KINGDOM OF LESOTHO

MINISTRY OF HEALTH

Southern Africa Tuberculosis and Health Systems Support Project

VOLUME 1. – THE ESMF

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

Prepared for:
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OTHER REPORTS IN THIS SERIES

This final ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK forms part of a series which is intended to provide complete documentation for the requirements of a holistic management of all forms of environmental and social impacts that may arise from the refurbishments and or upgrading of health care facilities and laboratories in the country.

This report contains the findings of a study conducted in selected institutions across the country and the framework has been developed on the basis of the local conditions and findings.

The following documents form the series:

1. **ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK for the Lesotho TB Control Programme**
   Volume 1: The ESMF

2. **ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK for the Lesotho TB Control Programme**
   Volume 2: Proof of Public Consultation

Report no.	001
Issue no.	001
Date of issue	26/01/16
Prepared	Sibekile Mtetwa
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Approved	

THIS REPORT IS AVAILABLE FROM:

The Minister of Health
Attention: The Secretary of Health
Ministry of Health
Maseru
Lesotho

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LIST OF ABBREVIATIONS

DC	District Commissioner
DEAP	District Environmental Action Plan
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
GDP	Gross Domestic Product
GOL	Government of Lesotho
HIV	Human Immune Deficiency Syndrome Virus
IDA	International Development Agency
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MFDP	Ministry of Finance and Development Planning
MLGC	Ministry of Local Government and Chieftainship
MTEC	Ministry of Environment, Tourism and Culture
NAC	National Aids Council
NEP	National Environmental Policy
NGO	Non-Governmental Organisation
PC	Project Coordinator
PCU	Programme Coordination Unit
PDO	Programme Development Objective
PRS	Poverty Reduction Strategy
RAP	Resettlement Action Plan
ARAP	Abbreviated Resettlement Action Plan
RPF	Resettlement Policy Framework
SIL	Specific Investment Loan.
STI	Sexually Transmitted Illnesses
TA	Technical Assistance / Assistant (according to context)
TB-HSSP	Tuberculosis and Health Systems Support Project

EXECUTIVE SUMMARY

The Government of Lesotho (GoL) through the Ministry of Health's National TB Program is in the process of preparing for a regional TB Control Project (The Tuberculosis and Health Systems Support Project (P155658)), with World Bank technical and financial support. The Tuberculosis and Health Systems Support Project (TB-HSSP) will be implemented over a period of five years in all the ten districts of Lesotho and will comprise various sub-projects with different levels of impact and located at various places within the country. These activities have a bearing on physical and social environments, hence the need to prepare an Environmental and Social Management Framework (ESMF).

The proposed project comprises three components as follows: (i) Prevention, Detection and Treatment of TB, (ii) Regional Capacity for Disease Surveillance, Diagnostics and Management of TB and Occupational Lung Diseases and (iii) Learning, Knowledge and Innovation. Components 1 and 2 are comprised of activities which have a bearing on physical and social environments, hence the need to prepare an Environmental and Social Management Framework (ESMF). The ESMF **was prepared because the location and design of sub-projects were not known and hence the nature and magnitude of the potential impacts would not be known by project appraisal stage.** It was further prepared to fulfil the World Bank safeguard policies, and the Lesotho Environmental management legislative requirements.

A Policy and legal review of Lesotho legislation established that the Health Care system is supported by a host of laws and regulations for the protection of humans and the environment at large. Among them the Lesotho Environment Act, (2001) establishes the Department of Environment as the lead agency in environmental protection. The Department in turn has established Environmental Units within the line Ministries to further institutionalize its functions nationwide. It has also given the line Ministries the responsibilities of protecting the environment in the course of their duties. On the other hand the World Bank Environmental Safeguards Policies require some measures to be taken to protect the physical environment from all forms of degradation and to prevent any potential social impacts.

The principal aim of this ESMF is to identify and evaluate potential environmental and social impacts associated with the Tuberculosis and Health Systems Support Project (TB-HSSP) activities and to provide mitigation measures for such impacts. The ESMF also provides a framework for screening environmental issues for all possible upgrading activities that will be undertaken under each sub-project. It establishes a unified process for addressing all environmental and social safeguards issues in sub-projects from preparation, through review and approval, to implementation.

Lesotho is predominantly mountainous, with the mountain zone covering approximately 65% of the total land area. This land is mostly characterised by steep slopes with fragile soil formations which are extensively degraded. Only 9% of Lesotho’s land is arable and over 80% of this is found in the lowlands, where it is used for many competing land uses which include agriculture only, housing industrial, business etc. This posses a constraint on any possible expansion of the Health care facilities as they will be utilising the scarce land resources.

The proposed refurbishments and construction of healthcare facilities including laboratories will generate several environmental and social impacts from planning, implementation, as well as during operation. This is because these activities may involve some amount of civil works, abstraction and use of natural resources such as water, interaction of many people within the project location area and ultimately impacting on the TB affected miners, ex-miners and even their families. Consequently, several environmental and social components will be affected in one way or the other by the project activities.

The ESMF identified the potential associated impacts and then analysed them, resulting in mitigation measures /or environmental management plans for the potential impacts being proposed. The lead implementing Agent (MoH) with the help of relevant authorities must monitor the environmental effects and the success of mitigation measures. This monitoring is an important part of managing the impacts of the project. It is recommended that an independent team should monitor the implementation of the recommendations of this report. The said team must consist of experts from all spheres of the environment that may be affected.

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 the stakeholders during the entire project period. Training and seminars will also be required for building capacity and awareness in social and environmental issues including effects of TB and HIV/AIDS.

In general the preparation of the ESMF consisted of the following aspects: (i) description of the current project, (ii) review of policy, regulations, institutional framework, (iii) establishment of baseline socio-environmental conditions, (iv) assessment of potential environmental and social impacts, (v) preparation of the environmental mitigation plan and a monitoring plan (vi) assessment of capacity building requirements (vii) estimating an implementation budget for the ESMF and (viii) providing guidelines for preparation, appraisal, approval and implementation of sub-projects. Thus the ESMF ensures that the substantive concerns of the relevant World Bank safeguard policies and the Lesotho legislation will be taken into account during the implementation of the selected Health Care Facility refurbishments.

1. INTRODUCTION

1.1 INTRODUCTION

The Government of Lesotho through the Ministry of Health's National TB Program is in the process of preparing for a regional TB Control Project (The Tuberculosis and Health Systems Support Project (THSSP) (P155658)), with World Bank technical and financial support. As one of the prerequisites for the project through the World Bank, an Environmental and Social Management Framework (ESMF) has to be developed.

The Tuberculosis and Health Systems Support Project will be implemented over a period of five years in all ten districts of Lesotho and will comprise various sub-projects with different levels of impact and located at various places within the country. These activities have a bearing on physical and social environments, hence the need to prepare an Environmental and Social Management Framework (ESMF).

The proposed Tuberculosis and Health Systems Support Project comprises three components as follows: (i) Prevention, Detection and Treatment of TB, (ii) Regional Capacity for Disease Surveillance, Diagnostics and Management of TB and Occupational Lung Diseases and (iii) Learning, Knowledge and Innovation. Components 1 and 2 are comprised of activities which have a bearing on physical and social environments, hence the need to prepare an Environmental and Social Management Framework (ESMF).

This Environmental and Social Management Framework (ESMF) is to be used by the TB programme in order to ensure that all environmental and social safeguards are adequately addressed and that the relevant capacity building and training needs are established in order for the recommended measures to be implemented effectively.

The main purpose of the ESMF is to:

- Identify and evaluate potential environmental and social impacts associated with the project activities and to provide mitigation measures for such impacts.
- establish unified and clear procedures and methodologies for the environmental and social screening, review, approval and implementation of sub-projects to be financed under the TB project;
- Specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to project investments;
- Determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF;
- establish the project funding required to implement the ESMF requirements;
- Provide practical information resources for implementing the ESMF.

This ESMF **was prepared because the location, design and magnitude of impacts of the eventual sub-projects were not yet known at project appraisal stage, even though the types of potential subprojects was fairly well defined.** The ESMF was further prepared to fulfil the World Bank safeguard policies, and the Lesotho Environmental management legislative requirements.

The Framework focuses on the nature and extent of significant adverse environmental and social impacts that may result from any construction and refurbishment activities and the final rolling out of the expanded TB control programme. It further provides a guide for the integration of environmental and social considerations into the planning and implementation of the proposed construction and refurbishment related project activities and also provides a basis for environmental assessments of all sub-projects to be carried out under this proposed financing.

1.2 PROJECT DEVELOPMENT OBJECTIVES

The proposed project is well aligned with the human development and improved service delivery pillar of the Lesotho Country Assistance Strategy (CAS), approved in May 2010. Efforts to reduce barriers to access and utilization of TB control and occupational health services for miners and ex-miners will be supported. Lesotho has some of the highest rates of TB and HIV/AIDS incidence in Southern Africa and the project will directly contribute to efforts to address these two diseases. Human resources for health challenges are severe and the project's support will directly contribute to this result area of the CAS.

The proposed Programme Development Objective (PDO) of the project is to: (i) improve coverage and quality of key TB control and occupational lung disease services in targeted geographic areas of Lesotho; and (ii) to strengthen regional capacity to manage the burden of TB and occupational diseases.

The project thus seeks to strengthen an otherwise neglected area; - occupational health and safety services and compensation services, which are intricately linked to the burden of TB. The project directly strengthens overall regional and national TB control efforts, though it places added focus on TB in mines as one of the key drivers of the TB epidemic.

Primary beneficiaries will be TB-affected individuals and households. More specifically, the project will mainly benefit mining communities, high TB-burden regions and cross-border areas. Mine workers, ex-miners, their families, labour-sending areas, and health workers will be direct beneficiaries. The project will directly benefit women, particularly in the small-scale mining sector.

1.3 APPROACH AND METHODOLOGY

The Environmental and Social Management Framework (ESMF) study is a structured, consistent and continuous process for identifying, assessing, deciding on responses to and reporting on measures taken to remediate the impacts of the Tuberculosis and Health Systems Support Project.

The focus of the assignment was to highlight the potential environmental and social impacts for the planned future activities of the project, and recommend a management plan for addressing potential negative impacts. In order to achieve these targets, the basic tenet of the strategy involved high degree of consultations with the various stakeholders. The rationale of these extensive consultations was to take on board views from a cross section of people, at least from local level, district level, and central government level.

The ESMF study was conducted on the premise that key project activities will entail among other issues, (i) renovation/refurbishment of Health Care facilities, and (ii) supply, installation and commissioning of laboratory equipment. The study was then prepared in accordance with applicable World Bank safeguard policies and Lesotho environmental impact assessment guidelines. The assessment process that was utilized followed the eight steps listed below, to ensure that the procedure is useful, feasible, ethical and accurate:

1. Thorough desk study of the assignment (a review of the conditions of the existing TB Control programme activities)
2. Engagement of all relevant stakeholders including potential sites inspections.
3. Identification and analysis of potential environmental and social impacts the implementation processes will likely trigger and generate.
4. Development of screening process for negative impacts for proposed project sites and project activities.
5. Identification of appropriate mitigation measures for the predicted impacts and compilation of a management plan for addressing environmental and social impacts during implementation, operation and maintenance of the project activities.
6. Preparation of an Environmental and Social Management Plan;
7. Preparation of sub-project guidelines and
8. Availing all field data collected as Justification of conclusions drawn.

Thus consultant assembled and evaluated relevant baseline data related to the physical, biological and socio-cultural environment of the country through literature review, field surveys, investigations, and stakeholder consultations. There are direct environmental impacts associated with the refurbishments, which include clearing of vegetation, Soil erosion and modification of surface relief, Sedimentation of water bodies and drains, Contamination from waste materials e.g. cement, paints, lubricants, fuels and detergents, Modification in flow of surface water /increased runoff, Transmission of diseases, Air pollutants emission from construction machinery, Noise & vibration disturbance. These effects have direct impact on the rivers, soil, vegetation, wildlife, aquatic life, wild lands, and human populations. Indirect impacts include those associated with the regional degradation of the environment impacting on the wider economy.

(i) **Field surveys**.

Site investigations and field surveys were undertaken in selected districts between December 18 2015 and January 15 2016. The consultants visited Mafeteng, Maseru, Leribe, and Mokhohlong districts. The field surveys enabled the consultants to identify the environmental setting of the heath care facilities and programmes, identify some of the existing physical conditions and gaps within the programmes. In addition, the site visits allowed consultations with health Care facility staff and various project beneficiaries on their feelings of the current problems, as well the potential impacts of the proposed Tuberculosis and Health Systems Support Project including the subsequent roll out of the expanded TB control programme.

(ii) Stakeholder consultations.

A series of stakeholder consultations were conducted throughout the study period. Appendix 10 is a list of the stakeholders who were consulted. Some of the consultations were round table discussions and/ or focus group discussions. A questionnaire was also administered during the consultations. Once the draft had been developed it was then presented to the stakeholders at a workshop (see Appendix 10.

The following is a list of the consulted stakeholders:

- Officials in the relevant Government Ministries
    - (i) Ministry of Health (MoH),
    - (ii) Ministry of Finance and Development Planning (MFDP),
    - (iii) Ministry of Labour and Employment (MoLE),

  - (iv) Ministry of Local Government and Chieftainship (MLGC).
  - (vi) Ministry of Environment, Tourism and Culture (MTEC)

- The Health Care Facilities:
  - Referral Hospitals
  - Hospitals
  - Health Centres
  - Private For Profit
  - Private Non-Profit

- Other Related Institutions:
  - Veterinary Clinics
  - Pharmaceuticals
  - Blood Transfusion Services
  - Local Authorities

- Potential programme beneficiaries
  - TEBA
  - Etc

- The NGO community

1.4 FORMAT OF THE REPORT

This framework is organized in nine chapters:-

Chapter One provides background information to the proposed Tuberculosis and Health Systems Support Project (THSSP). It outlines the objectives of the Environmental and Social Management Framework, the project development objectives and the approach and methodology that was taken in developing the framework.

Chapter two provides an overview of the project description such as the justification for the proposed project in Lesotho, the major components of the projects, and the proposed impact areas.

Chapter three describes Lesotho's relevant policies, laws and institutional set up which regulate and manage resource utilization, protection of sensitive areas including marginal lands, land use control and other legislative provisions. It gives an over view of the international conventions which Lesotho is signatory to and outlines the World Bank Environmental Safeguard Policies. It then explains in general terms the institutional set up which supports the regulatory framework.

Chapter four provides an overview of baseline information of Lesotho's key environmental resources such as land resources, water resources and biological resources. It then gives the general Lesotho Socio-economic conditions, a breakdown of the Lesotho Health Care System and baseline information for the selected health care facilities.

Chapter five outlines the nature and scopes of the proposed activities under the proposed project, the environmental components likely to be affected by the project activities, the nature and potential sources of the main environmental and social impacts in the implementation and operation of the project activities.

Chapter Six outlines the typical environmental management plan for the impacts for integration into the TB Control related project activities. The plan includes responsible authorities for collaboration in the implementation of the mitigation measures. The chapter includes recommendations of appropriate monitoring activities by different stakeholders at local level, district level and national level to ensure compliance to mitigation measures.

The Chapter also describes the screening process. It is the procedure for ensuring that environmental and social potential impacts are adequately addressed through the institutional arrangements and procedures used by the Tuberculosis and Health Systems Support Project (THSSP) for managing the identification, preparation, approval and implementation of sub-projects. It also provides a step by step screening process for sites for future sub-projects

It further outlines the monitoring Plan. The lead implementing Agent (MoH) with the help of relevant authorities must monitor the environmental effects of project implementation and the success of mitigation measures. This should be done by an independent team of experts drawn from all spheres of the environment that may be affected.

Chapter seven describes the relevant environmental and social training and capacity building measures for stakeholders at all levels to adequately participate in the implementation. The chapter includes specific training activities for the stakeholders and the cost estimates to facilitate the training programme. The chapter also gives a summary of the costs required for training and the sources of funding for the other project activities

Chapter Eight describes the funding arrangements and gives a budget for the implementation of the ESMF. It also describes the implementation plan by providing information on the proposed implementation arrangements, particularly at the sub-project level where all the activities will take place..

Chapter nine provides the implementing schedule and the reporting requirements for all the environmental and social activities

Chapter Ten Provides a conclusion of the findings of the ESMF drawing from the analysis of the preceding chapters.

Bibliographies, The literature which was used in the study is then listed and,

Appendices; Ten appendices are then attached at the end of the report covering (i) the environmental and social screening form, (ii) Environmental and social field appraisal form, (iii) Guidelines for an ESMP, (iv) ESMF Reporting Form. (v) Guidelines for annual reviews, (vi) Guidelines for annual report, (vii) Summary of World Bank Safeguards Policies, (viii) Environmental Guidelines for contractors, (ix) Typical Sub-project ESMPs (x) Record of Public Communication/meetings.

Of particular note Appendix 10 describes the Public Consultation process that was undertaken in the current study. It then sets out the Public Consultation plan to be followed throughout the project implementation process. In the process it outlines the importance of continuous consultation with relevant stakeholders throughout the project implementation cycle to ensure the success of the project. It identifies the measures which need continuous consultations and then defines the structure of the consultations and the reporting and disclosure requirements.

2. DESCRIPTION OF THE PROJECT

2.1 PROJECT DESIGN CONSIDERATIONS

The broad design considerations for the project includes three mutually reinforcing components which will assist Lesotho on its part, to mount an effective response to the burden of TB, with emphasis on TB in the mining sector. The project will apply the following approaches:

(i) Using a phased project implementation approach to enable the roll-out of the interventions gradually before going to full scale;

(ii) Targeting the poor and vulnerable with evidence-based interventions via innovative service delivery strategies. The project will provide targeted interventions to underserved populations with a high burden of TB, using innovative delivery strategies.

(iii) Strengthening TB and occupational health services as well as broader health systems. These include strengthening laboratory systems, skilled human resources and disease surveillance capacity, whose benefits cut-across health systems.

Implementation and coordination arrangements would be as simple as possible; performance-based with clear responsibilities and accountability; and strategies to encourage innovations and scaling up of successful interventions would be incorporated.

2.2 PROJECT STRUCTURE

The International Development Association (IDA) is financing the Southern Africa Tuberculosis and Health Systems Support Project (P155658). The project will be effected in four countries; Lesotho, Malawi, Mozambique, and Zambia. Lesotho will be supported by an amount of US$15 million equivalent.

The project objectives will be achieved through the implementation of two technical components and one component dedicated to management, coordination and monitoring. It should be noted that t**he first two technical components raise the principal safeguards issues associated with the project.** The three components of the project are outlined below:

Component 1: Innovative Prevention, Detection, and Treatment of TB (US$48 million)

This component sets out to improve the demand and availability of high-quality TB, TB-HIV/AIDS and occupational lung disease prevention and treatment services in targeted geographic areas of Lesotho. This will be done by:

(i) Enhancing case detection and improving treatment success rates which will be a result of rolling out and implementing a package of standardized TB prevention and treatment services across in the country.

(ii) Rolling out a standardized package of occupational health services and mining safety standards across the country. This will be done by carrying out periodic screening of miners and ex-miners for TB and other occupational lung diseases and also carrying out mine health safety inspections and monitoring, including dust control.

The subcomponent will facilitate linkages and referrals between agencies involved in compensation for occupational lung diseases.

Component 2: Regional Capacity for Disease Surveillance, and Diagnostics and Management of TB and Occupational Lung Diseases (US$42 million)

This component will help strengthen basic health systems to position Lesotho to better manage the TB epidemic and associated infectious diseases. It will improve the quality and availability of human resources, focusing on three critical areas: (i) enhancing case detection and management of TB; (ii) expanding and improving mine health and occupational services; and (iii) strengthening disease surveillance capacity. This will be archived through various training initiatives which include (i) inter-country learning and exchanges, (ii) training in disease surveillance; occupational health, mine health and basic training for community volunteers and civil society groups, (iii) training in the use of modern technology for mine health regulatory inspection.

The component will further strengthen (i) disease surveillance, (ii) diagnostic capacity and networking. (iii) Regulatory capacity of Lesotho. The regulatory strengthening will include updating or drafting will occupational health and safety legislation; reviewing and/or developing guidelines for mine health inspections, occupational health screening protocols, and compensation systems and guidelines; and developing information technology (IT) systems for compliance monitoring and mine health surveillance.

Component 3: Regional Learning and Innovation, and Project Management (US$30 million)

This component supports technical support to strengthen regional capacity and promotes regional innovation through sharing of knowledge and evidence from interventions implemented under components and 1 and 2. In addition, the component supports advocacy for policy reforms and for greater accountability by mining companies on enforcement of occupational and mine health standards.

The key learning activities will include evaluation, documentation, and dissemination of evidence from Lesotho's area which it has selected to provide technical leadership as part of the centers of excellence approach. Lesotho's chosen center of excellence in TB control will be to provide regional leadership in community-based management of MDR-TB.

The project will also fund operating costs for all learning and research related work including video-conferencing and other virtual learning facilities as well as a website for the project to disseminate knowledge.

2.3 POSSIBLE GEOGRAPHIC AREA OF INTERVENTION AND TARGET GROUPS.

Figure 2-1 *Map of Lesotho*

The proposed TB Project activities will be implemented at a national level, covering all the ten districts. However each activity under the work plan will not be implemented in all the districts but certain activities will be implemented in particular districts based on the following selection criteria:

(i) *mining zones* (i.e. focusing on those with substantial risks for TB, such as diamond, Mokhohlong (diamond), Butha buthe (diamond) , Berea (sandstone) and Maseru (crushed stone, quarries
(ii) high TB and *HIV areas*;
(iii) *transport corridor* with large movements of vulnerable groups, miners and refugees; and
(iv) *Congested urban areas* with pockets of poverty that represent a hotbed for transmission like Maseru.

For the current ESMF studies four districts have been selected and these are Leribe, Mokhohlong, Mafeteng and Maseru (Figure 2-1). These have been selected as they are representative of the country, have the largest concentration of potentially infected current local miners, x-miners from South Africa and have been selected for the construction of laboratories and health centers targeted for the referral system of TB patients from South African mines.

3. POLICY, LEGAL AND INSTITUTIONAL FRAMEWORK

3.1 INTRODUCTION

Over the last fifteen years, The Government of Lesotho has adopted a new republican constitution, and a number of new policies and legislation with the ultimate aim of promoting and consolidating sustainable socio-economic development in the country through the mainstreaming of environmental considerations in project planning and implementation. These include: the National Environmental Action Plan, the National Environmental Policy, the National Health Policy, Healthcare Waste Management Policy, The Health Act, the Environmental Act, and Local Government Act among others.

Health is articulated as one of the principles of Equality and Justice in the Constitution of Lesotho of 1993 in Chapter III. These Principles of State Policy articulate the vision and broad policies on socio-economic development and these include the principles of Equality and Justice, Protection of Health, Universal Education, Good Conditions of Work, and Protection of Children and Young people. As regards Health, the Constitution states that Lesotho shall adopt policies aimed at ensuring the highest attainable standard of physical and mental health for its citizens, including policies designed to - (a) provide for the reduction of stillbirth rate and of infant mortality and for the healthy development of the child; (b) improve environmental and industrial hygiene; (c) provide for the prevention, treatment and control of epidemic, endemic, occupational and other diseases; (d) create conditions which would assure to all, medical service and medical attention in the event of sickness; and (e) improve public health.

Government further committed itself to equitable access to standard quality health service in Lesotho in its Vision 2020 statement which reads: “The country will have a good quality health system with facilities and infrastructure accessible and affordable to all Basotho, irrespective of income, disabilities, geographical location and wealth. Health personnel will provide quality health service.”

Thus the National Constitution and the Government expressed vision set a good note for the implementation of good health care delivery for all. The following paragraphs highlight some selected policies and laws which are applicable in the planning and implementation of public sector projects, more especially those in the Health sector:

3.2 POLICIES AND STRATEGIES

Various policies and strategies relevant to the Tuberculosis and Health Systems Support Project have been used to inform this ESMF report and they will be considered in the execution of the Tuberculosis and Health Systems Support Project. The following is a summary of some of the relevant policies and strategies:

3.2.1 Poverty Reduction Strategy (PRS).

The Poverty Reduction Strategy of Lesotho includes the following; employment creation and income generation, Agriculture and Food security, infrastructure development - roads, water, electricity and communication, deepening democracy, governance, Safety and Security, improving quality of and access to essential health-care and social welfare service, improving quality and access to education, managing and conserving the environment and improving public service delivery. The *crosscutting issues are* scaling up the fight against HIV/AIDS and gender, youth and children.

Improving quality of and access to essential health care and social welfare service are a major pillar in the strategy and the TB/HIV project is set to address these same issues.

3.2.2 National Health Policy (2011)

The National Health Policy (2011) commits the Government to equitable access to a standard quality of health services for all. This will be implemented through the District Health Package which provides Essential Health Service package components free of charge or highly subsidized to all citizens. The vision of the policy is to have a healthy nation, living a quality and productive life. Its mission is to enhance a system that will deliver quality health service efficiently, effectively and equitably to all Basotho. The general objectives of the policy include the following:

- To reduce morbidity, mortality and human suffering among the Basotho.
- To reduce inequalities in access to health services.
- To strengthen the pillars of health system

Its overall objectives are expressed in a series of fourteen components which include; (i) Communicable Disease Control (ii) Sexual & Reproductive Health and rights, (iii) child survival and development (iv) Nutrition (v) Environmental Health (vi) Emergency and Humanitarian action (vii) Occupational health (viii) Health Education & Promotion (ix) Pharmaceutical services and medical technologies (x) Oral Health services (xi) Mental Health Services (xii) Clinical, Diagnostic and Nursing Services, (xiii) Referral services outside the country, and (xiv) Traditional Health Services.

Environmental health and Occupational Health are major components of the Policy and the Government committed its self to ensure the same by promoting safe water and sanitation, vector control, workplace safety, waste disposal, food hygiene and port health'. Thus the aims and activities of the Tuberculosis and Health Systems Support Project will directly address the issues in this policy.

