the project will follow GoZ air pollution laws and policies. The GOZ has in place emissions standards for incinerators and motor vehicles.</p> <p>The Environmental Management act (Chapter 20:27) and Atmospheric Pollution Control regulations (Statutory Instrument 72) of 2009 provide for the prevention of control and abatement of air pollution to ensure clean and healthy environment. The Statutory Instrument 72 of 2009, covers pollution from static sources (such as incinerators) as well mobile sources (motor vehicles). Incinerators need to be registered by EMA to allow for coordinated monitoring as well as receiving guidance and advice on best practices. EMA also monitors motor vehicle emissions. Point source monitoring regulations do not require motor vehicles to be licensed for emissions but vehicles maybe be stopped at roadblocks for the purposes of testing these emissions.</p> <p>The GOZ through the Ministry of Energy is in the process of developing the National Energy Efficiency Policy. The main goal of the policy is to encourage the adoption of energy efficiency strategies. This is a sub policy developed under the overall framework of the National Energy Policy of 2012. The other subsidiary policies laid out under the same are the National Renewable Energy Policy of 2019 and the Biofuels Policy of 2020.</p>	<p>It is anticipated that the ZCEREHSP activities will generate medical and some minor waste from equipment installation.</p> <p>The Project will thus ensure appropriate waste management and pollution prevention measures in all activities and will be fully compliant with WB requirements and the National Laws.</p> <p>Contractors will be required to prepare waste management plans. Any health facilities receiving project support will also be required to prepare an ICWMP for their individual facility before receiving support.</p> <p>ZCEREHSP goes beyond compliance with ESMAP grant and GFF grant will support energy efficient investments such as a cold chain system and transport systems such as solar powered tricycles that will rely on sustainable energy sources whenever practicable.</p> <p>Vehicles supported by the project will meet the national emissions level requirements discussed in section 3.4.1. Additionally, ZCEREHSP will follow the EHSG; Air Emissions and Ambient Air Quality guidance on environmentally friendly vehicle maintenance practices.</p>

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
		<p>iii) <b>The Zimbabwe National Sanitation and Hygiene Policy (2017)</b></p> <p>The Policy sets out safe or hygienic separation of human excreta and other waste from human contact. It covers processes and behaviours for establishing and managing domestic and workplace and public facilities necessary for waste or excreta containment, collection, treatment, and disposal.</p> <p><b>The Public Health Act (Chapter 15:17)</b></p> <p>The <b>Public Health Act</b> (CAP 15:17) has sections that deal with sanitation and buildings (housing). The Act prohibits creation of nuisance. The act looks at how actions of others may end up affecting the health of the public. Case in point is the air, water and land pollution which consequently leads to lung and other respiratory diseases.</p> <p>Dangerous Drugs Control Act (Chapter 15:02)</p> <p>This Act controls the importation, exportation, production, sale, and distribution and use of dangerous drugs, thus protecting people from direct ill health and poisoning from the dangerous drugs and ultimately pollution of the environment from the disposal of these drugs.</p>		

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
3.1	<p><b>Managing Emergency Situations</b></p> <p><b>The World Bank</b> requires the borrower Environmental and Social Assessment to analyse the risk of emergency situations and to manage them if relevant in the ESMP.</p>	<p><b>SI 76 of 2020</b></p> <p><b>Civil Protection (Declaration of State of Disaster: Rural and Urban Areas of Zimbabwe)</b></p> <p>This SI under the Civil Protection Act allows the civil protection authorities to use the special powers available to them under the Act to respond to a declared state of disaster. The declaration places the whole country in a state of disaster with effect from the promulgation of this notice. Currently the country has not been declared to be in a state of national disaster. However, this may change from depending on the progression of the COVID-19 pandemic and other emergency situations.</p> <p><b>SI 77 of 2020 to SI 103 of 2020</b></p> <p><b>Public Health (COVID-19) Prevention, Containment and Treatment) Regulations, 2020</b></p> <p>These regulations were made by the Minister of Health and Child Care under the "new" Public Health Act of August 2018. The Act gives the Minister wide powers to legislate measures to prevent, contain and treat the incidence of "formidable epidemic diseases".</p> <p>As a new virus, COVID-19 was not on the existing list of "formidable epidemic diseases" in section 64 of the Public Health Act. It was, therefore, necessary for the Minister of Health and Child Care to make it a "formidable epidemic disease" by a declaration in a statutory instrument under the same section. Section 3 of these regulations contains that declaration called the "FED declaration", and by way of this SI the Pandemic is handled.</p>	<p>Both the Zimbabwean Legislation and the WB directives make provisions for emergency situations. So, there is no gap between the two.</p>	<p>The project is a response to the current COVID-19 pandemic emergency whilst delivering essential health services, particularly RMNCAHN. In compliance with ESS4, this ESMF (including the ICWMP) will describe any emergency preparedness and response (EPR) measures which should address a plan for safe cold chain management during power outages or a disaster (Appendix 16).</p>



No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
4	<p><b>ESS4- Community Health and Safety</b></p> <p>ESS4 recognises that project activities, equipment and infrastructure can increase community exposure to risks and impacts, including GBV/SEAN/SH, disease transmission and pose security risks. In addition, the communities are already subjected to the impacts of climate change.</p> <p>The use of the Military or Security Personnel is not currently envisioned for any activities related to the Project.</p>	<p><b>Medicines and Allied Substances Control Act (Chapter 33:10)</b> The Act provides for the establishment of the Medicines Control Authority of Zimbabwe (MCAZ), which is regulatory board mandated to approve and register all medicines to be introduced in the country. The Act provides for the registration and approval of all medicines to be introduced in Zimbabwe.</p> <p><b>Public Health Act (Chapter 15:17)</b> The Act deals with emergency situations and epidemics such as COVID-19. It sets out provisions for prevention and control of a formidable epidemic disease. It also empowers the Minister responsible for Health to make regulations regarding prevention and containment of such diseases. The Act also provides for the development of health care waste management strategies</p> <p><b>SI 108 of 2020- Public Health (COVID-19 prevention, containment and treatment) (Amendment) regulations, 2020</b> The regulations make screening and testing mandatory. Persons who are essential services should be tested regularly and sanitisers, handwashing facilities should be provided in all office and workstation entrances</p> <p><b>Road Traffic Act</b> The act provides for the licensing of drivers and motor vehicles to ensure safety of the passengers and the public.</p>	<p>There are provisions in the Zimbabwean laws on COVID-19 prevention, containment and treatment, licensing of drivers of motor vehicles and motor vehicles, testing of the safety and efficacy of vaccines and related medical products before use. Gaps exist on Emergency preparedness and Response measures related to cold chain storage in case of power outages or natural disasters.</p>	<p>All vaccines to be introduced in the country are subject to approval by MCAZ.</p> <p>The project will support vaccine deployment activities for vaccines on WHO emergency use listing which will promote community health.</p> <p>The ESMF (including the ICWMP) will provide measures to address safety of equipment, safety of services related to health care facilities or vaccination sites to vaccinate target population (including COVID-19 risk reduction practices), vaccine roll out, medical waste management, emergency preparedness and response measures with a plan to address cold chain storage during power outages or natural disasters (see Appendix 16).</p> <p>The project will ensure that vehicle drivers are appropriately licensed and trained and that vehicles are properly serviced in an environmentally sustainable way and maintained to ensure the health and safety of passengers and the public from emissions, accidents and other pollution.</p> <p>Contractor's workers must sign and adhere to the Project Code of Conduct and associated training will be provided to prevent OHS incidents as well as SEAY/GBV/SH cases. The GRM provides a GBV sensitive reporting approach for potential survivors.</p>

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
5.	<p><b>ESS5- Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</b></p> <p><b>The ESS5- Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</b> standard covers direct economic and social impacts that both result from Bank-assisted investment projects, and are caused by (a) the involuntary taking of land resulting in (i) relocation or loss of shelter; (ii) loss of assets or access to assets, or (iii) loss of income sources or means of livelihood, whether or not the affected persons must move to another location; or (b) the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons..</p>	<p>The Zimbabwe Legislation that caters for involuntary displacements is the "Land Acquisition (Disposal of Rural Land) Regulations 1999"</p> <p>Subject to these regulations, the owner of any rural land, other than the State, a local authority, or a statutory body, shall not sell the land unless he has offered to sell it to the Minister and</p> <p>i) If the owner of any rural land which was the subject of an offer in terms of section 3 rejects a price proposed by the Minister in terms of subsection (4) of section 5, the Minister shall, within ninety days after being notified of the rejection, commence negotiations with the owner regarding the price to be paid by the President for the rural land concerned.</p> <p>ii) If negotiations referred to in subsection (1) conclude without an agreement being reached on the price to be paid for the rural land concerned, the Minister shall, within forty-five days after the conclusion of the negotiations, issue the owner of the land with a certificate of no present interest; or notify the owner, in writing, that it is intended to acquire the land compulsorily in terms of this Act; or to resume ownership of the land in terms of any condition in the land's title deed.</p>	<p>There are significant gaps in due process issues related to land acquisition in Zimbabwe.</p> <p>People can easily be resettled to make way for projects without due compensation.</p>	<p>Where ESS5 impacts are identified in the screening, the project approach will be to apply the provisions of the specifically covering restrictions and livelihoods impacts</p> <p>The Zimbabwean legislation does not affect the implementation of the project since there is no potential for resettlement.</p> <p>The project will not support activities that require resettlement, and all livelihoods will be protected in accordance with ESS5</p>

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
		iii) Negotiations shall be deemed to have concluded without agreement for the purposes of subsection (2) if no agreement is reached on the price payable for the rural land concerned within fourteen days from the commencement of the negotiations.		

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
6	<p><b>ESS7 - Indigenous Peoples/ Sub-Saharan African Historically Underserved Traditional- Local Communities</b></p> <p><b>ESS7</b> provides guidance to ensure that indigenous peoples benefit from development projects, and to avoid or mitigate adverse effects of Bank-financed development projects on indigenous peoples. Measures to address issues pertaining to indigenous peoples must be based on the informed participation of the indigenous people themselves. Project activities that would have negative impacts on indigenous people will not be funded under the proposed project.</p>	<p>The Government of Zimbabwe does not identify any specific group as indigenous, arguing that all Zimbabweans are indigenous peoples.</p> <p>However, there are two peoples who self-identify as indigenous in Zimbabwe; these are the:</p> <ol style="list-style-type: none"> <li>i) Tshwa (Tyua, Cuaa) San, who are found in the Tsholotsho District of Matabeleland North Province and the Bulilima-Mangwe District of Matabeleland South Province in western Zimbabwe.</li> <li>ii) Doma (Wadoma, Vadema) of Chapoto Ward in Guruve District and Mbire District of Mashonaland Central Province and Karoi District of Mashonaland West Province in the Zambezi Valley of northern Zimbabwe.</li> </ol>	<p>There are significant gaps in the Zimbabwean Legislation (which argues that there are no indigenous peoples) and the provisions of the World Bank's Indigenous Peoples/ Sub-Saharan African Historically Underserved Traditional- Local Communities Standard which gives guidance on how to involve the IPs.</p>	<p>Because the Zimbabwean Legislation does not provide special protection for IPs, the project will apply the provisions of the World Bank's ESS7- Indigenous Peoples/ Sub-Saharan African Historically Underserved Traditional Local Communities standard, whenever it encounters the IPs in the screening procedures through special measures contained in the IPPF.</p>

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
7.	<p><b>ESS8-Cultural Heritage</b></p> <p>Cultural Heritage (ESS8): The Bank's general guidance regarding cultural property is to assist in their preservation, and to seek to avoid their elimination. Specifically, the Bank normally declines to finance projects that will significantly damage non-replicable cultural property and will assist only those projects that are sited or designed so as to prevent such damage; and (ii) will assist in the protection and enhancement of cultural properties encountered in Bank-financed projects, rather than leaving that protection to chance.</p> <p>Cultural heritage encompasses tangible and intangible heritage which can be recognised and valued at local, regional and national level.</p>	<p>Zimbabwe uses <b>National Museums and Monuments Act (CAP 25:11)</b> to protect Cultural Property</p> <p>The Act protects all areas of archaeological, historical, architectural, geological, and paleontological value or scientific interest. Such sites cannot be altered, excavated, or damaged and material on them cannot be removed without the written consent of the Executive Director of the National Museums and Monuments of Zimbabwe. The law requires that any monument or relic discovered must be reported in writing to the Executive Director of the National Museums and Monuments of Zimbabwe by the discoverer and the owner of the land on which it is found.</p>	<p>There are no significant gaps between the provisions of the World Bank's ESS8 and Zimbabwe's National Museums and Monuments Act (CAP 25:11). However, the national legislation does not cover intangible heritage.</p>	<p>There are no envisaged impacts on any cultural heritage sites under the Project since project sites are already existing facilities which would likely have already uncovered any physical cultural resources. However, the Project may encounter cultural findings unexpectedly. If this occurs, the project will proceed according to the provisions of the Chance Find Procedures outlined in this ESMF.</p> <p>The management of cultural heritage of a country is the responsibility of the government. The government's attention should be drawn specifically to what is known about the cultural property aspects of the proposed project site and appropriate agencies (NMMZ), NGOs, or university departments should be consulted; if there are any questions concerning cultural property in the area, a brief reconnaissance survey should be undertaken in the field by a specialist. The project will apply the requirements of ESS8 on Cultural Heritage.</p> <p>The proposed project will not fund project activities that will have negative impacts on cultural property.</p>

No.	WORLD BANK ESS	ZIMBABWE LEGISLATION	GAP ANALYSIS	RECOMMENDED ACTION IN ZCEREHSP
8.	<p>This ESS recognises the importance of transparent engagement between the GOZ and the project stakeholders. Effective stakeholder engagement can improve environmental and social sustainability of project, enhance project acceptance and make meaningful contribution to successful project design and implementation</p> <p>WB requires ESA reports</p> <ul style="list-style-type: none"> <li>▶ to be disclosed for written comments</li> <li>▶ notify the public of the time and place of its review</li> <li>▶ solicit oral and written comments from those affected.</li> </ul>	<p>Environmental management (EIA and Ecosystems Protection) regulations, 2007</p> <p>The regulation provides for the conduction of environmental impact assessment, stakeholder engagement, the production and disclosure of such reports by project developers.</p> <p><b>Freedom of Information Act (Chapter 33:10)</b></p> <p>The act gives effect to section 62 of the Constitution of Zimbabwe which provides for the right to access information as enshrined in the declaration of rights.</p> <p>It sets out procedures for access to information held by public institutions or information held by any person. It also sets out considerations for making available on a voluntary basis by entities, certain categories of information thereby removing the need for formal request for such information</p> <p>It also sets out the scope and limitations on the right of access to information</p>	<p>While the Act spells out right to information held by public bodies, the Bank recognizes the importance of open and transparent engagement vis-à-vis project stakeholders by the borrower. The act also provides for voluntary disclosure of information held by them.</p>	<p>Upon completion of ESA reports, these must be:</p> <ul style="list-style-type: none"> <li>▶ circulated for written comments from the various agencies and government agencies.</li> <li>▶ notify the public of the place and time for its review; and</li> <li>▶ solicit oral or written comments from those affected.</li> </ul> <p>The project stakeholder engagement processes are described in the project Stakeholder Engagement Plan</p>



## 3.0 ENVIRONMENTAL AND SOCIAL BASELINES

### 3.1 Project Baseline Information

Zimbabwe is endowed with diverse natural resources, which include highlands, forest, and water resources, which accommodate diverse species of flora, fauna, and fish resources. However, these resources are under immense pressure from a complex interaction of several factors which include general development, over abstraction, unsustainable land use and climate change.

The following paragraphs review some of the country's key social, environmental, and natural resources such as demography, economy, nutrition, gender, land ownership, land resources, atmospheric resources, biological resources, and water resources as well as the health-related issue.

### 3.2 Site Visits and Workshop Discussion

Because of the current limitations imposed by the COVID-19 Pandemic, full-scale site visits could not be conducted. The strategy that was applied included the following:

- ▶ Limited site visits:
  - Mashonaland East, Harare, Bulawayo, Matabeleland South, and Matabeleland North were sampled for site visits.
  - In each province a central hospital, Provincial Hospital, District Hospital, Clinic, COVID designated Hospital, Isolation Centre, etc., were visited and staff at different levels interviewed.
  - Also participating ministries and Agencies like Ministry of Local Government and the Environmental Management Agency (EMA) were also visited.
- ▶ As the situation allowed, face to face interviews, completion of Questionnaires and focus group meetings were conducted.
- ▶ Several Virtual Zoom Meetings were made with some of the key stakeholders like MoHCC management, EMA Head office, etc.

All key stakeholders in MoHCC, participating Ministries, and Agencies were surveyed using an electronic questionnaire.

Appendix 9 outlines the stakeholder engagement process and the stakeholders who were engaged.

### 3.3 Analysis of Baseline Environmental Data

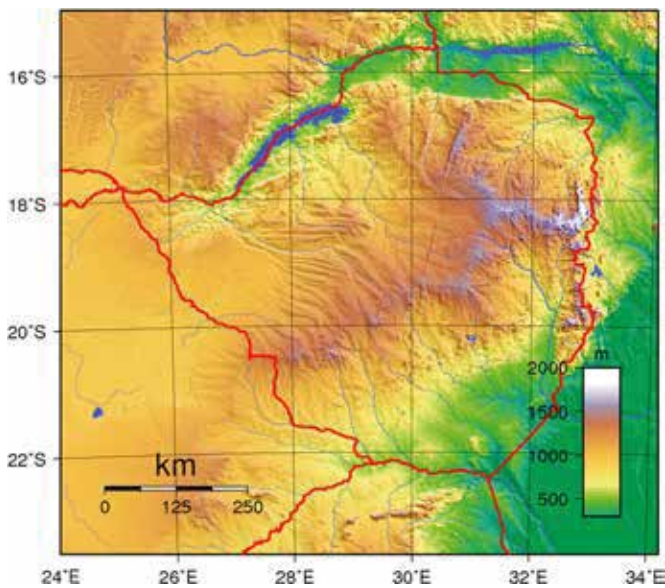
Baseline environmental data was readily available from literature and the internet. This data was compiled with the purpose of describing and evaluating the current environmental status of the Project area, which happens to be national. The baseline information included environmental information relevant to all Project components, drawing on existing information from Projects in the targeted areas. The description of the baseline environment was based on the bio-physical status of the country covering:

- (i) topography,
- (ii) geology,
- (iii) geomorphology,
- (iv) hydrology,
- (v) hydrogeology,
- (vi) soils,
- (vii) climate,
- (viii) ecosystem status,
- (ix) Natural hazards,

## 3.4 Biophysical Environment

### 3.4.1 Topography

Zimbabwe is a landlocked country in southern Africa lying well within the tropics. Much of the country is high plateau with the higher central plateau (high veldt) forming a watershed between the Zambezi and Limpopo River systems. The extensive high plateau drops northwards to the Zambezi valley where the border with Zambia is and similarly drops southwards to the Limpopo valley and the border with South Africa. The Limpopo and the lower Zambezi valleys are broad and relatively flat plains. The eastern end of the watershed terminates in a north-south mountain spine, called the Eastern Highlands.



*Figure 3-2 Topography of Zimbabwe*

About 75% of the country is semi-arid, with low and sporadic rainfall, which makes it prone to unpredictable droughts. Land use varies from intensive cropping to extensive cattle ranching, subsistence and small-scale agriculture, wildlife production, and mineral extraction. Approximately 60% of the country's 14.9 million people live in rural areas.

About 49% of the total land area is under forests and woodlands while 27% is cultivated. The former contains a wide range of fauna and flora that includes 4,440 species of plants, 270 mammals, and 532 bird species. Biodiversity is found in all the country's land categories—namely state, communal and private lands.

The country's ecosystems are formally protected under six categories of protected areas as follows: 11 national parks, 6 gazetted forests, 14 botanical reserves, 3 botanical gardens, 16 safari areas and 15 recreational parks and sanctuaries. National parks and gazette forests constitute 13% and 3% of the country's land area, respectively.

The country is mostly savannah, although the moist and mountainous eastern highlands support areas of tropical evergreen and hardwood forests. Trees found in these Eastern Highlands include teak, mahogany, enormous specimens of strangling fig, big leaf, white stinkwood, chirinda stinkwood, knob thorn and many others. In the low-lying part of the country fever trees, mopane, combretum and baobabs abound. Much of the country is covered by miombo woodland, dominated by *bracgystegia* species and other. Among the numerous flowers and shrubs are hibiscus, flame lily, snake lily, spider lily, leonotus, cassia, tree wisteria and dombeya.

### 3.4.2 Climate

The climate of Zimbabwe is tropical, although altitude and relief greatly affect both temperature and rainfall. There is a dry season, including a short cold season during the period May to September when the whole country has little rain. The rainy season is typically a time of heavy rainfall from November to March. The summer rainy season lasts from November to March. It is followed by a transitional season, during which both rainfall and temperatures decrease. The cool, dry season follows, lasting from mid-May to mid-August. Finally, there is the warm, dry season, which lasts until the onset of the rains.

The whole country is influenced by the Intertropical Convergence Zone during January. In years when it is poorly defined, there is below average rainfall and a likelihood of serious drought in the country (as happened in 1983 and 1992). When it is well-defined then rainfall is average or well above average, as in 1981 and 1985.

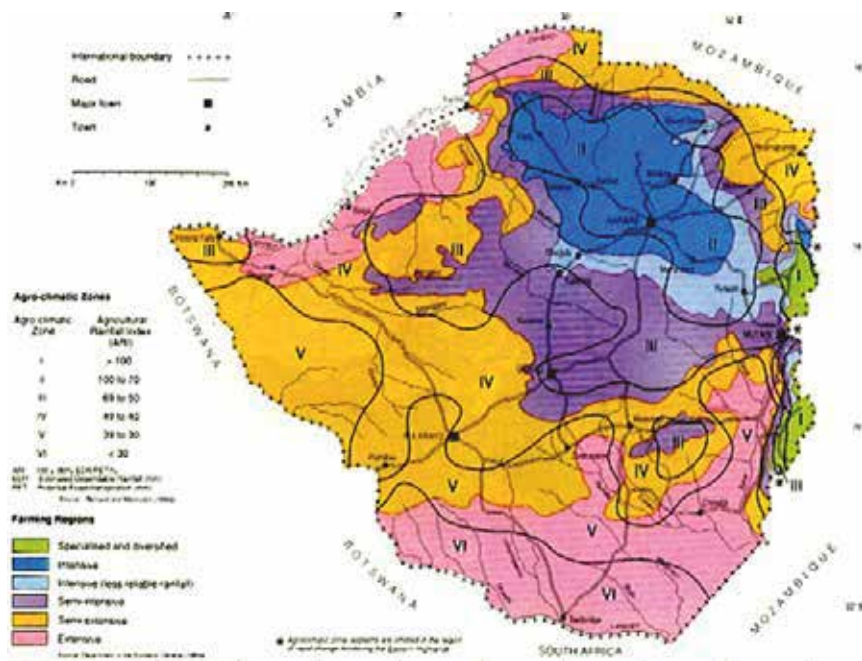


Figure 3-3 Zimbabwe Natural Regions

### 3.4.3 Climate Change

Zimbabwe is dealing with significant climate change. Global Climate Models (GCM) indicate that most of Southern Africa, including Zimbabwe, is likely to experience higher temperatures (2-4°C higher than the 1961-1990 baseline) in the coming decades, but the picture for rainfall is less clear. While average annual rainfall appears to have changed little over the last 50 years, adverse weather conditions have been increasing with droughts and floods having become more frequent and severe and the onset of the rains less dependable. Zimbabwe ranks 9 out of 16 countries (Angola, Botswana, Comoros, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, United Republic Tanzania, Zambia and Zimbabwe) on the Climate Change Vulnerability Index (CCVI).

Climate models predict that Zimbabwe's climate will be warmer than the 1961-1990 baseline with warming rates of 0.5-2°C by 2030. The climate change predictions for Zimbabwe are that the country will become hotter and drier, with an increase in violent storms. Floods are thereby the most frequent and dangerous hazard for the country, mostly hitting the northern and south-eastern lowlands (along the path of cyclones). The El Nino phenomenon has had ample impacts in the past, an estimated 4.1 million people in Zimbabwe experienced food insecurity in 2016 due to the phenomenon.

### 3.4.4 Geology

The geology of Zimbabwe in southern Africa is centred on the Zimbabwe Craton, a core of Archean basement composed in the main of granitoids, schist and gneisses. It also incorporates greenstone belts comprising mafic, ultramafic and felsic volcanic which are associated with epiclastic sediments and iron formations. The craton is overlain in the north, northwest and east by Proterozoic and Phanerozoic sedimentary basins whilst to the northwest are the rocks of the Magondi Supergroup. Northwards is the Zambezi Belt and to the east the Mozambique Belt. South of the Zimbabwe Craton is the Kaapval Craton separated from it by the Limpopo Mobile Belt, a zone of deformation and metamorphism reflecting geological events from Archean to Mesoproterozoic times. The Zimbabwe Craton is intruded by an elongate ultramafic/mafic igneous complex known as the Great Dyke which runs for more than 500 km along an SSW/NNE oriented graben. It consists of peridotites, pyroxenites, norites and bands of chromitite (Wilson, 1979; Cahen et al, 1984).



*Figure 3-4 Geological map*

### 3.4.5 Hydrology

The country is divided into six drainage basins. The largest are the Zambezi and the Limpopo. Western parts of Matabeleland connect to the Okavango inland drainage basin through the Nata River. Most of the southern Mashonaland and adjacent parts of Masvingo drain through the Save River into the Indian Ocean. Two smaller drainage basins cover parts of Manicaland and drain into the Indian Ocean through Mozambique. These are the Pungwe River to the north and the Buzi River to the south.

### 3.4.6 Flora and Fauna

The wildlife of Zimbabwe is mostly located in remote or rugged terrain in the national parks and private wildlife ranches; it is spread over the landscapes of miombo woodlands and thorny acacia or kopje. In the Rural areas the wildlife populations are drastically reduced due to the presence of large human populations. Natural vegetation varies with soil-type and hence influenced by geology to a certain extent. Other factors influencing vegetation type include climate, drainage conditions, altitude, and topography.

The prominent wild fauna members which inhabit this landscape include hippopotamus, buffalo,



elephant, leopard, lion, rhinoceros, baboon, okapi, giraffe, kudu, sable, zebra, warthog, porcupine, badger, otter, hare, and many more. In all, there are around 350 species of mammal.

Snakes and lizards abound. The largest lizard, the water monitor, is found in many rivers, as are several species of crocodile. More than 500 species of birds like the ant-thrush, barbet, bee-eater, bishop bird, bulbul, bush-warbler, guinea fowl, emerald cuckoo, grouse, gray lourie, and pheasant. No insect species of conservation interest has been identified.

### 3.4.7 Road Network

The figure below shows the road network in the country. The road network connects the national capital with provincial capitals, towns and growth points and other service centres in the country.



Figure 3-5 Zimbabwe Road Network

About 5% of the road network in Zimbabwe is classified as primary roads forming the major links to all major destinations within the country and outside. Some 14% of the network is classified as secondary roads that link the main economic centres within the country, enabling internal movement of people and goods. The primary and secondary roads are collectively referred to as the trunk road system; they carry over 70% of the vehicular traffic (measured in vehicle kilometres) and they are managed by the Department of Roads (DoR). A little more than 70% of the network is made up of tertiary feeder and access roads that link rural areas to the secondary road network. These are managed by the District Development Fund (DDF) and by the District Councils (DC).



Figure 3-6 An example of a rural gravel untarred road

The tertiary access roads, together with the unclassified tracks, typically with traffic volumes below 50 vehicles per day, provide for the intra-rural access movements. They link rural communities to social economic amenities, such as schools, health centres, and markets, and enable government services to reach rural areas. These will be important in the implementation of the projects both for being rehabilitated themselves and access to other Project sites.

### 3.4.8 Natural Hazards

Zimbabwe has endured various natural hazards including droughts, epidemic diseases, floods, and storms over the past century. From 1900 to 2017, the country encountered 7 drought events, 22 epidemic episodes, 12 floods, and 5 storms, which resulted in total deaths of roughly 7000 people, with more than 20 million people affected, and total damage of \$950 million USD. The number of total people affected and economic loss caused by droughts have been observed to increase considerably. Epidemic diseases, particularly bacterial and parasitic types, contribute to significant portion of total deaths and total affected people by natural hazards. Floods are strongly associated with total economic loss. The country has experienced several riverine floods. During the same time period, 9 riverine floods are accounted, affecting over 300 thousand people, killing over 270 people and leading to above \$270 million monetary loss. Zimbabwe is one of the six countries where the poor are overexposed (or 50% more likely) to be flooded than nonpoor people<sup>21</sup>. To mitigate and prepare for these and other hazards facing Zimbabwe, the Government of Zimbabwe (GoZ) created the Department of Civil Protection and charged it with the onus of coordinating and managing disasters and reducing hazards.

### 3.5 Socio-economic Environment

The following is an outline of the social context within which the project is being designed. It covers the population and economic settings of the country:

#### 3.5.1 Demography

The population of Zimbabwe has grown during the 20th century in accordance with the model of a developing country with high birth rates and falling death rates, resulting in relatively high population growth rate (around 3% or above in the 1960s and early 1970s). After a spurt in the period 1980-1983 following independence, a decline in birth rates set in. Since 1991, however, there has been a jump in death rates from a low of 10 per 1000 in 1985 to a high of 25 per 1000 in 2002/2003. It has since subsided to just under 22 per 1000 (estimate for 2007) a little below the birth rate of around 27 per 1000 (CIA 2007).

The high death rate is a result of poor medical facilities. This leads to a small natural increase of around 0.5%. Deaths due to HIV/AIDS have reduced due to improved methods of protection. However, the effects of the current pandemic are yet to be quantified.

Based on the 2019 revision of the World Population Prospects, the population of Zimbabwe was estimated by the United Nations at 14,438,802 in 2018. About 38.9% comprised youths under 15, while another 56.9% grouped persons aged between 15 and 65 years. Only around 4.2% of citizens were apparently over 65. Figure 3-2 below illustrates the population pyramid for Zimbabwe for 2017. (UNDESA, 2019)

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<sup>21</sup>Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters (2017) by Stephane Hallegatte, Adrien Vogt-Schilb, Mook Bangalore, and Julie Rozenberg

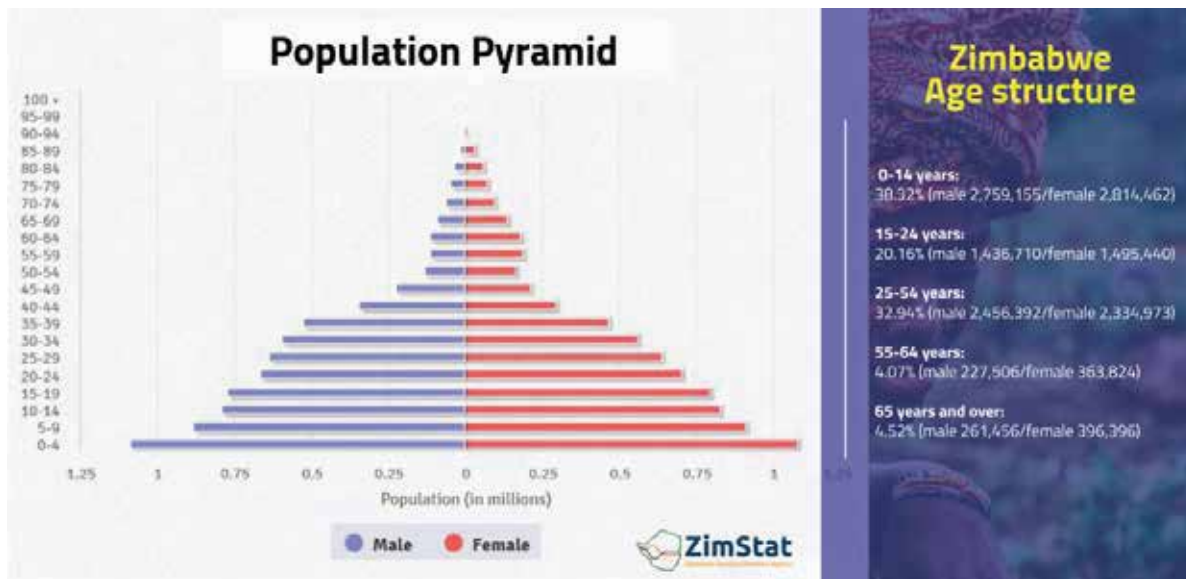


Figure 3-7 Population pyramid of Zimbabwe in 2021, (Zimbabwe National Statistics Agency)

### 3.5.2 Zimbabwe Economic Outlook and Macroeconomic Performance

GDP contracted by 12.8% in 2019 due to poor performance in mining, tourism, and agriculture. Foreign currency and electricity shortages affected mining and tourism. Agriculture shrank about 15.8% due to cyclone Idai in March 2019, prolonged drought, livestock diseases, and currency shortages reducing the availability of inputs. Despite a global mineral price recovery, production in Zimbabwe dropped below 2018 levels. Austerity measures through the Transitional Stabilization Program 2018–20 and attendant monetary reforms constricted economic activity. Any 2020–21 recovery would depend on quick turnaround in the real sector. In the medium term, however, fiscal, and monetary reforms are expected to stabilize the economy and begin to generate positive results.

Following the February 2019 unpegging of the exchange rate from the US dollar and the June 2019 introduction of the new currency—the Zimbabwe dollar—the exchange rate deteriorated from 2.5 Zimbabwe dollars per US dollar in February 2019 to 20 Zimbabwe dollars per US dollar in November 2019. Inflation spiked from single digits in 2018 to more than 200% in November 2019, occasioned largely by the exchange rate movements and by shortages of basic goods, including fuel, foodstuffs, and electricity. The current account deficit, at 2.2% of GDP in 2019, put pressure on urgently needed foreign exchange and made enhancing exports critical. The budget deficit narrowed from 9.9% of GDP in 2017 to 5.6% in 2018 and 6.0% in 2019, mainly due to government measures, which include frozen public sector employment, reduced investment and consumption spending, better revenue mobilization, and restrictions on government borrowing and the issue of government securities. (AfDB, 2020).

Public debt remains above the statutory target of 70% of GDP. In June 2019, external debt constituted 87% of the debt, estimated at \$8 billion, of which about \$5.9 billion (73.75%) was accumulated arrears. Multilateral institutions are owed \$2.6 billion (31.25% of external debt). Bilateral debt amounted to \$5.1 billion, with Paris Club creditors owed \$3.5 billion and others owed \$1.6 billion.

More than 60% of the population falls below the poverty line, while income inequality remains high. Employment opportunities continue to dwindle. About 2 million people in the rural areas were food insecure in April–June 2019—expected to rise to 5.5 million in January–March 2020—with 2.0 million more affected in urban areas. This economic outlook has a serious bearing on the health situation in Zimbabwe as most people will not be able to afford or even access health services (AfDB, 2020).



### 3.5.3 Human Development

Zimbabwe's Human Development index (HDI) improved from 0.427 in 2000, to 0.522 in 2015, and to 0.535 in 2017 and to 0.563 in 2018 despite the decline in the country's economic performance. This put the country in the medium human development category—positioning it at 150 out of 189 countries and territories.

Between 1990 and 2017, Zimbabwe's life expectancy at birth increased by 3.8 years, mean years of schooling increased by 3.6 years and expected years of schooling increased by 0.5 years. Zimbabwe's GNI per capita decreased by about 29.3% between 1990 and 2017 (UNDP, 2019).

Zimbabwe has amongst the highest HIV prevalence and maternal mortality rates in the region. The country's high mortality and morbidity rates are a result of an under-resourced health delivery system, which is overstretched by the high burden of HIV, tuberculosis (TB), malaria, maternal and childhood illnesses and recently by the COVID-19 pandemic. A decade of worsening economic conditions and rising costs have eroded a once vibrant health system, which now functions largely due to donor assistance.

The health sector has produced notable results in the areas of HIV; TB; malaria; maternal, new-born and child health (MNCH); and family planning/reproductive health (FP/RH). The national response to the HIV epidemic has scaled up prevention and treatment interventions, resulting in an estimated 290,000 lives saved through antiretroviral treatment (ART) since 2009 and a 50% decrease in the number of new HIV infections over the last ten years. The TB treatment success rate increased from 67% in 2006 to 80% in 2015, which meets the National TB program objective and World Health Organization recommendations. Malaria incidence declined by 79%, from 136/1,000 in 2000 to 29/1,000 in 2015. Although the maternal mortality rate declined significantly from 960 deaths per 100,000 live births in 2010/11 to 614 deaths per 100,000 live births in 2014, this rate remains too high by regional standards. The contraceptive prevalence rate increased from 60% in 2006 to 67% in 2014. These are noteworthy gains given the general economic decline and political context and speak to the technical and financial support provided by the donor community. Sustaining these gains will require both continued donor engagement and collaboration with the Ministry of Health and Child Care (MOHCC) to improve the systems and implementation of policies that surround the delivery of health services.

### 3.5.4 Labour and Employment

With regards to labour and employment, it is estimated that of 7 million economically active persons, approximately 11.3% are unemployed. The largest labour force at 52.3%, are 'own account' workers, being communal, peri-urban and resettlement farmers, working in agro-based businesses (UNDP, 2017). In Zimbabwe there are 1.6 physicians and 7.2 nurses for every 10000 people. In 2008, Zimbabwe implemented an Emergency Retention Scheme for the health sector with assistance from partners, which was felt to have somewhat stabilized the public health sector and has been credited with decreasing the number of resignations. Subsequently, a National Human Resources for Health Policy was developed to facilitate the optimum production, training, management and retention of health workers in the public health sector. Zimbabwe's Human Resources for Health Strategic Plan, 2010 – 2014 (ZMOHCW, 2010), was then issued to operationalize this policy. In 2011, the government and external partners enacted Zimbabwe's Health Transition Fund as a vehicle to reduce maternal and under-five mortality by abolishing user fees and supporting high impact interventions and health system strengthening. This 5-year pooled fund addressed four core elements, including specific measures to ensure retention of an adequate, skilled, and productive health workforce by providing satisfactory incomes and incentives, high-quality training and supervision, and adequate tools required for high quality care.

### 3.5.5 Crime and Violence

Crime, violence, and conflict are steadily increasing in the Zimbabwean communities due to dwindling livelihoods, increased poverty, and insecurity in general. In general, 35% of women in Zimbabwe experienced physical violence by the age of 15 and, 14% of women reported having experienced sexual violence during their lifetime (ZIMSTAT and ICF International, 2016).

The effects of the current economic meltdown, compounded by the Pandemic Lockdowns have increased the vulnerabilities that exist for women, girls and other marginalized group's exposure to crime and violence especially GBV/SEA. The unravelling of social fabric, as people are exposed

to different stresses, can have ample effects on the traditional social protection systems. Where members of households have died or been injured, family-based protection systems may not be functioning anymore; or support through extended families may not be granted anymore, as many households have lost their livelihoods and assets.

### 3.5.6 Gender Equality and Women's Empowerment

Women in Zimbabwe are under-represented in political decision-making, with their numbers in Parliament at 19%, far below the African Union and SADC target of 50%. Women are also disadvantaged in terms of health, with a high maternal mortality ratio at 960 per 100,000 live births. According to the 2011 Zimbabwe Demographic and Health Survey, 1 in 4 women reported that they had experienced sexual violence, and 1 in 3 women aged 15 to 49 have experienced physical violence since the age 15.

The Project will benefit both men and women by reducing the risks of COVID-19. Based on both global and national trends of COVID-19 confirmed cases, men constitute around 60 percent of those afflicted with the disease while women comprise 40 percent. Furthermore, with families under quarantine, the incidence of domestic violence within a household can be expected to increase.

As the Project addresses the effects of the pandemic across populations, it does not have a component dedicated exclusively for promoting women's welfare in the communities and will not have a conscious preference over women beneficiaries while being implemented in various localities. However, the Project will ensure that both men and women are informed and consulted, and that gender-sensitive public information will be disseminated. It will also be sensitive to the needs of poor and vulnerable women who may not have access to information and health care.

### 3.5.7 Social Structure

Bantu-speaking ethnic groups make up 98% of the population of Zimbabwe. The most populous people are the Shona, comprising 70% of the population. The Ndebele are the second most populous with 20% of the population.

The Ndebele descended from Zulu migrations in the 19th century and together with other tribes with whom they intermarried on their way.

Other Bantu ethnic groups make up the third largest with 2 to 5%: These are the Venda, Tonga, Shangaan, Kalanga, Sotho, Ndaou, Nambya, Tswana, Xhosa and Lozi.

Minority ethnic groups include white Zimbabweans, who make up less than 1% of the total population. White Zimbabweans are mostly of British origin, but there are also Afrikaner, Greek, Portuguese, French, and Dutch communities. There are two peoples who self-identify as indigenous in Zimbabwe; these are the Tshwa (Tyua, Cuaa) San, who are found in the Tsholotsho District of Matabeleland North Province and the Bulilima-Mangwe District of Matabeleland South Province in western Zimbabwe. The Doma (Wadoma, Vadema) of Chapoto Ward in Guruve District and Mbire District of Mashonaland Central Province and Karoi District of Mashonaland West Province in the Zambezi Valley of northern Zimbabwe.

### 3.5.8 Social Protection

Generally, Zimbabwe's social protection system has been adversely affected by declining incomes, loss of livelihoods, and lack of economic opportunities. This has led to a general disintegration of social fabric with increasing levels of diseases such as HIV/AIDS.

Households and communities have different opportunities at their disposal which they can use to deal with shocks and stressors they face. These include the following:

- ▶ Formal social support – from government and NGOs,
- ▶ Bonding Social Capital– support from other community members both relatives and nonrelatives,
- ▶ Bridging Social capital - support from relatives and non-relatives leaving outside the community within Zimbabwe,
- ▶ Informal safety net – support from churches and community groups,

- ▶ Remittances – from outside Zimbabwe.

Generally, the wellbeing of the general Zimbabwean has been sturdily decreasing as shown by the Food Consumption Patterns in Figure 4-7 below (FNC, 2019).

- ▶ The proportion of households which were consuming an acceptable diet decreased from 55% in 2018 to 47% (2019).
- ▶ The proportion of households consuming poor diets increased to 24% from 20% reported in 2018. This points towards deteriorating household food access,
- ▶ Most of the households (53%) were consuming borderline to poor diets which is an 8 percentage points increase from the 45% in 2018 indicative of deteriorating food security status among the rural households.

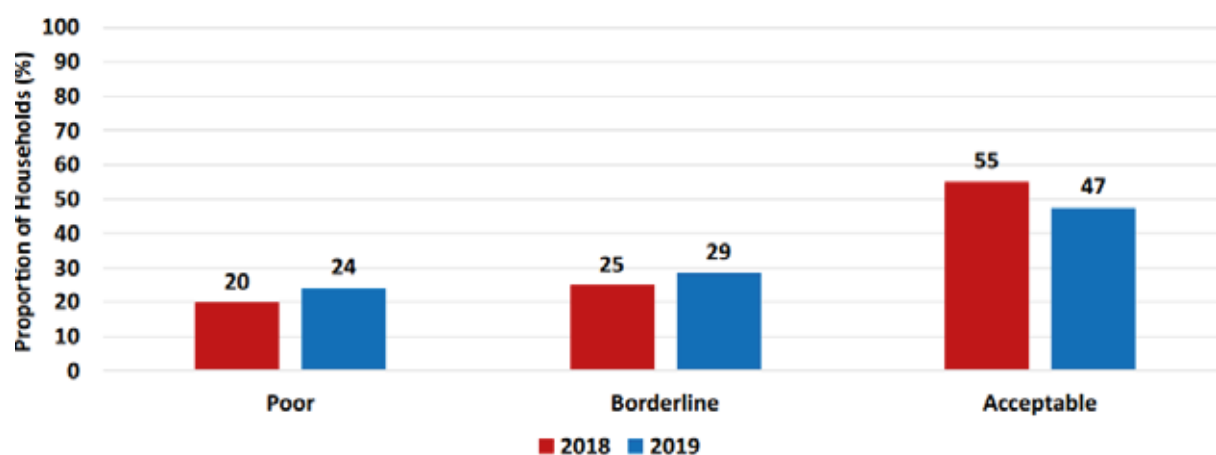


Figure 3-8 Food Consumption Patterns (FNC, 2019)

### 3.5.9 Coping strategies

Table 3-1 outlines the Livelihood Coping Strategies that a household can employ. Zimbabwe as a Nation scored 5.7 on the Coping Capacity Index, indicating 'lack of coping capacity' (UNDP, 2017). Reasons cited for this are infrastructure and institutional challenges, including limited physical connectivity, access to health care, and communication. In addition, corruption, government ineffectiveness and poor governance exacerbate the already fragile situation where socio-economic challenges are linked to multi-dimensional poverty, deprivation, and inequality (UNDP, 2017)

Table 3-1 Household Livelihood Coping Strategies (FNC, 2019)

CATEGORY	COPING STRATEGIES
Stress	<ul style="list-style-type: none"> <li>▶ Borrowing money, spending savings, selling assets, and selling more livestock than usual.</li> </ul>
Crisis	<ul style="list-style-type: none"> <li>▶ Selling productive assets directly reducing future productivity, including human capital formation.</li> <li>▶ Withdrawing children from school</li> <li>▶ Reducing non-food expenditure.</li> </ul>
Emergency	<ul style="list-style-type: none"> <li>▶ Selling of one's land thus affecting future productivity, more difficult to reverse /dramatic in nature.</li> <li>▶ Begging for food.</li> <li>▶ Selling the last breeding stock to buy food.</li> </ul>

Figure 3-8 below shows the households engaging in livelihood coping strategies by province (FNC, 2019). Manicaland (16%), Mashonaland Central (15%) and Matabeleland South (15%) had the highest proportion of households engaging in emergency coping strategies. Whilst the highest proportion of households employing stress strategies were in Manicaland (28%).

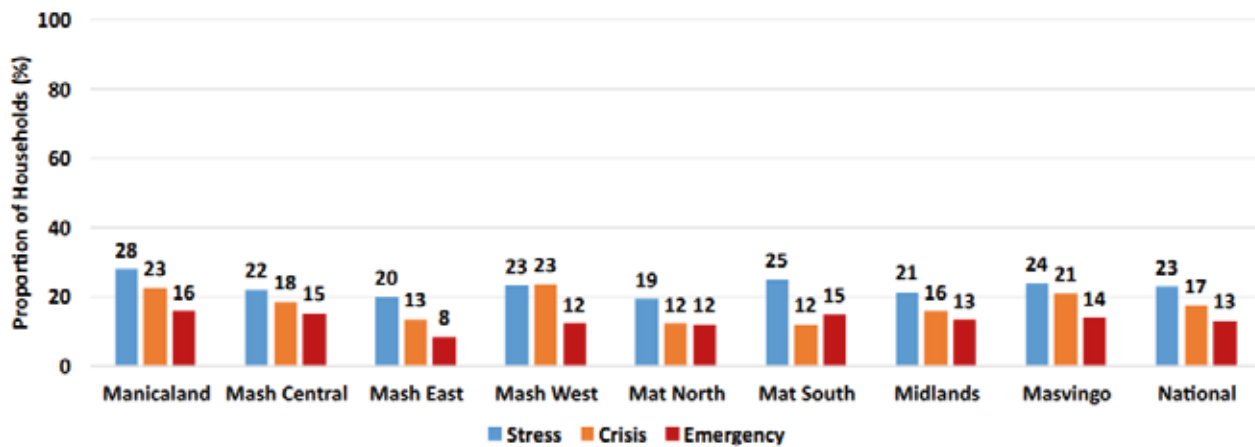


Figure 3-9 Households Engaging in Livelihood Coping Strategies by Province (FNC, 2019)

### 3.5.10 Health

At Independence in 1980, Zimbabwe adopted the Primary Health Care (PHC) Approach in line with the Alma Ata Declaration of 1978. The implementation of the PHC approach resulted in decentralization of health service provision from central level (cities and towns) to administrative wards at district level in the rural communities. Four tiers for health service delivery were established as follows:

- ▶ Quaternary Level: Central Teaching Hospitals with specialist medical services in the capital city Harare, the second largest city Bulawayo and in Chitungwiza,
- ▶ Tertiary Level: Provincial Hospitals with ambulatory and inpatient specialist services in the eight rural provinces of Zimbabwe,
- ▶ Secondary Level: District Hospitals with emergency, ambulatory, and inpatient services in the sixty-two districts of Zimbabwe,
- ▶ Primary Level: Rural Health Centres with primary care services in the 220 wards of Zimbabwe.

The population of Zimbabwe is approximately 16 million (67% rural and 33% urban). Table 4-2 shows the number of hospitals and PHC facilities that serve this population. The public PHC workforce is largely nurse-led, with PHC nurses in rural clinics and nurses, midwives and clinical officers in urban municipality clinics, hospital outpatients and inpatients. Nurse-anaesthetists provide the majority of anaesthesia in urban and rural hospitals, where caesarean sections are the main surgical procedure. Doctors in public PHC provide supervision and teaching, develop guidelines and consult on referred cases. Nearly every district ( $\pm 250\ 000$  population) has at least two medical officers; every PHC centre has at least two qualified nurses; 59% of administrative wards have an environmental health technician and 60% of villages have access to a village health worker. In Zimbabwe 86% of the health facilities are located in the rural areas while 14% are in urban areas.

Table 3-2 Distribution of Health Facilities in Zimbabwe

Level	Number of Facilities
Quaternary Level	6 (3 in Bulawayo, 3 in Harare)
Tertiary Level	8 Provincial hospital in all provinces
Secondary Level	63 hospitals
Primary Level	1634 (rural hospitals, rural health centres, clinics)

This decentralization was associated with a significant improvement of most health indicators in the 1980s and early 1990s.

### 3.5.11 Experiences with Health Services

Generally, the disease burden has been increasing in Zimbabwe as shown by figure 4-9 below. There was an increase in the proportion of households with at least one member living with HIV/AIDS from 12% (2018) 27% (2019), (FNC, 2019).

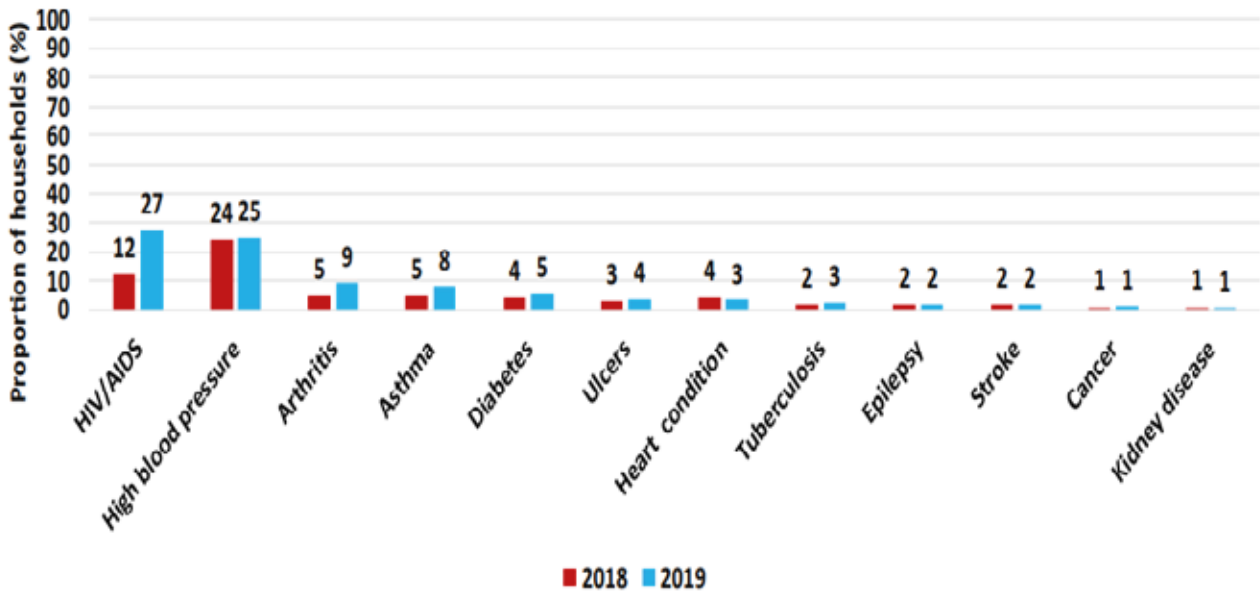
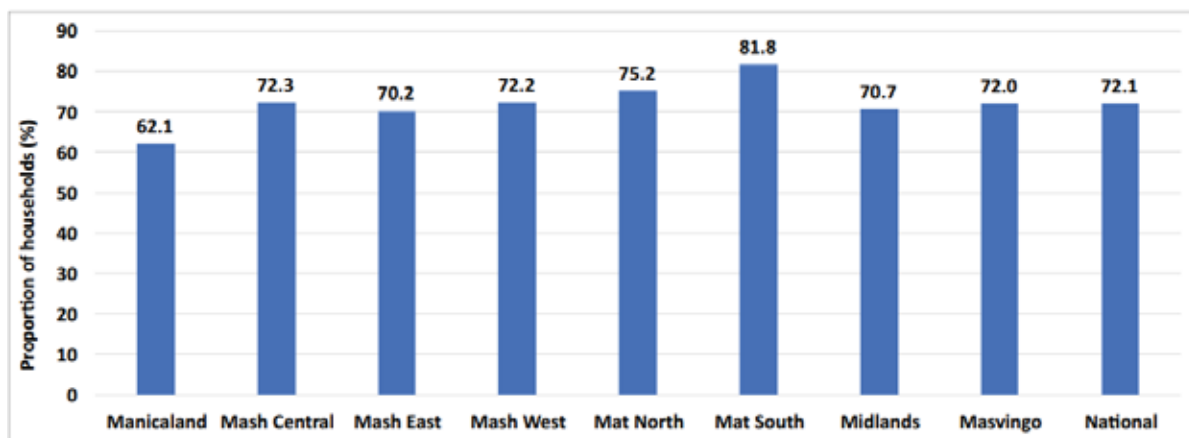


Figure 3-10 Households with at Least One Member Living with a Chronic Condition (FNC, 2019)

The presence of a member living with a chronic condition is likely to increase the household's financial burden. However, even if one can afford healthcare it is not a guarantee that residents will be able to get the medical attention they need. It may also depend on whether qualified staff, functioning equipment, and sufficient drugs are available.

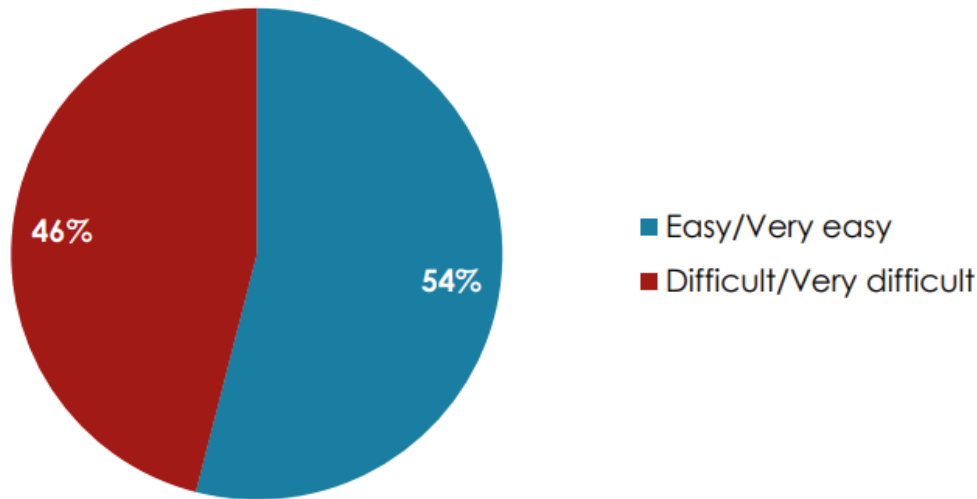
Figure 3-10 below illustrates the ease with which households with at least one member Living with a chronic condition (FNC, 2019) could access treatment services. Approximately a third (27.9%) of households consisting of at least one member living with a chronic condition, reported failure to accessing treatment services. Failure to accessing treatment services for chronic health conditions was high in Manicaland (37.9%).



- Approximately a third (27.9%) of households consisting of at least one member living with a chronic condition, reported failure to accessing treatment services.
- Failure to accessing treatment services for chronic health conditions was high in Manicaland (37.9%).

*Figure 3-11 Access to Treatment Services among Households with at Least One member Living with a Chronic Condition (FNC, 2019).*

In a similar study, Isbell and Krönke (2017) investigated how easy or difficult it was to obtain needed medical care. Of the 59% who had contact with a public hospital or clinic during the year preceding the survey, 54% said it was “easy” or “very easy,” while 46% describe it as “difficult” or “very difficult” (Figure 4-11).



*Figure 3-12 Easy or difficult to obtain medical treatment - Zimbabwe - 2017 (Isbell and Krönke 2017)*

Isbell and Krönke also found out that more rural (58%) than urban (45%) people found it easy to access health services, and those with no formal education (67%) are more likely than their more educated counterparts to find it easy to obtain care. However poor Zimbabweans struggle significantly more to obtain medical care than wealthier citizens.

The Cholera Crisis of 2017 highlighted Zimbabwe’s shortcomings in the Basic Health Care Delivery System. Access to health care is particularly difficult in urban areas, which were the epicentres of the cholera outbreak and now the epicentres of the COVID-19 pandemic.

### 3.5.11.1 General Service Availability

General Service availability refers to the physical presence of health service delivery components within the country. The general service availability index is computed as a composite of health infrastructure, health workforce, and service utilization indicators computed relative to a benchmark.

The general service availability index score for Zimbabwe was 42% in 2015. (Figure 3-8) The health infrastructure domain score was highest at 69% while the lowest was 22% for service utilization. On average, both health workforce density and service utilization were below half of the expected target values. There was a clear need for more trained health professionals which would most likely result in an increase in health service utilization (MOHCC, 2015).



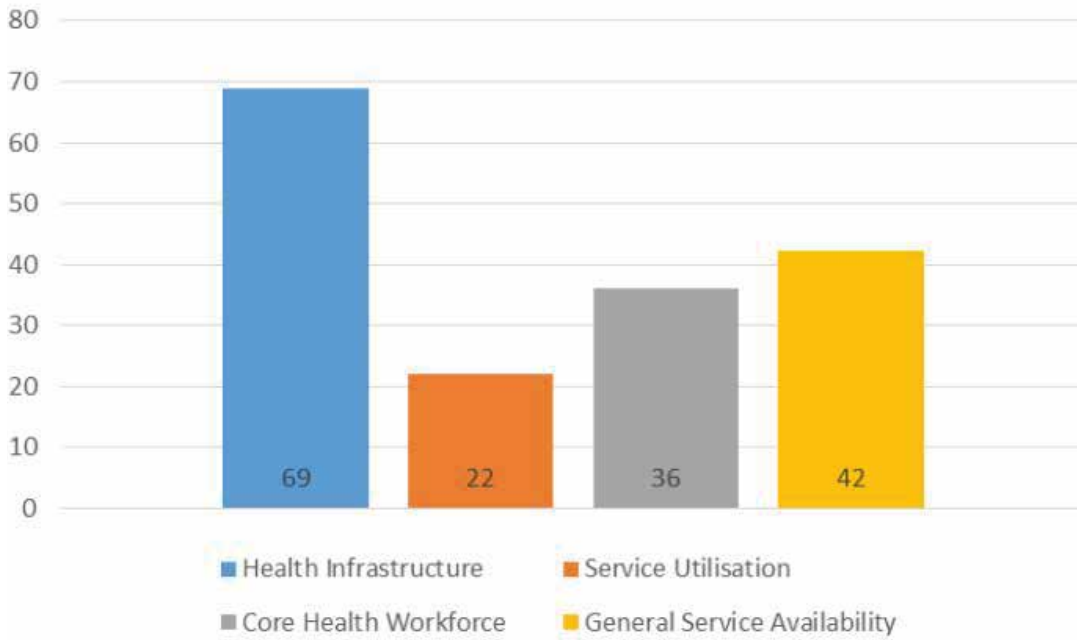


Figure 3-13 General Service Availability index and domain scores for Zimbabwe (MOHCC, 2015)

### 3.5.11.2 General Service Readiness

General Service readiness refers to the capacity of health facilities to provide general health services. It measures the availability of infrastructure, equipment and supplies necessary to provide services within the following five domains: basic amenities, basic equipment, standard precautions, diagnostic testing, and essential medicines. The general service readiness index is a composite score summarizing information from the five domains.

Figure 3-13 below shows that the general service readiness index score was 78%. Urban locations had a higher overall readiness score compared to rural locations. There was not much variation on basic equipment scores between rural and urban locations (69% rural vs 66%) urban. Diagnostics were the lowest at 69%.