3.2.3 Lesotho National Environmental Policy (1998)

The National Environmental Policy (1998) was crafted to protect the environment in the face of all developmental activities that may be undertaken in Lesotho. Its mission is "to promote and ensure that the present and future development of Lesotho is socio-economically and environmentally sustainable", while its goal is to protect and conserve the environment with a view to achieving sustainable development for Lesotho. The policy has sixteen (16) objectives but its main thrust is embodied in the first three which are outlined below:

a) To secure for all Basotho a high quality of environment to enhance their health and well being.
b) To use and conserve the environment and natural resources for the benefit of present and future generations.
c) To halt environmental degradation, and to restore, maintain and enhance the ecosystems and ecological processes essential for the functioning of the biosphere and to preserve biological diversity.

The policy objectives have a direct bearing to the proposed Tuberculosis and Health Systems Support Project and its elements that are most relevant to the project are those relating to toxic and hazardous substances; sanitation and waste management; and air pollution. These may arise from the refurbishment of facilities and the increased Health Care delivery activities afterwards.

3.2.4 Healthcare Waste Management Policy (2010)

The Health Care Waste Management Policy (June 2010) embodies the vision of Health Care Waste Management in Lesotho essentially as to minimise the adverse impacts of HCW on the environment and on public health in a sustainable way that will reflect a balance of the economic, social and ecological needs of Lesotho. Its vision, mission and overall objectives are expressed in twelve policy statements which cover (i) Prevention of Pollution of Natural Resources, (ii) Waste Minimisation and Recycling, (iii) HCWM Planning, (iv) Improved Infrastructure and equipment, (v) Appropriate Treatment technologies, (vi) Disposal technologies, (vii) Institutional Arrangements, (viii) Collaboration and partnerships, (ix) Capacity building and Awareness Raising, (x) Financial Management, (xi) Development of Enabling Mechanisms, and (xii) Monitoring and Evaluation

The policy emphasises that HCWM will be consistently monitored and enforced through a comprehensive monitoring and evaluation system that ensures compliance with HCWM regulations, standards, guidelines, environmental management systems and quality assurance requirements. The Tuberculosis and Health Systems Support Project will cause an increase in the HCW generated from the health care facilities as they operate with the improved systems. Thus its implementation will be absolutely necessary to avoid any pollution from HCW.

3.2.5 National Tuberculosis Programme: NTP Policy and Manual

(Last reviewed 2006): Tuberculosis Infection Control in Health Care Setting

This policy and procedure manual gives guidance on how the risk of tuberculosis infection can be reduced by work practice and administrative control measures, and by environmental control measures. The provisions of this policy will be directly triggered by the Tuberculosis and Health Systems Support Project as it deals with the Tuberculosis burden.

3.2.6 Lesotho Science and Technology Policy 2006-2011 (2006)

The Science and Technology Policy recognises that technical and scientific aspects are critical to the health sector making it essential to have trained, qualified, competent and highly motivated personnel to operate effectively; well-serviced, modern equipment and laboratory facilities; and affordable medicines. It highlights the MoH's roles in training, community education, research and outreach.

Its provisions are directly linked with the objectives of the Tuberculosis and Health Systems Support Project which seeks to improve the healthcare facilities including their laboratories.

3.2.7 ICT Policy for Lesotho - 4 March 2005

The Ministry of Communications, Science and Technology is the custodian of this policy. The Policy provides the nation with a vision and strategy for becoming a fully integrated member of the Information Society. It is intended to unite Government, industry, civil society and the general public in the achievement of its national development goals and endeavours to reduce the digital divide between the "haves" and the "have nots," to promote gender equality, protect the environment and to improve food security and the standard of living of all Basotho. **It further strives to promote a healthy society capable of exploiting the full potential of ICTs.**

The vision of the ICT policy is "To create a knowledge-based society fully integrated in the global economy by 2020." While its mission is "To fully integrate information and communications technologies throughout all sectors of the economy in order to realise rapid, sustainable socio-economic development."

The policy has nine overall objectives but the most relevant for the Health sector is to "Promote usage of ICTs throughout all sectors of society including disadvantaged groups." The policy then outlines the role of each sector in implementing it.

It then highlights Health as one of the ten (10) cross cutting catalysts that provide the strategic framework needed to guide the successful implementation of the ICT policy and to realise national development goals. ICTs can play an important role in strengthening of health institutions in order to ensure efficient and effective service delivery. It can also provide an effective and cost-efficient means for distributing health and disease prevention information to the public and can further assist health care workers by improving health care administration and management as well as accessibility to medical research, information sharing and training through on-line educational programs.

The objectives of e-health are to

- Build a health network that will enable institutions and individuals to exchange electronic records, share information and deliver quality services in both urban and rural areas.
- Improve the performance of health care facilities through the deployment of Health Management Information Systems (HMIS).
- Use electronic systems to ensure an efficient and standardised process for recording patient information.
- Increase access to health information for all Basotho through the innovative use of ICTs.
- Empower health professionals with the knowledge and use of ICTs.

The most appropriate policy measure for the Health sector is to "Use appropriate ICTs to dialogue among infected groups and health care providers." This will be greatly promoted in the Tuberculosis and Health Systems Support Project, and will be used to track patients and remind them of their medication.

3.2.8 National Health Sector Strategic Plan - 2012 - 2017

The Health Sector Strategic Plan (HSSP) takes into account all the relevant policies, legislation and other mandates for which the Ministry of Health is responsible. It also reflects the strategic outcome, oriented goals and objectives which the Ministry of Health will endeavour to achieve over the period 2013–2017. It is also a guiding plan that focuses towards attainment of the Health Policy objectives as outlined in the National Health Policy.

The National Health Sector Strategic Plan, is the operational manual for the National Health Policy and provides the situation analysis, defines broad goals and articulates the objectives of the strategic plan. Its mission is to enhance a system that will deliver quality health services efficiently, effectively and equitably to all basotho. Its strategic objectives include the following:

- To contribute to improved health status through equity and access to quality health care in both public and private domains guided by the principles and strategies of Primary Health Care.
- To attain and maintain deployment of right numbers and skills mix of appropriately trained and motivated HRH.
- To ensure availability and management of financial resources for improved access to health services and utilization of health facilities.

- To ensure that essential, safe, efficacious, acceptable quality and affordable medicines and other therapeutic products, medical devices and technologies are available all the times in health facilities and are accessible to all.
- To provide timely, relevant, accurate and complete health information on a sustainable and integrated basis.
- To improve delivery of health services by tapping into expertise and skills from the private sector, focusing on the output based partnerships and ensuring an optimal allocation of risk between the private and public sectors.
- To ensure that health physical infrastructure are properly designed and constructed and that equipment are properly procured, installed and maintained in accordance with health.

This plan will guide the implementation of the Tuberculosis and Health Systems Support Project as it sets out to deliver health care services to the nation.

3.2.9 National Health Care Waste Management Plan of 2005

The National Health Care Waste Management Plan (NHCWMP) (March 2005) was developed as part of the World Bank Health Sector Reform Project. The NHCWMP emphasises the following:

- The establishment of the NHCWM Committee
- The establishment of Healthcare Waste Management Committees in hospitals
- The segregation of HCW at source through the three-bin system within Health Care Facilities
- A raised awareness of the risks and need to manage HCW properly amongst staff at health care facilities.
- The distribution of coloured plastic liners, sharps safety boxes and personal protective equipment for HCW handling.
- Installation and refurbishment of incinerators.

This plan is an essential tool in the implementation of the Tuberculosis and Health Systems Support Project as the project will result in an increase in HCW generation.

3.2.10 The Health Services Decentralisation Strategic Plan (2009)

The approach of the current Health Services Decentralisation Strategy addresses three important policy issues in intergovernmental relations to achieve equity in the delivery of health services:

- How to balance the need to provide this basic service with macroeconomic constraints that limit the available resources
- How to objectively determine the equitable sharing of available resources between the different levels of government
- What resources need to be allocated for capital spending in a way that is consistent with the answers to the first two questions.

Decentralisation aims to improve the overall health through the following inter-linked strategic objectives:

- Promote community participation in health development
- Provide quality primary health services
- Strengthen health support systems including its governance
- Improve technical and managerial competence of staff for attainment of decentralisation objectives

The Strategy adopts an incremental change approach in line with the phases of the overall government of Lesotho which were:

- Transition phase: Two years in 2004-05 leading to the introduction of the District Councils and Community Councils and devolution of some functions.
- Development Phase: Five years in 2008-11, when additional functions are decentralised.
- Consolidation phase. Five years in 2012-16, when operations of the local government are refined and efficiency and effectiveness improved.

In this regard, MOH was to decentralise in phases described as follows:

- Internal de-concentration: Two years in 2004-2005 (pilot districts) and in two years in 2005-2007 (all districts)
- Partnership: actions and collaboration with the councils in 2004-2008
- Gradual delegation to the Local Government Councils in 2008-2016

MOH has restructured at Central level and is in the process of implementing the new structures. There are DHMTs in all districts although without the proposed District Director and the DHTs are being populated and accommodated in designated offices to enable effective service delivery. The sector has included decentralisation process indicators in the monitoring system to track implementation progress.

3.3 LEGAL FRAMEWORK

The following sections give an overview of the relevant legislative instruments for the Tuberculosis and Health Systems Support Project:

3.3.1 Constitution of Lesotho

Section 36 of the Constitution of Lesotho lays the foundation for environmental legislation and stipulates that Lesotho will adopt policies designed to protect and enhance the natural and cultural environment of Lesotho for the benefit of both present and future generations and shall endeavour to ensure for all citizens, a sound and safe environment adequate for their health and well-being. The TB/HIV project activities have a potential to disrupt the wellbeing of the environment and thus affect the people's health. So in implementing the TB/HIV project, Lesotho must adopt approaches that will conform to the requirement of the Constitution.

3.3.2 The Environment Act No 10 of 2008

The Environment Act *No 10 of 2008* makes provisions for the protection and management of the environment from any negative impacts that may be exerted by developmental projects such as refurbishments and construction of infrastructure. It also provides for the conservation and sustainable utilization of natural resources of Lesotho.

The act is based on sixteen fundamental principles of which the relevant one are:

(a) To assure every person living in Lesotho the fundamental right to a clean and healthy environment;
(b) To ensure that sustainable development is achieved through the sound management of the environment;
(c) to use and conserve the environment and natural resources of the Basotho Nation for the benefit of both present and future generations, taking into account the rate of population growth and the productivity of available resources; and
(h) To ensure that waste generation is minimized and safely disposed of;

The Act also imposes a corrective duty to protect, maintain and enhance the environment and defines a “citizen-right” to take legal action against acts or omissions damaging to the environment.

The Health Care Facility construction and refurbishment activities will have various effects on the environment and the relevant clauses that cover its protection and management follow below:

Part V: Environmental Impact Assessment, Audits and Monitoring: This clause provides for undertaking environmental impact assessment of the project developments. It makes provision for the type of projects for which an environmental impact assessment is required and this is specified in a Schedule to the Act. It stipulates submission of the project brief and guide to its preparation. The project brief preparation includes preparation of the environmental management plan for guiding development for prevention of environmental impact on natural resources by undertaking mitigation measures. Environmental impact studies and statements preparation and guide are made for projects that have serious environmental impacts on natural resources. It makes provision for review of environmental impact statements, environmental monitoring, environmental audit and issuance of the license for implementing the project.

Part VI: Environmental Quality Standards: Makes provision for soil, water, air, waste, noise, ionization, and other radiation, control of noxious smells, guidelines for environmental disasters and other standards.

Part VII: Pollution control: Makes provision for prohibition of discharge of hazardous substances, chemicals and materials or oil into the environment and defines the spiller's liability.

Part IX: Environmental Management: Makes provision for identification and protection of various natural environments including land use planning and natural heritage sites.

Part X: Environmental restoration order: Makes provision for issuance of environmental restoration orders.

Part XII: International Environmental Conventions: Covers environmental conventions or agreements to which Lesotho is a party.

The Department of Environment is charged with the responsibility to co-ordinate the functions and activities of all line ministries on environmental issues without interfering with their day to day activities and has the power to review and approve environmental impact assessments.

3.3.3 The Public Health Order No. 12 of 1970

The Order sets out the functions of the Ministry of Health shall, as to promote the personal health and environmental health within Lesotho; to prevent and guard against the introduction of disease from outside; to prevent or control communicable disease; to advise and assist district administrations and local authorities in regard to matters affecting public health; to promote or carry out researches and investigations in connection with the prevention and treatment of human diseases; to prepare and publish reports and statistics or other information relative to the public health; to report on the

work of the Ministry to the Minister who may submit such report to the Council of Ministers each year; to provide for the appointment of advisers, advisory bodies or councils to assist the Minister in all matters concerning public health; and generally to administer the provisions of this Order

It stresses the notification of Communicable diseases and non-Communicable diseases, the inspection of premises where a person suffering from such a diseases may have entered and the cleansing thereof.

The Order also specifies that the Minister may make regulations applicable to all communicable diseases or only to such communicable diseases as may be specified therein regarding the following matters-

- the imposition and enforcement of isolation or of medical observation and surveillance in respect of persons suffering from communicable disease
- the duties, in respect of the prevention of communicable disease and in respect of persons suffering or suspected to be suffering there from, of occupiers of land on which persons reside
- the measures to be taken for preventing the spread of or eradicating smallpox, typhus fever, typhoid fever, cholera, yellow fever, plague, poliomyelitis, tuberculosis or any other communicable disease requiring to be dealt with in a special manner
- the conveyance of persons suffering from or the bodies of persons Wh0 have died of a communicable disease

Generally the Order makes provisions for all matters concerning public health in Lesotho.

3.3.4 The Water Act 2008 - Water and Sewage Authority – (WASA)

The Water Act 2008 provides for the prevention of pollution of water resources through measures such as the control of processes causing pollution, the control or prevention of movement of pollutants, compliance with prescribed standards or management of waste, and the elimination of any sources or potential sources of pollution. These provisions have direct relevance to the activities of the National TB/HIV project as a potential source of pollution if not properly handled.

3.3.5 The Labour Code Order 1992 - Ministry of Employment and Labour

The order, among other things emphasises the Health and safety of employees. However some mines which are generally covered by the Mine Safety Act 1981. However to the extent that any activity involving mining, tunnelling or excavating is not covered by a specific provision of the Mine Safety Act 1981 or regulations made under that Act, this order applies.

The order sets out that every employer shall, so far as is reasonably practicable, ensure the safety, health and welfare at work of all of his or her employees, by providing and maintaining plant, systems of work, and a working environment for his or her employees that is clean, safe, without risks to health and adequate as regards sanitary facilities and arrangements for their welfare at work; and making arrangements for ensuring, safety and absence of risks to health in connection with the use, handling, storage and transportation of articles and substances.

The employers are also required to ensure that persons not in his or her employment who may be affected thereby are not exposed to risks to their safety or health.

There are two sets of relevant regulations which were written under Section 100 of the Labour Code Order. One is the Construction Safety Regulations and the other is the Chemical Safety Regulations.

Of particular note is the Chemical Safety Regulations which provide for the establishment of safety and health committees in all work establishments that have a staff compliment of more than 15 employees to deal with issues of safety within the working environment. It also stipulates that employees who work under conditions that could pose a risk to them should be issued with personal protective equipment, for which such employees will not be charged.

The order also provides for the notification of the Labour Commissioner of any industrial accidents and dangerous occurrences that may have happened at his workplace.

It also provides for the notification of industrial diseases, where a medical practitioner suspects or finds that any person is suffering from any industrial disease specified in the First Schedule to the Workmen's Compensation Act 1977, shall notify the employer of that person and the employer shall further notify the Labour Commissioner of the same.

3.3.6 Mining Rights Act 1967

This Act provides authority to award mining licenses for all minerals and other resources of economic value in Lesotho. Without the environmental impact assessment controls and oversight, such licenses may be destructive to the environment because the Act does not provide for reclamation of excessively disturbed lands by the mining industry. The mining rights are in direct competition with any other land use, including Health sector infrastructural development. Further mining tends to destroy the land and make it unavailable for any other use.

3.5 INSTITUTIONAL FRAMEWORK

3.5.1 Inter-Ministry NTC

At country level, an inter-ministerial NTC will be established to oversee the project. Membership will include directors from key implementing ministries (e.g. ministries of health, mines, and labour) and a representative from each of the following: an NGO implementing TB control programs, a labour union, a representative of the private sector, and a research organization with a rotational chairmanship. The NTC will be responsible for reviewing and approving consolidated annual work plans and budgets submitted by the technical departments and providing technical guidance to implementing agencies. In addition, it will recommend consolidated annual work plans for approval by the RAC.

Implementing agencies will develop annual work plans with measureable outputs and budget resources. The plans will be submitted to the MOH as the lead implementing agency and will be consolidated by the National TB Program, which will provide technical leadership to the project. PIUs and other MOH structures will provide overall support for project implementation and be responsible for day-to-day coordination of the project, including fiduciary aspects and preparation of quarterly and annual consolidated technical and financial reports

3.5.2 Ministry of Health (MoH)

Ministry of Health (MoH) is responsible for all the Health and Health Care delivery activities in the country. overall implementation will rest with the MOH and overall oversight with the Principal Secretary. The MOH will serve as the leading implementing agency and will work with the Ministry of Mining and the Ministry of Labour.

The MOH has a TB Program that will oversee a team of technical and fiduciary staff in a Project Accounting Unit established to support the project. The MOH's TB Program will also coordinate other implementing entities. With private entities, the government will use performance-based contracting to ensure accountability for results

The responsible directorates at head office will be the (DDC) and the Department of Environmental Health (EHD) and at district level each District Health officer (DHO) and his team will be responsible.

A Programme Coordination Unit (PCU) will be established which will be responsible for overall coordination, supervision and monitoring, while programme activities would be implemented by the private sector, NGOs and Government Agencies on the basis of performance-based contracts.

3.5.3 Ministry of Labour and Employment (MOLE)

Ministry of Labour and Employment (MOLE) is responsible for all the labour related issues in the country. It will be heavily involved in the implementation of the Tuberculosis and Health Systems Support Project as it has to see to it that there is fair treatment of labour at the mines. Although currently there is no provision for compensation for work related illnesses like TB, it is imperative that the labour ministry should be concerned with the welfare of all workers.

3.5.4 Ministry of Mines

Ministry of mines is responsible for all the mining activities in the country. It will be heavily involved in the implementation of the Tuberculosis and Health Systems Support Project as it is the most affected by TB diseases burden.

3.6 WORLD BANK POLICIES

The World Bank has ten (10) environmental and social safeguard policies that it uses to examine potential environmental risks and benefits associated with Bank lending operations. Appendix 7 gives a detailed description of the World Bank environmental and social safeguard policies. The environmental and social safeguard policies are designed to avoid, mitigate or minimise adverse environmental and social impacts of projects supported by the bank. The ten environmental and social safeguard policies are described in Appendix 7.

The Tuberculosis and Health Systems Support Project will trigger OP/BP 4.01: Environmental Assessment as a result of potential negative impacts. **It has also been classified as a "B" project.**

Table 3-1 Environmental Safeguards Triggered

Safeguard Policies Triggered by the Project	yes	No
Environmental Assessment (OP/BP/GP 4.01)	[**X**]	[ ]
Natural Habitats (OP/BP 4.04)	[ ]	[**X**]
Pest Management (OP 4.09)	[ ]	[**X**]
Physical Cultural Resources (OP 4.11)	[ ]	[**X**]
Involuntary Resettlement (OP/BP 4.12)	[ ]	[**X**]
Indigenous Peoples (OP 4.10)	[ ]	[**X**]
Forests (OP/BP 4.36)	[ ]	[**X**]
Safety of Dams (OP/BP 4.37)	[ ]	[**X**]
Projects in Disputed Areas (OP/BP 7.60)	[ ]	[**X**]
Projects on International Waterways (OP/BP 7.50)	[ ]	[**X**]

3.6.1 Environmental Assessment (OP/BP/GP 4.01)

OP 4.01 is triggered due to the potential environmental impacts related to the construction and/or rehabilitation of existing rural infrastructure such as the roads, bridges and irrigation schemes. The environmental impacts that the developmental activities are likely to cause include disturbance of soil from digging of pits and foundations, and rural infrastructure construction activities, tree cutting and general vegetation clearing, emission of dust and generation of noise. However, given the anticipated small scale of activities interventions, the negative environmental impacts are likely to be localized, temporary, and easily mitigated through sensible construction management techniques, and diligent management practices.

3.7 COMPARISON OF LESOTHO AND WORLDBANK CLASIFICARION

Table 3-2 Lesotho And Worldbank Classification Systems

No.	LESOTHO CLASSIFICATION	DESCRIPTION	LESOTHO CLASSIFICATION	DESCRIPTION
1	**Category 1**	projects under this 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.	**Category C**	A proposed project is classified as Category C, if it is likely to have minimal or no adverse environmental impacts.
2	**Category 2**	projects under this category **are listed in the Schedule** 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 Brief the projects are classified as not requiring a full EIS.	**Category B**	A proposed project is classified as Category 'B', if its potential adverse environmental impacts on human populations or environmentally important areas – including wetlands, forests, grasslands and other natural habitats – are less adverse than those of category 'A' projects. These impacts are site – specific, few if any of them are irreversible; and in most cases mitigatory measures can be designed more readily than for category 'A' projects.
3	**Category 3**	projects under this category **are listed in the Schedule** 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 Brief the projects are classified as requiring a full EIS.	**Category A**	A proposed project is classified as Category A, if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works.
			Category FI	If it involves investment of Bank funds through a financial intermediary in sub-projects that result in adverse environmental impacts

While Lesotho's EA procedures are generally consistent with the Bank's policies, there exists a gap regarding the screening of small scale sub-projects where the sites and potential adverse localized impacts cannot be identified prior to the appraisal of the project. Therefore the Tuberculosis and Health Systems Support Project will use the environmental and social screening process as described in this report.

4. BASELINE DATA

4.1 INTRODUCTION

Lesotho has the third highest prevalence rate of HIV/AIDS in the world, which according to recent estimates, is about 27%. It also has high TB incidence of approximately 960 cases per 100,000 people, a 74% HIV/TB rate of co-infection and significant numbers of MDR-TB cases. The disease burden has reduced the average life expectancy to 40 years for men and 44 years for women mainly because it is burdened by HIV and AIDS. (UNAIDS 2006 Report on the Global AIDS Epidemic,)

The national TB program faces several challenges, including: a reduction in case detection and notifications, while MDR-TB and other resistant strains are on the increase; and limited access to services in terms of operating clinic hours and distance to health centers.

Efforts to combat the epidemic have been stemmed by the nation's lack of infrastructure needed to fully deal with such a disease burden. The following paragraphs review some of the key country's background information on environmental and social issues as regards the Health delivery system.

4.2 GENERAL LESOTHO GEO-PHYSICAL CONDITIONS

The following is an outline of the general geo-physical conditions of the project area:

4.2.1 Topography

Three distinct geographical regions, demarcated by ascending altitude, extend approximately north-south across Lesotho. The western quarter of the country is a plateau averaging 1,500–1,850 m (4,900–6,100 ft). The soil of this zone is derived from sandstone and, particularly in the westernmost region, is poor and badly eroded. The remainder of the country is highland. A zone of rolling foothills, ranging from 1,800–2,200 m (5,900–7,200 ft), forms the border between the lowlands and the mountains in the east.

The Drakensberg Range forms the entire eastern and south-eastern border. A spur of this range, the Maluti Mountains, runs north and south. Where it joins the Drakensberg Range there is a high plateau ranging from 2,700–3,200 m (8,900–10,500 ft) in elevation. The highest point is Thabana Ntlenyana, 3,482 m (11,425 ft), in the east. The rich volcanic soils of the foothills and mountains are some of the best in the country.

The rugged and broken terrain makes it difficult to deliver health care services to the majority of the population especially in the rural areas.

4.2.2 Water Resources and Sanitation

Lesotho is known to have abundant water, but its distribution in the country is disproportionate owing to rainfall and other physical factors. The highlands receive more rainfall than the lowlands where most of the people reside.

In general the provision of clean water rose from 52% to 63% in the 1990s (GoL, 2006) on a national scale, but the situation has been steadily deteriorating in the per-urban areas, especially with the number of people per collection point. So there is a critical shortage of water supply to potential development sites like industries and factories and health care delivery centres. **This has ripple effects to the health care delivery system and hence the TB control programme**.

4.3 GENERAL LESOTHO SOCIO-ECONOMIC CONDITIONS

The following is an outline of the general socio-economic conditions of the project area:

4.3.1 Population

The population of Lesotho in 2005 was estimated by the United Nations (UN) at 1,804,000, which placed it at number 142 in population among the 193 nations of the world. In 2005, approximately 5% of the population was over 65 years of age, with another 38% of the population under 15 years of age. There were 87 males for every 100 females in the country. According to the UN, the annual population rate of change for 2005–2010 was expected to be -0.1%. The projected population for the year 2025 was 1,604,000. The population density was 59 per sq km (154 per sq mi). Some 70% of the total population lives in the fertile lowlands, where the land can be most readily cultivated; the rest is scattered in the foothills and the mountains.

The UN estimated that 13% of the population lived in urban areas in 2005, and that urban areas were growing at an annual rate of 0.75%. The capital city, Maseru, had a population of 170,000 in that year. Other large towns are Leribe, Berea, and Mafeteng.

The prevalence of HIV/AIDS has had a significant impact on the population of Lesotho. The UN estimated that 30.1% of adults between the ages of 15–49 were living with HIV/AIDS in 2001. The AIDS epidemic causes higher death and infant mortality rates, and lowers life expectancy.

4.3.2 Labour and Migration

The mining sector is a prominent example of how labour mobility can contribute to disease transmission. The vibrant mining sector in South Africa has traditionally attracted large numbers of workers from neighbouring countries. While there are currently about 500,000 miners in South Africa's mines, there are an estimated 3 million ex-miners in South Africa, Lesotho, Mozambique, Malawi, and Swaziland. The skyrocketing rates of TB in the gold mines in South Africa (3,000-7,000 per 100,000) place miners among the highest risk groups in the region. Many migrant miners live in dwellings with severe overcrowding and poor ventilation and work under difficult conditions, placing them at greater risk of developing TB and other occupational health diseases. As a result of high levels of mobility, mining communities and labour-sending zones in neighbouring countries are also disproportionately affected by TB and related occupational diseases. For example, close to 40 percent of adult male TB patients in three of Lesotho's main hospitals had worked in South African mines, highlighting the continual risk of disease transmission across borders

Internal migration from impoverished rural areas to mining communities also increases the risk of TB transmission to family members and labour-sending communities while hindering prevention and control efforts.