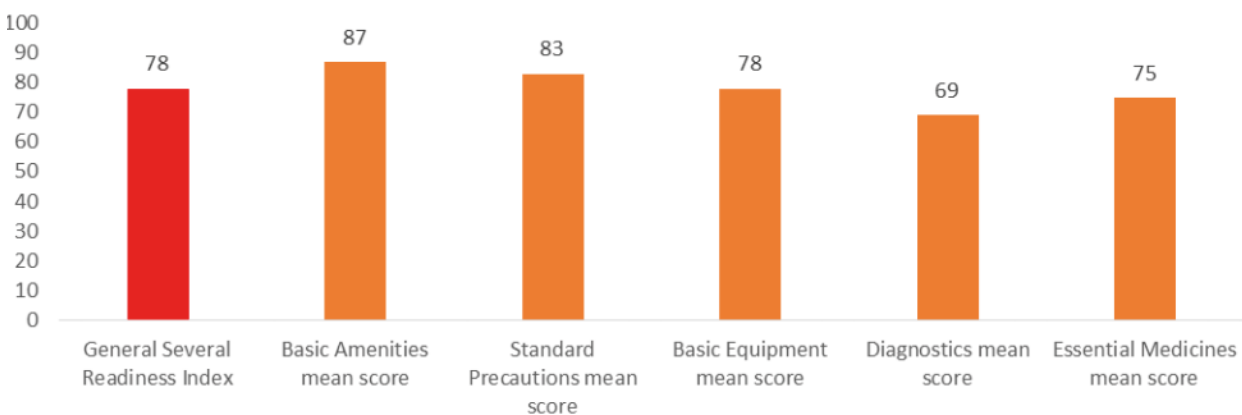


Figure 3-14 General Service readiness index and domain scores nationally, Zimbabwe (MOHCC, 2015)



### 3.5.11. General Readiness for COVID-19 Response

#### a) Quarantine Centres

Over 24 quarantine centres in all the 10 provinces.

#### b) Isolation hospitals

46 isolation hospitals in all 10 provinces in various states of readiness some are accepting patients, others are being renovated to suit purpose.

It should be noted that most of these facilities did not have capacities to handle COVID-19 infections.

Government of Zimbabwe has come up with various remedial measures to ensure compliancy, in line with the current WHO Guidance on COVID-19 covering "healthcare facilities", "waste management", "hazardous materials management", and "construction and decommissioning." The WHO Guidance on COVID-19 complies with the WBG EHSGs.

#### c) Surveillance of COVID-19 Vaccines and AEFIs Management

COVID-19 vaccine safety surveillance will be guided by already existing MoHCC's Adverse Events Following Immunization (AEFI) surveillance guidelines and the WHO COVID-19 Vaccines Safety Surveillance Manual. Safety surveillance for COVID-19 surveillance will be further strengthened through additional:

1. Training of national stakeholders and investigation teams.
2. Training of national AEFI committee on causality assessment of adverse events following COVID-19 vaccination.
3. Training and preparation of health care workers on identification, management and reporting of potential cases of anaphylaxis and ensuring availability of comprehensive emergency tray at all vaccination points. The trainings will be provided as part of a comprehensive COVID-19 vaccine introduction trainings.
4. Instituting active surveillance of Adverse Events of Special Interest following COVID-19 vaccination.

#### d) Zimbabwe AEFI Reporting-Routing, Timeline and Actions

The MOHCC currently uses the following flow chart for AEFI management below. The health care workers at health facilities are responsible for identification of AEFI and immediate notification of the event to the district level. They also complete the AEFI reporting form within 24 hours. The district level is responsible for conducting detailed investigation of the AEFI and this should be done within 7 days of notification. The reporting and investigation forms are then sent to the national level through the province. The national AEFI committee then does causality assessment of the AEFI. Feedback is then provided to the national EPI program, the provincial level, districts level and to the health facility.

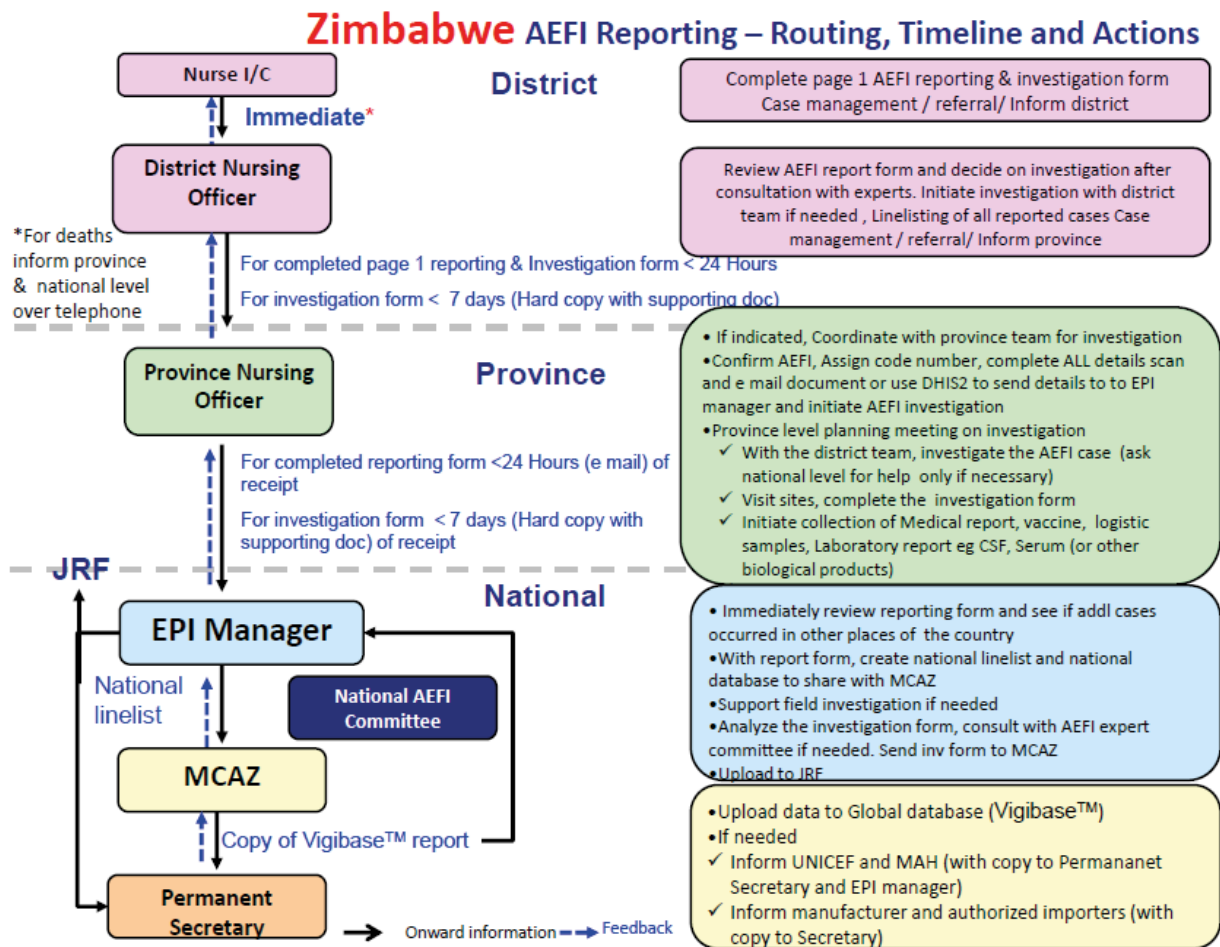


Figure 0-13 Zimbabwe AEFI Reporting-Routing and Timeline

### 3.5.12 Nutrition

The Government of Zimbabwe recognizes that adequate nutrition is a prerequisite for human growth and development, as it plays an important role in one's physical and intellectual development, and consequentially work productivity.

Since 76% of the rural households are considered poor and 23% extremely poor, on average, households are spending over half of their income on food and 33% suffer from food deprivation (ZimVAC, 2017).

While households used fewer and less extreme coping strategies in 2017 than in previous years, there was a decrease in households consuming an acceptable diet and an increase in households consuming a poor diet, as defined by the food consumption score. Overall, 10% of rural households experienced severe hunger in 2017, based on the household hunger score (ZimVAC, 2017, USAID, 2018). The underlying causes of malnutrition include food insecurity, gender inequality, poor hygiene practices and lack of safe water and sanitation. Stunting levels among children under five improved from 32% in 2010–2011 to 27% in 2015, which is considered high according to WHO/UNICEF (ZIMSTAT and ICF 2016; WHO/UNICEF 2017). Stunting levels vary geographically from 19% in Bulawayo province to 31% in Matabeleland South and are higher in rural areas (29%) than urban areas (22 percent). Differences in stunting levels can also be seen according to maternal education and wealth levels—25% of children whose mothers have secondary education are stunted, while the prevalence rises to 45% of children whose mothers had no formal education. Similarly, 17% of children in the highest wealth quintile are stunted, while 33% of children in the lowest wealth quintile are stunted (ZIMSTAT and ICF 2016). 37% of children 6–59 months are anaemic, a substantial improvement from 2010–11 when over half of children suffered from anaemia. Anaemia prevalence varies regionally, from 29% in Masvingo to 40% in Manicaland (ZIMSTAT and ICF 2016).

### 3.5.13 Disadvantaged / Vulnerable Individuals and Groups

The health delivery system must be able to serve even the most disadvantaged and vulnerable individuals, households, and other groups in the communities. Figure 4-15 shows the household vulnerability by province.

Matabeleland South had the highest proportion of households with at least an orphaned child (22%) and Matabeleland North (18%). Manicaland and Midlands provinces had the highest proportion of physically/mentally challenged members (6%), whilst Manicaland, Mashonaland West and Midlands had the highest proportion of chronically ill people (4%).

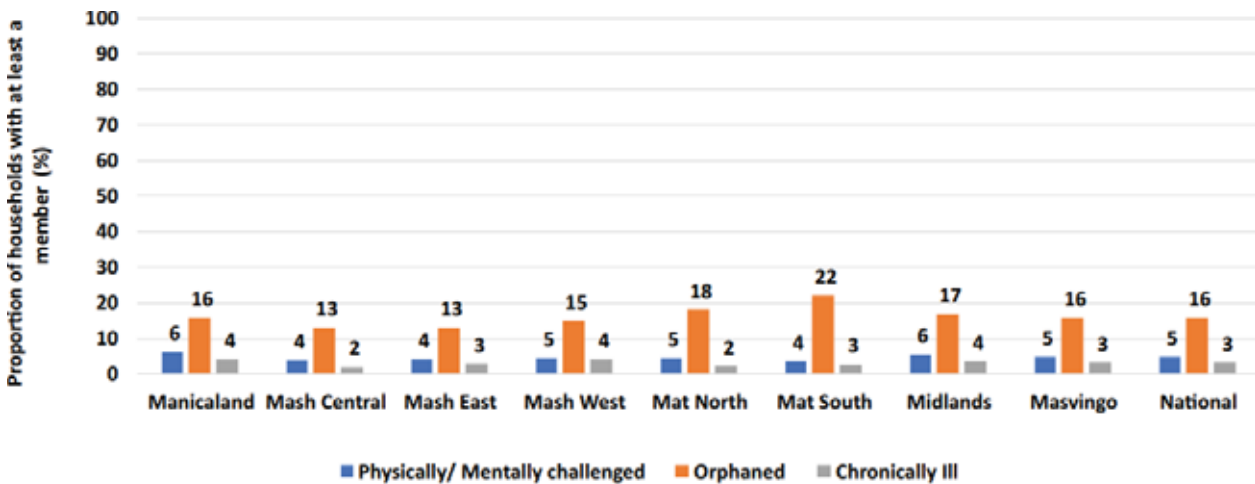


Figure 3-15 Household Vulnerability Attributes (FNC, 2019)

### 3.5.14 Sex and Age of the Rural Household Head

Generally rural households have an average size of 5.4 and a mode of 5 persons in a household, of which 65.8% are male headed and 34.2% are female headed, (ZimVAC 2018). The average age of the household head is 49.3 years, and most members of the households are aged 18-59 years, suggesting that the rural population is relatively young.

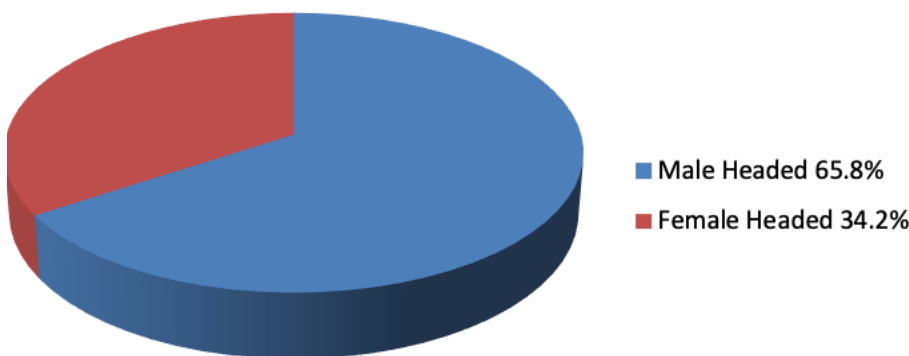


Figure 3-16 Percentage Head of Families

### 3.6 Health Care Waste Conditions

While not discussed in depth here (because the consultant visits and evaluation upon which this ESMF and ICWMP are based are more recent), there was a 2016 assessment of how well HSDSP project facilities complied with the national Health Care Waste Management Plan (HCWMP) which was the project's main ESA instrument at that time conducted by Professor Sara Baisai Feresu of

the University of Zimbabwe's Institute of Environmental Studies. Most of the HCFs sampled were found to not be segregating their waste properly which increased the amount of infectious waste. Another issue that was found mainly at hospitals was that infectious waste was in the majority of cases stored (temporarily) in places accessible to patients and visitors. On the other hand, the review found clinics to perform better in terms of final disposal since they had invested the project's Results Based Financing (RBF) funds in constructing and fencing waste management infrastructure on-site. Hospitals used about 10-40% of the RBF subsidy for health care waste management. Importantly for this project whose vaccination activities will result in needles as the most serious environmental impact of the project, the assessment found that "the most understood concept was the handling of sharps, as this was properly done in all health facilities, both at hospital and clinic level and in all departments of the health facilities."<sup>22</sup> The report found that there was a need for training of HCF staff to practice proper health care waste management using the HCWMP.

In conclusion, the assessment found that the RBF program led to the improvement of health care waste management although participants were not aware of the existence of the HCWMP. The main message of the report was that the RBF effectively financed health institutions to enable the majority of participating institutions to meet the minimum standards prescribed in the HCWMP. A large proportion of the facilities that in the beginning had no functional health care waste infrastructure, with the program acquired at least the basic infrastructure which help them to deliver services in a relatively safe non-infectious environment than before when an earlier baseline rapid assessment was carried out to develop the HCWMP. Thus, waste management improved across the system even though there is still room for improvement.

Generally, in Zimbabwe the issue of Health Care Waste is still desperate and the responsible agencies currently do not have sufficient financial or human resources to adequately respond to it. Although MoHCC has institutionalised HCWM in the Health Care delivery system, the enabling environment for its efficient implementation is lacking such as adequate budgets for repair and / maintenance of waste management infrastructure and/ or installation of new infrastructure and equipment for waste treatment and disposal. To mitigate against the improper treatment and disposal of medical waste there is need for the construction on new incinerators in health facilities. Further, MoHCC has embarked on a nationwide HCWM related training and plans to continue in this drive not only to train staff but also to raise the awareness of the public. These topics are covered more fully in the ZCERP ICWMP.

At each health facility there is an Infection Prevention and Control (IPC) Committee. The IPC Committee is responsible coordinating the implementation of the ICWMP. At smaller rural health centres, it is led by the Nurse in Charge and acts as the focal point on IPC issues. At secondary health facilities and provincial hospital, the IPC committee is led by the District Medical Officer who chairs the committee. The committees ensure regular IPC audits, review and implementation of the ICWMP.

Poor waste management is one of the major challenges facing Health Care institutions. Some do not even have prescribed medical waste disposal methods. The medical waste is at times indiscriminately disposed and given less attention creating an immense threat to public health. Medical waste management still has inadequacies from segregation at source to the final disposal with some medical waste finding its way to the municipal dumpsite. Most incinerators at health care facilities are not operating efficiently and thus not treating the waste at all. Currently most of the HCWM facilities are old and broken down and the first step would be to bring them to some working condition. At the health care facilities, the following applies:

### 3.6.1 Waste Segregation

In most health care facilities, the medical waste that is most often separated from the rest are needles which are placed in designated yellow containers or two litre plastic medicine bottles. The other waste may be segregated into infectious (pink) and non-infectious (black) lined bins (Figure 3-17). However, during transportation to the treatment facilities, the waste tends to be remixed. In some instances, medical waste is not being segregated and its handling poses serious challenges as it is not labelled, either on the bin or the plastic lining.

<sup>22</sup>Baisai Feresu, Sara. "Review of the Implementation of the HCWMP in 18 Rural Districts under the RBF Programme in Zimbabwe" Draft Report, University of Zimbabwe Institute of Environmental Studies. March 31, 2016.



*Figure 3-17 Segregation of waste in a hospital*

### 3.6.2 Temporary storage

Before treatment waste is stored under secure conditions (Figure 4-18). In most health centres there are no appropriate temporary storage facilities and where they are available, they are not being used.



*Figure 3-18 Temporary storage for waste*

In small clinics where the sharps must be transported elsewhere for incineration, they are stored in one of the rooms in the clinic until transport is found. At smaller centres which use lined pits, the sharps containers were being recycled. The needles are tipped into the pit and the yellow sharps box retained and reused.



### 3.6.3 Treatment and Disposal of Waste

#### (i) General Waste



*Figure 3-19 Municipal Landfill and Open pit disposal*

In urban areas general waste is land filled (Figure 4-21) and in rural areas it is burnt in open pits. The large local Authorities like Harare have landfills. The challenge they are facing is the proper running of the landfill sites as resources are scarce and the proper maintenance procedures are being left undone. There are no official disposal sites in the rural areas and each centre must manage its own waste.

#### (ii) Infectious Waste



*Figure 3-20 The incinerator and a lined pit at a hospital*

In most facilities, infectious waste is incinerated or disposed of in lined pits (Figure 4-21). Under the project, all infectious waste will be incinerated in accordance with the EHSs for HCFs. Most of the hospitals have incinerators which are mostly not working due to lack of maintenance and age. Some of the incinerators in health facilities do not operate to the recommended minimum temperature of 1200°C. Medical waste from health facilities with non-functional incinerators will be transported to facilities where there are functional incinerators including private companies. The project has funding for waste transportation under Component 1. In smaller facilities, the organic infectious waste is disposed of in the lined pits (Figure 4-21).

Incineration residues such as fly ash, bottom ash and liquid effluents from flue gas cleaning are not being managed properly at most facilities. The ash is at times dumped in open pits and poses a danger of polluting the environment as they may contain Persistent Organic Pollutants (POPs) due to incomplete combustion in the old incinerators.

### (iii) Sharps



*Figure 3-21 Concrete lined pit for sharps disposal at a Clinic*

In hospitals and clinics with incinerators, sharps are incinerated but in smaller Health Care Facilities sharps are disposed of in lined pits (Figure 4-21). The pits should be secure, and their base must be above the water table. In some instances, the pits were not lined. ZCERP supports vaccination activities so sharps usage is directly impacted by the project. In accordance with the EHS for Health Care Facilities, sharps are to be incinerated. Medical waste incinerators in Zimbabwe do not generate power.

### (iv) E-waste

Currently there is no law or guidelines on e-waste in Zimbabwe. This makes it difficult for existing regulatory institutions to enforce e-waste management effectively. However, there is a private company that has set up e-waste collection points in different outlets in Harare for collection of smaller type of e-waste. For larger types of e-waste, they are sent to another private company (Envionserve) at their depot in Harare. These services are only available in Harare.

## 3.6.4 Sanitation

Sanitation is either by pit latrines, septic tank system, or water borne sewage reticulation as in large urban areas. Most of the Health Care Facilities do not have adequate facilities for the patients and visitors that come to the institutions. The available facilities are either old and dilapidated or broken down altogether. The main problem is lack of maintenance. The existing infrastructure is old and needs replacement in most cases.

## 3.6.5 Health Care Waste Handling Licenses

There are various licenses required for handling and managing health care waste, which include Incinerator Emission Licences, Hazardous Waste Transportation Licences, and Waste Enterprise Licence. All relevant licensing is explained in section 3-4, Table 3-4. Unfortunately, most facilities do not have the required licenses but the project will work with participating facilities to ensure that they will be in compliance with these national rules. Facilities will be trained on safe management of health care waste including on the requirements of relevant legislation such as the Environmental Management Act which requires facilities to be licenced as waste handlers and licensing of their incinerators.



### 3.7 Air Quality

Globally, recent studies have linked air pollution to chronic health problems like cardiovascular and cardiorespiratory deaths in populations. Pollution in Harare, the capital of Zimbabwe, is a source of concern, (Mujuru et al; 2012). Mapira (2015) noted that the main human causes of air pollution in the country which he identifies include: transportation, industrial processes, industrial and non-industrial fugitive processes, energy production, waste management and agricultural activities. Most industries in Zimbabwe are located in urban centres such as Harare, Bulawayo, Gweru, Kwekwe and Mutare. They emit air pollutants like sulphur dioxide, Nitrogen oxide, carbon monoxide, methane and other organic compounds. Zimbabwe has experienced a rapid expansion in vehicular population especially in Harare which holds about two thirds of the vehicle population in Zimbabwe. Of which the vehicles are not roadworthy due to lack of proper maintenance and repair, and many do not have catalytic converters (Mujuru et al; (2012)) and Mapira (2015)). Another contribution to pollution in Harare is attributed to the use of old technology and equipment by industries. Data on air pollution in third world cities such as Harare is scanty or lacking with only a few studies on air pollution having been done in the past. In a study by Mujuru et al.;(2012) found that SO<sub>2</sub> highest pollution of 820 µg/m<sup>3</sup> was in the Southerton industrial area and the lowest pollution of 5 µg/m<sup>3</sup> was in the Central Business District (CBD) of Harare. SO<sub>2</sub> pollution was generally above the World Health Organization (WHO) 24-hour guideline value of 125 µg/m<sup>3</sup>. The highest NO<sub>2</sub> pollution was 46.14 µg/m<sup>3</sup> at a site with a busy road nearby and the lowest was 11.09 µg/m<sup>3</sup> in a high population residential area. NO<sub>2</sub> pollution was generally lower than the WHO guideline value of 40.0 µg/m<sup>3</sup> (annual mean).

The air quality in Harare is compromised by the presence of particulate matter, lead, sulphur dioxide and nitrogen dioxide. Studies have found all these pollutants to be above the air quality guidelines provided by WHO, and of much concern were the levels of SO<sub>2</sub> and particulate matter. The pollutants are transported by wind and travel far away from sources of pollution spreading to residential areas. SO<sub>2</sub> and particulate matter is mainly from vehicles and industrial operations.

Therefore, in accordance with the World Health Organization's guidelines, the air quality in Zimbabwe is considered moderately unsafe. The most recent data indicates the country's annual mean concentration of PM<sub>2.5</sub> is 22 µg/m<sup>3</sup> which exceeds the recommended maximum of 10 µg/m<sup>3</sup>. Contributors to poor air quality in Zimbabwe include the mining, cement, and steel industries, fertilizer manufacturing, vehicle emissions, and waste burning. Available data indicates that Harare has consistently high levels of air pollution.

So, in conclusion, while the airshed is a bit degraded, it does not really matter because the project emissions are insignificant at least from the cars and maybe from incinerators.

### 3.8 Incineration

The WHO (2014) recommended the use of medium temperature double chambered incinerators with a minimum temperature of 850°C for the emergency HCW disposal. This includes disposal of pharmaceuticals except antineoplastic waste that requires a higher temperature of above 1200°C (WHO, 2001, 2014). Correspondingly, two types of sharps containers permitted for use are disposable containers made of plastic or plasticized cardboard, and reusable containers made of metal or plastics (WHO, 2014). According to the WHO (2007), plastic containers are not supposed to be incinerated. In case incineration is the only available option, containers made of materials that emit toxic fumes, ozone depleting substances and gases with higher climate change potential are not permitted (WHO, 2007). Additionally, depending on the amount of waste generated and the other factors, HFs may operate on-site incinerators, or waste may be transported to an off-site incineration facility. Incinerators should have permits to accept health care waste and be properly operated and maintained. Health care waste should be disposed of using pyrolytic or rotary kiln incinerators. Single chamber incinerators should only be used in emergency situations (e.g. acute outbreaks of communicable disease) when other incineration options for infectious waste are not available<sup>23</sup>.

<sup>23</sup>World Bank Environmental, Health and Safety Guidelines for Health Care Facilities

### 3.8.1 Types of Incinerators

Incineration is controlled burning of solid, liquid, or gaseous combustible wastes to produce gases and residues containing little or no burnable material and will be safe to handle. Incineration is a high temperature dry oxidation process that reduces the volume and weight of waste. This process is usually selected to treat waste that cannot be recycled, reused, or disposed of in a landfill, thus healthcare waste. Health-care waste includes all waste generated by health care facilities, research facilities, laboratories and that produced in the course of health care undertaking in the home e.g. dialysis, insulin injections and home based care (needles, syringes, soiled bandages, disposable sheets, medical gloves, dialysis machine filters, plastic catheters and drip set, glass waste, urinary bags, expired medicines, medicine containers, pesticide containers, sanitary napkins, liquid waste and placenta) (WHO, 1998).

Pyrolytic incinerator (Standard /modern incinerator): This is a standard incinerator consist of a primary combustion chamber, which has a treatment capacity of 200 to 10,000 kg/daily, with a maximum combustion temperature ranging from 800 to 900° C. Its requirements in terms of investment and maintenance are not very high; it needs trained staff to operate it hence found in most rural healthcare facilities. This is fuelled by firewood or coal; the residues of wastes are sent to the landfill disposal sites or ash-pits.

Pyrolytic incinerator (Advanced): An advanced incinerator with two combustion chambers, primary and secondary combustion chambers. It has a treatment capacity ranging from 500 to 30,000 kg wastes daily, at a combustion temperature of 1200° or 1600° C. This incinerates even expired medicines, but its initial cost is very high. The incinerator is highly controlled with air pollution equipment and operational practice is specifically designed to reduce formation of dioxins. It needs fuel or electricity to function and highly qualified staff to operate it hence found in central hospitals. The residues of wastes are sent to landfill disposal sites or ash-pits.

To install and operate an incinerator, a licence is required from the Environmental Management Agency (EMA). This is because treatment, disposal of hazardous waste and discharge is a high environmental hazard.

### 3.8.2 Emissions

Pollutants potentially emitted from health care waste incinerators (HWIs) include:

- ▶ Heavy metals,
- ▶ Organics in the flue gas, which can be present in the vapor phase or condensed or absorbed on fine particulates,
- ▶ Various organic compounds (e.g. polychlorinated dibenzo-p-dioxins and furans [PCDD/Fs], chlorobenzenes, chloroethylenes, and polycyclic aromatic hydrocarbons [PAHs]), which are generally present in hospital waste or can be generated during combustion and post-combustion processes,
- ▶ Hydrogen chloride (HCl) and fluorides, and potentially other halogens-hydrides (e.g. bromine and iodine);
- ▶ Typical combustion products such as sulphur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (including non-methane VOCs) and methane (CH<sub>4</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), and nitrous oxide (N<sub>2</sub>O).<sup>24</sup>

### 3.8.3 Climate Change

Zimbabwe is dealing with significant climate change. Global Climate Models (GCM) indicate that most of Southern Africa, including Zimbabwe, is likely to experience higher temperatures (2-4°C higher than the 1961-1990 baseline) in the coming decades, but the picture for rainfall is less clear. While average annual rainfall appears to have changed little over the last 50 years, adverse weather conditions have been increasing with droughts and floods having become more frequent and severe and the onset of the rains less dependable. Zimbabwe ranks 9 out of 16 countries on the Climate Change Vulnerability Index (CCVI).

<sup>24</sup>WB (2007) Health Care Facility EHSG, p6.

Climate models predict that Zimbabwe's climate will be warmer than the 1961-1990 baseline with warming rates of 0.5-2°C by 2030. The climate change predictions for Zimbabwe are that the country will become hotter and drier, with an increase in violent storms. Floods are thereby the most frequent and dangerous hazard for the country, mostly hitting the northern and south-eastern lowlands (along the path of cyclones). The El Nino phenomenon has had ample impacts in the past, an estimated 4.1 million people in Zimbabwe experienced food insecurity in 2016 due to the phenomenon.

The incineration of health care waste involves generation of climate relevant emissions. These are mainly emissions of CO<sub>2</sub>, but also of N<sub>2</sub>O, NO<sub>x</sub>, NH<sub>3</sub> and organic carbon. It has also been observed that black carbon emissions from incinerators absorb heat radiation from the sun and reduce the light's reflecting ability thus causing global warming. Black carbon emissions cause approximately 60% of global warming effects of carbon dioxide (Bond et al.; 2013 and Deangelis, 2011) making it the second most important climate change pollutant.

## 4.0 POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS, IMPACTS AND MITIGATION

### 4.1 Introduction

The ZCEREHSP Environmental and Social risk classification as per WB ESF is Substantial because of the enormity of the COVID-19 challenge (that is, its infectiousness, mortality and pandemic nature), the new vaccines and Zimbabwe's macroeconomic situation. While the risks associated with COVID-19 and infectious medical waste are serious, with use of personal protective equipment and other behaviors outlined in WHO Guidelines, the risks are manageable and should not result in large-scale or significant impacts. Effective administrative, infection-controls, engineering controls and environmental safety controls must be put in place to minimize these serious risks. The project ICWMP outlines these measures to provide infection control and waste management in the project. Potential risks and impacts will be associated with the following ZCEREHSP activities:

- ▶ Support of COVID-19 vaccination activities, setting up solar panels at health facilities, installation of refrigeration units in trucks
- ▶ Fuelling, repair and maintenance of vehicles for vaccine distribution
- ▶ Waste disposal from HCFs including both on-site and at off-site incinerators
- ▶ Actual transportation of goods/materials (i.e., road safety, accidents, traffic, air emissions, etc)
- ▶ Operation of solar panels (hence maintenance and waste disposal)
- ▶ Potential use of on-site emergency generators in case of loss of power and/or issues with solar
- ▶ Procurement and operation of solar powered tricycles (that is maintenance and disposal of solar panels and batteries), use of motorcycle (maintenance and waste disposal)
- ▶ Minor renovations and refurbishment of maternity waiting homes, operating theatres,
- ▶ Installation of medical oxygen reticulation systems,

It is expected that any potential negative environmental and social impacts associated with ZCEREHSP activities will be largely localized and of short-term duration and can be significantly mitigated through adequate planning and implementation of mitigation measures in ESMPs. This would depend on ensuring adequate disposal of medical waste. All project activities carry the risk of promoting COVID-19 infection since they are being carried out during the pandemic therefore all project workers will be supplied with appropriate PPE and will follow MOHCC and WHO protocols to reduce the possibility of transmission amongst themselves and to the public.

Components 2 and 3 of the ZCEREHSP are mainly catalytic activities which will strengthen the capacity of MOHCC to respond to the COVID-19 pandemic. These activities will lead to the generation of medical waste including infectious waste. Covid-19 vaccine deployment activities will also have negative environmental, health and safety risks if an appropriate system for collection, transportation and disposal of medical waste is not put in place. The ZCERP will only support vaccine deployment and will not procure vaccines.

The main environmental risks are related to the handling, transportation, treatment, and disposal of hazardous medical waste, including infectious waste, pharmaceutical waste, chemical waste such as formaldehyde<sup>25</sup> and its waste, ash from incinerators and sharps. Additionally, environmental risks

<sup>25</sup> In the medical field, formaldehyde in an aqueous solution is used for disinfection, sterilization, and preservation of preparations. It is an active gas against all micro-organisms except at low temperature (<20°C); This disinfecting product is recommended for Hepatitis and Ebola virus (but not for HIV/AIDS). The risk associated with formaldehyde is that it can cause cancer. In those applying it. This risk will be avoided by use of proper PPE, washing facilities and the fact that hazardous materials and wastes will be handled according to occupational health and safety guidance provided in the General EHSG Guidelines. The challenges of this disinfection method are that the disinfected wastes still need other methods of final elimination. This method gives highly efficient disinfection in good operating conditions, and some chemical disinfectants are relatively inexpensive.

are also related to minor renovations and refurbishment of maternity waiting homes, operating theatres, installation of oxygen reticulation systems, maintenance and waste disposal from motorcycle repairs and service, e-waste from the use and maintenance of solar powered tricycles. Potential impacts are expected to be limited to the activity site and can be managed through established and proven mitigation measures, including instituting the ZCEREHSP Infection Control and Waste Management Plan (ICWMP). Air emissions from incinerators (or even the use of waste pits for wastewater and/or sharps) can lead to off-site (i.e., outside of HCF boundaries) pollution and may not be reversible.

Some important risks to the project include difficulties with sanitary and hygiene services and the larger national macroeconomic environment. For example, sometimes, temporarily, running water is not available in a given area or facility. Inadequate budget coupled with inflationary environment also makes it difficult to secure necessary supplies such as gloves, soap and other disinfectants. The budget might be adequate at the time of disbursement, but by the time facilities go on the market to procure the material, the prices will have gone up.

The overall residual risk to achieving the new PDO for ZCEREHSP was and continues to be Substantial. Residual macroeconomic and fiduciary risks remain high. The key risks that may negatively impact project implementation are as follows: political and governance, macroeconomic, institutional capacity for implementation and sustainability, and environmental and social.

Taking into consideration the proposed project activities, the potential environmental and social impacts were identified through desk study and a comprehensive stakeholder consultation process. The project is not expected to have any cumulative impacts as defined by the ESF. That is, no negative impacts from the past, and foreseeable developments (including unplanned but predictable activities enabled by the project) are foreseen. The following is an analysis of the anticipated environmental and social impacts of the project.

## 4.2 Environmental Risk/ Impact analysis

Support to COVID-19 vaccine deployment and related health system strengthening particularly RMNCAHN services will have considerable positive outcomes as it aims to prevent, detect and respond to the threat posed by COVID-19 and strengthen national systems for public health to deliver quality RMNCAHN services. However, the COVID-19 vaccination and RMNCAHN activities can also have potential adverse environmental, health and safety (EHS) risks if an appropriate system for collection, transportation and disposal of medical wastes is not put place. Additionally, environmental risks from the project will include construction related risks including EHS and OHS (dust, noise, construction waste, working at height, being hit by objects etc.) emanating from refurbishment of maternity waiting homes; ii) road traffic incidents due to operation of tricycles supporting community health services, vans and motorcycles for health center monitoring ; iii) exposure to hazardous, medical and e-wastes emanating from immunization, and health care operations and digitization and solar powered equipment, if improperly managed; iv) OHS risks during operation of maternity waiting home and management of child illnesses including traps, falls and general wastes management. It is important to note that while the project will support the deployment of WB-eligible vaccines, it will not directly purchase or administer the vaccines. The project is only financing the enabling environment and infrastructure for vaccine delivery and other measures to address COVID-19 pandemic and provision of integrated RMNCAHN services. Vaccination programs or vaccines are not entirely without risk as adverse reactions / adverse events following immunization might sometimes occur following vaccination which may be due to the vaccine or by an error in the administration or handling of the vaccines. Hence, the project will contribute to an appropriate COVID-19 vaccines safety monitoring system to respond to adverse events following immunization (AEFI) cases, if any. Considering the proposed AF activities, such as the integrated outreach service delivery model, community health services including disease surveillance, commodity security, revitalization of MWHs, and health system digitalization and related innovations, the most significant foreseen social risks are related to: (i) exclusion of vulnerable social groups (poor, disabled, elderly, isolated communities, refugees, and people and communities living far from the health facilities, etc.) from access to the essential health services, (ii) inadequate personal data protection under the health system digitalization and related innovations activities, which involve capacity building for using electronic health records and implementing the early warning system using machine learning and artificial intelligence to detect service disruption, (iii) poor labor and working conditions due to a failure to abide by



national legislation and the ESS2 requirements on working hours, wages, overtime, compensation and/or benefits; and (iv) sexual exploitation and abuse, and sexual harassment (SEA/SH) among project workers, with stakeholders and/or local communities. Despite Zimbabwe's considerable capacity to manage the EHS risks associated with the activities, given the enormity of the Covid-19 challenge (its infectiousness, mortality, pandemic nature, etc.), the new vaccines and Zimbabwe's macroeconomic situation, environmental risk of the ZCEREHSP is therefore rated as substantial.

**Environmental and Social risk management.** To address these environmental and social risks and impacts, the Borrower has updated and re-disclosed through MOHCC and Cordaid websites, the safeguard instruments for the parent project (ESCP and SEP) prior to the Decision Meeting date to reflect the AF activities and associated risks, impacts, and mitigation measures. However, since the project is using the condensed procedures as defined in paragraph 12, section III of the Bank Policy (BP) for Investment Project Financing (IPF), the ESMF (which includes the LMP) will be updated and disclosed within 60 days of project's effectiveness date. Due to the scope and type of waste generation in the parent project, the client prepared an Infection Control and Waste Management Plan, which will be reviewed for its adequacy in managing AF-generated wastes and updated accordingly. The current parent project provisions for grievance management, including measures for addressing SEA/SH, remain relevant and adequate for this AF.

#### 4.2.1 Key Environmental Risks

Project main environmental risks include the following in order of significance:

- (i) Infectious medical waste (including infectious materials, liquid effluents, reagents, etc.) generated from project activities. Improper handling, managing, transporting, treatment and disposing of these waste streams pose health and safety risks to health care workers, patients and the public in general from infectious materials, COVID-19 infected waste, radiological waste (from x-rays and the like) and other general waste. Lack of proper segregation of waste at source and non-availability of adequately designed and operated on-site treatment and disposal of the waste can pose risks to waste handling staff, other HCF staff, the environment and local community. The use of inadequate off-site waste treatment and disposal can cause similar risks and impacts, as well as potential risks due to the transport of medical waste to such sites (e.g., accidents, spills).
- (ii) The risk of COVID-19 spreading among project implementors (including health care workers, planners, etc.) and to the public (including those to be vaccinated) is present during all stages of the project discussed below. Poor practices during provision of medical services, blood testing, or analysis of samples without proper protective equipment would pose a risk of infection and possible mortality of healthcare workers. Infection Control and Prevention protocols and strategies are outlined in the ICWMP. Additionally, the project will supply appropriate PPE for all project activities and observe behaviours designed to reduce the spread of COVID-19.
- (iii) OHS risks to workers from installation and operation of solar energy generation equipment and refrigeration units in trucks for transporting vaccines. OHS risks may also include dust, noise, construction waste, working at height, being hit by objects etc.) emanating from refurbishment of maternity waiting homes; installation of oxygen reticulation systems, road traffic incidents due to operation of tricycles supporting community health services, vans and motorcycles for health center monitoring ; exposure to hazardous, medical and e-wastes emanating from immunization, and health care operations and digitization and solar powered equipment, if improperly managed; OHS risks during operation of maternity waiting home and management of child illnesses including traps, falls and general wastes management. General construction related impacts and risks to environment due to solar generation equipment installation.
- (iv) Waste:
  - or oil and other substances emanating from fuelling, repair and maintenance of vehicles for Covid-19 vaccine deployment, motorcycles for disease surveillance and integrated outreach mobile vans
  - emanating from the installation and operation of solar or other energy generating equipment, e-waste from the disposal of solar panels and batteries from solar powered tricycles
  - Contaminated soil at HCFs due to past improper on-site waste treatment or disposal, including waste storage, incinerators and waste pits.
  - Wastewater from HCFs

- (v) Road safety risks from transportation of vaccines and public address vehicles, solar powered tricycles and vans for integrated mobile outreach services, and motorcycles for disease surveillance.
- (vi) Emissions from the incinerators and from the vehicles. Both are expected to be insignificant given the small scale of project activities (mostly needles from vaccination to be incinerated) and the small amount of time the project will operate .
- (vii) Health and safety risks from Installation and/ or repair of oxygen reticulation systems. A slow leak of oxygen gas from a flange, valve, coupling, etc. would most likely be due to poor maintenance, poorly fitted seal, etc., poor connection during filling operation or minor damage. These are mainly human errors of commission with a moderate probability.

#### 4.2.2 Environmental Impact Analysis - Planning Phase

The main impacts and risks related to health and safety during the planning phase are mostly related to generation of medical waste especially hazardous medical waste, HCFs that do not have all applicable EHS licenses/permits and/or do not comply with all regulatory EHS requirements, or those that have material EHS existing liabilities including historical contamination, inadequate present or past onsite medical waste or wastewater disposal or inadequate potable water. Individual facility ICWMPs will also address these issues.

Well in advance of activities that may generate medical waste start, the entity that would generate such waste must submit a waste management plan (the WMP can be in the form of an individual facility ICWMP). The ZCEREHSP ICWMP provides guidance on the required contents of the WMP which should focus on waste management for sharps due to the vaccination activities. The PIE reviews the WMP and once approved, the project can begin the activities. All activities will be conducted within the footprint of the existing government facilities/grounds and no new land will be acquired or accessed and most planning will be for internal installations and vaccine support activities. Project screening including site visits will identify risks which must be mitigated.

#### 4.2.3 Environmental Impact Analysis – Installation Phase

Environmental impacts and risks during the installation phase will emanate from the following activities:

- a. Installation of solar energy panels
- b. Installation solar direct drive refrigerators
- c. Installation of refrigeration units in trucks
- d. Minor renovations and refurbishment of maternity waiting homes and operating theatres
- e. Installation of oxygen reticulation systems

All of the activities pose OHS risks to workers, likely contractors, that will actually install equipment and conduct the minor works. Depending on the location of the installation and renovations, other workers at the facility and the public may also be at risk from work associated hazards. These activities also pose potential impacts and risks to the environment.

##### a. Installation of Solar Plants

Solar panels will be mounted on the ground. Since they are adopting ground mounting, there will be some ground excavation for the panel stands' footing. Installation of the photovoltaic (PV) solar array (the ordered series of panels) involves mounting the array frame on the ground. Approximately 50 m<sup>2</sup> of the ground must be assessed first to check if the existing area (soils) may be contaminated due to past improper waste storage or disposal activities (e.g., contaminated soil) before clearing the ground for installation works. Contaminated land is of concern because of the potential risks to human health and ecology, and the liability it may pose to the polluter/ health facility owners. Contamination of land should be prevented to avoid risk to health and ecological receptors. The preferred strategy for land decontamination is to reduce the level of contamination at the site while preventing human exposure to contamination (See Appendix 14). Solar works will include excavation of the footing (approximately 70 cm deep by 25 cm width depending on the ground stability for each leg stand) and pouring concrete footing for the array frame stand so there may result in generation of cement concrete waste, waste from used cement bags. Fabrication (the onsite process of bending, cutting, welding, moulding, steel structures to create beams, columns, and steel members<sup>26</sup>) for installation of the array stand and installation of PV solar array will likely involve working at heights and carries the risk of dangerous slips, trips and falls. Manual installation

<sup>26</sup>These are vertical structural steel columns used in construction to carry or transfer loads and in this case solar panels.



involves mounting of array frame, cabling (the process of putting electrical cables in place for the purposes of transmitting electrical current to the gadgets/ equipment), interconnecting PV solar arrays and connecting the batteries and the facility to the array power. There are risks of electrocution during installation and these solar modules will generate up to 5-10kilovolts of DC electricity when exposed to sunlight. In addition to the possibility of electrocution while working with the actual PV module, there is a risk of injury by accidentally coming into contact with nearby high-voltage power lines during the installation process. Twenty-nine (29) health facilities will be targeted for installation of solar panels. Solar stands will involve some welding and may pose risks to workers. Potential environmental impacts include clearing of vegetation, dust generation due to earth movement and concrete works, soil erosion from rainfall and storm water, noise, construction related wastes including potential spills.

There is no possibility of mounting panels on roof tops because of the nature of the equipment which is expected to be installed: solar panels generating approximately 5 kV and 10 kV. These will require ground mounting. Therefore, there is little concern about asbestos containing materials that are commonly found on roofs nor is there much possibility of working at heights or fall and trip accidents. Additionally, wiring of the cables will involving also chiselling the walls and may require replastering and repainting afterwards. Solar panels will be installed where the power will be delivered (already existing health facilities). Ground clearing will generally take place on already existing healthcare facilities grounds; that is in areas that have previously been cleared for healthcare or other development.

b. Installation of Solar Direct Drive Refrigerators (SDD). Two hundred fifty 75 litre refrigerators will be supplied as complete plug and play solar systems including a temperature monitoring device. The exterior dimensions of each refrigerator (height x length x depth) are 86.5cm x 82.5cm x 142.5cm. The refrigerators will use a R600a refrigerant which is natural and environmentally-friendly due to its low global warming gas potential (GWP). 250 health facilities will be supported (each receiving 1 refrigerator). The solar refrigerator cabinet must be installed in a secure room with adequate ventilation and where security is a concern, a burglar-proof grill has to be fitted. This involves some minor works again like wall drilling, welding and fabrication. Manual installation involves mounting of array frame, cabling interconnecting PV solar arrays and connecting the cabinet to the array power.

c. Installation of different components of the refrigeration system in the trucks include condenser installation, evaporator installation, pipe connections, pulley installation, compressor installation as well as pumping in the refrigerant which must be free of chlorofluorocarbons.

The units must be installed in the vehicle so there will be some welding and also punching of screw holes which can pose risks to workers and has waste implications.

d. Minor Renovations of the waiting mothers' homes

The activities to revitalize MWHs will involve minor civil works such as renovation and refurbishment of existing MWHs, operating theatres, and no land acquisition or involuntary resettlement impacts are expected. Key Environment risks include i) construction related risks including EHS and OHS (dust, noise, construction waste, working at height, being hit by objects etc.) emanating from refurbishment of maternity waiting homes

e. Installation of oxygen reticulation system

A slow leak of oxygen gas from a flange, valve, coupling, etc. would most likely be due to poor maintenance, poorly fitted seal, etc., poor connection during filling operation or minor damage. These are mainly human errors of commission with a moderate probability. Outdoors, this would be a negligible increase in the oxygen content having no adverse effects on people. Materials that are normally of low combustibility can become highly flammable in an oxygen enriched atmosphere. Dilution in the outdoors atmosphere would result in a negligible increase in the oxygen content and negligible increase in flammability of combustible materials. Exposed skin that comes into contact with the leaking gas may suffer cold burns requiring medical attention.

The medical oxygen reticulation system to be installed inside the building and the main activities are purchasing, actual installation and operation. The purchase will take care of Environmental, Health and Safety (EHS), aspects to ensure that the equipment is environmentally friendly, and it has safety measures to avoid any avoidable accidents. At installation and operation, mainly it is OHS risks which can be included in the ESMF. The risks are generic and happening inside a building.

### (i) Soil and Land Degradation

Although the minor construction work (essentially small-scale alterations) will be limited to the footprint of existing infrastructure, some project activities may involve works that will expose soil to erosion, conduct minor excavation, compaction or deterioration of the soil structure which will potentially decrease or decrease the drainage of the areas when installing equipment. This could generally result in small-scale soil erosion, and generation of dust. The activities will also result in waste generation which could cause soil and land degradation if not properly disposed. Improper operation of incinerators may result in air contaminants affecting both on-site and off-site soils (and humans if present).

Furthermore, there is risk of accidental discharge of hazardous products like paint, leakage of hydrocarbons, oils or grease from machinery and fuelling of vehicles constitutes potential sources of soil, water and land pollution. Any soil, water and land degradation under the project would be insignificant and if it occurs, it will be minimized through adoption of this ESMF's ESMP (see Table 6-6) that details suitable mitigation and management measures to be taken. No lead paint will be used.

### (ii) Installation Waste

Installation activities may produce small amounts of wastes such as excavated soils (which may be potentially contaminated from before the project), cement bags, paint drums, brick and concrete rubble, scrap metal, asbestos containing materials and other debris. Concrete footing for solar panels will require cement for concrete mixtures, resulting in concrete rubble. Metal scrap could result from the cutting and welding of solar panel stands. This debris will be minor in quantity but could pollute the environment, obstruct the public, the movement of the workers and vehicles as well as affect the aesthetics of the environment if not appropriately managed.

Since solar panels will be installed on the ground, it is unlikely that any asbestos will be encountered. Any asbestos containing materials (ACMs)<sup>27</sup> pose serious threats to the health and safety of workers, passers-by and communities in which this work takes place or where the materials will be disposed. Exposure to asbestos may cause cancer. Workers can be accidentally exposed to asbestos through unsafe removal of asbestos. Particular tasks such as use of power tools for cutting, drilling, sanding and sewing can release significant numbers of fibres. However, due to the nature and scope of works, the risk of exposure is low because solar power installation will be on the ground. Roofing materials carry the biggest risk of possessing asbestos, but the project is unlikely to involve them. In the unlikely event that ACMs are found, use of power tools especially on ACMs will be minimised. Precautions will be taken to reduce the chance of asbestos fibres becoming airborne and subsequently being inhaled. The workers' exposure can be reduced by wearing PPE such as masks and appropriate clothing as well as other measures such as not using power tools or restricting access to areas where installations and reparative renovations are taking place. However, since the mounting of solar panels on roofs tops will not take place, it is unlikely that project activities will encounter any other ACM thus, the risk of exposure to asbestos is very low. Guidance for prevention, minimization, and control of impacts from asbestos or ACM is derived from the General EHS Guidelines and the WB Good Practice Note Asbestos: Occupational and Community Health Issues (World Bank Group, May 2009). Such activities are outlined in Appendix 14.

### (iii) Pollution of Ambient Air

This would be very minor and insignificant if any at all from the installation of solar panels since the activities are so small and do not result in emissions directly. Air pollution during construction phase will emanate from dust emissions from ground excavation for solar panel stands and vehicles transporting materials to the project sites. However, during operation of the equipment, there are no air pollution concerns from the equipment as solar equipment will provide cleaner source of energy which does not pollute the atmosphere as fossil fuels would.

### (iv) Pollution of Water Resources

Water quality may be impacted by wastewater discharges from the installation activities if wastes and activities are not appropriately managed. Since the installation activities are minor and being

<sup>27</sup>Guidance for prevention, minimization, and control of impacts from asbestos or asbestos containing Materials (ACM) is derived from the General EHS Guidelines and the WB Good Practice Note. Asbestos: Occupational and Community Health Issues (World Bank Group, May 2009) is outlined in Appendix 14

conducted within existing health facilities, and the resulting materials used or even temporarily left behind will be few, any runoff that may carry away waste or chemicals will not be impacted significantly. The discharge of this wastewater into surface waters could impact water quality temporarily if at all by causing changes to its physical, chemical, and biological properties. Given the possibility of generation of waste/spoil that will be generated, it is likely that the waste will be stockpiled on roadsides and in the health facilities premises before it is removed for final disposal. If it is not properly contained, rains could carry it along with runoff into surface waters, leading to a minor increase in turbidity and siltation and contamination.

#### **(v) Temporary Visual Intrusion**

Construction activities will require material, equipment, and barriers (to prevent unauthorized individuals from injuring themselves and disturbing works) at the health facilities. Since facilities where solar panel installation activities will take place may not be able to completely restrict public access, these activities and materials may cause temporary minor visual intrusion at all sites. Since the scale of activities is very small covering 29 health facilities for installation of solar panels (relatively small structures), these risks and possible impacts will be very minor, temporary and extremely reversible.

This may be exacerbated in the unlikely case that the contractor will set up camp on or near the site. Camp accommodation for workers is not expected to be large and so this should not be a big or long-term concern. For these minor works an average of five (5) people may need to be accommodated on site. Contractors will be required to restore any extraction or other altered sites to avoid leaving marred landscapes.

#### **(vi) Noise**

The installation of solar panels may generate some minor noise which could be an issue at HCFs due to sensitive receptors. For the solar panel installation and other ZCERP activities, the use of heavy or loud machinery is not anticipated, so noise is considered a relatively minor possible yet unlikely impact which is unlikely to cause an issue. In any case, noise prevention and mitigation measures should be applied where predicted or measured noise impacts from a project facility or operations exceed the applicable noise level guideline at the most sensitive point of reception. General EHS Guidelines: Environmental Noise will be applied for management approach and reference levels. Since the EHSG are more for industrial processes and in this case, patients are the most sensitive receptors, the project will go beyond EHSG reference levels and instruct contractors and others that may carry out activities that may disturb patients to structure their work in such a way to reduce or avoid impacts by such measures as moving patients temporarily to another part of the hospital if possible, scheduling work at convenient times, or other means.

#### **(viii) Environmental, Health and Safety Impacts on Patients, Staff, and Other Stakeholders**

Installation work undertaken in the same buildings having patients, staff and visitors has potential to cause injuries to the occupants. At all sites, installation works will have the following potential hazards to patients, visitors and staff:

- ▶ Noise and welding, soldering,
- ▶ Injury from falling or flying debris when installing solar panels,
- ▶ Exposure to refrigerants during installation of refrigeration units in vehicles
- ▶ Fire from improper handling of refrigerants

Although a small risk, the safety of the local population may be at risk during installation activities. Pollutants such as dust and noise, although not significant risks during the project could also have negative implications for the health of the nearby communities.

Camp accommodation for workers is not expected to be large and so this should not be a big or long-term concern. For these minor works an average of five (5) people may need to be accommodated on site therefore, labour influx related issues are not expected to be significant or important.

#### 4.2.4 Environmental, Health and Safety Impact Analysis – Implementation/Operational Phase

Environmental impacts and risks during the implementation phase will emanate from the following project activities:

- ▶ Increased infectious waste (used needles, etc.) and other non-infectious wastes from vaccination efforts, as well as waste water, that the project will support - and the storage transport and treatment/disposal of all solid and liquid wastes,
- ▶ Unintentional increased opportunities to spread COVID-19 resulting from assembling people to be vaccinated,
- ▶ General COVID - 19 response operations,
- ▶ Provision of sustainable energy to the Covid-19 vaccination centres including the generation of waste from solar generation units and potential need to use backup generators in case solar panels are not functioning,
- ▶ Enhanced cold chain supply for effective vaccine storage,
- ▶ Transportation which generate potential traffic related risks (both to community and drivers) and increased noise and air emissions
- ▶ Enhanced cold chain supply for effective vaccine storage transportation
- ▶ Mobile public address systems will carry road safety risks and generate emissions
- ▶ Project vehicles to be fuelled and maintained will generate emissions once in motion and will generate wastes (including petroleum based and others that need special disposal) and waste water, and potential worker OHS risks.
- ▶ Potential EHS risks due to occurrence of either natural hazard (e.g., flood, etc.) or man-made event (e.g., fire, etc.)
- ▶ A slow leak of oxygen gas from a flange, valve, coupling, etc. would most likely be due to poor maintenance, poorly fitted seal, etc., poor connection during filling operation or minor damage. These are mainly human errors of commission with a moderate probability.

##### **(a) Healthcare and other Solid Waste: Infectious Waste Management**

Project activities generate healthcare waste which contains materials both hazardous to humans and the environment. Although HCFs are all different, most of the medical waste is non-infectious general waste, a small percentage is infectious medical waste which is hazardous. This infectious medical waste is expected to be the most significant environmental impact of project activities. Inadequate storage, transportation and disposal of infectious medical waste can pose health risks to workers and communities and the environment. The project ICWMP contains more details on the protocols and standards that will be used to manage this impact and its associated risks. ZCEREHSP is supporting the vaccine delivery system and RMNCAHN services in general causing the facilities to use more medical supplies and generate more health care waste such as sharps, other infectious and non-infectious waste mostly due to increased vaccinations. Non-infectious waste will be collected through municipal refuse collection system and destined for disposal sanitary landfills operated by the local municipalities.

The project has also supported the purchase of PPE for over 1000 vaccination centres to protect worker health and safety from infectious medical waste as well as COVID-19.

The ZCEREHSP is also strengthening the capacity of MOHCC to effectively deploy vaccines and deliver RMNCAHN services through various activities, overall project management, monitoring and evaluation. The project is not supporting procurement of vaccines but is instead enhancing vaccine deployment capacity causing facilities to use more medical supplies, including PPE and needles, and thus generate more health care waste. Installation of solar direct drive refrigerators will also result in the replacement of old vaccine refrigerators which could cause an accumulation of obsolete equipment at health facilities, and the potential for disposal of solar batteries and other wastes. In addition, solar powered tricycles, motorcycles and vans for integrated outreach



activities will also be purchased and this may result in obsolete equipment when they come to the end of their useful life or during repairs and maintenance. At the end of their useful life, the project will dispose of old and obsolete refrigerators, solar powered tricycles, motorcycles, and vans in accordance with the Public Finance Management Act and Public Finance Management (Treasury instructions) regulations. These regulations provide for the processes and procedures to be followed when disposing of government assets. Increased generation of HCW will be mitigated by instituting the requirements of the project ICWMP.

### **(b) Emissions from Health Care Waste Treatment**

Incinerators which are used to safely dispose of infectious waste will yield products such as emissions fly ash, bottom ash and liquid effluents from flue gas cleaning which are also hazardous waste as they may contain high concentrations of POPs which can pollute the air, waterways and other areas if not managed appropriately. Incineration provides very high disinfection efficiency and a drastic reduction of weight and volume of waste. Pyrolytic incinerators, also known as standard/modern incinerators, are the kind of incinerators used mainly for Zimbabwe healthcare waste.

In conclusion, the health facilities and laboratories will generate increased amount of solid waste, such as infectious sharps, infectious wastewater and increased incinerator usage resulting in toxic emissions and ash from incompletely combusted clinical waste which could contain high levels of POPs. These will need to be managed properly to prevent environmental contamination and community exposure to POPs by implementing the requirements of the project ICWMP. Each health facility has a responsibility of managing its own waste. However, it has been noted that there are some facilities which lack proper waste management facilities such as incinerators, these will be supported to transport waste for offsite incineration and disposal. Each generator of waste is required by law to prepare and implement a waste management plan; hence the facilities will be supported to develop individual ICWMPs. Ash residues from incinerators will be disposed in lined pits at the facility. It is important to note that since sharps will not be disinfected with chlorine solutions, POPs are not expected to form during incineration. Health care waste will be properly segregated at the point of generation to prevent sending material that will produce POPs for incineration. The Project or MoHCC will provide the funds for storage, transportation and disposal.

Waste handlers and practitioners must be provided with sufficient and appropriate PPE which must include face masks and eye protection (especially for cleaning of hazardous spills), and respirators (for spills or waste involving toxic dust or incinerator residue).

### **(c) Pollution of Ambient Air**

Air quality will be impacted by emissions from vehicles and as previously discussed above and the incineration of infectious medical waste. Zimbabwe already has degraded air quality, with readings above the WHO Annual Air Quality Guidelines.<sup>28,29</sup> Incinerator emissions may contain Persistent Organic Pollutants (POPs) and other contaminants. POPs can arise from incompletely burnt hazardous waste, during cooling of combustion gases, and from hazardous waste contaminated with POPs, e.g., activated carbon filters used for flue gas cleaning in combustion installations. These POPs are not only emitted with the flue gases at the stack, but are also found in the incineration residues, predominantly in the fly and boiler ashes and in the flue gas cleaning residues. The challenge of hazardous waste incineration is to destroy POPs in the waste as completely as possible, while minimizing the formation and release of POPs that form during cooling of combustion gases. The sharps and PPE are the biggest sources of infectious waste under the project. As mentioned elsewhere, sharps used in vaccination will not be cleaned with chlorine prior to incineration so it is unlikely that the project will produce POPs.

Due diligence of existing incinerators in facilities participating in the project will be conducted to examine their technical adequacy, process capacity, performance record, and operators' capacities as part of each facility-level ICWMP. Each facility that will receive project support for infectious waste generating activities such as vaccination and provision of RMNCAHN services will be required to develop its own ICWMP. The ICWMP will be reviewed and approved by PIE and MOHCC. The Environmental Management Agency routinely conducts site visits to facilities to establish the status of incinerators, and remedial measures will be recommended to those performing below expected standards. Prosecution of a non-compliant facility will be instituted as a final resort. This includes implementation of operational controls including combustion and flue gas outlet temperatures (combustion temperatures should be above 850°C while flue gases need to be quenched very quickly to avoid formation and reformation of Persistent Organic Pollutants (POPs) as well as use

<sup>28</sup>WHO Air Quality Guidelines for Particulate Matter, Ozone, Nitrogen dioxide and Sulphur dioxide, Global update 2005, Summary of Risk Assessment  
<sup>29</sup>Zimbabwe Environmental Management Agency, 2017

of flue gas cleaning devices meeting international standards).<sup>30</sup>Persistent Organic Pollutants are hazardous organic compounds that are resistant to environmental degradation through chemical, biological, or photolytic processes. This resistance means that they bioaccumulate in humans and wildlife with potential adverse impacts on human health and the environment.