4.3.3 Economy

Gross domestic product (GDP) growth is projected at 2.6%, driven primarily by mining production, construction and government services.
Unemployment stood at 24% in 2008 and is unlikely to have changed much, even as underemployment and low productivity employment is widespread, especially in rural areas. Recent unemployment data is not yet available. Preliminary government estimates based on the 2010/11 Household Budget Survey show that the national poverty head count rate stood at 57.1% and the Gini Coefficient based on consumption stood at about 0.53. Poverty has decreased in urban areas, while poverty has increased in rural areas.

4.3.4 Social Welfare

In the past, many social welfare programs were organized on the local level or by missions. But the need for concerted action to alleviate hardships brought about by the severe droughts led to the creation in 1965 of a Social Welfare Department under the Ministry of Health (later the Ministry of Health and Social Welfare). Community development teams stimulate local initiative by conducting courses and forming voluntary community development committees. The Homemakers' Association, an organization long active in social welfare, has given family-management courses in remote areas under a grant from the Oxford Committee for Famine Relief (Oxfam).

4.3.5 Health

The government of Lesotho is working to rehabilitate some hospitals and is making an overall effort to strengthen health care services. However it is facing an acute human resource for health (HRH) crisis. A third of MoH labour force consists of support staff. Nurses constitute 73.3% of the workforce in MoH followed by physicians at 6% with other health cadres constituting a low percentage of the workforce. While there is a general shortage of staff, it should be emphasized that Lesotho generally experiences an acute shortage of specialized health cadres. (Lesotho National Health Strategic Plan)

Laboratory services in the health sector remain understaffed and laboratory personnel who are specialized are very few in the system. As a result of this shortage, at health centers level health center staff collect specimen for processing at the district hospital. In addition to lack of personnel, there are interrupted supplies of medicines and some gaps are being filled by development partners who purchase laboratory reagents among other things. (Lesotho National Health Strategic Plan).

4.4 THE HEALTH SYSTEM OF LESOTHO

The formal system of Lesotho health facilities are divided into the national (tertiary), district (secondary), and community (primary) levels. The community level includes both health posts and health centers. The district level comprises hospitals that receive patients referred from the community level and filter clinics. The national level consists of one referral and two specialized hospitals. Any patients with

conditions that cannot be addressed at the national level are referred to South Africa for care, through the national referral hospital. In Lesotho, 42 percent of the health centers and 58 percent of the hospitals are government owned, 38 percent of the hospitals and 38 percent of the health centers fall under the control of the Christian Health Association of Lesotho (CHAL), and the remaining facilities are either privately owned or operated by the Lesotho Red Cross.

In addition to the hospitals, filter clinics, health centers, and health posts recognized within the Government of Lesotho (GOL) system of health facilities, there is also an extensive network of private surgeries, nurse clinics and pharmacies providing care and/or medicines.

In terms of HCWM the Ministry of Health is assisted by Lesotho Millennium Development Authority (LMDA) for collection and treatment of HCW in its facilities. LMDA has sub-contracted other companies for this function. The contracted companies are expected to supplier the health facility with waste management equipment (container, liners). It collects HCW from the Health facilities for treatment at the incinerator at the hospitals. It is also mandated to maintain day to day running of the incinerator. They are again expected to collected and transport general waste from the hospital for disposal at a designated disposal site.

National level: At the national level, Lesotho has three tertiary-level hospitals: Queen Momahato Hospital, Mohlomi Mental Hospital, and Bots`abelo Leprosy Hospital. Queen Momahato Hospital is the national referral hospital. It is a large tertiary public-private partnership hospital. Any cases that cannot be treated at Queen Momahato are referred to South Africa. It is linked to a network of filter clinics.

District level: Districts have filter clinics and district hospitals. Filter clinics are a first point of care intended to lighten the load of district hospitals and function as “mini-hospitals,” offering curative and preventive services and limited inpatient care. Unlike health centers, filter clinics are staffed by doctors and some have pharmacy technicians. They also offer selected laboratory and radiology services (administered through the hospitals).

Although district hospitals provide both in-patient and outpatient care, their services vary widely depending on the availability of financial resources, equipment, and human resources. Treatment and diagnostic services are more complex at this level. These facilities provide minor and major operative services, ophthalmic care, counselling and care of rape victims, radiology, dental services, mental health services, and blood transfusions as well as preventive care. Some specialized care is also available for TB, HIV, and non-communicable diseases.

Community level: Communities offer health posts and health centers. Health centers are the first point of care within the formal health system. Staffed by nurse clinicians with comprehensive skills in preventive and curative care and in the dispensing of medication, health centers offer curative and preventative services, including immunizations, family planning, and postnatal and antenatal care on an outpatient basis (with the exception of services to expectant mothers). Their

mandate also extends to supervising the community public health efforts and training volunteer community health workers (CHWs).

Health posts provide community outreach services and are typically managed by volunteers. Generally, health posts are opened at regular intervals (not daily) and provide promotive, preventive, and rehabilitative care in addition to organizing health education gatherings and immunization efforts. Volunteer CHWs include traditional birth attendants and community-based condom distributors, among others.

4.5 BASELINE INFORMATION OF THE VISITED FACILITIES

A representative sample of health care facilities for Lesotho was chosen to participate in a survey leading to the development of the Environmental and social Management Framework. Table 4-1 lists the institutions that were visited and table 4-2 summarises the findings of the field visits. At each site interviews were conducted with the following people:

- Head of institution
- Manager or deputy of health care facility
- Head nurse
- Person responsible for HCWM
- Head of laboratory services
- Person handling waste

No patients were interviewed. The details of the findings of the field visits are in Appendix 10.

Table 4-1 surveyed institutions

CATEGORY OF FACILITY	NUMBER OF INSTITUTIONS	LERIBE	MAFETENG	MASERU	MOKHOHLONG
Referral Hospitals	1			Queen Mamohato Memorial Hospital	
Large Hospitals	2	Motebang Hospital	Mafeteng Hospital		
Health Centres	3	Peka Health Centre	Motsekuoa Health Centre	LDF Health centre	
Private Non Profit (NGO)	1	Mamohau Hospital (CHAL)		TEBA Clinic	
Private for-Profit	1	Dr. Knight Hospital			Letseng Mine Hospital
Pharmaceuticals	1		(NDSO) National Drug Supply Organisation		
Blood Transfusion Services	1			Maseru Blood Bank	
MDR TB clinic (Multiple Drug resistant TB)	1			Botsabelo MDR - TB	

The selected health facilities showed that they are at different stages of development in terms of waste disposal services. Some are poorly developed, whilst some displayed state of the art waste handling systems. The following is an outline of the site profile at each of the selected health care facilities:

4.5.1 Major Challenges at the HCF

Some of the major challenges (relevant to the current programme) being faced by the healthcare facilities (HFC) that need serious attention include the following;

Table 4-2 Major challenges at Health Care Facilities.

No.	CHALLENGE	*Queen Mamohato Memorial Hospital*	*Motebang Hospital*	*Mafeteng Hospital*	*Peka Health Centre*	*Motsekuoa Health Centre*	*Ratjomose Health centre*	*Mamohau Hospital - (CHAL)*	*TEBA Clinic*	*Dr. C. K. Knight Memorial Hospital*	Letseng Mine Hospital	*National Drug Supply Organisation (NDSO)*	*Lesotho Blood Transfusion Service*	*Botsabelo MDR -TB clinic*
1	Shortage of rooms to carry out all necessary programmes.				√	√	√	√	√					
2	O.P.D is too small for the ever-increasing number of patients.				√	√	√		√					
3	Health Facility Poorly designed to handle TB patients				√	√	√							
4	Water supply not reliable.					√	√	√						
5	HCWM Systems not being implemented effectively.		√	√	√		√	√						
6	Poor health care waste management equipment.						√	√					√	
7	Staff not trained for HCWM													
8	Temporary storage facility not being utilized properly		√	√	√	√	√	√				√	√	√
9	Poorly designed and wrongly sited kitchen.				√	√								
10	Too few staff compliment for the institution.		√	√	√	√	√	√		√		√	√	
11	Rapid consumption of HCWM supplies / medicines due to many patients /clients.							√				√	√	
12	Shortage of testing kits in laboratories and blood transfusion services.		√	√				√	√	√				
13	Allocated stand for the Health Facility too small for any expansion.		√			√		√						

5. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

5.1 INTRODUCTION

Since the actual project sites are as yet unknown, potential impacts described below are general and serve as a guideline for a thorough assessment once the sites have been selected. The Social and physical interventions that will be undertaken will include:

5.1.1 Physical Interventions

(i) Environmental health, screening and surveillance

- Screening for TB and other occupational lung diseases (e.g. asthma, bronchitis, asbestosis and pneumoconiosis) among miners, ex-miners and mining communities.
- Monitoring of environmental health and safety in mines, quarry areas and hospitals.
- upgrading surveillance capacity for drug resistance with a focus on MDR-TB;
- establishment of joint cross-border committees to carry out joint outbreak investigations and surveillances

(ii) Training / Capacity development

- Review of existing mining and occupational health legislation, and development of policies and methods for implementation and enforcement.
- Developing and rolling out an in-service training and mentorship for front-line health workers in the management of TB and TB-HIV;
- Maintenance and user training for purchased equipment.
- training of Health care practitioners, environment and occupational health officers based on defined curricula and mentoring, knowledge sharing for disease control

(iii) Procurement of equipment

- Procurement of innovative ICT and mobile health software for compliance monitoring, mine health surveillance, satellite/project districts and border areas surveillance.
- procurement of various pieces of instruments and equipment like Gene Xpert and Hain for screening and diagnosis;
- procure personal protective equipment (PPEs) for care providers in TB and MDR wards
- improving laboratory-based monitoring of antimicrobial resistance,
- procure special advanced mobile x-rays machines which are able to differentiate silicosis form asbestosis

(iv) Research and data gathering

- Conduct relevant operational research and use this research to inform policy and practice through innovative knowledge sharing approaches.
- Meetings on disease surveillance to share best practices in disease surveillance and cost-effective community surveillance activities.

(v) Construction/refurbishments and other expansions

- Upgrading and refurbished of existing health care delivery facilities and laboratories.
- Equipping laboratories with the latest diagnostic technologies
- Accrediting laboratories with the global WHO, ASLM and CDC supported SLAMTA process.

- Expansion of community sputum collection points and delivery of samples to microscopy sites closer to patients.
- Improve ventilation and refurbish rooms to create isolation cells within the three main prison locations.

5.1.2 Social Interventions

(i) Social support

- Provide MDR-TB patients with psychosocial and nutritional support
- Set up one-stop shop service centers at existing health facilities
- Assure adherence to the diagnostic and treatment cascade through innovations which include:
    - linking TB screening and treatment to deferred pay distribution;
    - task-shifting with the use of facility-based lay counsellors to promote treatment literacy and community-based care supporters to provide adherence support; and
    - Use of a mobile phone-based application to provide automated SMS medication and appointment reminders.

(ii) Policy advocacy:

- Using advocacy mechanisms to ensuring that evidence generated by the project captures key policy frameworks like “holding mining companies accountable for TB and occupational health safety standards”

(iii) Behavior modeling

- Improving patient adherence to treatment through behavior modeling individuals in communities;
- Behavior change TB interventions mainly focusing on services to reduce stigma, and to improve knowledge and early health-seeking behavior to promote early screening for TB in the targeted areas.
- conducting behavior change and communication (BCC) activities for TB and occupational health diseases for miners, ex miners, senior management and labor unions, including surrounding communities,
- Training of ex-miners and community health workers to conduct BCC activities to improve knowledge of TB control among the affected target populations.

(iv) Patient referrals

- Strengthening patient referrals and follow-up within and across countries through the use of ICT and the public health systems

5.2 ENVIRONMENTAL AND SOCIAL IMPACTS

Taking into considerations the above proposed project activities, the potential environmental and social impacts were then identified through a comprehensive stakeholder consultation process. Appendix 10, lists the consulted stakeholders.

Table 5-1, gives an overview of the major environmental impacts resulting from the refurbishment, construction and operation of the health facilities. It is a matrix outlining the typical project activities in each phase of refurbishments and the specific components of the environment and social systems which they will affect.

Table 5-1 *Matrix of typical project activities and their related impacted.*

ENVIRONMENTAL SOCIAL COMPONENTS / PROJECT ACTIVITIES	Soils	water	water quality	Topography	Archaeology	Flora and fauna	Anxiety	Air quality	Noise	Cultural	livelihoods	land use	Local economy	Health and	Aesthetic
PLANNING PHASE ACTIVITIES															
Site Identification							X				X		X		
Project consultations							X				X		X		
Designing of refurbishments							X								
IMPLEMENTATION/OPERATION PHASE ACTIVITIES															
Procurement of Building Materials							X				X		X		
Delivery Of Building Materials	X	X	X	X		X	X	X	X		X	X	X	X	X
Demolition of walls	X	X	X	X		X		X	X		X	X	X	X	X
Erection of partitioning	X	X	X	X		X	X	X	X		X	X	X	X	X
Disruption of utilities	X	X	X	X		X	X	X	X		X	X	X	X	X
New fittings; plumbing, wiring, air conditioning, etc	X	X	X					X	X		X	X	X	X	X
Fixing leaking roofs								X	X		X		X	X	X
Fitting new ceiling	X	X	X			X		X	X		X		X	X	
Fixing floors	X	X	X					X	X		X		X	X	
Managing solid waste	X	X	X	X		X		X		X	X	X	X	X	X
Use of improved Health facilities											X		X	X	

Notes: X indicates the component of the environment has potential impact (maybe negative or positive). .

5.2.1 Environmental Impacts

5.2.1.1 Planning Phase

(i) Physical Restrictions on building space.

Generally the size of the Health Care Facilities premises is limited, with little room to expand outwards as they are mostly located in urban settings. Most planning has to deal with internal refurbishments.

5.2.1.2 Implementation Phase

(i) Soil and Land Degradation

Although construction work will be limited to the footprint of existing infrastructure, some projects may involve works that will expose the soils to erosion and also compact it and break down the soil structure which will potentially decrease the drainage of the areas. This will generally result in soil erosion, defacing of the countryside and generation of dust.

Furthermore, the risk of accidental discharge of hazardous products like paint, leakage of hydrocarbons, oils or grease from machinery constitutes potential sources of soils and land pollution.

(ii) Waste Management

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 general public, the movement of the workers and vehicles as well as affect the aesthetics of the environment.

(iii) Increased generation of infectious waste

The Health facilities and laboratories will generate increased amount of waste, such as infectious sharps, infectious wastewater and also increased incinerator usage resulting in toxic emissions and ash. These will need to be managed carefully to prevent public health risk and environmental impacts.

(iv) Ambient air quality

Air Quality will be impacted by emissions from vehicles, building equipment and released particulate matters. Demolition to modify the built environment will lead to considerable levels of cement dust 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.

(v) Ambient Water Quality

Water quality will be impacted by wastewater discharges from the refurbishment activities. These will include mainly rainwater run-off from the health facility sites. The discharge of this wastewater into surface waters will impact on water quality 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 road sides and in the health facilities premises. If it is not properly contained, rains could carry it along with runoff into surface waters, leading to increased turbidity and siltation.

(vi) Temporary Visual Intrusion

Construction activities will require material, equipment and cordons at the health facilities. Since facilities under renovation would not be closed from access by the public, these activities and materials thereof will cause temporary visual intrusion at all sites. This may be exacerbated by the contractor setting up camp on site.

Rehabilitation and upgrading of health care facilities, laboratories and other possible facilities will change the aesthetics of the project areas and leave marred landscapes.

5.2.2 Social And Health Impacts

5.2.2.1 Planning Phase

(i) Project Timing

Staff at health care facilities had questions about the timing of project implementation. Specifically, staff expressed concerns about expectations as whether and when project activities would occur. Similarly most stakeholders do not know exactly what will happen

and when it will happen. They are holding the whole process with suspicion and do not want the planning phase to drag for too long.

5.2.2.2 Implementation Phase

(i) Disruption of Utilities Service

The demolitions and refurbishment activities may cause temporary disruptions of utility services such as electricity, communication and water. Such disruptions may inconvenience the communities in the vicinity of the centres.

(ii) Temporary disruption of Health Care services

Since facilities under renovation will not be closed, they will experience shortages of working space. Thus modifications of rooms in which health care services is provided may entail moving patients or equipment from one area or room to another. This may cause temporary disruption of the health care delivery programmes.

(iii) Occupational Safety and Health

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.

(iv) Impacts of construction activities on patients, staff and other stakeholders.

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

- Exposure to asbestos containing materials. (Old Buildings with asbestos roofs).
- Falling from tripping on building materials.
- Noise and vibrations during demolition
- Injury from falling or flying debris when demolishing walls
- Cracking of existing structures from vibrations
- Spillages and dust during transportation of materials

The safety of the local population may be at risk during construction activities. Pollutants such as dust and noise could also have negative implications for the health of the near-by communities.

(v) Noise

Noise and vibration caused by machines, site vehicles, pneumatic drills etc will be commonplace during the refurbishment activities. These impacts can affect the quietness of the communities and can also impact patients and the healthcare workers.

(vi) Material/ equipment suppliers and contractors

The proposed refurbishments of the health facilities will necessitate the procurement of equipment, construction materials and services, providing income to suppliers and contractors. The sourcing of the materials could be from unauthorized or illegal quarries which could be an environmental hazard or result in environmental degradation.

(vii) Employment opportunities

These opportunities arise during and after the refurbishment processes. **Most of the workers must originate from the local community to minimize social conflicts**. During the refurbishment process jobs may become available for construction workers. Once the

facilities are up and running, more jobs may be created to run the expanded facilities ranging from the technical staff to train and run the machinery to non-technical job opportunities for cleaners, security guards, etc.

(viii) Improved services at the health facilities

The project will positively impact on the health delivery programmes through improved quality and diversity of services offered. Renovation of the facilities and installation of equipment will enable currently inefficient facilities to provide improved health care services leading to improved health conditions.

(ix) Improvement in livelihoods and local economies

Improved health care delivery will improve the health of the labor force, resulting in increased productivity and household incomes and ultimately to long-term benefit of improved local economies.

(x) Improved aesthetics of the Health Facilities

Renovation will improve aesthetics of the Health Facilities which, in their present state, look dilapidated. Some buildings currently under use are unfit for occupation. Renovation will also give these buildings and equipment an extended life.

5.3 SIGNIFICANCE RATING

The significance of adverse impacts from project actions is rated on the basis of the combination of the magnitude, duration and probability of the impact as tabulated below in Table 5-2. The scales of rating are High, Moderate and Low. Where an aspect is affected by more than one impact, the highest rating is taken as the applicable significance of the impact. **The environmental Management Plans in Chapter seven only consider the impacts that have been rated moderate and high significance as these present impacts that need attention.**

Table 5-2 *Significance rating table*

MAGNITUDE	DURATION/FREQUENCY	PROBABILITY	SIGNIFICANCE RATING
LARGE	Long/Continuous	Certain	High
LARGE	Short/Periodic	Certain	Moderate
LARGE	Long/Continuous	Probable	High
LARGE	Short/Periodic	Probable	Moderate
SMALL	Long/Continuous	Certain	Moderate
SMALL	Short/Periodic	Certain	Low
SMALL	Long/Continuous	Probable	Low
SMALL	Short/Periodic	Probable	Low

Table 5-3 *Significance rating of potential Impacts*

TEXT REF. No.	CATEGORY	IMPACT	CAUSE	MAGNITUDE OF IMPACT	DURATION AND PROBABILITY OF OCCURRENCE	SIGNIFICANCE RATING
5.2.1	**POTENTIAL ENVIRONMENTAL IMPACTS**					
5.2.1.1	**Planning Phase Impacts**					
(i)	Physical Restrictions on building space.	• Most centres are in built up areas and do not have much land for expansion.	• Refurbishment of existing Health Care Facilities within a built environment.	▪ **Small magnitude:** planning the renovations will be a challenge.	▪ **Long/Continuous duration:** Impacts expected to last for short time and then restore to normal ▪ **Probability**: Probable	▪ **Low**
5.2.1.2	**Implementation/Operation Phase**					
(i)	Soil and Land degradation.	• Soil and land pollution. • Defacing of countryside.	• Equipment and machinery use. • accidental discharge of hazardous substances	• Large magnitude	• **Long/Continuous duration:** for most activities • **Probability**: Certain	**High**
(ii)	Waste Management (construction waste)	▪ Effluent pollutes soil and water resources ▪ Littering and indiscriminate dumping of solid waste pollutes land and water ▪ Building rubble obstructs movement ▪ Building rubble affects the aesthetics of the centres	▪ Waste generated from demolition activities like brick and concrete rubble, broken glass, etc. ▪ Waste generated from building activities like cement bags, paint tins, metal scraps, timber waste	▪ **large magnitude**	• **Short/Periodic** – during refurbishment period. ▪ **Probability**: Certain	**Moderate**
(iii)	Increased generation of infectious waste.	▪ Infectious sharps may become environmental hazards. ▪ Infectious wastewater may pollute the environment. ▪ Toxic emissions from incinerators polluting the air. ▪ Ash from incinerators will need proper handling.	▪ Waste being generated from improved TB Control programmes. ▪ Waste being generated from upgraded laboratories	▪ **Large magnitude**	• **Long/Continuous duration:** for most activities. • **Probability**: Certain	**High**
(iv)	• Ambient Air Quality	• Pollution of air • Increases in bronchial disorders • Impaired Visibility on the roads • Disturbs normal developments of vegetation • Causes acid rain	• Smoke emissions from vehicles and equipment • Released particulates like demolition dust and cement dust.	▪ **Large magnitude**: - the thrust of the project is value addition and this will involve these polluting processes.	▪ **Long/Continuous Duration:** Impacts expected to last throughout the project. ▪ **Probability**: Certain to happen	**High**

TEXT REF. No.	CATEGORY	IMPACT	CAUSE	MAGNITUDE OF IMPACT	DURATION AND PROBABILITY OF OCCURRENCE	SIGNIFICANCE RATING
(v)	• Ambient Water Quality	• Pollution of water resources • Death of aquatic animals. • Loss of ordinary use of water. • Polluted water affects plant growth. • Treatment cost of the water become high.	• Wastewater discharges into storm water drains. • Washing of waste by rainwater • Storm water drainage introduces all the pollutants picked along the way. • Fallout from dust etc introduces pollutants.	▪ **Large magnitude**: - the wastewater discharges; dust fall-outs and stockpiling of waste will introduce pollution into the water bodies through storm drains.	▪ **Long/Continuous Duration:** Impacts expected to last for long time. ▪ **Probability**: Certain to happen	**High**
(vi)	• Temporary Visual Intrusion	• Change of the aesthetics of project area.	• Piled building materials. • Stored building equipment. • Cordons for controlling movement.	• **Large magnitude**:- the visual impacts will be obvious especially during the construction period	▪ **Short/Periodic Duration:-:** Impacts expected to last for short time and then restore to normal. • **Probability**: Certain to happen	**Moderate**
5.5.2	**SOCIAL AND HEALTH IMPACTS**					
5.5.2.1	**Planning phase impacts**					
(i)	• Project Timing	• Suspicion • Lack of trust • Lack of effective cooperation	• Lack of transparency from the Authorities. • Lack of proper time lines for the different phases of the project. • Dragging the planning phase too long.	• **Large magnitude**: - expectations of the stakeholders have been raised.	• **Short/Periodic Duration: -** Impacts expected to last for short time and then restore to normal as project implementation takes off. • **Probability**: Certain	**Moderate**
5.5.2.2	**Implementation/Operation Phase**					
(i)	• Disruption of Utility Services	• Affect operations of neighbours • Disrupt internal operations • Temporary closure of the sections of the Health Care centres	• Demolitions and alterations causing temporary disruptions of utilities such as water, electricity and telephones. • Poor pre-refurbishment planning.	• **Large magnitude**: - new installations will require these temporary closures.	• **Short/Periodic Duration: -** Impacts expected to last for short time and then restore to normal as installations are done. • **Probability**: Certain	**Moderate**
(ii)	• Temporary disruptions of Health Care	• Moving of patients and equipment from one room to another.	• Shortages of space as certain sections of the building are worked on.	• **Large magnitude**: - new installations will require these	• **Short/Periodic Duration: -** Impacts expected to last for short time and then	**Moderate**

TEXT REF. No.	CATEGORY	IMPACT	CAUSE	MAGNITUDE OF IMPACT	DURATION AND PROBABILITY OF OCCURRENCE	SIGNIFICANCE RATING
	services	• Cancellation of health care delivery programme. • Delays in attending to patients.		temporary closures.	restore to normal as installations are done. • **Probability**: Certain	
(iii)	• Occupational Safety and Health	• Work related accidents and injuries. • Bronchial diseases from dust. • Hearing impairments due to prolonged working in noisy areas.	• Operation of various equipment. • Emissions from the operations.	• **Small magnitude: -** may arise from accidents and uncontrolled dust emissions.	▪ **Long/Continuous Duration: -** Impacts expected to last long once effected. • **Probability**: Certain to happen	**Moderate**
(iv)	• Impacts of Construction Activities on patients, staff or other stakeholders	• Inconvenience or injuries to patients, staff or other stakeholders. ▪ Cracking of existing structures from vibrations.	• Various works at the Health Care centres. ▪ Falling from tripping on building materials. ▪ Noise and vibrations during works. ▪ Falling or flying debris. ▪ Spillages and dust during transportation of materials.	• **Large magnitude: -** inconveniences as project get underway.	▪ **Short/Periodic Duration: -** Impacts expected to last for short time and then restore to normal as stakeholders come to grips with new approach to project implementation • **Probability**: Certain to happen	**Moderate**
(v)	• Noise	• Irritation and anger. • Impairment of hearing.	• Machines. • Site vehicles. • Pneumatic drills. • Service equipment.	• **Small magnitude: -** inconveniences as project get underway.	▪ **Long/Continuous Duration:-** Impacts expected to last for a long time • **Probability**: Certain to happen	**Moderate**
(vi)	• Income to material/ equipment suppliers and contractors	• Income levels for suppliers and contractors raised.	• Procurement of equipment. • Procurement of building materials. • Provision of services.	• **Large magnitude**: - projects will generate business for suppliers from construction to maintenance.	▪ **Long/Continuous Duration:-** Impacts expected to last long once effected as there may be follow-up maintenance work • **Probability**: Certain to happen.	**High**
(vii)	• Employment opportunities	• Creation of jobs during refurbishment period. • Creation of more long term jobs	• Refurbishment activities • Improved Health Care facilities requiring extra staff.	• **Large magnitude**: - projects will generate employment opportunities from	▪ **Long Duration: Long/Continuous Duration: -** Impacts expected to last long once	**High**

TEXT REF. No.	CATEGORY	IMPACT	CAUSE	MAGNITUDE OF IMPACT	DURATION AND PROBABILITY OF OCCURRENCE	SIGNIFICANCE RATING
				construction to implementation periods.	effected as there may be follow-up opportunities as programmes continue. • **Probability**: Certain to happen	
(viii)	• Improved services at the health Care facilities.	• Improved TB control services at Health centres. • Improved referral system in place. • Improve diagnostics services at refurbished laboratories	• Refurbished Health Care centres and laboratories with new equipment. • More facilities to offer TB control services.	• **Large magnitude**: - projects will result in more efficiency in the TB control services.	▪ **Long Duration: Long/Continuous Duration: -** Impacts expected to last long once effected as there may be follow-up opportunities as programmes continue. • **Probability**: Certain to happen	**High**
(ix)	• Improvement in livelihoods and local economies	• Enhancement of livelihoods of communities • Raising of income levels • Improvement of productivity and lifestyles. • Jalousies and conflicts	• Improved income levels. • Improved industrial outputs. • Increased wealth differentials among the locals	• **Large magnitude**: - projects will generate economic activities from construction to implementation periods.	▪ **Long Duration: Long/Continuous Duration: -** Impacts expected to last long once effected as there may be follow-up opportunities as programmes continue. • **Probability**: Certain to happen	**High**
(x)	• Improved aesthetics of the Health Care Facilities	• Improved aesthetics	• Renovations and refurbishments. • Installations of new fittings and equipment.	• **Large magnitude**: - projects will change the face of the project areas in a big way.	▪ **Long Duration: Long/Continuous Duration: -** Impacts expected to last long once effected. • **Probability**: Certain to happen	**High**

6. ENVIRONMENTAL MANAGEMENT FRAMEWORK

6.1 INTRODUCTION

The environmental and social management Framework (ESMF) for the proposed refurbishment/construction of Health care facilities and laboratories (Table 6-1), provides guidelines for the management of potential environmental and social aspects (detailed above) at all possible project sites.