All rural health centres participating in the project have incinerators which use low-cost single chamber static grates. Their volume of waste is low. Unfortunately, there is not much maintenance of them. However, some urban, district and provincial healthcare facilities' incinerators have broken down and are not working. Most of the few functioning incinerators in the country fail to reach the 850°C that is required to treat or destroy sharps. As result, some health care facilities are transporting waste to nearby health facilities or district and provincial incinerators for incineration.

Pollutants potentially emitted from health care waste incinerators (HWIs) include:

- ▶ Heavy metals,
- ▶ Organics in the flue gas, which can be present in the vapor phase or condensed or absorbed on fine particulates,
- ▶ Various organic compounds (e.g. polychlorinated dibenzo-p dioxins and furans [PCDD/Fs], chlorobenzenes, chloroethylenes, and polycyclic aromatic hydrocarbons [PAHs]), which are generally present in hospital waste or can be generated during combustion and post-combustion processes,
- ▶ Hydrogen chloride (HCl) and fluorides, and potentially other halogens-hydrides (e.g. bromine and iodine);
- ▶ Typical combustion products such as sulphur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (including non-methane VOCs) and methane (CH<sub>4</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), and nitrous oxide (N<sub>2</sub>O).<sup>31</sup>

The General EHS Guidelines: Health Care Facilities (2007) Table 3 contains the expected air emission levels for hospital waste incineration facilities. Pyrolytic incinerators, also known as standard/modern incinerators are the kind mainly used in Zimbabwe health care settings. Incineration provides very high disinfection efficiency and drastic reduction of weight and volume of waste.

A typical incinerator used in Zimbabwe for medical waste incineration generates 150 tpy in emissions of NO<sub>x</sub>, 50 tpy of SO<sub>2</sub> and 100 tpy of total PM if properly functioning.<sup>32</sup>

It is important to note that the use of incinerators for this project's activities will not result in significant sources of air emissions since most of the infectious medical waste requiring incineration will be needles and small amounts of other infectious medical waste associated with vaccination. However, the infectious waste can be co-mingled with other non-infectious waste along the waste management value chain. Masks, gloves and gowns represents 75% of COVID-19 related medical waste that are non-hazardous if handled properly. However, the remaining 25% is hazardous COVID-19 vaccine waste which include COVID-19 vaccine vials and safety boxes containing syringes and other sharp waste. District and provincial hospitals are expected to produce 2.5 kilogrammes (kg) of hazardous waste per day while primary level facilities are expected to produce 0.2 kg per day of hazardous waste from vaccination activities.<sup>33</sup> This will represent a small volume of the total waste from each facility going to each incinerator so the amount of emissions from actual project activities is actually less than the typical amounts of emissions from an incinerator listed above.

Pollution prevention and control measures include:

- ▶ A facility-based ICWMP and application of waste segregation and selection including removal of the following items from waste destined for incineration: halogenated plastics (e.g., PVC), pressurized gas containers, large amounts of active chemical waste, silver salts and photographic/ radiographic waste, waste with high heavy metal content (e.g. broken

<sup>30</sup> Refer to *Guidelines on BAT/BEP practices relevant to Article 5 and Annex C of the Stockholm Convention on Persistent Organic Pollutants, Section V.*

<sup>31</sup> *WB (2007) Health Care Facility EHS GG, p6.*

<sup>32</sup> *Walker and Cooper (2012) as cited in HSDSP AFV ESMF.*

<sup>33</sup> *Waste Management for COVID-19 in Health Care Settings for Africa, Africa CDC.*



thermometers, batteries), and sealed ampoules or ampoules containing heavy metals.<sup>34</sup> This removed waste should not be burned, incinerated, or landfilled. These wastes will be inertised and sent to safe storage site designed for final disposal of hazardous waste and / or transported to specialized facilities for metal recovery. Sharps and other acceptable categories of hazardous waste are to be incinerated (not deposited in on-site waste pits).

- ▶ Incinerators should have permits issued by authorized regulatory agencies and be operated and maintained by trained employees to ensure proper combustion temperature, time, and turbulence specifications necessary for adequate combustion of waste.<sup>35</sup> This includes implementation of operational controls including combustion and flue gas outlet temperatures (combustion temperatures should be above 850 °C while flue gases need to be quenched very quickly to avoid formation and reformation of POPs) as well as use of flue gas cleaning devices meeting international standards.<sup>36,37</sup> The Ministry of Local Government, Public Works and Housing is in charge of all infrastructure at the HCF of which the incinerators are part therefore it is responsible for incinerator. Since repair or replacement of incinerators are too costly for the project, the project will rely upon transportation of infectious waste to properly functioning incinerators.

Secondary air pollution control measures for hospital waste incinerators (HWI), while not widely used in Zimbabwe, could include the following:

- ▶ Wet scrubbers to control acid gas emissions (e.g. hydrochloric acid [HCl], sulphur dioxide [SO<sub>2</sub>], and fluoride compounds). A caustic scrubbing solution will increase the efficiency for SO<sub>2</sub> control.
- ▶ Control of particulate matter may be achieved through use of cyclones, fabric filters, and / or electrostatic precipitators (ESP). Efficiencies depend on the particle size distribution of the particulate matter from the combustion chamber. Particulate matter from hospital incinerators is commonly between 1.0 to 10 micrometres (µm). ESPs are generally less efficient than baghouses in controlling fine particulates and metals from HWI,
- ▶ Control of volatile heavy metals depends on the temperature at which the control device operates. Fabric filters and ESP typically operate at relatively high temperatures and may be less effective than those that operate at lower temperatures. Venturi quenches and venturi scrubbers are also used to control heavy metal emissions. The volatile heavy metals usually condense to form a fume (less than 2 µm) that is only partially collected by pollution control equipment,
- ▶ Management of incineration residues such as fly ash, bottom ash and liquid effluents from flue gas cleaning as a hazardous waste (see General EHS Guidelines) as they may contain high concentrations of POPs.<sup>38</sup> It is important to note that since sharps will not be disinfected with chlorine solutions, POPs are not expected to be formed during incineration.

The vehicles that will be used for public address, vaccine delivery, and healthcare waste transportation, and vehicles used for coordination activities will generate an insignificant amount of emissions due to the small scale of activities (i.e., small number of vehicles which is about 58 vehicles) from this project. A typical diesel truck emits about 4.6 metric tons of carbon dioxide per year. This number can vary based on a vehicle's fuel, fuel economy, and the number of miles driven per year.<sup>39</sup> Similar to the incinerator combustion processes, emissions from vehicles include CO, NO<sub>x</sub>, SO<sub>2</sub>, particulate matter and volatile organic compounds. Given the insignificant amount of project vehicle emissions, the project will take a preventative management approach to ensure the proper maintenance of vehicles to avoid any unnecessary releases. The project is expected to support 9 national vehicles for coordination activities, 3 vehicles per province for 10 provinces, 2 public address vehicles, 9 refrigerated trucks for vaccine delivery and 8 trucks for waste transportation. Therefore, the vehicle fleet being supported is 58 vehicles which is far below the ESHG threshold of 540 vehicles which is assumed to represent a potentially significant emission based on individual vehicle travelling more than 100,000 km per year using average emission factors. Vehicles will be

<sup>34</sup>WB (2007) Health Care Facility EHS GG, p6.

<sup>35</sup> Technical information on the proper operation and maintenance of hospital waste incinerators may be obtained from WHO (1999) Chapter 8 and the US EPA Handbook on the Operation and Maintenance of Medical Waste Incinerators (2002).

<sup>36</sup>Refer to Guidelines on BAT/BEP practices relevant to Article 5 and Annex C of the Stockholm Convention on Persistent Organic Pollutants, Section V.

<sup>37</sup>WB (2007) Health Care Facility EHS GG, p9.

<sup>38</sup>WB (2007) Health Care Facility EHS GG, p9.

<sup>39</sup>United State Environmental Protection Agency, Office for Transportation and Air Quality, 2018

serviced throughout the country thus any impacts (albeit minor) will be diffuse (not concentrated).

For the waste transportation trucks, each truck will cover one province collecting waste from central, designated points in districts and transporting it to provincial or regional incinerators. It is important to note that not all HCF require off-site incinerators.

In addition to complying with national programmes, the following approaches will be considered: regardless of the size or type of vehicle, fleet owners/operators should implement the manufacturer recommended engine maintenance programs, drivers should be instructed on the driving practices that reduce both the risk of accidents and fuel consumption, including measured acceleration and driving within safe speed limits.

Activities to modify buildings and HCF sites during installation could lead to dust (soil related) and cement dust and the release of carcinogenic asbestos fibres which can affect workers, patients, and staff. Deteriorated indoor air quality will be of critical effect to especially asthmatic construction workers, and patients, with either minor or severe health impact depending on level and duration of exposure. However, risk of asbestos exposure is low in the project since installation of solar panel will involve ground mounting.

The *Pollution of Ambient Air* will be minimized through adoption of this ESMF's ESMP (see Table 6-8) that details suitable mitigation and management measures to be taken, institution of dust suppression measures, as well as use of suitable clothing and protective equipment.

#### **(d) Pollution of Soil and Water**

Pollution of solid ambient ground water or surface water may also occur from oils and fuels as a result of the fuelling and maintenance of vehicles. Similarly, improper disposal of medical waste such as sharps and all other construction and operation phase wastes (including wastewater) can also result in pollution of soil and water bodies. Contamination can also occur during construction due to erosion and subsequent sedimentation. *Pollution of Ambient Water* possibilities will be minimized through adoption of this ESMF's ESMP (see Table 6-8) that details suitable mitigation and management measures to be taken.

#### **(e) Provision of sustainable energy to the COVID-19 vaccination centres**

The solar power is environmentally friendly (i.e. it is not fossil fuels which release air pollutants) and sustainable so this is actually an environmental benefit of the project. Solar power will be installed in select health care facilities depending on needs and resources. Back-up diesel generators will be used to supply power in case the solar power fails. However, the previously analysed installation process can pose occupational, health and safety (OHS) risks to the installers and it does generate some vegetation removal, exposed soils, solid wastes which should be disposed of appropriately in order to avoid pollution and contamination of land and water which would also pose potential risks to community health and safety. At the end of their useful life (25-30 years) solar panels and SDD refrigerators will need to be disposed of appropriately. Such waste constitute electronic waste. The current legal instruments are not clear on the management of electronic waste in Zimbabwe. Zimbabwe has no legislation or policy on electronic waste management. The available Environmental Waste Management Act (20:27) only prohibits the discharge of hazardous substances into the environment, but there is no specific legislation regulating electronic waste.

#### **(i) Enhanced cold chain supply for effective vaccine storage and transportation**

In order to maintain their effectiveness, the vaccines need to have a dependable cold chain supply to keep their temperature at the required level. One of the risks to the maintenance of this temperature are common power outages or electricity bills that may be too high for the health or other facility that would provide vaccinations. A mitigation measure to provide storage at a constant temperature and less expensively, the project is going beyond compliance to provide direct-drive solar vaccine refrigerators. As mentioned earlier, installation of the direct-drive refrigerators will also result in the replacement of old vaccine refrigerators which could cause an accumulation of excess refrigerators or obsolete equipment at health facilities and, depending on the model, some small batteries once used. Both the batteries and refrigerators will need to be disposed of appropriately at the end of their useful lives. Solar Direct Drive (SDD) refrigerators have a life span of about 15 years depending on the make. Therefore, installation of SDD refrigerators will displace refrigerators already in place. The disposal of obsolete, unusable, unserviceable or excess refrigerators will be

guided by the Public Finance Management (Treasury Instructions) regulations of 2019, SI 144 of 2019. The Statutory instruments provides for the disposal of such equipment through i) transfer to another department with or without financial adjustment, ii) sale by public tender, iii) sale by public auction, iv) destruction, dumping, or burying, v) trade in or any other method recommended by the Procurement Regulatory Authority of Zimbabwe (PRAZ). Some refrigerators come with small batteries to power the fan. Typically, the batteries used in refrigerators have a life span of 5 years but can range up to 10 years. These smaller ancillary batteries used in SDD refrigerators are sealed gel batteries which are maintenance free and do not require topping up with distilled water. These are lower in cost than batteries used in other battery powered solar refrigerators. Ancillary batteries need to be replaced upon failure. It is important to have a scheduled battery replacement every few years to avoid unexpected systems failures. Upon reaching their life span, if the batteries are not disposed of properly can cause environmental and social challenges through contamination of the environment and water bodies with lead as well as causing lead poisoning in humans. The batteries need to follow proper disposal procedures which include recycling by sending them to recycling companies and in Zimbabwe there are companies such as Chloride Zimbabwe and Battery World which recycle these batteries. Transportation of vaccines (9 vehicles) and 3 vehicles for public address systems, and 8 vehicles for off-site waste transportation will carry common road safety risks. However the risk can be compounded by poor and damaged roads which are in a state of disrepair. the risk will be minimal because the all drivers engaged by the MOHCC are licenced and in addition will have undergone a Defensive Driving Course prior to engagement.

Pollution of land and water may also occur from improper management of oils, fuels and waste as a result of the fuelling and maintenance of vehicles one of the project activities. The risk of pollution can be minimized through adoption of mitigation and management measures detailed in this ESMF's ESMP (see Table 6-6).

### **(g) Occupational Safety and Health**

The movement of trucks to and from some HCFs for waste transportation, vaccination activities, operation and use of solar powered tricycles and vans for integrated outreach services, motorcycles during disease surveillance, and contractor workers involved in minor renovations and refurbishments of the maternity waiting homes and operating theatres will expose the workers to work-related accidents and injuries. Pollutants such as dust and noise could also have negative implications for the health of workers. There could be increased risk of work-related accidents as a result of lack of use of PPE by workers. Any cases of work related severe injuries or death (except for Covid-19 caused) must be reported to the PIE which will report to the World Bank with immediate effect such as within 24 hours of occurrence.

Workers operating incinerators are exposed to the following: working at a high heat, which put the worker at a risk of burns. Heat may lead to fires, carbon monoxide poisoning. During burning of refuse, it may yield substances that may be hazardous or even poisonous. The incinerator operator's job is physically hard and may lead to pain and other problems in hands, arms, the lower back parts. Working in hot and humid environment may cause tiredness and general ill feeling for the incinerator operator. To mitigate against the these OHS effects, there is need for appropriate PPE to be provided to the incinerator operator. Install effective exhaust ventilation to prevent air contamination and local exhaust ventilation if necessary. There is a need to arrange for the periodic inspection of incinerator vessel integrity to detect metal cracking as well as the training of incinerator operators of safe lifting and moving techniques for heavy or awkward loads.

Health care providers and personnel may be exposed to general infections including COVID-19, blood-borne pathogens, and other potential infectious materials (OPIM) during care and treatment, as well as during collection, handling, treatment, and disposal of health care waste. The following measures are recommended to reduce the risk of transferring infectious diseases to health care providers:

- ▶ Formulate an exposure control plan for blood-borne pathogens,
- ▶ Provide staff members and visitors with information on infection control policies and procedures,
- ▶ Establish Universal / Standard Precautions to treat all blood and other potentially infectious materials with appropriate precautions, including:
- ▶ Immunization for staff members as necessary (e.g. vaccination for hepatitis B virus)

- ▶ Use of appropriate PPE
- ▶ Adequate facilities for hand washing. Hand washing is the single most important procedure for preventing infections (e.g. nosocomial and community). Hand washing should involve use of soap / detergent, rubbing to cause friction, and placing hands under running water. Washings of hands should be undertaken before and after direct patient contacts and contact with patient blood, body fluids, secretions, excretions, or contact with equipment or articles contaminated by patients. Washing of hands should also be undertaken before and after work shifts; eating; smoking; use of personal protective equipment (PPE); and use of bathrooms. The LMP and the ICWMP contain detailed procedures, based on WHO guidance, for protocols necessary for testing, administering vaccines and handling medical waste as well as environmental health and safety guidelines for staff, including the necessary PPE.

Traffic accidents have become one of the most significant causes of injuries and fatalities among members of the public worldwide. Traffic safety should be promoted by all project personnel during displacement to and from the workplace, and during operation of project equipment on private or public roads. Prevention and control of traffic related injuries and fatalities should include the adoption of safety measures that are protective of project workers and of road users, including those who are most vulnerable to road traffic accidents; The following measures will be adopted to ensure safety of the workers and the public:

Adoption of best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public. Measures should include:

- ▶ Emphasizing safety aspects among drivers
- ▶ Improving driving skills and requiring licensing of drivers
- ▶ Adopting limits for trip duration and arranging driver rosters to avoid overtiredness
- ▶ Avoiding dangerous routes and times of day to reduce the risk of accidents
- ▶ Use of speed control devices (governors) on trucks, and remote monitoring of driver actions
- ▶ Regular maintenance of vehicles and use of manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.

However, implementation of mitigation measures stated above will help reduce OHS risks associated with the project.

#### **(h) Environmental, Health and Safety Impacts of Operational Activities on Patients, Staff, and Other Stakeholders**

Inappropriate handling of COVID-19 samples and patients can expose community and could lead to further spread of the disease. Non-provision of medical services to disadvantaged or vulnerable groups is a potential risk under the project. The project ICWMP will contain guidelines on specific measures to prevent the spread of diseases in the community from infectious medical waste. This ESMF contains measures to ensure health and safety in the community from project activities and safety of services as they relate to health care facilities, vaccine roll out, emergency preparedness measures including measures to address a plan for cold chain storage during power outages and natural disasters (Appendix 13). GBV/ SEA/SH risks will be ameliorated through training of every worker engaged in the project on OHS and GBV/ SEA/SH risks and be required to sign a code of conduct.

COVID-19 vaccine safety and surveillance will be guided by the existing MOHCC's Adverse Events Following Immunisation surveillance and the WHO Vaccines Safety Surveillance Manual. The



project will regularly integrate the latest guidance by WHO as it develops over time and experience addressing COVID-19 globally especially with respect to reducing the risk of the project spreading COVID-19 to the public in general. Additionally, the project will conduct risk communication and community engagement activities to raise awareness and dispel misinformation in the affected areas including the vulnerable and marginalised groups, use of proper PPE for COVID-19 prevention measures

No one will be forced to get the vaccine.

The project will abide by Section 3.3 (Life and Fire Safety) of the World Bank Group (WBG) General Environmental, Health and Safety Guidelines (EHSGL) as it relates to fire and other safety standards for new buildings and existing buildings programmed for renovation with the use of the Bank funding. These requirements apply to buildings programmed for renovation, whether occupancy type is maintained (e.g., a hospital renovation) or changed (e.g., an office building is converted to a hospital).

The use of the Military or Security Personnel is not currently envisioned for any activities related to the Project.

#### **(h) Adverse Events Following Immunization (AEFIs)**

For the Government of Zimbabwe through MOHCC, vaccine protection is an integral aspect of immunization programs and requires the participation of multiple stakeholders whose primary mandate is to control immunization safety. In partnership with ZEPI, the National Pharmacovigilance and Clinical Trials Committee, MCAZ, are the main drivers of this enterprise.

COVID-19 vaccine safety surveillance will be guided by already existing MoHCC's Adverse Events Following Immunization (AEFI) surveillance guidelines and the WHO COVID-19 Vaccines Safety Surveillance Manual. Safety surveillance for COVID-19 surveillance will be further strengthened through additional training of MOHCC health care workers on causality assessment of adverse events following COVID-19 vaccination, identification, management and reporting of potential cases of anaphylaxis and ensuring availability of comprehensive emergency tray at all vaccination points. The trainings will be provided as part of a comprehensive COVID-19 vaccine introduction trainings. The project will also hire a Social Specialist to oversee the management of social risks and impacts associated with the project as well as the implementation of the project GRM and Gender Based Violence Action Plan (Appendix 12).

#### **4.2.5 Risks Associated with Hazardous Work**

Hazardous manual tasks include lifting, lowering, pushing, pulling, carrying which require sudden use of force, repetitive movements and awkward posture. Lifting, carrying and/or pushing cement, sand and other construction materials to storage areas or from storage areas to the working zones for on-site mixing of concrete and other activities as well as lifting heavy construction equipment like generators, doors and windows may involve situations that put undue stress on the waist, central spine and other body parts of site workers. Another type of hazardous manual tasks is hand, arm and/or body vibrations resulting from the single or prolonged use of jack hammers and power drills on site. Sprayers, painters, labourers, and steel benders working on new constructions, rehabilitation and installation at the selected EmONC (hub) facilities, One Stop GBV Centres, school clinics and POE may be exposed to emissions, dust and naked oxy acetylene flames respectively during treatment of wood to be used as roof members and form work, painting as well as cutting and welding during the construction or rehabilitation of the selected project facilities. During mixing and carting of concrete and masonry, concrete may also splash into the eyes of the workers involved in the aforementioned activities. Similarly, dripping paints, oils and lubricants from high elevation may come into contact with the eyes of site workers, adversely affecting the eyes. These incidents may lead to immediate or long-term visual impairment and/or blindness, therefore eye hazards are of major consequences with a likely occurrence. The health risks associated with hazardous tasks under the QEHSSP will be limited to site workers and hired hands for loading and off load building materials and equipment.

### **Incidence of Work-Related Accidents**

Accidents may occur during the new constructions, installation and rehabilitation works leading to injuries and potential loss of life involving employees of Sub Project Contractor, their Sub-Contractors and suppliers as well as employees of the selected facilities to be rehabilitated or during new constructions. Common accidents related to civil and rehabilitation works as well as installation of equipment and facilities include burns, cuts, slips and falls resulting from poor housekeeping and signage on site, installation and operation of equipment. Other causes of work related accidents are failure to adhere to equipment manufacturers' specifications and the use of Personal Protective Equipment (PPEs).

### **Poor Conditions of Service**

Sub Project Contractors and Sub-Contractors as well as suppliers may practice unfair/discriminatory recruitment practices (e.g., against women) and may attempt to subvert the national labour laws with practices such as paying wages lower than the national minimum wage, asking workers to work overtime without pay, denying women maternity leave and corresponding allowances and employ persons without formal contracts. Health/allied health workers and other ancillary workers, who will be recruited or posted to work in the rehabilitated EmONC facilities and POEs as well as the newly constructed pilot Bio-medical Waste Treatment Facility, One Stop GBV Centres and School Clinics can also be subjected to similar infractions.

### **Incidence of Child Labour**

Sub Project Contractors, their sub-contractors and suppliers may recruit unqualified or under aged persons to work on site and other related activities.

### **Exposure to Infectious Diseases**

Waste handlers, health and allied health workers at the selected EmONC (Hub) Facilities, school clinics, POEs and One Stop GBV Centres may pick up infections including COVID-19 leading to morbidity and mortality in the line of duty.

### **Incidence of Gender Based Violence, Sexual Harassment and Sexual Exploitation and Abuse**

Teachers, health and allied health workers employed within the selected EmONC (Hub)/ health facilities, those to be employed within the new One Stop GBV Centres and site workers can become survivors or perpetrators of Gender Based Violence, Sexual Harassment and Sexual Exploitation and Harassment.

### **Accidents involving Contractors and Suppliers Trucks and Equipment**

Haulage and trucks and equipment belonging to Project Suppliers, Sub Project Contractors and Subcontractors may be involved in accidents leading to the loss of life and property, injuries and spillage of materials within project catchment communities and along haulage routes.



## 4.2.6 Potential Environmental, Health and Safety Impacts

The table below outlines potential environmental impacts from planning, installation and operation phases of the project

**Table 4-1 Potential Environmental Impacts**

REF:	PARAMETER UNDER CONSIDERATION		
CATEGORY	CAUSE	IMPACT	
	<b>PLANNING PHASE</b>		
(i)	Physical Restrictions on building space	<ul style="list-style-type: none"> <li>▶ Project activities will not acquire any new land</li> <li>▶ Solar power equipment installations will be on already-existing building sites</li> </ul>	<ul style="list-style-type: none"> <li>▶ presence of hazardous and flammable materials</li> <li>▶ presence of Asbestos Containing Materials (ACM)</li> </ul>
	<b>INSTALLATION AND OPERATION PHASE</b>		

REF:	PARAMETER UNDER CONSIDERATION		
CATEGORY	CAUSE	IMPACT	
(i)	Increased generation of Health Care waste	<ul style="list-style-type: none"> <li>▶ Use of more medical supplies by the enhanced Health Delivery system</li> <li>▶ Increased utilization of health services</li> <li>▶ Availability of more vaccines</li> <li>▶ Increased use of PPE because of COVID-19 precautions</li> <li>▶ Replacement of obsolete refrigerators, equipment for the care and management of new-borns</li> <li>▶ Poor disposal of small ancillary barriers for refrigerator's batteries</li> <li>▶ Refrigerant with CFCs</li> <li>▶ Incinerator operation to mitigate health care waste generated</li> </ul>	<ul style="list-style-type: none"> <li>▶ Generation of more health care waste such as sharps, infectious and non-infectious waste, and toxic fly ash</li> <li>▶ Increased PPE waste generation</li> <li>▶ Increased generation of clinical and infectious waste</li> <li>▶ Increased accumulation of obsolete equipment</li> <li>▶ Contamination of the environment with lead from the batteries and community health and safety issues for people who come into contact with battery lead and acid</li> <li>▶ CFCs can cause ozone depletion</li> <li>▶ Incinerators: a) improperly operated can cause the release of unsafe wastes that can harm humans and pollute the environment b) pose OHS risks to operators and other health care workers that may come in contact with an incinerator</li> </ul>
(ii)	Soil and Land degradation	<ul style="list-style-type: none"> <li>▶ Minor installation work (essentially small-scale alterations) may expose soil to erosion, compaction, or deterioration of the soil structure</li> <li>▶ Accidental discharge of hazardous substances such as fly ash, bottom ash from incinerators</li> <li>▶ Improper incinerator operations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Decrease or increase the drainage of the areas</li> <li>▶ Soil erosion</li> <li>▶ Generation of dust</li> <li>▶ Soil and water pollution</li> <li>▶ Air contaminants affecting on-site and offsite soils (and humans if present)</li> </ul>

REF:		PARAMETER UNDER CONSIDERATION	
CATEGORY	CAUSE	IMPACT	
(iv)	Pollution of Ambient Air	<ul style="list-style-type: none"> <li>▶ Emissions from vehicles</li> <li>▶ Emissions from building equipment and released particulate matters (dust)</li> <li>▶ Cement dust from demolitions</li> <li>▶ Emissions from incinerators</li> </ul>	<ul style="list-style-type: none"> <li>▶ Pollution of air</li> <li>▶ Deteriorated indoor air quality</li> <li>▶ Increases in bronchial disorders</li> <li>▶ Impaired visibility on the roads</li> </ul>
(v)	Pollution of Soil and Water	<ul style="list-style-type: none"> <li>▶ Wastewater discharges from the installation activities and HCF operations</li> <li>▶ Erosion processes introduce pollutants and particulates into the water</li> <li>▶ Rainwater run-off from the health facility sites</li> <li>▶ Liquid effluents from flue gas cleaning of incinerators are a hazardous waste</li> <li>▶ Oils from fuelling, repair, and maintenance of vehicles</li> </ul>	<ul style="list-style-type: none"> <li>▶ Discharge of this wastewater into surface waters impacts on water quality by causing changes to its physical, chemical, and biological properties</li> <li>▶ Effluent pollutes soil and water resources</li> <li>▶ Littering and indiscriminate dumping of solid waste pollutes land and water resources</li> <li>▶ Poisoning of aquatic and inland ecosystems.</li> <li>▶ Loss of ordinary use of water</li> <li>▶ Oil discharges pollute water and inland ecosystems</li> </ul>
(vii)	Temporary Visual Intrusion	<ul style="list-style-type: none"> <li>▶ Installation requires materials to be stored at site</li> </ul>	<ul style="list-style-type: none"> <li>▶ Change of the aesthetics of project area</li> </ul>
(viii)	<b>Disruptions from Installation Activities</b>		
(b)	Temporary disruption of Health Care Services	<ul style="list-style-type: none"> <li>▶ Blocking sections of the facility for installation</li> </ul>	<ul style="list-style-type: none"> <li>▶ Shortages of working space or inconvenience</li> </ul>

REF:		PARAMETER UNDER CONSIDERATION	
CATEGORY	CAUSE	IMPACT	
(c)	Occupational Health and Safety Issues	<ul style="list-style-type: none"> <li>▶ Weak technical capacity and/or negligence on operation of vehicles and machinery</li> <li>▶ Lack or inadequate use of safety gear may also contribute to accidents that may result in trauma and other casualties</li> <li>▶ Road safety risks from transportation of vaccines, personnel and public address vehicles</li> </ul>	<ul style="list-style-type: none"> <li>▶ Temporary and permanent physical injuries</li> <li>▶ Bronchial diseases from dust</li> <li>▶ Loss of life</li> <li>▶ Injuries to personnel</li> <li>▶ Loss of life</li> <li>▶ Damage to vehicles</li> </ul>
(d)	Impacts of Installation activities on Patients, Staff, and Other Stakeholders	<ul style="list-style-type: none"> <li>▶ Noise and vibrations during works.</li> <li>▶ Spillages and dust during transportation of materials.</li> <li>▶ Falling from tripping on building materials.</li> <li>▶ Falling or flying debris</li> </ul>	<ul style="list-style-type: none"> <li>▶ Temporary and permanent physical injuries</li> <li>▶ Bronchial diseases from dust</li> <li>▶ Loss of life</li> <li>▶ Cracking of existing structures from vibrations</li> </ul>
(e)	Installation and Construction Waste	<ul style="list-style-type: none"> <li>▶ Installation wastes may include:</li> <li>▶ Demolition debris</li> <li>▶ ACM</li> <li>▶ Excavated soils</li> <li>▶ Cement bags</li> <li>▶ Paint drums</li> <li>▶ Brick and concrete rubble</li> <li>▶ Scrap metal</li> <li>▶ Other debris</li> </ul>	<ul style="list-style-type: none"> <li>▶ Pollution of the environment</li> <li>▶ Obstruction of the public, and the movement of the workers and vehicles</li> <li>▶ Affect the aesthetics of the environment if not professionally managed</li> </ul>

### 4.3 Social Impact Analysis

The social risk classification of the Project is Substantial. There are risks associated with exclusion of marginalized and vulnerable groups who may be unable to access services which would increase vulnerability and undermine the general objectives of the project. This risk of exclusion to vulnerable groups could be due to poor road infrastructure, and lack of accurate information on vaccine roll out. There are also risks associated with AEFIs and social conflict resulting from limited availability of vaccines and social tension due to the pandemic situation. The other social risk is that COVID-19 having triggered misinformation across social networks, and this could lead to lack of confidence in vaccinations and vaccine hesitancy.

#### Need for a Grievance Redress Mechanism

The potential impacts will infringe on people's rights, and they may be aggrieved in one way or another. To address this a grievance redress mechanism is being strengthened under the ZCEREHSAFP will use the existing GRM under the HSDSP AF-V.

The current project GRM is based on both MOHCC conflict-resolution mechanisms as well as project-based steps to ensure that beneficiaries and all stakeholders have opportunities and means to raise their concerns and/or provide suggestions regarding project-related activities. In addition, as part of the COVID-19 response, the MOHCC has established an EOC using a toll-free number to report suspected cases and grievances can be reported through provincial call centres.

The current AF-V GRM has been improved to integrate GBV-sensitive measures, including multiple channels to initiate a complaint and specific procedures for GBV/SEA/SH, such as confidential and/or anonymous reporting with safe and ethical documenting of GBV/SEA/SH cases. It is important that the project continues to link client satisfaction surveys with the GRM. The current national COVID-19 response Toll Free Number is 2019 is being used for GRM issues.

#### 4.3.1 Key Social Risks

There are several key social risks which include:

- i. **Enhanced community transmission and exposure of health care workers, health care mobilisers and community workers to COVID-19:** Increased exposure due to non-adherence to public health guidelines and lack of/or poor management of PPE,
- ii. **Risks to vulnerable Groups:** Vulnerable groups include people with chronic conditions/ disabled, poor people, migrants, the elderly and, disadvantaged sub-groups of women, Indigenous Peoples (IPs). They face several risks which include exclusion from consultations, difficulty to access services, potential displacements, etc.,
- iii. **Handling of Project and Personal Information:** Will cover (i) general project information which must be shared with all stakeholders for the smooth running of the project, (ii) handling and storage of Personal data collected in the process of project implementation in COVID-19 response, and (iii) misinformation in social media networks related to COVID-19,
- iv. **Exclusion of disadvantaged groups in consultations:** Vulnerable groups are at risk of being left out in the consultation processes and hence in the implementation of the projects. There is need for representation of vulnerable groups in different structures e.g., HCC, Ward committee, CHWs so that their voices are heard.
- v. **Disruptions from installation activities:** Disruptions may include disruptions of utilities in maternity waiting homes and operating theatres that may be caused by the contractors, temporary disruption of health care services as sections of the health facility utilities is cut off, and impacts of construction activities on patients, staff, and other stakeholders. However, most installation and renovation activities are short term not taking more than 21 days to complete. Therefore, no major services will be disrupted for a prolonged period, and this is a low risk.
- vi. **GBV/SEA/SH risks** among health care providers and communities: Risks especially in relation to distribution life-saving vaccines and family planning commodities, and access to outreach services. These can be at the vaccination centres and outreach centres and maternity waiting homes. Other abuses can be by the health care trainers, supervisors and community members who may be subject to surveillance and follow up.

**vii. Social conflicts and risks to human security:** resulting from testing, limited availability of vaccines and family planning commodities and tension related to the difficulties in accessing mobile outreach services.

**viii. Public perception risks:** Risks associated with Adverse Events Following Immunisation (AEFIs).

### 4.3.2 Social Impact Analysis - Planning Phase

#### (i) Project Timing

The project support is being delivered at a time when the country is already implementing COVID-19 response RMNCAHN activities. Vaccination and risk communication and community engagement are already taking place. Hence the project will fill a gap in identified priority areas including health systems strengthening for effective response and delivering of RMNCAHN services. Stakeholder consultations will be ongoing and the processes for stakeholder engagements are detailed in project SEP.

The project will help Zimbabwe vaccinate the target population eligible for vaccines according to the National Vaccine Deployment Plan (NVDP), which is based on the World Health Organisation's (WHO) Strategic Advisory Group of Experts (SAGE) Values framework. Based on this, the social risk rating of the project is considered substantial.

### 4.3.3 Social Impact Analysis – Installation/Implementation Phase

#### (i) Risks to vulnerable Groups

##### a) Difficulties in Access to Services by Vulnerable Social Groups

Difficulties in access to services by vulnerable social groups through Exclusion in consultations, (i.e. people with chronic conditions/disabled, poor people, migrants, the elderly and disadvantaged sub-groups of women, Indigenous Peoples (IPs)). Vulnerable groups may have difficulties in accessing services and facilities designed to combat the disease and improve RMNCAHN services.

#### (ii) Handling of Project and Personal Information

##### a) Personal Data Protection

Possible personal data protection concerns which may arise in relation to the collection, storage or use of personal data. Large volumes of personal data, personally identifiable information and sensitive data are likely to be collected and used in connection with the COVID-19 response and RMNCAHN services under circumstances where measures to ensure the legitimate, appropriate and proportionate use and processing of data may not feature in national law or data governance regulations, or be routinely collected and managed in health information systems.

##### b) General Project Information

Full participation of key stakeholders during project preparation and implementation is important to the successful implementation of the project. Thus, the ZCEREHSP will ensure that information is meaningful, timely, and accessible to populations that are most at risk (such as women, youths, persons living with disabilities, and elderly people densely populated areas), and contribute to strengthening the capacities of community structures in promoting prevention messages and messages related to access of the RMNCAHN services in the community.

Component 1b of ZCEREHSP is focused on complementing efforts to ensure communication is strengthened in communities, enhancing provision of clear information related to risks and prevention measures. Proper communication and advocacy will result in social, and behaviour change and health delivery strengthening down to village level by changing the perceptions of the implementers and villagers through various training programmes.



**c) Misinformation in Social Media Networks Related to COVID-19**

Misinformation in social media networks related to COVID-19 and stigma for those who will be admitted to isolation or treatment centres may contribute to propagate false information. Some of the vaccine recipients may experience adverse events following immunisations. Furthermore, this can be countered by continuous consultations, publicising and communication of the correct information through various media. This can be countered with correct handling of project and personal communication and tracking of media to correct myth and misconceptions on how to deal with the pandemic, and response measures and vaccinations in particular. Call centres (Emergency Operation Centres) being supported under AF-V will be communicated to project beneficiaries to provide adequate and proper information to project affected persons on regarding vaccines and reporting AEFIs. The national EOC is has been established at Parirenyatwa Hospital and each province will be supported to establish a Provincial EOC.

**d) Use of security or military personnel**

The engagement of security or military personnel in the implementation of project activities is not anticipated. In the event of military engagement, this action will be subjected to Bank approval before enforcement. Cordaid will ensure that prior to engagement of security personnel, (i) a written notice will be sent to the Bank indicating the name of the security unit; and (ii) ensure that all activities carried out by security personnel will be supervised by MoHCC, working closely with Cordaid as the Project implementing entity to ensure compliance with environmental and social provisions.

MoHCC through the COVID-19 National Coordinator's office will engage the Ministry of Home Affairs and Cultural Heritage and the Ministry of Defense and War Veterans Affairs in setting out the arrangements for the engagement of the military or security personnel under the Project, including compliance with the relevant requirements of this project. Furthermore, the Cordaid will assess risks associated with engagement of security personnel and implement appropriate mitigation measures to manage such risks and impacts, including a stand-alone Security Management Plan, guided by the principles of proportionality and GIIP, and by applicable national law.

MoHCC, working closely with Cordaid will be required to adopt codes of conduct for security personnel and screen such personnel to verify that they have not engaged in past unlawful or abusive behavior, including GBV, SEA and SH or excessive use of force.

Security personnel will be adequately instructed and trained, prior to deployment and on a regular basis, on the use of force and appropriate conduct. Any concerns related to security conduct will be addressed through the project GRM.

Table 4-2 Potential Social Impacts

REF:	PARAMETER UNDER CONSIDERATION		
	CATEGORY	CAUSE	IMPACT
<b>4.4.2</b>	<b>Planning phase impacts</b>		
(i)	Project Design	<ul style="list-style-type: none"> <li>▶ Limited Stakeholder Involvement</li> <li>▶ Inadequate dissemination/sharing of information</li> <li>▶ Unclear roles and responsibilities</li> <li>▶ Predominance of the top-down approach.</li> <li>▶ Negative perception</li> <li>▶ Lack of transparency from the Authorities</li> <li>▶ Lack of proper timelines for the different phases of the project</li> <li>▶ Dragging the planning phase too long</li> </ul>	<ul style="list-style-type: none"> <li>▶ Low chances of success and sustainability</li> <li>▶ Failure to take up ownership of the project</li> <li>▶ Anxiety and anticipation Limited cooperation</li> <li>▶ Suspicion and hence concealing important information</li> </ul>
<b>4.4.3</b>	<b>Implementation Phase</b>		
<b>(i)</b>	<b>Enhanced community transmission and exposure of Health Workers To infectious diseases</b>		
(a)	Potential Risks of healthcare workers	<ul style="list-style-type: none"> <li>▶ Staff executing their duties.</li> <li>▶ Engagement with Community and Village Health workers.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Community transmission of diseases</li> <li>▶ Transmission of diseases at health care centres.</li> </ul>
(ii)	<b>Risks to vulnerable Groups</b>		

REF:	PARAMETER UNDER CONSIDERATION		
	CATEGORY	CAUSE	IMPACT
(a)	Difficulties in Access to Services by Vulnerable Social Groups	<ul style="list-style-type: none"> <li>▶ Exclusion from consultations of disadvantaged groups</li> <li>▶ Vaccination Services not reaching targeted beneficiaries</li> <li>▶ Occupational health and safety issues related to civil works, working in the health care setting and handling health care waste</li> <li>▶ Females, in project beneficiary districts or those seeking to access the RMNCAHN nutritional support to vulnerable patients-predominantly-new-borns, children and pregnant and breastfeeding women may be survivors of Gender-Based Violence (GBV), Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH);</li> </ul>	<ul style="list-style-type: none"> <li>▶ Failure to access services.</li> <li>▶ Exclusion from essential services.</li> <li>▶ Long-term hardship, impoverishment, and social unrest among the affected community</li> <li>▶ Vulnerable and marginalized groups not being protected from Covid-19 and other infectious diseases</li> </ul>
(iii)	<b>Handling of Project and Personal Information</b>		
(a)	Personal Data Protection	<ul style="list-style-type: none"> <li>▶ Collection, storage or use of personal data</li> <li>▶ Legitimate, appropriate and proportionate use and processing of data may not feature in national law or data governance regulations.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Abuse of personal information and data.</li> </ul>
(b)	General Project Information	<ul style="list-style-type: none"> <li>▶ Limited sharing of project information.</li> <li>▶ Information not readily available to populations that are most at risk.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Weak community structures to promote RMNCAHN and prevention messages</li> </ul>
(c)	Misinformation in Social Media Networks Related to COVID-19, Family Planning	<ul style="list-style-type: none"> <li>▶ Social media networks spreading various information about COVID-19 vaccines and family planning products and RMNCAHN services.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Stigma for young people accessing reproductive health services including family planning and stigma for those infected by COVID 19.</li> <li>▶ Lack of correct information of how to deal with the pandemic.</li> </ul>

REF:	PARAMETER UNDER CONSIDERATION		
	CATEGORY	CAUSE	IMPACT
(e)	AEFIs	<ul style="list-style-type: none"> <li>▶ Inadequate training of health care workers to inoculate vaccines including Covid-19 Vaccines</li> <li>▶ Improper storage and transportation of vaccines</li> <li>▶ Inadequate advice on community about vaccination and family planning services.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Community members react to vaccines after immunisation.</li> <li>▶ Vaccine hesitancy among community members</li> <li>▶ Hesitancy in accessing family planning.</li> </ul>
	GBV/SEA-H	<ul style="list-style-type: none"> <li>▶ Lack of training on GBV/SEA-H among health care providers</li> <li>▶ Failing to abide by the SEA-H Code of Conduct</li> </ul>	<ul style="list-style-type: none"> <li>▶ Abuse of health care providers and community members and patients</li> </ul>

#### 4.4 POSITIVE PROJECT IMPACTS

The project is expected to produce many positive impacts. These include the following:

(i) **Improvement of Quality of Care and Utilization of Public Health Facilities**

The project will positively impact the health delivery programmes leading to improved health conditions. The project will also result in the improvement of the health of the populace.

At the same time Government and other international organisations are working on similar initiatives in the concerted fight against the COVID-19 pandemic. All these efforts will result in a cumulative improvement in the quality of care and the increase of utilization of public health facilities.

(ii) **Improvement of Health and Hygiene**

Government and other international organizations are spreading the same message of hygiene improvement, washing of hands, sanitizing hands, and surfaces etc. as they fight to control the spread of the COVID-19 virus. All these efforts will result in a cumulative improvement in the health and hygiene of the populace.

(iii) **Improvement in Livelihoods and Local Economies**

Improved health care delivery will improve the health of the children, mothers, and adolescents, resulting in increased productivity and household incomes and long-term benefit of improved local economies. This improvement will be compounded by the efforts of Government and other development partners who are fighting to improve the health of the population after years of during regression the COVID-19 pandemic.

On the other hand, there will be some negative cumulative impacts even from mitigated activities. For example, although ZCEREHSP's contribution to overall medical waste (most importantly the vaccination needles) is relatively small, it does add to the overall volume of solid waste and once the infectious waste is incinerated, HCF's will add to the amount of air pollution being generated already from vehicles, industry, and other sources. Project transportation activities, albeit minor, also contribute to the air pollution levels in Zimbabwe.

## 5.0 PROCEDURES TO ADDRESS ENVIRONMENTAL AND SOCIAL MATTERS

### 5.1 Introduction

The ZCEREHSP site-selection criteria will, among others, include environmental and social appraisal as needed after a screening process. The selection of the institutions to be supported with installation of solar panels, installation of solar direct drive refrigerators, installation of refrigeration units in trucks, minor renovations and refurbishments of the maternity waiting homes and operating theatres, and installation of oxygen reticulation systems will be done by MOHCC based on their needs and priorities.

The sections below (6.2 – 6.5) detail the stages of the environmental and social screening process leading towards the review and environmental and social approval of any project activity that will be undertaken in the ZCEREHSP. This will be used in conjunction with the ZCEREHSP site-selection criteria.

### 5.2 Project Activity Preparation and Approval

The following is an outline of the process that will be undertaken to oversee project activity identification, preparation, screening, approval, and implementation process for all activities that may require Environmental and Social Assessment (ESA) work before final approval for implementation as discussed in Table 6-1 below. The process will be guided by the Environmental Management Act, EIA regulations and World Bank ESF and EHS Guidelines to address environmental and social management considerations under the project. The ZCEREHSP is aligned to COVID-19 response through supporting COVID-19 vaccine deployment activities and strengthening capacity for the MOHCC systems for effective vaccine deployment and delivery of RMNCAHN services. This project will target RCCE activities, infection prevention and control supply to facilities conducting vaccinations, vaccine deployment activities, cold chain supply through procurement and supply of solar direct drive refrigerators and setting up energy generation equipment, minor renovations of maternity waiting homes and operating theatres, installation of oxygen reticulation systems, procurement and supply of solar powered tricycles, motorcycles, and mobile outreach vans. MOHCC will identify facilities for support such as installation of solar power generation equipment, installation of refrigeration units in trucks and supply of solar direct drive refrigerators at health facilities, minor renovations of maternity waiting homes and operating theatres, installation of oxygen reticulation systems, procurement, and supply of solar powered tricycles, motorcycles, and mobile outreach vans.

## 5.3 Exclusion / Eligibility List

### 5.3.1 Exclusion List

Table 5-1 below lists project activities that are not eligible for financing under ZCERP due to high environmental and/or social risks.

**Table 5-1 Project Activity Exclusion List**

No.	NEGATIVE SUB PROJECT LIST
1	Require acquisition of land and physical or economic displacement of people.
2	Block the access to or use of land, water points and other livelihood resources used by others.
3	Encroach onto fragile ecosystems, marginal lands, or important natural habitats (e.g., ecologically sensitive ecosystems; protected areas; natural habitat areas, forests and forest reserves, wetlands, national parks, or game reserve; any other environmentally sensitive areas). <sup>40</sup>
4	Impact on physical cultural resources of national or international importance and conservation value. <sup>41</sup>
5	Activities that may cause long-term, permanent and/or irreversible (e.g., loss of natural habitat) adverse impacts such as dam construction and other greenfield construction among others.
6	Activities that have high probability of causing serious adverse effects to human health and/or the environment not related to treatment of COVID-19 cases.
7	Activities that may have adverse social impacts and may give rise to significant social conflict.
8	Activities that may affect lands or rights of indigenous people or other vulnerable minorities.
9	Have risks assessed as requiring biosafety levels BSL-3 and BSL-4 containment. <sup>42</sup>
10	All other excluded activities set out in this ESMF.

### 5.3.2 Eligibility List

Table 5-2 below provides criteria on which project activities which will be eligible for financing under ZCEREHSP.

<sup>40</sup>Fragile ecosystems include such places as wetlands, which quickly degrade if not properly used. Marginal lands include lands that has little or no agricultural or industrial value, often has poor soil or other undesirable characteristics and often located at the edge of desolate areas and can very easily be degraded if abused. So, these are ecologically sensitive areas which must be protected from any development that may adversely affect them.

<sup>41</sup>A physical cultural resource (PCR) is a movable or immovable object or site of historical, architectural religious, or other cultural significance. Development should not impact on these important resources.

<sup>42</sup>Biosafety level (BSL), or pathogen/protection level, is a set of biocontainment precautions required to isolate dangerous biological agents in an enclosed laboratory facility. The levels of containment range from the lowest biosafety level 1 (BSL-



**Table 5-2 and Activity Eligibility List**

No.	SUB PROJECT ELIGIBILITY LIST
1	Participating laboratories must possess working eyewash, safety showers, sink, autoclave, etc.
2	Sites where there are no negative significant impacts on natural habitats or cultural sites.

#### 5.4 Assigning Environmental and Social Category

The assignment of the appropriate environmental category will be based on the World Bank ESF categorization and on the provisions of the EMA EIA Regulations. For ZCEREHSP, although most impacts and risks stem from minor works with a small footprint that have limited and manageable adverse environmental impacts in addition to medical waste which can also be mitigated and managed with the application of appropriate mitigation measures, the unprecedented ZCEREHSP COVID-19 and RMNCAHN related risks are classified as Substantial. The project will continue to support strengthening of medical waste management and disposal systems in permanent and temporary healthcare facilities on an as needed basis since the main environmental issue associated with this project's activities is health care waste management.<sup>43</sup>

So, with respect to categorisation the World Bank and Zimbabwe systems will be considered:

- (i) **The Zimbabwe legislation** classifies projects and activities into three types as follows:

**Table 5-3 Zimbabwe Legislative Project Classification**

TYPE	INTERPRETATION
<b>Type 1</b>	Projects under this category <b>are listed in the Schedule</b> and are likely to have significant adverse environmental impacts whose scale, extent and significance cannot be determined without in-depth study. Appropriate mitigation measures can only be identified after such study. From the assessment of the project prospectus the projects are classified as requiring a full EIA.
<b>Type 2</b>	Projects under this category <b>are listed in the Schedule</b> and are likely to cause environmental impacts, some of which may be significant unless mitigation actions are taken. Such projects cause impacts which are relatively well known and easy to predict. Also, the mitigation actions to prevent or reduce the impacts are well known. From the assessment of the project prospectus the projects are classified as not requiring a full EIA.
<b>Type 3</b>	Projects under this category <b>are not listed in the Schedule</b> and are unlikely to cause any significant environmental impact and thus do not require any additional environmental assessment.

The World Bank projects are screened for their potential environmental and social impacts to determine the appropriate classification of the proposed projects into one of four categories as follows:

1) to the highest at level 4 (BSL-4). At the lowest level of biosafety, precautions may consist of regular hand-washing and minimal protective equipment. At higher biosafety levels, precautions may include airflow systems, multiple containment rooms, sealed containers, positive pressure personnel suits, established protocols for all procedures, extensive personnel training, and high levels of security to control access to the facility.

<sup>43</sup> Temporary health care facilities will need to factor in safe water, sanitation, and hygiene facilities (meeting quality standards; separation of infected vs. non-infected patients).

## World Bank Project ESF Risk Classification

World Bank classifies environmental and social risks for projects using the following criteria:

- ▶ High (H) risk
- ▶ Substantial (S) risk
- ▶ Moderate (M) risk
- ▶ Low (L) risk

Risk classification considers relevant issues, such as the type, location, sensitivity, and scale of the project; the nature and magnitude of the potential environmental and social risks and impacts; and the capacity and commitment of GoZ/Cordaid. This project risk is overall considered to be Substantial.

Support to COVID-19 vaccine deployment and related health system strengthening particularly delivery of RMNCAHN services will have considerable positive outcomes as it aims to prevent, detect, and respond to the threat posed by COVID-19 and strengthen national systems for public health preparedness. However, the Project activities can also have potential adverse environmental, health and safety (EHS) risks if an appropriate EHS mitigation and monitoring system is not implemented during both implementation and operation, including among other aspects the collection, transportation, and disposal of medical wastes. It is important to note that while the project will support the deployment of WB-eligible vaccines, it will not directly purchase or administer the vaccines. The project is only financing the enabling environment and infrastructure for vaccine and RMNCAHN services delivery. Vaccination programs or vaccines specifically carry the risk of adverse reactions/adverse events following immunization which may be due to the vaccine or by an error in the administration of or handling of the vaccines. Hence, the project will contribute to an appropriate COVID-19 vaccines safety monitoring system to respond to adverse events following immunization (AEFI) cases, if any. Taking into consideration the uniqueness and complexity of the vaccine safety monitoring of COVID-19 vaccine, MOHCC's capacity to identify, report, investigate, and analyse adverse events following immunization and determine the cause of and respond to safety issues should be given due attention. Furthermore, an appropriate cold chain system should be in place to maintain the potency of the vaccines and the quality of the immunization service. Immunization programs also entail safe injection practices so that potential risks to the patients, healthcare personnel, and others could be avoided or minimized as unsafe injection practices can result in disease transmission.

Similarly, patients gathered for vaccination are at risk for COVID-19 infection. MOHCC should therefore establish and maintain an appropriate EHS risk management system for the following risks and possible impacts among others: monitoring and surveillance of AEFIs; safe injections; for proper collection, transportation, and disposal of all hazardous medical wastes (including from this project); and for minimization of occupational health and safety risks. Some other more minor risks will issue from minor renovations and refurbishments of the maternity waiting homes and operating theatres, installation of oxygen reticulation systems, OHS risks (including from improper use or lack of PPE, dust emissions, trips and falls, and COVID-19 exposure), fueling and maintenance of vehicles (i.e., spills, waste disposal), actual truck transportation of goods/materials, use of motorcycles and solar powered tricycles (i.e., road safety, accidents, traffic, air emissions, etc), installation of solar panels for energy generation, installation of refrigeration units in trucks. Potential use of on-site emergency generators in case of loss of power and/or issues with solar. Contaminated soil at HCFs due to past improper on-site waste treatment or disposal, including waste storage, incinerators and waste pits. Emissions from the incinerators (as we dispose of infectious medical waste) and from the vehicles, as well as the construction and operation of solar power equipment depending on the equipment. The client's relatively low capacity to manage the EHS risks associated with the activities (given lack of financial resources, hyperinflation, and several national challenges) and given the enormity of the Covid-19 challenge (its infectiousness, mortality, pandemic nature, etc.), the vaccines and Zimbabwe's macroeconomic situation, environmental risk of the ZCEREHSP is therefore rated as Substantial at this stage. As mentioned above, the minor environmental impacts associated with installing solar panels, minor renovations of the maternity waiting mothers, and operating theatres, and installation of oxygen reticulation system will all be in already existing health care facilities and so minimal risks are posed to cultural heritage, natural habitats, or biodiversity. A more complete list of potential EHS impacts and risks is in Section 5 of this ESMF.

The key social risk related to this operation is that vulnerable social groups (poor, disabled, elderly, isolated communities, refugees, and people and communities living far from the health facilities, etc.) may be unable to access facilities, vaccines, RMNCAHN services and other and services, which could increase their vulnerability and undermine the general objectives of the project. This risk of exclusion is due to vulnerable groups being in the low-income bracket with limited access to health services; the long distance to health facilities due to the remoteness of particularly rural areas with poor road infrastructure (which may affect vaccine transportation and access by outreach teams for RMNCAH services); and the lack of accurate information on the roll out of vaccinations and RMNCAH services as well as implementers perhaps not having the full appreciation for the eligibility criteria for vaccines and RMNCAH services. There are also risks of social conflict resulting from the limited availability of vaccines and RMNCAH services and social tensions related to the inherent difficulties of a pandemic situation and the inappropriate handling of personal data. The other social risk is the swift spread of misinformation (labelled "infodemic") across social networks. This infodemic threatens to erode confidence in vaccination, which could lead to COVID-19 vaccine hesitancy and decrease public trust in the program. Furthermore, the planned activities may present risks to project workers (healthcare workers and PIE staff) and civil servants who may be potentially exposed to COVID-19 due to prolonged engagement with the target communities or samples/materials contaminated with COVID-19. No forced vaccination will be permitted under this project. The project will help vaccinate the target population eligible for vaccines according to the Zimbabwe's National Vaccine Deployment Plan (NDVP), which is based on the World Health Organization's (WHO) Strategic Advisory Group of Experts on Immunization (SAGE) Values Framework. Based on this assessment, the social risk rating of this project is Substantial.

The following table shows the risk classification of the different types of project activities:

**Table 5-4 Classification of the project activities**

No.	ACTIVITIES	WB Classification	Zimbabwe Classification
1.			
2			
3			
	Transport (motor cycles and solar powered tricycles).	M	3
	(i) Early reporting and community psychosocial support for victims of GBV/SEA/SH including linkages/referrals to care. All interventions will incorporate gender mainstreaming through involvement of both females and males in the communities.	M	3
	(i) Procurement of PPE and Family Planning items	L	3
	(ii) Fuel, repair, and maintenance service of vehicles used for vaccine distribution (Component 1 ZCEREHSP)	M	3
	(iii) Activities that generate, manage, or transport or dispose infectious medical waste	S	
	(vi) Outreach, family planning and vaccine distribution including fuel, repair, and maintenance service of vehicles	L	2

No.	ACTIVITIES	WB Classification	Zimbabwe Classification
4			
5	Provision of PPE for health care workers	L	3
6	Grievance Redress Mechanisms (GRMs); Psychosocial support systems for both healthcare workers and general population by building capacity of community health workers and support to national psychosocial centre; community discussion forums with local and traditional leaders and school heads to share information about gender-based violence (GBV), sexual exploitation, abuse and harassment (SEA-H) and GRM	L	3
7	Vehicle maintenance and fuel for key National Response Pillar leads to coordinate and monitor COVID-19 response activities	L	3
8	Audits, reviews, and other activities to ensure governance and accountability	L	3
10			
11	Minor renovations of the maternity waiting homes	L	3
12	Minor renovations of the operating theatre	L	3
13	Installation of oxygen reticulation systems	L	3
14	Use, repair and maintenance of solar powered tricycles, motorcycles, and vans	L	3
15	Delivery of RMNCAH services	S	3

*Zimbabwe EIA procedures are generally consistent with the Bank's ESF.*

## 5.5 Environmental and Social Screening

This section outlines the stages of the environmental and social screening process (the screening process) leading towards the review and environmental approval of any project activity that will be undertaken on the ZCEREHSP. To facilitate environmental and social screening, the ESMF has provided a checklist for project activity types that will assist stakeholders, proponents, and project staff with the identification of environmental and social issues relating to the location surrounding environment based on available knowledge and field investigations.

### 5.5.1 Environmental Screening

MOHCC will identify project activities and MOHCC District Technical Teams (see Figure 6-1) and participating facilities, with support from the PIE Environmental Specialist and Social Safeguards Specialist, will be responsible for the environmental and social screening of an activity. The PIE Environmental and/or Social Safeguards Specialists will give overall guidance in the screening process approving or rejecting ultimately, whilst MOHCC participating facilities will conduct the screening and submission for approval (i.e., filling out the form and doing the on-site evaluation).

The screening will be conducted to identify possible site-specific impacts and safeguard issues associated with a particular activity. Commensurate with the significance of activity impacts, screening is only required for installation activities. Facilities that will install solar panels are required to screen those activities for environmental and social risks. Screening is required for truck installations if those activities will take place at only a few (like 4 or less) locations to avoid

impacts from concentrated activities. If truck installations will take place at numerous locations (thus resulting in diffuse insignificant impacts), responsible project proponents or contractors are to apply the relevant measures in Table 5-5 and below in Table APP9.1 although they do not need to be screened. The initial stage is a desk appraisal of the activities planned, including designs. The screening process will be carried out by the MOHCC participating facilities with support from PIE. This initial screening will be carried out using the Environmental and Social Screening Form (Appendix 5).

Completion of the screening form will facilitate the identification of potential environmental and social impacts, determination of their significance, assignment of the appropriate environmental and social category, identification of appropriate environmental and social mitigation measures, determine if any further environmental and social work is necessary, if necessary. The Environmental and Social Screening Process is outlined in Figure 6-1 below. Once drafted, the PIE Environmental Specialist will review the Screening Form before any activities take place just in case the activity is not eligible or does not contain the necessary information. MOHCC will identify facilities to be supported with installation of solar panel for sustainable energy generation and supply of solar direct drive refrigerators. MOHCC vehicles will also be supported with fuel, maintenance, and repair therefore MOHCC will be responsible for identifying vehicles to be supported. MOHCC with support from PIE is responsible for screening project activities for environmental and social risks and/ impacts. The screening forms will be submitted to the PIE for review and approval. The extent of further environmental and social work required to mitigate adverse impacts for the project activities will depend on the outcome of the screening process. The following activities may be screened: installation of refrigeration units in trucks for vaccine delivery, fuelling, repair and maintenance of vaccine delivery trucks.

Table 5-4 outlines activities that will require screening and preparation of an ESMP.

### *Table 5-5 Environmental and Social Analysis Levels for Types of*

#### *Project Activities*

NO.	PROJECT ACTIVITY TYPE	ADDITIONAL ESA WORK REQUIRED
1.		
2.		
3.		
4	Fuel, repair and maintenance of vehicles, motorcycles, and tricycles.	PIE will communicate guidance (from this ESMF and EHSGs) to those carrying out vehicle fuel, repair and maintenance service activities from the beginning and note any repair/maintenance activities that are in or near natural habitats (such as rivers, parks, etc.) since those should receive increased supervision attention and ad hoc monitoring. These requirements will be reflected in the contract/s for such services. If MoHCC facilities are used, then the requirements must be provided in writing and there must be agreement that they will be implemented. If activities will be carried out at 4 or less sites, such sites will be screened and shared with WB for no objection. The Environmental, Health, and Safety Guidelines for Retail Petroleum Networks contains information relevant for this project activity.
5	Transportation of hazardous waste and all medical waste	Obtain any necessary licenses/permits prior to use of any such Transporter and follow requirements of the project ICWMP. For contracted Transporters all EHS requirements are to be specific in-service contract. PIE to verify license/permit.