The following table details the mitigation measures that will reduce both existing and potential impacts associated with both the existing and proposed refurbishments at the Health Care Facilities and the TB Control roll-out programmes. In addition, mitigation measures are identified as either social or physical measures. Social mitigation includes the measures used to mitigate effects such as noise, land use, and other effects to the human environment. Physical mitigation includes measures that address impacts to the physical environment, such as biological communities, vegetation, air quality, and others.

This ESMF serves as a safeguard framework to examine the environmental and social impacts of the components of the project with the following objectives:

i) To establish clear procedures and methodologies for the environmental and social review, approval and implementation of the activities under the project;
ii) To specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to the project;
iii) To determine the training and capacity building needs; and
iv) To establish the budget required to implement the ESMF.

The ESMF outlines an environmental and social screening process, focusing on the following steps:

(i.) completion of the Environmental and Social Screening Form
(ii.) carrying out the appropriate level of environmental work;
(iii.) Review and clearance of the screening results;
(iv.) Preparation of EIA reports, where this may be necessary and;
(v.) Preparation of Environmental Management Plan

The ESMF therefore details the steps to be followed prior to start of construction works at each specific site and identifies parties responsible for monitoring actions, and any training or capacity building needs.

6.2 ENVIRONMENTAL IMPACTS AND GENERIC MITIGATION MEASURES

Table 6-1 *Environmental Impacts And Generic Mitigation Measures*

TEXT REFERENCE	IMPACT	MITIGATION/ENHANCEMENT	RESPONSIBILITY
5.2.1	**ENVIRONMENTAL IMPACTS**		
5.2.1.1	**Planning Phase**		
(i)	**Physical Restrictions on Building Space**		
	The sizes of the stands for the construction sites are generally small.	Does not apply for refurbishing existing buildings but may entail the erection of high rise buildings for any lateral expansion.	PCU and Contractor
5.2.1.2	**Construction / Operation Phase**		
(i)	**Soil and land degradation**		
	Point source contamination from spilled paints, diesel, lubricants etc around workshop areas.	Appropriate containment measures for all operational areas and proper disposal of used lubricants.	MOH, MTEC, PCU and Contractor
(ii)	**waste management**		
	Activities at construction sites will produce construction wastes whose disposal will pose a threat to the environment.	• Seek guidance of local environmental officers to identify acceptable disposal sites. • Contractors should undertake waste segregation at source to separate hazardous from non-hazardous waste.	PCU Contractor Local Environmental Officer.
(iii)	Increased generation of infectious waste		
	Refurbished Health facilities and laboratories will generate increased amount of waste. These will need to be managed carefully to prevent public health risk and environmental impacts.	• Enforce implementation of the ICWMP in all institutions • Make waste handling materials readily available at all institutions • Incinerators and other treatment facilities should always be in working condition. • Alternative treatment methods should always be at hand in case of breakdowns	PCU Contractor Local Environmental Officer.
(iv)	**Ambient air quality deterioration due to dust**		
	• Air Quality will be impacted by emissions from vehicles, equipment and released particulate matters. • Demolition to modify the built environment will lead to considerable levels of cement dust which can affect workers, staff and patients.	Contractors should use dust screens or nets in windows, doorways and ventilators of rooms where demolition or other dusty construction activities are occurring	PCU and Contractor
(v)	**Ambient Water Quality**		
	• Water quality will be impacted by wastewater discharges from construction activities including onsite sewage and rainwater run-off.	• Contractor to employ proper sanitary facilities • Pollution from lubricants and other wastes to be avoided.	PCU and Contractor
(vii)	**Temporary Visual Intrusions**		

TEXT REFERENCE	IMPACT	MITIGATION/ENHANCEMENT	RESPONSIBILITY
	Construction materials and contractor camps will cause temporary visual blight at sites.	Contractor should ensure minimum footprint of construction activities and provide decent accommodation for workers.	Contractor and Health Care Facility management.
5.2.2	**SOCIAL AND HEALTH IMPACTS**		
5.2.2.1	**Planning Phase**		
(i)	**Project Timing**		
	• Project planning to be more transparent and should not take too long. • Stakeholders should be kept updated of project progress.	• The planning stage must be shortened and on commencement the implementation must be within schedule. • Continuous stakeholder consultations should be held.	PCU and Contractor
5.3.2	**Construction / Operation Phase**		
(i)	**Disruption of Utility Services**		
	• The demolition and excavations during refurbishments may cause temporary disruptions of utility services such as electricity communication and water.	• Any service disruption must be reconnected as soon as possible • Alternative means of providing the service must also be used.	PCU; Contractor; Health Care Centre Administrator
(ii)	**Temporary disruption of Health Care services**		
	• Since the Health Care Facilities under renovation will not be closed, they will experience shortages of working space.	Plan pre-construction activities early to identify suitable rooms or adjoining buildings into which to relocate patients with minimal inconvenience. Refurbishment should be in phases so that the whole facility is not disrupted at once.	PCU Contractor; Health Facility Administrator
(iii)	**Occupational Health Safety risks to construction workers**		
	• 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.	• All safety precautions must be enforced • Provide PPE to all workers	PCU and Contractor
(iv)	**Impacts of Construction Activities on patients, staff or other stakeholders**		
	Refurbishment work undertaken in the same buildings having patients has potential to cause inconvenience or even injuries.	• Contractors should cordon off areas under construction • Ensure good housekeeping and clean operations always immediately removing rubble strewn outside construction areas. • Construction workers should limit verbal noise or other forms of noise during the renovation works inside the buildings. • Contractors should use screens or nets to avoid flying debris and dust.	PCU and Contractor

TEXT REFERENCE	IMPACT	MITIGATION/ENHANCEMENT	RESPONSIBILITY
(v)	**Noise**		
	Noise and vibration caused by machines, site vehicles, pneumatic drills etc	• Contractor to avoid old equipment. • Heavy duty equipment to be minimized. • Noisy operations to be limited to certain times. • Noise levels to be limited to within acceptable levels.	PCU and Contractor
(vi)	**Equipment ad material suppliers**		
	Project will promote local procurement where technically or commercially reasonable and feasible.	For earth materials, procure from legitimate sources to avoid encouraging environmental degradation	PCU and Contractor
(vii)	**Employment Opportunities**		
	During refurbishment jobs may become available for construction workers. The refurbished Health centres will offer more long-term technical and non-technical job opportunities.	Offer appropriate training for staff to manage the improved facilities.	PCU and Suppliers
(viii)	**Improved services at the health Care facilities**.		
	Improved quality and availability of TB control services offered will lead to improved health in the communities and thus increased productivity.	Renovation of health care centres should be matched with commensurate staffing with technical staff adequately trained in the use of newly installed equipment	PCU and suppliers
(ix)	**Improvement in livelihoods and local economies**		
	Improved health will improve labour productivity and household incomes and hence improve the local economy.	Leadership should promote viable economic activities.	local leadership
(x)	**Improved aesthetics of the** Health Care Facilities		
	Renovation of the Health Care centres will improve their aesthetics and this should be maintained.	• Maintenance teams to be stationed at the Health Care Centres. • Planned maintenance of machines and buildings to be instituted	PCU and facility management

6.3 SUB-PROJECT SCREENING PROCESS

6.3.1 Screening the Potential Sites

The environmental and social screening process for environmental and social impacts helps to:

- Assess whether sub-projects are likely to have potential negative environmental and social impacts;
- Determine appropriate mitigation measures for activities with significant adverse impacts, for incorporating them into the sub project design.
- Review and approve sub-project proposals and
- Monitor environmental parameters during project implementation.

The extent of environmental and socials work required, to mitigate adverse impacts for the sub-projects, will depend on the outcome of the screening process. For the Southern Africa Regional TB in Mining Project, environmental screening will be done by completing the Environmental and Social Screening Form attached as Annex 1.

Step 1.1 Completing the Environmental and Social Screening Form

The District Health Management Team will guide and facilitate the completion of the Environmental and Social Screening Form; with the assistance of the District technical team comprising experts from i) MoH ii) Districts Environmental Officers, and iii) Ministry of Local Government and Chieftainship. The Sub-project Environmental and Social Checklist in Annex 2 will guide the officer responsible for environmental matters at the district to identify appropriate mitigation measure for the sub projects to be implemented.

The refurbishment and rehabilitation of laboratories would take place at existing facilities and therefore, no land will be acquired, no property will be affected and involuntary resettlement or compensation would not be required.

Step 1.2 Assigning Appropriate Environmental Category

The screening process will lead to four safeguard options:

- No further action, if the sub project has no significant impacts on the environment;
- Simple Environmental Review to be carried out for sub-projects likely result in a few minor environmental problems that can easily be mitigated.
- Limited Environmental Review for sub-projects that may create minor environmental problems, requiring frequent site visit or construction modifications to minimize or eliminate impact.
- Full Environmental Impact Assessment for sub projects resulting in potentially significant direct or indirect adverse impact.

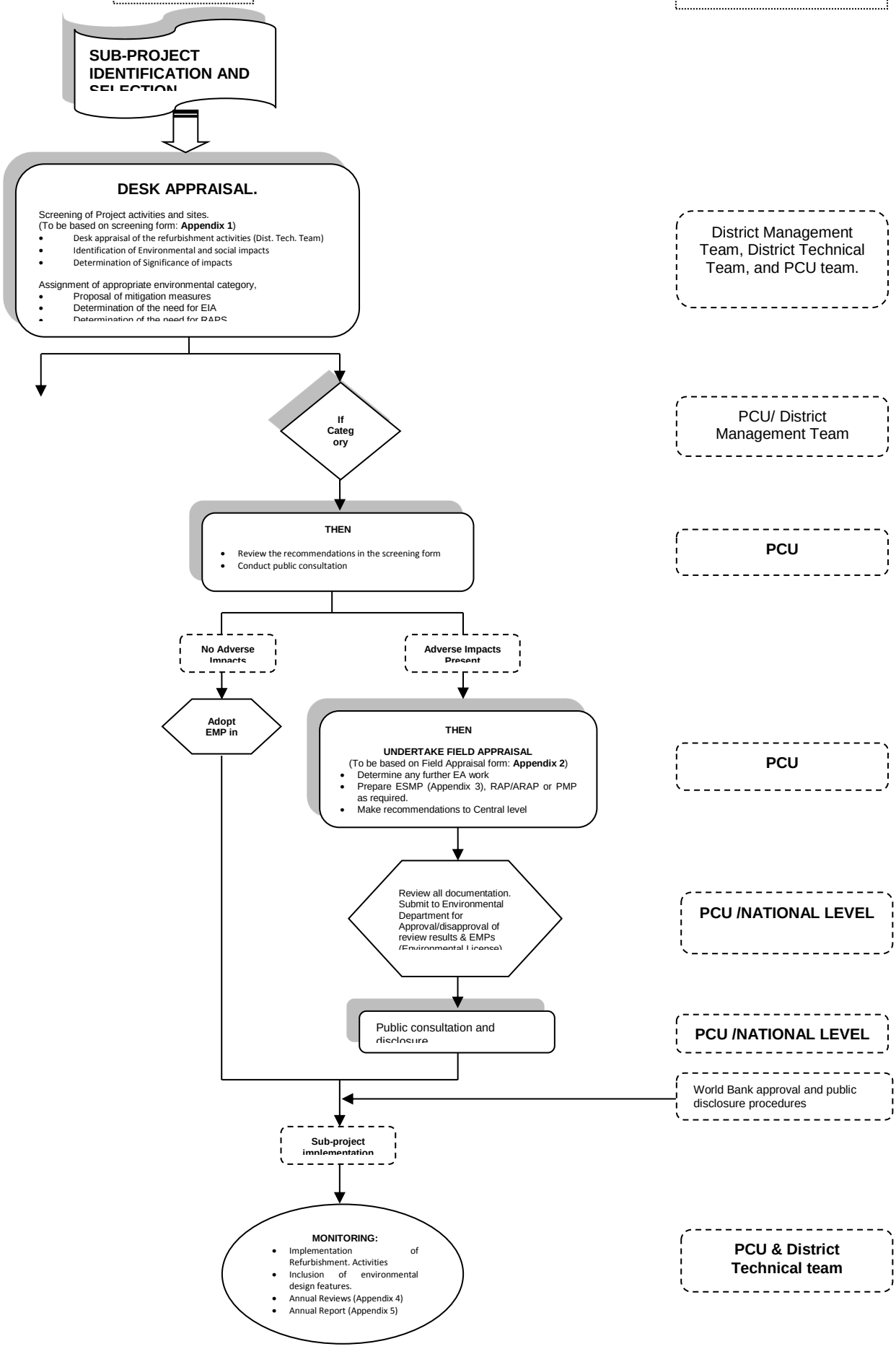

Figure 6-1 Flow for sub-projects identification, submission, evaluation and monitoring.

Step 1.3 Conducting a Limited EIA

The completed Environmental and Social Screening Form *(Appendix 1)*, and the sub project environmental checklist will be reviewed by the District Health Officer (DHO). They will determine the extent of environmental and social work required (i.e. whether application of mitigation measures outlined in the environmental checklist will suffice or not). Some design modifications can be incorporated in the project costs at this stage in order to minimize or avoid environmental impacts.

Depending on the magnitude of the environmental impacts identified, the District Health Officer (DHO) will supervise any further environmental work which will include an Environmental Review (ER) or Limited Environmental Assessment (LEA) if needed.

Where results of the environmental and social screening process indicate the need to carry out an EIA, the procedure for preparation of the EIA, up to issuing of an EIA certificate (as provided for in the Environment Management Act and the Environmental Impact Assessment Guidelines) shall be followed.

The Project will pay for the EIA study, to be done by approved consultants and also pay for the review and approval costs charged by the institution responsible for environmental matters. EIA requires inputs from teams of specialists who will consult the relevant key stakeholders.

Step 1.4 Review and Approval

The completed screening form is forwarded together with the overall sub-project application to the review authority – MoH/ PCU (National Level)

MoH/ PCU (National Level) will review the Environmental and Social Screening Form, as well as the Environmental Checklists, completed during preparation of the subprojects, to ensure that all environmental and social impacts have been identified and a mitigation management plan proposed. The MoH/ PCU (National Level) will also ensure that an appropriate monitoring plan, for implementation of the impact mitigation plan has been prepared.

Once MoH/ PCU (National Level) are satisfied, they then refer the application to the approval authority – the **Department of Environment** - with recommendations for approval conditions and implementation supervision (e.g. erosion control, waste management, human safety).

If the application has satisfied all the environmental requirements on the screening form and the check list, the approval authority – the **Department of Environment** will clear the sub-project and recommend to the ministry responsible for health for approval and subsequent funding.

If the approval authority – the **Department of Environment** finds that the submitted design is not consistent with the requirements of the environmental screening form and the environmental checklist, appropriate design modifications will need to be made. Thereafter, the sub-project will, once again, be subjected to another screening process until it conforms to the environmental requirements; after which it will then be re-submitted for review and approval.

Any proposed sub-projects that do not comply with the requirements of this ESMF, the completed screening form and the World Bank safeguards policies will not be cleared for approval.

Step 1.5 Drafting of the ESMP

Based on the screening tools, the site-specific ESMPs need to be prepared, which will detail the mitigation measures to be implemented during civil works, roles and responsibilities of respective officials and stakeholders, monitoring, supervision and reporting plan, timeline for implementation and a site-specific budget. (detailed in appendix 9)

The site-specific ESMPs should be prepared by District Health Management Team with the assistance of the District technical team and cleared by the approval authority – the **Department of Environment**

Step 1.6 Public Consultation And Disclosure

Public consultations are critical in preparing an effective and acceptable sub-project. All sub-project applications, planning reports and appraisal reports have to be available for public examination at suitable and accessible locations including the district council offices and the offices of the ministry responsible for health. Consultation with the local communities and all other interested parties is important during the screening process.

The first step is to hold public consultations with the local communities and all other interested/affected parties.

The consultations should identify key issues and determine how the concerns of all parties will be addressed. To facilitate meaningful consultations all relevant material and information concerning the sub-projects should be made available to the stakeholders in a timely manner, prior to the consultation. As far as practicable, this material and information will be in a form and language to be easily accessible and understood by the people being consulted. Depending on the extent of public interest in the potential impacts of the sub projects, a public hearing may be requested, to better convey public concerns and to facilitate elaboration of the sub-project activities and their impacts.

The District Health Officer (DHO) will be responsible for organizing and the District Environmental Health Officer will be responsible for taking the minutes of the public hearing or disclosure meeting. The office will also produce and distribute copies of the minutes to local leadership, local representatives, NGOs, and other civil societies in the community, as appropriate. A summary of the outcome of this public consultation or disclosure meeting will be posted at appropriate public places.

Any interested individual or group has the right of appeal, if dissatisfied with the decision reached at any stage in the EIA process. The appeal process will be according to the environmental management regulation or Act.

Step 1.7 Inclusion of ESMP In Contractor Documents

The requirements and mitigation measures detailed in the site-specific ESMPs must be incorporated into the contractors' documents which must be monitored prior to start of works and during implementation of civil works (detailed in appendix 8)

Step 1.8 Monitoring and Reporting

The lead implementing Agent, the Ministry of Health (MoH) with the help of relevant authorities must monitor the environmental effects of project implementation and the success of mitigation measures. This monitoring is an important part of managing the impacts of the project. This should be done by an independent team of experts drawn from all spheres of the environment that may be affected.

6.4 ANNUAL MONITORING AND REVIEWS

Environmental monitoring needs to be carried out during the implementation of the Sub-projects. Monitoring of the compliance of sub-project implementation with the mitigation measures set out in the ESMP, PMP and/or RAP will be carried out jointly by District Management Teams, District technical teams and the Tuberculosis and Health Systems Support Project - PCU. District Health Offices should supervise the monitoring activities and are required to report annually on sub-project activities during the preceding year. The information to be included in these annual reports is shown in Appendix 6. An annual monitoring report must be submitted to the WB by the Tuberculosis and Health Systems Support Project - PCU.

Compliance monitoring comprises on-site inspection of activities to verify that measures identified in the ESMP, PMP and/or RAP are being implemented. This type of monitoring is similar to 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 appointed environmental consultant will have the responsibility of conducting the environmental inspections. An annual inspection report must be submitted (together with the monitoring report) to the WB for review and approval.

Annual reviews may be carried out by an independent local consultant, NGO or other service provider that is not otherwise involved with the PCU (Appendix 5). Annual reviews should evaluate the annual monitoring report from District Health Offices and the annual inspection report from MoH/PCU. The purpose of the reviews is two-fold:

1. To assess compliance with ESMP procedures, learn lessons, and improve future ESMP performance;
2. 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 PCU 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. Guidance on undertaking annual reviews is provided in Appendix 5 of this ESMP.

6.4.1 Monitoring Indicators

In order to be able to assess the effectiveness of the proposed mitigation measures for the impacts that will arise from the potential refurbishment activities, the following will be used as indicators for monitoring the programmes implementation:

- Hectarage of vegetation clearance.; Length of infrastructure rehabilitated.
- Hectarage of levelled land; Number of pit latrines for excreta disposal for workers
- Quality of construction materials for the camps and lodges
- Quality of water discharged from the establishments.

6.5 THE MONITORING PLAN

The monitoring plan for the Health Care Facilities is summarized in table 6-2 below:

Table 6-2 *Monitoring Activities and Indicators*

ISSUE	*METHOD OF MONITORING*	AREAS OF CONCERN	POSITIVE INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
Crime	The PCU should Liaise with police department if crime/theft becomes a problem.	• Criminal activities at the Health Care Facilities	Crime theft kept to a minimum. Incidences of materials theft and house breaking minimized.	Regularly and ongoing as project is implemented	• PCU • Police department • Centre Administrator
Noise	Noise monitoring should be carried out on an ad-hoc basis by the Environmental Monitor or the PCU to establish noise levels in the work areas.	• Noise Levels	Noise levels at the nearest sensitive receiver would be kept to a minimum.	Regularly and ongoing as project is implemented.	• Ministry Of Health • Department Of Environment • PCU • Centre Administrator
Health	The PCU must ensure that education and awareness campaigns are implemented. The Ministry of Health, local authority should carry out awareness campaigns on potential diseases.	• Public health • Ensure that stagnant water is sprayed to destroy mosquito larvae. • Waste management at Sub-project sites. • Disease outbreak due to concentration of people at the Sub-project sites. • Disease outbreak due to dust and water pollution.	Reduction in number of cases of such diseases as TB, AIDS/STD related diseases recorded at hospital and medical clinic	Regularly and ongoing as project is implemented	• Health ministry • PCU • Local Authority
Energy	The Developer must inspect the provisions made by the Contractor to supply energy to the workforce, and ensure that fuel wood is not being collected. The Environmental Department should enforce legislation which prohibits cutting down of trees. The Environmental Department, PCU and local leadership (cultural and political) should sensitize the workers against cutting down of trees.	• Types of energy sources used in the project site	Energy supplied by electricity or other suitable source. Deforestation and resultant erosion controlled and reduced	Regularly	• Ministry of Health (MoH) • Department Of Environment • PCU
Air Pollution	Observations should be made on the level of dust generated during the refurbishment implementation by the Environmental Monitor or PCU. Dampening should be carried out if levels are unacceptable.	• Levels of dust emissions	Deposition of dust on surfaces should decrease with increased dampening	Regularly	• Health ministry • PCU • Contractor

ISSUE	*METHOD OF MONITORING*	AREAS OF CONCERN	POSITIVE INDICATOR	FREQUENCY	RESPONSIBLE AUTHORITIES
Landscape	The PCU should make visual inspection of earth works to ensure that excessive excavation is not being carried out. Temporary screening may be appropriate in some cases. Storage of building material should not mar the landscape	• Visual intrusions. • Aesthetics.	Landscape alteration reduced to a minimum	Monthly	• Department Of Culture • Department Of Environment • PCU
Complaints	• The PCU should inspect the record of complaints made by local residents, to be kept by the Health Care Facility management, and should check that action is taken quickly and that the number of complaints do not rise significantly.	• Complaints	Number of complaints decreases.	Regularly	• PCU • MoH • Health Care Facility • Department Of Environment
Local governance	MLGC to ensure the following • Compliancy to designs. • Employment opportunities and recruitment are transparent. • Allocation of land is overboard • Cultural values are respected.	• Land management • Land allocations • Socio cultural issues • Local governance • Social Aspects, • Land rights	• Disputes over land reduced • Cooperation of local leadership is secured • Locals employed in the projects	Regularly	• Ministry of Local Government and Chieftainship • District Councils • PCU • MoH

7. CAPACITY BUILDING, TRAINING AND TECHNICAL ASSISTANCE

7.1 INTRODUCTION

Effective implementation of the Environmental and Social Management Framework will require technical capacity of implementing institutions. Project implementing bodies need to understand inherent social and environmental issues and values and be able to clearly identify indicators of these. A capacity needs assessment was inbuilt to identify strengthening needs on social and environmental evaluation, screening, mitigation and monitoring during the courses of conducting this ESMF study. This chapter sets out the training and capacity building that is required to support the implementation of this ESMF. These recommendations are based on observations made during the field visits carried out as part of the preparation of this ESMF.

In many institutions, staffs have been retained for core activities of their profession whereas little consideration to directly oversee environmental management activities has been taken. In some cases, environment personnel are present but their level of training and technical capacity on environmental principles and tools of management is not sufficient. Training and awareness creation will be undertaken at different levels of implementation. These levels will entail the central Government, local authorities, private sector, NGOs, and grassroots stakeholders. The exercise will be customised according to each level's needs to ensure adequacy in implementation of the ESMF.

7.2 TECHNICAL CAPACITY ENHANCEMENT:

Awareness creation, training and sensitization will be required for personnel of the following institutions.