NO.	PROJECT ACTIVITY TYPE	ADDITIONAL ESA WORK REQUIRED
6.	Vaccine and Family Planning items distribution	<p>Waste Management: PIE to communicate ESMF and ICWMP waste management standards (including national environmental and social requirements) for sharps and other waste segregation and management to HCFs (participants). Participating facilities must have an approved facility level ICWMP with details on sharps and all medical waste management. Facility ICWMPs will be reviewed and approved (or denied) for project support by the PIE. Facilities will be advised on how to improve any unacceptable ICWMPs.</p> <p>Health &amp; Safety: PIE to verify that AEFI safety and efficacy monitoring plan and activities in place to enable swift detection of anomalies. Plan must be in place before vaccine distribution starts.</p>
7.		
8	Medical waste disposal by incinerator or acceptable other type	All regulatory permits. Compliance with all ESMF and ICWMP requirements. EHS requirements established in contract if third-party service provider. Verified by PIE.
9	Minor renovations of the Waiting Mothers' Homes (WMH), operating theatres	Requires screening and checklist ESMP. All EHS requirements to be included in construction works contract. Requirements: Compliance with all ESMF and ICWMP requirements. For third-party service providers, EHS requirements will be established in contracts to be verified by PIE.
10	Installation of oxygen reticulation system	Requires screening and checklist ESMP. All EHS requirements to be included in construction works contract. Requirements: Compliance with all ESMF and ICWMP requirements. For third-party service providers, EHS requirements will be established in contracts to be verified by PIE.
11	Delivery of RMNCAHN services	Waste Management: PIE to communicate ESMF and ICWMP waste management standards (including national environmental and social requirements) for sharps and other waste segregation and management to HCFs (participants). Participating facilities must have an approved facility level ICWMP with details on sharps and all medical waste management. Facility ICWMPs will be reviewed and approved (or denied) for project support by the PIE. Facilities will be advised on how to improve any unacceptable ICWMPs.
	Disposal of electronic waste	The disposal of electronic will be in accordance with the public finance management, procurement, and disposal of public assets regulations

Figure 5-1 below depicts the steps for project activity identification, submission, screening, approval, and monitoring.



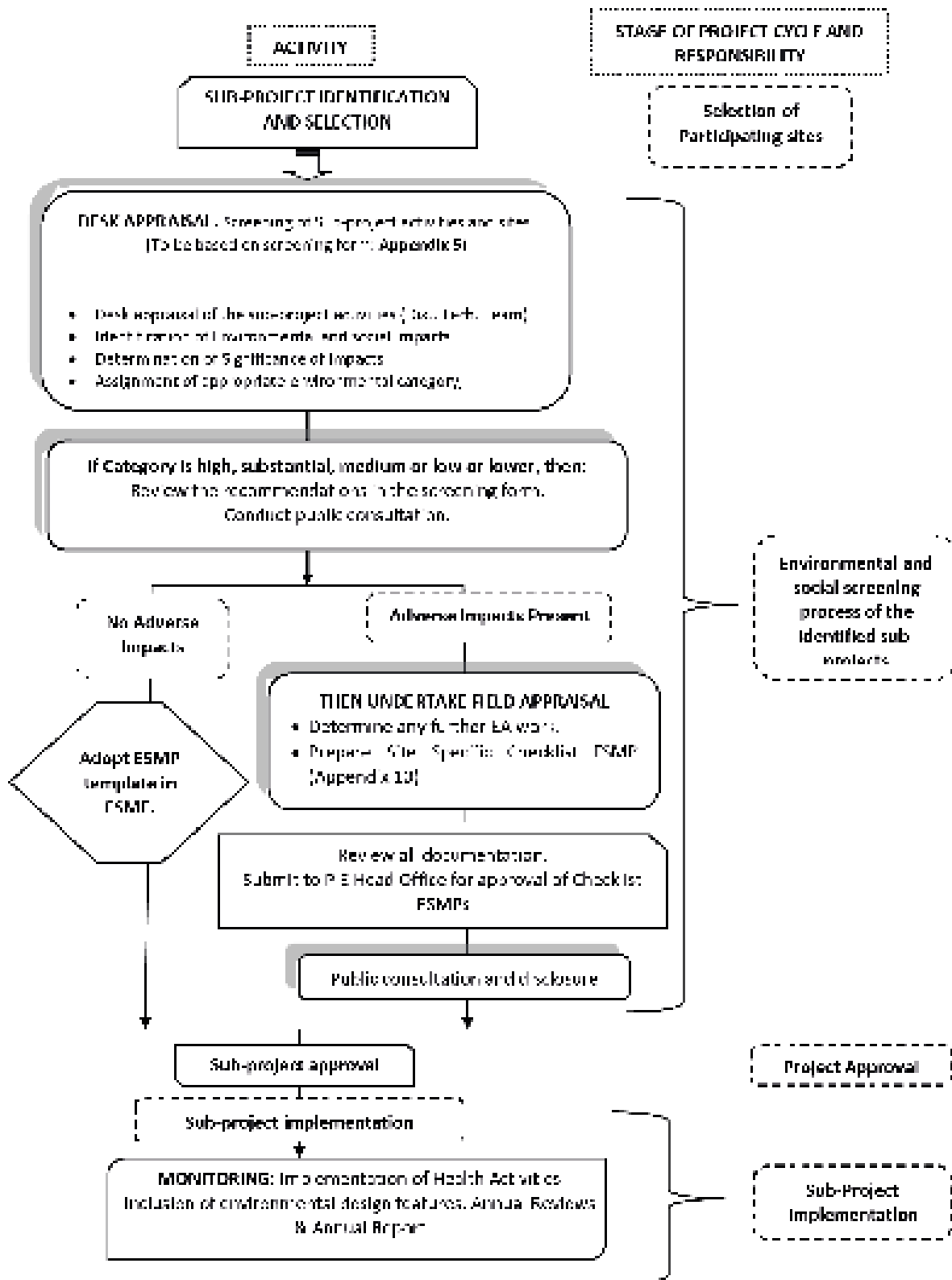


Figure 5-1 Flow for project activity identification, submission, evaluation, and monitoring<sup>44</sup>

<sup>44</sup> The term "subproject" in this diagram refers to individual project activities.

### 5.5.3 Evaluation and Approval of Environmental and Social Evaluation and Instruments

Zimbabwe environmental and social evaluation requirements are generally consistent with the Bank's ESF. The completed screening form, along with any additional planning reports, will be forwarded to the review authority (Evaluations Committee), which is the Ministry of Health at National Level, represented by the PIE Environmental and Social Specialists. Project activities such as installation of refrigeration units in vaccine delivery trucks, and the supply of reagents for genomic sequencing which are low risk and do not have significant environmental and social implications, do not require the preparation of an ESMP. Installation of refrigeration units in vaccine delivery trucks only need to be screened if the installation will take place in a limited number of places (for example, if a particular site will install units in 20 or so vehicles) to determine whether any steps must be taken to avoid or minimize impacts for example to nearby natural habitats but all of them will require use of proper PPE, waste disposal and application of EHS General Guidelines. The supply of reagents for genomic sequencing and other laboratory related activities will require screening to ensure the exclusion of activities requiring BSL3 and 4 capacity. The PIE (or other deputised party) will monitor the management of environmental and social issues of these types of project activities as a part of project supervision and monitoring.

Installation of energy generation equipment (for solar power) as a relatively higher risk project activity, requires a checklist ESMP based on its screening together with the requirements of this ESMF as its safeguards instruments before the activity starts.

Facilities that will distribute vaccines must have an approved facility-level ICWMP with details on sharps management as well as an AEFI safety and efficacy monitoring plan and arrangements in place to enable swift detection of anomalies both of which (ICWMP and AEFI Safety & Efficacy Plan) must be in place before vaccine distribution starts. Transportation of hazardous waste is to be detailed in a facility ICWMP and should obtain any necessary licenses/permits and follow requirements of the project ICWMP. PIE to verify license/permits as a part of project supervision. At least the first 3 project screening, ESMPs, ICWMPs and AEFI Plans (for each activity type) require WB No Objection before the activity starts.

The project implementer will ensure each facility develops ESMPs when necessary for every project activity based on its screening in line with the requirements of this ESMF as its safeguards instruments before the activity starts. For this project, the installation of solar panels for energy generation is the only project activity that will require screening and development of an ESMP. Project proponents (either HCFs or contractors) are required to use the ESMP templates in Appendices 6 and 10 to draft their ESMPs for solar power installation. Solar power installation activities must have an ESMP approved by the PIE before they start. An ESMP is required for truck installations if those activities will take place at only a few (like 4 or less) locations to avoid impacts from concentrated activities. If truck installations will take place at numerous locations (thus resulting in diffuse insignificant impacts), responsible project proponents or contractors are to apply the relevant measures in Table 5-5 and in Table APP 9.1 although they do not need to be screened or to develop any ESMP.

Each facility participating in COVID-19 vaccine deployment activities is required to prepare and implement an approved ICWMP (which is the form the ESMP takes for this activity) in accordance with the requirements of this ESMF.

Generally, many of the project activities that will be financed by ZCEREHSP will not need any further EA work beyond a checklist ESMP to guide the implementation of this ESMF. So, no further EMA approvals will be required except for those required by HCF for its waste management activities.

### 5.6 Management of Impacts

The proposed mitigation measures for the Zimbabwe ZCEREHSP (Table 6-6), provides guidelines for the management of potential environmental and social aspects at all possible project activity sites. The mitigation or enhancement measures will reduce the negative impacts and enhance the positive impacts. The information from the screening process will be used in the preparation of ESMPs as necessary. An ESMP template is included in Appendix 9. Very low risk activities, such as installation of refrigeration equipment in vaccine delivery trucks and transportation of medical waste, do not require screening. Project implementers carrying out this activity should just observe the ICWMP guidance respecting the safe handling and disposal of reagents as well as any laboratory safety protocols therein or in this ESMF. ESMPs will be developed by the Provincial/District Technical teams as necessary under the oversight and guidance of the PIE Environmental Specialist (see section 1.7 and 6.1).

Appendix 6 presents directions for ESMP formulation. The solar power installation project activities will adopt the checklist approach. The checklist methodology is a more streamlined approach to preparing an ESMP especially for low-risk projects. The checklist approach covers typical mitigation approaches to common low-risk activities with temporary, localised impacts. However, in case a project activity requires the development of a specialised ESMP or any other safeguard instrument, the instrument may require a No Objection from the World Bank and will be publicly disclosed once completed as all project ESMPs will be publicly disclosed.

The ESMPs will capture the potential impacts, mitigation, monitoring and institutional measures to be taken during the project implementation to avoid or eliminate negative environmental impacts. For each impact, mitigation measures should be identified and listed. Estimates are made of the cost of mitigation actions.

Most of the project activities will adopt and adapt mitigation measures listed in the projects comprehensive ESMP in Table 6-6 of this ESMF and will only be required to complete screening. Based on the screening, some activities may be directed to draft a site-specific environmental and social management plan prior to commencement of the activity, but the majority will use a checklist ESMP. For the ZCEREHSP low-risk activities, an alternative to the commonly used "full text" ESMP format is to use a checklist approach. The goal is to provide a more streamlined approach to preparing ESMPs. This checklist-type approach ("Guide to Identifying Key ESMP Contents," see Appendix 6) has been developed to provide "pragmatic good practice" designed to be user-friendly. It covers typical mitigation approaches to common low-risk activities with temporary localized impacts. This format provides the key impact and mitigation concerns of an ESMP to meet World Bank Environmental and Social Assessment requirements under ESS1 (see Appendix 5). This list is not comprehensive. Refer to other identified risks, impacts and mitigation measures discussed elsewhere in this ESMF such as Table 6-2 and Appendix 10 which may also be required in an ESMP. Table 6-6 contains activities and mitigation measures for COVID-19 and social standards related matters. The Environmental and Social Guidelines for Contractors (Appendix 8) are to be observed for all project activities as appropriate. The already introduced Table 6-2 outlines the ZCERP activities that will require preparation of an ESMP.

## 5.7 Risk Reduction and Management of Impact Approaches

### 5.7.1 COVID-19 Transmission

The purpose of the project itself is to reduce the transmission of COVID-19 through supporting vaccination efforts. The project will follow WHO guidance and GIIP to reduce the risk of spreading COVID-19 among project implementers and patients.

### 5.7.2 Occupational Health and Safety

One of the ways the project will reduce the risk of transmission of COVID 19 is through provision of PPE to project implementers including health care facilities and general project administrators at all levels such as masks, sanitizer, soap, and the like. Contractors will be required to provide PPE to workers. All will be trained in its proper use. In addition, construction contractors and service providers (e.g., Transporters, vehicle maintenance) will require adequate OHS risk mitigation measures, as well as all medical waste disposal sites (e.g., incinerators).

### 5.7.3 Vaccine Readiness and Prioritisation

The Government, with the assistance of donor partners including the Bank, has prepared a draft COVID-19 National Deployment and Vaccination Strategy (NVDS) that outlines detailed procedures and protocols for implementation of COVID-19 vaccination and proposes measures for effective vaccination procedures for the population. Through this plan, the Government plans to vaccinate all eligible people according to the Strategic Advisory Group of Experts on Immunization (SAGE) recommendations. The vaccinations will be phased according to level of risk starting with the highest risk individuals in 2021. This group is comprised mainly of frontline health care and social workers, the elderly above 60 years, those with comorbidities, PLWHIV and those living in high risk areas including prisons and refugees. This represents about 22% of the total population.

The vaccination strategies for phase 1 and phase 2 will include static, outreach and mobile vaccinations.

### 5.7.4 Community Health and Safety

In activities that interface with the public such as vaccinations, COVID-19 risk reducing behaviours will be observed such as taking temperatures upon entry, provision of adequate information/signs/safety measures to and for patients regarding potential infection hazards within the facility and associated waste disposal sites, worker use of PPE, etc. there are situations where vaccine cold chain breaks and can result in vaccine emergencies. This may occur, if necessary, steps are not taken quickly. The situation can be:

1. Partial/ complete failure of the fridge making it unable to hold temperatures between 2°C & 8°C. Fridge failures include situations when the fridge gets too cold (without being adjusted too cold)
2. Loss of electrical power to the fridge motor (local power outages, electrical circuit breaker shut-off in the building, fridge power switch shut off, unplugging, damaged electrical cord)

Vaccine handling issue (e.g., not transferring vaccines to the fridge promptly after picking them up, after taking a dose from a package not returning the remainder to the fridge). Vaccine Preparedness and Response measures are outlined in Appendix 17.

Since the project activities will involve minor renovations and refurbishments of the maternity waiting homes and operating theatres, these renovations may involve painting, glazing, repair of roofs and since some of the roofs are made of asbestos, ACMs are likely to be encountered during these activities. Should any ACMs be encountered, it must be properly bagged (enclosed) and disposed of at an approved site. The project will accordingly make it impossible for the public to reuse the ACM containing materials through physical and other barriers.

### 5.7.5 Adverse Events Following Immunisation (AEFIs)

Monitoring the safety of vaccines is an essential part of immunisation programmes which requires the involvement of various stakeholders. There is much public concern about vaccine safety and so the project will monitor its vaccination efforts for any problems. The National Pharmacovigilance Centre, Medicines Control Authority of Zimbabwe (MCAZ) in collaboration with the Zimbabwe Expanded Programme on Immunisation (ZEPI)- are the main drivers of Zimbabwe's monitoring system for Adverse Events Following Immunisation (AEFIs). They will use the AEFI surveillance system which is in place to collect, detect, assess, monitor, prevent and manage AEFIs. Health workers will be guided on the procedures for the management of AEFI, submission of complete AEFI forms and case investigation forms and on causality assessment of the AEFI and risk benefit assessment. These activities will allow ZCERP to monitor and react as needed to any AEFI.

### 5.7.6 Infectious Medical Waste Management

Project activities will generate two main types of waste: general waste (which similar in composition to domestic waste, generated during administrative, housekeeping, and maintenance functions) and hazardous health care waste such as the used needles from vaccinations that will be indirectly supported by the project. General waste practices will follow national and local guidance and requirements. See project ICWMP as well as Sections 5 and 6 of this ESMF for details on how infectious waste will be managed.

### 5.7.7 Air Emissions

The project will not be a significant source of emissions from either vehicles or incineration. However, in accordance with the WB EHS Guidelines for Health Care Facilities, where possible, the project will avoid, minimize, and control adverse impacts to human health, safety, and the environment from emissions to air from vehicles and incineration. Project activities will abide by WB EHS for HCFs and national emissions rules.<sup>45</sup>

<sup>45</sup> WB, GENERAL EHS GUIDELINES: ENVIRONMENTAL AIR EMISSIONS AND AMBIENT AIR QUALITY, April 30, 2007, p 3.

**a) Incinerator Emissions:**

Pollutants potentially emitted from health care waste incinerators (HWIs) include:

- ▶ Heavy metals,
- ▶ Organics in the flue gas, which can be present in the vapor phase or condensed or absorbed on fine particulates,
- ▶ Various organic compounds (e.g., polychlorinated dibenzo-p dioxins and furans [PCDD/Fs], chlorobenzenes, chloroethylenes, and polycyclic aromatic hydrocarbons [PAHs]), which are generally present in hospital waste or can be generated during combustion and post-combustion processes,
- ▶ Hydrogen chloride (HCl) and fluorides, and potentially other halogens-hydrides (e.g., bromine and iodine).
- ▶ Typical combustion products such as sulphur oxides ( $\text{SO}_x$ ), nitrogen oxides ( $\text{NO}_x$ ), volatile organic compounds (including non-methane VOCs) and methane ( $\text{CH}_4$ ), carbon monoxide ( $\text{CO}$ ), carbon dioxide ( $\text{CO}_2$ ), and nitrous oxide ( $\text{N}_2\text{O}$ ).<sup>46</sup>

**b) Pollution Prevention and Control**

Pollution prevention and control measures include:

- ▶ Application of waste segregation and selection including removal of the following items from waste destined for incineration: halogenated plastics (e.g., PVC), pressurized gas containers, large amounts of active chemical waste, silver salts and photographic / radiographic waste, waste with high heavy metal content (e.g., broken thermometers, batteries), and sealed ampoules or ampoules containing heavy metals<sup>47</sup>. This waste should not be burned, incinerated, or landfilled. These wastes will be inertised and sent to a safe storage site designed for final disposal of hazardous waste and / or transported to specialized facilities for metal recovery.
- ▶ Incinerators should have permits issued by authorized regulatory agencies and be operated and maintained by trained employees to ensure proper combustion temperature, time, and turbulence specifications necessary for adequate combustion of waste.<sup>48</sup> This includes implementation of operational controls including combustion and flue gas outlet temperatures (combustion temperatures should be above 850 °C while flue gases need to be quenched very quickly to avoid formation and reformation of POPs) as well as use of flue gas cleaning devices meeting international standards.<sup>49,50</sup>

**c) Management of Air Pollution and Incinerator Residue**

In accordance with the EHS Guidelines for Health Care Facilities, secondary air pollution control measures for hospital waste incinerators should include the following where technically and financially feasible:

- ▶ Wet scrubbers to control acid gas emissions (e.g., hydrochloric acid [HCl]), sulphur dioxide [ $\text{SO}_2$ , and fluoride compounds]). A caustic scrubbing solution will increase the efficiency for  $\text{SO}_2$  control.
- ▶ Control of particulate matter may be achieved through use of cyclones, fabric filters, and / or electrostatic precipitators (ESP). Efficiencies depend on the particle size distribution of the particulate matter from the combustion chamber. Particulate matter from hospital incinerators is commonly between 1.0 to 10 micrometres ( $\mu\text{m}$ ). ESPs are generally less efficient than baghouses in controlling fine particulates and metals from HWI,
- ▶ Control of volatile heavy metals depends on the temperature at which the control device operates. Fabric filters and ESP typically operate at relatively high temperatures and may

<sup>46</sup> WB (2007) Health Care Facility EHS GG, p6.

<sup>47</sup> WB (2007) Health Care Facility EHS GG, p6.

<sup>48</sup> Technical information on the proper operation and maintenance of hospital waste incinerators may be obtained from WHO (1999) Chapter 8 and the US EPA Handbook on the Operation and Maintenance of Medical Waste Incinerators (2002).

<sup>49</sup> Refer to Guidelines on BAT/BEP practices relevant to Article 5 and Annex C of the Stockholm Convention on Persistent Organic Pollutants, Section V.

<sup>50</sup> WB (2007) Health Care Facility EHS GG, p9.



be less effective than those that operate at lower temperatures. Venturi quenches and venturi scrubbers are also used to control heavy metal emissions. The volatile heavy metals usually condense to form a fume (less than 2 µm) that is only partially collected by pollution control equipment.

- ▶ Management of incineration residues such as fly ash, bottom ash, and liquid effluents from flue gas cleaning as a hazardous waste (see General EHS Guidelines) as they may contain high concentrations of POPs.<sup>51</sup> It is important to note that since sharps will not be disinfected with chlorine solutions, POPs are not expected to be formed during incineration.
- ▶ Incineration residues (including those which may contain POPs) will be disposed of in an ash pit to control emissions to the environment. Installing new ash pits is not the goal of the project but refurbishing the ones already in existence is possible.

However, Zimbabwe is a low-income country and the standard incinerators which are used in healthcare facilities generally do not have pollution control devices. They adhere to air emission standards prescribed by EMA. For this project, participating facilities will need to install or use an air pollution control measure acceptable to the Bank.

#### **d) Emergency Preparedness and Response**

Emergency incidents occurring in a HCF may include spillage, occupational exposure to infectious materials or radiation, accidental releases of infectious or hazardous substances to the environment, medical equipment failure, failure of solid waste and wastewater treatment facilities, and fire. These emergency events are likely to seriously affect medical workers, communities, the HCF's operation and the environment. The ZCEREHSP ICWMP contains guidance on some of the measures to deal with these emergencies.

Each HCF should develop an Emergency Response Plan (ERP) that is commensurate with the risk levels as part of its ICWMP. The key elements of an ERP are defined in ESS 4 Community Health and Safety (paragraph 21) and are as follows: (a) engineering controls (such as containment, automatic alarms, and shutoff systems) proportionate to the nature and scale of the hazard; (b) identification of and secure access to emergency equipment available on-site and nearby; (c) notification procedures for designated emergency responders; (d) diverse media channels for notification of the affected community and other stakeholders; (e) a training program for emergency responders including drills at regular intervals; (f) public evacuation procedures; (g) designated coordinator for ERP implementation; and (h) measures for restoration and cleanup of the environment following any major accident.

Emergency Preparedness and Response measures related to cold chain storage are elaborated in Appendix 13.

#### **e) Motor Vehicle Emissions**

Emissions from motor vehicles include CO, NO<sub>x</sub>, SO<sub>2</sub>, particulate matter and Volatile Organic Compounds (VOCs). Emissions are expected from the project vehicles although this is insignificant, considering that the national air quality is degraded, any small increases should be avoided or minimized to the extent possible. Given the insignificant amount of project vehicle emissions, the project will take a preventative management approach to ensure the proper maintenance of vehicles to avoid any unnecessary releases. Emissions from the project vehicles will comply with the Environmental management (Atmospheric Pollution Control) regulations of 2009. The regulations prescribe maximum permissible emission limits per given compound including recommendations which may be determined by EMA to reduce vehicle emissions. In addition, project vehicles will: i) implement manufacturer recommended engine maintenance programmes, ii) instruct drivers on the benefits of safe driving practices that reduce both the risk of accidents and fuel consumption, including measured acceleration and driving within safe speed limits, iii) replace older vehicles with those that are newer and more fuel efficient, iv) install and maintain emission control devices, and v) implement a regular vehicle maintenance programme.<sup>52</sup> The EHS for Retail Petroleum Networks is silent on vehicle emissions since it focuses on petroleum delivery.

Table 6-6 outlines the comprehensive ESMP for this ESMF. It presents the potential adverse impacts of the Project, which include direct impacts on sites, the generation of solid and liquid waste, the generation of medical waste and the disposal thereof, as well as occupational risks

<sup>51</sup>WB (2007) *Health Care Facility EHS GG*, pg.

<sup>52</sup>WB (2007), *General EHS GG: Environmental Air Emissions and Ambient Air Quality*, pg.



faced by workers in the healthcare facilities or during the minor civil works that will be done and sets forth possible and mitigation measures.

## 5.8 Environmental and Social Management Plan

An Environmental and Social Management Plan (ESMP) details the specific environmental and social conditions for the project in response to identified risks. The use of ESMPs ensures that mitigation measures identified through environmental and social assessment are implemented and monitoring is carried out. The ESMP in Table 6-6 outlines the mitigation, compensation, enhancement, and monitoring needed to manage the environmental and social impacts associated with ZCERP including details on when each action should occur and who is responsible for its delivery. For those that require it, individual project activities will also formulate checklist ESMPs based on Table 5- 6.

Table 5-6 Comprehensive ESMP of the ZCEREHSP by Project Component

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
For all components	<ul style="list-style-type: none"> <li>▶ OHS and CHS COVID-19 risks.</li> <li>▶ Natural or human-made disaster or other large scale emergency event</li> <li>▶ Risks/impacts on community health and safety</li> </ul>	<ul style="list-style-type: none"> <li>▶ Provision of PPE (including hand sanitizers and masks, etc. as necessary) and promotion and observation of COVID-19 protocols to halt the spread among project implementers, from project implementers to the public and between project beneficiaries (for example, those being vaccinated). The project will regularly integrate the latest guidance by WHO as it develops over time and experience addressing COVID-19 globally.</li> <li>▶ Follow Emergency Measure guidance in this ESMF. Individual facilities should follow the procedures detailed in their individual ICWMPs.</li> </ul> <p>HCFs, their contractors and other project implementors will design, construct, operate and decommission the structural elements of ZCEREHSP (such as incinerators, solar panels, solar drive refrigerators, etc.) in accordance with national legal requirements, the EHSGs and other GIIP, taking into consideration safety risks to third parties and affected communities. Structural elements of ZCEREHSP will be designed and constructed by competent professionals and certified or approved by competent authorities or professionals. Further, HCFs and the PIE will consider the incremental risks of the public's potential exposure to accidents or natural hazards (including extreme weather events especially for high-risk locations in accordance with ESS4 Community Health and Safety and the WB Fire Safety Guidelines in Section 3.3 of the General EHSg2007).</p>	<ul style="list-style-type: none"> <li>▶ PIE</li> </ul> <p>Each HCF/MoHCC</p>	Continuous data from the PPE tracking system; visits and spot checks to confirm protocols being observed. Monitoring will be conducted monthly over 18 months.

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
<b>Component 1: Covid-19 Deployment and Related Risk Communication and Community Engagement</b>				
<b>Sub Component 1.1 Vaccine Deployment</b>				
<p>This sub-component will contribute toward strengthening the public health system's capacity to deploy vaccines through Fuel, repair and maintenance service of vehicles used for vaccine distribution will support: Supervision and monitoring of vaccine deployment including ensuring implementation of the NVDP. Special attention will be given to women, people with disabilities, and others among targeted groups who may face barriers to access information and services.</p> <p>Procurement of electronic data capturing tools for clinic level, and data</p>	<ul style="list-style-type: none"> <li>▶ Exclusion of vulnerable and marginalised groups from services and facilities necessary to combat the disease.</li> <li>▶ Risk of COVID-19 transmission among the community, patients, and workers</li> <li>▶ Waste or oil and other substances emanating from fuelling, repair, and maintenance of vehicles for Covid-19 vaccine deployment.</li> <li>▶ Waste emanating from the installation and operation of solar or other energy generating equipment</li> <li>▶ Infectious waste from vaccinations</li> </ul>	<ul style="list-style-type: none"> <li>▶ Implementation of Covid-19 National Deployment and Vaccination Strategy (NDS) that outlines detailed procedures and protocols for implementation of COVID-19 vaccination and proposes measures for effective vaccination procedures for the population.</li> <li>▶ Ensure phasing of vaccinations according to the level of risk and starting with the highest risk in 2021</li> <li>▶ The risk of elite capture and corruption will be mitigated through government's vaccine oversight, verification and monitoring and evaluation</li> <li>▶ Strengthen feedback mechanisms for the public (detailed in GRM)</li> <li>▶ Each generator of waste is required by law to prepare and implement a waste management plan; hence the facilities will be supported to develop individual ICWMPs.</li> </ul>	<p>MOHCC and PIE</p>	<p>NDS adopted and being implemented by all beneficiary institutions.</p> <p>Presence of Waste management plan for every waste generator.</p>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
<p>Support outreach activities – fuel, procurement, and service of vehicles</p> <p>Support vaccine efficacy monitoring / check</p> <p>Procurement of PPE for public COVID-19 vaccination centres and capacity building for rational use of PPE, including the development of guidance tools and training through physical and virtual methods</p> <p>Vaccine Waste Management and Transportation to Regional hubs</p> <p>Monitoring and Evaluation on Waste Management National Trainer of Trainers (ToT) on Vaccine waste management</p> <p>Set up of Impilo COVID-19 Vaccination Authentication. This is an Electronic Health Record mobile application solution that will enable a QR code to be assigned to every COVID-19 vaccination certificate.<sup>53</sup></p>	<ul style="list-style-type: none"> <li>▶ Contaminated soil at HCFs due to past improper on-site waste treatment or disposal, including waste storage, incinerators and waste pits.</li> <li>▶ Wastewater from HCFs</li> <li>▶ Road safety risks from transportation of vaccines, other project goods and supplies and public address vehicles.</li> <li>▶ Emissions from the incinerators for (infectious medical waste disposal) and from the vehicles</li> </ul> <p>OHS risks to staff operating or around incinerators</p>	<ul style="list-style-type: none"> <li>▶ Formulate an exposure control plan for blood-borne pathogens.</li> <li>▶ Provide staff members and visitors with information on infection control policies and procedures.</li> <li>▶ Establish Universal / Standard Precautions to treat all blood and other potentially infectious materials with appropriate precautions, including:</li> <li>▶ Immunization for staff members as necessary (e.g., vaccination for hepatitis B virus)</li> <li>▶ Use of appropriate PPE</li> <li>▶ Adoption of best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public.</li> <li>▶ Measures should include:</li> </ul>		

<sup>53</sup> The GoZ and MOHCC, in collaboration with the Harare Institute of Technology, developed this solution for the production of authentic and secure COVID-19 vaccination certificates.

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
		<ul style="list-style-type: none"> <li>o Emphasizing safety aspects among drivers</li> <li>o Improving driving skills and requiring licensing of drivers</li> <li>o Adopting limits for trip duration and arranging driver rosters to avoid overtiredness.</li> <li>o Avoiding dangerous routes and times of day to reduce the risk of accidents.</li> <li>o Use of speed control devices (governors) on trucks, and remote monitoring of driver actions</li> </ul> <p>Regular maintenance of vehicles and use of manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure. Pollution prevention, avoidance and mitigation measures as discussed in this ESMF and dictated by the EHSGs.</p>		

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>Environmental and community related risks from inadequate storage, handling, transportation, and disposal of health care waste</p>	<ul style="list-style-type: none"> <li>▶ In order to mitigate the risks associated with medical waste management and disposal, the Project will invest in the procurement of appropriate PPE, as well as training of medical, and waste management personnel to ensure compliance with the ICWMP, WHO guidance and GIP. This will be documented in the ICWMP. There is no current estimate of what these needs are either nationwide or in facilities which may participate in the project.</li> <li>▶ Proper and adequate treatment of all waste through incineration. Facilities with non-functional incinerators will be supported to transport waste for off-waste incineration.</li> <li>▶ Adoption of relevant transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public. Measures should include:</li> </ul>	<p>MOHCC, PIE, HCFs</p>	<ul style="list-style-type: none"> <li>▶ Number of reported waste transportation related accidents/incidents</li> <li>▶ Amount of medical waste generated at HCF</li> <li>▶ Amount transported (and confirmed by hazardous waste transportation return)</li> <li>▶ Amount and location of disposal</li> </ul> <p>Percentage of Disposal sites (eg., incinerator) operating properly per Project requirements (ESMF, ICWMP)</p>



PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
		<ul style="list-style-type: none"> <li>○ Emphasizing safety aspects among drivers</li> <li>○ Improving driving skills and requiring licensing of drivers</li> <li>○ Adopting limits for trip duration and arranging driver rosters to avoid overtiredness.</li> <li>○ Avoiding dangerous routes and times of day to reduce the risk of accidents.</li> <li>○ Use of speed control devices (governors) on trucks, and remote monitoring of driver actions</li> <li>○ Regular maintenance of vehicles and use of manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.</li> </ul> <p>▶ Follow guidance as outlined in ZCEREHSP ICWMP, this ESMF, individual facility ICWMP and the EHSGs with respect to appropriate labeling, handling, and packaging of the hazardous medical waste being transported</p>		

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<ul style="list-style-type: none"> <li>▶ Improper handling, storage, and transportation of waste to regional incinerators for disposal</li> <li>▶ HCFs that do not have all applicable EHS licenses/ permits and/or do not comply with all regulatory EHS requirements</li> </ul> <p>HCFs that have material EHS existing liabilities including historical contamination, inadequate present or past onsite medical waste or wastewater disposal, inadequate potable water,</p>	<ul style="list-style-type: none"> <li>▶ Each healthcare facility that will participate in the project will be required to develop its own infection control and waste management plan which will assess and address the needs. The plan must in place before implementation of any waste generating activity, and the plan to be shared with PIE and MOHCC for approval. The ICWMP contains guidance on this individual facility waste management plan.</li> <li>▶ Training of drivers on safe transportation of hazardous waste</li> </ul> <p>Regular servicing and maintenance of motor vehicles</p>	<p>MOHCC/ PIE</p>	<ul style="list-style-type: none"> <li>▶ Number of drivers trained of safe transportation of waste</li> <li>▶ Percentage of incinerator operators trained on proper operation and maintenance of incinerators.</li> <li>▶ Percentage of incinerators licenced by the Environmental Management Agency.</li> <li>▶ Amount of medical waste generated at HCF</li> </ul>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
				<ul style="list-style-type: none"> <li>▶ Amount transported (and confirmed by hazardous waste transportation return)</li> <li>▶ Amount and location of disposal</li> <li>▶ Percentage of Disposal sites (e.g., incinerator) operating properly per Project requirements (ESMF, ICWMP),</li> <li>▶ Percentage of HCF appropriately segregating waste at point of generation</li> <li>▶ shipping manifest (as applicable)</li> </ul> <p>confirmation of final disposal of hazardous materials</p>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>Environmental degradation from mismanaged fuelling, repair, and maintenance of vehicles</p>	<p>Manage fuel, emissions and wastes generated from vehicle fuelling and maintenance in accordance with the General and Retail Petroleum Networks EHG's; and adequately manage and dispose of such wastes. For example, Oil water separators and grease traps should be installed and maintained as appropriate at refueling facilities, workshops, parking areas, fuel storage and containment areas.<sup>54</sup> Document disposal of all hazardous wastes (including petroleum related) with governmental authorized facility.</p> <p>Emissions from vehicles must comply with Environmental Management (Atmospheric Pollution Control) Regulations, 2009. Additional recommendations include:</p> <ul style="list-style-type: none"> <li>▶ operators should implement the manufacturer recommended engine maintenance programs</li> <li>▶ Implement a regular vehicle maintenance and repair program.<sup>55</sup></li> <li>▶ Securing fire extinguishers / fire alarms systems and appropriate storage of fuel.</li> </ul> <p>Plan the signals and the appropriate signage to be placed close to potential areas of danger</p>	<p>Vehicle Operators (ultimately MOHCC and PIE to monitor and enforce)</p>	<ul style="list-style-type: none"> <li>▶ Percentage of fuelling facilities with adequate and proper equipment for management of oil and other petroleum related waste.</li> <li>▶ Percentage of workers with appropriate PPE.</li> <li>▶ Percentage of facilities disposing petroleum related waste at an authorised disposal facility.</li> </ul> <p>Number of vehicles complying with national environmental emission standards.</p>

<sup>54</sup> WB (2007) General EHS: Environmental—Wastewater and Ambient Water Quality, p29.

<sup>55</sup> WB (2007) General EHS: Environment—Air Emissions, p9.

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>Adverse Events Following Immunisations</p>	<ul style="list-style-type: none"> <li>▶ The profiling and screening of candidate individuals to be vaccinated should be performed to avoid the risk of vaccine contraindications; Surveillance of AEFI through registration of all recipients of Covid-19 vaccines and capturing of all adverse events in the Medicines Control Authority of Zimbabwe system for easy tracking of AEFIs</li> <li>▶ Implementation of the existing MOHCC AEFIs surveillance guidelines and the WHO vaccine safety manual</li> <li>▶ TA to MoHCC to revise, update, and implement the safety monitoring plan to enable swift detection of any AEFI</li> <li>▶ training and preparation of health care workers on identification, management and reporting of potential cases of anaphylaxis</li> <li>▶ provision of comprehensive emergency tray at all vaccination points</li> </ul>	<p>MOHCC (including Medicines Control Authority of Zimbabwe) and PJE</p>	<ul style="list-style-type: none"> <li>▶ Percentage of AEFIs reported and documented</li> <li>▶ Revised and updated safety monitoring plan in place</li> </ul> <p>Number of health care workers trained on identification, management and reporting of anaphylaxis</p>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>GBV/ SEA-SH risks among patients and health care providers, especially in relation to outreach campaigns distribution of family planning services and items</p>	<ul style="list-style-type: none"> <li>▶ prepare, adopt, and implement a GBV/SEA/SH Action Plan (as part of the ESMF).</li> <li>▶ ensure that the codes of conduct and GBV/SEA/SH prevention provisions are integrated into all contractual and contracting documents (ToRs, tender documents, and workers' contracts)</li> <li>▶ training of staff on SEA/SH risks and sign the codes of conduct before starting work on any project activities</li> </ul>	<p>MOHCC and PIE</p>	<ul style="list-style-type: none"> <li>▶ GBV/ SEA/SH Action plan in place (Reference: Annex 15)</li> </ul> <p>Number of Contractors signing the GBV/SEA/SH Code of Conduct</p>



PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>Loss of vaccine potency due to poor storage, handling and transportation</p>	<ul style="list-style-type: none"> <li>▶ The deployment plan and standard operating procedures (SOPs), including maintaining cold chain, will be communicated to all levels of the supply chain managers. (In accordance with WHO and CDC guidelines)</li> <li>▶ ensure vaccines are stored at the correct temperatures.</li> <li>▶ Provision of direct-drive solar vaccine refrigerators</li> <li>▶ Health professionals, including vaccinators, will be trained in infection prevention control measures and cold chain maintenance.</li> </ul> <p>continuous monitoring of data recording and reporting mechanism for vaccines and cold chain equipment</p>	<p>MOHCC and PIE</p>	<ul style="list-style-type: none"> <li>▶ percentage of facilities with Vaccine standard operating procedures or deployment plan</li> <li>▶ percentage of facilities storing vaccines at correct temperatures</li> <li>▶ number of health care workers trained on cold chain maintenance and IPC</li> </ul> <p>percentage of health facilities with direct-drive solar vaccine refrigerators</p>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>OHS issues related to the availability, supply, and proper usage of personal protective equipment (PPE) and exposure to COVID-19 for healthcare workers</p>	<ul style="list-style-type: none"> <li>▶ The LMP and the ICWMP will contain detailed procedures, based on WHO guidance, for protocols necessary for testing, administering vaccines and handling medical waste as well as environmental health and safety guidelines for staff, including the necessary personal protective equipment (PPE). Proper disposal of sharps disinfectant protocols, and regular testing of healthcare workers will be included. Workers to be trained regularly in the use of PPE and techniques for reducing exposure to COVID-19.</li> <li>▶ The project will regularly integrate the latest guidance by WHO as it develops overtime and experience addressing COVID-19 globally especially with respect to ESS2 and reducing the risk of the project spreading COVID-19 among project workers or to the public in general</li> </ul>	<p>MOHCC and PIE</p>	<ul style="list-style-type: none"> <li>▶ Number of facilities Using tracking system to check on PPE distribution,</li> <li>▶ Monitor worker loss-time incidents.</li> <li>▶ Spot checks during site visits.</li> </ul> <p>Analyse, record, and report the Quality Checklist data on this on a biannual basis.</p>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>Hazards related to transportation (of infectious and other waste from vaccination centres to regional hubs for incineration and indirect risks related to project vehicle maintenance and fueling activities</p>	<ul style="list-style-type: none"> <li>▶ Adequately manage and dispose of health care wastes (including, vaccines) and other types of hazardous and non-hazardous wastes in accordance with the ICWMP and the individual facility waste management plan if applicable.</li> <li>▶ Proper labelling of waste containers</li> <li>▶ Providing transportation documentation (shipping manifest).</li> <li>▶ Ensuring adequate vehicle specifications</li> <li>▶ Ensuring that the volume, nature, integrity and protection of packaging and containers used for transport are appropriate for the type and quantity of hazardous materials</li> <li>▶ Training employee involved in the transportation of health care waste regarding proper transportation and handling procedures and emergency procedures</li> <li>▶ Using labelling and placarding (external signs on vehicles as required).</li> <li>▶ Providing necessary means for emergency response on call 24 hours/ day.</li> </ul>	<p>Healthcare facilities, vaccination centres. Ultimately MOHCC and PIE for following-up to ensure.</p>	<ul style="list-style-type: none"> <li>▶ Number of road accidents.</li> <li>▶ Percentage of drivers with adequate documentation (driver's licences, defensive drivers' licence, positive medical report),</li> <li>▶ Number of drivers trained on safe transportation of hazardous waste.</li> </ul> <p>Number of incidents or accidents where healthcare workers, waste handlers or drivers meet waste.</p>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
		<ul style="list-style-type: none"> <li>▶ Follow road safety protocols as found in the WB General EHSGs.</li> <li>▶ Ensure proper vehicle maintenance to reduce emissions and safety risks. Consult the Retail Petroleum Networks EHSG as necessary.</li> </ul> <p>Vehicle drivers will be appropriately licensed and trained and that vehicles are properly serviced and maintained to ensure the safety of passengers and the public</p>		
	Routine Accidents and Spills in HCFs	<ul style="list-style-type: none"> <li>▶ Follow spills, fire and emergency procedures as detailed in ZCERP ICWMP and in individual facility ICWMP.</li> </ul> <p>Report any serious accidents such as those with fatalities to the PIE which will report to the Bank (except for COVID-19 cases) immediately following any timeline requirements as detailed in the ESCP and elsewhere in this ESMF</p>	HCF, PIE	Number of accidents and serious spills/ incidents to be reported in PIE Safeguards Progress reports.
<b>Sub-component 1.2: Risk Communication and Community Engagement</b>				

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
<p>This subcomponent will support:</p> <p>Support research, monitoring, evaluation, and documentation of all RCCE activities at all levels through community dialogues, trainings of community influencers, political leaders, school health teams and community, sensitization meetings, development of IEC materials on COVID-19 and vaccination, dissemination of messages through radio, TV, social media, and bulk short SMS.</p> <p>Strengthening of Interpersonal Communication (IPC) at Community Level through door-to-door and street level awareness campaigns</p>	<ul style="list-style-type: none"> <li>Rumours and false information in the electronic media causing panic.</li> </ul>	<ul style="list-style-type: none"> <li>When developing communication messages about COVID-19, it is important to have social stigma issues in mind and choose language that does not exacerbate stigma.</li> <li>It is best to not refer to people with the disease as "COVID-19 cases", "victims" "COVID-19 families" or "the diseased". It is better to refer as "people who have COVID-19", "people who are being treated for COVID-19", or "people who are recovering from COVID-19". It is important to separate a person from having an identity defined by COVID-19, to reduce stigma. This language should be used throughout all communication materials.</li> </ul> <p>Ensure accurate information about the virus is</p>	<p>MOHCC/ PIE</p>	<ul style="list-style-type: none"> <li>Covid-19 affected benefit from the psychosocial support</li> <li>Call centre teams incentivised.</li> </ul>
			<p>MOHCC/ PIE</p>	<ul style="list-style-type: none"> <li>Number of people reached to IEC material</li> </ul>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
				<ul style="list-style-type: none"> <li>Use of proper PPE supplies such as face masks, hand sanitisers, aprons, overalls etc</li> </ul>
		widely disseminated, and that there is also a focus on people recovered.		<ul style="list-style-type: none"> <li>provided and observed.</li> </ul>
	Risk of fear and/or stigma towards the virus, which may make people hide symptoms, avoid getting tested and even reject hygiene measures or wearing PPE equipment (or masks if recommended)	When developing communication materials, refer to WHO information on social stigma: <a href="https://www.who.int/docs/default-source/coronavirus/COVID19-stigma-guide.pdf">https://www.who.int/docs/default-source/coronavirus/COVID19-stigma-guide.pdf</a> .		Information Communication, capacity building and stakeholder engagement



PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
<p>Strengthening community feedback mechanisms at local level such as the use of registers or rumour logbooks or suggestion boxes. Grievance Redress Mechanisms (GRMs), seconding Health Promotion Officers (HPOs) to EOCs, as well as ensuring community feedback is transmitted to high level meetings</p> <p>Strengthening psychosocial support systems for both HCWs and general population by building capacity of community health workers, and national psychosocial center</p> <p>Community discussion forums with local and traditional leaders, school heads to share information about GBV, SEA and GRM (priority for the tshwa and doma districts)</p> <p>Procure 2 purpose-built public-address branded vehicles</p> <p>Safeguard instruments validation, dissemination, and capacity building</p>	<ul style="list-style-type: none"> <li>Inappropriate information and communication increase social stigma with those who expose or are infected by virus.</li> </ul>	<ul style="list-style-type: none"> <li>It is best to not refer to people with the disease as "COVID-19 cases", "victims" "COVID-19 families" or "the diseased". It is better to refer as "people who have COVID-19", "people who are being treated for COVID-19", or "people who are recovering from COVID-19". It is important to separate a person from having an identity defined by COVID-19, to reduce stigma. This language should be used throughout all communication materials.</li> <li>Ensure accurate information about the virus is widely disseminated, and that there is also a focus on people recovered</li> </ul>	<p>MOHCC/ PIE</p>	<ul style="list-style-type: none"> <li>Number of people reached with information on COVID-19</li> </ul>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	OHS risks to health workers	<ul style="list-style-type: none"> <li>Use of PPE and other COVID-19 prevention protocols.</li> </ul> <p>The project will regularly integrate the latest guidance by WHO as it develops over time and experience addressing COVID-19 globally especially with respect to ESS2 and reducing the risk of the project spreading COVID-19 among project workers or to the public in general.</p>	MOHCC/ PIE	Number of OHS related accidents or incidents reported
	Road hazards/vehicle safety/emissions	<ul style="list-style-type: none"> <li>Ensure proper vehicle maintenance and safety protocols as found in WB General EHSG</li> <li>Follow road safety protocols as found in the national laws and WB General EHSG.</li> </ul> <p>Vehicle drivers will be appropriately licensed and trained</p>	MOHCC/ PIE	Number of motor vehicle related accidents reported
	Air Pollution from project vehicles	<ul style="list-style-type: none"> <li>implementing a regular vehicle repair and maintenance programme</li> <li>Installing and maintaining emission control devices</li> <li>Replacing older vehicles with newer, fuel-efficient vehicles</li> <li>Implementing manufacturer recommended engine maintenance programmes</li> </ul>	MOHCC and PIE	Number of vehicle emission tests conducted

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>Communication materials may not reach the most vulnerable, including the elderly, vulnerable groups and workers from the informal sector, a lot of whom are women, who tend to have lower levels of education, lower incomes and may lack access to reliable information materials.</p>	<ul style="list-style-type: none"> <li>▶ The SEP provides measures for stakeholder engagement at participating health facilities to inform local communities of project activities, seek their feedback on potential risks and mitigation measures. The following measures will also be applied.</li> <li>▶ Develop clear and concise communication materials and ensure that it is in a format/language that is understandable to all people, the most vulnerable.</li> <li>▶ When developing communication materials, refer to WHO information on social stigma: <a href="https://www.who.int/docs/default-source/coronavirus/covid19-stigma-guide.pdf">https://www.who.int/docs/default-source/coronavirus/covid19-stigma-guide.pdf</a></li> <li>▶ Use different media (social media, radio, tv) plus engaging existing formal and informal public health and community-based networks (schools, healthcare service providers at local level, etc). Ensure that information is accessible in sign language, braille, illustrations/pictorial and in Sesotho.</li> </ul>	<p>MOHCC and PIE</p>	<ul style="list-style-type: none"> <li>▶ Number of people reached with communication materials</li> <li>number of people reached through social media/ mobile awareness,</li> <li># of people reached to interpersonal communication,</li> <li>number of Information education material distributed.</li> </ul>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
		<ul style="list-style-type: none"> <li>▶ Ensure messages relating to COVID-19 reach all groups of people, the most vulnerable (the poor, elderly, women single heads of household, those with a disability, vulnerable groups, any marginalized group). This may include having a multi-faceted approach to consultations and disclosure of information and information sharing, such as by loudspeaker (by community authorities or district health authorities), radio, TV, newspapers, WhatsApp broadcast messages, Facebook, SMS, You Tube videos, community announcement, social influencers/religious leaders, etc.</li> <li>▶ A focus of information materials should be on women, as they tend to be the best avenue of communication for children, disabled and the elderly in the household.</li> <li>▶ Communication materials must reinforce the positive contribution of health care workers and other essential workers and their need to be supported by community members.</li> <li>▶ Communication materials should make clear the steps health workers and others are taking to protect themselves against the virus and their use of PPE</li> </ul>		

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p><b>Social conflicts:</b> May result from false rumours and misinformation, especially for project supported facilities, project beneficiaries, and other services. If stakeholders are not properly consulted, information is not disclosed and people are not informed about their rights, options for grievance redress or project timelines, there could be misunderstandings, conflict, stigma, gender-based violence, false rumours, or loss of confidence in the community regarding the project.</p>	<ul style="list-style-type: none"> <li>▶ The ESMF's continuous stakeholder engagement strategy will be utilised to continuously consult the stakeholders in the process of implementing the project.</li> <li>▶ Ensure the continuous consultations on this ESMF include relevant government agencies, NGOs and other organizations working on health and gender, including GBV, as well as vulnerable groups. Ensure women, and women's groups, are targeted during the continuous consultations on the ESMF, as well as information campaigns.</li> <li>▶ Identify trusted community groups (local influencers such as community leaders, religious leaders, health workers, community volunteers, celebrities) and local networks (such as women's groups, youth groups, business groups, and traditional healers) that can help to disseminate messages. Define clear and easy mechanisms to disseminate messages and materials based on community questions and concerns.</li> </ul>	<p>MOHCC and PIE</p>	<p>Dissemination of correct COVID-19 information to the public.</p> <p>Peoples' grievances being addressed timeously.</p> <p>Number of public consultations conducted</p>
<p><b>Subcomponent 2: Climate Friendly Related Health Systems Strengthening</b></p>				

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
<p>This component will support complementary strategic activities to facilitate the implementation of the COVID-19 NDVP, focusing on climate friendly health system strengthening activities that support vaccine deployment</p> <p>Cold chain equipment including Solar Direct Solar Drive Refrigerators and cold boxes purchase</p> <p>Installation and maintenance of solar energy in health facilities</p> <p>Training of HCWs</p> <p>Installation of refrigeration units in trucks for vaccine delivery</p> <p>Installation of solar panels for sustainable energy generation at health facilities</p>	<p><b>Cold Chain Operation-</b> The use of refrigerants<sup>56</sup> in the cold chain system (in refrigerators and transportation trucks) can cause depletion of the ozone layer and can contribute to greenhouse gas emissions that cause global warming</p> <p>However, the cold chain will be energy efficient and will involve the use of sustainable solar energy in some health care facilities</p>	<p>Use of more energy-efficient technology for the refrigeration system</p> <p>To include relevant technical specifications as part of procuring cold storage/chain equipment and transport and/or stipulating performance standards for the cold chain service providers</p>	<p>MOHCC/ PIE</p>	<p>▶ Testing of direct drive solar refrigerators temperatures daily. Record and act on anomalies.</p> <p>Number of accidents reported</p>

<sup>56</sup> In the 2017 UNEP Report of the Technology and Economic Assessment Panel (Montreal Protocol on Substances that deplete the ozone layer), industrial refrigeration accounts for approximately 2% of HFC consumption in terms of CO<sub>2</sub>-eq and is projected to grow by approximately 6.7% annually between 2015 and 2050.



PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	The lack of proper maintenance and knowledge very often translates into an inadequate management of the life cycle of refrigerant gases. More refrigerant leakage results to less efficient equipment and higher emission of high global warming potential (GWP) gases into the atmosphere.	<p>Ensure that the refrigeration system including its maintenance and servicing, complies with the requirements of the Montreal Protocol on Ozone Depleting Substance (ODS)</p> <p>Improve energy efficiency of refrigeration systems through maintenance of the refrigeration systems, implementation of procedures and best practices that reduces energy consumptions of chillers and refrigeration systems, e.g. closing the doors of cold rooms during operation, switching-off mobile refrigeration units while opening doors of refrigerated trucks, parking refrigerated trucks in the shade, regular controls and monitoring of all equipment parameters, such as energy performance, pressure, and temperature.</p>	MOHCC/ PIE	Percentage of installed refrigerators with protocols on ODS
	Refrigerants are toxic and some are flammable and could form explosive mixture with air if leakage occurs, posing risk to people's health and safety.	<p>Observe proper handling of refrigerants and during servicing and ensure that workers involved in servicing are trained to avoid leakage of refrigerant in the atmosphere and use PEEs to avoid exposure to refrigerants.</p> <p>Procure solar direct drive refrigerators from WHO Prequalified suppliers- prequalified solar refrigeration systems.<sup>57</sup></p>	MOHCC/ PIE	<p>Workers with proper PPE</p> <p>Number of accidents reported</p>

<sup>57</sup> A formal definition for 'qualified supplier' can be found in WHO PQS E03/PV01.2 (available at: [http://apps.who.int/immunization\\_standards/vaccine\\_quality/pqs\\_catalogue/](http://apps.who.int/immunization_standards/vaccine_quality/pqs_catalogue/))

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>Hazards (including environmental and OHS related) associated with installation of solar panels include falls from ladders, cuts from metal and power tools, eye injuries, soldering burns, sun burn, shocks from electric currents</p>	<p>Site assessment for potential hazards by the contractors</p> <p>Provision of adequate and proper PPE for workers which include hard hats, gloves, goggles, steel toed shoes, harnesses</p> <p>Contractors will be required to follow the Labour Management Procedures (Appendix 2) and Environmental and Social Guidelines for Contractors (Appendix 8) to mitigate and reduce OHS and environmental risks associated with the installation of energy generating equipment.</p> <p>Contractors or others installing solar power equipment to decide to reduce noise impacts on patients as necessary such as (in consultation with medical professionals) having patients moved, scheduling works at times that won't disturb patients or limiting the timing of works, etc.</p>	<p>MOHCC and PIE, contractors</p>	<ul style="list-style-type: none"> <li>▶ Number of accidents or incidents</li> <li>▶ EHS performance of contractors installing solar panels - such as noise, waste disposal,</li> </ul> <p>Disposal/repurposing of any obsolete equipment removed</p>
	<p>Operation of solar panels, maintenance, and waste disposal.</p>	<p>Potential use of on-site emergency diesel generators in case of loss of power and/or issues with solar</p> <p>Risk of electrocution during repair and maintenance</p>	<p>HCFs, MLGPW</p>	

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	Risk of environmental contamination with battery lead because of improper disposal and lead poisoning in humans	Disposal of the batteries using the procedures defined in the Public Finance management (Treasury Instructions) regulations. Sending or selling the batteries to registered recycling companies.	PIE	<ul style="list-style-type: none"> <li>▶ % of facilities following appropriate procedures in the disposal of assets including batteries</li> <li>% of facilities utilising registered battery recycling companies for disposal of old batteries</li> </ul>
<b>Component 4: Sustaining Essential Health Services</b>				
<b>Subcomponent 4.1: Integrated Outreach Service Delivery</b>				
Procurement of 76 solar-powered tricycles, 8 well equipped outreach vans, eight by 18-seater rough terrain mini buses, operational costs for the integrated outreach teams, costs related to the RMNCAH mentorship	OHS risks to health workers	<ul style="list-style-type: none"> <li>▶ Use of PPE and other infection prevention and control protocols.</li> </ul> <p>The project will regularly integrate the latest guidance by WHO as it develops over time and experience addressing COVID-19 and other health care associated infections globally especially with respect to ESS2 and reducing the risk of the project spreading healthcare associated infections among project workers or to the public in general</p>	MOHCC/ PIE	Number of OHS related accidents or incidents reported

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	Road hazards/vehicle safety	<ul style="list-style-type: none"> <li>▶ Ensure proper tricycles maintenance and safety protocols as found in WB General EHSG</li> <li>▶ Follow road safety protocols as found in the national laws and WB General EHSG.</li> <li>▶ Tricycle riders will be appropriately licensed and trained</li> </ul>	MOHCC/ PIE	Number of motor vehicle related accidents reported
	Air Pollution from project vehicles	<ul style="list-style-type: none"> <li>▶ implementing a regular vehicle repair and maintenance programme</li> <li>▶ Installing and maintaining emission control devices</li> <li>▶ Replacing older vehicles with newer, fuel-efficient vehicles</li> <li>▶ Implementing manufacturer recommended engine maintenance programmes</li> </ul>	MOHCC and PIE	Number of vehicle emission tests conducted
<b>Subcomponent 4.2: Strengthening Community Health Services including Disease Surveillance</b>				

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
Upskilling/refresher trainings and support for 5,450 VHWs, procurement of motorcycles for environmental health technicians	Road hazards/vehicle safety/emissions	<ul style="list-style-type: none"> <li>▶ Ensure proper motorcycle maintenance and safety protocols as found in WB General EHSG</li> <li>▶ Follow road safety protocols as found in the national laws and WB General EHSG.</li> <li>▶ Motorcycle riders will be appropriately licensed and trained</li> </ul>	MOHCC/ PIE	Number of motorcycle related accidents reported
<b>Subcomponent 4.3: Commodity Security</b>				
Procurement of equipment for both basic and comprehensive emergency obstetric and new-born care, procurement of family planning commodities	Risk of environmental contamination with obsolete equipment because of improper disposal	<ul style="list-style-type: none"> <li>▶ Disposal of the equipment using the procedures defined in the Public Finance and Procurement Act, and the Public Finance management (Treasury Instructions) regulations.</li> </ul>	MOHCC and PIE	Presence of Waste management plan for every waste generator.