- The Tuberculosis and Health Systems Support Project PCU
- Line and Sector Ministries' District Offices
- Rural District Councils (RDC)
- District Environmental Health Offices
- District Environmental Departments (MTEC)
- NGOs,

Training will focus on:

- Stakeholder engagement, consultation and partnerships;
- EIA law, procedures, & guidelines
- Use and application of ESMF tools (Screening checklists, ESMP, EA), their review, implementation and enforcement.
- Development of mitigation measures and Environmental Management Plans
- Thorough review of National EIA procedures, Environmental Management policies & guidelines
- WB safeguards as well as their implementation and enforcement.
- Environmental reporting, monitoring and follow-up of ESMF
- Reporting, monitoring and follow-up of ESMF

In order to reduce costs, minimize duplication of efforts and integrate existing technical expertise, officers with relevant knowledge and experience in particular fields will be used to train the others. As an example the District Environment Officers can be used to train on

requirements of Law and associated guidelines and regulations, use of checklists and EMSP implementation, etc.

Table 7-1, sets out the specific training requirements of each of these groups. For each training session, the value of inviting participation of other stakeholders, such as those from local authorities and the local private sector, should be considered. For each group, training will be provided to bring them to a different level of expertise in the different areas (refer to *Table 7-1*):

(i) In-depth training to a level that allows trainees to go on to train others, including technical procedures where relevant;
(ii) Sensitisation, in which the trainees become familiar with the issues to a sufficient extent that it allows them to demand their precise requirements for further technical assistance; and
(iii) Awareness-raising in which the participants acknowledge the significance or relevance of the issues, but are not required to have technical or in-depth knowledge of the issues.

Table 7-1 *Training, Sensitization and Sensitization raised awareness Requirements*

	Participants				
	District Safeguards officer (MTEC)	***Relevant Line Ministry staff at district level***	***District Environmental Health officers and other Line and sectoral Ministries***	***Designated safeguards focal points at Community level***	***Community representatives and local leaderships***
Environmental and Social Impact Assessment (ESIA) procedures, guidelines, preparation and application for subprojects.	T	A	A	NA	
Public consultation	T	A	A	S	A
Integrating environmental and social management into development planning	T	A	A	S	S
Applying ESMF	T	A	A	S	S
National and International environmental and social management guidelines and standards	T	S	S	NA	
Stakeholders engagement, consultation and partnerships;	T	A	S	S	S
ESMP Development and application	T	NA	A	NA	S
WB safeguards as well as their implementation and enforcement.	T	A	A	NA	S

T = detailed training, S = sensitization to the issues, A = raised awareness, NA=not applicable

Training to district level staff and line Ministry staff on issues of environmental management, is required in the form of initial training followed by regular refresher courses and updates.

The Safeguards Specialist at national PCU level and the District Safeguards officers will provide training to others with the assistance of the MTEC District Environmental Officers. A cascade model of training will be adopted with regular oversight from the MTEC and The Tuberculosis and Health Systems Support Project PCU at the national level. Details of the

training are set out in table 7-1 and 7-2. Programs will also include refresher courses from time to time in all of the topics identified.

Table 7-2 *Training Schedule*

Participants	Duration and Format	Frequency
Safeguards officers (MTEC District Environmental Officers) in 10 districts	2 days training	Year 1 of the project
	1 day refresher workshop	Second Year of the project
***Relevant Line Ministry staffs in* 10 districts**	1 day Workshop	Year 1 of the project
	½ day refresher workshop	After Year 1 as needed
District Environmental Health officers, Line and sector Ministries in 10 Districts	1 day workshop	Year 1 of the project
	½ day refresher workshop	Annually after year 1
Designated safeguards focal points at Community level	1 day workshop	Year 1 of the project
Community representatives and local leaderships	1 day sensitization workshop	Year 1 of the project

Table 7-3 below provides costs estimates for the identified capacity building activities which are then incorporated into the main ESMF budget in Chapter eight. A contingency is included to cater for training of new district officers in instances where the first appointed officer has resigned and for re-training of non-performers. 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 30 people for District environmental Office team (MTEC)
- An average number of 26 people for a local level team.
- The length of training sessions will depend on the course, and will vary from ½ days to 5 days
- The estimated costs include reimbursables like training costs/fees, hire of rooms, and food for participants, per diems, and transport costs. Training subsistence allowances have been estimated at R100.00 per participant per day while a lump sum of R2500.00 has been included for each training session to cover the costs of the trainer.

Table 7-3 *Budget for training activities*

Training activity	***Duration [days]***	***Cost/participant /day* [USD]***	***No. of participants***	***Total cost [USD]***
Safeguards Officer **(MTEC District Environmental Officers)**				
Subject matter training	2	200	10	4,000.00
follow up refresher training	1	150	10	1,500.00
Subtotal				**5,500.00**
Relevant Line Ministry staffs 4 Districts				
Initial training	1	200	4	800.00
Annual follow up training	½	150	4	300.00
Subtotal				**1,100.00**
District Environmental Health officers, Line and sector Ministries at 10 Districts				
Initial training	1	200	20	4,000.00
Annual follow up training	½	150	20	1,500.00
Subtotal				**5,500.00**
Designated safeguards focal points at Community level				
Initial workshop	1	200	10	2,000.00
Subtotal				**2,000.00**
Community representatives and local leaderships				
Initial sensitization	1	100	20	20,000.00
Subtotal				**20,000.00**

Training activity	*Duration [days]*	*Cost/participant /day* [USD]*	*No. of participants*	*Total cost [USD]*
Reimbursables				10,000.00
Subtotal				**10,000.00**
TOTAL				**44,100.00**
Contingency for additional training due to staff turnover and non-performance (15 %)				6,615.00
GRAND TOTAL				**50,715.00**

*Inclusive of participants' transport, accommodation and perdiems and, if applicable, trainers' transport and per diems.

The training activities in Environmental and Social Impact Assessment including environmental project screening, can be conducted by MTEC or private consultants under the supervision of the project PCU. 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 very useful for assessing the environmental implications of the sub-project activities before they start.

Training in Project Planning and Implementation should be done before any project activities start in order to prepare the participants to use their knowledge during project implementation. The training should be done once during the project life.

8. ESMF IMPLEMENTATION BUDGET

8.1 ACTIVITY DESCRIPTIONS

The following is a breakdown of costs for the implementation of the ESMF including the end-of-project environmental audit.

8.1.1 Development of Site Specific EMPS

Recruitment of an environmental and social specialist to develop site specific Environmental and Social Management Plans (ESMPs) for all the sub-projects before commencement.

8.1.2 Environmental Auditing

1 month national consultant to undertake environmental and social audit. Will be mainstreamed within the scope of the Project's Annual Audit

8.2 TOTAL COST FOR THE ESMF IMPLEMENTATION

Table 8-1 Budgetary requirements for the ESMF implementation

No.	ACTIVITY	YEAR				TOTAL	NOTES
		1	2	3	4		
1.0	**Institutional Development**						
	• Policy Workshops	30				30	
2.0	**Training**						
	Safeguards officers at 10 districts						
	• training	2				2	2 day workshop
	• Refresher workshop		1			1	1 day workshop
	Relevant Line Ministry staffs at four districts						
	• ***workshop***	1				1	1 day workshop
	Environmental Health officers, Line and sector Ministries at 103 Districts						
	• ***workshop***	1				1	1 day workshop
	• Refresher workshop			½		½	½ day workshop
	Designated safeguards focal points at Community level						
	• ***workshop***	1				1	1 day workshop
	Community representatives and local leaderships						
	• sensitization workshop	1				1	1 day workshop
3.0	monitoring visits, and consultations						
	• monitoring visits	25	25	25	25	100	100 days @ $200/day including expenses
	• consultations	10	10	10	10	40	40 days @ $200/day including expenses
4.0	Allowance for Subproject EMPs,						
	• Environmental Management Plans	15	15	15	15	60	60 days @ $200/day including expenses
	• Work plans any other required safeguards instrument.	15	15	15	15	60	60 days @ $200/day including expenses
5.0	Annual Reviews	10	10	10	10	40	40 days @ $200/day including expenses
	TOTAL	111	76	75 ½	75	337½	

Table 8-2 ESMF implementation budget

Activity	*Description*	*Total cost [USD]*
Capacity development	As per chapter **Error! Reference ource not found.**	50,715.00
Development of Site-specific ESMPs		61,175.00
Technical Assistance	General and specific TA	28 000.00
Annual reviews of ESMF	Based on four annual reviews (the last annual review is replaced by the end-of-project evaluation)	69,500.00
End-of-project ESMF evaluation	An evaluation of the impact of the ESMF and the subprojects	21 500.00
Total		230,890.00

9. IMPLEMENTATION SCHEDULE AND REPORTING

9.1 IMPLEMENTATION SCHEDULE

This section of the ESMF describes the process for ensuring that environmental and social concerns are adequately addressed through the institutional arrangements and procedures used by the project for managing the identification, preparation, approval and implementation of subprojects. This section sets out the reporting systems and responsibilities of the institutions in implementing the ESMF including the details to be addressed by the ESMF and the specific steps to be undertaken to ensure adherence to the ESMF.

In order to comply with various technical and performance standards, the investments to be supported under this program shall comply with this Environmental and Social Management Framework. The implementation, monitoring and reporting arrangements for the ESMF have been worked out within the overall institutional structure for implementation of the proposed Tuberculosis and Health Systems Support Project. The implementation schedule for the ESMF is outlined in table 9-1 and takes into account all activities related to the proposed measures (enhancement and mitigation), the monitoring program, consultations, and institutional arrangements.

9.2 REPORTING

To monitor the progress of the implementation of the measures that have been identified in this ESMF, annual reviews will be carried out as outlined in Appendix 5. The principal output of the annual reviews is an **annual review report** that documents the review methodology, summarizes the results, and provides practical recommendations. Distinct sections should address: a) ESMF performance and, b) cumulative impacts. Annexes should provide the detailed results of the field work, and summarize the number of approved sub-projects by District and their characteristics according to the annual report format (Appendix 6). Copies of the annual review report should be delivered to the programme coordination unit (PCU), to each Ministry of Health office responsible for appraisal, approval and implementation of sub-projects, and to the Bank.

To ensure early detection of critical environmental and social conditions and to provide information on the mitigation progress and results, reporting deadlines have been specified in the implementation schedule.

Table 9-1 Implementation schedule for ESMF

No.	PROJECT ACTIVITIES	REPORTING DEADLINES	YEAR 1	YEAR 2	YEAR 3	YEAR 4
1.0	Various Capacity development Programmes	• ESMP before project approval • Annually at end of 4th quarter				
2.0	Development of Site-specific ESMPs	Year 1, End of 2nd quarter				
3.0	Development of Site Specific Work plans	Year 1, End of 2nd quarter				
4.0	Technical Assistance	Annually with each rain season				
7.0	Annual reviews of ESMF	Annually by end of 3rd quarter				
8.0	End-of-project ESMF evaluation	By end of 3rd quarter year four				

10. CONCLUSIONS

The proposed Tuberculosis and Health Systems Support Project requires affective coordination and capacity building of all implementing agents to foster an enabling environment for reducing vulnerabilities. This requires active participation of all stakeholders especially those representing the rights of vulnerable groups in the society. Clear cut roles for all stakeholders and institutions needs to be drawn to make sure that there are no conflicts resulting from the unclear job descriptions. The operating environment should be analyzed at the local levels and the requisite remedies be implemented for the success of the project.

The proposed project has potential to significantly improve the livelihoods of the local populations in the target Districts. The improvement in health that the community will benefit, will translate to improved livelihood as people become productive again and this will translate ultimately to an improved economy.

The environmental impacts that the developmental activities are likely to cause include disturbance of soil from digging of pits and foundations, tree cutting and general vegetation clearing, emission of dust and generation of noise. **These envisaged environmental impacts will be experienced during the construction phase and will be localized, minimal, short term and can be mitigated.**

The ESMP presented in the study **will be used to mitigate the impacts during and after the rehabilitation of the Health care Facilities. The Final benefits of this project to the nation will, by far outweigh potential negative effects. Further, the project will overally not have any apparent significant environmental impacts if the recommended mitigations are carried out.**

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APPENDICES

APPENDIX 1 ENVIRONMENTAL AND SOCIAL SCREENING FORM

THE KINGDOM OF LESOTHO

ENVIRONMENTAL AND SOCIAL SCREENING FORM

FOR

SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS OF

THE TUBERCULOSIS AND HEALTH SYSTEMS SUPPORT PROJECT

Name of the Project:

Sub-projects Name:

Sub-projects Location:

Community Representative and Address:

Extension Team Representative and Address:

Site Selection:
When considering the location of a sub-project, 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	
Natural habitats	No natural habitats present of any kind	No critical natural habitats; other natural habitats occur	Critical natural habitats present	
Water quality and water resource availability and use	Water flows exceed any existing demand; low intensity of water use; potential water use conflicts expected to be low; no potential water	Medium intensity of water use; multiple water users; water quality issues are important	Intensive water use; multiple water users; potential for conflicts is high; water quality issues are important	

Issues	Site Sensitivity			Rating
	Low	Medium	High	
	quality issues			
Natural hazards vulnerability, floods, soil stability/ erosion	Flat terrain; no potential stability/erosion problems; no known volcanic/seismic/ flood risks	Medium slopes; some erosion potential; medium risks from volcanic/seismic/ flood/ hurricanes	Mountainous terrain; steep slopes; unstable soils; high erosion potential; volcanic, seismic or flood risks	
Cultural property	No known or suspected cultural heritage sites	Suspected cultural heritage sites; known heritage sites in broader area of influence	Known heritage sites in project area	
Involuntary resettlement	Low population density; dispersed population; legal tenure is well-defined; well-defined water rights	Medium population density; mixed ownership and land tenure; well-defined water rights	High population density; major towns and villages; low-income families and/or illegal ownership of land; communal properties; unclear water rights	

Completeness of Sub-projects Application:

Does the sub-project application document contain, as appropriate, the following information?

	Yes	No	N/A
Description of the proposed project and where it is located			
Reasons for proposing the project			
The estimated cost of construction and operation			
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			
Any land that needs to be acquired, as well as who owns it, lives on it or has rights to use it			
A work program for construction, operation and decommissioning the physical works, as well as any site restoration needed afterwards			
Construction methods			
Resources used in construction and operation (e.g. materials, water, energy)			
Information about measures included in the sub-projects plan to avoid or minimize adverse environmental and social impacts			
Details of any permits required for the project			

Environmental and Social Checklist

		Yes	No	ESMP Guidance
A	**Type of activity – Will the sub-projects :**			
1	Involve the construction or rehabilitation of water supply reticulation?			
2	Build or rehabilitate any feeder roads?			
3	Build or rehabilitate any electric power supply system?			
4	Build or rehabilitate any structures or buildings?			
5	Support Health Delivery activities?			
6	Be located in or near an area where there is an important historical, archaeological or cultural heritage site?			
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?			
8	Depend on water supply from an existing dam, weir, or other water diversion structure?			
	If the answer to any of questions 1-8 is "Yes", please use the indicated Resource Sheets or sections(s) of the ESMP for guidance on how to avoid or minimize typical impacts and risks			
B	**Environment – Will the sub-projects :**			
9	Risk causing the contamination of drinking water?			
10	Cause poor water drainage and increase the risk of water-related diseases such as malaria or bilharzia?			
11	Harvest or exploit a significant amount of natural resources such as trees, soil or water?			
12	Be located within or nearby environmentally sensitive areas (e.g. intact natural forests, mangroves, wetlands) or threatened species?			
13	Create a risk of increased soil degradation or erosion?			
14	Create a risk of increasing soil salinity?			
15	Produce, or increase the production of, solid or liquid wastes (e.g. water, medical, domestic or construction wastes)?			
16	Affect the quantity or quality of surface waters (e.g. rivers, streams, wetlands), or groundwater (e.g. wells)?			
17	Result in the production of solid or liquid waste, or result in an increase in waste production, during construction or operation?			
	If the answer to any of questions 9-17 is "Yes", please include an Environmental and social Management Plan (ESMP) with the sub-projects application.			
C	**Land acquisition and access to resources – Will the sub-projects :**			
18	Require that land (public or private) be acquired (temporarily or permanently) for its development?			
19	Use land that is currently occupied or regularly used for productive purposes (e.g. gardening, farming, pasture, fishing locations, forests)			
20	Displace individuals, families or businesses?			
21	Result in the temporary or permanent loss of crops, fruit trees or household infrastructure such as granaries, outside toilets and kitchens?			
22	Result in the involuntary restriction of access by people to legally designated parks and protected areas?			

		Yes	No	ESMP Guidance
	It the answer to any of the questions 18-22 is "Yes", please consult the ESMP and, if needed, prepare an Resettlement Action Plan (RAP)			
D	**Dam safety – Will the sub-projects :**			
23	Involve the construction of a dam or weir?			
24	Depend on water supplied from an existing dam or weir?			
	If the answer to question 23-24 is "Yes", please consult the ESMP			

CERTIFICATION

We certify that we have thoroughly examined all the potential adverse effects of this sub-project. To the best of our knowledge, the sub-projects plan as described in the application and associated planning reports (e.g. ESMP, RAP, PMP), if any, will be adequate to avoid or minimize all adverse environmental and social impacts.

Signatures:

..... **.....**
DISTRICT TECHNICAL TEAM **DATE**

..... **.....**
DISTRICT MANAGEMENTTEAM **DATE**

Desk Appraisal by Review Authority:

- **The sub-project can be considered for approval.** The application is complete, all significant environmental and social issues are resolved, and no further sub-project planning is required.

- **A field appraisal is required.**

Note: *A field appraisal must be carried out if the sub-project:*

- *Needs to acquire land, or an individual or community's access to land or available resources is restricted or lost, or any individual or family is displaced*
- *May restrict the use of resources in a park or protected area by people living inside or outside of it*
- *May affect a protected area or a critical natural habitat*
- *May encroach onto an important natural habitat, or have an impact on ecologically sensitive ecosystems (e.g. rivers, streams, wetlands)*
- *May adversely affect or benefit an indigenous people*
- *Involves or introduces the use of pesticides*
- *Involves, or results in: a) diversion or use of surface waters; b) construction or rehabilitation of latrines, septic or sewage systems; c) production of waste (e.g. slaughterhouse waste, medical waste); d) new or rebuilt irrigation or drainage systems; or e) small dams, weirs, reservoirs or water points.*

The following issues need to be clarified at the sub-project site:

……
……
……

A Field Appraisal report will be completed and added to the sub-project file.

Name of desk appraisal officer (print): …….

Signature:

..... **.....**

DESK OFFICER **DATE**

APPENDIX 2 ENVIRONMENTAL AND SOCIAL FIELD APPRAISAL FORM

NAME OF PROJECT **Application Number:**

PART 1: **IDENTIFICATION**

1. Project Name: (for example: Refurbishment of Mamohau Hospital – Leribe District)

2. Project Location: (for example: Leribe District)

3. Reason for Field Appraisal: Summarize the issues from the Screening form that determine the need for a Field Appraisal.

4. Date(s) of Field Appraisal:

5. Field Appraisal Officer and Address:

6. District Management Team Representative and Address:

7. District Technical Team Representative and Address:

PART 2: DESCRIPTION OF THE PROJECT

8. Project Details: Provide details that are not adequately presented in the sub-project application. If needed to clarify sub-project details, attach sketches of the sub-project component(s) in relation to the community and to existing facilities.

PART 3: ENVIRONMENTAL AND SOCIAL ISSUES

9. Will the project: **Yes** **No**
* Need to acquire land?
* Affect an individual or the community's access to land or available resources?
* Displace or result in the involuntary resettlement of an individual or family?

If "Yes", tick one of the following boxes:
- ☐ The Resettlement Action Plan (RAP/ARAP) included in the sub-project application is adequate. No further action required.
- ☐ The RAP/ARAP included in the sub-project application must be improved before the application can be considered further.
- ☐ An RAP/ARAP must be prepared and approved before the application can be considered further.

10. Will the project: **Yes** **No**
* Encroach onto an important natural habitat?
* Negatively affect ecologically sensitive ecosystems?

If "Yes", tick one of the following boxes:
- ☐ The Environmental and Social Management Plan (ESMP) included in the sub-project application is adequate. No further action required.
- ☐ The EMP included in the sub-project application must be improved before the application can be considered further.
- ☐ An EMP must be prepared and approved before the application can be considered further.

11. Will this project involve or result in: **Yes** **No**

* Diversion or use of surface waters?
* Production of waste (e.g. sewage effluent)?

* New or rebuilt drainage systems?

If "Yes", tick one of the following boxes:

- ☐ The application describes suitable measures for managing the potential adverse environmental effects of these activities. No further action required.
- ☐ The application does not describe suitable measures for managing the potential adverse environmental effects of these activities. An ESMP must be prepared and approved before the application is considered further.

12. Will this project require the construction of a small dam or weir? Yes No

If "Yes", tick one of the following boxes:

- ☐ The application demonstrates that the structure(s) will be designed by qualified engineers, and will be built by qualified and adequately supervised contractors. No further action is required.
- ☐ The application does not demonstrate that the structure(s) will be designed by qualified engineers, and will be built by qualified and adequately supervised contractors. The application needs to be amended before it can be considered further.

13. Will this project rely on water supplied from an existing dam or weir? Yes No

If "Yes", tick one of the following boxes:

- ☐ The application demonstrates that a dam safety report has been prepared, the dam is safe, and no remedial work is required. No further action is required.
- ☐ The application does not demonstrate that a dam safety report has been prepared, the dam is safe, and no remedial work is required. A dam safety report must be prepared and approved before the application is considered further.

14. Are there any other environmental or social issues that have not been adequately addressed? Yes No

If "Yes", summarize them:

and tick one of the following boxes:

- ☐ Before it is considered further, the application needs to be amended to include suitable measures for addressing these environmental or social issues.
- ☐ An ESMP needs to be prepared and approved before the application is considered further.

PART 4: FIELD APPRAISAL DECISION

- **The sub-project can be considered for approval.** Based on a site visit and consultations with both interested and affected parties, the field appraisal determined that the community and its proposed project adequately address environmental and/or social issues as required by the ESMP.
- **Further sub-project preparation work is required before the application can be considered further.** The field appraisal has identified environmental and/or social issues that have not been adequately addressed. The following work needs to be undertaken before further consideration of the application:

All required documentation such as an amended application, ESMP, RAP/ARAP, or PMP will be added to the sub-projects file before the sub-projects is considered further.

Name of field appraisal officer (print): .....

Signature:

..... **.....**

DESK OFFICER **DATE**

APPENDIX 3 GUIDELINES FOR AN ESMP

Sub project's Environmental Management Plan (EMP) consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. The plan also includes the actions needed to implement these measures. Management plans are essential elements of EA reports for Category "A" projects; for many Category "B" projects like the Proposed TB Control project, the EA may result in a management plan only. To prepare a management plan, the borrower and its EA design team (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements. More specifically, the EMP includes the following components.

When a sub-project includes distinct mitigation measures (physical works or management activities), an Environmental and Social Management Plan (ESMP) needs to be included with the sub-project application.

ESMP Contents:

An ESMP usually includes the following components:

- Description of adverse effects: The anticipated effects are identified and summarized.

Description of mitigation measures: Each measure is described with reference to the effect(s) it is intended to deal with. As needed, detailed plans, designs, equipment descriptions, and operating procedures are described. The EMP identifies feasible and cost-effective measures that may reduce potentially significant adverse environmental impacts to acceptable levels. The plan includes compensatory measures if mitigation measures are not feasible, cost-effective, or sufficient. Specifically, the EMP:

- identifies and summarizes all anticipated significant adverse environmental impacts (including those involving indigenous people or involuntary resettlement);
- describes--with technical details--each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;
- (c) estimates any potential environmental impacts of these measures; and
- (d) provides linkage with any other mitigation plans (e.g., for involuntary resettlement, Indigenous Peoples, or cultural property) required for the project.
- Description of monitoring program: Monitoring provides information on the occurrence of environmental effects of the project, particularly the environmental impacts of the project and the effectiveness of mitigation measures. Such information enables the borrower and the Bank to evaluate the success of mitigation as part of project supervision, and allows corrective action to be taken when needed. It helps also to identify how well mitigation measures are working, and where better mitigation may be needed. The monitoring program should identify what information will be collected, how, where and how often. It should also indicate at what level of effect there will be a need for further mitigation. How environmental effects are monitored is discussed below.
- Therefore, the EMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the EA report and the mitigation measures described in the EMP. Specifically, the monitoring section of the EMP provides(a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

- Capacity Development and Training: To support timely and effective implementation of environmental project components and mitigation measures, the EMP draws on the EA's assessment of the existence, role, and capability of environmental units on site or at the agency and ministry level. If necessary, the EMP recommends the establishment or expansion of such units, and the training of staff, to allow implementation of EA recommendations. Specifically, the EMP provides a specific description of institutional arrangements, and outlines who is responsible for carrying out the mitigatory and monitoring measures (e.g., for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training). To strengthen environmental management capability in the agencies responsible for implementation, EMPs cover one or more of the following additional topics: (a) technical assistance programs, (b) procurement of equipment and supplies, and (c) organizational changes.
- Responsibilities: The people, groups, or organizations that will carry out the mitigation and monitoring activities are defined, as well as to whom they report and are responsible. There may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies.
- Implementation schedule: For all three aspects (mitigation, monitoring, and capacity development), the EMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans. The timing, frequency and duration of mitigation measures and monitoring are specified in an implementation schedule, and linked to the overall sub-project schedule.
- Cost estimates and sources of funds: These are specified for the initial sub-project investment and for the mitigation and monitoring activities as a sub-project is implemented. Funds to implement the EMP may come from the sub-project grant, from the community, or both. Government agencies and NGOs may be able to assist with monitoring. The capital and recurrent cost estimates and sources of funds for implementing the EMP. These figures are also integrated into the total project cost tables

- Integration of EMP with Project: The borrower's decision to proceed with a project, and the Bank's decision to support it, is predicated in part on the expectation that the EMP will be executed effectively. Consequently, the Bank expects the plan to be specific in its description of the individual mitigation and monitoring measures and its assignment of institutional responsibilities, and it must be integrated into the project's overall planning, design, budget, and implementation. Such integration is achieved by establishing the EMP within the sub project so that the plan will receive funding and supervision along with the other components.

Template for mitigation plan

Project Stage	***Project activity***	***environmental Impacts***	***mitigation/ enhancement measures***	***Institutional responsibilities***	***Cost***
Pre-construction					
Construction					
Operation and maintenance					

Template for Monitoring Plan

Project Stage	***Mitigation measures***	***Parameters to be monitored***	***location***	***measurements***	***frequency***	***Institutional responsibilities***	***Cost***
Pre-construction							
Construction							
Operation and maintenance							

Monitoring Methods:

Methods for monitoring the implementation of mitigation measures or environmental effects should be as simple as possible, consistent with collecting useful information (see example below) and that community members can apply themselves. For example, they could just be regular observations of sub-project activities or sites during construction and then use. Are fences and gates being maintained and properly used around a new water point?; does a stream look muddier than it should and, if so, where is the mud coming from and why?; are chemicals/drugs being properly stored and used? Most observations of inappropriate behaviour or adverse effects should lead to common sense solutions. In some cases (e.g. unexplainable increases in illness or declines in fish numbers), there may be a need to require investigation by a technically qualified person.

Table AP 3.1. Example of monitoring water quality from a drainage project

Item	Monitoring Parameter	Sampling Frequency	Monitoring Location
Operation Phase			
Ground water quality	pH salinity Alkalinity conductivity ammonia Total nitrates Phosphorus Pesticide scans BOD COD	Monthly	tube wells, tile drain outfalls and/or monitoring wells
Surface water quality – receiving water	pH salinity Alkalinity conductivity ammonia Total nitrates Phosphorus Pesticide scans BOD COD Coliforms	weekly	above and below project influence and at strategic stations below and above drainage outfalls at minimum 500 meters; if the river exceeds 3 meters depth, samples at all stations should be at surface and 60-80% of depth
Drainage quality	pH salinity Alkalinity conductivity ammonia Total nitrates Phosphorus Pesticide scans BOD COD Coliforms	Weekly	At point of discharge

APPENDIX 4 ESMF REPORTING FORM

This appendix contains three templates to be used in conjunction with monitoring and reporting on ESMF implementation.

Table APP4.1 ESMF reporting form

Subproject title	*Subproject code*	*Application received (date)*	*Field appraisal undertaken (date if undertaken)*	*Application approved (date if approved)*	*EMP developed (yes or no)*	*Written warnings of violation of EMP issued (yes/no)*	*Chance find procedures invoked (yes or no)*

Table APP4.1 ESMF training form

Personnel	*No. of people trained*	*Training received*
Safeguard specialist/officer		
Locality focal points		
District focal points		
MoH staff		
Community members etc.		

Table APP4.1 Follow up on previous recommendations

Recommendation	*Date of recommendation*	*Action taken*	*Recommendation implemented (yes/no)*

APPENDIX 5 GUIDELINES FOR ANNUAL REVIEWS

Objectives: The objectives of annual reviews of ESMP implementation are two-fold:

a) To assess Project performance in complying with ESMP procedures, learn lessons, and improve future performance; and

b) To assess the occurrence of, and potential for, cumulative impacts due to the TB Control project-funded and other development activities.

The annual reviews are intended to be used by PCU management to improve procedures and capacity for integrating natural resources and environmental/social management into project operations. They will also be a principal source of information to Bank supervision missions.

Scope of Work: *ESMP Performance Assessment*
The overall scope of the performance assessment work is to:

a) Assess the adequacy of the sub-project approval process and procedures based on interviews with project participants, project records, and the environmental and social performance of a sample of approved sub-projects;

b) Assess the adequacy of ESMP roles and responsibilities, procedures, forms, information resource materials, etc.;

c) Assess the needs for further training and capacity building;

d) Identify key risks to the environmental and social sustainability of sub-projects; and

e) Recommend appropriate measures for improving ESMP performance.

The following tasks will be typical:
a) Review district records of sub-projects preparation and approval (e.g. applications; screening checklists; ESMPs, RAP/ARAPs and PMPs appraisal forms; approval documents), monitoring reports as well as related studies or reports on wider issues of natural resources and environmental management in the country;

b) On the basis of this review, conduct field visits of a sample of approved sub-projects to assess the completeness of planning and implementation work, the adequacy of environmental/social design, and compliance with proposed mitigation measures. The sample should be large enough to be representative and include a substantial proportion of sub-projects that had (or should have had) a field appraisal according to established ESMP criteria (see Chapter 12 - The Screening Process). Sub-projects in sensitive natural or social environments should especially be included.

c) Interview project and district officials responsible for sub-projects appraisal and approval to determine their experience with ESMP implementation, their views on the strengths and weaknesses of the ESMP process, and what should be done to improve performance. Improvements may concern, for example, the process itself, the available tools (e.g. guidelines, forms, and information sheets), the extent and kind of training available, and the amount of financial resources available.

d) Develop recommendations for improving ESMP performance.

Cumulative Impacts Assessment

This part of the annual review assesses the actual or potential cumulative impacts of sub-projects with other sub-projects or development initiatives on the environment, natural resources and community groups. Cumulative impacts result from a number of individual small-scale activities that, on their own, have minimal impacts, but over time and in combination generate a significant impact. For example:

- Decline in groundwater levels or quality due to the construction of numerous wells and the introduction of numerous small-scale irrigation works;
- Overwhelmed or illegal waste and dumping sites due to the inappropriate disposal of increasing amounts of waste materials;
- Illegal poaching of wildlife due to expansion of land under cultivation or increased proximity and access to protected areas through construction of small access roads; and
- Attraction of large migrant populations to communities that have successfully introduced improve social infrastructure (such as schools, health centers or water sources) resulting in overcrowding, depletion of resources (e.g. space, supplies, water), etc.

The function of this assessment is primarily as an "early warning" system for potential cumulative impacts that might otherwise go undetected and unattended to. It will be largely based on the observations of people interviewed during the field work, and trends that may be noticed by district or regional officials. Where cumulative impacts are detected or suspected, recommendations will be made to address the issue, perhaps through more detailed study to clarify matters and what should or can be done about them.

Qualifications for Undertaking Annual Reviews:
The reviews should be undertaken by an individual or small team with training and experience relevant to the likely issues to be encountered (e.g. environmental and natural resources management and land acquisition and resettlement). They should also be familiar with the methods and practices of effective community consultation, and with typical methods and processes for preparing, appraising, approving and implementing small-scale community development projects.

Timing:
Annual reviews should be undertaken after the annual monitoring report has been prepared and before Bank supervision of the project, at the closing of each year of the project. It is expected that each review would require 3-4 weeks of field work (interviews, examination of sub-projects), and that the review report would be completed within 2 weeks of completing the field work.

Outputs:
The principal output is an **annual review report** that documents the review methodology, summarizes the results, and provides practical recommendations. Distinct sections should address: a) ESMP performance and b) cumulative impacts. Annexes should provide the detailed results of the field work, and summarize the number of approved sub-projects by district and their characteristics according to the annual report format (see Appendix 6). Copies of the annual review report should be delivered to the PCU Steering Committee, to each district office responsible for appraisal, approval and implementation of sub-projects, and to the World Bank. The District Review Panel may also want to host national or district workshops to review and discuss the review findings and recommendations.

APPENDIX 6 GUIDELINES FOR ANNUAL REPORT

Name of the Project: **Application Number:**
(THSSP**)**

1. Name of District or Local Government:

2. Name and Position of Review Authority Completing the Annual Report:

3. Reporting Year:

4. Date of Report:

5. Community Sub-project (s):

Please enter the numbers of sub-projects in the following table.

Types of Activities	**Approved this year**	**Application included an ESMP checklist**	**Field Appraisal**	**EMP**	**PMP**	**RAP/ARAP**	**Specific TA**
Water Supply							
Water point rehabilitation							
Earth dam rehabilitation							
Community reservoirs							
Small dams							
Water harvesting facility							
Gravity water schemes							
Roads and Energy							
Tertiary/secondary roads							
Tertiary/secondary road culverts/bridges							
Footpaths							
Agriculture and markets							
Terracing							
Agro-processing facilities							
Post harvest handling facilities							
Market places							
Natural resources management							
Anti-erosion interventions and soil fertility restoration							
Démonstration/nutrition gardens							
Stream and river bank protection							
Wetland development							
Soil Conservation Works							

6. Were there any **unforeseen environmental or social problems** associated with any sub-project approved and implemented this year? If so, please identify the sub-project (s) and summarize the problem (s) and what was or will be done to solve the problem (s). Use a summary table like the one below.

Sub-project	Problem(s)	Actions taken	Actions to be taken

7. Have any **other environmental or social analyses** been carried out by other public or private agencies in your district? If so, please describe them briefly.

……
……
……
.

8. Have you noticed any particular **problems with implementing the ESMP** in the past year (e.g. administrative, communications, forms, capacity)? If so, please describe them briefly.

……
……
……

9. **Training:** Please summarize the training received in your district in the past year, as well as key areas of further training you think is needed.

Group	Training Received	Training Needed
Review Authority		
Approval Authority		
Extension Teams		
NGOs/Associations		

APPENDIX 7 SUMMARY OF WORLD BANK SAFEGUARD POLICIES.

The World Bank Environmental and Social Safeguard Policies.

- **Environmental Assessment (OP 4.01).** Outlines Bank policy and procedure for the environmental assessment of Bank lending operations. The Bank undertakes environmental screening of each proposed project to determine the appropriate extent and type of EA process. This environmental process will apply to all sub-projects to be funded by the proposed project.

- **Natural Habitats (OP 4.04).** The conservation of natural habitats, like other measures that protect and enhance the environment, is essential for long-term sustainable development. The Bank does not support projects involving the significant conversion of natural habitats unless there are no feasible alternatives for the project and its siting, and comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs. If the environmental assessment indicates that a project would significantly convert or degrade natural habitats, the project includes mitigation measures acceptable to the Bank. Such mitigation measures include, as appropriate, minimizing habitat loss (e.g. strategic habitat retention and post-development restoration) and establishing and maintaining an ecologically similar protected area. The Bank accepts other forms of mitigation measures only when they are technically justified. Should the sub-project-specific EMPs indicate that natural habitats might be affected negatively by the proposed sub-project activities with suitable mitigation measures, such sub-projects will not be funded under this project.

- **Pest Management (OP 4.09).** The policy supports safe, affective, and environmentally sound pest management. It promotes the use of biological and environmental control methods. An assessment is made of the capacity of the country's regulatory framework and institutions to promote and support safe, effective, and environmentally sound pest management. This policy was not triggered by the proposed project.

- **Involuntary Resettlement (OP 4.12).** This policy 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. The project did not trigger this policy.

- **Indigenous Peoples (OD 4.20).** This directive 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. Sub-projects that would have negative impacts on indigenous people will not be funded under the proposed project.

- **Forests (OP 4.36).** This policy applies to the following types of Bank-financed investment projects: (a) projects that have or may have impacts on the health and quality of forests; (b) projects that affect the rights and welfare of people and their level of dependence upon or interaction with forests; and (c) projects that aim to bring about changes in the management, protection, or utilization of natural forests or plantations, whether they are publicly, privately, or communally owned. The Bank does not finance projects that, in its opinion, would involve significant conversion or degradation of critical forest areas or related critical habitats. If a project involves the significant conversion or degradation of natural forests or related natural habitats that the Bank determines are not critical, and the Bank determines that there are no feasible alternatives to the project and its siting, and comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs, the Bank may finance the project provided that it incorporates appropriate mitigation measures. Sub-projects with likelihood of having negative impacts on forests will not be funded under the project.

- **Cultural Property (OPN 11.03).** The term “cultural property” includes sites having archaeological (prehistoric), paleontological, historical, religious, and unique natural values. The Bank’s general policy regarding cultural property is to assist in their preservation, and to seek to avoid their elimination. Specifically, the Bank (i) 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. The management of cultural property 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, 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 proposed project will not fund sub-projects that will have negative impacts on cultural property.

- **Safety of Dams (OP 4.37).** For the life of any dam, the owner is responsible for ensuring that appropriate measures are taken and sufficient resources provided for the safety to the dam, irrespective of its funding sources or construction status. The Bank distinguishes between small and large dams. Small dams are normally less than 15 m in height; this category includes, for example, farm ponds, local silt retention dams, and low embankment tanks. For small dams, generic dam safety measures designed by qualified engineers are usually adequate. This policy does not apply to the proposed project.

- **Projects on International Waterways (OP 7.50).** The Bank recognizes that the cooperation and good will of riparians is essential for the efficient utilization and protection of international waterways and attaches great importance to riparians making appropriate agreements or arrangement for the entire waterway or any part thereof. Projects that trigger this policy include hydroelectric, irrigation, flood control, navigation, drainage, water and sewerage, industrial, and similar projects that involve the use or potential pollution of international waterways. The proposed project did not triggered this policy

- **Disputed Areas (OP/BP/GP 7.60)**. Project in disputed areas may occur in the Bank and its member countries as well as between the borrower and one or more neighbouring countries. Any dispute over an area in which a proposed project is located requires formal procedures at the earliest possible stage. The Bank attempts to acquire assurance that it may proceed with a project in a disputed area if the governments concerned agree that, pending the settlement of the dispute, the project proposed can go forward without prejudice to the claims of the country having a dispute. This policy is not expected to be triggered by sub-projects. This policy is unlikely to be triggered by sub-projects to be funded by this project.

APPENDIX 8 ENVIRONMENTAL GUIDELINES FOR CONTRACTORS

1. General Provisions and Precautions

The contractor shall take all necessary measures and precautions and otherwise ensure that the execution of the works and all associated operations on the work sites or offsite are carried out in conformity with statutory and regulatory environmental requirement of Lesotho. The contractor shall take all measures and precautions to avoid any nuisance or disturbance arising from the execution of the work. This shall, wherever possible, be achieved by suppression of the nuisance at source rather than abatement of the nuisance once generated. In the event of any soil or debris or silt from the work sites being deposited on any adjacent land, the contractor shall immediately remove all such spoil debris or silt and restore the affected area to its original state to the satisfaction of the responsible authorities.

2. Water Quality

The following conditions shall apply to avoid adverse impacts to water quality:

- The contractor shall prevent any interference with supply to, or abstraction from, water resources and the pollution of water resources (including underground percolating water) as a result of the execution of the works.
- The contractor shall not discharge or deposit any matter arising from the execution of the work into any waters except with the permission of the regulatory authorities concerned.
- The contractor shall at all times ensure that all existing stream courses and drains within and adjacent to the site are kept safe and free from any debris and any material arising from the works.
- The contractor shall protect all water courses, waterways, ditches, canals, drains, lakes and the like from pollution, silting, flooding or erosion as a result of the execution of the works.

3. Air Quality

The following conditions shall apply to avoid adverse impacts to air quality:

- Open burning will be prohibited.
- Blasting (If any) will be carried out using small charges, and dust – generating items will be conveyed under cover.
- In periods of high wind, dust- generating operations shall not be permitted within 200 meters of residential areas having regard to the prevailing direction of the wind.
- Water sprays shall be used during the delivery and handling of materials when dust is likely to be created and to dampen stored materials during dry and windy weather.
- Stockpiles of materials shall be sited in sheltered areas or within hoarding, away from sensitive areas. Stockpiles of friable material shall be covered with tarpaulins. With application of sprayed water during dry and windy weather. Stockpiles of material or debris shall be dampened prior to their movement whenever warranted.
- Vehicle with an open load – carrying area used for transporting potentially dust-producing material shall have proper fitting side and tailboards. Materials having the potential to produce dust shall not be loaded to a level higher than the side and tail boards, and shall be covered with a clean tarpaulin in good condition.

The tarpaulin shall be properly secured and extend over the edges of the side and tailboards.

- In periods of adverse weather adverse impacts to adjacent residents or site employees during construction will be mitigated by either discontinuing until favourable conditions are restored, or, if warranted, sites may be watered to prevent dust generation, particularly at crushing plants.
- Machinery and equipment will be fitted with pollution control devices, which will be checked at regular intervals to ensure that they are in working order. Best available pollution control technologies will be used

4. Protection of soils

Borrow pits. The following conditions shall apply to borrow pits:

- Borrow areas will be located outside the Health Care Facility premises.
- Pit restoration will follow the completion of works in full compliance with all applicable standards and specification.
- The excavation and restoration of the borrow areas and their surroundings, in an environmentally sound manner to the satisfaction of the contractor is required before final acceptance and payment under the terms of contracts.
- Borrow pit areas will be graded to ensure drainage and visual uniformity, or to create permanent tanks\dams.
- Topsoil from borrow pit areas will be saved and reused in re-vegetating the pits to the satisfaction of the contractor.

Quarries. To ensure adequate mitigation of potential adverse impacts, only licensed quarrying operations are to be used for material sources. If licensed quarries are not available the contractors may be made responsible for setting up their dedicated crusher plants at approved quarry sites.

Erosion. To avoid potential adverse impacts due to erosion, the contractor shall:

- Line spillage ways with riprap to prevent undercutting.
- Provide mitigation plantings and fencing where necessary to stabilize the soil and reduce erosion.
- Upgrade and adequately size, line and contour storm drainage to minimize erosion potential.
- To avoid erosion and gullying of road formations, the contractor should reduce his earthworks during the peak of rainy seasons, use gabions and miter drains and avoid angle termination at the intersections of cuts and fills.

As noted elsewhere in these specifications, ditches shall be designed for the toe of slopes in cut sections with gutters or drainage chutes being employed to carry water down slopes to prevent erosion. Interceptor ditches shall be designed and constructed near the top of the back of slopes or on benches in the cut slopes as well as when there is a slope on adjacent ground toward the fill. When the roadway has a steep longitudinal slope, a drain is to be designed and constructed at the down – slope end of the cut to intercept longitudinal flow and carry it safely away from the fill slopes.

5. Avoidance of Social Impacts

To avoid adverse social impacts, the Contractor shall:

- Coordinate all construction activities with neighbouring land uses and respect the rights of local landowner. If located outside the Health Care Facility

Premises, written agreements with local landowners for temporary use of the property will be required and sites must be restored to a level acceptable to the owner within a predetermined time period.
- Maintain and cleanup campsites.
- Attend to health and safety of their worker by providing basic emergency health facilities for workers and incorporate programs aimed at the prevention of sexually transmitted diseases as a part of all construction employee orientation programs.
- Obtain approval of all diversions and accommodation of traffic. As stipulated by section- which states that "the Contractor shall provide the contractee with a written traffic control plan which is to include when and where flagmen shall be employed and when and where traffic cones or other devices such as barricades and \or lights will be used. Where ….traffic diversions area planned for ….additional areas (will) be determined and the diversions clearly defined for travel."
- Construct and maintain by-passes around bridges to be reconstructed until such time as the bridge is open for traffic. By-passes will be removed and the affected areas re-graded so as to blend in with the existing contour when the bridge is opened.

6. Noise

To avoid adverse impacts due to noise, the contractor shall:
- Consider noise as an environmental constraint in his planning and execution of the works.
- Use equipment conforming to international standards and directives on noise and vibration emissions.
- Take all necessary measures to ensure that the operation of all mechanical equipment and construction processes on and off the site shall not cause any unnecessary or excessive noise, taking into account applicable environmental requirements.
- Maintain exhaust systems in good working order; properly design engine enclosures, use intake silencers where appropriate and regularly maintain noise –generating equipment.
- Use all necessary measures and shall maintain plant and silencing equipment in good condition so as to minimize the noise emission during construction works.
- Schedule operations to coincide with periods when people would least likely be affected and by the contractor having due regard for possible noise disturbance to the local residents or other activities. Construction activities will be strictly prohibited between 10pm and 6am.
- Incorporate noise considerations in public notification of construction operations and specify methods to handle complaints. Disposal sites and routes will be coordinated with local officials to avoid adverse traffic noise.

7. **Protection of Historic and Cultural resources**

To avoid potential adverse impacts to historic and cultural resources, the contractor shall; in the event of unanticipated discoveries of cultural or historic artefacts (movable or Immovable) in the course of the work, the sub-contractor shall take all necessary measures to protect the findings and shall notify the contractor and district-level representatives of the Archaeological committee under the ministry

responsible for culture. If continuation of the work would endanger the finding, project work shall be suspended until a solution for preservation of the artefacts is agreed upon.

8. **Protection of Utilities**

To avoid potential adverse impacts to utilities, the Contractor shall:

- Ascertain and take into account in his method of working the presence of utility services on and in the vicinity of the site.
- Take into account in his programme the periods required to locate access, protect, support and divert such services, including any periods of notice required to effect such work in consultation with authorities operating such services.
- Assume all responsibility to locate or to confirm the details and location of all utility services on or in the vicinity of the site.
- Exercise the greatest care at all times to avoid damage to or interference with services.
- Assume responsibility for any damage and \or interference caused by him or his agents, directly or indirectly, arising from actions taken or a failure to take action, and for full restoration of the damage.

9. **Waste Disposal and Hazardous materials**

Water and waste products shall be collected, removed via suitable and properly designed temporary drainage systems and disposed of at a location and in a manner that will cause neither pollution nor nuisance. Insofar as possible, all temporary construction facilities will be located at least 50 metres away from a water course, stream or canal.

The contractor shall not dispose of used pavement material on the road or highway side, nor in water courses or wetlands. Such material shall be utilized or disposed of in places approved by the SEA.

10. Environmental monitoring

Monitoring of direct impact will be carried out by the SEA and will include, but not be restricted to, the following concerns:

- Erosion along highway segments and borrow sites during and after construction;
- Silting and increased sediment loads to streams crossed by the highway.
- Verification that proper waste disposal at construction sites and road camps is done;
- Prevention of damage to undiscovered significant archaeological or historical findings;
- Assurance that construction sites and road camps are cleaned after construction and
- Inspection of vegetation covers (removal and re- growth) on the basis of field examinations.

APPENDIX 9 TYPICAL SUB-PROJECT ESMPs

9.1 Health Delivery Systems (Construction of infrastructure and equipment installations)

The following groups of Health Care activities have been considered:

- Refurbishing of wards
- Refurbishing of Laboratories
- Building new hospital
- Equipping a laboratory
- Equipping a hospital

No.	POTENTIAL NEGATIVE IMPACTS	MITIGATING MEASURE
1.	Soil erosion	• Proper design and layout of structures avoiding too steep a gradient. • Land leveling. • Design of terraces on hillside minimizing surface erosion hazard.
2.	• Increased soil erosion due to clearing of vegetation and trampling. • Increased siltation of surface waters.	• Restriction of construction activities to good ground. • Soil erosion control measures (e.g., reforestation, terracing).
3.	Siting of Health care facility complex on/near sensitive habitats	• Location of plant in rural area away from estuaries, wetlands, or other sensitive or ecologically important habitats, or in industrial estate to minimize or concentrate the stress on local environment and services. • Involvement of natural resource agencies in review of siting alternatives.
4.	Siting of Health care facility along water courses leading to their eventual degradation.	• Site selection examining alternatives which minimize environmental effects and not preclude beneficial use of the water body using the following siting guidelines: ○ on a watercourse having a maximum dilution and waste absorbing capacity ○ in an area where wastewater can be reused with minimal treatment for Health Care or industrial purposes ○ within a municipality which is able to accept the plant wastes in their sewage treatment system ○ Improved water management; improved Environmental Health practices and control of inputs. ○ Proper handling of waste. ○ Imposition of water quality criteria.
5.	Siting of Health care facility so that air pollution problems are aggravated.	Location of Health care facility at a high elevation above local topography, in an area not subject to air inversions, and where prevailing winds are away from populated areas.
6.	Environmental deterioration (erosion, contamination of water and soil loss of soil, etc.) from construction/refurbishment activities.	Control of Health care activities to minimize environmental problems.
7.	Aggravation of solid waste problems in the	• For facilities producing large volumes of

	area	waste, incorporation of the following guidelines in site selection: ○ plot size sufficient to provide a landfill or on-site disposal ○ proximity to a suitable disposal site ○ convenient for public/private contractors to collect and haul solid wastes for final disposal
8.	Water pollution from discharge of liquid effluents • Health care facility: TSS; temperature; pH • Materials storage piles runoff: TSS; pH • Most Health care packaging produces solid waste.	• Laboratory analysis of liquid effluent (including cooling water runoff from waste piles) in O/G, TDS, TSS, BOD, COD and in-situ temperature monitoring. • Seek guidance of local environmental officers to identify acceptable disposal sites.
9.	Accidental release of potentially hazardous solvents, acidic and alkaline materials.	Maintenance of storage and disposal areas to prevent accidental release; provide spill mitigation equipment.
10.	Occupational health effects on workers due to fugitive dust, materials handling, noise, or other process operations. Accidents occur at higher than normal frequency because of level of knowledge and skill.	Development of a Safety and Health Program in the facility designed to identify, evaluate, and control safety and health hazards at a specific level of detail to address the hazards to worker health and safety and procedures for employee protection, including any or all of the following: • site characterization and analysis • site control • training • medical surveillance • engineering controls, work practices and personal protective equipment • monitoring • information programs • decontamination procedures • emergency response • illumination • regular safety meetings • sanitation at permanent and temporary facilities
11.	Threat to historic, cultural or aesthetic features.	• Siting of project to prevent loss. • Salvage or protection of cultural sites.
12.	**Temporary Visual Intrusions** Rehabilitation and upgrading of Health Care facilities will change the characteristics of the area and leave marred landscapes.	• Contractor should ensure minimum footprint of construction activities and provide decent accommodation for workers. • All altered landscapes (Sand pits, borrow pits, brick moulding sites etc) should be rehabilitated by the contractor.
13.	**Noise** • Noise and vibration caused by machines, site vehicles, pneumatic drills etc	• Contractor to avoid old equipment. • Heavy duty equipment to be minimized. • Noisy operations to be limited to certain times. • Noise levels to be limited to within acceptable levels.
14.	**Social misdemeanor by construction workers** Impacts associated with the contractor's camp include: • Disposal of liquid and solid wastes. • Theft, alcoholism and sexually transmitted diseases (especially HIV/AIDS).	• As a contractual obligation, contractors should be required to have an HIV/AIDS policy and a framework (responsible staff, action plan, etc) to implement it during project execution. • Contractor to curb thefts and misbehaviour through a code of conduct. • Contractor to manage any of its waste properly.