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>Infectious health care waste generation from the management and care of new-born and the mothers, and use of family planning commodities</p>	<ul style="list-style-type: none"> <li>▶ Each generator of waste is required by law to prepare and implement a waste management plan; hence the facilities will be supported to develop individual ICWMPs.</li> <li>▶ Formulate an exposure control plan for blood-borne pathogens.</li> <li>▶ Provide staff members and visitors with information on infection control policies and procedures.</li> <li>▶ Establish Universal / Standard Precautions to treat all blood and other potentially infectious materials with appropriate precautions, including:</li> <li>▶ Immunization for staff members as necessary (e.g., vaccination for hepatitis B virus)</li> <li>▶ Use of appropriate PPE</li> </ul>	<p>MOHCC and PIE</p>	<p>Presence of Waste management plan for every waste generator.</p>



PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p>OHS risks from installation and/ or repair of oxygen reticulation system</p> <ul style="list-style-type: none"> <li>▶ Damage to fittings with release of oxygen will vigorously support the fire escalating the seriousness of the fire.</li> <li>▶ Future works local to liquid oxygen pipework could damage or rupture the pipework, causing a serious leak of liquid oxygen.</li> <li>▶ A leak from the LPG tank in the presence of an enriched-oxygen atmosphere could cause a jet fire on the LPG tank above ground connections.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Fire detection and alarm.</li> <li>▶ Early response to external fire.</li> <li>▶ daily and weekly user care and preventive maintenance of the equipment</li> <li>▶ proper storage of oxygen cylinders</li> <li>▶ ensure appropriate fire safety precautions including fire extinguishers that are properly working and regularly inspected.</li> <li>▶ Unwanted cylinders to be returned to the vendor and not vented into the environment.</li> <li>▶ Ensure safe handling of oxygen cylinders</li> </ul>	<p>Healthcare facility, MOHCC, PIE</p>	<ul style="list-style-type: none"> <li>▶ Facilities adhering to health and safety precautions for reticulated oxygen</li> <li>▶ Facilities with reticulated oxygen installed according to set standards.</li> <li>▶ Facilities conducting daily and weekly preventive maintenance</li> </ul>
<p><b>Subcomponent 4.4: Revitalization of Maternity Waiting Homes (MWHs)</b></p>				

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
<p>Refurbishment and minor renovations of existing MWHs, training of service providers at MWHs in emergency obstetric and neonatal care (EmONC) and sensitization on the MWHs guidelines</p>	<p><b>Occupational Safety and Health:</b> The movement of trucks to and from the site, the operation of various equipment and machinery and the actual refurbishment activities will expose the workers to work-related accidents and injuries. Pollutants such as dust and noise could also have negative implications for the health of workers.</p>	<ul style="list-style-type: none"> <li>▶ The contractor(s) shall comply with all national and good practice regulations regarding workers' safety.</li> <li>▶ The contractor(s) shall have or receive minimum required training on occupational safety regulations and use of personal protective equipment.</li> <li>▶ The contractor(s) shall provide safety measures as appropriate during works such as installation of fences, fire extinguishers, first aid kits, restricted access zones, warning signs, overhead protection against falling debris, lighting system to protect hospital staff and patients against construction risks.</li> <li>▶ To manage potential COVID-19 infection risk as an OHS issue among construction workers, wash stations should be provided regularly throughout site, with a supply of clean water, liquid soap, and paper towels (for hand drying), with a waste bin (for used paper towels) that is regularly emptied. Wash stations should be provided wherever there is a toilet, canteen/food and drinking water, or sleeping accommodation, at waste</li> </ul>	<ul style="list-style-type: none"> <li>▶ Health facility Contractor(s)</li> </ul>	<ul style="list-style-type: none"> <li>▶ Use of Proper PPE is adhered to always.</li> <li>▶ Safety precautions and signs installed</li> </ul> <p>COVID-19 prevention materials available.</p>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
		<p>stations, at stores and at communal facilities. Where wash stations cannot be provided (for example at remote locations), alcohol-based hand rub should be provided. Relevant GIIP including WBG ESH Guidelines will be complied with.</p> <ul style="list-style-type: none"> <li>▶ Communication materials on COVID-19 prevention and control should be put in workplaces.</li> <li>▶ All work will be carried out in a safe and disciplined manner designed to minimize impacts on neighbouring residents and environment.</li> <li>▶ Workers: PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots)</li> </ul> <p>Appropriate signposting of the sites will inform workers of key rules and regulations to follow.</p>		

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p><b>Hazardous Waste:</b> The risk of accidental discharge of hazardous products like paint, leakage of hydrocarbons, oils or grease from machinery, electronic waste from repair and maintenance of solar powered tricycles constitutes potential sources of soils and land pollution.</p> <p>However, use of solar powered tricycles will be energy efficient and minimise emission of greenhouse gases through use of sustainable energy source.</p>	<ul style="list-style-type: none"> <li>▶ Contractor(s) will ensure proper storage and labelling of hazardous materials.</li> <li>▶ Temporarily storage on site of all hazardous or toxic substances will be in safe containers labelled with details of composition, properties, and handling information.</li> <li>▶ The containers of hazardous substances should be placed in a leak-proof container to prevent spillage and leaching.</li> <li>▶ Maintain an inventory of hazardous materials when used in work sites.</li> <li>▶ Use proper protective equipment and procedures for managing spill, exposures, and other incidents.</li> <li>▶ Hazardous materials should be handled in accordance with the accepted practices. Only trained personnel should handle the materials with precautions by using required protection equipment.</li> </ul>	Contractor(s)	<p>Type of Hazardous materials produced.</p> <p>Records of waste generated available</p> <p>weekly site inspection reports available</p>

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
		<p>The wastes are transported by specially licensed carriers and disposed in a licensed facility. Paints with toxic ingredients or solvents or lead-based paints will not be used</p> <p>To include relevant technical specifications as part of procuring solar powered tricycles and/or stipulating performance standards for the solar powered tricycles to service providers</p> <p>Disposal of electronic waste from solar powered tricycles should be in accordance with the provisions of the public finance and disposal of public assets regulations.</p>		

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p><b>Asbestos Containing Materials (ACM):</b> The risk of accidental discharge of asbestos containing materials (ACM) generated from construction, rehabilitation, or minor civil works. The risk of ACMs during the refurbishment, facility improvement, isolation ward formation and other similar activities is high since most of the old buildings have asbestos roofs and some old hospital equipment has asbestos components.</p>	<p>In reconstruction, demolition, and removal of damaged infrastructure, asbestos hazards should be identified, and a risk management approach adopted that includes disposal techniques and end-of-life sites. Techniques for prevention, minimization, and control of impacts from asbestos or asbestos containing Materials (ACM) and guidance from the General EHS and Good Practice Note: Asbestos: Occupational and Community Health Issues (World Bank Group May 2009) include:</p> <ul style="list-style-type: none"> <li>▶ Avoiding the use of asbestos containing materials (ACM) in renovation activities.</li> <li>▶ Undertaking an asbestos/hazardous products audit prior to/at the beginning of the refurbishment.</li> <li>▶ If asbestos is located on the project site, mark clearly as hazardous material</li> </ul>	<ul style="list-style-type: none"> <li>▶ Health Facility Contractor(s)</li> </ul>	<p>Site inspections, Disposal site records</p>



PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
		<ul style="list-style-type: none"> <li>▶ When possible, the asbestos will be appropriately contained and sealed to minimize exposure</li> <li>▶ The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust</li> <li>▶ Use of specially trained personnel to identify and selectively remove potentially hazardous materials (ACMs) in building elements prior to dismantling or demolition.</li> <li>▶ Repair or removal and disposal of existing ACM in buildings should only be performed by specially trained personnel, following, internationally recognized procedures. (WB, 2007)</li> <li>▶ If asbestos material is be stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately.</li> <li>▶ Managing the treatment and disposal of ACMs according to Sections 1.5 and 1.6 on Hazardous Materials and</li> <li>▶ Hazardous Waste Management, respectively.</li> </ul>		

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
		<ul style="list-style-type: none"> <li>▶ Transporting ACM in leak-tight containers to a secure landfill operated in a manner that precludes air and water contamination that could result from ruptured containers. (WB, 2007)</li> </ul> <p>The removed asbestos will not be reused</p> <ul style="list-style-type: none"> <li>▶ The contractor(s) shall develop and follow a brief site-specific solid waste control procedure (storage, provision of bins, site clean-up, bin clean-out schedule, etc.) before commencement of any financed rehabilitation works.</li> <li>▶ The contractor(s) shall use litter bins, containers, and waste collection facilities at all places during works.</li> <li>▶ The contractor(s) may store solid waste temporarily on site in a designated place prior to off-site transportation and disposal through a licensed waste collector.</li> </ul> <p>(a) The contractor(s) shall dispose of waste at designated place identified and approved by local authority. Open burning or burial of solid waste at the hospital premises shall not be allowed. It is prohibited for the contractor(s) to dispose of any debris or construction material/paint in environmentally sensitive areas (including watercourse). Recyclable materials</p>	Contractor(s)	<p>Noise levels below limits in EHS General Guidelines</p> <p>Records of waste generated available</p> <p>weekly site inspection reports available.</p>
	<p><b>Construction Waste Management:</b> Activities at construction sites will produce construction wastes such as demolition debris, excavated soils, cement bags, paint drums, brick and concrete rubble, scrap metal, broken glass, timber waste and other debris. This debris could obstruct the public, the movement of the workers and vehicles as well as affect the aesthetics of the environment.</p>			

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
		<p>such as wooden plates for trench works, steel, scaffolding material, site holding, packaging material, etc. shall be segregated and collected on-site from other waste sources for reuse or recycle (sale). Whenever feasible the contractor will reuse and recycle appropriate and viable materials (except asbestos)</p> <p>(b) Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities.</p> <p>(c) Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers.</p> <p>(d) Construction waste will be collected and disposed properly by licensed collectors</p> <p>(e) The records of waste disposal will be maintained as proof for proper management as designed.</p>	<p>▶ Health Care Facility Contractors</p>	<p>▶ Level of WASH issue. Quality of Facility sanitation</p>
	<p><b>Soil and Land Degradation:</b> Although construction work will be minor and limited to the footprint of existing infrastructure, mitigation measures are needed for unlikely circumstances of soil disturbances.</p>	<p>▶ The contractor(s) is responsible for compliance with relevant national legislation with respect to soil and land degradation.</p> <p>The contractor(s) should implement Good International Industrial Practices (GIIP) and other international guidelines such as the WBG EHS Guidelines.</p>		

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
	<p><b>Ambient air quality:</b> Air quality will be temporarily impacted by the construction activities. Interior demolition to upgrade and refurbish healthcare facilities etc, this will generate dust and debris which can affect workers, patients, and staff. Deteriorated indoor air quality may pose risks to workers and patients, with either minor or serious health impact depending on level and duration of exposure.</p>	<ul style="list-style-type: none"> <li>▶ compliance with relevant national legislation with respect to indoor and ambient air quality.</li> <li>▶ ensuring that the generation of dust is minimized, and dust suppression measures instituted indoors and outside.</li> <li>▶ Keep demolition debris in controlled area and spray with water mist to reduce debris dust</li> <li>▶ Keep surrounding environment (sidewalks, roads) free of debris to minimize dust</li> <li>▶ There will be no open burning of construction / waste material at the site</li> <li>▶ There will be no excessive idling of construction vehicles at sites</li> </ul>	<ul style="list-style-type: none"> <li>▶ Health Care Facility</li> </ul> <p>Contractor(s)</p>	<p>Dust levels are below recommended levels in EHS General Guidelines.</p>
<b>Subcomponent 4.5: Health System Digitalization and Related Innovations</b>				

PROJECT COMPONENT and PROJECT ACTIVITIES	RISK/ IMPACTS	MITIGATION MEASURES	RESPONSIBILITY FOR IMPLEMENTATION	MONITORING INDICATORS
<p>Support decentralization of the Electronic Health Record (EHR) System implementation.</p> <p>Development of the Costing and Electronic Maternal and Perinatal Death Notification System (eMPDNS) modules in the HER. Capacity building on blockchain technology within MOHCC. Development and piloting of a Digitized Community Transport Dispatch System for emergency services. Strengthening the MOHCC monitoring and evaluation system</p>				

## 5.9 PPE Requirements for Project Implementation

Personal Protective Equipment (PPE) will be used during the project. PPE will be required for vaccination activities and during installation of solar panels at health facilities, installing refrigeration units in vaccine delivery trucks, fuelling and maintenance of vehicles, processing of medical waste among others. Additionally, since the Project takes place during the COVID-19 pandemic and seeks to address it, PPE and risk reducing behaviours are required for all project activities even administrative office tasks. The following sections outline the recommended PPE for these activities.

### 5.9.1 PPE Requirements for Installation Sites

PPE is important for working in the solar project, minor renovations for maternity waiting homes, installation of oxygen reticulation system, minor renovations of the operating theatres, and delivery of RMNCAHN services. The site should be assessed for hazards and necessary PPE provided for worker safety. The following are the PPE Requirements for installation of solar panels at health facilities.

*Table 5-7 PPE Requirements for minor works*

No.	PPE	PURPOSE OF THE PPE
1	Heavy duty gloves	Offer protection from harsh substances such as lead, acid, electrical shocks, cuts
2	Overalls	Body protection
3	Gumboots/ steel toed shoes with rubber soles	To protect from drop hazards
4	Hard hats	To provide protection from falling objects or electrical hazards
5	Safety goggles/ eye shields	For eye protection against splattering hot solder, flying particles, dust, or debris

### 5.9.2 PPE for COVID-19

Proper use of PPE is essential for the protection against COVID-19. The indications should be based on the setting, target audience, risk of exposure (e.g., type of activity) and the transmission dynamics of the pathogen (e.g., contact, droplet or airborne). The recommended PPE for COVID-19 is outlined in the National PPE guidelines for COVID-19 which have been adapted from the WHO guidelines; "the Rational use of personnel protective clothing (PPE) March (2020)".

The recommended PPE for health care workers for COVID-19 and other routine risks for Zimbabwe are detailed in the project's ICWMP.

### 5.9.3 PPE for Incinerator Operators

PPE must be selected to protect against risks specific to incinerator operators. The major risks to these staff are encountered either during direct contact with medical waste or when incinerator operators are exposed to heat or fumes emitted by the incinerator while burning health care waste. Wearing PPE reduces risk from sharps, germs, exposure to blood and other bodily fluids, splashes from chemicals, inhalation of exhaust, and sparks from the incinerator.

The recommended PPE for incinerator operators for Zimbabwe is outlined in the project's ICWMP.





## 5.10 Monitoring and Supervision of Project Activities

MoHCC with the support of the lead implementing agent, CORDAID, and the other implementing partners (relevant authorities) must monitor the environmental effects of project implementation and the success of mitigation measures. The implementing partners include:

- ▶ The Environmental Management Agency (EMA),
- ▶ Ministry of Public Service, Labour, and Social Welfare (MOPSLSW),
- ▶ Ministry of Local Government and Public Works (MLGPW),
- ▶ Ministry of Environment, Climate, Tourism and Hospitality Industry (MECTHI).

This monitoring is an important part of managing the impacts of the project. This section presents the monitoring plan for the ZCERP. Contractors will be required to formulate ESMPs for specific project activities under the guidance of the PIE Environmental Specialist. The PIE reviews and approves contractor ESMPs. From time-to-time, the PIE Environmental Specialist or his or her designees will visit sites to determine compliance with the ESMPs. Appendices 6 and 7 contain ESMP monitoring templates which both contractors and the PIE can use to monitor project compliance with environmental and social safeguards. Additionally, the measures detailed in tables 6-6, 6-7 and 6-8 will also be used to monitor project compliance with environmental and social standards.

Supervision and monitoring are key components of the ESMF during project implementation and must be undertaken during ZCERP implementation phase to authenticate the effectiveness of impact management, including the extent to which mitigation measures are being successfully implemented. The aim of monitoring will be to:

- ▶ Improve environmental and social management practices,
- ▶ Check the efficiency and quality of the assessment processes,
- ▶ Establish the scientific reliability and credibility of the EA for the project and
- ▶ Provide the opportunity to report the results on safeguards and impacts and proposed implementation of mitigation measures.

The three main components of the Supervision and monitoring are:

- ▶ Compliance monitoring,
- ▶ Impact and risk monitoring and
- ▶ Cumulative impact monitoring.

### 5.10.1 Compliance Monitoring

This is to authenticate that the required mitigation measures, which are the environmental and social commitments agreed on by the implementing agency, local implementing agencies and contractors are being adhered to. A monitoring framework was developed based on agreed prototype project activities as they are specified in the positive list of projects; it is in section 9. The PIE will be responsible for undertaking compliance monitoring.

### 5.10.2 Impact Monitoring

The PIE will monitor project activity impacts and mitigation measures. The Environmental and Social Safeguards agreed in the contract specifications should be monitored to ensure that works are proceeding in accordance with the laid down mitigation measures. The PIE and implementing entities should ensure that the project implementers submit reports on work progress and any challenges in observing the Environmental and Social Safeguards. The monitoring results should form a major part of the compliance reports to be submitted by the PIE to EMA.

The EHS requirements of the project will be monitored during project implementation through site visits by the MOHCC, PIE and Environmental Management Agency, the quarterly Quality-of-Care Supervision Checklist results and other HCF generated reports. The District Health Executives

and Provincial Health Executives will on a quarterly basis visit HCF for monitoring and supervision on provision of quality services including infection prevention control and waste management. Progress on implementation of the requirements of the ESMF will also be reviewed periodically as outlined in the monitoring plan.

### 5.11 Areas to be Monitored

It is recommended that all environmental parameters mentioned above be monitored during the implementation and operation stages and any impacts should be mitigated as soon as possible.

Frequency of monitoring depends on the activity and parameters. Consult the ESMP Table 6-6 for more details. Contractors (Supervising Engineer, site foreperson or other relevant on-site supervisor) are expected to note and report any environmental or socially related issues or accidents daily during works. WHO COVID-19 protocols should be checked for updates at least once per year.

While monitoring, when any significant impacts are detected, the monitoring team should meet and address the issue. All team members should keep records of such meetings.

#### 5.11.1 Health Care Waste

Project activities will generate medical waste which will include hazardous materials such as infectious waste, radiological waste, and laboratory reagents. Therefore, participating facilities will be monitored to ensure that they are managing the waste according to agreed-upon protocols including their own entity-specific ICWMP. Table 6-6 and the project ICWMP contain more details.

#### 5.11.2 Installation Waste and construction waste

Solid and liquid waste will be generated from these activities; therefore, contractors and others performing installations and minor renovations will need to ensure that waste is properly managed until final disposition. The management of asbestos waste is of particular importance due to its hazardous nature and so its disposal will be reported and monitored when it is present.

Waste or other materials could lead to pollution of the water and the soil. Therefore, should the need arise, the project will monitor the amount of pollutants in the soil or water.

#### 5.11.3 Ambient Air Quality

All air polluting activities need to be checked regularly to minimise their effect on air quality. Some examples are the emissions from incinerators being used to process infectious healthcare waste. See the ICWMP for more information on emissions levels. The emissions levels of incinerators must be measured to ensure compliance with requirements. Dust levels from renovation/upgrading and other related activities should also be monitored and controlled. Motor vehicles emissions to be tested on a quarterly basis to ensure compliance with emissions standards for motor vehicles as prescribed in the regulations. Table 6-8 further discusses the mitigation measures.

#### 5.11.4 Occupational Health and Safety

The work force should be monitored in order identify any threats, requirements for compliance are set out in the LMP (Appendix 2). Contractors are to record and report accidents, fatalities, illnesses, and incidents daily. The health and safety of other workers participating in project-financed activities will similarly be monitored for accidents and any project related illnesses. Table 6-6 further elaborates mitigation measures.

#### 5.11.5 The Monitoring Plan

The monitoring plan lists issues of concern in Table 9-1 below. It provides specific details including parameters, frequency, and responsible entities. Appendix 7 presents a template monitoring form which can be used for each activity or healthcare facility.

**Table 5-8 Possible Monitoring Activities and their Indicators**

ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
Noise	Noise monitoring should be carried out on an ad-hoc basis by the Environmental Monitor or the PIE to estimate noise levels in the work areas and adherence to working times	<ul style="list-style-type: none"> <li>▶ Noise Levels.</li> <li>▶ Adherence to restricted working times.</li> <li>▶ Use of low noise equipment.</li> <li>▶ Noise suppression</li> </ul>	Noise levels at the nearest sensitive receiver would be kept to a minimum so as not to disturb the peace of the patients or other neighbours if applicable. EHS General Guidelines on noise level for construction applies.	Regularly and ongoing as project is implemented.	<ul style="list-style-type: none"> <li>▶ PIE</li> <li>▶ MoHCC</li> <li>▶ Contractor controls noise levels</li> </ul>

ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
Health	<p>PIE must ensure that education and awareness campaigns are implemented. The Ministry of Health should carry out awareness campaigns on Hospital Acquired diseases.</p> <p>PIE must mainstream HIV/AIDS and COVID-19 issues into the project implementation programme.</p> <p>Site visit observation for worker OHS and contractor reporting on accidents, incidents, and fatalities.</p>	<ul style="list-style-type: none"> <li>▶ Public health</li> <li>▶ Waste management at Project activity sites.</li> <li>▶ Disease outbreak due to concentration of people at the Project activity sites.</li> <li>▶ Disease outbreak due to dust and water pollution.</li> <li>▶ Worker OHS; Project related accidents, incidents, or fatalities</li> <li>▶ Health and Nutrition status</li> <li>▶ Use of proper PPE and other necessary supplies such as sanitizer</li> </ul>	<ul style="list-style-type: none"> <li>▶ Reduction in number of cases of such diseases as, HIV/STD related diseases recorded at hospital and medical clinic</li> <li>▶ Worker OHS:</li> <li>1. Low or decreasing accidents, incidents, and fatalities.</li> <li>2. Observed proper PPE, use of safety supplies and equipment.</li> <li>▶ Percentage of facilities with adequate and functional sanitation facilities for both staff and patients at agreed standards.</li> </ul>	Regularly and ongoing as project is implemented	<ul style="list-style-type: none"> <li>▶ PIE</li> <li>▶ MoHCC</li> <li>▶ RDCs</li> <li>▶ Local Leadership</li> <li>▶ Contractor</li> </ul>

ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
		<ul style="list-style-type: none"> <li>▶ special COVID-19 occupational health and safety guidelines and practices</li> <li>▶ case detection</li> <li>▶ psychosocial support.</li> <li>▶ Level of WASH issue.</li> <li>▶ Quality of Facility sanitation (WASH).</li> </ul>		<ul style="list-style-type: none"> <li>▶ Project related accidents, incidents or fatalities are to be reported to the PIE as soon as they occur, or project officials find out. PIE will report to the WB as soon as it finds out. Follow-up investigations will be conducted, as necessary.</li> <li>▶ WASH facilities are inspected on a quarterly basis, together with the whole health Care facility by the Environmental Health Depart of MoHCC.</li> </ul>	

ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
Waste Management	<p>For minor works and renovations: Observations should be made on how the HCF, and any contractor/activity implementer is handling general waste, hazardous waste including asbestos containing materials (ACM) and liquid waste in accordance with the ESMF, ICWMP and project activity ESMP.</p> <p>For medical waste, which is hazardous, facilities will develop waste management plans (ICWMP) which will be monitored for compliance. Consult the ICWMP for further details.</p>	<ul style="list-style-type: none"> <li>▶ Hazardous waste identification if any.</li> <li>▶ Waste segregation on site.</li> <li>▶ Waste handling facilities.</li> <li>▶ Waste temporary storage areas.</li> <li>▶ Waste transportation methods.</li> <li>▶ Functioning incinerator</li> <li>▶ Use of proper PPE</li> </ul>	<ul style="list-style-type: none"> <li>▶ Hazardous waste properly delineated and stored</li> <li>▶ Proper transportation of hazardous waste available</li> <li>▶ designated waste management site that complies with ESMF and ICWMP requirements being used for hazardous waste disposal.</li> <li>▶ Hazardous Waste properly classified.</li> <li>▶ EHS performance of contractors installing solar panels - such as noise level, waste disposal,</li> </ul>	<p>Regular, weekly monitoring of hazardous construction waste and hazardous medical waste.</p>	<ul style="list-style-type: none"> <li>▶ PIE</li> <li>▶ MoHCC</li> <li>▶ Contractor</li> <li>▶ the health care facilities</li> </ul>

ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
			<ul style="list-style-type: none"> <li>▶ equipment removed</li> <li>▶ Amount and location of waste disposal</li> <li>▶ Data confirming Disposal site (e.g., incinerator) is operating properly per Project requirements (ESMF, ICWM)</li> <li>▶ Number of drivers trained in safe transportation of waste</li> <li>▶ Percentage of incinerator operators trained on proper operation and maintenance of incinerators.</li> </ul>		



ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
			<ul style="list-style-type: none"> <li>▶ Percentage of incinerators licenced by the Environmental Management Agency.</li> <li>▶ Disposal/ repurposing of any obsolete Amount of medical waste generated at HCF Amount of hazardous waste transported</li> <li>▶ Amount and location of disposal</li> <li>▶ Percentage of disposal sites (e.g., incinerator) operating properly per Project requirements (ESMF, ICWMP),</li> </ul>		

ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
Air Pollution	Observations should be made on the level of dust generated during the solar panel installation activities by the Environmental Monitor or PIE. Dampening should be carried out if levels are unacceptable and there should be no open burning of construction waste.	<ul style="list-style-type: none"> <li>▶ Levels of dust emissions</li> <li>▶ Controlled areas for debris</li> <li>▶ Dust suppression measures</li> <li>▶ Proper PPE provided</li> </ul>	<ul style="list-style-type: none"> <li>▶ Percentage of HCF appropriately segregating waste at point of generation</li> <li>▶ Relevant Quality-of-Care Supervision Checklist quarterly data</li> <li>▶ Number of traffic accidents from project activities</li> </ul>	Weekly monitoring of dust suppression measures as necessary.  To be determined taking into consideration EMA or other national testing schedule.	<ul style="list-style-type: none"> <li>▶ EMA</li> <li>▶ MoHCC</li> <li>▶ PIE</li> <li>▶ RDCs</li> </ul>

ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
	<p>EMA testing of project supported vehicles to ensure compliance with national regulations on vehicular emission for Pb, CO, NOx, SO<sub>2</sub> and PM<sub>2.5</sub>. EMA already has the required equipment.</p>	<ul style="list-style-type: none"> <li>▶ Vehicle exhaust emissions</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of motor vehicles within the permissible limits for CO, NOx, SO<sub>2</sub>, PM emissions</li> </ul>	<p>Quarterly monitoring of exhaust emissions</p>	<ul style="list-style-type: none"> <li>▶ EMA, MOHCC, PIE</li> </ul>
Water re-sources	<ul style="list-style-type: none"> <li>▶ Water resources should be managed in accordance with WB EHSG, ESF and national laws and regulations</li> <li>▶ HCF should test its water quality in supplied to ascertain the suitability for human usage and/or consumption</li> <li>▶ Project activities should not pollute or unduly disturb water resources. All waste should be managed properly and not lead to pollution of water resources.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Watercourses and impoundments.</li> <li>▶ Surface water quality</li> <li>▶ Ground water quality</li> <li>▶ Recommended distances from watercourses.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Water resources should be managed in accordance to environmental concerns.</li> <li>▶ Pollution of water resources detected early, and remedial measures taken on time</li> </ul>	<ul style="list-style-type: none"> <li>▶ Tests for water quality from installed water distribution devices to be done regularly (at least once per year)</li> <li>▶ If supplied by borehole, boreholes should be tested at least once a year if there is no problem, but if pollution is suspected, a more frequent regime is adopted depending on the incident.</li> </ul>	<ul style="list-style-type: none"> <li>▶ MoHCC</li> <li>▶ PIE</li> <li>▶ Project activity implementers</li> </ul>

ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
Cold Chain Supply	Refrigeration in the cold chain system for vaccine storage and distribution is necessary to maintain efficacy of the vaccines. Through proper refrigeration, the potential to generate vaccine rejects is also avoided.	<ul style="list-style-type: none"> <li>▶ Temperature</li> <li>▶ Power availability</li> <li>▶ Vaccine distribution mechanisms</li> <li>▶ Cold chain storage</li> <li>▶ Cold chain transportation</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of health facilities with cold chain equipment maintaining temperature between +2°C and +8°C</li> </ul>	<ul style="list-style-type: none"> <li>▶ Testing and monitoring HCF wastewater discharge for parameters outlined in the Environmental management (waste water and effluent disposal) regulations on annually at relevant discharge point/s for municipal sewer and on-site septic tanks</li> <li>▶ Daily at health facility level</li> <li>▶ Monthly for Provincial level</li> </ul>	<ul style="list-style-type: none"> <li>▶ PIE</li> <li>▶ MOHCC</li> </ul>

ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
Com-plaints	The PIE should inspect the record of complaints made by residents, to be kept by the beneficiaries, and should check that action is taken quickly and that the number of complaints does not rise significantly. The GRM should be employed.	<ul style="list-style-type: none"> <li>▶ Complaints</li> <li>▶ Remuneration of HCWs</li> <li>▶ Work safety measures</li> <li>▶ accidents caused by project activities and reported</li> <li>▶ Safety equipment (PPE) available</li> <li>▶ Information, communication, capacity building</li> <li>▶ Working conditions for workers</li> <li>▶ Incidences of GBV/SEA</li> <li>▶ No underage employed</li> <li>▶ Incidences of utility disruptions</li> </ul>	Number of Cases resolved within stipulated time frame of 3 working days for priority 1 and 3 working weeks for priority 2.	Monthly monitoring of the complaint registers.	<ul style="list-style-type: none"> <li>▶ PIE</li> <li>▶ MoHCC</li> <li>▶ RDCs</li> <li>▶ EIA Department</li> </ul>

## 6.0 PROJECT COMPLAINTS, CONFLICTS AND GRIEVANCE REDRESS MECHANISM

### 6.1 Introduction

Implementation of project activities under ZCEREHSP will take place in various locations in all the target areas of the country. The implementation may generate several challenges and complaints, especially those which relate to infringement of rights of sections of society. As part of addressing such complaints and in the spirit of the continuous consultation process, a GRM has been developed for HSDSP AF-V and will be used under ZCEREHSP. The GRM will consist of two parallel systems. These systems are: i) the Facility level GRM system for project implementation feedback including challenges and complaints and ii) the World Bank Grievance Redress System (GRS) for non-compliance with environmental and social safeguards policies.

The GRM for the ongoing HSDSP AF-V is monitored by the PIE Social Safeguards and Communications Specialists with the support from MoHCC Health Promotion, Public Relations Units and Quality Assurance and Patient Safety Department. Under the ZCEREHSP, the Social Safeguards Specialist engaged during the implementation of HSDSP AFV and ZCERP will continue to further support the implementation and monitoring of the GRM.

The GRM will be a system by which queries or clarifications about the project will be responded to, problems with implementation will be resolved, and complaints and grievances will be addressed efficiently and effectively. The purpose of the grievance redress mechanism is to:

- ▶ be responsive to the needs of beneficiaries and to address and resolve their grievances,
- ▶ serve as a conduit for soliciting inquiries, inviting suggestions, and increasing community participation,
- ▶ collect information that can be used to improve operational performance,
- ▶ enhance the project's legitimacy among stakeholders,
- ▶ promote transparency and accountability,
- ▶ deter fraud, corruption and mitigate project risks.

### 6.2 Facility Level GRM System

The rationale for the facility level GRM, is because the CBOs and HCCs in the villages indicated that they were getting minimum assistance from the establishment and that they were dealing with community grievances through the police and the local elders.

The Grievance Redress Mechanism consists of the following components:

- ▶ The access point for impacted/concerned patients or people will be situated as close to the Project Affected Person (PAP) as possible.
  - Notices written indicating the process to be taken when aggrieved,
  - At all health facilities there will be various channels to communicate grievances (suggestion boxes, clients comments book, phone numbers, etc.) some of which will be situated in designated areas. The responsible committee or person(s) will oversee management of grievances at each level
  - At the various health facilities and MoHCC Offices there will be a designated officer who receives, classifies, and log all grievances,
  - At all project activity and CORDAID offices there will be various channels of communicating grievances (suggestion box, emails, SMS, phone calls, etc.) and a designated CORDAID staff will be responsible for receiving the grievances, classifying, and logging them
  - All the communication channels should be open daily
- ▶ The patient would normally be asked to submit a written down grievance to the person in charge of recording, who then takes it up with the immediate supervisor, who will try to resolve it, failure to do so appropriate steps will be taken by the next higher level of

management.

- ▶ The responsible person should give the complainant an acknowledgement of receipt containing an expectation of when they will receive a response,
- ▶ The Facility Manager assigns a member of staff to be responsible for the case, who then assess and investigates the grievance to identify all the key facts,
- ▶ The responsible staff member in consultation with the Facility Manager then makes a resolution and the proposed actions are confirmed with CORDAID/MoHCC responsible committee,
- ▶ A response is then communicated to the complainant within the timescale promised:
  - ✓ **For Priority 1 – urgent**, potential high health and high business impact. **This requires a response to the Complainant within three (3) working days,**
  - ✓ **Priority 2 - non-urgent**, lower health, environmental and social impact. This requires a response to the complainant within 2 working weeks,
- ▶ The complainant is given room to appeal to the MoHCC Head Office if they are not satisfied with the response. The appeal can be lodged with the Public relations Manager, MoHCC, Kaguvi Building, 4th Floor, Central Avenue, Harare. If the complainant is not satisfied, then they can appeal to the Courts of Law
- ▶ Once done the case is brought to a closure and all the staff members of the Facility are made aware of the complaint, any underlying issues and plans to prevent any future recurrence of the issue,
  - ✓ All complaints should be reviewed monthly as part of the quality assurance review meetings,
  - ✓ Any complaints where action can be taken to avoid recurrence must be acted upon and raised with the appropriate managers/teams across the Facility,
  - ✓ A monthly summary incident report is submitted to the Communications Specialist of CORDAID for record keeping and consolidation. He/she will ensure that all grievances are being recorded and resolved in a timely manner.

**NB: The GRM system at each level should accommodate anonymous reports.**

- ✓ **For all internal grievances, the existing MoHCC grievances handling procedures will be used**

### 6.3 World Bank Grievance Redress System (GRS)

Communities and individuals who believe that they are adversely affected by a World Bank supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, because of WB noncompliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievanceredress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org).



inspectionpanel.org

## 6.4 Disclosure

To meet the consultation and disclosure requirements of the Bank, once the EMA, the approval or licensing authority, has approved the ESMF, GoZ will issue a disclosure letter to inform the Bank of (i) the Government's approval of the ESMF; (ii) the actual disclosure of these documents to all relevant stakeholders and potentially affected persons in Zimbabwe, and (iii) the Government's authorization to the Bank to disclose these documents on its website. Usually, disclosure of the safeguard documents must be completed prior to appraisal of the Project as per ESS10. However, since this is an emergency project, the disclosure of this ESMF was deferred to six weeks after project effectiveness. This ESMF, the ICWMP and other future safeguards instruments for the project will be disclosed both in-country and by the World Bank, in English. In country the safeguards instruments will be disclosed both on the MoHCC and Cordaid websites as well as the project website.

## 7.0 STAKEHOLDER ENGAGEMENT AND COMMUNICATION

### 7.1 Stakeholder Engagement

The ZCEREHSP project will engage, gather information from, consult with and disseminate project information to a variety of stakeholders. It is important to note that stakeholder engagement is an ongoing process and not an event. This engagement process will provide a framework for achieving effective stakeholder involvement and promoting greater awareness and understanding of issues so that the project is carried out effectively, within budget and on time. A detailed and updated SEP can be found on this link: <https://healthprojectzim.org.zw/2023/05/12/strengthening-stakeholder-engagement-the-project-updates-its-stakeholder-engagement-plan/>

### 7.3 Risk Communication and Community Engagement (RCCE)

A clear and integrated RCCE strategy and response is vital for community uptake of essential public health interventions to prevent and control the spread of disease. The strategy will ensure dialogue and participation of all stakeholders and affected communities during preparedness, readiness, and response (during and after) the project.

The RCCE must promote the uptake of public health services. Individuals who are at risk, the infected and those who have been affected need to be part of the solution to their own problems. This can be achieved when the community actively participate from problem identification, preparedness, response/action, and after-action activities. Continuous dialogues and statutory instruments that came in with COVID-19 prevention protocols can also be used for RCCE activities.

The COVID-19 pandemic response has been affected by infodemics (misinformation, disinformation, rumours, myths and misconceptions, etc., that makes it difficult for people to make decisions and practice the recommended Public Health and Social Measures (PHSM). A multi-sectoral approach is therefore important in addressing COVID-19 prevention and control.

More details on stakeholder engagement activities for the Zimbabwe COVID-19 Emergency Response Project are contained in the project SEP prepared separately.

## 8.0 PROJECT IMPLEMENTATION ARRANGEMENTS, RESPONSIBILITIES AND CAPACITY BUILDING

### 8.1 Introduction

Safeguard implementation monitoring is critical to the success of the implementation of the project and its activities to ensure adherence to the World Bank Environmental and Social Standards and national laws and regulations.

### 8.2 Implementation Arrangements

CORDAID serves as the PIE for the project and will lead the execution of project activities. CORDAID is already the PIE for the ongoing HSDSP (including for COVID-19 emergency response) financed by the WB-GFF. The PIE has designated environment and social focal points for HSDSP AF V implementation, who were responsible for the preparation of the ZCERP environmental and social instruments. The Environmental Specialist, Social Safeguards Specialist and the Communication Specialist are the focal points working together to ensure coordination with the MOHCC staff on environmental and social risk management during the project implementation, including supervision of waste management practices and OHS issues related to COVID-19 risks.

Vaccine pharmacovigilance is a critical aspect in public health and a key indicator for pharmacovigilance. The Medicines Control Authority of Zimbabwe (MCAZ) is the statutory body responsible for protecting public and animal health by ensuring that all medicines, medical devices, allied substances, and other health commodities are safe, effective, and of good quality. This is achieved through registration of medicines; licensing of persons and premises that handle medicines; review, approval, and monitoring of clinical trials that involve the use of medicines; and quality testing and safety monitoring of all health commodities granted market authorisation.

At national level the MCAZ in collaboration with the Expanded Programme on Immunization-Ministry of Health and Child Care (EPI-MoHCC), have continuously worked to develop vaccine pharmacovigilance in Zimbabwe through participation in World Health Organisation (WHO) projects, development and implementation of the Adverse Events Following Immunization (AEFI) surveillance guidelines and conducting trainings for health care professionals on AEFI reporting and case investigations.

MOHCC has an Environmental Health Department which is made up of Environmental Health Officers (EHOs) and Environmental Health Technicians (EHTs). The Environmental Health Department is structured from the national level to primary care facility level. In each province there is a Provincial EHO (PEHO) whose role is to provide technical oversight to districts on environmental, health and safety issues. S/he ensures that the district implements measures to ensure safe management of health care waste. Working closely with the Infection Prevention and Control (IPC) Focal Person in each healthcare facility, the PEHO ensures Infection prevention and prevention measures are adhered to. They routinely conduct support and supervision to district levels ensuring the requirements of health care waste management plans are adhered to.

At district level, the District Environmental Health Officer oversees the implementation of environmental, health and safety activities. The DEHO works in collaboration with the IPC Focal Person to ensure the lower level rural health facilities adhere to the requirements of the facility health care waste management plans. At each provincial and district hospital, there is an IPC committee. The committee is composed of the Health Services Administrator, Environmental Health Officer, a pharmacist and a laboratory scientist/technician. The committee promotes adherence to the requirements of the IPC policy at facility level. The District Environmental Health Officer leads a team of Environmental Health Technicians (EHTs) with each EHT stationed at a rural health facility. The EHT is the focal person for environmental, health and safety activities at rural health facility level. Working closely with the nurse in charge at rural health facility/ clinic, the EHT ensures proper health care waste management at primary care facility level. They receive regular support from the District Environmental Health Officer and the IPC focal person. The number of EHTs in each district varies depending on the size of the district.

The MoHCC Environmental Health Service Department (EHSD) also leads Environmental Health Teams in the districts and provinces consisting of:

- ▶ MoHCC - Environmental Health Department,
- ▶ Ministry of Environment, Water and Climate (MoEWC)- Environmental Management Agency (EMA) District Officers and the Zimbabwe National Water Authority (ZINWA),
- ▶ Ministry of Public Service, Labour and Social Welfare (MOPSLSW)- Department,
- ▶ Ministry of Local Government, Public Works, and National Housing (MLGPWNH)- Public Works Department,
- ▶ Cordaid

The MoHCC can mobilize its Provincial Officers, as well as Health Centre Committees which include community representatives from youth groups, women's associations, religious entities, etc. for various purposes. The District Development Committee with the District Environmental Health Officer (DEHO) and District Infection Prevention and Control (IPC) Focal Person conduct monthly inspections in public spaces, raise awareness and educate the community to reinforce infection control practices for COVID-19. Finally, the MOHCC's EHSD and Nursing Directorate Infection Control Department are responsible for training healthcare workers on infection prevention and healthcare waste management at provincial level through the Provincial Environmental Health Department (PEHD) and Provincial IPC Department. The MoHCC provincial and district environmental health practitioners have been trained on environmental health, safety precautions and IPC including on COVID-19.

The current E&S performance of the HSDSP project has been assessed as moderately satisfactory demonstrating that the PIE has adequate capacity to carry out this ESMF and the project's ICWMP since these documents (and the arrangements they describe) are in large part based on and similar to the HSDSP arrangements and safeguard instruments.

The PIE will work closely with the MOHCC which will, in turn, coordinate with the COVID-19 EOC at national and subnational levels. The PIE will handle all project funds. It may contract other UN agencies such as UNDP to procure equipment and goods. In addition, given that the MOHCC has delegated the National Pharmaceutical Company (NatPharm, a state-owned enterprise) to handle storage and distribution of all COVID-related goods and equipment, the PIE will also enter into an agreement with NatPharm. The PIE will manage: vehicle fueling and maintenance, as well as selection and purchase of the energy-efficient equipment. The health care facilities themselves will operate the new energy-efficient equipment.

The PIE will ensure that all project-financed goods and equipment are geo-tracked and monitored to ensure that they are used for their intended purpose. It will also mobilize Provincial Officers, as well as Health Center Committees that include community representatives from youth groups, women's associations, religious entities, etc., to confirm availability of equipment, supplies and services.

The Community Working Group on Health (a network of community-based/civil organizations), international NGOs, such as CORDAID and development partners also participate in the National RBF Steering Committee and several COVID-19 Response Committees. The Project Implementation Manual (PIM), developed under ZCERP will be updated, among other things, to clarify key stakeholders' (public and private) roles and responsibilities. Additional TA involving the WB Governance, Disaster Risk Management and HNP teams will be provided to improve coordination and governance of COVID-19 and essential health services activities including strengthening public financial management. The project will also finance regular internal and external financial audits.

As a health care NGO, CORDAID is also on the forefront of COVID-19 responses as well as delivery key RMNCAHN services that require an agile approach to ESF implementation. CORDAID is therefore assessed to have the experience and capacity to carry out the necessary environmental and social due diligence associated with ESF requirements aligned with the COVID-19 and RMNCAHN context, have the experience and capacity to carry out the necessary environmental and social due diligence. It already has an Environmental Specialist. However, it is recognized that the COVID-19 pandemic has posed a unique set of challenges given the importance of immediate actions required to be implemented over a broad geographic space with many key stakeholders. However, CORDAID has been implementing environmental and social safeguards supported under the HSDSP AF (V) and ZCERP as guided by the ESF. the project would need to continue strengthening these

areas to address environmental and social challenges posed by the new project and also taking into account new and emerging threats. The Environmental and Social Commitment Plan (ESCP) and the ESMF will include targeted support to build their capacity including training in COVID-19 and support from third-party entities to deliver on the objectives of the COVID-19 response and RMNCAHN operation. Moreover, given the need for a comprehensive stakeholder engagement and communications strategy in the context of COVID-19 management, vaccine deployment, and delivery of RMNCAHN services, the PIE has a Social Safeguards Specialist in place who will be maintained in the ZCEREHSP.

### 8.2.1 Environmental and Social Screening Process

MOHCC will identify project activities and MOHCC District Technical Teams (see Figure 6-1) and participating facilities, with support from the PIE Environmental Specialist and Social Specialist, will be responsible for the environmental and social screening of the project activity (Figure 6-1). The PIE Environmental and/or Social Specialists will give overall guidance in the screening process, approving or rejecting ultimately, whilst MOHCC participating facilities will conduct the screening and submission for approval (i.e., filling out the form and completing the on-site evaluation). The extent of further environmental and social work required to mitigate adverse impacts for the project activities will depend on the outcome of the screening and environmental and social assessment process.

### 8.3 Monitoring and Supervision of E&S and Overall Project

HCFs, and MoHCC more broadly, will prepare ESMPs as appropriate, the PIE will review and approve or deny such ESMPs before works begin. Similarly, HCFs and MoHCC more broadly will draft facility-specific ICWMPs and submit them to the PIE for review and approval or rejection before any project-supported activities that produce infectious medical waste begin. The PIE will ensure the inclusion of all applicable EHS terms and conditions in any Project contract (for construction or service provider). While HCFs are responsible for the operation of medical waste disposal facilities, the MLGPW is responsible for incinerators and all physical infrastructure at the HCFs such as the buildings, incinerators, etc. Similarly, while HCFs/the MoHCC is responsible for behavioural aspects of EHS measures, the MLGPW is responsible for structural (that is, the physical infrastructure) EHS controls.

In terms of the overall project, the NVDP provides for further strengthening of the existing DHIS2 and EHR systems to incorporate vaccination and AEFI specific modules. These components have been planned for under this project to monitor vaccination coverage and adverse events post vaccination at disaggregated levels (region, population groups and risk groups, target group prioritization) like the surveillance and case management activities. The strategies cited in the NVDP include developing electronic COVID-19 vaccination registers and vaccination cards (with bar codes and other security features), upgrading the web based DHIS2 and EHR immunization register systems to reflect the COVID-19 vaccination coverage and uptake and harmonizing the AEFI monitoring system with EHR and DHIS2 interoperability of the systems. NVDP implementation includes routine collection of data and reporting on the number of people that would have received the first and second dose of COVID vaccine, the uptake and dropout rates, turnaround times in distribution, coverage of essential COVID-19 vaccine messages, temperature monitoring at facility level as well as the number of AEFI reported and investigated within 24 hours. The Electronic Logistics Management Information System (eLMIS) will be upgraded to collect and track data on the vaccine distribution and the key performance indicators up to facility level. Leveraging on recent investments in strengthening commodity tracking under the HSDSP AF V, the logistics system will allow for the tracking of batch numbers, expiration dates, manufacturer, quantity, date, origin, receipt at destination and beneficiary (last mile). The project will invest in further strengthening the interoperability between the eLMIS, DHIS 2.0 and the EHR systems in this regard.

Recognizing that vaccine protection is an integral aspect of immunization programs and requires the participation of multiple stakeholders the country established a partnership across the ZEPI, the National Pharmacovigilance & Clinical Trials Committee and MCAZ as a key driver in monitoring vaccination safety. With the aid of Standard Operating Procedures for use across facilities, sentinel cohort monitoring, mass communication and awareness raising and use of grievance redress mechanisms; the combined efforts will seek to achieve timely reporting of adverse events as well as detection of incidences of misallocation or elite capture of vaccines that should otherwise be allocated to priority groups under the national plan.

- ▶ Strengthening the linkages between the EHR and eLMIS for commodity tracking presents opportunities to extend the progress made to date in the production and scaling of these digital solutions to the response to COVID-19 including vaccination. MOHCC developed a mobile-based application known as Baobab<sup>1</sup> and is being piloted with the possibility of its use for surveillance, case management and AEFI at household level.

### 8.3 Annual Monitoring, Reporting and Reviews

Environmental and social monitoring needs to be carried out during the implementation of the project activities. Monitoring of the activity's compliance with the mitigation measures set out in the ESMP, will be carried out by the PIE, where relevant, jointly with the support from community leaders and local authorities and, extension teams. MoHCC Local Offices will supervise or carry out the monitoring activities and are required to report annually on activities during the year. The PIE will submit biannual monitoring reports on safeguards matters and ESMF implementation to the World Bank. Starting from the Effective Date, bi-annual reports shall be submitted with the general project progress report. In case no general progress report is drafted, the ESHS progress report is to be submitted no later than 20 days after the end of each reporting period, throughout Project implementation.

Project activity specific ESMPs, the project ICWMP and ESMF will be disclosed but HCF specific ICWMPs will not.

The PIE will report, as required in the Project ESCP, any incident or accident related to the project which has or likely to have a significant adverse impact on the environment (including any materially non-compliant emission from an incinerator used for Project wastes), the affected communities the public or project workers including any allegation of GBV/SEA/SH, project-related occupational incidents or fatalities, labour strikes or social unrest. Enough details will be provided regarding the incident or accident, indicating immediate action taken or are planned to be taken to address it and any information provided by the contractor whilst ensuring confidentiality especially GBV/SEA/SH related incidents. The report will be made within 48 hours after learning of the incident or accident in line with the World Bank Environment and Social Incidence Response Toolkit (ESIRT). COVID-19 illness and/or fatalities are only to be reported to the WB if any of the following conditions are present:

1. The infection rate in the workforce increases to the point that the PIE, the HCFs, other implementing partners (including MoHCC) or a contractor's ability to implement the project is compromised.
2. Project implementors (including the PIE, HCFs and contractors) are unable to ensure that infected workers are receiving proper care.
3. Project implementors (including the PIE, HCFs and contractors) are failing to deliver preventative measures adequately. Especially report to us if a fatality occurs and the information available suggests that the fatality may be a result of the implementor failing to deliver preventative measures adequately.
4. Incinerator and vehicle emissions need to be tested and recorded on a quarterly basis. Testing of these emissions will be completed by the Environmental Management Agency in line with the Environmental Management (Atmospheric Pollution control) regulations of 2009. Incinerator operators will monitor daily their operations and conduct periodic preventive maintenance as outlined in the standard operating procedures contained in the ICWMP. Those that are found not complying with the prescribed standards as set out in the mentioned regulations and the WB EHS Guideline for Health Care Facilities, EMA will determine the measures (which must be acceptable to MoHCC and WB) that institution or facility with non-compliant vehicle or incinerator to take necessary measures to rectify the short comings or bring it into compliance. EMA has the tools and equipment to conduct such tests. However, only the test and equipment are centralised at the national office. Capacity building of the subnational level/ provincial and district officers is required. Hence, the project will support the training of provincial and district EMA officers on air quality monitoring.



For the safety of passengers, the project ensures that the drivers are appropriately licenced to drive the class of vehicle. Furthermore, once any new driver is engaged in the project, the Transport Officers<sup>58</sup> will ensure such driver is appropriately licenced. In addition, the project will support the training drivers on safe transportation of waste as well as basic road safety.

Table 8-1 below details the reporting arrangements for the environmental and social safeguards implementation:

**Table 8-1 Reporting arrangements.**

No.	Issue/report	Reporting entity	Recipient of report	Frequency of reporting
1	Biannual progress reports on safeguards status and the implementation of instruments (i.e., the ESMF, SEP, GRM, LMP, ESMPs, checklists, etc.)	<ul style="list-style-type: none"> <li>▶ PIE Env. Specialist</li> <li>▶ PIE Communications Specialist</li> <li>▶ PIE Social Safeguards Specialist</li> </ul>	<ul style="list-style-type: none"> <li>▶ World Bank</li> <li>▶ MoHCC</li> </ul>	Biannual
2	Vehicle and incinerator emissions monitoring	<ul style="list-style-type: none"> <li>▶ PIE Env. Specialist</li> <li>▶ EMA</li> </ul>	<ul style="list-style-type: none"> <li>▶ World Bank</li> <li>▶ MoHCC</li> <li>▶ PIE</li> </ul>	Quarterly to MOHCC and biannual to World Bank
3	Project related accidents, incidents, and fatalities	<ul style="list-style-type: none"> <li>▶ PIE project personnel</li> <li>▶ PIE Team Leader</li> <li>▶ Project activity leaders</li> </ul>	<ul style="list-style-type: none"> <li>▶ World Bank</li> <li>▶ MoHCC</li> <li>▶ PIE</li> </ul>	As soon as project personnel become aware of them and within 48 hours in line with ESIRT
4	Consultation of Indigenous Peoples, project progress and any unexpected and unintended events affecting Indigenous Peoples	<ul style="list-style-type: none"> <li>▶ Project activity applicants</li> <li>▶ PIE Env. Specialist</li> <li>▶ PIE Communications Specialist</li> </ul>	<ul style="list-style-type: none"> <li>▶ affected indigenous communities</li> <li>▶ PIE</li> <li>▶ World Bank</li> <li>▶ MoHCC</li> </ul>	As and when an incident has occurred.
5	GBV/SEA/SH reporting and community psychosocial support	RBF activity by community health workers (CHW).	<ul style="list-style-type: none"> <li>▶ PIE</li> <li>▶ World Bank</li> <li>▶ MoHCC</li> </ul>	Monthly and as soon as when an incident has occurred.

Compliance monitoring comprises on-site inspection of activities to verify that measures identified in the ESMP, are being implemented. This type of monitoring is like the normal tasks of a supervising engineer whose task is to ensure that the Contractor is achieving the required standards and quality of work. An annual inspection report must be submitted (together with the annual monitoring report) to WB for review and approval.

<sup>58</sup>Transport Officers are responsible for fleet management and transport logistics at all levels of the MOHCC including transport logistics, ensuring that vehicles are serviced and repaired, drivers are adequately instructed for safe transportation of goods and people.



## 8.4 Adaptive Management

Annual reviews may be carried out by an independent local consultant, NGO or other service provider that is not otherwise involved with ZCERP. Annual reviews should evaluate the annual monitoring report from MoHCC Local Offices and the annual inspection report from PIE. The purpose of the reviews is two-fold:

- ▶ To assess compliance with the ESMF requirements, learn lessons, and improve future ESMF performance,
- ▶ To assess the occurrence of, and potential for, cumulative impacts due to project-funded and other development activities.

The annual reviews will be a principal source of information to the PIE for improving performance, and to Bank supervision missions. Thus, they should be undertaken after the annual report on monitoring has been prepared and before Bank supervision of the project.

The review should identify areas of adaptive management, including training of project staff to ensure that the ESMF remains an iterative and adaptive to any changes or unforeseen circumstances (e.g., staff turnover, funding, political and environmental change) which may have an impact on project decision making, design and activities, requiring ESMF operational adjustments.

## 8.5 Monitoring Indicators

The purpose of monitoring indicators is to measure the extent to which the interventions in the management of environment and social impacts have achieved expected result and decide if further interventions are needed.

To be able to assess the effectiveness and safety of the proposed rehabilitations, installations, health care supplies and the subsequent implementation, operation and maintenance, the following are possible indicators for monitoring EHS performance of project activities:

**Table 8-2 Monitoring Indicators**

No.	ANTICIPATED IMPACTS OF ZCEREHSP PROJECT ACTIVITIES	POSSIBLE MONITORING INDICATORS
1.0	installation waste management	<ul style="list-style-type: none"> <li>▶ Number of specific areas for waste disposal in appropriate formal dumping sites.</li> <li>▶ Volumes of Toxic waste Segregated. (Hazardous chemicals, infected samples, obsolete chemicals, Asbestos Containing Materials (ACM))</li> <li>▶ Number of human resources employed in waste management</li> <li>▶ Number of Obstructions of roads and walkways.</li> </ul>

No.	ANTICIPATED IMPACTS OF ZCEREHSP PROJECT ACTIVITIES	POSSIBLE MONITORING INDICATORS
2.0	Hazardous and medical waste including e-waste	<ul style="list-style-type: none"> <li>▶ Conditions of the waste handling System (Segregation at source, handling, managing, transporting, treatment and disposal)</li> <li>▶ Volumes of Infectious waste generated from facilities</li> <li>▶ Number of vehicles complying with national environmental emission standards.</li> <li>▶ Percentage of fuelling facilities with adequate and proper equipment for management of oil and other petroleum related waste.</li> <li>▶ Number of drivers trained of safe transportation of waste</li> <li>▶ Percentage of incinerator operators trained on proper operation and maintenance of incinerators,</li> <li>▶ Percentage of incinerators licenced by the Environmental Management Agency,</li> <li>▶ Amount of medical waste generated at HCF</li> <li>▶ Amount transported (and confirmed by hazardous waste transportation return)</li> <li>▶ Amount and location of disposal</li> <li>▶ Percentage of disposal sites (e.g., incinerator) operating properly per Project requirements (ESMF, ICWMP),</li> <li>▶ Percentage of HCF appropriately segregating waste at point of generation,</li> <li>▶ Amount of e-waste disposed according to the national regulations,</li> <li>▶ Amount of e-waste sent for recycling</li> </ul>
3.0	Land degradation/ Soil erosion	<ul style="list-style-type: none"> <li>▶ Surface areas rehabilitate with terraces, erosion ditches, etc. developed.</li> <li>▶ length of storm water channels rehabilitated.</li> <li>▶ Areas of Patches revegetated or regressed</li> </ul>
4.0	State of vegetation	<ul style="list-style-type: none"> <li>▶ Area with planted trees and shrubs/grasses</li> <li>▶ Areas of Patches revegetated or regressed</li> </ul>

No.	ANTICIPATED IMPACTS OF ZCEREHSP PROJECT ACTIVITIES	POSSIBLE MONITORING INDICATORS
5.0	Ambient Air pollution	<ul style="list-style-type: none"> <li>▶ Level of air Quality vs national and WB standard.</li> <li>▶ Availability of Correct PPE.</li> </ul>
6.0	Noise generation	<ul style="list-style-type: none"> <li>▶ Level of noise within an allowable limit and</li> <li>▶ Close to Patient Wards the noise levels should not be more than 30 Db Leq.</li> <li>▶ Noise making period complying with the work time (7am-6pm).</li> </ul>
7.0	Occupational health and safety (OHS), and Community Transmission and Exposure	<ul style="list-style-type: none"> <li>▶ Incidences of work-related injuries and fatalities at sites.</li> <li>▶ Number of non-health care staff at project sites with health problems.</li> <li>▶ Number of Health Care workers infected during operations (Incidences of infection at work).</li> <li>▶ COVID-19 cases emanating from or related project sites or Health Facilities.</li> <li>▶ Number of accidents, incidents, and fatalities caused by project activities and reported.</li> <li>▶ Number of workers accessing HIV/AIDS services needed.</li> <li>▶ Number of non-compliance events to labour/employment act and other applicable obligations (compliance to the Health Care Workers code of conduct, labour contracts, and labour rights).</li> <li>▶ Number of complaints regarding the project.</li> <li>▶ Number of Safety equipment (PPE) available at construction site for workers.</li> <li>▶ Number of speed control ramps with appropriate road signs in case of roads.</li> <li>▶ Percentage of drivers with adequate documentation (driver's licences, defensive drivers' licence, positive medical report),</li> <li>▶ Number of drivers trained on safe transportation of hazardous waste.</li> </ul>

No.	ANTICIPATED IMPACTS OF ZCEREHSP PROJECT ACTIVITIES	POSSIBLE MONITORING INDICATORS
8.0	Gender mainstreaming	<ul style="list-style-type: none"> <li>▶ Proportion of women among contract workers or employees</li> <li>▶ Number of reported sexual abuse case involving project workers.</li> <li>▶ Ratio of men to women trained (ensure equity in the training processes).</li> </ul>
9.0	Risks to vulnerable Groups	<ul style="list-style-type: none"> <li>▶ Number of vulnerable persons served (Easy of access of services). (vulnerable persons include people with chronic conditions/disabled, poor people, migrants, the elderly and disadvantaged sub-groups of women, Indigenous Peoples (IPs).)</li> </ul>
10.0	Handling of Project and Personal Information	<ul style="list-style-type: none"> <li>▶ Number of complaints of known leakage of patient personal information.</li> <li>▶ Number of safeguards training courses conducted for staff and beneficiaries in safe handling of personal information.</li> </ul>
11.0	Training / induction and capacity building	<ul style="list-style-type: none"> <li>▶ Dates.</li> <li>▶ number of trainings.</li> <li>▶ and topics covered.</li> </ul>
12.0	Handling of Grievances	<ul style="list-style-type: none"> <li>▶ Percentage of grievances addressed and closed within 4 weeks of initial complaint being recorded.</li> </ul>
13.0	Cold Chain Supply	<ul style="list-style-type: none"> <li>▶ Number of facilities with equipment maintaining cold chain temperatures between 2-8 degrees Celsius.</li> </ul>
14.0	AEFIs	<ul style="list-style-type: none"> <li>▶ Percentage of AEFIs identified and managed according to protocol</li> </ul>

## 8.6 Institutional Arrangements for ESMF Implementation

### 8.6.1 Project Implementers

To assure the successful implementation and monitoring of the ESMF, the target groups and stakeholders who will play a role in the implementation of the ESMF must be provided with appropriate training and awareness. This is because the implementation of the activities will require inputs, expertise and resources which will be adequately conducted if the concerned parties are well-trained. These people include the following:

#### (a) National level

##### i) Ministries and other Government Entities

This project is being implemented by and for the MoHCC. Both the MoHCC Environmental Health and Health Promotion Departments have primary roles to play in the environmental and social management of project impacts. The MLGPW also has a central role as the owner and determiner of the physical elements/infrastructure of the HCFs. Close communication and coordination between MoHCC and MLGPW are required for successful implementation of this project.

The other government entities that will support the project include:

- ▶ MoEWC - EMA District Officers and ZINWA,
- ▶ MOPSLSW - Social Welfare Department,

These other institutions such as MoEWC - EMA District Officers, MOPSLSW - Social Welfare Department, and MLGPW - Public Works Department have roles to ensure that national environmental and other standards are met through monitoring, site visits, permit obligations and other means. EMA plays a central role in supporting the project and HCFs for screening, capacity building (including training) and other environment, health, and safety aspects.

For the smooth implementation of this ESMF, staff at national level must understand the environmental and social issues pertinent to their involvement. The groups that may need training at national level will include:

- ▶ PIE staff,
- ▶ MoHCC staff,
- ▶ Other collaborating institutions such as MLGPW.

##### ii) Project Implementation Unit (PIE)

The Project Implementation Unit (PIE) is primarily responsible for implementing the project and reporting on the use of World Bank-GFF funds. CORDAID will remain as the PIE and will receive World Bank-GFF funds through a Designated Account. The roles and functions of CORDAID are elaborated in section 1.7.

The PIE has strengthened its capacity to implement the project's environmental and social safeguards and this ESMF, by engaging a Communications Specialist, Social Safeguards Specialist for social issues and an Environmental Specialist for environmental matters. The Communications Specialist and Environmental Specialist were engaged under the HSDSP AFV and oversaw the implementation of social and environmental issues for the project. The Environmental Specialist will oversee the implementation of environmental matters for both AFV and ZCEREHSP activities. The Social Safeguards Specialist is supporting the implementation of social issues for the parent project and ZCEREHSP. Sections 6 and 9.2.1 describe the roles of the PIE in preparation and approval of screening forms, ESMPs, facility ICWMPs and other safeguards responsibilities in more detail.