APPENDIX 10 RECORD OF PUBLIC COMMUNICATIONS / MEETINGS

A 10.1 CONSULTED STAKEHOLDERS

Table A 10.1 *Consulted Stakeholders*

	NAME	ORGANIZATION/	DESIGNATION	CONTACT
1.0	**TEAM MEMBERS**			
	S. Mtetwa	consultant	Consultant	+263775884628 +26668230891
	Ms. Lineo Mohlomi	EHD/MOH	Health & Safety Manager	+26658445643
2.0	**PARTICIPATING MINISTRIES**			
		Ministry of Environment, Tourism and Culture (MTEC)		
		Ministry of Health		
	Teboho mafooa	Ministry of labour and employment		
		Ministry of Finance		
		Ministry of Local Government		
	Posholi Jonathan	Ministry of Mining		
	Pokane Koatla	Ministry of Mining		+26658424599
	Malineo Seboholi	Ministry of Mining		+26663083873
	Mohato Moima	Ministry of Mining		+26663108734
3.0	**NGOs**			
	TEBA Limited - Maseru			
	Mabolaoana Phakisi	TEBA Limited		**+26662076856**
	Constantinus Senatla	TEBA Limited		**+26662076856**
	Sebongile Maweng	TEBA Limited	Head Nurse	**+26662076856**
	Keneuoe Letsika	TEBA Limited	Laboratory Technician	
	Stephen Mapota	TEBA Limited	Manager	
	MDR - TB			
	Odunayo Johnson Alakaye	Partners in health (Botsabelo MDR-TB)		
	Mabatloung mofolo	Partners in health (Botsabelo MDR-TB)	Site Director	**63097859**
	Mateboho Theoane	Partners in health (Botsabelo MDR-TB)	Cleaner	
	TEBA CLINIC - LERIBE			
	Stephen Mapota	TEBA Limited	Development coordinator	+26663338447
	Qhobela Lira	TEBA Limited	SC coordinator	+26658917722
	Magret Letsika	TEBA Limited	Laboratory technician	+26657767315
	Limakatso Lebelo	ICAP - TEBA Limited	Nurse Adviser	+26658870904
4.0	**MAFETENG**			
	Government Hospital			
	Dr. Kabala	Mafeteng Government Hospital	DMO	+26622700208
	Mathabiso klaas	Mafeteng Government Hospital	Coordinator – Departmental Nursing Services (CDNS)	+26658451175 +26622700208
	Tsiane Nthabiseng	Mafeteng Government Hospital	Administrator	+26658106818
	Majoel Makhonya	Mafeteng Government Hospital	Principal laboratory technician	+26622700208
	Mpho Makhata	Mafeteng Government Hospital	Cleaner	
	Health Centre			

	NAME	ORGANIZATION/	DESIGNATION	CONTACT
	Sister Eusebia Lerotholi	Motsekua Health Centre	manager	
	Nthabeleng Sehlatsana	Motsekua Health Centre	Nursing assistant	
	Mapuleng Mochekoane	Motsekua Health Centre	Cleaner	
	pharmaceuticals			
	Mafoto Khobotlo	National Drug Services Organisation (NDSO)	CSM	
	Mantle ntsohi	National Drug Services Organisation (NDSO)	Assistant logistics manager	
	Nthoesele Leopa	National Drug Services Organisation (NDSO)	Quality Assurance Manager	
	Palesa Mokomeng	National Drug Services Organisation (NDSO)		
5.0	**MASERU DISTRICT**			
	Referral Hospitals			
		Queen Mamohato Memorial Hospital		
	Makatleho Makayane	Queen Mamohato Memorial Hospital	Nursing Manager	22220374
	Mamoonyane Lesesa	Queen Mamohato Memorial Hospital	Infection prevention and control	62206663 Mamoonyane.Lesesa@netcare.co.za
		Queen Mamohato Memorial Hospital		
	Camilla Letsota	Ampath Pvt Ltd (Queen Mamohato Memorial Hospital)	Safety Health and Environment Officer	52525050
	Khotso Hlehlisi	Mediguardwic Cleaning Services (Queen Mamohato Memorial Hospital)	Operations Manager	
	Health Centres			
	Ntsihlele	Ratjomose LDF Health centre	Nursing Officer	63071575
	Maselloane Nthejane	Ratjomose LDF Health centre	Nursing Assistant	58038190
	Khorola Makhahliso	Ratjomose LDF Health centre	Cleaner	22316955
	Blood Bank			
	Maleqhoa Nyopa	Blood transfusion services	Manager	22316091
	Khotso Kalake	Blood transfusion services	Laboratory Technologist	58924764
6.0	**LERIBE DISTRICT**			
	Local Leadership			
	Karabo Sello	Leribe Urban Council	Assistant Administration Officer	+26622400709
	Matseliso Sejane	Rural district council		+26628400357
	Mokhabelane Morahanye	Ministry of Local Government - leribe		+26622400293
	Government Hospital			
	Dr. Tshiteku Kalala	Motebang Government Hospital	Medical Superintendent	+26659785052
	Mathaabe Ranthimo	Motebang Government Hospital	Manager – Hospital Nursing Services	+26658862137
	Masello Mapota	Motebang Government Hospital	Senior Health Assistant	+26658434515
	Mpinane Letsie	Motebang Government Hospital	Hospital Administrator	+26658862137
	Lephuthing Mamosuoe	Motebang Government Hospital	TB Clinic Head	+26663433841
	Health Centre			
	Mamelang Molise	Peka Health Centre	RMN	+26627088825
	Ester Mohapi	Peka Health Centre	Nursing Assistant	+26627088825
	Lydia Sojane	Peka Health Centre	Cleaner	+26627088825

	NAME	ORGANIZATION/	DESIGNATION	CONTACT
	Chal Hospital			
	Rafube Molefi	Mamohau Hospital	Human Resources Development	+26658414812
	Teboho Likotsi	Mamohau Hospital	Maintenance Officer	+26658078552
	Laetitia Tanka	Mamohau Hospital	PHC Coordinator	+26658414812
	Makokonyane Khuswayo	Mamohau Hospital		+26657807970
	Makhenene Mahase	Mamohau Hospital	Cleaner	+26659049840
	Marethabile Ramolula	Mamohau Hospital	Cleaner	+26659115199
	Private Hospital			
	Dr. R. L. Knight	Dr. C. Y. Knight Memorial Hospital	owner	+26658821389
	Mabothotha Tsenase	Dr. C. Y. Knight Memorial Hospital	Assistant nurse	+26658680364
	Mamabitjoa sekoai	Dr. C. Y. Knight Memorial Hospital	Cleaner	+26656644229
7.0	**MOKHOHLONG DISTRICT**			
	Mining Hospital			
	Posholi Jonathan	Letseng Mine	Safety Manager	+26658866686
	Matsepo phosisi	Letseng Mine	PHC Coordinator	+26657684861
	Makapa Kampong	Letseng Mine	Snr Nursing Officer	+26658854041
	Lefatle Phakoana	Letseng Mine	Medical Superintendant	+26662100100
	Mamosa Mohapi	Letseng Mine	Environment Intern	+26663816805
	Tsikoe Busa	Letseng Mine	Senior Environmental Officer	+26658183888
	Finane Mapota			
8.0	**CONSULTATION MEETING WITH STAKEHOLDERS**			
	Lerato Nkhetse	MDA - Migrant Assistant	nkhetsel@gmai.com	59519138
	Ndynabangi Dickson	MDA - Migrant workers Association	ndyanadick@gmail.com	50790680
	Sibekile Mtewa	MoH	mikemtetwa@live.com	68230891
	Mantai Malataliana	MOLE Labour	Mntmalataliana280@gmail.com	58902770
	Mpinane Masupha	Labour	mpinanecm@gmail.com	22315725
	Thakabanna Lebitsa	Labour	thakabannalebitsa@gmail.com	22315725
	Tsatsana Molomane	Labour		59612352
	Stephen Mapota	TEBA	stephen@teba.co.za	63334887
	Limatso Lebelo	ICAP	lebelol@org.ls	58870904
	Mashale Shale	ICAP	shalem@icap.org.ls	58880726
	Dr. Simon Marealle	MoH	smarealle@gmai.com	63210510
	K. Kalake	LBTS	khotsokalake@yahoo.com	58880726
	Dr. David Omotayo	PIH	domotayo@pih.org	63097129
	Pokane Koatla	Mining	Pc.koatla@gmail.com	58424599
	Dr. L. Maama	MoH - TB Program Manager	Maama36@hotmail.com	58949666

A 10.2 SAMPLE OF THE RECORDS OF CONSULTATIONS

The following is a sample of the interviews, meetings and consultations that were carried out in the project area. The details of the interviews are contained in Volume 2 of this report -- " **PROOF OF PUBLIC CONSULTATION":**

A 10.2.1 Use of the Questionaire

Ministry of labour and employment

KINGDOM OF LESOTHO
MINISTRY OF HEALTH

THE DEVELOPMENT OF AN ESMF AND ICWMP FOR THE LESOTHO NTP- MOH

QUESTIONAIRE

NAME TEBOHO MAFOOA
ORGANISATION MINISTRY OF LABOUR & EMPLOYMENT
PHYSICAL ADDRESS BUS STOP AREA, ~~MA~~ OXFORD BUILDING
PHONE NUMBER +266 59802078 E –MAIL ADDRESS tmafooa@gmail.com

The Government of Lesotho through the Ministry of Health's National TB Program is in the process of preparing for a regional TB Project with World Bank technical and financial support. The proposed Regional TB project will comprise of various sub-projects with different levels of impact and located at various places within the country. The project activities will include.

(i) The construction, refurbishment and upgrading of health facilities and laboratories, and
(ii) The national roll out of the TB programme

These programmes have a bearing on the social and environmental dimension and will affect the people and the region in one way or another. Environmental issues, economic issues and social issues will be looked at as a programme to come up with best practices to be implemented is being formulated. As a stake holder that will be affected by these Developments and related activities (positively or negatively), what are your views about these activities in your locality? Comment against these dimensions.

FOCAL DIMENSIONS

1.0 Environmental Concerns:

- In the Planning Phase of the Construction, refurbishment and upgrading of health facilities, as *the project is being introduced to the areas and people start planning to implement (surveys, demolitions, clearing etc) what environmental impacts do you envisage?*

Since our mandate is to prevent accidents and health illness for the workers in formal ~~or~~ employmen
WE emphazise that during construction and refurbishment workers be ~~prot~~ given protection against hazardous operations.

- In the Implementation/operation Phase, as *the project is being implemented (use of structures, buildings, warehouses, etc) what environmental impacts do you envisage?*

The risk assessment profile for construction activities should be developed. ~~For~~ whereby asbestors is ~~and~~ to be worked on, competent and authorized personel should handle it.
If it is to be exposed, it should be in a good manner that is done by relevent companies in the country or outside the Country.

2.0 Economic Aspects:

- How is the project going to affect Livelihoods/economic base.

The project shall create jobs for local people, whereby expatriates are engaged they shall have workpermits.

3. Social Aspects:

- **Demographic: (Population characteristics) -** Existing migration movements

Since people will migrate from rural to urban areas or from their homes to workstation, there might be fight for jobs. Also HIV/AIDS may rise since people will be away from their spouses.

4. Cultural Aspects:

- What is the people's attitude towards the project (general & personal impacts; trust in developers; transparency of process; and overall support for the project)

—

5. Welfare profile:

- Adequacy of services (General Infrastructure and Community Services and Facilities)– are the current health facilities adequate?

—

6. Other Comments:

The project should try as much as possible to align itself with Labour Laws.

Signed:

interviewee Teboho MAFOOA Date 08/01/16
Ministry of LABOUR & EMPLOYMENT

Interviewer .....Date.....

A 10.2.2 Focus Group Meeting – Pharmaceuticals

NATIONAL DRUG SERVICES ORGANISATION (NDSO):

MINUTES OF THE MEETING FOR THE DEVELOPMENT OF AN ESMF AND ICWMP FOR THE LESOTHO TUBERCULOSIS AND HEALTH SYSTEMS SUPPORT PROJECT HELD ON 12 JANUARY 2016 IN THE BOARD ROOM AT 09:00 AM

1.0 ATTENDANCE

	NAME	ORGANIZATION/	DESIGNATION	CONTACT
1.	Mafoto Khoboffo	National Drug Services Organisation (NDSO)	CSM	
2.	Mantle ntooni	National Drug Services Organisation (NDSO)	Assistant logistics manager	
3.	Nthoesele Leopa	National Drug Services Organisation (NDSO)	Quality Assurance Manager	
4.	Palesa Mokomeng	National Drug Services Organisation (NDSO)		
5.	LINEO Mohlomi	MoH	Health Inspector	+26658445643
6.	Sibekile Mtetwa	MoH	Consultant	+26668230891 +263775884628

2.0 APOLOGIES

No Apologies were made.

3.0 **PROCEEDINGS**

The meeting was chaired by Mr. Mafoto Khoboffo, the CSM at the National Drug Services Organisation (NDSO). The Chairperson welcomed everyone who had attended the meeting and requested self introductions from all members. He then proceeded to give a brief health and safety introduction for the sake of the visiting team. He emphasised that they should always consider the risk of anything they do, report anything wrong you observe and always to observe the three point rule when going up any stair case. He further reiterated the need to keep clear of any steep edges and high walls when walking around the mine and to observe the speed limit of 30km/hr.

The chairman then handed over the meeting to the consultant to brief the members the purpose of the meeting. The consultant then explained the purpose of the meeting as a consultative meeting to gather the stakeholders environmental and social concerns as regards the proposed refurbishment and expansion of health care facilities and laboratories and the resultant expanded roll out of the TB control programme. He clarified that this process was leading to the development of a Environmental and Social management framework (ESMF) for the proposed project and also a review of the infection control and waste management plan (ICWMP)

He then requested for any questions and clarifications.

4.0 MEMBERS CONCERNS AND VIEWS

The members raised the following concerns and views:

- The area to be constructed is on a steep slope and the erosion potential is high. Steps should be taken to minimise this possibility.
- During the construction phase the clinic will experience further shortage of space as this may involve demolition of walls etc. this may raise the numbers of defaulters in the TB/HIV treatment as people avoid congestion. This should be countered by the clinic management becoming more innovative in sharing the remaining space for all the programmes.
- The construction work will produce noise which will not go very well with ill people and the neighbours. So noise must really be reduced to tolerable levels and real heavy machinery must be avoided.
- The construction process will produce dust. This must be taken care of and be minimised as it will affect patients.
- The coming in of construction teams may bring with it the spread of HIV/AIDs from promiscuity and also may have impacts on the social fabric as the new comers interfere with existing relationships. This can be minimised by employing locals as much as is possible.
- The construction will have negative effects of destroying some mango trees which were being used by the patients for fruits and which were also serving as a windbreaker.
- The construction/rehabilitation will generate waste which may become a nuisance as it may be dumped in grazing lands and cause problems.
- During the operation stage, when the clinic has been expanded, the locals will have better services at hand and this will mean saving of travel money to far of hospitals and increased good health in the locality.
- The expansion of the clinic will produce more space for more programmes at the clinic.
- The rehabilitation of the maternity unit will be of great benefit to expectant mothers since currently they have to go to the major hospitals which are very far.
- The project is a welcome move as it will benefit the public, more so the HIV/AIDS and TB patients.

The staff generally welcomed the project and emphasised that their concerns should be taken care of so that the negative impacts may be minimised in the process of bringing this major development in the area. They were happy that the expansion of the facility means more work for them and their other colleagues who are currently not employed.

There being no other business to discuss the meeting was officially closed at 13:30pm.

SIGNED.

……..… **……**
CHAIRMAN **DATE**

……..… **……**
STAFF REPRESENTATIVE **DATE**

A 10.2.3 Focus Group Meeting – Mining

LETSENG DIAMOND MINE:

MINUTES OF THE MEETING FOR THE DEVELOPMENT OF AN ESMF AND ICWMP FOR THE LESOTHO TUBERCULOSIS AND HEALTH SYSTEMS SUPPORT PROJECT HELD ON 12 JANUARY 2016 IN THE BOARD ROOM AT 09:00 AM

1.0 ATTENDANCE

	NAME	ORGANIZATION/	DESIGNATION	CONTACT
1.	Posholi Jonatuan	Letseng Mine	Safety Manager	+26658866686
2.	Matsepo phosisi	Letseng Mine	PHC Coordinator	+26657684861
3.	Makapa Kawpong	Letseng Mine	Snr Nursing Officer	+26658854041
4.	Lefertle Phakoona	Letseng Mine	Medical Superintendant	+26662100100
5.	Mamosa Mohapi	Letseng Mine	Environment Intern	+26663816805
6.	Tsikoe Busa	Letseng Mine	Senior Environmental Officer	+26658183888
7.	LINEO Mohlomi	MoH	Health Inspector	+26658445643
8.	Sibekile Mtetwa	MoH	Consultant	+26668230891 +263775884628

2.0 APOLOGIES

No Apologies were made.

3.0 PROCEEDINGS

The meeting was chaired by Mr. Posholi Jonatuan, the Safety Manager at Letseng Diamond Mines. The Chairperson welcomed everyone who had attended the meeting and requested self introductions from all members. He then proceeded to give a brief health and safety introduction for the sake of the visiting team. He emphasised that they should always consider the risk of anything they do, report anything wrong you observe and always to observe the three point rule when going up any stair case. He further reiterated the need to keep clear of any steep edges and high walls when walking around the mine and to observe the speed limit of 30km/hr.

The chairman then handed over the meeting to the consultant to brief the members the purpose of the meeting. The consultant then explained the purpose of the meeting as a consultative meeting to gather the stakeholders' environmental and social concerns as regards the proposed refurbishment and expansion of health care facilities and laboratories and the resultant expanded roll out of the TB control programme. He clarified that this process was leading to the development of a Environmental and Social management framework (ESMF) for the proposed project and also a review of the infection control and waste management plan (ICWMP)

He then requested for any questions and clarifications.

4.0 MEMBERS CONCERNS AND VIEWS

The members raised the following concerns and views which were responded to accordingly:

One member wanted to know whether the project is focusing on Government hospitals only or will private hospitals benefit and start being linked to the rest of the health care system also. The meeting was informed that the project is mainly centred around TB in mines including ex-miners from South Africa and those visiting home from time to time so that the spread of this disease can be curbed. The project aims to establish one stop shops to handle all issues and even cater for the miners' families. All mining houses will be involved as they are a major stakeholder.

The consultant then asked the meeting if the mine hospital is handling any TB cases. The meeting was informed that the local clinic is indeed handling some TB patients in terms of treatment but was not in any way cooperating with the rest of the Health Care system in terms of information sharing etc. The clinic does not initiate treatment. Patients get their drugs from somewhere and all the clinic does is to assist with DOTS.

A follow-up question was; "How are you going to get enough data to run the project in the country and be relating the TB to the work environment?" The consultant clarified that the project is looking at enhancing the screening process including the referral system so that the country can start developing the requisite database with the history of patients readily available. He further pointed out that current legislation does not include TB as a compensatable work related diseases but Ministry of Labour is in the process of reviewing its laws to cater for this gap. It will then remain for individuals to prove that their TB is related to their working conditions for any compensation..

Another concern was whether the project is only related to TB or will it include HIV/AIDS? The meeting was assured that the project does cover the HIV/AIDS component as the diseases are interlinked. Although the project is talking of TB in general terms, it does includes silicosis and even asbestosis since they are even more work-related infections.

One member wanted to know if the refurbished laboratories will only be looking at TB – HIV/AIDS or will they also be equipped to analyse other health problems. He was assured that in the first instance yes as it was the thrust of the programme but any other tests can then be done.

Another concern was whether there is anything wrong with the current Health care plan that warrants any review. The response was that the plan as developed in 2012 was not really deficient but a review was just being carried out to ascertain if the plan would be suitable for the implementation of this expanded programme.

Another member wanted to know if this process was an environmental impact assessment (EIA) for the project or whether some other experts will come and carry out a proper EIA. The consultant clarified that at the current stage of the project the location and design of sub-projects is not yet known and hence the nature and magnitude of the potential impacts would not be known by project appraisal stage. Hence what is being developed is an Environmental and Social Management Framework (ESMF), which is looking at all issues in broad terms and identifying potential impacts and crafting

possible mitigation measures so that when the sub-projects have been identified this framework can be used to screen the projects and if any further EA work is required then experts will be hired and site specific EIAs can be done.

A follow-up input from one of the members was that a similar exercise was carried out by LMDA recently and they came up with an EIA study which they used to refurbish and expand certain health care facilities. He stressed that it would be cost effective for this project to adopt those and continue with implementation. The meeting agreed that the said document should be obtained and used to guide the current process so that we do not reinvent the wheel.

A final input from the meeting was that after the information gathering process is done will there be a feedback process. The meeting was advised that a wrap up meeting will be arranged and a representative of the mine will be invited.

5.0 RECOMMENDATIONS:

The meeting agreed to make the following recommendations;

- The clinic should be given authority to initiate patients to avoid losing them on moving between facilities.
- Letseng mines should appoint somebody responsible for health care waste management for accountability, ie an Environmental Health Officer.

The Letseng mine staff generally welcomed the project and emphasised that their concerns should be taken care of so that the negative impacts may be minimised in the process of bringing this major development in the region. They were happy that the expansion of the facilities will mean more efficient service delivery in the country.

There being no other business to discuss the meeting was officially closed at 12:00pm.

SIGNED.

……..… **……**
STAFF REPRESENTATIVE **DATE**

……..… **……**
CONSULTANT **DATE**

A 10.2.4 Focus Group Meeting – Large Hospital

MAFETENG GOVERNMENT HOSPITAL:

MINUTES OF THE MEETING FOR THE DEVELOPMENT OF AN ESMF AND ICWMP FOR THE LESOTHO TUBERCULOSIS AND HEALTH SYSTEMS SUPPORT PROJECT HELD ON 6 JANUARY 2016 AT 10:00 AM

1.0 ATTENDANCE

	NAME	ORGANIZATION	DESIGNATION	CONTACT
1.	Mathabiso klaas	Mafeteng Government Hospital	CDNS	+26658451175 +26622700208
2.	Tsiane ntaabising	Mafeteng Government Hospital	Administrator	+26658106818
3.	Majoel malchoanya	Mafeteng Government Hospital	Principal laboratory technician	+26622700208
4.	Mpho Makhata	Mafeteng Government Hospital	Cleaner	
5.	LINEO Mohlomi	MoH	Health Inspector	+26658445643
6.	Sibekile Mtetwa	MoH	Consultant	+26668230891 +263775884628

2.0 APOLOGIES

No Apologies were made.

3.0 PROCEEDINGS

The meeting was chaired by Mrs. Mathabiso klaas, the CDNS at Mafeteng Government Hospital. The Chairperson welcomed the team and requested self introductions from all members. After that the chair then handed over the meeting to the consultant to brief the members the purpose of the meeting.

The consultant explained the purpose of the meeting as a consultative meeting to gather the stakeholders environmental and social concerns as regards the proposed refurbishment and expansion of health care facilities and laboratories and the resultant expanded roll out of the TB control programme. He clarified that this process was leading to the development of a Environmental and Social management framework (ESMF) for the proposed project and also a review of the infection control and waste management plan (ICWMP)

4.0 MEMBERS CONCERNS AND VIEWS

After the consultants briefing the meeting then engaged in general discussions in which the Mafeteng Government Hospital staff raised the following concerns and views:

- During the construction/refurbishment phase the hospital may experience a shortage of space as this may involve demolition of walls etc. Will this not raise the numbers of defaulters in the TB/HIV treatment as people avoid congestion.

This should be countered by the hospital management becoming more innovative in sharing the remaining space for all the programmes.

- The construction/refurbishment work will produce noise which will not go very well with ill people and the neighbours. So noise must really be reduced to tolerable levels and real heavy machinery must be avoided.
- The construction/refurbishment process will produce dust. This must be taken care of and be minimised as it will affect patients.
- The coming in of construction teams may bring with it the further spreading of TB - HIV/AIDs from promiscuity and also may have impacts on the social fabric as the new comers interfere with existing relationships. This can be minimised by employing locals as much as is possible.
- The construction/rehabilitation will generate waste which may become a nuisance as it may be dumped in undesignated areas and cause problems.

- During the operation stage, when the hospital has been expanded, the locals will have better services at hand and this will mean saving of travel money to far of hospitals and increased good health in the locality.

The staff generally welcomed the project and emphasised that their concerns should be taken care of so that the negative impacts may be minimised in the process of bringing this major development in the area. They were happy that the expansion of the facility means more work for them and their other colleagues who are currently not employed.

There being no other business to discuss the meeting was adjourned and the team proceeded to completing the questionnaires and carrying out inspections of the hospital waste management system.

SIGNED.

……..… **……**
STAFF REPRESENTATIVE **DATE**

……..… **……**
CONSULTANT **DATE**

A 10.2.5 ALL STAKEHOLDERS CONSULTATION MEETING

MINUTES OF THE STAKEHOLDERS CONSULTATION MEETING ON THE ESMF AND ICWMP FOR THE SOUTHERN AFRICA TUBERCULOSIS AND HEALTH SYSTEMS SUPPORT PROJECT, HELD ON THE 18TH FEBRUARY 2016 AT UN-HOUSE BOARDROOM.