The MOHCC PCU will continue to be the national purchaser for RBF services its roles are also elaborated in section 1.7.

### *PIE Environment Specialist*

The PIE Environmental Specialist will ensure the provisions of this ESMF are implemented, all Environmental and Social Safeguards are adhered to and that the ESMPs are formulated, reviewed, and adhered to. He/she will need to have a Masters' or advanced degree in Environmental Health, Environmental Sciences, Public Health, Nursing, Infection Prevention and Control, Natural Resource Management, Development Studies, Social Sciences, or any other relevant field.

His or her main functions are (i) capacity building, (ii) analytical and technical support and (iii) Operations, Management, and Implementation of the ESMF. In capacity building, conduct or ensure continuous training on the project's safeguards instruments to all CORDAID staff, MoHCC staff (National, Provincial and District), etc. The training will be in the form of initial awareness and refresher workshops on specific safeguards issues together with on-the-job practical demonstrations of the development and implementation of the ESMPs. Another important function of the PIE Environmental Specialist will be to ensure quality control and clearance of ESMPs and any other environmental documentation including instruments.

In terms of analytical and technical support he/she will assist the PIE in ensuring that the project is environmentally and socially compliant with the ESMF and ICWMP requirements. He/she will provide technical support and guidance and clearance functions (as necessary) during project activity proposal development, Environmental and Social screening and assist in the inclusion of environmental and social issues in the activity selection process, operations, management, and implementation of the ESMF. He/she will advise on administrative measures and actions required for ensuring the compliance with requirements set regarding environmental and social safeguard measures and undertake periodic monitoring and evaluation of project activities against standards of the safeguard guideline.

### *PIE Social Safeguards Specialist*

The PIE Social Safeguards Specialist will serve the purpose of making sure the social provisions of this ESMF are implemented, all Social Safeguards are adhered to and that the capacity of the beneficiaries to implement the ESMPs is enhanced. He/she will also be responsible for the implementation of the project's GRM. The project has engaged the Social Safeguards Specialist to oversee the implementation of the social provisions of the ESMF.

His/her main functions are (i) capacity building, (ii) Analytical and Technical support and (iii) Operations, Management, and Implementation of the GRM. In capacity building Conduct continuous training on the project's social safeguards instruments and the project's GRM, to all CORDAID staff, MoHCC staff (National, Provincial and District) etc. The training will be in the form of initial awareness and refresher workshops on specific safeguards issues together with on-the-job practical demonstrations of the implementation of the project's GRM.

In terms of analytical and technical support he/she will assist the PIE in ensuring that the project is socially compliant with the ESMF requirements. He/she will provide technical support and guidance during activity proposal, formulation, social screening activities and assist in the inclusion of social issues in the project as it is executed.

With respect to the operations, management, and implementation of the ESMF, this Specialist advises on administrative measures and actions required for ensuring the compliance with requirements set regarding social safeguard measures and undertake periodic monitoring and evaluation of project activities against standards of the safeguard guideline.

### **v) PIE Communication Specialist**

The Communication Specialist will support the Social Safeguards in the successful implementation of the GRM, working with focal points from MoHCC. She will provide overall policy and technical direction for all risk communication and community engagement activities working closely with Health Promotion Department, as well as public relations management issues under the Project as defined by the Environmental and Social Commitment Plan (ESCP), Environmental and Social Management Framework (ESMF), Stakeholder Engagement Plan (SEP) this LMP and the ICWMP such as AEFI, GRM, etc.

**(b) Provincial, District and Local level Technical Teams**

The PIE Environmental Specialist together with the Communications Specialist/ Social Safeguards Specialist, will be assisted in their duties by the Provincial and District Technical Teams (See Section 6.1), who will be led by MoHCC - Environmental Health Department, Health Promotion department and Public Relation Unit and consist of representatives of the following institutions at each level:

- a. MoHCC - Public Relation Unit
- b. MoHCC - Health Promotion Department, MoHCC - Environmental Health Department
- c. MoEWC - EMA District Officers
- d. MOPSLSW - Social Welfare Department
- e. MLGPW - Public Works Department
- f. ZINWA
- g. Cordaid

The technical teams will be responsible for completing the environmental and social screening form (Appendix 5) to be able to identify and later mitigate the potential environmental and social impacts of ZCEREHSP project activities. At Facility Level, the groups that will receive environmental and social training to enable them to implement the ESMF of the project will include the following:

- ▶ CHW,
- ▶ Environmental Health Technicians/ Officers,
- ▶ Nurse in Charge.

Figure 8-1 below outlines the roles and responsibilities of different institutions and various levels in the implementation of the ESMF.



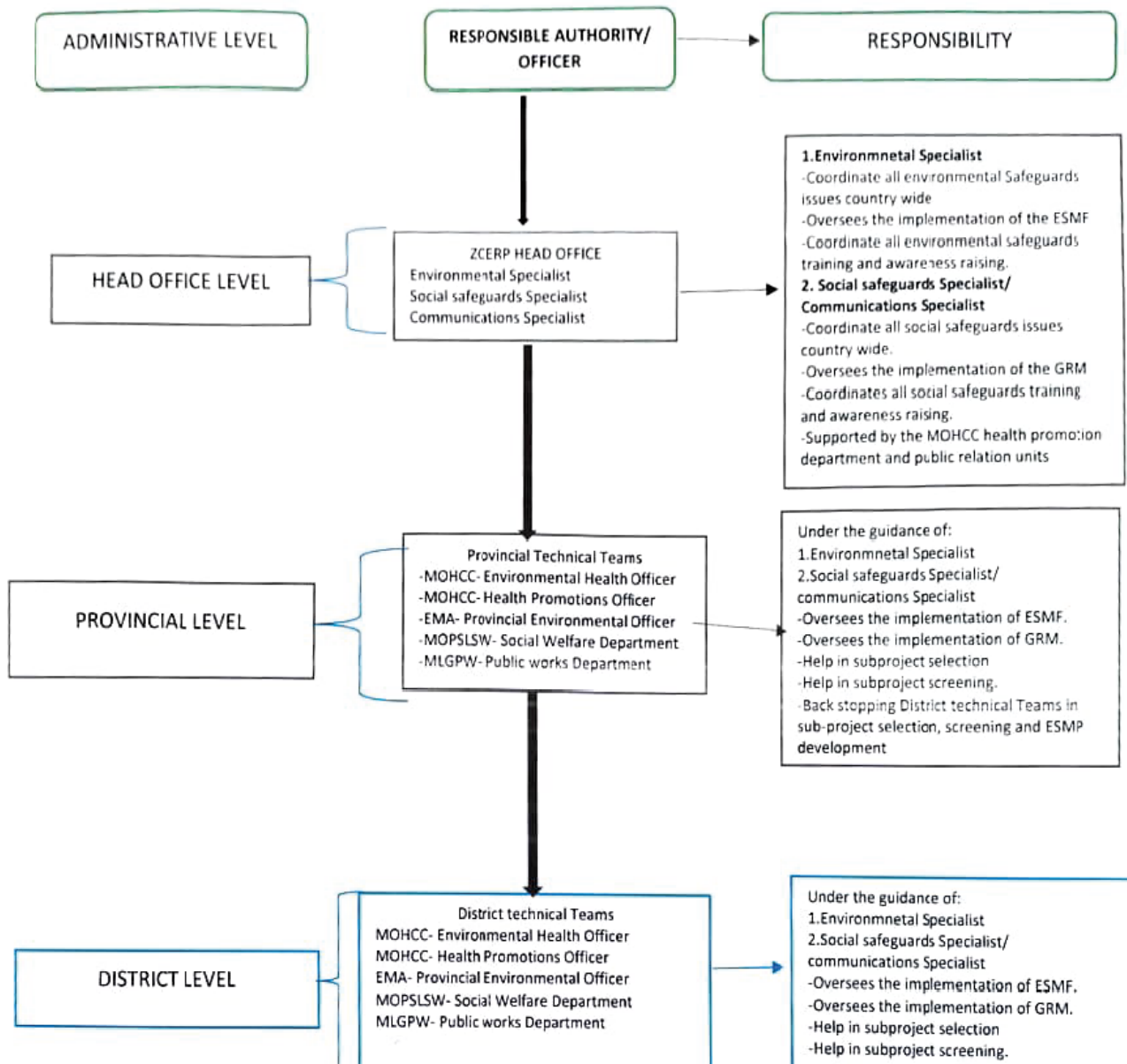


Figure 8-1 Organisational Arrangements

## 8.7 Project Implementation Capacity

### 8.7.1 Planning and Coordination of the Vaccine Introduction

In March 2020, the Zimbabwe National Preparedness and Response Plan for COVID-19 was launched and with it a national COVID-19 Response Task Force and the Inter-Ministerial Committee. In August, to strengthen the National COVID-19 response, the Cabinet decided to merge the COVID-19 response into a single response plan comprising the Command Centre, Office of the COVID-19 Chief Coordinator and Ministry of Health and Child Care. The overall COVID-19 response is being coordinated by the COVID-19 National Response Committee directed from the Office of the President and Cabinet. The COVID-19 vaccine will be coordinated by the Interagency Coordinating Committee (ICC). The country has appointed the ICC as the COVID-19 National Coordinating Committee (CNCC) with multi-sectoral representation. The Zimbabwe National Immunization Technical Advisory Group (ZIMNITAG) will provide evidence-based recommendations and policy guidance specifically related to COVID-19 vaccines, to facilitate fully informed decision-making by the government.

### 8.7.2 The Medicines Control Authority of Zimbabwe (MCAZ)

Vaccine pharmacovigilance is a critical aspect in public health and a key indicator for pharmacovigilance. The Medicines Control Authority of Zimbabwe (MCAZ) is the statutory body responsible for protecting public and animal health by ensuring that all medicines, devices, allied substances, and other health commodities are safe, effective, and of good quality. This is achieved through registration of medicines; licensing of persons and premises that handle medicines; review, approval, and monitoring of clinical trials that involve the use of medicines; and quality testing and safety monitoring of all health commodities granted market authorisation.

The MCAZ in collaboration with the Expanded Programme on Immunization- Ministry of Health and Child Care (EPI-MoHCC), have continuously worked to develop vaccine pharmacovigilance in Zimbabwe through participation in World Health Organisation (WHO) projects, development and implementation of the Adverse Events Following Immunization (AEFI) surveillance guidelines and conducting trainings for health care professionals on AEFI reporting and case investigations.

### 8.7.3 The roles of the ICC in COVID-19 vaccination

- ▶ The responsibilities of the ICC include, but not limited to:
  - reviewing global-level information related to COVID-19 vaccines and incorporating it into the planning and preparation for COVID-19 vaccine deployment at country level.
  - considering the recommendations issued by the ZIMNITAG.
  - defining the deployment plan with clear functions, responsibilities, and deadlines for different stakeholders. The plan needs to be aligned with the national COVID-19 preparedness and response plan.
  - estimation of costs to facilitate budget advocacy and resource allocation.
  - establishing an operations process for coordination, information, and communication.
  - ensuring integration with existing immunization programmes and coordination across programmes and different sectors embedding the vaccination programme into existing health system structures.
  - coordinating and/or supporting the implementation of health services readiness and capacity assessments (at facility and community level) to identify bottlenecks and guide delivery of vaccines and other essential supplies; and
  - monitoring progress using methods such as a dashboard with key indicators, readiness assessment tools, etc.

### 8.7.4 The roles of the ZIMNITAG

ZIMNITAG will be responsible for the following activities:

- ▶ Reviewing recommendations from the Strategic Advisory Group of Experts on Immunization (WHO/SAGE), the Regional Immunization Technical Advisory Group (RITAG) and/or other NITAGs.
- ▶ Periodic reviewing of Zimbabwe's relevant data on the national/regional epidemiology of COVID-19, including laboratory confirmed cases, hospitalization and deaths associated with COVID-19 and data on natural immunity.
- ▶ Updating the advice and issue vaccine-specific recommendations as new information comes in on the characteristics of COVID-19 vaccines under development; changes in the landscape of non-pharmacological interventions, COVID-19 diagnosis, and treatment; and COVID-19 vaccine-specific recommendations from SAGE and RITAGs
- ▶ Advising the MoHCC on priority groups and vaccination strategies based on the evidence collected and available global and regional guidance, i.e., values framework.
- ▶ Advising the MoHCC on the best communication approaches regarding COVID-19 vaccine introduction, considering vaccine characteristics and public acceptance dynamics.

### 8.7.5 Roles and Responsibilities of Focal Persons

For the effective deployment of vaccines, the National EPI Programme will be responsible for the implementation of Covid-19 vaccination activities. The table below highlights some of the responsibilities of the focal persons:

**Table 8-3 Responsibilities of focal persons**

Title	Responsibilities
EPI Manager	<p>Responsible for managing a country's overall pandemic response in coordination with the National Response team.</p> <ul style="list-style-type: none"> <li>- Organizes and oversees implementation capacity building for health workers</li> <li>- Delegates responsibilities for deployment of vaccine and vaccination to the logistics and vaccination focal points.</li> <li>- In collaboration with the logistics team, drafts the deployment and implementation plan.</li> <li>- Collects and organizes contact information for members of deployment committees, other key authorities</li> </ul>
Surveillance Officer	<p>Responsible for the monitoring COVID 19 vaccine and injection safety.</p> <ul style="list-style-type: none"> <li>- Update processes for data collection, analysis, visualisation, and communication using management information systems.</li> <li>- Strengthening post-deployment surveillance and management of Adverse Events Following Immunization (AEFI), monitoring and evaluating vaccination activities.</li> <li>- Participate in Pharmacovigilance committee</li> </ul>
Logistician	<p>Oversees process for forecasting, vaccine reception, storage, transport distribution and waste management.</p> <p>Responsible for deployment COVID 19 vaccine &amp; supplies</p> <ul style="list-style-type: none"> <li>- Ensures that there is appropriate mode of transport of each shipment.</li> <li>- Strengthening the logistics management information systems, inventory management system and health facility service capacity assessments.</li> </ul>
Monitoring and Evaluation Officer	<ul style="list-style-type: none"> <li>- Update indicators for monitoring &amp; evaluation</li> <li>- Establishes process for monitoring and evaluating COVID-19 deployment activities.</li> <li>- Update processes for COVID-19 data collection, analysis, visualisation, and communication using management information systems.</li> <li>- Ensures timely and continuous monitoring of activities to make activities are implemented as planned</li> <li>- Monitoring of COVID-19 vaccine acceptance level.</li> </ul>

Title	Responsibilities
Advocacy, Communication and Social Mobilisation	Developing of a communication plan and monitoring framework for COVID 19 vaccine <ul style="list-style-type: none"> <li>– Engagement of key national &amp; subnational stakeholders</li> <li>– Development of communication materials for COVID 19</li> <li>– Coordination of demand creation &amp; media campaign</li> <li>– Establishment of media monitoring and community feedback mechanism</li> <li>– Coordinate national launch of COVID 19 vaccine</li> <li>– Establish ethical codes/patients charter</li> </ul>

### 8.7.6 Vaccine Safety Monitoring and Management of AEFI and Injection Safety

COVID-19 vaccine safety surveillance will be guided by already existing MoHCC's Adverse Events Following Immunization (AEFI) surveillance guidelines and the WHO COVID-19 Vaccines Safety Surveillance Manual. Safety surveillance for COVID-19 surveillance will be further strengthened through additional training of MOHCC health care workers on causality assessment of adverse events following COVID-19 vaccination, identification, management and reporting of potential cases of anaphylaxis and ensuring availability of comprehensive emergency tray at all vaccination points. The trainings will be provided as part of a comprehensive COVID-19 vaccine introduction trainings. The project will also hire a Social Specialist to oversee the management of social risks and impacts associated with the project as well as the implementation of the project GRM and Gender Based Violence Action Plan.

### 8.8 Capacity Building Requirements

The proposed Zimbabwe ZCEREHSP activities are ambitious, and the Social Safeguards Specialist together with the Communication Specialist, will oversee some of the capacity building and awareness raising requirements of the project. Successful implementation of the project activities will require dynamic and multi-disciplinary professionals. Therefore, regular short and tailor-made training courses and seminars will be required to reinforce the capacity and skills of project implementers at all levels during the entire project period.

The stakeholders have different training needs ranging from awareness, sensitization, and comprehensive training.

- ▶ Awareness raising will cause the participants to acknowledge the significance or relevance of the issues, but without in-depth knowledge of the issues,
- ▶ Sensitization will cause the participants to be familiar with the issues to the extent of demanding precise requirements for further technical assistance,
- ▶ Comprehensive training will raise the participants to a level of being able to train others and to competently act on project environmental and social matters in their areas such as vaccine waste management, social issues related to coordination of an RMNCAHN integrated outreach model, identification, reporting and management of AEFIs, and GBV/SEA-H.

Training and seminars will be undertaken and table 8-4 below provides costs estimates for the identified capacity building activities. The basis of the estimates is on some of the following:

- ▶ Prevailing costs of goods and services offered in typical urban or rural areas,
- ▶ An average number of 10 people for a District/local level team,
- ▶ The length of training sessions will depend on the course and will vary from 3 days to about 5 days,
- ▶ The estimated costs include training costs/fees, hire of rooms, food for participants, per diems, and transport costs. Training subsistence allowances have been estimated at US \$75 per participant per day.

In addition, the project Social Safeguards Specialist is overseeing the implementation of social safeguards related matters of the project including capacity building on GBV/ PSEA-H, operation of the project GRM.

**Table 8-4 Summary of Capacity Building Requirements and Cost Estimates**

No.	TRAINING ACTIVITY	TARGET GROUP	MEANS OF VERIFICATION	COST ESTIMATES
1.	<p>Refresher Training on Environmental and Social Safeguards for the 25 districts– ESMPs of the project activities:</p> <ul style="list-style-type: none"> <li>- Screening process.</li> <li>- Use of checklists</li> <li>- Preparation of terms of reference.</li> <li>- Identification of Impacts</li> <li>- EIA report preparation and processing</li> <li>- Strategic action planning for Environmental Management</li> <li>- Policies and laws in Zimbabwe</li> <li>- Grievance Redress Mechanism and Incident Management and Reporting</li> </ul> <p>World Bank Environmental and Social safeguards Policies.</p>	<ul style="list-style-type: none"> <li>▶ District Health Office Teams</li> <li>▶ District EMA Units</li> <li>▶ District health Workers</li> <li>▶ Extension workers in project impact areas.</li> <li>▶ Relevant Line Ministries</li> <li>▶ Community Members</li> </ul> <p><u>TRAINER: Department of Environment or private consultant</u></p>	<p>In each District:</p> <ul style="list-style-type: none"> <li>▶ 10 members of District Health Office Team are trained.</li> <li>▶ 5 members of each relevant line ministry trained.</li> </ul>	<p>4 people/district for 25 districts x \$75/day for 3days = \$</p>
2.	<p>Refresher training and capacity building on the Grievance Redress Mechanism, Incident Reporting, GBV/SEAH</p>	<ul style="list-style-type: none"> <li>▶ National, Provincial and District level</li> <li>▶ Social Safeguards Specialist</li> <li>▶ Communication Specialist</li> </ul>	<p>30 PROs and Focal Persons Trained Training Reports</p>	<p>30 people x \$75/day x 3 Days</p> <p>Total - \$6750</p>

No.	TRAINING ACTIVITY	TARGET GROUP	MEANS OF VERIFICATION	COST ESTIMATES
3.	<p>Refresher Medical Waste Management Training for the 25 districts supported under- the ZCERPEHSP:</p> <ul style="list-style-type: none"> <li>▶ Use of the three-bin system (colour coded bins)</li> <li>▶ How to operate an incinerator</li> <li>▶ Importance of Personnel Protective Equipment (PPE)</li> <li>▶ Safe management of waste from mobile or outreach vaccination sites</li> <li>▶ Safe transportation of vaccination waste</li> <li>▶ Waste weighing and record keeping</li> <li>▶ GBV/ SEA-H</li> <li>▶ Grievance Redress Mechanism</li> <li>▶ Preparation of facility-level HCF ICWMP</li> </ul>	<ul style="list-style-type: none"> <li>▶ All HCW and all involved in the implementation of the project</li> <li>▶ Incinerator operators</li> <li>▶ All waste handlers</li> </ul>	<p>In each District:</p> <ul style="list-style-type: none"> <li>▶ 10 members of District Health Office Team are trained.</li> <li>▶ 3 provincial team members trained</li> </ul>	<p>450 people at \$15/ person for 5 days =\$33,750</p>



No.	TRAINING ACTIVITY	TARGET GROUP	MEANS OF VERIFICATION	COST ESTIMATES
4.	Training of Technical Teams on construction site waste management appropriate for minor works such as renovations of the maternity waiting homes and operating theatres, installation of oxygen reticulation systems including GBV/ SEA-H GRM	<ul style="list-style-type: none"> <li>▶ PIE Env, Social Safeguards and Communication Specialists</li> <li>▶ Contractors</li> <li>▶ All waste handlers</li> </ul>	<p>In each District:</p> <ul style="list-style-type: none"> <li>▶ 6 members of District technical Team are trained.</li> <li>▶ 5 members of each Provincial technical team trained.</li> </ul>	<p>305 people@ \$15 person per day for 35 days</p> <p>\$22,875</p>
6.	Training of Contractors on GBV/ SEA-H and the Code of Conduct Signing of the Code of Conduct	<ul style="list-style-type: none"> <li>▶ Contractors</li> <li>▶ PIE</li> </ul>	<p>In each Province:</p> <ul style="list-style-type: none"> <li>▶ 15 Contractors/ contractor workers</li> </ul>	\$8,000
9	Monitoring and Support Support and Supervision in provinces and districts	<ul style="list-style-type: none"> <li>▶ MOHCC National</li> <li>▶ PIE Social Safeguards Specialist and Environmental Specialist and Communication Specialist</li> </ul>	Quarterly monitoring visits	<p>Each quarterly visit</p> <ul style="list-style-type: none"> <li>▶ 8 People \$75/ day for 5 days per quarter x 3 quarters=</li> </ul> <p>\$9,000</p>
<b>TOTAL BUDGET</b>				<b>\$220,675</b>

**NOTE:**

- ▶ District Health Office Teams are to be trained including:

- Environmental Health officers,
- Nurse in Charge,
- Public Relations Officers
- Health Promotions Officers etc

- ▶ Relevant line ministries to be trained:

- MoHCC,
- PIE Staff,
- EMA,
- MoLGPW.
- MoPSLSW

### 8.8.1 Proposed Approach in Executing the Training Activities

The ZCEREHSP will adopt a strategy of running workshops and refresher courses to disseminate the safeguards instruments as well as convey respective roles to project implementers. It will also use the training of trainers and community exchange visits approach.

The training activities on the ESMF can be conducted by the PIE Specialists. This will have to be done at the beginning of the project, before the project activities start, so that the participants are ready in time to apply the knowledge during implementation of the project activities. Skills in the screening process will be extremely useful for assessing the environmental and social implications of the project activities before they start.

Training in Project Planning and Implementation should be done before any project activities start to prepare the participants to use their knowledge during project implementation. The training should be done once during the project life. The training can be conducted by private consultants.

### 8.9 Budget

The budget for implementing and monitoring the recommended mitigation measures throughout the project life includes capacity building activities and is presented here. The budget will be integrated into the overall project costs to ensure that the proposed mitigation measures are implemented. Additionally, the MOHCC is already implementing some of the mitigation measures associated with identified risks and impacts associated with the COVID-19 vaccination programme of the Government of Zimbabwe. These mitigation measures being implemented and funded by the government of Zimbabwe and partners such as The Global Fund, Infection Control Association of Zimbabwe (ICAZ) include procurement and supply of waste management equipment to HCF, procurement and supply of PPE to health care workers involved in COVID-19 vaccination activities, cleaning materials, detergents and equipment, training of health care workers on infection prevention and control including waste management, and funding for the overall project coordination through the Environmental Health Services and the Nursing Departments. Some of the costs of the many mitigation measures are not yet known since the specific sites and health facilities are not yet identified. However, the PIE safeguards team is already providing technical support through the HSDSP AFV and ZCERP through support and supervision activities to some of the project facilities. Some of the proposed environmental activities will be funded directly by the project resources in accordance with the proposed plan laid out below.

A summary of the budgetary requirements for the proposed activities is given in table 9-4 below:

**Table 8-5 Summary of the Budgetary Requirements**

No.	ACTIVITY	TARGET	BUDGET (US \$)	SOURCE OF FUNDS
1.0	Environmental and Social Safeguards – ESMPs of the project activities.	<ul style="list-style-type: none"> <li>▶ District Health Office Teams</li> <li>▶ District EMA Units</li> <li>▶ District health Workers</li> <li>▶ Extension workers in project impact areas.</li> <li>▶ Relevant Line Ministries</li> <li>▶ Community Members</li> </ul> <p>TRAINER: <u>Dept. of Environment or private consultant</u></p>	\$18,900	ZCEREHSP
3.0	Medical Waste Management Training:	<ul style="list-style-type: none"> <li>▶ All HCW and all involved in the implementation of the project</li> <li>▶ Incinerator operators</li> <li>▶ All waste handlers</li> </ul>	\$33,750	ZCEREHSP
4.0	Training of Technical Teams on construction site waste management appropriate for minor works such renovation for waiting mothers' homes and theatres and upgrading, awareness on GBV/ SEA-H, GRM capacity strengthening	<ul style="list-style-type: none"> <li>▶ PIE Env. Specialist</li> <li>▶ PIE Social Safeguards Specialist</li> <li>▶ Contractors</li> <li>▶ All waste handlers</li> </ul>	\$22,875	ZCEREHSP
6	Training of Contractors on GBV/ SEA-H and the Code of Conduct	<ul style="list-style-type: none"> <li>▶ Contractors</li> </ul> <p>PIE</p>	\$8,000	ZCEREHSP
9	Monitoring and Support Support and Supervision in provinces and districts	<ul style="list-style-type: none"> <li>▶ MOHCC National</li> </ul> <p>PIE</p>	\$9,000	ZCERPEHSP
<b>TOTAL</b>	<b>\$214,000</b>			

## 8.10 Conclusions

The proposed ZCEREHSP requires effective coordination and capacity building of all participating agents to foster an enabling environment for its success. As a multisectoral approach it requires active participation of all stakeholders especially those at the fore front of working with the communities, i.e., the Community Health Workers (CHW), Village Health Workers, Extension Officers, etc. Clear cut roles for all stakeholders and institutions needs to be delineated to make sure that there are no conflicts resulting from the unclear job descriptions. In this vein the PIE will analyse the operating environment at the local levels and then implement the requisite remedies for the success of the project.

The PIE will systematically apply all the available environmental and social management safeguards to ensure that the impacts on the natural and social environment are adequately identified, assessed, and minimised. The PIE Environmental Specialist together with the Social Safeguards Specialist, will ensure that all project activities are screened and where needed, ESMPs are developed, adopted, and applied to minimise and avoid adverse impacts in all phases of project activity execution.

The proposed project has potential to significantly improve the health delivery system in all the target areas. The improvement in health that the communities will benefit, will translate to improved livelihoods as people become productive again and this will translate ultimately to an improved economy.

The ZCEREHSP project will pose more positive than negative potential environmental and social impacts. **The envisaged negative environmental and social impacts will be localized, minimal, short-term and can be mitigated by simple measures.** The PIE (CORDAID) undertakes to ensure that:

- ▶ The ICWMP will be applied to deal with any resultant increase in Health Care Waste generation from the Facilities,
- ▶ Stakeholder organizations such as EMA, NGOs and other interested developmental parties will be continuously involved and kept informed of the implementation progress so that they can play their part,
- ▶ The mitigation measures recommended in the ESMF, will be implemented to avoid any significant environmental and social impacts.

The ESMP presented in the ESMF will be used to mitigate the impacts during and after the implementation of the ZCERP. The final benefits of this project to the nation will, by far, outweigh any potential negative effects. Further, the project will overall not have any significant environmental and social impacts if the recommended mitigations are carried out.

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## 10. APPENDICES

### APPENDIX 1 INDIGENOUS PEOPLE'S PLANNING FRAMEWORK

The ZCEREHS Project will adopt the IPPF for the ZCERP.

#### App 1.1 Introduction

This Indigenous Peoples Planning Framework (IPPF) has been prepared to ensure that the World Bank's ESS7 on Indigenous Peoples and Sub-Saharan African Historically Underserved Traditional Local Communities is applied to ZCERP supported projects. The objectives of the policy are to avoid adverse impacts on Indigenous Peoples and to provide them with culturally appropriate benefits.

The Indigenous Peoples policy recognizes the distinct circumstances that expose Indigenous Peoples to different types of risks and impacts from development projects. As social groups with identities that are often distinct from dominant groups in their national societies, Indigenous Peoples are frequently among the most marginalized and vulnerable segments of the population. As a result, their economic, social, and legal status often limit their capacity to defend their rights to lands, territories, and other productive resources, and restricts their ability to participate in and benefit from development. At the same time, the policy, together with the Involuntary Resettlement policy, recognizes that Indigenous Peoples play a vital role in sustainable development and emphasizes that the need for conservation should be combined with the need to benefit Indigenous Peoples to ensure long-term sustainable management of critical ecosystems.

The IPPF describes the policy requirements and planning procedures that project activities of ZCERP will follow during their preparation and subsequent implementation. It also describes the role of ZCERP.

#### App 1.2 ZCERP and indigenous peoples

Some of the Health Facilities where ZCERP will invest serve areas or territories traditionally owned, customarily used, or occupied by Indigenous Peoples (IPs). The potential impacts of the project, both negative and positive will directly affect the IPs impacting on their intrinsic ways of life and their healthy ecosystems on which they depend for their survival. Therefore, ZCERP project activities can provide valuable long-term opportunities for sustainable development for Indigenous Peoples and other local communities if the positives of the project are implemented. However, several risks are relevant for the type of projects supported by ZCERP:

- ▶ **Customary and Indigenous Peoples' rights:** Rights of Indigenous Peoples are recognized in international agreements and for World Bank-supported projects by the Bank's own policy. Such rights may also be recognized in national legislation. ZCERP project activities will need to identify and recognize these rights to ensure that activities are not adversely affecting such rights.
- ▶ **Loss of culture and social cohesion:** Given Indigenous Peoples' distinct cultures and identities and their frequent marginalization from the surrounding society, interventions may run the risk of imposing changes to or disruption of their culture and social organization, whether inadvertently or not. This can happen if the participation of the IPs is not appropriate:
  - The engagement techniques used are not cultural appropriate, causing the IPs to hold back since they may have special cultural requirements for engagement or even service delivery.
  - Inappropriate selection of methods for disclosure of information (including such topics as format, language, and timing).
  - Inappropriate selection of location and timing for engagement event(s) (avoiding busy work times, which may be seasonal, and days/times when special events may be occurring).
  - Not agreeing on the mechanisms for ensuring stakeholder attendance at engagement event(s) (if required).
  - Failure to identify the appropriate feedback mechanisms to be employed.

While indigenous communities may welcome and seek change, they can be vulnerable when such change is imposed from external forces and when such change is rushed.



- ▶ **Inequitable participation:** The level of participation which the IPs will be afforded may not yield the intended results because:
  - The local communities may not see the benefit of taking their time and resources to participate in project activities when they do not expect to receive culturally appropriate benefits.
  - The design of the participation may not include appropriate capacity building (when needed) or take into consideration local decision-making structures and processes with the risk of leading to alienation of local communities or even conflicts with and/or between local communities.
  - Participation design may not include appropriate representation of Indigenous Peoples in decision-making bodies.

This can be averted by conducting specific targeting of stakeholder engagement activities relevant to Indigenous Peoples (IPs) that meet the requirements of ESS7. This may involve carrying out a Social Assessment (SA) prior to any activities that would impact on them, coming up with a stand-alone plan or framework of how to deal with the IPs and developing site-specific approaches that will ensure adequate consideration of their specific cultural needs in accordance with ESS7.

Projects affecting Indigenous Peoples, whether adversely or positively, therefore, need to be prepared with care and with the participation of affected communities. The requirements include social analysis to improve the understanding of the local context and affected communities; a process of free, prior, and informed consultation with the affected Indigenous Peoples' communities to fully identify their views and to obtain their broad community support to the project; and development of project-specific measures to avoid adverse impacts and enhance culturally appropriate benefits.

### App 1.3 Policy requirements

The level of detail necessary to meet the requirements is proportional to the complexity of the proposed project and commensurate with the nature and scale of the proposed project's potential effects on the Indigenous Peoples, whether adverse or positive. This needs to be determined based on a subjective assessment of project activities, circumstances of local communities, and project impacts.

Minimum requirements for projects working in areas with Indigenous Peoples are identification of Indigenous Peoples and assessment of project impacts, consultations with affected communities, and development of measures to avoid adverse impacts and provide culturally appropriate benefits (in projects with no impacts this could be limited to consultations during implementation to keep local communities informed about project activities).

#### App 1.3.1 Screening for Indigenous Peoples.

The ZCERP PIE will know if Indigenous Peoples are present in a project activity area and can proceed to the social assessment and consultations (see next section).

However, if this is not the case ZCERP project activity applicants (the Health Facilities) are required to screen for the presence of Indigenous Peoples early on in project preparation, using the screening form (Appendix 5). The characteristics of Indigenous Peoples (a distinct, vulnerable, social, and cultural group)<sup>59</sup> mentioned in ESS7 will be used. Health Facilities in Tsholotsho, Bulilima-Mangwe, Guruve and Mbire Districts can confirm by screening if they are not sure of the presence of the IPs in their areas since the two peoples who self-identify as indigenous in Zimbabwe are found.<sup>60</sup>

<sup>59</sup> "Indigenous Peoples" are a distinct, vulnerable, social, and cultural group possessing the following characteristics in varying degrees:  
self-identification as members of a distinct indigenous cultural group and recognition of this identity by others;  
collective attachment to geographically distinct habitats or ancestral territories in the project area and to the natural resources in these habitats and territories;  
customary cultural, economic, social, or political institutions that are separate from those of the dominant society and culture;  
an indigenous language, often different from the official language of the country or region.

<sup>60</sup> The Indigenous Peoples of Zimbabwe are the:  
Tshwa (Tyua, Cuaa) San, who are found in the Tsholotsho District of Matabeleland North Province and the Bulilima-Mangwe District of Matabeleland South Province in western Zimbabwe  
Doma (Wadoma, Vadema) of Chapoto Ward in Guruve District and Mbire District of Mashonaland Central Province and Karoi District of Mashonaland West Province in the Zambezi Valley of northern Zimbabwe.

### App 1.3.2 Social assessment

Once it has been determined that Indigenous Peoples are present in the project area, the applicant assesses the circumstances of affected indigenous communities and assesses the project's positive and adverse impacts on them. This is to ensure that the project design takes IP needs and views into account. The level of detail of the assessment depends on project activities and their impacts on local communities. If the project is small and has no or few adverse impacts, this assessment is done as part of early project preparation by the applicant, mainly based on secondary sources and the applicants own experience working in the area. In larger and more complex projects, the assessment may be a separate exercise done by the applicant or contracted experts as appropriate and may include primary research (Note that assessments for large projects is not envisaged in this Project). In all cases the assessment will be based on consultations with the affected communities.

The main purpose of the social assessment is to evaluate the project's potential positive and adverse impacts on the affected Indigenous Peoples. It is also used to inform project preparation to ensure that project activities are culturally appropriate, will enhance benefits to target groups, and is likely to succeed in the given socioeconomic and cultural context. In this way the assessment informs the preparation of the design of the project as well as any measures and instruments needed to address issues and concerns related to Indigenous Peoples affected by the project.

The findings of the social assessment are described in a separate report and reflected in the activity proposal application. For small scale projects with no direct impacts on indigenous communities, the report is short and includes a brief overview of the indigenous communities affected by the project activities as they relate to the local communities, how project implementation will address the circumstances of Indigenous Peoples, and how they will participate and be consulted during implementation.

For more complex projects a more elaborate report is required and should include the following elements, as needed:

- ▶ A description, on a scale appropriate to the project, of the legal and institutional framework applicable to Indigenous Peoples,
- ▶ Baseline information on the demographic, social, cultural, and political characteristics of the affected indigenous communities, and the land and territories which they traditionally owned, or customarily used or occupied and the natural resources in which they depend,
- ▶ Description of key project stakeholders and the elaboration of a culturally appropriate process for consultation and participation during implementation,
- ▶ Assessment, based on free, prior, and informed consultation with the affected Indigenous Peoples' communities, of the potential adverse and positive effects of the project. Critical to the determination of potential adverse impacts is an analysis of the relative vulnerability of, and risks to, the affected indigenous communities given their distinct circumstances, close ties to land, and dependence on natural resources, as well as their lack of opportunities relative to other social groups in the communities, regions, or national societies they live in,
- ▶ Identification and evaluation, based on free, prior, and informed consultation with the affected Indigenous Peoples' communities, of measures to ensure that the Indigenous Peoples receive culturally appropriate benefits under the project and measures necessary to avoid adverse effects, or if such measures are not feasible, identification of measures to minimize, mitigate, or compensate for such effects.

### App 1.3.3 Free, prior, and informed consultation

The Applicant undertakes a process of free, prior, and informed consultation with the affected Indigenous Peoples' communities during project preparation to inform them about the project, to fully identify their views, to obtain their broad community support to the project, and to develop project design and safeguard instruments. In most cases, this process is best done as part of the social assessment although consultations are likely to continue after its completion.

The extent of consultations depends on the project activities, their impacts on local communities and the circumstances of affected Indigenous Peoples. At a minimum (for projects with no impacts or direct interventions with the indigenous communities), local communities (villages or dwellings neighbouring the Health Facility, Staff of the Health Facility, and other potential Clients of the

Health Facility) are informed about the project, asked for their views on the project, and assured that they will not be affected during project implementation. For projects affecting indigenous communities, whether positively or adversely, a more elaborate consultation process is required. This may include, as appropriate:

- ▶ Inform affected indigenous communities about project objectives and activities,
- ▶ Discuss and assess possible adverse impacts and ways to avoid or mitigate them,
- ▶ Discuss and assess potential project benefits and how these can be enhanced,
- ▶ Identify and discuss (potential) conflicts with other communities and how these might be avoided,
- ▶ Elicit and incorporate indigenous knowledge into project design,
- ▶ Facilitate and ascertain the affected communities' broad support to the project,
- ▶ Develop a strategy for indigenous participation and consultation during project implementation, including monitoring and evaluation.

All project information provided to indigenous peoples should be in a form appropriate to local needs. Local languages should usually be used, and efforts should be made to include all community members, including women and members of different generations and social groups (e.g., clans and socioeconomic background).

The applicant is responsible for the consultation process. The consultation process for the IP Communities will generally take the following form:

- ▶ Identify appropriate customary approaches to deal with the communities in question,
- ▶ Using the identified approaches, inform the affected indigenous communities about project objectives and activities,
- ▶ Identify the elected and natural leaders in these communities who will be used as representatives as the project progresses,
- ▶ Discuss and assess possible adverse impacts and ways to avoid or mitigate them,
- ▶ Discuss and assess potential project benefits and how these can be enhanced,
- ▶ Discuss and assess the Health Facilities at their disposal and the most appropriate ways they can derive benefits from them,
- ▶ Identify and discuss (potential) conflicts with other communities in the use of these Facilities and how these might be avoided,
- ▶ Elicit and incorporate indigenous knowledge into project design,
- ▶ Facilitate and ascertain the affected communities' broad support to the project,
- ▶ Develop a strategy for indigenous participation and consultation during project implementation, including monitoring and evaluation.

However, if the communities in question are organized in community associations or umbrella organizations, these should usually be consulted. In some cases, it may be appropriate or even necessary to include or use in the process independent entities that have the affected communities' trust. The experience of (other) locally active NGOs and Indigenous Peoples experts may also be useful.

When seeking affected indigenous communities' support to project activities, two aspects should be considered: Who and what is the "community," and how is "broad support" obtained. Communities are complex social institutions and may be made up of several fractions; it may be difficult finding persons who are representatives of the community. Interest in the project may vary among different groups (and individuals) in the community, and they may be affected differently. It is important to keep this in mind during the consultation process, and in some cases, it may be

more appropriate to consider the needs and priorities of sub-communities rather than those of a whole village.

When seeking "broad community support" for the project, it should be ensured that all relevant social groups of the community have been adequately consulted. When this is the case and the "broad" majority is overall positive about the project, it would be appropriate to conclude that broad community support has been achieved. Consensus building approaches are often the norm, but "broad community support" does not mean that everyone must agree to a given project. The agreements or special design features providing the basis for broad community support should be described in the Indigenous Peoples Plan; any disagreements should also be documented.

### App 1.3.4 Indigenous Peoples Plan

Based on the consultation and social assessment processes, project design is refined, and measures and instruments are prepared to address issues pertaining to Indigenous Peoples. The documents are prepared with the participation of affected indigenous communities during the consultation process.

The instrument to address the concerns and needs of Indigenous Peoples is usually an Indigenous Peoples Plan (IPP). ZCERP will facilitate the development of the activity specific IPPs for onward submission to the Bank for review and approval. In cases where Indigenous Peoples are the sole or most direct project beneficiaries, the elements of an IPP should be included in the overall project design, and a separate IPP is not required. In this case the project application becomes the IP and must respond to the requirements outlined in the above.

It should be noted that very few ZCERP project activities are likely to need such an elaborate plan. It may be appropriate to include a process of further social analysis and consultations during project implementation to determine specific activities (this is particularly so given the limited funds for preparing ZCERP projects). At minimum the IPP should include a description of the Indigenous Peoples affected by the project; summary of the proposed project; detailed description of the participation and consultation process during implementation; description of how the project will ensure culturally appropriate benefits and avoid or mitigate adverse impacts; a budget; mechanism for complaints and conflict resolution; and the monitoring and evaluation system that includes monitoring of particular issues and measures concerning indigenous communities.

The following elements and principles may be included in the IPP, as appropriate:

- ▶ Specific measures for implementation, along with clear timetables of action, and financing sources. These should be incorporated into the general project design as appropriate. Emphasis should be on enhancing participation and culturally appropriate benefits. Adverse impacts should only be contemplated, when necessary,
- ▶ Formal agreements reached during the free, prior, and informed consultation during project preparation,
- ▶ Clear output and outcome indicators developed with affected Indigenous Peoples,
- ▶ Project design should draw upon the strengths of Indigenous Peoples Organizations and the IP communities and consider their languages, cultural and livelihood practices, social organization, and religious beliefs. It should avoid introducing changes that are considered undesirable or unacceptable to the Indigenous Peoples themselves,
- ▶ Efforts should be made wherever possible and appropriate to make use of, and incorporate, Indigenous knowledge and local resource management arrangements into project design,
- ▶ Special measures for the recognition and support of customary rights to land and natural resources may be necessary,
- ▶ Special measures concerning women and marginalized generational groups may be necessary to ensure inclusive development activities. If the grantee does not possess the necessary technical capacities, or if their relationship with Indigenous Peoples is weak, the involvement of experienced local community organizations and NGOs may be appropriate; they should be acceptable to all parties involved,

- ▶ Capacity building of other implementing agencies should be considered,
- ▶ Capacity building activities for the indigenous communities to enhance their participation in project activities may be useful or necessary; this may also include general literacy courses,
- ▶ Grievance mechanism considering local dispute resolution practices,
- ▶ Participatory monitoring and evaluation exercises adapted to the local context, indicators, and capacity.

### App 1.4 Disclosure

Before finalising an IPP a draft should be disclosed together with the social assessment report (or its key findings) in a culturally appropriate manner to the Indigenous Peoples affected by the project. Language is critical and the IPP should be disseminated in the local language or in other forms easily understandable to affected communities – oral communication methods are often needed to communicate the proposed plans to affected communities.

The ZCERP will then disclose the IPP with the Bank. After the Bank has reviewed and approved the IPP as part of the overall proposed project for funding, the sub-project will share the final IPP again with the affected communities. The final IPP will also be disclosed at the ZCERP website.

### App 1.5 Roles and responsibilities

Project activity applicants are responsible for following the requirements of this Framework. They will ensure that Indigenous Peoples are consulted and benefit in culturally appropriate ways. They will avoid adverse impacts on indigenous communities, or where this is not possible develop with the participation of affected communities, measures to mitigate and compensate for such impacts. Finally, they are responsible for reporting to both affected indigenous communities and ZCERP on project progress and any unexpected and unintended events affecting Indigenous Peoples.

ZCERP) is responsible for the implementation of this Framework and will ensure that the participation of Indigenous Peoples in project activities in culturally appropriate ways is encouraged. ZCERP responsibilities include:

- ▶ Inform applicants and other stakeholders, including local communities, of this Framework and policy requirements,
- ▶ Assist applicants, and subsequently grantees, in the implementation of the Framework and policy requirements,
- ▶ Screen for projects affecting Indigenous Peoples.
- ▶ Review and approve project proposals, ensuring that they adequately apply the World Bank's Indigenous Peoples Policy,
- ▶ Assess the adequacy of the assessment of project impacts and the proposed measures to address issues pertaining to affected indigenous communities. When doing so project activities, impacts and social risks, circumstances of the affected indigenous communities, and the capacity of the applicant to implement the measures should be assessed. If the risks or complexity of issues,
- ▶ Assess the adequacy of the consultation process and the affected indigenous communities' broad support to the project—and not provide funding until such broad support has been ascertained and

Monitor project implementation, and include constraints and lessons learned concerning Indigenous Peoples and the application of this IPPF in its progress and monitoring reports; it should be assured that affected indigenous communities are included in monitoring and evaluation exercises.

## App 1.6 Grievance mechanism

Indigenous Peoples and other local communities and stakeholders may always raise a grievance to project activity applicants and ZCERP about any issues covered in this Framework and the application of the Framework. Affected communities should be informed about this possibility and contact information of the respective organizations at relevant levels should be made available. These arrangements should be described in the project-specific frameworks and action plans along with the more project-specific grievance and conflict resolution mechanism.

As a first stage, grievances should be made to the project activity applicants, who should respond to grievances in writing within 15 working days of receipt. Claims should be filed, included in project monitoring, and a copy of the grievance should be provided to the ZCERP PIE. If the claimant is not satisfied with the response, the grievance may be escalated to MoHCC Head office.



## APPENDIX 2 LABOUR MANAGEMENT PROCEDURES

### LABOUR MANAGEMENT PROCEDURES

#### 1. INTRODUCTION

ZCEREHSP project is being prepared under the World Bank Environmental and Social Framework (ESF). The project is adopting the Labour Management Procedures laid out under the ZCERP. Under the Environmental and Social Standard on Labour and Working Conditions (ESS2) on Labour and working Conditions the project is required to develop Labour Management Procedures (LMP) to promote sound worker management relationships and enhance the development benefits of a project by treating workers fairly and providing safe and healthy working environment. The purpose of this LMP is to facilitate the planning and implementation of the project by identifying the main labour requirements and associated risks and determining the resources necessary to address the project related labour issues. It sets out guidance on general labour issues on different forms of labour and issues related to COVID-19 considerations.

#### 2. OVERVIEW OF LABOR USE IN THE PROJECT

The LMP for ZCERP will apply to Project workers including fulltime, part-time, or temporary. It is not expected that the Project will rely on seasonal or migrant workers. It will apply to the following workers engaged in the Project:

(a) **Direct Workers.** People employed directly by Cordaid to work specifically in relation to the Project in the Project Implementation Entity (PIE) at the Head Office in Harare, and in the Provincial Offices as Provincial Results Based Financing Officers (PRBFOs) in Manicaland, Mashonaland East, Mashonaland Central, Mashonaland West, Matabeleland North, Matabeleland South, Midlands, and Masvingo Provinces. Cordaid has about 25 employees who will be working on the Project providing support but with different levels of effort ranging from 20% to 50%. However, under the ZCERP, a fulltime Social Specialist will be engaged with 100% level of effort.

Consultants will also be engaged to provide different services. Not more than 5 consultants will be engaged throughout the life of the Project.

In addition, the Government civil servants will support the Project implementation, generally referred to as **Health Care Workers (HCWs)**. These are civil servants engaged by Government of Zimbabwe through the Ministry of Health and Child Care (MOHCC) to provide health care services and these include nurses, doctors, pharmacists, laboratory workers, general cleaners, radiographers, and nurse aides. HCWs will be engaged in several activities including triaging of patients, treating and reporting cases and suspected, vaccination of the public, reinforcing Infection Prevention and Control measures, providing correct public health information, health care waste management (segregation and point of generation, transportation, treatment, and disposal). During mobile vaccination campaigns, mobile teams will be set up and will require some of the workers to be engaged. Mobile teams may camp out in the field or in communities where vaccinations will be conducted. Government civil servants are subject to the public sector working agreement or arrangement. Recruitment and engagement of health workers will be as per government procedures.

(b) **Contracted Workers.** People employed by contractors for the Project who are engaged to install solar panels. The contractors will be engaged for short durations with on average with a maximum of 6 workers on each site. Contracted Workers will be engaged directly by Cordaid's competitively chosen contractors to set up solar panel equipment; install refrigeration units in vaccine delivery trucks; transport and deliver solar direct refrigerators; treat, transport and/or provide other waste management services, providers of transport or storage of vaccines. Migrant workers are not anticipated in this project.

(c) **Community Workers/ Volunteers.** MOHCC engages many Community Health Workers<sup>61</sup> (CHWs) within the health sector. CHWs are mainly engaged in health promotion, preventive, and

<sup>61</sup> Community Health Workers or Village Health Workers are members of the communities where they work, selected by the communities, answerable to the communities for their activities, supported by the health system but not necessarily a part of its organization, and have shorter training than professional workers. The terms CHW and VHW are used interchangeably depending on the context (Urban or Rural)



treatment support, and in a more limited capacity regarding actual treatment. The CHWs are people employed or engaged in providing community-based project interventions on voluntary basis. These will include Village Health Workers (VHWs). These will include community members/ volunteers who will be working with Health Care Workers to mobilise the communities and raise awareness on COVID-19, vaccination, and vaccines, planning for vaccine introductions and identification of target groups, tracking and follow-up and infection prevention and control and vaccination sites. These CHWs are trained before being deployed to conduct their activities. Current Community Health Workers have been trained by MOHCC on COVID-19 infection prevention and control measures so that they will in turn capacitate their communities. Community Health Workers were provided with Personal Protective Equipment (PPE), including masks and sanitisers to reduce the risk of COVID-19 transmission. In addition to VHWs and CHWs, there are Health Centre Committees (HCCs) and Community Based Organisations (CBOs) who provide a link between the health services and the communities and further the CBOs remain the voice of the people through client satisfaction surveys.

All CHWs, CBOs and HCCs are subject to the terms and conditions of the MOHCC engagements agreement or arrangement.

(d) **Primary Supply Workers:**<sup>62</sup> Primary suppliers will be for the supply of PPE, SDD refrigerators, solar panels. However, these suppliers are not yet known at this stage and PIE will require such suppliers to identify potential for labour risks such forced labour, underage employment. Where necessary the PIE will require specific monitoring and reporting mechanisms related to labours issues

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<sup>62</sup>There are Primary Supply Workers associated with items procured under the Project. These include suppliers of PPE, medical supplies, and equipment. However, such suppliers will only be known subject to competitive bidding for contracts.

### 3. ASSESSMENT OF KEY POTENTIAL LABOR RISKS

As part of the labour risk and impacts identification, the following project activities outline some possible exposure pathways:

- ▶ VHWs/CHWs are involved in health promotion and preventive activities to increase uptake of vaccinations through community meetings, interpersonal communication, door to door campaigns. They will also be involved in infection prevention and control at vaccination sites.
- ▶ Contracted workers will be setting up energy generation equipment and installing refrigeration units in vaccine delivery trucks.
- ▶ HCWs will be involved in triaging, treating, collecting, transporting, and analysing COVID-19 samples, public vaccinations, contact tracing of COVID-19 cases, reporting cases, waste segregation,
- ▶ Cleaners will be involved in waste segregation, in facility transportation, treatment and disposal of waste.
- ▶ Counsellors at psychosocial support centres will offer counselling to clients by virtual and face-to-face interactions.
- ▶ HCF workers who provide environmental management services, including medical waste management, at the HCFs involved in the Project.
- ▶ Drivers will be involved in transportation of health care waste to regional incinerators for treatment and disposal. Drivers will also be involved in the transportation of vaccination staff, vaccines and medical supplies related to COVID-19 response activities.
- ▶ Direct workers at Cordaid will provide technical assistance to the MOHCC workers at different levels and will involve trainings on guidelines and protocols on how to protect themselves and the communities from the spread of COVID-19.
- ▶ Workers to the sites/facilities that provide medical waste disposal of wastes generated by the Project.

The table below highlights and analyses the potential labour related risks and in view of the anticipated labour utilisation.

**Table 3-1**

<b>Risk</b>	<b>Analysis (magnitude, extent, timing, likelihood, and significance)</b>
<p>Poor working conditions (working environment, underpayment, rights)</p>	<p>HCWs in Zimbabwe have, over an extended period, engaged in protest poor working environment and underpayment. HCWs are paid in accordance with national law (app. \$50/month for nurses and \$100-150 for doctors), but, due to inflation, the salary's value is rapidly eroding purchase power. This leads to significant vacancies in the health system that is difficult to fill. This challenge is likely to persist throughout the Project's implementation.</p> <p>Given the lack of employment opportunities, there is a risk that contracted workers could be engaged without adhering to required provisions, including low wages/rates and delays of payment, working conditions (particularly overtime payments and adequate rest breaks). Where any class of worker raises questions, there is a risk that employers may retaliate against them for demanding legitimate working conditions, or raising concerns regarding unsafe or unhealthy work situations, or any grievances; such situations could lead to labour unrest and work stoppage.</p>
<p>COVID-19 infection</p>	<p>Zimbabwe has suffered from a lack of PPE, an issue pre-dating the COVID-19 pandemic with health care worker infection rates at 11% and accounting for about 3% of health care worker infections in Africa. Zimbabwe has suffered from a lack of PPE, an issue pre-dating the COVID-19 pandemic. MOHCC has set up a Health Worker Infection (HWI) surveillance system in all the country's 10 provinces. All provincial situation reports to include HWI indicators. HCWs will be more at risk of infection without the provision of PPE and the use of disinfectants that will be provided by the Project. The risks include pathogen exposure, infection and associated illness or death. Fortunately, the WB Procurement Team has worked with HSDSP to ensure timely provision of PPE supplies and will also be able to assist ZCERP with the same. Without adequate testing, tracing and vaccinations, the risk of co-infection is significant.</p> <p>All ZCERP workers are at risk of exposure to COVID-19 since the pandemic is still active. Given the nature of energy and other installation activities (i.e., minimum to no contact with patients), those contracted workers are not expected to be at significant risk of co-infection. Such work will only require a few workers on each work site, provided that appropriate PPE is used to prevent infection, the risk is considered low as tasks can be phased and distanced. Contracted workers that transport infectious medical waste are at a higher risk of exposure to COVID-19. Health care workers that will work directly with the public to facilitate or provide vaccinations will have a lower yet still possible risk of COVID-19 infection since they will be in contact with the public which will have both infected and uninfected members. All workers will be supplied PPE to reduce the risk of exposure.</p>

Occupational health and safety (OHS)	<p>The project will support the setting up of energy generation equipment, installation of solar direct drive refrigerators and the installation of refrigeration units in trucks for vaccine transportation. Potential risks to construction workers include slip and falls from manual handling of heavy objects, injuries from working on heights, burns from hot works (welding), electrocution, injury from moving machinery and dust from construction vehicles, exposure to refrigerants and working in small or confined spaces. However, these installations are small-scale and so the magnitude and impact of the risks are minimal overall. There are also risks of COVID-19 exposure for all workers involved in project activities because of the pandemic.</p> <p>HCWs as well as VHW/CHW have increased risk of general OHS given the added burden due to the COVID-19 pandemic, which includes long working hours, psychological distress, fatigue/burnout, and stigma associated with COVID-19.</p> <p>The Project also involves the transport of vaccines and medical waste which presents potential risks to drivers and the community</p>
HCW and community exposure to infectious or hazardous health care waste	<p>Components 1 and 2 entails generation of health care waste that include infectious sharps, syringes, swabs, used PPE, obsolete refrigeration equipment thereby exposing community to the risk of infection and hazardous substances exposure. Where procedures are not adequately followed, this can pose a health threat to HCWs and community members, including those who provide medical waste transport and disposal.</p>
Sexual harassment, Exploitation and Abuse	<p>There are concerns about the potential for GBV, increased risk of abuse and exploitation for vulnerable women workers, increased risk of sexual exploitation and violence for persons in health facilities and during vaccinations. Other abuses maybe experienced by health care workers, supervisors, trainers, and community members who may be subjected to surveillance and follow up.</p>
Discrimination and exclusion of vulnerable groups	<p>If unmitigated vulnerable group pf people maybe be subject to risk of exclusion from employment opportunities under the project. such groups include vulnerable and marginalized groups, as well as women and Persons Living with Disabilities (PLWD). Sexual harassment and other forms abuse have the potential to compromise safety and wellbeing of the vulnerable groups.</p>

## 4. BRIEF OVERVIEW OF LABOUR LEGISLATION: TERMS AND CONDITIONS

This section reviews the available legal provisions within the laws of Zimbabwe that will complement ESS2 (Labour and Working Conditions) and ESS4 (Community Health and Safety). The chapter also identifies requirements of ESS2 that are not covered by legislation. This LMP will outline how the project will address any relevant gaps.

Zimbabwe is a member of the International Labour Organization (ILO) and signatory to the core ILO Labour Conventions which include fundamental principles and rights at the workplace, freedom of association, right to collective bargaining, discrimination and equal remuneration, child labour and forced labour.

The Constitution of Zimbabwe 2013, sections 65(1) enshrine labour rights to fair and safe labour practices and standards, and the right to a fair and reasonable wage. Membership to ILO and the provisions of the constitution create a solid platform for progressive and sustainable labour and working conditions to be mainstreamed in the various workplaces in Zimbabwe in general and ZCERP.

The fundamental legislation on labour and working conditions in Zimbabwe is the Labour Act (CAP 28:01). The Act declares and defines the fundamental rights of employees and gives effect to the International Obligations of the Republic of Zimbabwe as a member state of the ILO and as a member of or party to any other international organisation or agreement governing conditions of employment, which Zimbabwe would have ratified. The Act provides for:

- ▶ definition of unfair labour practices
- ▶ regulates conditions of employment and other related matters like wages and salaries, provide for the appointment and functions of workers committees.
- ▶ provides for the formation, registration and functions of trade unions, employers organizations and employment councils
- ▶ regulates the negotiation, scope, and enforcement of collective bargaining agreements and
- ▶ provides for the establishment and functions of the Labour Court and prevention of trade disputes.

The project will involve engaging project staff. It will also involve working with MoHCC staff and staff of other participating Ministries. The Labour Act will be relevant to protect the welfare of all these workers. It governs how workers will be treated, including their employment conditions. However, it is worth noting that Health Care Workers are considered essential services and cannot freely exercise this right to engage in collective job actions. The Law restricts the exercise of this right to maintain essential services. Essential services are defined in Section 102(a) of the Labour Act as "any services the interruption of which endangers immediately the life, personal safety or health of the whole or any part of the public" and health care services are part of essential services.

The Act is supported by Statutory Instruments targeting specific labour related issues including:

a. **Labour Relations (Employment of Children and Young Persons) Regulations, 1997.** The regulations define minimum age for employment as sixteen. Exception is given in cases where such work is an integral part of a course of education or training for which the school or training institution is primarily responsible; and does not prejudice such child's education, health, safety, social or mental development. A child may be employed in an activity in which it receives adequate specific instructions or vocational training in that activity.

b. **Labour Relations (Workers Committees) (General) Regulations, 1985.** The regulations safeguard the employee's right to participate in the formation of a workers committee and to undertake tasks on behalf of a workers committee. A workers committee shall be formed when a group of employees or any one employer appoint or elect some of the employees to represent them in the works council composed of an equal number of employer representatives and employee representatives. The works council is a platform where employee engages in negotiations on all work-related matters with the employer including wages and other employee benefits.

c. **Labour Relations (Employment Codes of Conduct) Regulations, 1990.** The regulation provides for the registration of codes and conduct agreed between an employer and the representatives of the employees as rules of conduct to be observed at the workplace, undertaking or industry concerned. The codes will include and not limited to; i. Precise definition of those acts or omissions that shall constitute misconduct, and the categorization of those acts or omissions according to their seriousness. The acts of

misconduct include:

any act of conduct or omission inconsistent with the fulfilment of the express or implied conditions of his or her contract

wilful disobedience to a lawful order

wilful and unlawful destruction of the employer's property

theft or fraud

absence from work for a period of five or more working days without leave or reasonable cause in a year

gross incompetency or inefficiency in the performance of his or her work; or

habitual and substantial neglect of his or her duties

lack of a skill which the employee expressly or implied held himself or herself to possess.

ii. Procedures for settling any grievances that may arise between or against employees, managerial employees, or the employer; and

iii. Procedures to be followed in the event of any breaches of the code, including a requirement that any breach be investigated before any proceedings are commenced against an employee.

iv. Penalties for any breaches of the rules or procedures of the code, which may include oral or written warnings, fines, reductions in pay for a specified period, demotion, suspension with or without pay or on reduced pay for a specified period, and dismissal from employment.

v. Person, committee or authority which will be responsible for implementing and enforcing the rules, procedures, and penalties of the code.

vi. Notification in writing to any person who is alleged to have breached any of the rules or procedures of the code of the nature of the misconduct or breach alleged against him and the date when proceedings are to be commenced against him.

vii. Right of an accused employee to have his case heard by the appropriate person, committee or authority referred to in paragraph (e) before any decision in his case is made.

viii. Written record or summary to be made of any proceedings and decisions taken in terms of the code, which record, or summary shall be made at the time such proceedings and decisions are taken and shall be kept for a period of not less than 12 months; and

ix. Procedure for an appeal within a specified period to such person, committee or authority as may be specified.

d. **Labour (Settlement of Disputes) Regulations, 2003.** The regulations provide for dispute resolution with public service through the involvement of the Labour Officer within the Ministry of Public Service, Labour, and Social Welfare. The provision has means to engage the disputing parties until the worst-case scenario manifests and arbitration is sought before engaging the formal court system. As part of the dispute resolution, a local company disciplinary meeting is held, if no resolution is found the matter can be escalated to the labour officer in respective National Employment Council, if no resolution the matter is referred to the Labour Court, the High Court, the Supreme Court, and the Constitutional Court if no resolution is found. The Constitutional Court's decision on the matter is final.

e. **Labour Relations (HIV and AIDS) Regulations, 1998.** The regulations protect the rights of HIV infected employees and aspiring employees by guarding against any form of victimization or segregation, including, and not limited to HIV testing before employment or compulsory disclosure of one's status at the workplace. The statutory instrument also calls for employers to invest in HIV and AIDS awareness within the workplace. This may include, health talks, free testing



and counselling, free distribution protection materials and employee access to sick leave where required.

**f. Labour Relations (Specification of Minimum Wages) Notice, 1996.** The statutory instrument provides for the setting of minimum wages applicable to public service by the Minister of Public Service, Labour, and Social Welfare. The various employment council also set their respective minimum wages based on negotiations during collective bargaining as provided for in the Labour Act. These requirements will be enforced through contractor management of all Cordaid contracts. The PIE will provide full awareness of the applicable codes and conduct at recruitment through induction and implementation during employment through labour audits. The project will refer to National Employment Councils for the health sector and construction sector since the project activities cut across these sectors for its contracted employees.

**g. Health Service Regulations, Statutory Instrument (SI) 117 of 2006.** The SI provides for the conditions of service for members employed in the health service that is it guides conditions of service for Ministry of Health and Child Care employees. The SI sets out the grievance procedures, leave (vacation, annual, sick, special, maternity) conditions, disciplinary procedures as well as recruitment, advancement, and promotion of the members of the health service. The MOHCC embarked on flexible working arrangements where alternate arrangements or schedules are granted to workers to decongest the workplace for the prevention of COVID-19 spread.

#### **h. Civil Protection Act Chapter (10:06)**

This Act provides for the declaration of state of disaster if it appears that there is a disaster which needs extra-ordinary measures to be implemented and protect the persons affected or likely to be affected by the disaster in any area in Zimbabwe. After such a declaration is made, it is required to be published in a statutory instrument. The GoZ declared the pandemic a national disaster in terms of Section 27 of the Civil Protection Act. This was done by the gazetting of the Civil Protection (Declaration of State of Disaster: Rural and Urban Areas of Zimbabwe) (COVID-19) Notice. The declaration of a state of disaster allows the President to take extra-ordinary measures to assist the affected population or to contain the effects of the disaster. In the case of COVID 19, the extra-ordinary measure put in place through the relevant ministries include a national lockdown, with the severe curtailment of various freedoms that include freedom of movement, expression, conscience, assembly, and association. It also resulted in the closing down of most major commercial and social enterprises, except for the food industry, health, and other deemed essential public services. The Civil Protection Act provides that the state of disaster may be extended, curtailed, or terminated by the President through a Statutory Instrument.

Despite the national disaster declaration, no labour provisions (such as overtime compensation, annual or sick leave, or severance) have been suspended or curtailed for project workers, e.g., health care workers or other essential workers.

To enforce the lockdown laws, the police and army were deployed to patrol the streets. However, the currently the lockdown regulations have been relaxed, hence the use of the Military or Security Personnel is not currently envisioned for any activities related to the Project. If, however, during Project implementation, the Recipient decides to use its military or security forces, the GoZ shall: (a) prior to any involvement of its military and/or security forces in the carrying out of Project activities, send a written notice to the Bank communicating such decision, including the name of the military or security unit; and (b) ensure that all activities carried out by military or security personnel under the Project are under the control of MoHCC, working closely with Cordaid as the Project implementing entity and undertaken exclusively for the purposes related to the Project and in compliance with the ESSs and the provisions set out under this provision. Should the military be used in the project, the Ministry of Health through the COVID-19 National Coordinator's office, engages the Ministry of Home Affairs and Cultural Heritage and the Ministry of Defence and War Veterans Affairs in setting out the arrangements for the engagement of the military or security personnel under the Project.



## 5. BRIEF OVERVIEW OF INTERNATIONAL GUIDANCE AND LABOR LEGISLATION: OCCUPATIONAL HEALTH AND SAFETY

### 5.1 International Guidance

#### i. International Labour Organisation-COVID-19 action checklist for the construction industry, December 2020

This action checklist provides practical measures designed to help employers, workers and the self-employed in the construction industry work safely on site and thus prevent and mitigate the spread of COVID-19 at work. This tool provides information applicable to any construction site and should be further informed by national legislation and guidelines.

#### ii. A safe and healthy return to work during the COVID-19 pandemic, ILO Policy Brief, May 2020

Safe and healthy working conditions are fundamental for decent work and are the foundation upon which policy guidance for the return to work must be based. This guidance note aims to: (1) assist governments and employers' and workers' organisations in developing national policy guidance for a phased and safe return to work, and (2) provide guidelines for workplace level risk assessments and implementation of preventive and protective measures according to a hierarchy of controls.<sup>63</sup>

#### iii. ILO Policy Brief Hand hygiene at the workplace: an essential occupational safety and health prevention and control measure against COVID-19

The Safety and Health in Construction Convention, 1988 (No. 167), provides that men and women workers should be provided with separate sanitary and washing facilities. The ILO code of practice on safety and health in construction (1992) indicates that the scale of provision of sanitary facilities should comply with the requirements of the competent authority. In addition, adequate washing facilities should be provided as near as practicable to toilet facilities. Washing facilities should not be used for any other purpose and should be kept clean and maintained. There should be enough appropriate washing facilities for use if workers are exposed to skin contamination.

#### iv. ESF/Safeguards interim note: Covid-19 considerations in construction/civil works projects

This note emphasizes the importance of careful scenario planning, clear procedures and protocols, management systems, effective communication and coordination, and the need for high levels of responsiveness in a changing environment. It recommends assessing the current situation of the project, putting in place mitigation measures to avoid or minimize the chance of infection, and planning what to do if either project workers become infected, or the work force includes workers from proximate communities affected by COVID-19.

#### v. WB Environmental and Social Standard 2 (ESS2)- Labour and Working Conditions

ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. The project can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions.

#### vi. WB Environmental and Social Standard 4 (ESS2)- Community Health and Safety

ESS4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project activities.

#### vii. WB EHS General Guidelines

These are technical reference documents with industry specific statements of Good International Industry Practice (GIIP). The EHSGs contain performance levels and measures that are generally considered achievable in new facilities by existing technology at reasonable cost. For complete reference consult *the World Bank Group Environmental, Health, and Safety Guidelines*, [http://www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/ifc+sustainability/](http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/)

<sup>63</sup>For practical guidance at the workplace level, see: ILO, *Safe Return to Work: Ten Action Points*, see also: *Safe Return to Work: Guide for Employers on COVID-19 Prevention*, in addition to: *Prevention and Mitigation of COVID-19 at Work: Action Checklist*.

[our+approach/risk+management/ehsguidelines.](#)

### **viii. WB Guideline for Health Care Facilities**

The EHS Guidelines for Health Care Facilities include information relevant to the management of EHS issues associated with health care facilities (HCF) which includes a diverse range of facilities and activities involving general hospitals and small inpatient primary care hospitals, as well as outpatient, assisted living, and hospice facilities. Ancillary facilities may include medical laboratories and research facilities, mortuary centres, and blood banks and collection services.

### **ix. WB Life Safety Guidance**

This guidance requires that all buildings which are accessible to the public must be designed, constructed and operated in full compliance of the local building codes and in accordance with an internationally accepted life and fire safety (L &FS) standard.

## **5.2 National Legislation**

### **i. National Social Security Authority Statutory Instrument 68 (Accident Prevention and Worker's Compensation Scheme) 1990**

The Statutory Instrument provides for the protection of health and safety of workers, prevention of accidents and compensation for employees or their dependents in the event of an injury, contracting diseases or death out of and in the course of employment. The third schedule of Section 15 defines the collective duties of employers, workers, and other persons in accident prevention at the workplace. In principle, the employer is required to provide a healthy and safe environment and to formulate and implement a health and safety policy at the workplace. Employees are required to identify and report health and safety hazards while executing their duties without posing risks to their health and safety. Part I, section 2 provides for the establishment of a worker's compensation scheme in respect of injury, occupational illness, or death and for the promotion of occupational health and safety to which all employers and employees are required to contribute. Cordaid will ensure adherence to comprehensive occupational safety and health provisions for the project related activities to prevent accidents at the workplace. All contractors will be required to have Safety and Health personnel that is commensurate with the scope of their contracted work. The PIE together with MOHCC and Ministry of Public Service, Labour and Social Welfare (MPSLSW) will carry out inspections and audits to ensure the required occupational safety and health standards are maintained at all project activities through the contractor checklist.

### 5.1. Gap Analysis between National Legislation and ESF (ESS2 and ESS4)

This section compares National Legislation with the objectives of ESS2 and ESS4 and provides a means for the bridging of the gap to ensure effective implementation and monitoring of the LMP. Table below presents the gap assessment.

**Table 5-1 Gap Analysis**

ESF Objective	National Requirement	Recommendation
<b>ESS2 Labour and Working Conditions</b>		
To provide employee with information and documentation that is clear and understandable regarding their terms and conditions of employment.	Labour Act (CAP 28:01) Section 12 compels the employer to inform the employee on the details of employment, duration, particulars, and termination of employment contract in writing. The details include name and address of the employer, the period of time, if limited, for which the employee is engaged, the terms of probation, the terms of any employment code, particulars of the employee’s remuneration, its manner of calculation and the intervals of payment, benefits receivable in the event of sickness or pregnancy, hours of work, particulars of any bonus or incentive production scheme, particulars of vacation leave and vacation pay and particulars of any other benefits provided under the contract of employment.	Contract of employment shall be signed between the contractor and the employee upon engagement and the contractor will avail the agreements for inspection upon request by the PIE, MOHCC and Ministry of Public Service, Labour, and Social Welfare (MPSLSW).
To promote the fair treatment, non-discriminatory and equal opportunity of project workers.	Labour Act (CAP 28:01), section 5 protects employees or prospective employees against discrimination on grounds of race, tribe, place of origin, political opinion, colour, creed, gender, pregnancy, HIV/AIDS status or disabled. The prohibition relates to advertisement of employment, recruitment for employment, the creation, classification or abolition of jobs or posts, determination or allocation of wages, salaries, pensions, accommodation, leave or other such benefits, choice of persons for jobs or posts, training, advancement, apprenticeships, transfer, promotion or retrenchment, provision of facilities related to or connected with employment, or any other matter related to employment.	The PIE will make all Contractors aware of the Labour Act requirement for compliance in their recruitment processes.  Contractors shall show the PIE, MOHCC and MPSLSW the evidence of induction of employees on the legal requirements for non-discrimination.

ESF Objective	National Requirement	Recommendation
<p>To support the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.</p>	<p>Labour Act (CAP 28:01) Section 23 provides for the formation of workers committees through appointment or election by workers to represent their interests, provided that no managerial employee shall be appointed or elected to a workers committee, nor shall a workers committee represent the interests of managerial employees, unless such workers committee is composed solely of managerial employees appointed or elected to represent their interests. Section 25 pronounces that the collective bargaining agreements negotiated by workers committees with their employer and accented to by their affiliated Trade Union shall be binding on both the employer and the employees.</p> <p>However, it is worth noting that Health Care Workers are considered essential services and cannot freely exercise the right to engage in collective job actions. The Law restricts the exercise of this right to maintain essential services. Essential services are defined in Section 102(a) of the Labour Act as "any services the interruption of which endangers immediately the life, personal safety or health of the whole or any part of the public" and health care services are part of essential services. Therefore, there are no collective agreements applicable to the project.</p>	<p>Due to the shortness of the typical employment contracts for most activities and the voluntary basis of membership, most contracted workers may not have access to the full privilege and protection of this legal provision and some contractors may take advantage of this gap.</p> <p>The PIE shall require all contractors to be aware of, and implement as minimum employment conditions, those applicable to the respective National Employment Council (NEC), e.g., Construction (NEC)</p> <p>MOHCC should engage with health care workers to address issues relating to their working conditions and terms of employment. Alternative mechanisms may include recognizing worker committees/ associations, and allowing workers to choose their own representatives for dialogue and negotiation on terms and conditions of employment in a manner that does not contravene national law.</p> <p>The project will not restrict project workers from developing alternative mechanisms to collective job actions to express their grievances and protect their rights regarding working conditions and terms of employment. GoZ should not seek to influence or control these alternative mechanisms. GoZ should not discriminate or retaliate against project workers who participate, or seek to participate, in such workers' organizations and alternative mechanisms to collective bargaining.</p>
<p>To prevent the use of all forms of child labour.</p>	<p>The Labour Act (Cap 28:01) establishes the minimum age for work as 16 inclusive of where a child is engaged in vocational/ technical or apprenticeship training.</p>	<p>No project worker and contracted worker under the age of eighteen will be employed. The ages will be verified using National identification.</p>
<p>To prevent the use of all forms of forced labour.</p>	<p>Labour Act (CAP 28:01) section 4A prohibits forced labour. The Act excludes any labour required by virtue of an enactment during a period of public emergency or in the event of any other emergency or disaster that threatens the life or well-being of the community, to the extent that the requiring of such labour is reasonably justifiable in the circumstances of any situation arising or existing during that period or as a result of that other emergency or disaster, for the purpose of dealing with that situation from being forced labour.</p>	<p>All contractors will ensure consent of employees to work through written agreements.</p>

ESF Objective	National Requirement	Recommendation
<p>To promote safety and health in the workplace.</p>	<p>National Social Security Authority Statutory Instrument 68 (Accident Prevention and Worker's Compensation Scheme) 1990 compels all employers to ensure safe and healthy working conditions including: (a) Identification of potential hazards to project workers, particularly those that may be life threatening. (b) Provision of preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances. (c) Training of project workers and maintenance of training records. (d) Documentation and reporting of occupational accidents, diseases, and incidents. (e) Emergency prevention and preparedness and response arrangements to emergency situations. (f) Remedies for adverse impacts such as occupational injuries, deaths, disability, and disease.</p> <p>The Labour Act also prohibits against unfair labour practices in the form of demanding from an employee or prospective employee any sexual favour as a condition of recruitment, provision of facilities related to employment or engaging in sexually determined behaviour towards any employee.</p>	<p>Contractors shall have appropriate Health and Safety plans in place and will provide daily OHS talks and trainings for workers as well as PPE. Contractors will ensure that there are sanitation facilities and waste collection bins in all applicable work areas. Contractors and project proponents/implementers will adhere to the ESMF and ICWMP implementing measures to promote safety and health in the workplace.</p> <p>Contractors will not victimise any contracted workers that remove themselves from unsafe or unhealthy work environments.</p> <p>Contractors will ensure that all workers have access and can effectively use appropriate personal protective equipment (PPE).</p> <p>The workers engaged in the project will utilise the project GRM which is GBV sensitive.</p>
<p>To provide project workers with appropriate means to raise workplace concerns.</p>	<p>Labour (Settlement of Disputes) Regulations, 2003. The regulations provide for dispute resolution with public service through the involvement of the Labour Officer within the Ministry of Public Commission, Labour, and Social Welfare. The provision has means to engage the disputing parties until the worst-case scenario manifests and arbitration is sought before engaging the formal court system. Labour Act (CAP 28:01) provides for the registration of a code of conduct by employers. The Code of conduct will include (a) Disciplinary rules to be observed including the precise definition of misconduct. (b) Procedures in case of any breach of the code. Penalties for breach of the code, which may include oral or written warnings, fines, reductions in pay for a specified period, suspension with or without pay or on reduced pay, demotion, and dismissal from employment. (d) Person, committee, or authority that shall be responsible for implementing and enforcing the rules, procedures, and penalties of the employment. (e) Notification to any person who is alleged to have breached the code that proceedings are to be commenced against him in respect of the alleged breach. (f) Right of an accused person to be heard by the appropriate person, committee or authority referred to in paragraph (d) before any decision in his case is made; (g) Written record or summary to be made of any proceedings or decisions taken in terms of the code, which record, or summary shall be made at the time such proceedings and decisions are taken.</p>	<p>Contractors will be required to comply with general legal requirements where they do not have a code of conduct registered with the Ministry of Labour or enforce their respective codes of conduct where registered. Contractor will be required to induct their employees on the grievance procedure. PIE will require contractors to report grievances raised within one month and progress on resolution monthly.</p> <p>Community Health workers and Village health will use the already GRM being strengthened through the existing World Bank project.</p>

ESF Objective	National Requirement	Recommendation
<b>ESS4 Community Health and Safety</b>		
<p>To anticipate and avoid adverse impacts on the health and safety of project affected communities during project lifecycle from both routine and non-routine circumstances.</p>	<p>Environmental Management (Effluent and Solid Waste Disposal) regulations, 2007; Environmental management (hazardous Waste Management) regulations, 2007; Environmental Management (Atmospheric Pollution Control) regulations, 2009. These regulations provide for the protection of the environment (and people by extension) through prohibition of discharge into the environment include air, water, land of any waste or harmful substances that may have negative impact thereof. All waste generators are required to adhere to the provisions of these regulations and apply for relevant permits for the generation, storage, transportation, and disposal of such waste.</p>	<p>Contractors will ensure that there are adequate toilet facilities for staff and waste collection bins in all applicable work areas, especially spaces open to the community, patients and visitors that will have many people at the same workplace that may not have toilet facilities. However, the construction sites are not anticipated to have many workers and visitors. Waste collection will support appropriate waste treatment and final disposal which will protect the health and safety of communities.</p> <p>The national legislation is very limited and broad application of ESS 4 will be used, e.g., related to GBV. The project will implement a GBV Action Plan (Appendix 15) as part of this ESMF, contractors will put in place grievance redress mechanisms which is accessible to employees for raising work related concerns and grievances to their management.</p> <p>Train and sensitise community and project workers on GBV/ SEA-H</p> <p>The PIE will enforce this as part of the Contractor Management</p> <p>Contractor workers will sign and adhere to the Code of Conduct on GBV/SEAH (Appendix 14 of the ESMF)</p>
	<p>Civil Protection Act</p> <p>This Act provides for the declaration of state of disaster if it appears that there is a disaster which needs extra ordinary measures to be implemented and protect the persons affected or likely to be affected by the disaster in any area in Zimbabwe. After such a declaration is made it is required to be published in a statutory instrument. The GoZ declared the pandemic a national disaster in terms of Section 27 of the Civil Protection Act. This was done by the gazetting of the Civil Protection (Declaration of State of Disaster: Rural and Urban Areas of Zimbabwe) (COVID-19) Notice. To enforce the lockdown, the police and/ or the army may be deployed to patrol the streets.</p>	<p>Prior to any involvement of its military and/or security forces in the carrying out of Project activities, send a written notice to the Bank communicating such decision, including the name of the military or security unit; and (b) ensure that all activities carried out by military or security personnel under the Project are under the control of MoHCC, working closely with Cordaid as the Project implementing entity and undertaken exclusively for the purposes related to the Project and in compliance with the ESSs and the provisions set out under this provision. Should the military be used in the project, the Ministry of Health through the COVID-19 National Coordinator's office, engages the Ministry of Home Affairs and Cultural Heritage and the Ministry of defence and War Veterans Affairs in setting out the arrangements for the engagement of the military or security personnel under the Project.</p>
	<p>Freedom of Information Act Chapter (10:33)</p> <p>The act gives effect to section 62 of the Constitution of Zimbabwe which provides for the right to access information as enshrined in the declaration of rights.</p> <p>It sets out procedures for of access to information held by public institutions or information held by any person. It also sets</p>	<p>During project implementation information will be generated and that information must be accessible to the public.</p> <p>The ESMF which will contain the LMP is a public document and therefore will be disclosed as per national laws.</p>



ESF Objective	National Requirement	Recommendation
	<p>out considerations for making available on a voluntary basis by entities, certain categories of information thereby removing the need for formal request for such information</p> <p>It also sets out the scope and limitations on the right of access to information</p>	
<p>- Issues related to;</p> <p>- ESS4 Safety of Services given at HF's that will service public</p> <p>- ESS4 Traffic and Road Safety as the Project will involve the use of trucks for transportation</p> <p>- ESS4 Emergency Preparedness and Response as the HCFs would be subject to both natural disasters and man-made events</p>	<p>Inappropriate handling of COVID-19 samples and patients can expose community and could lead to further spread of the disease. Non-provision of medical services to disadvantaged or vulnerable groups is a potential risk under the project. The project ICWMP will contain guidelines on specific measures to prevent the spread of diseases in the community from infectious medical waste. This ESMF contains measures to ensure health and safety in the community from project activities and safety of services as they relate to health care facilities, vaccine roll out, emergency preparedness measures including measures to address a plan for cold chain storage during power outages and natural disasters. GBV/ SEA/SH risks will be ameliorated through training of every worker engaged in the project on OHS and GBV/ SEA/SH risks and be required to sign a code of conduct.</p> <p>COVID-19 vaccine safety and surveillance will be guided by the existing MOHCC's Adverse Events Following Immunisation surveillance and the WHO Vaccines Safety Surveillance Manual. The project will regularly integrate the latest guidance by WHO as it develops over time and experience addressing COVID-19 globally especially with respect to reducing the risk of the project spreading COVID-19 to the public in general. Additionally, the project will conduct risk communication and community engagement activities to raise awareness and dispel misinformation in the affected areas including the vulnerable and marginalised groups, use of proper PPE for COVID-19 prevention measures</p> <p>No one will be forced to get the vaccine.</p> <p>The project will abide by Section 3.3 (Life and Fire Safety) of the World Bank Group ("WBG") General Environmental, Health and Safety Guidelines ("EHSG") as it relates to fire and other safety standards for new buildings and existing buildings programmed for renovation with the use of the Bank funding. These requirements apply to buildings programmed for renovation, whether occupancy type is maintained (e.g., a hospital renovation) or changed (e.g., an office building is converted to a hospital).</p> <p>The use of the Military or Security Personnel is not currently envisioned for any activities related to the Project.</p>	<p>During project planning a project IVCWMP will be developed and disclosed. Each participating health facility will be required to prepare an approved ICWMP to be shared with PIE and MOHCC for approval.</p> <p>Project will ensure that all project drivers are appropriately licenced. Trainings will also be conducted for drivers for safe handling and transportation of medical waste.</p>



## 6. RESPONSIBLE STAFF

This section identifies the functions and/or individuals within the project responsible for the implementation of this Labour Management Procedures. The PIE will be responsible for: (i) the day-to-day management and execution of project activities; (ii) the preparation of annual activity and procurement plans; (iii) the drafting of contract documents; (iv) collecting and compiling all data relating to their specific indicators; (v) evaluating results; (vi) reporting results to the World Bank prior biannually; and (vii) the preparation of a consolidated report on the implementation of the project components. The PIE will also closely follow up with the Directorate of Finance, Director Internal Audit, Procurement Unit and relevant technical directorates in MOHCC. The PIE will perform its functions as described in the Project Implementation Manual (PIM). The Project Implementation Entity (PIE) will be responsible for the overall project management and coordination, including compliance with safeguards requirements such as those contained herein. Specifically, the Social Safeguards Specialist will oversee and manage all social development and related matters under the project ensuring that all project activities are carried out in line with the World Bank Environmental and Social Framework (ESF) and safeguard documents guiding Project implementation: the ESMF, Labour Management Plan (LMP) and Stakeholder Engagement Plan (SEP). This includes: ensuring that all activities are screened for adverse social impact prior to commencement, implementation of Environmental and Social Management Plans, including aspects related to Indigenous Peoples, organize and conduct the trainings on Social Safeguards aspects of the project including: preparation of mitigation checklists, ESMP implementation, conducting monitoring, Grievance Redress Mechanism (GRM) and Community Consultations, oversee the project-related Grievance Redress Mechanism (GRM) and as part of this, ensure the sound establishment of feedback and GRM, track reporting, ensuring any issues are resolved in a timely manner and close out issues and prepare a comprehensive Gender Based Violence (GBV) as well as Sexual Exploitation and Abuse (SEA) Risk Assessment for the project, including outputs, activities, indicators and targets and monitoring mechanisms, to address the key recommendations identified through the assessment. The PIE will engage other line ministries and institutions with expertise in environmental, social, OHS issues. These include Environmental Management Agency (EMA). The PIE will be responsible for the following tasks: Undertake the overall implementation of this LMP; Engage and manage consultants and contractors in accordance with this LMP and the applicable Procurement Documents; Monitor project contractors and workers to ensure their activities are aligned with the provisions of the LMP and the applicable Procurement Documents. Monitor the potential risks of child labour, forced labour and serious safety issues in relation to primary suppliers; Provide training to mitigate social risks for project workers and community volunteers; Ensure that the GRM for project workers is established and implemented and that project workers are informed about it; Monitoring the implementation of the Worker Code of Conduct; and Report to the World Bank on Labour and OHS performance and key risks and complaints.

The Social Safeguards Specialist and an Environmental Specialist under PIE shall be responsible for the implementation of the LMP and OHS requirements of the project. They will be responsible for promoting implementation of the LMP and OHS requirements within the project.

The entire PIE has responsibility for the implementation of these components which are integral to the project. The team will be responsible for the following:

- a. Supervise workers' adherence to the LMP,
- b. Maintain records of recruitment and employment of contracted workers (including subcontractors).
- c. Provide induction and regular training to contracted workers on environmental, social and OHS issues,
- d. Require primary supplier(s) to identify and address risks of child labour, forced labour and serious safety issues, and undertake due diligence to ensure this is done,
- e. Develop and implement the GRM for contracted workers, including ensuring that grievances received from the contracted workers are resolved promptly, and report the status of

grievances and resolutions regularly to the PIU and World Bank,

- f. Ensure all contractor and subcontractor workers understand and sign the CoC prior to the commencement of works and supervise compliance with the CoC,
- g. The Environmental and Social Safeguards Specialists are responsible for reporting accidents, incidents, fatalities, and project Covid 19 outbreaks to the WB.

Health Care Workers working in various health facilities being supported by the project are contracted by the MOHCC and work under the terms and conditions of the Ministry of Health and Child Care. Each health facility has a Head of Institution. Provincial Hospitals are headed by the Medical Superintendent, District Hospital is headed by the Medical Superintendent or District Medical Officer and the rural health facility is led by a Nurse in Charge. Head of institutions oversee day to day management of the facility.

The HCF will be responsible for (i) the day-to-day management of activities during planning, installation, and operational phases; (iv) collecting and compiling all data relating to their specific indicators; (v) evaluating results; (vi) providing the relevant performance information to the MoHCC and PIE. The HCF will work closely with the PIE.

Protocols developed will clearly assign responsibilities to each of the members by providing the necessary oversight as shown in table below:

**Table 6-1 Roles and Responsibilities for the PIE**

Position	Roles and responsibilities
Social Safeguards Specialist (PIE)	<ul style="list-style-type: none"> <li>- The project Social Safeguards Specialist will continue to ensure effective implementation of the social provisions of the ESMF such as:</li> <li>- Overseeing the implementation of the GRM in collaboration with MOHCC, Following, up on the feedback mechanisms between the contractors and their workers and flagging any issues for redress,</li> <li>- Ensure appropriate stakeholder consultation,</li> <li>- Provide overall policy and technical direction for all social relations management issues under the Project as defined by the Environmental and Social Commitment Plan (ESCP), Environmental and Social Management Framework (ESMF), Stakeholder Engagement Plan (SEP) this LMP and the ICWMP such as AEFI, GRM, GBV/SEAH Action Plan etc.</li> <li>- The Social Specialist will ensure that the GRM functions for the project and follow-up on complaints, record keeping, resolutions, etc.</li> </ul>
Communication Specialist (PIE)	<ul style="list-style-type: none"> <li>- The Communication Specialist will support the successful implementation of the GRM, working with focal points from MoHCC. She will provide overall policy and technical direction for all risk communication and community engagement activities working closely with Health Promotion Department, as well as public relations management issues under the Project as defined by the Environmental and Social Commitment Plan (ESCP), Environmental and Social Management Framework (ESMF), Stakeholder Engagement Plan (SEP) this LMP and the ICWMP such as AEFI, GRM, etc.</li> </ul>

Position	Roles and responsibilities
Environmental Specialist (PIE)	<ul style="list-style-type: none"> <li>- Implementing the ESMF and ICWMP including the LMP. Monitoring, guiding, and reporting on project environmental, health and safety issues (including those relating to COVID-19).</li> <li>- Raising awareness and advising on or providing pertinent training for direct workers, contracted workers and community volunteers as needed.</li> <li>- Ensuring the integration of LMP requirements in procurement and worker's contracts.</li> <li>- On a regular basis conduct monitoring, supervision, and reporting on health and safety issues related to COVID-19.</li> <li>- Advising on and establishing reporting arrangements from contractors to Cordaid.</li> <li>- The Social Safeguards Specialist and Environmental Specialist will ensure that the LMP, ESMF and ICWMP requirements are addressed including engagement with other entities involved in the project.</li> <li>- Following up on any health and safety feedback from contractors and their workers and flagging any issues for redress; and</li> <li>- Reporting on a regular basis on the overall project progress on environmental or other agreed matters.</li> </ul>
Logistics and Procurement Officer (PIE)	<ul style="list-style-type: none"> <li>- Lead the procurement activities of the project and coordinate with the technical teams and stakeholders assigned to implement the subcomponents.</li> <li>- Ensure that all the procurement documents adequately reflect environment and social issues, where relevant.</li> </ul>
Monitoring and Evaluation Officer	<ul style="list-style-type: none"> <li>- Update indicators for monitoring &amp; evaluation Establishes process for monitoring and evaluating COVID-19 deployment activities.</li> <li>- Update processes for COVID-19 data collection, analysis, visualization, and communication using management information systems.</li> <li>- Ensures timely and continuous monitoring of activities to make activities are implemented as planned</li> <li>- Monitoring of COVID-19 vaccine acceptance level.</li> </ul>
Expanded Programme on Immunisation Manager (MOHCC)	<ul style="list-style-type: none"> <li>- Responsible for managing a country's overall pandemic response in coordination with the National Response team.</li> <li>- Organizes and oversees implementation capacity building for health workers</li> <li>- Delegates responsibilities for deployment of vaccine and vaccination to the logistics and vaccination focal points.</li> <li>- In collaboration with the logistics team, drafts the deployment and implementation plan.</li> <li>- Collects and organizes contact information for members of deployment committees, other key authorities</li> </ul>
Health Promotion Manager (MOHCC)	<ul style="list-style-type: none"> <li>- Developing of a communication plan and monitoring framework for COVID 19 vaccine</li> <li>- Engagement of key national &amp; subnational stakeholders</li> <li>- Development of communication materials for COVID 19</li> <li>- Coordination of demand creation &amp; media campaign</li> <li>- Establishment of media monitoring and community feedback mechanism</li> <li>- Coordinate national launch of COVID 19 vaccine</li> <li>- Establish ethical codes/patients charter</li> </ul>

Position	Roles and responsibilities
Contractor	<ul style="list-style-type: none"> <li>- Contractors must appoint a minimum of one safety representative onsite (someone with first aid expertise and access to materials such as a first aid kit). Smaller contracts may permit the safety representative to carry out other assignments as well. The safety representative ensures day-to-day compliance with specified safety measures and records of any incidents. Contractors are expected to give daily OHS talks and trainings to workers including awareness raising, prevent and mitigate the spread of COVID-19. Promptly notify the PIE of any incident or accident related to the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers, including, cases of sexual exploitation and abuse (SEA), sexual harassment (SH), and accidents that result in death, serious or multiple injuries. The PIE should then notify the Bank as per the ESCP requirements. Subsequently, prepare a report on the incident or accident and propose any measures to address it and prevent its recurrence. Contractors will keep records in accordance with specifications set out in this LMP. PIE may at any time require records to ensure that labour conditions are met. The PIE will review records against actuals at a minimum on a monthly basis and can require immediate remedial actions if warranted. A summary of issues and remedial actions will be included in biannual reports to the World Bank.</li> <li>- Contractors will be required to present a worker grievance redress mechanism which responds to the minimum requirements in this LMP. The PIE Social Safeguards Specialist will review records monthly. Where worker concerns are not resolved, the national system will be used as set out in the section, but the PIE will keep abreast of resolutions and reflect in biannual reports to the World Bank.</li> <li>- Contractors will need to prepare a C-ESMP (for works/construction) and meet applicable OHS requirements in their contracts for service providers (for example, transport/drivers, medical waste disposal, etc.).</li> </ul>

## 7. POLICIES AND PROCEDURES

### Occupational Health and Safety (OHS):

- ▶ Access to psychosocial support services. The psychosocial support centre at Parirenyatwa Hospital is being strengthened under the HSDSP AF-V and services will be provided to all those who may require them including health care workers and community. Provision is being made for those who may require services virtually. The project will also promote the strengthening of existing referral pathways for GBV/ SEA-H at local levels.
- ▶ Appoint a dedicated team with responsibilities to identify and implement actions that can mitigate the effects of COVID-19 on the facility and community around it.
- ▶ Develop and provide information on good practices for preventing COVID-19 transmission, particularly observing recommendations on social distancing, and for training staff to recognize the symptoms of COVID-19 and understand their required response.
- ▶ Training medical staff on the latest WHO advice and recommendations on the specifics of COVID-19, and principles on fair, equitable and inclusive access, and allocation of Project benefits, including vaccines.
- ▶ Training medical staff on the priority groups for allocation of vaccines and the timetable for these groups, as well as why they are required to only vaccinate persons from the priority group at the particular time (for example, because that group is at higher risk, for reasons of inclusion and equity etc. where there is limited supply of vaccines).
- ▶ Ask workers to stay away from work in cases where they exhibit any COVID-19 symptoms or have been in close contact with a confirmed COVID-19 patient during the previous 14 days.
- ▶ Provide enough water/soap handwashing facilities in all workplaces and provide disposable tissues and garbage bins. People should be encouraged to speak up if they encounter non-conforming behaviour.
- ▶ Adjust workplace designs and work processes to minimize close contact among workers. This may include working in shifts and/or expanding the work areas.
- ▶ Provide suitable personal protective equipment (PPE) to all project personnel (including cleaners) as appropriate. Obtaining adequate supplies of medical PPE, including gowns, aprons, curtains; medical masks and respirators (N95 or FFP2); gloves (medical, and heavy duty for cleaners); eye protection (goggles or face screens); hand washing soap and sanitizer; and effective cleaning equipment. Where relevant PPE cannot be obtained, the plan should consider viable alternatives, such as cloth masks, alcohol-based cleansers, hot water for cleaning and extra handwashing facilities, until such time as the relevant supplies are available.
- ▶ Follow the manufacturers' instructions for use of cleaning and disinfection products.
- ▶ For vaccination sites, ensuring that the space is organized in a safe and socially distant manner, and necessary logistical controls and waste management are planned for in advance.
- ▶ For the deployment and use of vaccines, safe cold-chain practices, checking that vaccines are approved for use by WHO or another regulatory authority agreed by the Bank, selecting safe injection equipment, immunization practices for vulnerable people such as pregnant women or children under 5, immunization waste-disposal plan, supervision and reporting on implementation of immunization practices as required under national legislation.
- ▶ Conducting enhanced cleaning arrangements, including thorough cleaning (using adequate disinfectants) of catering facilities/canteens/food/drink facilities, latrines/toilets/showers, common areas, including door handles, floors and all surfaces that are touched regularly.
- ▶ At HCF and all facilities which provide medical waste disposed for the Project implement the necessary OHS measures to protect HCF workers and patients/visitors from potential HCF risks including those identified in WB EHS Guideline for Health Care Facilities

- ▶ For construction related works at the HCFs, ensure all Contractors implement the necessary OHS measures to protect HCF workers and patients/visitors from potential HCF risks including those identified in WB EHS General Guideline and measures included in their respective contact
- ▶ For all service providers, including those who provide truck transportation and maintenance implement the necessary OHS measures to protect workers as included in their respective contact

In addition, direct workers engaged by the PIE, the PIE has standard operating procedures which every employee engaged by Cordaid must follow to mitigate against the transmission of COVID-19. The following guidelines are in place and have been developed following guidance from international organisations such as WHO: i.) Pretravel checklist and risk assessment travel of Cordaid employees; ii) Cordaid standard Operating procedures Mitigating Transmission of COVID-19; iii) Self Quarantine guidance.

Health care waste exposure:

To minimise exposure to health care waste, handling, transportation, and disposal of health care waste will be done in accordance with the ZCERP Infection Control and Waste Management Plan (ICWMP) and all HCF specific ICWMPs and any project activity ESMPs

**For projects involving installation of equipment**, contractors should develop specific procedures or plans so that adequate precautions are in place to prevent or minimize an outbreak of COVID-19, and it is clear what should be done if a worker gets sick. Details of issues to consider are set out in Section 5 of the [World Bank's Interim Note: COVID-19 Considerations in Construction/Civil Works Projects](#) and include:

- ▶ Assessing the characteristics of the workforce, including those with underlying health issues or who may be otherwise at risk
- ▶ Confirming workers are fit for work, to include temperature testing and refusing entry to sick workers
- ▶ Considering ways to minimize entry/exit to site or the workplace and limiting contact between workers and the community/general public.
- ▶ Training workers on hygiene and other preventative measures, and implementing a communication strategy for regular updates on COVID-19 related issues and the status of affected workers
- ▶ Treatment of workers who are or should be self-isolating and/or are displaying symptoms
- ▶ Assessing risks to continuity of supplies of medicine, water, fuel, food and PPE, taking into account international, national and local supply chains
- ▶ Reduction, storage, and disposal of medical waste
- ▶ Adjustments to work practices, to reduce the number of workers and increase social distancing
- ▶ Organizing for the treatment of sick workers
- ▶ Siting worker accommodations further apart or having one worker accommodation in a more isolated area.
- ▶ Establishing a procedure to follow if a worker becomes sick (following WHO guidelines)
- ▶ Implementing a communication strategy with the community, community leaders and local government in relation to COVID-19 issues on the site as relevant.



**GBV/ Sexual Exploitation and Abuse:** Given the implementation context GBV, sexual exploitation, abuse and harassment of co-workers is a likely risk.

- ▶ All Contractor workers engaged under the project should sign a Code of Conduct (Appendix 4) outlining the expected standards of behaviour and consequences of such actions. The project has adopted the World Bank Code of Conduct for Contractor workers.
- ▶ Provide and implement GRM for addressing GBV and SEA complaints
- ▶ training of PIE staff and contracted workers on SEA-H risks and signing of the codes of conduct before starting work on any project activities. Health care workers will be trained on GBV/ SEA-H as part of ongoing capacity building activities.

Additional resources with relevant COVID-19-related information include the following:

- ▶ For health workers rights, roles and responsibilities, including on OHS, consult [WHO COVID-19 interim guidance](#)
- ▶ For guidance on infection prevention and control (IPC) strategies for use when COVID-19 is suspected, consult WHO IPC interim guidance
- ▶ For rational use of PPE, consult [WHO interim guidance on use of PPE for COVID-19](#)
- ▶ For workplace-related advice, consult [WHO guidance getting your workplace ready for COVID-19](#)
- ▶ For guidance on water, sanitation and health care waste relevant to viruses, including COVID-19, consult [WHO interim guidance](#)
- ▶ For projects requiring management of medical waste, consult guidance issued by [WHO Safe management of wastes from health-care activities](#)
- ▶ For guidance on immunization and vaccine safety, consult [WHO Immunization Safety guidance](#)
- ▶ For guidance on implementation of mass vaccination campaigns in the context of COVID-19, consult [WHO framework for decision-making](#)



## 8. TERMS AND CONDITIONS

**Minimum Wages:** The official minimum wage will be governed by the national employment council for that industry for example The Employment Council for the Construction Industry will schedule minimum wages for the industry. All efforts will be made to ensure that contractors do not underpay and overwork their workers, more so temporary (casual) workers. There is need to ensure they comply with minimum wages for the respective industry. Direct workers engaged by the PIE are governed by the National Labour laws.

**Hours of Work:** The normal hours of work of a project worker shall not exceed 8 hours a day. Hours worked in excess of the normal hours shall be entitled to relevant allowances.

**Rest per week:** Every worker shall be entitled rest on Saturday and Sunday. Workers shall also be entitled to rest on public holidays recognized as such by the Government of Zimbabwe.

**Annual leave:** Workers (apart from consultants and temporary workers) shall be entitled to 30 days' leave with pay for every year of continuous service. An entitlement to leave with pay shall normally be acquired after a full year of continuous service. This requirement applies to direct workers

**Maternity leave:** A female worker shall be entitled, on presentation of a medical certificate indicating the expected date of her confinement, to 90-days maternity leave, provided that she has been employed by the employer for at least 12 months without any interruption on her part except for properly certified illness.

**Deductions from remuneration:** No deductions other than those prescribed in labour laws shall be made hereunder or any other law or collective labour agreement shall be made from a worker's remuneration, except for repayment of advances received from the employer and evidenced in writing. The employer shall not demand or accept from workers any cash payments or presents of any kind in return for admitting them to employment or for any other reasons connected with the terms and conditions of employment.

**Death benefit:** In case of death of a worker during his/her contract of employment, the employer shall pay to his/her remuneration as death benefits in-line with the provisions of the relevant laws.

**Written Contracts:** These terms deal with contents of written contracts. Termination is provided for under the law and a written contract shall be terminated: (a) If the period for which it was given has expired; or (b) If the employee has died; or (c) In any other way a contract of service may be lawfully terminated. (d) Due to sickness or accident, an employee is unable to fulfil a written contract; it may be terminated on the report of a registered medical practitioner.

**Flexible working arrangements:** the MOHCC has implementing an alternate arrangements or schedules from the traditional work arrangements. These flexible working arrangements has been put in place to decongest the workplaces and mitigate against the spread of COVID-19. These flexible working arrangements allows project workers to use the workplace on prearranged weekdays. This arrangement gives the worker greater scheduling freedom in how they fulfil their job responsibilities and may therefore meet personal, and family needs and achieve better work-life balance. This arrangement is reviewed from time-to-time depending how the COVID-19 pandemic involves.

The project will not restrict project workers from developing alternative mechanisms to collective job actions to express their grievances and protect their rights regarding working conditions and terms of employment. GoZ should not seek to influence or control these alternative mechanisms. GoZ should not discriminate or retaliate against project workers who participate, or seek to participate, in such workers' organisations and alternative mechanisms to collective bargaining.

## 9. GRIEVANCE MECHANISM

### GRIEVANCE REDRESS PROCEDURE

**General Principles:** Typical workplace grievances include demand for employment opportunities; labour wage rates; delays of payment; disagreement over working conditions; and health and safety concerns in work environment. Although SEA occurs in workplaces it is not always reported on for fear of victimization. There is already a grievance redress mechanism within the MOHCC system which is being strengthened under AF V. Below is an outline of the GRM process in place:

#### Facility Level GRM

The rationale for the facility level GRM, is because the CBOs and HCCs in the villages indicated that they were getting minimum assistance from the establishment and that they were dealing with community grievances through the police and the local elders.

The Grievance Redress Mechanism consists of the following components:

- ▶ The access point for impacted/concerned patients or people will be situated as close to the project affected person (PAP) as possible.
  - At the various Health Facilities phone numbers will be posted and notices written indicating the process to be taken when aggrieved,
  - At the various Health Facilities there will be Suggestion Boxes (Also used as grievances boxes) situated in the reception area, where anonymous reports can be deposited. The community, the CBO and HCC will oversee the keys to the boxes,
  - At all Ministry of Health and Child Care (MoHCC) Offices there will be Suggestion boxes situated in the reception area, where anonymous reports can be deposited,
  - At the various Health Facilities and MoHCC Offices there will be a designated officer who receives, classifies, and log all grievances,
  - At all project activity and CORDAID offices there will be a Suggestion box and a designated CORDAID staff will be responsible for receiving the Grievances, classifying, and logging them.
  - All Suggestions boxes should be opened daily.
- ▶ The patient would normally be asked to submit a written down grievance to the Person in Charge of recording, who then refers the patient to see the sister in charge, who will try to resolve it, failing which the next steps will be taken. This is done so that a different person handles the case from the one who recorded it,
- ▶ The Administrator should give the complainant an acknowledgement of receipt containing an expectation of when they will receive a response,
- ▶ The Facility Manager assigns a member of staff to be responsible for the case, who then assess and investigates the grievance to identify all the key facts,
- ▶ The responsible staff member in consultation with the Facility Manager then makes a resolution and the proposed actions are confirmed with CORDAID/MoHCC senior members of staff,
- ▶ A response is then communicated to the complainant within the timescale promised:
  - ✓ **For Priority 1 – urgent**, potential high health and high business impact. **This requires a response to the Complainant within three (3) working days,**
  - ✓ **Priority 2 - non-urgent**, lower health, environmental and social impact. This requires a response to the complainant within 2 working weeks,
- ▶ The complainant is given room to appeal to the MoHCC Head Office or the Courts of Law if they are not satisfied with the response. The appeal can be lodged with the Public relations Manager, MoHCC, Kaguvi Building, 4th Floor, Central Avenue, Harare.
- ▶ Once done the case is brought to a closure and all the staff members of the Facility are made aware of the complaint, any underlying issues and plans to prevent any future recurrence of the issue,

- ✓ All complaints should be reviewed monthly as part of the quality assurance review meetings,
- ✓ Any complaints where action can be taken to avoid recurrence must be acted upon and raised with the appropriate managers/teams across the Facility,
- ✓ A monthly summary incident report is submitted to the Communications Specialist of CORDAID for record keeping and consolidation. He/she will ensure that all grievances are being recorded and resolved in a timely manner.

However, Contractors will establish a separate grievance redress mechanism for its workers at each project site, as required in ESS2. Handling of grievances should be objective, prompt, and responsive to the needs and concerns of the aggrieved workers. The mechanism will also allow for anonymous complaints to be raised and addressed. Individuals who submit their complaints or grievances may request that their name be kept confidential, and this should be respected.

- ▶ The project will contract Contractors who sign an undertaking to comply with the provisions of the Labour Act for Contracted workers.
- ▶ Contractor inducts the employee on the applicable grievance redress mechanism. Induct all project workers to be aware of their rights. All records of induction shall be kept and made available for inspection by PIE and MOHCC or World Bank.
- ▶ In case of violation, the aggrieved employee must capture and present the details of the grievance to the person they report to or the supervisor's superior in case of conflict of interest.
- ▶ The supervisor will verify the details and seek to address the matter within the shortest time up to 48 hours.
- ▶ The supervisor will escalate the matter if not resolved within 48 hours until a resolution is found or not found.
- ▶ Where no resolution is found, the employee will escalate the matter to the sector specific National Employment Council, to the Labour court, High Court or Supreme Court who will resolve the matter between employer and employee. The Supreme Court's decision is final.
- ▶ Where no resolution is found between employees, the aggrieved employee will escalate the matter to the Labour court, High Court or Supreme Court who will resolve the matter between employer and employee. The Supreme Court's decision is final.
- ▶ The Contractor shall keep records of all proceedings of grievance redress that are within their jurisdiction and furnish PIE/ MOHCC as part of the periodic progress reporting to the PIE.
- ▶ All grievances of sexual nature (GBV/sexual harassment/Sexual Exploitation and Abuse) should follow the existing national GBV/SEA and Child Abuse referral pathways and complaints resolution mechanism.

Cordaid has a grievance or complaints procedure that deals with complaints from Cordaid's stakeholders such as donors, consultants, the MOHCC, suppliers and staff members. The complaint can be submitted to Cordaid through phone, email or by letter. The complaint can be sent to anyone in the organisation, however, at the contact person at the national office is the Finance and Administration Specialist. The receiver of the complaint registers the complaint database which is posted in the server. The receiver of the complaint will pass the complaint to the responsible person who will send confirmation of receipts within two working days to the complainant. After sending confirmation of receipt to the complainant the complaint is examined to determine its validity within 14 working days. If a complaint can be solved immediately a response is sent to the stakeholder. Corrective action can also be taken depending on the nature of the complaint for instance deviations from procedures (errors are corrected and person concerned is addressed), violation of the code of conduct (disciplinary action). Most complaints or objection will be handled by the responsible contact person and his or her supervisor, but some may require input from Cordaid officers. If the solution is not to the satisfaction of the stakeholder, the Complaints and Objections

Committee at Cordaid in Zimbabwe will give advice. The Complaints and Objections Committee will only be created if contact person and his/her supervisor does not come to an agreement with the stakeholder. The contact person ensures that the customer receives the response even if the complaints are unfounded. After the handling of the complaint the file and all correspondence, is put in a complaints folder and on the server. Once per quarter the Finance and Administration makes an analysis and report on all complaints received and a summary of issues and their status is provided to the World Bank in the biannual progress reports.

### **Additional GRM Approaches**

Besides the Project GRM, aggrieved persons can also employ additional channels to air their complaints. These include the World Bank Grievance Redress System (GRS) and the inspection Panel. The objective of the World Bank's Complaints Procedure is to ensure that appropriate mechanisms are in place to allow individuals and communities to contact the World Bank directly and file a complaint if they believe they are or might be adversely affected by the Project not complying with the World Bank's Environmental and Social Safeguards Standards.

Complaints must concern environmental, social and climate issues only and should not be accusations of fraudulent or corrupt activities in relation to project implementation – these are dealt with by the Offices of Audit and Oversight.

All project workers will be made aware of the grievance redress mechanism through a number of platforms that include project website, displays on notice boards, emails, trainings on GRM, emails, various awareness activities.

## 10. CONTRACTOR MANAGEMENT

Each contractor engaged by the Project to provide services (such as construction of isolation/quarantine centres, setting up energy generation equipment, installation of refrigeration units in trucks, collection of waste, delivery of communication materials at the community level, etc.) will be expected to adopt the protective measures outlined in this LMP document and any specified in the respective contracts. The PIE will make reasonable efforts to ascertain that third parties who engage contracted workers are legitimate and reliable entities that have in place labour management procedures applicable to the project that will allow them to operate in accordance with the relevant requirements of ESS2, Labour and Working Conditions. The contracts drawn by the PIE will include provisions, measures and procedures to be put in place by the contractors to manage and monitor relevant OHS issues. Measures required of Contractors will include:

- a) As part of the bidding/tendering process, specific requirements for certain types of contractors, and specific selection criteria (e.g., for medical waste management, certifications, previous experience).
- b) Provision of medical insurance covering treatment for COVID-19, sick pay for workers who either contract the virus or are required to self-isolate/quarantine due to close contact with infected workers and payment in the event of death.
- c) Specific procedures relating to the workplace and the conduct of the work (e.g., creating at least 6 feet between workers by staging/staggering work, limiting the number of workers present), daily safety talks, regular training of workers on health and safety at work.
- d) Specific procedures and measures dealing with specific risks. For example, for healthcare contractors - infection prevention and control (IPC) strategies, health workers' exposure risk assessment and management, developing an emergency response plan as per [WHO Guidelines](#). For community workers, measures will include ensuring their security and addressing stigma.
- e) Appointing a COVID-19 focal point with responsibility for monitoring and reporting on COVID-19 issues, and liaising with other relevant parties; and
- f) Including contractual provisions and procedures for managing and monitoring the performance of contractors, considering changes in circumstances prompted by COVID-19.
- g) Contractor workers must sign the Code of Conduct (Appendix 4) and the Code of Conduct on GBV/SEAH (Appendix 15). They are expected to adhere to the ESHS matters as laid out in the standard WB procurement documents for small construction works Code of Conduct.
- h) Relevant noncompliance remedies.

Contractors will be required to identify focal points and communication channels (for example, WhatsApp, SMS and email) within the company to address workers' concerns on an ongoing basis and ensure that such channels are adequately resourced (for example, 24-hour staffing of the emergency response call line). Workers shall not be victimized in any way for reporting a grievance.

## 11. COMMUNITY WORKERS

Community surveillance, mobilization and sensitization will be undertaken by community volunteers who will include community health workers, Community Based Organisations, Health Centre Committees, and other volunteers as appropriate. The following safety measures will be put in place to prevent or minimize exposure to COVID-19, as well as for addressing situations where there are cases of symptomatic workers:

- a. Set up a system at the community level that links up with health facilities and sub-county system for the management of COVID-19 related matters (this could be an e-system). b) Set up an online system (use WhatsApp for instance) to provide the CHWs with updates on COVID-19.
- b. Establish a referral system that will allow the CHWs to refer people with various COVID-19 related symptoms and questions. The online system could also assist with the triage of sick community members as necessary.
- c. Develop training materials that will also give the volunteers accurate information on COVID-19 including prevention and control measures.
- d. Equip the CHWs with basic protective equipment such as masks and sanitisers.
- e. Provide information on the GRM to be used in case of a community complaint (abuse, stigma, etc.); and establish a monitoring system on the performance of the CHWs.

## 12. PRIMARY SUPPLY WORKERS

Primary suppliers will be for the supply of PPE, solar direct drive refrigerators, refrigeration units for trucks transporting vaccines. These suppliers are not known at this stage. When sourcing for primary suppliers, the PIE will require such suppliers to identify risk of child labour or forced labour and serious safety risks. Where appropriate, the project will include specific monitoring and reporting requirements related to child labour or forced labour and work safety issues in all purchase orders and contracts.

## APPENDIX 3 ARCHAEOLOGICAL CHANCE FINDS PROCEDURE



### ZIMBABWE

#### ARCHAEOLOGICAL CHANCE FINDS PROCEDURE

#### FOR

#### THE ZIMBABWE COVID-19 RESPONSE and ESSENTIAL HEALTH SERVICES PROJECT (ZCEREHSP)

### 1.0 INTRODUCTION

The purpose of this document is to address the possibility of archaeological deposits, finds and features becoming exposed during earthmoving and ground altering activities associated with the ZCERP and to provide procedures to follow in the event of a chance archaeological find.

The objectives of these procedures are to identify and promote the preservation and recording of any archaeological material that may be discovered and notify the relevant Rural District Council (RDC), the Environmental Management Agency (EMA) and the National Museums and Monuments of Zimbabwe (NMMZ) to resolve any archaeological issue that may arise (NMMZ, 2001).

### 2.0 ARCHAEOLOGICAL CHANCE FINDS PROCEDURE

During the project induction meeting/training, all contractors/construction teams will be made aware of the need to be on the lookout for objects of archaeological interest as they carry out their refurbishments/ minor civil works (excavation) activities. For example, the sanitary facilities may require excavation.

Generally, the following procedure is to be executed if archaeological material is discovered:

- ▶ Stop all construction activity in the vicinity of the find/feature/site immediately,
- ▶ Delineate the discovered find/ feature/ site immediately,
- ▶ Record the find location, and make sure all remains are left in place,
- ▶ Secure the area to prevent any damage or loss of removable objects,
- ▶ Contact, inform and notify the RDC, EMA and NMMZ authorities immediately,
- ▶ The Authorities so notified will avail an archaeologist,
- ▶ The archaeologist will assess record and photograph the find/feature/ site,
- ▶ The archaeologist will undertake the inspection process in accordance with all project health and safety protocols under direction of the RDC Health and Safety Officer,



- ▶ In consultation with EMA, NMMZ and MoHCC authorities, the Archaeologist will determine the appropriate course of action to take,
- ▶ **Finds retrieval strategy:** All investigation of archaeological soils will be undertaken by hand, all finds, osteological remains and samples will be kept and submitted to the National Museum as required. If any artefacts need to be conserved, the relevant licence (Licence to Alter) will be sought from the NMMZ,
- ▶ An on-site office and finds storage area will be provided, allowing storage of any artefacts or other archaeological material recovered during the monitoring process,
- ▶ In the case of human remains, in addition to the above, the Local Leadership will be contacted and the guidelines for the treatment of human remains will be adhered to. If skeletal remains are identified, an osteoarchaeologist will be available to examine the remains,
- ▶ **Conservation:** A conservator should be made available to the project, if required,
- ▶ The on-site archaeologist will complete a report on the findings as part of the licensing agreement in place with the NMMZ,
- ▶ Once authorisation has been given by the responsible statutory authorities, the client will be informed when works can resume.

## APPENDIX 4 CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

### Code of Conduct for Contractor's Personnel (ES) Form

#### CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We are the Contractor, [enter name of Contractor]. We have signed a contract with [enter name of Employer] for [enter description of the Works]. These Works will be carried out at [enter the Site and other locations where the Works will be carried out]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse and sexual harassment.

#### Note to the Bidder:

**The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified. However, the Bidder may add requirements as appropriate, including to consider Contract-specific issues/risks.**

**The Bidder shall initial and submit the Code of Conduct form as part of its bid.**

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, labourers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as "**Contractor's Personnel**" and are subject to this Code of Conduct.

This Code of Conduct identifies the behaviour that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behaviour will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

## REQUIRED CONDUCT

Contractor's Personnel shall:

1. carry out his/her duties competently and diligently
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person
3. maintain a safe working environment including by:
  - a. ensuring that workplaces, machinery, equipment, and processes under each person's control are safe and without risk to health
  - b. wearing required personal protective equipment
  - c. using appropriate measures relating to chemical, physical and biological substances, and agents; and
  - d. following applicable emergency operating procedures.
4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and danger to his/her life or health
5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers, or children
6. not engage in Sexual Harassment, which means unwelcome sexual advances, requests for sexual favours, and other verbal or physical conduct of a sexual nature with another Contractor's or Employer's Personnel
7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power, or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially, or politically from the sexual exploitation of another
8. not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions
9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage
10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH)

11. report violations of this Code of Conduct; and
12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism.

## RAISING CONCERNS

If any person observes behaviour that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [enter name of the Contractor's Social Expert with relevant experience in handling sexual exploitation, sexual abuse and sexual harassment cases, or if such person is not required under the Contract, another individual designated by the Contractor to handle these matters] in writing at this address [ ] or by telephone at [ ] or in person at [ ]; or
2. Call [ ] to reach the Contractor's hotline (if any) and leave a message.
3. The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behaviour prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

## CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [enter name of Contractor's contact person(s) with relevant experience] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

Countersignature of authorized representative of the Contractor:

Signature: \_\_\_\_\_

Date: (day month year): \_\_\_\_\_

**ATTACHMENT 1:** Behaviours constituting Sexual Exploitation and Abuse (SEA) and behaviours and behaviours constituting Sexual Harassment (SH)

## ATTACHMENT 1 TO THE CODE OF CONDUCT FORM

### BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)

The following non-exhaustive list is intended to illustrate types of prohibited behaviours.

**Examples of sexual exploitation and abuse** include, but are not limited to:

- ▶ A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g., cooking and cleaning) in exchange for sex.
- ▶ A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- ▶ A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
- ▶ A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favour.
- ▶ A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(1) **Examples of sexual harassment in a work context**

- ▶ Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
- ▶ When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- ▶ Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor's Personnel.
- ▶ A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

## APPENDIX 5 ENVIRONMENTAL AND SOCIAL SCREENING FORM



**MINISTRY OF HEALTH AND CHILDCARE  
ENVIRONMENTAL AND SOCIAL SCREENING FORM  
FOR  
ZCEREHSP**

**Name of Activity Representative:** .....

**Project activity Name:** .....

**Project activity Address:** .....

.....

**Name of Extension Team Representative** .....

**Address:** .....

.....

**Description of Project activity** (include: .....

dimensions, associated activities .....

necessary to the project and any .....

other relevant information) .....

## PHASE 1

### 1.0 SITE SELECTION:

When considering the location of a project activity, rate the sensitivity of the proposed site in the following table according to the given criteria. Higher ratings do not necessarily mean that a site is unsuitable. They do indicate a real risk of causing undesirable adverse environmental and social effects, and that more substantial environmental and/or social planning may be required to adequately avoid, mitigate, or manage potential effects.

Issues	Site Sensitivity			Rating
	Low	Medium	High	
<b>Natural habitats<sup>64</sup></b>	<ul style="list-style-type: none"> <li>▶ No natural habitats present of any 5kind</li> </ul>	<ul style="list-style-type: none"> <li>▶ No critical natural habitats<sup>65</sup></li> <li>▶ other natural habitats occur</li> </ul>	<ul style="list-style-type: none"> <li>▶ Critical natural habitats present.</li> </ul>	
<b>Water quality and water resource availability and use</b>	<ul style="list-style-type: none"> <li>▶ Water resources exceed any existing demand.</li> <li>▶ Potable water that meets national requirements for piped water.</li> <li>▶ no potential water quality issues</li> </ul>	<ul style="list-style-type: none"> <li>▶ Water resources relatively available.</li> <li>▶ multiple water users.</li> <li>▶ water quality issues are important</li> </ul>	<ul style="list-style-type: none"> <li>▶ Water resources not readily available.</li> <li>▶ multiple water users.</li> <li>▶ water quality issues are important</li> </ul>	
<b>Natural hazards vulnerability, floods, soil stability/ erosion</b>	<ul style="list-style-type: none"> <li>▶ no potential stability/ erosion problems.</li> <li>▶ no known volcanic/ seismic/ flood risks</li> </ul>	<ul style="list-style-type: none"> <li>▶ some erosion potential.</li> <li>▶ medium risks from volcanic/ seismic/ flood/ hurricanes</li> </ul>	<ul style="list-style-type: none"> <li>▶ steep slopes.</li> <li>▶ unstable soils.</li> <li>▶ high erosion potential.</li> <li>▶ volcanic, seismic or flood risks</li> </ul>	

<sup>64</sup>Natural habitats<sup>1</sup> are land and water areas where (i) the ecosystems' bio-logical communities are formed largely by native plant and animal species, and (ii) human activity has not essentially modified the area's primary ecological functions. (See OP 4.04, Annex 1 for full definition).

<sup>65</sup>Critical natural habitats are (1) legally protected, (2) officially proposed for protection, or (3) unprotected but of known high conservation value. (i) existing protected areas and (ii) areas officially proposed by governments as protected areas, (iii) areas initially recognized as protected by traditional local communities (e.g., sacred groves) (of known high conservation value), and (iv) sites that maintain conditions vital for the viability of these protected areas (See OP 4.04, Annex A Para. 1.1b) for full definition.)

Issues	Site Sensitivity			Rating
	Low	Medium	High	
<b>Cultural Resources</b>	<ul style="list-style-type: none"> <li>▶ No known or suspected cultural heritage sites, rites, or tangible/intangible resources</li> </ul>	<ul style="list-style-type: none"> <li>▶ Suspected physical cultural resources.</li> <li>▶ known physical or intangible cultural resources in broader activity area of influence</li> </ul>	<ul style="list-style-type: none"> <li>▶ Known physical or intangible cultural sites in project activity area</li> </ul>	
<b>Compliance with all relevant Zimbabwe EHS requirements including permits/authorizations (see Section 3 of ESMF for details)</b>	<ul style="list-style-type: none"> <li>▶ All requirements are met</li> </ul>	<ul style="list-style-type: none"> <li>▶ All material requirements are met</li> </ul>	<ul style="list-style-type: none"> <li>▶ Some material requirements are not met</li> </ul>	
<b>Potential historical contamination (soil, ground water, etc.)</b>	<ul style="list-style-type: none"> <li>▶ No known potential</li> </ul>	<ul style="list-style-type: none"> <li>▶ Some potential exists</li> </ul>	<ul style="list-style-type: none"> <li>▶ Known contamination exists</li> </ul>	

**NOTE:** ZCERP will not fund any project that will involve any involuntary resettlement, dam construction, encroach into natural habitats, impact cultural heritage, adversely affect human health, cause significant social conflicts, require biosafety levels 3 (work with microbes that can either be indigenous and exotic and can cause serious or potentially lethal disease through respiratory transmission for example *Yersinia pestis*, *Mycobacterium tuberculosis*, SARS, rabies virus, west nile, hanta virus) and/or 4 (analysis of dangerous and exotic microbes posing high risk of aerosol transmission. Infections caused by these microbes are frequently fatal and without treatment or vaccines such as Ebola and small pox virus) or block access to important resources.



## 2.0 COMPLETENESS OF ACTIVITY APPLICATION:

The project activity application document must contain, as appropriate, the following information:

	Yes	No	N/A	Comment
Description of the proposed project and where it is located				
Information about how the site was chosen, and what alternatives were considered				
A map or drawing showing the location and boundary of the project including any land required temporarily during construction				
The plan for any physical works (e.g., layout, buildings, other structures, construction materials)				
Any new access arrangements or changes to existing road layouts				
A work program for construction, operation and decommissioning the physical works, <b>including any site restoration needed afterwards</b>				
List of all present and past on-site waste storage, treatment and disposal – including waste pits, septic systems, incinerators, etc.				
Information about measures to avoid or minimize adverse environmental and social impacts				
Details of any permits required for the project				

## 3.0 ENVIRONMENTAL AND SOCIAL CHECKLIST

		Yes	No	ESMF Guidance/ Comment
<b>A</b>	<b>Type of activity – Will the project activity support:</b>			
1	Installation of energy generation equipment in at health care facilities?			
2	Installation of refrigeration equipment trucks			
3	Support Health Delivery Systems?			
4	Provide on-site medical infectious waste disposal			
5	Contract (use) off-site facility for medical infectious waste disposal			

		Yes	No	ESMF Guidance/ Comment
6	Be located in or near an area where there are physical cultural resources such as important historical, archaeological or cultural heritage sites, artefacts or intangible resources such as locations of sacred or traditional rites?			
7	Be located within or adjacent to any areas that are or may be protected by government (e.g., national park, national reserve, world heritage site) or local tradition, or that might be a natural habitat?			
<p><i>If the answer to any of questions 1-5 is "Yes", please use the indicated Resource Guide in Appendix 6 of the ESMF for guidance on how to identify key ESMP contents for typical impacts and risks</i></p>				
<b>B Environment – Will the project activity:</b>				
8	Potentially affect the quality of any close surface waters (e.g., rivers, streams, wetlands), or groundwater (e.g., wells)?			
9	Cause waste management difficulties (beyond known project accepted processes) or increase the risk of illness due to toxic or hazardous waste?			
10	Cause the production of waste which may include asbestos waste or asbestos containing materials.			
11	Cause the discharge of any pollutants into the environment such as emissions into the air (incinerators, etc.)?			
12	Produce, or increase the production of, solid or liquid wastes (e.g., water, medical or other wastes)?			
13	Does applicant/project activity proponent or facility have all applicable EHS licenses/permits, and does it comply with all regulatory EHS requirements?			
14	Does applicant/project activity proponent or facility have material EHS existing liabilities including historical contamination, inadequate present or past onsite medical waste or wastewater disposal, inadequate potable water;			
<p><i>If the answer to any of questions 8-12 or 14 is "Yes" or if the answer to 13 is "No", please include an Environmental and Social Management Plan (ESMP) with the project activity's application addressing the applicable issue.</i></p>				

		Yes	No	ESMF Guidance/ Comment
<b>C Social: Gender, Land acquisition and access to resources – Will the project activity:</b>				
13	Require that land (public or private) be acquired (temporarily or permanently) for its development?			
14	Displace individuals, families, or businesses?			
15	Result in and maintain adverse gender balances?			
16	Exacerbate existing gender imbalances?			
17	Positively address gender imbalances in the health sector?			
18	Include less privileged potential beneficiaries? (i.e., youths, disabled persons, child headed households, the poorest).			
19	Include disadvantaged and vulnerable groups? (i.e., ethnic minorities, Indigenous Peoples, etc.).			
<b>D Cumulative Impacts – in the project area will there be:</b>				
20	Any current or planned development with similar impacts			
21	Any current or planned development with potential to negatively impact on the environmental and social performance of the project			
<b>E Exclusion Criteria– Will the project activity (including procurement of laboratory chemicals or materials)</b>				
22	Result in Laboratory activities that may require Biosafety Levels 3 (BSL-3) or 4 (BSL-4) lab facilities.			
23	Cause activities that have high probability of causing serious adverse effects to human health and/or the environment not related to treatment of COVID-19 cases			
24	Acquisition of land and physical or economic displacement of people			
25	Block the access to or use of land, water points and other livelihood resources used by others			

		Yes	No	ESMF Guidance/ Comment
26	Encroach onto fragile ecosystems, marginal lands or important natural habitats (e.g., ecologically sensitive ecosystems; protected areas; natural habitat areas, forests and forest reserves, wetlands, national parks or game reserve; any other environmentally sensitive areas)			
27	Impact on physical or intangible cultural resources of national or international importance and conservation value			
28	Activities that may cause long-term, permanent and/or irreversible (e.g., loss of natural habitat) adverse impacts such as dam construction and other greenfield construction among others			
29	Activities that may have adverse social impacts and may give rise to significant social conflict			
30	Activities that may affect lands or rights of indigenous people or other vulnerable minorities			

*If the answer to any of questions 13-17 is "Yes", please include an Environmental and Social Management Plan (ESMP) with the activity's application. If the answer to questions 22-30 is "Yes" then the project activity is ineligible for ZCERP funding/support.*

**CERTIFICATION**

We certify that we have thoroughly examined all the potential adverse effects of this project activity. To the best of our knowledge, the project activity described in the application and associated planning reports (e.g., ESMF, IPP), if any, will be adequate to avoid or minimize all adverse environmental and social impacts.

**SIGNATURES:**

.....

**EXTENSION TEAM REPRESENTATIVE**

.....

**DATE**

## APPENDIX 6 GUIDE TO IDENTIFYING AND DRAFTING KEY CHECKLIST ESMP CONTENTS

Guide to Identifying Key ESMP Contents			
Will the site activity include/ involve any of the following potential issues and/or impacts:	Activity and potential issues and/or impact	Status	Additional references
	1. Installation <ul style="list-style-type: none"> <li>▶ Site-specific vehicular traffic</li> <li>▶ Increase in dust and noise from activities</li> <li>▶ Waste</li> </ul>	[[ Yes ]] No	See Section B below
	2. Historic building(s) and districts <ul style="list-style-type: none"> <li>▶ Risk of damage to known/ unknown historical or archaeological sites</li> </ul>	[[ Yes ]] No	See Section C below
	<ul style="list-style-type: none"> <li>▶ Acquisition of land</li> <li>▶ Encroachment on private property</li> <li>▶ Relocation of project affected persons</li> <li>▶ Involuntary resettlement</li> <li>▶ Impacts on livelihood incomes</li> </ul>	[[ Yes ]] No	See Section D below
	3. Hazardous or toxic materials <sup>66</sup> <ul style="list-style-type: none"> <li>▶ Storage, treatment, Removal or on-site or off-site disposal of toxic and/or hazardous installation waste</li> <li>▶ Storage of machine oils and lubricants</li> </ul>	[[ Yes ]] No	See Section E below
	4. Impacts on forests and/or protected areas. <ul style="list-style-type: none"> <li>▶ Encroachment on designated forests, buffers and /or protected areas</li> <li>▶ Disturbance of locally protected animal habitat</li> </ul>	[[ Yes ]] No	See Section F below
	5. Handling / management of medical waste <ul style="list-style-type: none"> <li>▶ Clinical waste, sharps, pharmaceutical products (cytotoxic and hazardous chemical waste), radioactive waste, organic domestic waste, non-organic domestic waste</li> <li>▶ On site or off-site disposal of medical waste</li> </ul>	[[ Yes ]] No	See Section G below
	6. Traffic and Pedestrian Safety <ul style="list-style-type: none"> <li>▶ Site-specific vehicular traffic</li> <li>▶ Site is in a populated area</li> </ul>	[[ Yes ]] No	See Section H below

<sup>66</sup> Toxic / hazardous material includes and is not limited to asbestos, toxic paints, removal of lead paint, etc.

ACTIVITY	PARAMETER	GOOD PRACTICES MITIGATION MEASURES CHECKLIST
A. General Conditions	Notification and Worker Safety	<ol style="list-style-type: none"> <li>1. Appropriate PPE to be provided to the incinerator operator.</li> <li>2. Install effective exhaust ventilation to prevent air contamination and local exhaust ventilation if necessary.</li> <li>3. There is a need to arrange for the periodic inspection of incinerator vessel integrity to detect metal cracking.</li> <li>4. Training of incinerator operators of safe lifting and moving techniques for heavy or awkward loads.</li> <li>5. All work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment.</li> <li>6. Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots)</li> <li>7. Measures to prevent/reduce COVID-19 contraction and transmission to others (non-workers) are required for all ESMPs.</li> <li>8. Formulate an exposure control plan for blood-borne pathogens,</li> <li>9. Provide staff members and visitors with information on infection control policies and procedures,</li> <li>10. Establish Universal / Standard Precautions to treat all blood and other potentially infectious materials with appropriate precautions, including:</li> <li>11. Immunization for staff members as necessary (e.g. vaccination for hepatitis B virus)</li> <li>12. Use of appropriate PPE</li> <li>13. Adequate facilities for hand washing.</li> </ol>
B. General Installation Activities	Air Quality	<ol style="list-style-type: none"> <li>1. As necessary, use debris-chutes above the first floor</li> <li>2. Keep any debris in controlled area and spray water mist to reduce debris dust</li> <li>3. Suppress dust during pneumatic drilling/wall destruction by ongoing water spraying and/or installing dust screen enclosures at site as necessary</li> <li>4. Keep surrounding environment (sidewalks, roads) free of debris to minimize dust</li> <li>5. There will be no open burning of waste material at the site</li> </ol>
	Noise	<ol style="list-style-type: none"> <li>1. Construction noise will be limited to restricted times agreed to in the permit</li> <li>2. During operation, the engine covers of generators, air compressors and other powered mechanical equipment should be closed, and equipment placed as far away from residential areas as possible</li> </ol>
	Water Quality	<ol style="list-style-type: none"> <li>1. The site will establish appropriate erosion and sediment control measures such as e.g., hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers as necessary.</li> </ol>
	Waste management	<ol style="list-style-type: none"> <li>1. Waste collection and disposal pathways and sites will be identified for all major waste types expected from installation activities.</li> <li>2. Installation wastes will be separated from general refuse, organic, liquid, and chemical wastes by on-site sorting and stored in appropriate containers as necessary.</li> <li>3. As necessary, installation waste will be collected and disposed properly by licensed collectors.</li> <li>4. The records of waste disposal will be maintained as proof of proper management as designed.</li> <li>5. Whenever feasible the contractor will reuse and recycle appropriate and viable materials (except asbestos)</li> <li>6. Each facility participating in COVID-19 vaccine deployment activities is required to prepare and implement an approved ICWMP in accordance with the requirements of this ESMF</li> </ol>

C. Historic building(s)	Cultural Heritage	<ol style="list-style-type: none"> <li>1. If the activity takes place in or is very close to a designated historic structure or site, or located in a designated historic district, notify, and obtain approval/permits from local authorities and ensure all activities take place in line with local and national legislation. Any such activity's screening will require a No Objection from the World Bank.</li> <li>2. Ensure that provisions are put in place so that artifacts or other possible "chance-finds" encountered in excavation for installation are safeguarded, officials contacted immediately, and activities delayed or modified to account for such finds.</li> </ol>
D. Acquisition of land	Land Acquisition Plan/Framework	<ol style="list-style-type: none"> <li>1. This is not permitted under this project</li> </ol>
E. Toxic Materials	Asbestos management	<p>See Appendix 14 for further guidance.</p> <ol style="list-style-type: none"> <li>1. If asbestos is located on the project site, clearly identify and secure as hazardous material</li> <li>2. When possible, the asbestos will be appropriately contained and sealed to minimize exposure</li> <li>3. The asbestos, prior to removal (if removal is necessary), will be treated with a wetting agent to minimize asbestos dust</li> <li>4. Asbestos will be handled and disposed by skilled and experienced professionals</li> <li>5. If asbestos material is to be stored temporarily, the waste should be securely enclosed inside closed containers, marked appropriately and left in such a state so as to discourage scavengers and reuse</li> <li>6. The removed asbestos will not be reused</li> </ol>
	Toxic / hazardous waste management	<ol style="list-style-type: none"> <li>1. Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties, and handling information</li> <li>2. The containers of hazardous substances should be placed in a leak-proof container to prevent spillage and leaching</li> <li>3. The waste is transported by specially licensed carriers and disposed of in a licensed facility. Obtain any necessary licenses/permits prior to use of any such Transporter and follow requirements of the project ICWMP. For contracted Transporters, all EHS requirements are to be specific in-service contract. PIE to verify license/permit.</li> <li>4. Waste containing heavy meatal is inertised and sent to safe storage site designed for final disposal of hazardous waste and / or transported to specialized facilities for metal recovery.</li> <li>5. Paints with toxic ingredients or solvents or lead-based paints will not be used.</li> </ol>



	<p>Historically contaminated soils</p>	<ul style="list-style-type: none"> <li>▶ Limiting or preventing access to contaminant by receptors (actions targeted at the receptor may include signage with instructions, fencing, or site security)</li> <li>▶ Imposing health advisory or prohibiting certain practices leading to exposure such as fishing, crab trapping, shellfish collection</li> <li>▶ Educating receptors (people) to modify behaviour to reduce exposure (e.g., improved work practices, and use of protective clothing and equipment)</li> <li>▶ Providing an alternative water supply to replace, for example, a contaminated groundwater supply well</li> <li>▶ Capping contaminated soil with at least 1m of clean soil to prevent human contact, as well as plant root or small mammal penetration into contaminated soils</li> <li>▶ Paving over contaminated soil as an interim measure to negate the pathway of direct contact or dust generation</li> <li>▶ and inhalation</li> <li>▶ Using an interception trench and pump, and treat technologies to prevent contaminated groundwater from discharging into fish streams</li> <li>▶ In situ biological treatment (aerobic and/or aerobic) In situ physical/chemical treatment (e.g., air sparging, zero-valent iron permeable reactive barrier)</li> <li>▶ Ex situ biological, physical, and or chemical treatment (i.e., groundwater extraction and treatment)</li> <li>▶ Containment (e.g., slurry wall or sheet pile barrier)</li> <li>▶ Natural attenuation</li> </ul>
<p>F. Affects forests and/or protected areas</p>	<p>Protection</p>	<ol style="list-style-type: none"> <li>1. All recognized natural habitats, protected, vulnerable or sensitive areas in the immediate vicinity of the activity will not be damaged or exploited. All staff will be strictly prohibited from hunting, foraging, logging or other damaging activities.</li> <li>2. For large trees in the vicinity of the activity, mark and cordon off with a fence, protect the root system and avoid any damage to the trees</li> <li>3. Adjacent wetlands and streams will be protected from installation site or vehicle fueling/servicing or waste run-off with appropriate erosion and sediment control features to include, but not limited to hay bales, silt fences and the like.</li> <li>4. There will be no waste dumps in adjacent areas, especially not in protected areas.</li> </ol>

G. Disposal of medical waste	Infrastructure for medical waste management	<p>1. In compliance with national regulations the project will ensure that activities supported by the project that will produce infectious medical waste include sufficient infrastructure for medical waste handling and disposal. Such activities or facilities must develop their own ICWMP specifying sharps management. The infrastructure should include, but is not limited to:</p> <ul style="list-style-type: none"> <li>▶ Special facilities for segregated healthcare waste (including soiled instruments "sharps", and human tissue or fluids) from other waste disposal: <ul style="list-style-type: none"> <li>a. Clinical waste: yellow bags and containers</li> <li>b. Sharps – Special puncture resistant containers/boxes</li> <li>c. Domestic waste (non-organic): black bags and containers</li> </ul> </li> <li>▶ Appropriate storage facilities for medical waste are in place; and</li> <li>▶ If the activity includes facility-based treatment, appropriate disposal options are in place and operational</li> <li>▶ All regulatory permits. Compliance with all ESMF and ICWMP requirements. EHS requirements established in contract if third-party service provider. Verified by PIE.</li> </ul>
H. Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	<p>2. In compliance with national regulations, the contractor will ensure that the installation site is properly secured and project-related traffic regulated. This includes, but is not limited to:</p> <ul style="list-style-type: none"> <li>▶ Signposting, warning signs, barriers and traffic diversions: sites will be clearly visible and the public warned of all potential hazards as appropriate</li> <li>▶ Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where installation interferes with traffic.</li> <li>▶ Emphasizing safety aspects among drivers</li> <li>▶ Improving driving skills and requiring licensing of drivers</li> <li>▶ Adopting limits for trip duration and arranging driver rosters to avoid overtiredness</li> <li>▶ Avoiding dangerous routes and times of day to reduce the risk of accidents</li> <li>▶ Use of speed control devices (governors) on trucks, and remote monitoring of driver actions</li> <li>▶ Regular maintenance of vehicles and use of manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.</li> <li>▶</li> <li>▶ Ensuring safe and continuous access to office facilities, shops and residences during installation activities, if the buildings stay open to the public.</li> </ul>

<sup>[2]</sup> Toxic / hazardous material includes and is not limited to asbestos, toxic paints, removal of lead paint, etc.

## APPENDIX 7 E & S GENERAL SUPERVISION CHECKLIST

### Environmental and Social Safeguards Implementation

Ensure that documentation on specific sites and project activities, environmental and social impacts monitoring reports, and reports on the status of safeguards implementation are furnished to the mission team at or before the kick-off meeting.

- ▶ Meet with key beneficiaries and other stakeholders,
- ▶ Review a random sample of project activities, making sure all safeguard issues are evaluated,
- ▶ Get an overview of all the project activities and their categories in terms of impacts,
- ▶ Identify projects with applicable environment safeguards,
- ▶ Identify projects with applicable social safeguards,
- ▶ Based on the reports, determine projects that have potential critical safeguards issues, and focus on those,
- ▶ Discuss findings and significant noncompliance issues if any with the TTL and agree on correcting actions,
- ▶ Assess the project's experience in managing social and environmental risks,
- ▶ Field visits to review recently completed project activities, where possible review project proposals and impact monitoring records,
- ▶ Assess the use of environmental and social screening checklists contained in the Environmental and Social Management Framework (ESMF) for proposed project activities/ investments,
- ▶ Assess implementing agencies' awareness and use of the ESMF and the ICWMP,
- ▶ Find out if there is an established ESMF/ICWMP monitoring and tracking system to ensure effective oversight of project activities at the national level,
- ▶ Identify weaknesses in procedures, internal control mechanisms, supervision, and post reviews,
- ▶ Has there been/Is there any training plan to improve the awareness and capacity of implementing agencies on the use of the ESMF and ICWMP,
- ▶ Assess the project activity implementer's capacity and commitment to plan and implement safeguard policy issues,
- ▶ Make practical recommendations for the project activity-specific action plans,
- ▶ Assess the impacts from any changes in the project design or new components. If required agree upon a revised safeguards management plan, monitoring and reporting requirements,
- ▶ Agree with the PIE on additional measures required, and if non-compliance or unresolved safeguards issues remain, establish a plan for follow on supervision.

### Methodology:

- ▶ Examine project activity design, review and approval process, social and environmental safeguards compliance, quality, and effectiveness of project outputs.

## APPENDIX 8 ENVIRONMENTAL AND SOCIAL GUIDELINES FOR CONTRACTORS

The guidelines:

- ▶ Cover provisions for proper management of construction sites, safe storage of construction materials and safe disposal of wastes,
- ▶ Will be included in the bidding documents and eventually be part of the contract document. (This guideline to be used in conjunction with Appendix 4, Code of Conduct for Contractors).

### General Considerations

- ▶ The contractor shall follow the World Bank Group Environment, Health and Safety Guidelines which should become the basis for preparing the EHS Plan. For details, please refer to: [www.ifc.org/EHSguidelines](http://www.ifc.org/EHSguidelines),
- ▶ The contractor in all his activities ensure maximum protection of the environment and the socio-economic wellbeing of the people affected by the project, whether within or outside the physical boundaries of the project area,
- ▶ Before any construction works begin, the contractor shall ensure that the relevant environmental and land acquisition certificates of authorization for the works have been obtained from the relevant authorities,
- ▶ In general, the contractor should become familiar with the environmental and social screening process. The contractor shall work in cooperation and in coordination with the Project Management Team and/or any other authority appointed to perform or to ensure that the social and environmental work is performed according to the provisions of the safeguards documents,
- ▶ The contractor shall pay close attention to health and safety requirements for workers who must wear protective clothing if required. The artisan should also ensure the health and safety of the community adjoining any construction areas,
- ▶ The contractor must ensure that all COVID -19 protocols are adhered to and orient all staff about COVID-19 protection requirements. The following must be enforced:
  - Always maintain physical distance of 2 meters (6') from others,
  - always wearing masks,
  - Regular hand washing,
  - Minimum conducting of activities at proximity,
  - Segregating construction crews and allocating tasks so that they do not overlap,
  - establishing crew shifts to be also applied for break, and lunch,
  - Meetings on site should be always avoided,
  - Instruction to workers should be given in open spaces and maintaining physical distance.
- ▶ In case of a chance finds of archaeological materials the contractor must adhere to the chance-find procedures (Appendix 1), which will also be part of the contract,
- ▶ The contractor shall always keep on site and make available to Environmental Inspectors or any authorized persons, copies of the ESMPs for the monitoring and evaluation of environmental and social impacts and the level or progress of their mitigation,
- ▶ The contractor shall ensure that construction materials such as sand, quarry stone, soils or any other construction materials are acquired from approved suppliers and that the production of these materials by the suppliers or the contractor does not violate the environmental regulations or procedures. The contractor will restore any extraction sites prior to completing works. Site restoration is considered as part of works,
- ▶ The movement and transportation of construction materials to and within the construction sites shall be done in a manner that generates minimum impacts on the environment and on the community, as required by the ESMP,

- ▶ Construction materials shall be stored in a manner to ensure that:
  - There is no obstruction of service roads, passages, driveways, and footpaths,
  - Where it is unavoidable to obstruct any of the service paths, the contractor shall provide temporary or alternate by-passes without inconveniencing the flow of traffic or pedestrians,
  - There is no obstruction of drainage channels and natural water courses,
  - There is no contamination of surface water, ground water or the ground,
  - There is no access by public or unauthorized persons, to materials and equipment storage areas,
  - There is no access by staff, without appropriate protective clothing, to materials and equipment storage areas,
  - Access by public or unauthorized persons, to hazardous, corrosive, or poisonous substances including asbestos lagging, sludge, chemicals, solvents, oils, or their receptacles such as boxes, drums, sacks, and bags is prohibited.
- ▶ Access by staff, without the appropriate protective clothing, to hazardous, corrosive, or poisonous substances including asbestos lagging, sludge, chemicals, solvents, oils, or their receptacles such as boxes, drums, sacks, and bags is prohibited.
- ▶ Construction waste includes but is not limited to combustion products, dust, metals, rubble, timber, water, wastewater, and oil. Hence construction waste constitutes solid, liquid, and gaseous waste and smoke,
- ▶ In performing his activities, the contractor shall use the best practical means for preventing emissions of noxious or offensive substances into the air, land, and water. He shall make every effort to render any such emissions (if unavoidable) inoffensive and harmless to people and the environment. The means to be used for making the emissions harmless or for preventing the emissions shall be in accordance with the ESMPs and with the approval of the relevant Local Authority or EMA,
- ▶ The contractor shall comply with the regulations for disposal of construction/demolition wastes, wastewater, combustion products, dust, metals, rubble, and timber. Wastewater treatment and discharge will conform to the applicable regulations by the relevant guidelines,
- ▶ Asbestos wastes, PCBs and other hazardous wastes shall be treated and disposed of in conformity with the national regulations and World Bank Group standards where applicable, with the supervision of qualified personnel,
- ▶ The contractor shall protect the health and safety of workers by providing the necessary and approved protective clothing (to include at a minimum safety boot (with steel toe cap), hard hat and high visibility vest. Eye and ear protection will be required if operating power tools and dust masks if mixing concrete on site) and by instituting procedures and practices that protect the workers from dangerous operations. The contractor shall be guided by and shall adhere to the relevant national Labour Regulations for the protection of workers. Appropriate information and awareness on HIV/AIDS shall be conducted at each construction site.

## APPENDIX 9 TEMPLATES FOR ENVIRONMENTAL & SOCIAL MONITORING PLANS

The following is the template environmental and social monitoring plan for i) solar panel Installation, ii) solar power drive refrigerator installation and iii) minor renovations for the maternity waiting homes, and operating theatres. Project activity proponents or contractors should identify the pertinent matters based on their PIE approved ESMP, delete any that are irrelevant and add any that are necessary but missing in the template.

**Table APP 9.1** *Environmental Monitoring Template for Installation and Fuelling/Maintenance Activities*

No.	ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	POSITIVE INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
1.	Noise	Noise monitoring should be carried out on an ad-hoc basis by the Environmental Officer from EMA to monitor noise levels in the work areas. The relevant noise level standards are in the General EHSG.	<ul style="list-style-type: none"> <li>Noise Levels</li> </ul>	<ul style="list-style-type: none"> <li>Noise levels at the nearest sensitive receiver would be kept to a minimum so as not to disturb the piece of the patients.</li> <li>Level of noise complying with the work time (7am-6pm)</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly and ongoing as project is implemented.</li> </ul>	<ul style="list-style-type: none"> <li>PIE</li> <li>MoHCC</li> <li>EIA Department of EMA</li> </ul>
4.	Air Pollution	Observations should be made on the level of dust generated during the renovation and rehabilitation activities by the Environmental Monitor or PIE. Dampening should be carried out if levels are unacceptable.	<ul style="list-style-type: none"> <li>Levels of dust emissions</li> </ul>	<ul style="list-style-type: none"> <li>Deposition of dust on surfaces should decrease with increased dampening</li> <li>Level of pollution vs national and WB standard</li> <li>Number of speed control ramps with appropriate road signs in case of roads</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly</li> </ul>	<ul style="list-style-type: none"> <li>EMA</li> <li>MoHCC</li> <li>PIE</li> <li>RDCs</li> </ul>

No.	ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	POSITIVE INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
6.	Complaints	The PIE should inspect the record of complaints made by residents, to be kept by the beneficiaries, and should check that action is taken quickly and that the number of complaints does not rise significantly. The GRM should be employed.	<ul style="list-style-type: none"> <li>▶ Complaints</li> </ul>	Speed with which PIE resolves cases. Conforming with the stipulations of 3 working days for priority 1 and 3 working weeks for priority 2.	Quarterly	<ul style="list-style-type: none"> <li>▶ PIE</li> <li>▶ MoHCC</li> <li>▶ RDCs</li> <li>▶ EIA Department</li> </ul>



**Table APP 9.2 Environmental Monitoring Template for Vaccinations**

No.	ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
1.	AEFI	Get the numbers from MCAZ	<ul style="list-style-type: none"> <li>Health of vaccination recipients</li> </ul>	Number and types of cases among staff.	<ul style="list-style-type: none"> <li>quarterly and ongoing as project is implemented</li> </ul>	<ul style="list-style-type: none"> <li>PIE</li> <li>MoHCC</li> <li>RDCs</li> <li>Local Leadership</li> </ul>
2.	Medical Waste and Hazardous materials Management	<ul style="list-style-type: none"> <li>The PIE Environmental Specialist must ensure that all Health Facilities are aware of the developed ICWMP and start implementing it.</li> <li>All Health Facilities must make sure their waste treatment facilities are operating well or that the waste is transported to the nearest facility with a functional Incinerator.</li> </ul>	<ul style="list-style-type: none"> <li>Hazardous materials used and generated during the provision of COVID-19 diagnosis, care, and treatment services</li> <li>Hazardous Laboratory reagents such as formaldehyde, at Health care centres</li> </ul>	<ul style="list-style-type: none"> <li>Number of facilities implementing ICWMP requirements.</li> <li>Number of Incinerators and other treatment facilities working properly.</li> <li>Number of HCW trained in handling Home Based Health Care Waste.</li> <li>Availability of hazardous material management procedures and reporting of incidents.</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly and ongoing as the Health Care Facilities are operating.</li> </ul>	<ul style="list-style-type: none"> <li>PIE</li> <li>MoHCC - Environmental Health Dept.</li> <li>Health Facility</li> <li>Local EMA Officer</li> </ul>

No.	ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
		<ul style="list-style-type: none"> <li>▶ The PIE, MOHCC and EMA to check availability of incinerator licences at facility level</li> <li>▶ The PIE, MOHCC and EMA to check availability hazardous waste transportation licences</li> <li>▶ PIE to check on availability of appropriate PPE for Incinerator operators</li> </ul>	<ul style="list-style-type: none"> <li>▶ Hazardous waste treatment and disposal</li> <li>▶ Hazardous waste transportation</li> <li>▶ Handling and Operation of the incinerator</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of facilities with hazardous waste incinerator licences</li> <li>▶ Percentage of Facilities with appropriate PPE for incinerator operators</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ongoing during project implementation</li> </ul>	<ul style="list-style-type: none"> <li>▶ PIE</li> <li>▶ MOHCC</li> <li>▶ EMA</li> </ul>
	<ul style="list-style-type: none"> <li>▶ PIE, MOHCC and EMA to screen facilities for historical contamination of land</li> <li>▶ Contamination of land due to past and present improper hazardous waste disposal</li> <li>▶ Number of facilities with past and present land contamination</li> <li>▶ Ongoing</li> <li>▶ PIE</li> <li>▶ MOHCC</li> <li>▶ EMA</li> </ul>					

No.	ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
3.	<b>Exclusion of Vulnerable people</b>	<ul style="list-style-type: none"> <li>▶ PIE will check and make sure that vulnerable groups are being catered for in each Health facility by checking the numbers being served</li> <li>▶ PIE will follow-up in areas known to have IPs to make sure they are catered for.</li> </ul>	<ul style="list-style-type: none"> <li>▶ The poor, elderly, indigenous peoples, and people living with a disability with no access to social media.</li> <li>▶ Vulnerable people in remote areas.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of programme packages geared to reach out to the vulnerable.</li> <li>▶ Availability of Clear Communication materials targeting the vulnerable.</li> <li>▶ testing and treatment centres being disability inclusive</li> </ul>	<ul style="list-style-type: none"> <li>▶ quarterly and ongoing as the Health Care Facilities are operating</li> </ul>	<ul style="list-style-type: none"> <li>▶ PIE</li> <li>▶ MoHCC - Environmental Health Dept.</li> <li>▶ Health Facility</li> </ul>
4.	Staff Contracting COVID-19 at work (including staff administering vaccines, cleaners, etc.)	<ul style="list-style-type: none"> <li>▶ PIE will make sure that there is continuous regular testing of all staff involved in COVID diagnosis and treatment.</li> <li>▶ Records of these tests should be shared with PIE for its assessments.</li> <li>▶ The PIE will make sure that all workers are trained on special occupational health and safety guidelines and practices to follow during the COVID-19 crisis in line with WB &amp; WHO guidelines.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Provision of appropriate and adequate PPE for all staff including VHWS.</li> <li>▶ Knowledge of Safety precautions by workers</li> <li>▶ OHS issues</li> <li>▶ Personal Hygiene for staff</li> <li>▶ Protective measures for staff.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Number of staff with COVID-19</li> <li>▶ Safety precautions being enforced</li> <li>▶ Number and adequacy of PPE available</li> <li>▶ Number of accidental pricks (of staff)</li> <li>▶ Number of staff trained in special COVID-19 occupational health and safety guidelines and practices</li> </ul>	<ul style="list-style-type: none"> <li>▶ continuous and quarterly testing</li> </ul>	<ul style="list-style-type: none"> <li>▶ PIE</li> <li>▶ MoHCC</li> <li>▶ Health Facility</li> </ul>

No.	ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
5.	Water Pollution	<ul style="list-style-type: none"> <li>▶ The PIE Environmental Specialist together with the Environmental Health department of MoHCC will do continuous inspections of facilities to check if there are any unexpected discharges of effluents into the environment.</li> <li>▶ PIE will ensure that Environmental Health department of MoHCC is continuously monitoring the drugs and chemicals storage facilities.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Discharge of poor-quality effluents into the environment</li> <li>▶ Waste storage poor and getting washed away</li> <li>▶ Accidental release of hazardous solvents from laboratories</li> </ul>	<ul style="list-style-type: none"> <li>▶ Level of Management at Laboratories</li> <li>▶ Quality Monitoring of water bodies close to facility</li> <li>▶ Level of maintenance of chemical storage areas</li> <li>▶ Availability of spill mitigation equipment.</li> </ul>	<ul style="list-style-type: none"> <li>▶ continuous and quarterly</li> </ul>	<ul style="list-style-type: none"> <li>▶ PIE Environmental Specialist.</li> <li>▶ MoHCC - Environmental Health Dept.</li> <li>▶ Health Facility</li> </ul>

No.	ISSUE	METHOD OF MONITORING	AREAS OF CONCERN	INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
7.	Sanitation	<ul style="list-style-type: none"> <li>Facilities to report any deviations or agreed follow-up matters from the facility ICWMP.</li> </ul>	<ul style="list-style-type: none"> <li>Poor sanitary conditions at vaccination centres related to vaccination services.</li> <li>Improper management of wastewater related to vaccination services.</li> </ul>	<ul style="list-style-type: none"> <li>Provision of safe water, sanitation, and hygienic conditions related to vaccination services.</li> <li>Availability of enhanced cleaning arrangements, including deep cleaning related to vaccination services.</li> <li>Availability of proper PPE for cleaning staff for vaccination services.</li> </ul>	<ul style="list-style-type: none"> <li>quarterly</li> </ul>	<ul style="list-style-type: none"> <li>PIE</li> <li>MoHCC - Environmental Health Dept.</li> <li>Health Facility</li> </ul>
8.	Complaints	The PIE should inspect the record of complaints made by residents, to be kept by the beneficiaries, and should check that action is taken quickly and that the number of complaints does not rise significantly. The GRM should be employed.	<ul style="list-style-type: none"> <li>Complaints</li> </ul>	Number of Cases resolved within stipulated time frame of 3 working days for priority 1 and 3 working weeks for priority 2.	quarterly	<ul style="list-style-type: none"> <li>PIE Social Safeguards Specialist</li> <li>MoHCC</li> <li>EIA Department.</li> </ul>

## APPENDIX 10 EXPECTED LABORATORY SAFETY FEATURES AND CHECKLIST

Laboratories receiving support under the project (including procurement of reagents or materials) are encouraged to complete this checklist, using it as a self-audit to help ensure that personnel are proactively addressing concerns about chemical hazards and potential health exposures. The National Microbiology Reference Laboratory (NMRL) expected to be supported is deemed to have biosafety level (BSL) 3 because of the nature of its equipment. District and provincial labs by virtue of the nature of their equipment are considered to have biosafety level 2 containment. Genomic sequencing requires BSL-2.

The checklist below contains safety considerations for BSL-2 labs therefore in meeting these standards which are more stringent, a lab will adequately meet the needs of the BSL-1 and 2 activities allowed under the project. Outlined below are basic rules for operating a laboratory at BSL-2. This is not comprehensive. Refer to the references below for additional rules that may apply to the lab's specific research and activities. After the BSL-2 Checklist is the BSL-3 Checklist which only applies to the NMRL as no project activities must require any BSL above 2. All requirements in each checklist are superseded by World Bank Environment, Health and Safety Guidelines which prevail in any conflict. The Principal Investigator (PI) is ultimately responsible for the enforcement of these practices. Contact an EH&S biosafety officer for assistance.

### BSL-2 Checklist<sup>67</sup>

FACILITY #s \_\_\_\_\_ ROOM \_\_\_\_\_

PRINCIPAL INVESTIGATOR (PI) # \_\_\_\_\_ PI PHONE \_\_\_\_\_

PERSON COMPLETING CHECKLIST: \_\_\_\_\_

No.	CHECKLIST ISSUE	POTENTIAL MITIGATION MEASURES
<b>1.0</b>	<b>Access</b>	
1.1	Keep lab doors closed and post a BSL-2 (or BSL-3 if this is for the NMRL) biohazard warning sign while infectious agents are in use.	
1.2	Store infectious agents in a lockable freezer or lab room.	
<b>2.0</b>	<b>Training Checklist</b>	
2.1	Do laboratory personnel receive specific laboratory safety instruction for the activities they are involved with? The PI and lab staff must complete EH&S Biosafety training every three years. The PI must ensure and document lab-specific biosafety training and demonstrated proficiency for lab personnel.	
2.2	The EH&S Bloodborne Pathogens training is required if working with human source material or bloodborne pathogens (e.g., Hepatitis C Virus, HIV).	
<b>3.0</b>	<b>Facilities</b>	
3.1	Chairs and other furniture are covered in a non-fabric, non-porous material that can easily be decontaminated. .	
3.2	No carpets or rugs permitted.	
3.3	A sink for hand washing must be available.	

<sup>67</sup> Source is BIOSAFETY LEVEL 2 (BSL-2) LABORATORY PRACTICES, [BSL2-info.pdf \(washington.edu\)](#) accessed Oct 5, 2022.

<b>4.0</b>	<b>Aerosol Containment</b>	
4.1	Perform aerosol-generating procedures (e.g., vortexing, sonicating, pipetting, harvesting infected tissues from animals) inside a certified biological safety cabinet (BSC).	
<b>5.0</b>	<b>Decontamination</b>	
5.1	Decontaminate all cultures, stocks, biohazardous waste, and other potentially infectious materials prior to disposal using an appropriate method such as autoclaving or chemical disinfection. Decontaminate work surfaces and lab equipment after completion of work and after spills or splashes.	
<b>6.0</b>	<b>Sharps</b>	
6.1	Collect sharps in a red plastic sharps container. If needles are used, do not bend, shear, break, recap, or otherwise manipulate by hand before disposal. Package non-disposable sharps in a hard-sided container for decontamination.	
<b>7.0</b>	<b>Personal Protective Equipment (PPE) Checklist</b>	
7.1	Are laboratory staff supplied with the following standard BSL-2 PPE to be worn when working with infectious agents: gloves, eye protection and dedicated lab coats.  Other PPE may be required based on specific lab activities. PPE is not to be worn in public areas.	
<b>8.0</b>	<b>Transport</b>	
8.1	Place biohazardous waste in a leak-proof secondary container labeled with a biohazard symbol.	
8.2	Decontaminate the outside of the container prior to transport since PPE should not be needed for transport	
<b>9.0</b>	<b>Emergency Preparedness Checklist</b>	
9.1	Are there emergency eyewashes at the Laboratory?	
9.2	Are there emergency showers at the Laboratory?	
9.3	is there someone responsible for flushing the eyewashes each week?	
9.4	Is there a protocol for dealing with an accidental exposure to a hazardous chemical?	

### BSL-3 Checklist

This checklist is only for the NMRL.

FACILITY: NMRL\_\_\_\_\_ROOM  
#s\_\_\_\_\_

PRINCIPAL INVESTIGATOR (PI)\_\_\_\_\_PI PHONE  
#\_\_\_\_\_

PERSON COMPLETING CHECKLIST\_\_\_\_\_

DATE OF LAST PLAN REVISION\_\_\_\_\_



No.	CHECKLIST ISSUE	POTENTIAL MITIGATION MEASURES
<b>1.0</b>	<b>Experiment Planning, SOP Checklist</b>	
	Is an approval required before conducting an experiment?	
1.1	Are chemical experiments thoroughly researched before they are applied?	
1.2	Are the resources used for planning experiments and bench-top operations readily available?	
<b>2.0</b>	<b>Training Checklist</b>	
2.1	Do laboratory personnel receive specific laboratory safety instruction for the activities they are involved with?	
2.2	Have all laboratory staff obtained formal hazardous waste/ material training from a recognized accreditation body?	
<b>3.0</b>	<b>Chemical Inventory, Storage, Labelling Checklist</b>	
3.1	Is the chemical inventory kept completed, up to date, and available for inspection?	
3.2	Are chemical reagents segregated by compatibility/reactivity?	
3.3	Are hazardous liquids stored in secondary containment?	
3.4	Are all chemicals and solutions properly labelled?	
<b>4.0</b>	<b>Hazardous Waste Checklist</b>	
4.1	is hazardous waste being properly collected and managed?	
4.2	Is the hazardous waste inspection log being checked weekly?	
4.3	are old, unwanted, or expired chemicals are promptly submitted for proper disposal?	
<b>5.0</b>	<b>Chemical Hazard Information checklist</b>	
5.1	Are hard copies of Material Safety Data Sheets (MSDS) and other chemical hazard information located where its accessible to all staff?	
5.2	Is there a readily accessible computer/printer that all staff can use to internet access any additional chemical hazard resources and MSDS?	
5.3	Are all staff made aware of useful web links?	
<b>6.0</b>	<b>Ventilation checklist</b>	
6.1	Are there sufficient, operational chemical fume hood(s), located in the laboratories?	
6.2	Are the fume hoods working properly?	
6.3	Is there a routine of maintaining the fume hoods?	
6.4	Are all hazardous chemicals used inside the fume hood(s)?	
6.5	If not sure whether a particular chemical must be used in a hood rather than on the bench-top, is there a way we ask or look up toxicity and other information?	

No.	CHECKLIST ISSUE	POTENTIAL MITIGATION MEASURES
<b>7.0</b>	<b>Personal Protective Equipment (PPE) Checklist</b>	
7.1	Are laboratory staff supplied with the following PPE: gloves, goggles, aprons, lab coats, face shields and other PPE?	
7.2	Is information about which PPE is suitable for different chemicals readily available?	
7.3	Is there a "work-related health" contact person at the laboratory?	
<b>8.0</b>	<b>Emergency Preparedness Checklist</b>	
8.1	Are there emergency eyewashes at the Laboratory?	
8.2	Are there emergency showers at the Laboratory?	
8.3	Is there someone responsible for flushing the eyewashes each week?	
8.4	Are there emergency contingency plans, strategically posted around the laboratories?	
8.5	Are means of communication readily accessible, e.g., telephones?	
8.6	Is there emergency spill equipment at the laboratories?	
8.7	Are the nearest fire alarm pull stations conveniently located?	
8.9	Are there fire extinguishers in the laboratories?	
8.10	Is there a protocol for dealing with an accidental exposure to a hazardous chemical?	

## APPENDIX 11 REQUIREMENTS WHEN WORKING WITH ASBESTOS MATERIALS<sup>68</sup> AND CONTAMINATED LAND REQUIREMENTS WHEN WORKING WITH ASBESTOS

### A. Evaluation of alternatives

1. Determine if the project could include the installation, replacement, maintenance, or demolition of:
  - ▶ Roofing, siding, ducts, or wallboard
  - ▶ Thermal insulation on pipes, boilers, and ducts
  - ▶ Plaster or fireproofing
  - ▶ Resilient flooring materials
  - ▶ Other potentially asbestos-containing materials
3. In many cases, it can be presumed that ACM are part of the existing infrastructure that must be disturbed. If there is a need to analyse samples of existing material to see if it contains asbestos, provide information on how and where that can be arranged.
4. Once the presence of ACM in the existing infrastructure has been presumed or confirmed and their disturbance is shown to be unavoidable, incorporate the following requirements in tenders for construction work in compliance with applicable laws and regulations.

### B. Understanding the regulatory framework

1. Review the host country laws and regulations and the international obligations it may have entered (e.g., ILO, Basel conventions) for controlling worker and environmental exposure to asbestos in construction work and waste disposal where ACM are present. Determine how the qualifications of contractors and workers who maintain and remove ACM are established, measured, and enforced.
2. Determine whether licensing and permitting of the work by authorities is required.
3. Review how removed ACM are to be disposed of to minimize the potential for pollution, scavenging, and reuse.
4. Incorporate the following requirements in tenders involving removal, repair, and disposal of ACM.

### C. Considerations and possible operational requirements related to works involving asbestos.

#### 1. Contractor qualification

- ▶ Require that contractors demonstrate having experience and capability to observe international good practice standards with asbestos, including training of workers and supervisors, possession of (or means of access to) adequate equipment and supplies for the scope of envisioned works, and a record of compliance with regulations on previous work.

#### 2. Related to the technical requirements for the works

- ▶ Require that the removal, repair, and disposal of ACM shall be carried out in a way that minimizes worker and community asbestos exposure and require the selected contractor to develop and submit a plan, subject to the engineer's acceptance, before doing so.
- ▶ Describe the work in detail in plans and specifications prepared for the specific site and project, including but not limited to the following:

<sup>68</sup> World Bank, Operations Policy, and Country Services

- Containment of interior areas where removal will occur in a negative pressure enclosure,
  - Protection of walls, floors, and other surfaces with plastic sheeting,
  - Construction of decontamination facilities for workers and equipment,
  - Removing the ACM using wet methods, and promptly placing the material in impermeable containers,
  - Final clean-up with special vacuums and dismantling of the enclosure and decontamination facilities,
  - Disposal of the removed ACM and contaminated materials in an approved landfill,
  - Inspection and air monitoring as the work progresses, as well as final air sampling for clearance, by an entity independent of the contractor removing the ACM.
- ▶ Other requirements for specific types of ACM, configurations and characteristics of buildings or facilities, and other factors affecting the work shall be enumerated in the plans and specifications. Applicable regulations and consensus standards shall be specifically enumerated.

### 3. Related to contract clauses

- ▶ Require that the selected contractor provide adequate protection to its personnel handling asbestos, including respirators and disposable clothing.
- ▶ Require that the selected contractor notifies the relevant authorities of the removal and disposal according to applicable regulations as indicated in the technical requirements and cooperates fully with representatives of the relevant agency during all inspections and inquiries.

### 4. Related to training and capacity building

- ▶ Determine whether specialist industrial hygiene expertise should be hired to assure that local contractors learn about and apply proper protective measures in work with ACM in existing structures.

## D. Guidance for prevention, minimization, and control of impacts from ACM

- ▶ Avoiding the use of asbestos containing materials (ACM) in renovation activities.
- ▶ Undertaking an asbestos/hazardous products audit prior to/at the beginning of the refurbishment.
- ▶ If asbestos is located on the project site, mark clearly as hazardous material. When possible, the asbestos will be appropriately contained and sealed to minimize exposure. The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust
- ▶ Use of specially trained personnel to identify and selectively remove potentially hazardous materials (ACMs) in building elements prior to dismantling or demolition,
- ▶ Repair or removal and disposal of existing ACM in buildings should only be performed by specially trained personnel, following, internationally recognized procedures. (WB, 2007)
- ▶ If asbestos material is to be stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately.
- ▶ Managing the treatment and disposal of ACMs according to Sections 1.5 and 1.6 on Hazardous Materials and Hazardous Waste Management, respectively.
- ▶ Transporting ACM in leak-tight containers to a secure landfill operated in a manner that precludes air and water contamination that could result from ruptured containers. (WB, 2007)
- ▶ The removed asbestos will not be reused.

## E. REQUIREMENTS WHEN WORKING CONTAMINATED SOILS

This section provides a summary of management approaches for land contamination due to anthropogenic releases of hazardous materials, wastes, or oil, including naturally occurring substances. Releases of these materials may be the result of historic or current site activities, including, but not limited to, accidents during their handling and storage, or due to their poor management or disposal.

Contaminated land is of concern because of the potential risks to human health and ecology, and the liability it may pose to the polluter/ health facility owners.

Contamination of land should be managed to avoid risk to health and ecological receptors. The preferred strategy for land decontamination is to reduce the level of contamination at the site while preventing the human exposure to contamination.

When the three risk factors are present (despite limited data) under current or foreseeable future conditions, the following steps should be followed:

### 1. Risk screening

This step is also known as "problem formulation" for environmental risk assessment. Where there is potential evidence of contamination at a site, the following steps are recommended:

Identification of the location of suspected highest level of contamination through a combination of visual and historical operational information;

Sampling and testing of the contaminated media (soils or water) according to established technical methods applicable to suspected type of contaminant

Evaluation of the analytical results against the local and national contaminated sites regulations. In the absence of such regulations or environmental standards, other sources of risk-based standards or guidelines should be consulted to obtain comprehensive criteria for screening soil concentrations of pollutants.

Verification of the potential human and/or ecological receptors and exposure pathways relevant to the site in question

### 2. Interim risk management

Interim risk management actions should be implemented at any phase of the project life cycle if the presence of land contamination poses an "imminent hazard", i.e., representing an immediate risk to human health and the environment if contamination were allowed to continue, even a short period of time.

### 3. Detailed quantitative risk assessment, and

As an alternative to complying with numerical standards or preliminary remediation goals, and depending on local regulatory requirements, a detailed site-specific, environmental risk assessment may be used to develop strategies that yield acceptable health risks, while achieving low level contamination on-site. An assessment of contaminant risks needs to be considered in the context of current and future land use, and development scenarios

### 4. Permanent risk reduction measures.

The underlying principle is to reduce, eliminate, or control any or all the three risk factors. Regardless of the management options selected, the action plan would include, whenever possible, contaminant source reduction (i.e., net improvement of the site) as part of the overall strategy towards managing health risks at contaminated sites, as this alone provides for improved environmental quality. The mitigation measures would include ground water, surface water and leachate management, risk mitigation measures for receptors, and pathways.

### 5. Occupational Health Safety Considerations

Investigation and remediation of contaminated lands requires that workers be mindful of the occupational exposures that could arise from working in close contact with contaminated soil or other environmental media (e.g., groundwater, wastewater, sediments, and soil vapor). Occupational health and safety precautions should be exercised to minimize exposure, as described in Section 2 on Occupational Health and Safety. In addition, workers on contaminated sites should receive special health and safety training specific to contaminated site investigation and remediation activities.

## APPENDIX 12 GENDER BASED VIOLENCE AND SEXUAL EXPLOITATION ABUSE AND HARASSMENT

### Action Plan for the HSDSP AF V and ZCEREHSP Projects

This Action Plan is derived from a review of every recommendation presented in the ESMF and for activities to mitigate any social risks that may arise during implementation of the two projects.

The primary actions include:

- Development of materials that incorporate or raise awareness of GBV/SEA-H
- Build capacity of health care workers, contractors, and communities on GBV and SEA and H.
- Raise awareness on reporting of GBV/SEA-H such as well as referrals
- Strengthen operational processes to address GBV/SEA and H
- Raise awareness internally and externally
- Ensure continuous learning to improve capacity to address GBV/SEA-H issues during project implementation and beyond

Detailed activities derived from these broad thematic areas are presented below.

### *Gender Based Violence and Sexual Exploitation Abuse and Harassment*

#### *Plan- January 2022- April 2023*

Thematic Area	Detailed activity	Timeline	Responsible person
Build capacity of health care workers, contractors, and communities on GBV/SEA-H	- Train contractors on GBV/ SEA-H upon engagement and Code of Conduct (CoC) requirements	As soon as they are contracted On-going	Social Safeguards Specialist, Environmental Specialist and Communications Specialist
	- Train and sensitize community and project workers on GBV/ SEA-H - Workers to affirm CoC	Q1 2022	
	- training of staff on SEA-H risks	Q4 2021- Q1 2022	

Thematic Area	Detailed activity	Timeline	Responsible person
Raise awareness internally and externally	- Incorporate GBV/SEA-H in all planned ESMF trainings as well as RCCE activities	On-going	Environmental Specialist, Social Safeguards Specialist and Communication Specialist and Cordaid Staff
	- Conduct Community discussion forums with local and traditional leaders, school heads to share information about GBV, SEA-H and GRM (priority for the Tshwa and Doma districts)	Q1-4 2022	Social Safeguards Specialist and Communication Specialist
	- Conduct sensitization meeting with influencers - Conduct meetings with local level referral pathway players	Q1-2, 2022	Social Safeguards Specialist and Communication Specialist
	- Incorporate GBV/SEA-H messaging and awareness in interpersonal communication campaigns (IPC) planned under the COVID-19 component	Q1-2, 2022	Communication Specialist
	- Promote early reporting and community psychosocial support for victims of GBV/SEA/SH including linkages/referrals to care	Q1 2022- Q22023	Social Safeguards Specialist and Communication Specialist



Thematic Area	Detailed activity	Timeline	Responsible person
Strengthen operational processes to address GBV/SEA-H	<ul style="list-style-type: none"> <li>- Inclusion of GBV/SEA-H in the current development of the GRM system</li> </ul>	Q4 2021- Q1 2022,	Social Safeguards Specialist
Mapping of referral pathways	<ul style="list-style-type: none"> <li>- forge strategic alliances with local women's support groups, organizations and institutions that can provide the timely and immediate support that girls and women require</li> <li>- The project will identify and work with already existing GBV-SEA/H service providers (health, phycological &amp; legal) in the project area and ensure that GBV-SEA/H referral pathway is operation.</li> <li>- Review of existing GBV-SEA/H service provider referral lists</li> <li>- Disseminate the referral pathways to stakeholders, including service providers</li> </ul>	Q1 2022-Q2 2023	Team leader, Social Safeguards Specialist and Communication Specialist
Development of IEC material on GBV/SEA-H	<ul style="list-style-type: none"> <li>- Inclusion of GBV/SEA-H in project IEC materials to be produced</li> </ul>	Q1-2022 under Urban Voucher and Q2 for Rural RBF	Communication Specialist
Incorporate GBV-SEA/H risk in Project ESMPs	Where ESMPs are developed, incorporate consideration for GBV/SEA/H in the ESMP	Ongoing	Env Specialist and Social Safeguards Specialist

## APPENDIX 13 VACCINE EMERGENCY PREPAREDNESS AND RESPONSE

### A. Prevention and Preparation:

Preventing a vaccine emergency is preferable to having to respond to one. The following are steps to prepare and avoid the most common Cold Chain Breaks and vaccine fridge and handling issues:

1. Check and record fridge temperatures twice daily. contact Cold Chain Technician right away for advice if temperatures go out of the +2°C to +8°C cold chain range.
2. Have a latch and/or closure-spring on the fridge door to make sure it closes properly
3. Put "Vaccine Fridge - Do Not Un-Plug" stickers on the fridge, electrical plug receptacle, and fridge circuit breaker on the electrical panel
4. Temperature-buffer (i.e. water bottles, gel blankets) in the fridge to slow temperature changes
5. Keep fridges:
  - ▶ away from hot equipment and out of direct sunlight
  - ▶ level & stable (i.e., adjust the legs if necessary)
6. **Temperature adjustment:** If you need to adjust the FRIDGE and/or FREEZER (even if they're in separate compartments) temperature, to avoid making the fridge too cold/hot make only small changes, then re-check a few hours later to see the results and repeat if needed. Check the Fridge Manual if necessary to confirm how to adjust the temperature.

### Preparing:

7. If possible, pre-arrange an alternate, monitored fridge to move your vaccines to if needed
8. Make sure all Staff responsible for vaccine handling & fridge monitoring know the details of the Vaccine Emergency Plan, their roles in it, and where the office copy is located.

### B Response Steps: Responding to a Vaccine Emergency (fridge/power failure, vaccine handling issue)

If vaccine storage temperatures go out of the +2°C to +8°C range:

1. Quarantine the exposed vaccines:
  - ▶ (If possible) Keep the exposed vaccine under refrigeration. If alternate refrigeration space is not available onsite then take measures to keep the vaccines cool, but not freezing, (e.g., transfer them to a transport cooler with any gel blankets/ ice packs available)
  - ▶ Clearly mark (tag/ label) the vaccines and fridge 'QUARANTINE – Do Not Use Until Further Notice'
  - ▶ Contact EPI Manager for guidance on the next steps to take
  - ▶ Maintain the Quarantine until the EPI Manager provides guidance and follow
  - ▶ Do not discard any vaccines regardless of their condition. If EPI Manager advises that some of the vaccines are unusable then return the exposed products to EPI programme as Cold Chain Break wastage.
2. Investigate Cause(s): Inspect and Correct (if possible)

Simple Causes can be any of the following (e.g., fridge door open, power cord unplugged) correct and continue to monitor

Maximum-Minimum thermometer: Is it displaying the °C or °F scale, the 'OUT' (i.e., fridge temperature)

### 3. Power and Fridge Failures: Vaccine temperature monitoring and recording

- Maintain monitoring throughout a power/ fridge failure and/or vaccine relocation.
- At the time the incident is discovered:
  - ▶ record 'Maximum' or 'Minimum'/ and current temperature from the Maximum-Minimum thermometer then reset or clear it, and
  - ▶ record the date, time, and any other relevant info [e.g., observations/ causes]

-Provide monitoring records/details to EPI Manager as soon as possible to ensure the quickest response possible.

### 4. Fridge Failure: (breakdown or running but unable to maintain temperatures between +2°C and +8°C)

Transfer vaccines to either:

- ▶ A monitored back-up fridge onsite, or
- ▶ (If a back-up fridge is not available) a cooler box with any cold chain supplies (gel blankets, ice packs) available for transfer off-site

### Power failures

Less than 4 hrs – keep the fridge door closed and continue to monitor temperatures

More than 4 hrs – move vaccines to a running back-up, monitored fridge or, if that's not available transfer them to a cooler box with cold chain supplies