1.0 ATTENDANCE

NAME	Organization/Title	Email:	Tel:
Lerato Nkhetse	MDA - Migrant Assistant	nkhetsel@gmai.com	59519138
Ndynabangi Dickson	MDA - Migrant workers Association	ndyanadick@gmail.com	50790680
Sibekile Mtewa	MoH	mikemtetwa@live.com	68230891
Mantai Malataliana	MOLE Labour	Mntmalataliana280@gmail.com	58902770
Mpinane Masupha	Labour	mpinanecm@gmail.com	22315725
Thakabanna Lebitsa	Labour	thakabannalebitsa@gmail.com	22315725
Tsatsana Molomane	Labour		59612352
Stephen Mapota	TEBA	stephen@teba.co.za	63334887
Limatso Lebelo	ICAP	lebelol@org.ls	58870904
Mashale Shale	ICAP	shalem@icap.org.ls	58880726
Dr. Simon Marealle	MoH	smarealle@gmai.com	63210510
K. Kalake	LBTS	khotsokalake@yahoo.com	58880726
Dr. David Omotayo	PIH	domotayo@pih.org	63097129
Pokane Koatla	Mining	Pc.koatla@gmail.com	58424599
Dr. L. Maama	MoH - TB Program Manager	Maama36@hotmail.com	58949666

2.0 AGENDA

TIME	EVENT	RESPONSIBLE PERSON
9:00 -9:30	Stakeholders arrivals and registration	Chair
9:30 -9:45	Introductions of stakeholders	Chair
9:45 – 10:00	Presentation of Project Background	MoH
10:00 – 10:30	Presentation of the Environmental and Social Management Framework (ESMF)	Consultant
10:30 – 11:00	TEA BREAK	
11:00 – 11:15	Group work on the ESMF	Consultant
11:15 – 11:30	Plenary Discussion of the ESMF	Chair
11:30 – 11:50	Presentation of the Infection Control and Waste management plan (ICWMP)	Consultant
11:50 – 12:00	Plenary Discussion of the ICWMP	Chair
12:00 – 12: 20	Presentation of the Standard Operating Procedures of the ICWMP	Consultant
12:20 – 12:30	Plenary Discussion of the ICWMP -SOP	Chair
12:30 – 12:50	Comments from the WB	Snr Social Development Specialist
12:50 – 13:00	Closing session	Chair
13:00 ----	LUNCH AND DEPARTURE	

3.0 PROCEEDINGS

The meeting was chaired by Dr. Simon Marealle of Ministry of Health (MoH) who welcomed everyone and requested for self introductions. After the introductions, the chairman then outlined the reason for the meeting to the stakeholders. He explained that it was a consultative meeting being held to present the draft Environmental and Social Management Framework (ESMF), the Infection Control and Waste Management Plan (ICWMP) and ICWMP Standard Operating Procedures reports to stakeholders and solicit their comments and inputs. The documents have been developed as some of the pre-requisite instruments that have to be in place before the proposed **Southern Africa Tuberculosis and Health Systems Support Project** can be funded**.**

He gave a brief background of the proposed project and then pointed out that a consultant had been hired and was working on these documents in the past two months, in which he had visited the stakeholders and consulted them on the various environmental and social issues. He then said the documents were now at draft stage and comments have been received from the World Bank. The current meeting was to afford the stakeholders a chance to review and comment on the documents also.

He explained that the Consultant would present an overview of each document and that there would be group work and plenary sessions to discuss the documents. After this he handed the meeting over to Mr. Sibekile Mtetwa to make the presentation.

The consultant introduced his subject by explaining that an ESMF is produced whenever the direct impact area has not been identified and is not definitely known. i.e. **the location, design and magnitude of impacts of the eventual sub-projects are not yet known at project appraisal stage, even though the types of potential subprojects is fairly well defined.**

He pointed out that the purpose of the ESMF is to provide a guide for integration of environmental and social considerations into the planning and implementation process of Project activities and that it also ensures that sub-projects will be designed and implemented in an environmentally and socially sustainable manner.

The presentation was structured as follows:

- Proposed project background
- Analysis of legal framework
- Outline of project activities
- Environmental Management Plan
- Monitoring
- Capacity building
- Implementation plan
- The Screening process

He then went on to expound what is contained in each chapter of the ESMF report. The first four chapters covered the background information, the description of the current project and the legal framework that supports the implementation of such a project. Emphasis was then placed on chapter five which identifies the potential impacts. It outlined the nature and scope of the proposed activities under the proposed project and the nature and potential sources of the main environmental and social impacts in the implementation and operation of the project activities. He outlined the physical and social interventions that will be undertaken in the project and pointed out the sort of impacts they will have.

He also explained how the impacts were rated and the most significant ones further analysed for the impact management plan. The environmental Management Plans only considered the impacts that were rated to be of moderate and high significance as these presented impacts that need attention.

Some of the Possible Negative Impacts Identified/Foreseen were listed as follows:

- Vegetation clearing
- Soil erosion
- Loss of physical cultural heritage
- *Physical Restrictions on building space.*
- *Clearing of Vegetation*
- *Soil and Land Degradation*
- *Vehicular Traffic*
- *Anxiety and anticipation*
- *Disruption of Utilities Service*
- *Temporary disruption of Health Care services*
- *Occupational Safety and Health*
- *etc*

He then went on to outline the typical environmental management plan for the impacts for integration into the TB Control related project activities. The plan includes responsible authorities for collaboration in the implementation of the mitigation measures and recommendations of appropriate monitoring activities by different stakeholders at local level, district level and national level to ensure compliance to mitigation measures.

After this he went on to explain the public consultation process, the monitoring plan, the relevant environmental and social training and capacity building measures for stakeholders, the funding arrangements and gives a budget for the implementation of the ESMF, the implementing schedule and the reporting requirements and finally he described the screening process for the sub projects.

At this stage the participants were divided into three groups and requested to discuss their comments and questions on the presented ESMF so that one of them would present the groups finding in plenary.

4.0 Participants concerns and Views

After group work the participants presented their findings, which were responded to as follows:

Q: Currently MCA has just upgraded and refurbished health care facilities and laboratories, so which ones are this project going to upgrade.

A: both old and refurbished health care facilities were found not to be infection control compliant. The building lay outs are not suitable for handling TB cases.

Q: Are those people who will make assessments capacitated, How competent are they and will there be transparency in the system. There is need to include the stakeholders from the sites.

A: The screening process at district level will be carried out by the District Health Management Team's together with its District technical team comprising experts from i) MoH ii) Districts Environmental Officers, and iii) Ministry of Local Government and Chieftainship, to ensure that all pertinent environmental issues are identified. The team will work with the local leadership. The team is also competent to do the screening.

Q: What will happen to those activities which will fall under category "A" and are not funded by the project?

A: The project is a Category "B" project and will not fund any category "A" sub-projects. In any case Category "A" projects are beyond the scope of this project as they include such major infrastructural projects like dam or road constructions

Q: Community sensitization is left out. How will this be done?

A: the project does includes continuous community sensitization and mobilization

Q: How will you ensure the sustainability of the project beyond five years

A:

Q: Improving ventilation in three of the main correctional facilities. Why three and not all the correctional facilities.

A: During consultations with the correctional Services they submitted these three as the hotspots which have higher populations of inmates who are infected. So it is the sector's priority.

Q: How are you going to take care of HR issues for isolation cells for prisons with staff shortages?

A: The Correctional Services Department indicated that they have sufficient staff to man the isolation cells. What they don't have currently are suitable room to use as isolation cells.

Q: what does enhancing occupational health services mean.

A:

Participants also made recommendations which were noted as follows:

- Include Ministry of Environment in your deliberations
- Cross border referral , tracking and linkage especially of miners with silicosis to be included
- Industrial issues to be covered like wages, working hours to prevent unwanted strikes
- Capacity building of the employees on employee rights needs to be included.
- Training of labour, health and safety inspection officers to be included in the training schedule.

- Occupational health issues be included during tendering process so that they are budgeted for.
- Occupational safety and health issues be included in the national procurement guidelines.
- Reviewing the mining legislation
- Review of occupational health legislation

5.0 ICWMP PRESENTATION.

The ESMF discussions took more time than was allocated as very interesting issues were being raised. The ICWMP presentations had to be reorganized. The main ICWMP document overview was not presented, only a brief outline was presented and then the ICWMP standard operating procedures were presented in more detail.

The consultant outlined that the Infection Control and Waste Management – Standard operating Procedures **(ICWM SOP),** were developed to operationalise the ICWMP (2016), which the Ministry of Health (MoH) has developed**.** The document packages and presents the series of Standard Operating Procedures (SOPs) compiled to supplement and support the implementation of the ICWMP.
He further explained the **ICWM SOP** were written instructions to achieve uniformity in the implementation of the ICWMP.

The consultant indicated that thirteen SOPs had been developed for the different issues in the ICWMP which are:

1. Waste Minimisation, Recycling And Re-Use
2. Identification, Segregation And Packaging Of Waste
3. Adequate Handling Of Waste
4. Safe Storage Of Waste
5. Safe And Appropriate Transportation Of Waste
6. Proper Treatment And Appropriate Final Disposal Of Waste
7. Waste Quantification
8. Occupational Health And Safety
9. Hand Hygiene
10. Decontamination Of General Surfaces
11. Spillage Management
12. Mercury Waste Management
13. Health Care Waste Practices Supervision And Monitoring

He then selected one of the SOPs, the “Identification, Segregation And Packaging Of Waste”, SOP and went through it as an example for the participants to appriciate the contents on a SOP.

After this the consultant opened the discussion to plenary. Only one burning issue was raised:

Q: One of the stakeholders raised the issue that he was not comfortable with SOPs that have been developed by others and they normally are not implemented by the various institutions. He would have been more comfortable had the project trained people on how to develop SOPs and then leave them to develop their own SOPs.

A: what MoH has developed are the national SOPs which every institution has to comply with. However the Ministry also expects each institution to develop its own local SOPs which will be based on the National document but being specific to the institution. Once staff are involved in the development of their own specific SOPs they will readily implement them.

6.0 Comments From The Snr Social Development Specialist

After the plenary discussions of the presentations were concluded, the consultant then invited the Snr Social Development Specialist, Ms Paula F. Lytle to present the concluding comments for the consultation meeting that had been held.

the Snr Social Development Specialist explained that such documents as ESMF have been derived from wealth of experience that come from many countries with many things that can go wrong. Its been codified into policies that are now the World bank's environmental and social management policies.

The proof is really in implementation. Any document can have a perfect form and perfect structure. The idea of having an ESMF is so that in all our development activities we avoid doing any harm in the process. All the fieldwork that was done was to access the baseline conditions which must be preserved as development occurs. They were to collect all the relevant information from all of you and get to understand your views.

The ESMF is not meant to be a document that will just sit on the website or in your offices. It's meant to be something that the people working on the project take into their hands and use it to keep walking themselves through the idea that before you do anything that is good in a project first do no harm in ways that are sometimes not easy to catch. The immediacy of certain developmental projects sometimes makes it hard to put environmental and social considerations into place. Thus the ESMF can be taken as the guide that will assist you in your activities.

She appreciated the candid feedback from all the stakeholders and their active participation throughout.

6.0 Meeting Adjournment

With no further issues to discuss, the Chair thanked everyone for attending and the meeting was officially adjourned.

SIGNED

……..… **……**
CHAIR **DATE**

……..… **……**
CONSULTANT **DATE**

A 10.3 THE CONSULTATIONPROCESS

10.3.1 Objectives of Consultations

The objectives of consulting all these stakeholders were:

- To inform them of the proposed project and its likely impacts on their activities and general surroundings.
- To gather the views of the stakeholders on the proposed project.
- To accommodate the stakeholders' concerns during the project implementation.
- To establish the social implications of the project on the different stakeholders.

10.3.2 Stakeholders Consulted

A series of stakeholder consultations were conducted throughout the study period. Appendix 11 is a list of the stakeholders who were consulted. Some of the consultations were round table discussions and/or focus group discussions. A questionnaire was also administered during the consultations (Appendix 11 – Shows Questionnaires used). The stakeholders who were consulted include:

1. Participating Government Ministries:
   - Ministry of Environment, Tourism and Culture (MTEC)
   - Ministry of Health
   - Ministry of labour and employment
   - Ministry of Finance
   - Ministry of Local Government
   - Ministry of Mining

2. Health Care Facilities
   - Referral Hospitals
   - Large Hospitals
   - Health Centres
   - Private Non Profit (NGO)
   - Private for-Profit
   - Pharmaceuticals
   - Blood Transfusion Services
   - MDR TB clinic (Multiple Drug resistant TB)

3. Rural District Councils
4. Urban Council
5. The NGO community
6. Local leadership

The individual stakeholders who were consulted are listed in Appendix 11 together with a sample of the records of the interviews. Their views were assessed in terms of environmental, economic and social effects the project will exert on them.

10.3.3 Methodology

The following methods were used to assess the social dynamics of the project on the beneficiaries and communities where the project will be implemented to come up with a sound management plan that will lay stronger foundations for the Health Care delivery system:

- Review of Literature and reports on Health care delivery in Lesotho.
- Site Visits to communities where the project will be implemented

- One on one interview with individual stakeholders.
- request for written proposals/comments
- Focussed group discussions with groups of stakeholders.
- the administration of a questionnaire
- Direct observation and discussion in the field.
- General data Collection from all stakeholders

Key stakeholders were identified by the MoH and together with the Consultant. The Stakeholders were then engaged in order to identify their concerns and values with respect to the project under consideration. This allowed the identification of key project environmental and social dynamics and made sure that all those identified as stakeholders were conferred with. The Environmental/Social consultant shared information about the proposed project with the concerned public to enable meaningful contributions and thus enhance the success of the project.

10.3.4 Results of the Stakeholders' Survey

During the visits to evaluate the social management risks the identified stakeholders (See Appendix 11) were consulted, and the specific concerns raised by the stakeholder are attached as appendices (See Appendix 11). Table 7-1 below is a summary of their concerns grouped into three sectors; the Health Care Facilities, the Government Departments and the NGOs.

Table A 10.3**-1** Results of Stakeholder Survey

No.	COMMENTS FROM THE SURVEY	
1.0	Health Care Facilities	
1.1	Environmental	• Do not envisage any significant impacts as the projects will be within the footprint of existing infrastructure, i.e. Existing Health Care Facility areas. • Concerned about vegetation clearing as vegetation is already scarce in the project areas. • Engage in selective tree cutting and non destructive extraction of rocks for use in the construction of structures. • Use of concrete bricks and steel beams in construction/refurbishments can reduce destructive extraction of local materials. • Rehabilitate burrow pits and fill up gullies
1.2	**Economics**	• Expecting the refurbishments/ construction works to benefit local communities by providing employment. • Looking forward to the project impacting on the affected populations positively by improving their health and affording them to be productive again, thus impacting positively on the economy of the country. • Choice of Health care facilities for rehabilitation should be strategic enough to have a significant catchment area and service a large population. .
1.3	**Social**	• People will become productive again and command better livelihoods. • TB programme will reach out to families of affected miners thus bringing the much needed relief and a curb on the ever spreading diseases. • .
2.0	**Government departments & RDCs**	
2.1	**Environmental**	• Since the project is targeting already existing infrastructure, there will be little impact on the environment, if anything the impacts will be positive as they involve refurbishments. • Construction work may induce environmental issues like erosion and gully formation, so this should be taken into consideration and the requisite mitigation measures put in place.

No.	COMMENTS FROM THE SURVEY	
		• The general populace should be made aware of environmental issues through community awareness campaigns. .
2.2	**Economics**	• The programme will result in more people accessing the Health Care Delivery. • Beneficiaries will realise an improvement in livelihoods as they become productive again. • The projects will prolong the life of the Health Care infrastructure which badly needs the refurbishment. • Projects will serve to create employment both during the construction phase and implementation, when they TB programme will be rolled out.
2.3	**Social**	• Good infrastructure will benefit the locals, in that they will receive standard services more efficiently. • If communities are employed during the rehabilitation of their local infrastructure it will create a sense of ownership and the structures will be better maintained. • The improvement of the infrastructure will improve the social status of the communities, inducing easy access to essential services previously not available. • Employment created by the refurbishment exercises will reduce social vices and improve social/family cohesion. • Completed projects can enhance sustainable development thereby uplifting the quality of life in the community. • Targeting of workers during the project should not be discriminatory (sex, culture, religion etc) respect local leadership, avoid child labour and target the deserving. • As local labour will be used it is highly unlikely that social values will be disturbed by the projects. • There will; be a need to involve HIV/AIDS counsellors to bring awareness of the scourge to the workers and beneficiaries.
3.0	**NGOs**	
3.1	**Environmental**	• Projects should ultimately aim to reduce the ever increasing TB-HIV/AIDS burden which has engulfed the nation. • Need to observe all environmental concerns during project implementation to avoid triggering such this as soil erosion, gully formation etc since most of our facilities are on steep slopes. • Vegetation is scarce in the country, so clearing should be reduced to a minimum.
3.2	**Economics**	• Increase the level of income of the local who will be engaged during the construction phases. • More TB patients will be reached out to, and as they improve in health they will also become more productive and add to the economic growth of the nation. .
3.3	**Social**	• As people become more productive their livelihoods will also be improving. • Target to empower women to run key economic activities to raise their social status. • Gender issues should be taken seriously. • The working hours during construction should be such that patients will not be affected. • ‘

10.3.5 Stakeholders’ Attitudes toward the Project

All stakeholders were supportive of the project since it is geared to lessen the TB-HIV/AIDS burden that is currently engulfing the country. The Primary beneficiaries, TB-affected individuals and households will be afforded a chance to access health care services easier and get a reprieve livelihood improvement from improved health and increased productivity. They appreciated the contribution the project will have on improving the social wellbeing of the nation in general, i.e.:

- ***Health benefits:-*** **T**he project will mainly benefit mining communities, high TB–burden regions and cross-border areas. Mine workers, ex-miners, their families,

labour-sending areas, and health workers will be direct beneficiaries. The project will directly benefit women, particularly in the small-scale mining sector.

- ***Improve coverage:-*** The project will improve coverage and quality of key TB control and occupational lung disease services in the following manner:-
  - Percentage of pansusceptible TB patients cured in line with regional protocols
  - Percentage of drug-resistant TB cases who complete treatment. (This includes cured patients plus those who complete the treatment but the culture result is unavailable.)
  - Percentage of suspected TB cases tested for HIV in the targeted geographic areas.
  - Percentage of ex-miners and miners screened annually for TB, silicosis, and other occupational lung diseases according to national and regional protocols
  - Number of miners and ex-miners successfully referred for TB and occupational health services from South Africa and within country.

- ***Improve access:-*** The project will help improve access to quality TB prevention and treatment services by supporting such roll-out and implementation of a package of harmonized TB prevention and treatment services

- ***Occupational health services:-*** The project will strengthen the core occupational health services and safety standards in the country. It will help to make TB a compansatable work related illness

- ***Strengthen basic health systems:-*** The project will help to strengthen basic health systems to position the country to better manage the complex TB epidemic and associated diseases. It will prioritize: (i) improving quality and availability of skilled human resources for disease surveillance, management of MDR-TB, and occupational health services; (ii) strengthening diagnostic capacity; and (iii) strengthening mine health regulation.

- ***Human Resources:-*** The project will improve the quality and availability of Health care human resources by promoting the development of a skilled health workforce for disease control across countries and achieving economies of scale.

- ***Disease surveillance and diagnostic capacity:-*** The project will strengthen disease surveillance and diagnostic capacity by capacitating selected laboratories. This will involve refurbishing them, equipping them and developing them up to accreditation.

- ***Mine health regulation:-*** The project will strengthen mine health regulations by updating regulatory frameworks and coordination in reporting on mine health and safety performance across countries; and (ii) strengthen regulatory institutions to better enforce compliance with mine health and safety standards.

- ***Education:-*** children access to better and quality education will also improve as parents will be able to pay fees. in time as well as buying other education materials for their children, since they will be productive again

- ***Gender equality:-*** improved incomes and participation of women will improve gender relations at both the household and community levels.

- ***Decrease in antisocial behaviour:-*** when people become productive anti social behaviour like prostitution, crime resulting from both idleness and poverty will decrease and improve the welfare and raise the social status of the vulnerable groups in the communities.

- ***Social integration:-*** most people living in poverty are not able to participate on equal term with others in the communities and with improved incomes they will be able to participate on equal terms with others. This will help promote social integration and unity at the grass roots levels. Their social status, self esteem will also improve and this will improve their confidence which is good for self empowerment. This also the best way of integrating secluded groups like women and youths in community development programmes.

- ***Employment generation*:–** though this will be seasonal the Public Community Works project will create jobs to the affected community which help to improve their incomes, their livelihoods, and reduce idleness. Participating households will acquire assets that help raise their social status.

- ***Business and economic growth:-*** The local business owners will also benefit from the project. Increased disposable incomes for the communities' increases their spending power and growth of the local businesses and the community in general.

A 10.4 COMPARISON OF ASPECTS RAISED

a) Comparison of environmental aspects

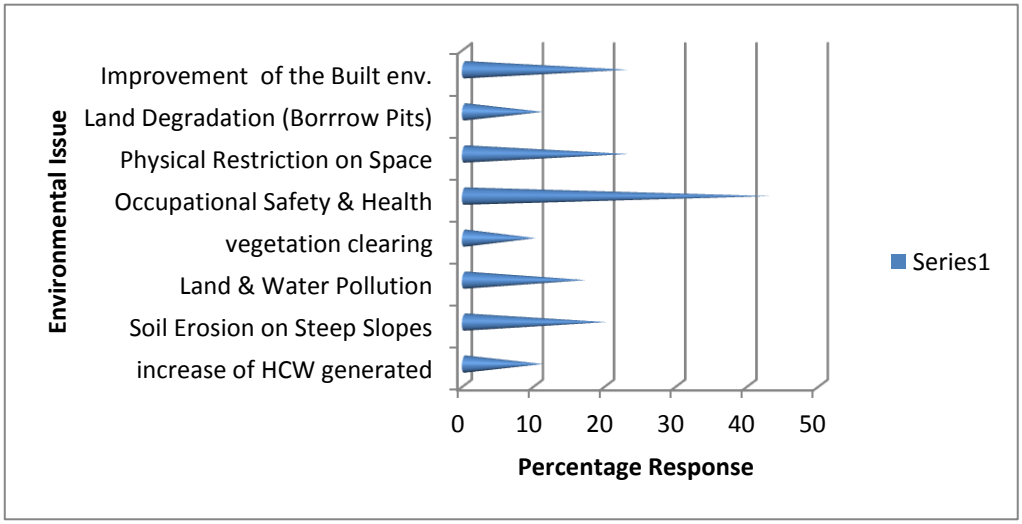

Figure 0-1 Comparison of environmental aspects raised

From the graph above environmentally many people (40%) were concerned with occupational health and safety in the mines and quarries around the country. It is the main cause of the diseases and thus people are wary about it. The fact that TB is not a compensatable work related illness in terms of the Lesotho legislation is a cause for concern for many and they are eagerly awaiting the legislative reviews that will change this status. The other issues like soil erosion on steep slopes, lack of land for expansion and improvements on the built environment came second with 20% of stakeholders mentioning them. Vegetation clearing was the least mentioned as most of the expansions will be within the footprint of existing infrastructure.

b) Comparison of economic aspects

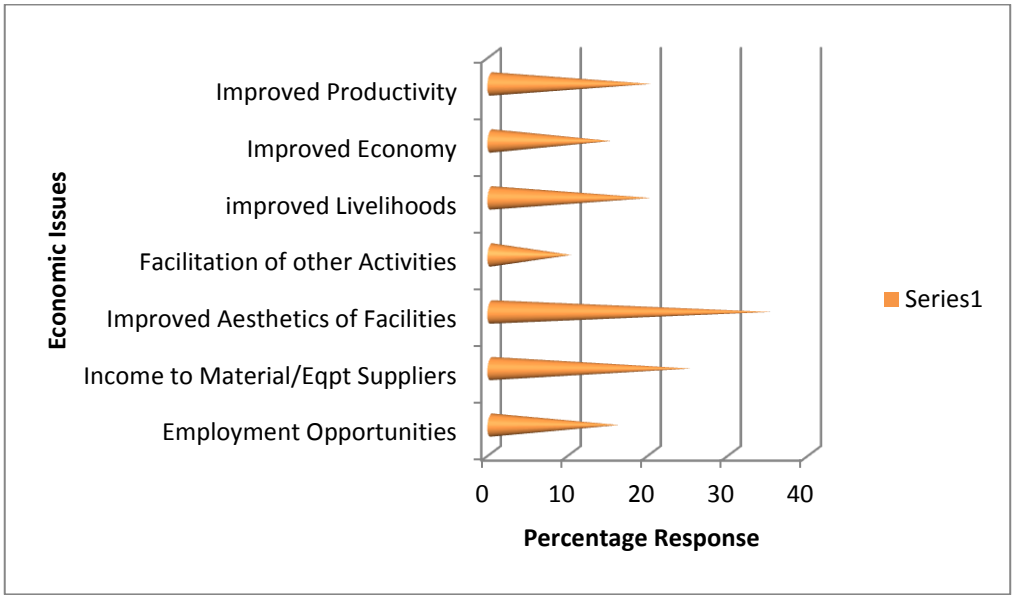

Figure 0-2 Comparison of economic aspects raised

Many of the consulted stakeholders (35%) welcomed the potential for improved aesthetics of the Health Care Facilities, some of which are badly in need of maintenance. income to material and equipment suppliers was also mentioned by many stakeholders (25%). Improved productivity, economy and livelihoods were equally mentioned at 16%.

Though least in the percentage responses, employment creation and facilitation of other activities, are key in the project as this will assist many to pull out of the poverty cycle by offering the otherwise redundant local folks some form of employment during the refurbishment exercise and will create further employment as people continue to be engaged in the various expanded programmes.

c) Comparison of social aspects responses

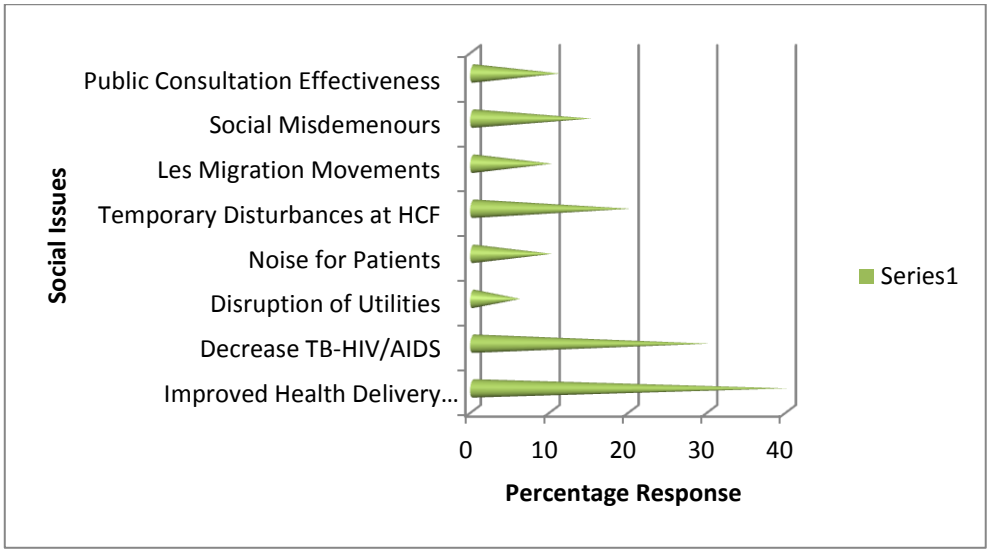

Figure 0-3 Comparison of social aspects raised

The improved health delivery services issue tops the social aspects with 40 %. This is because the current situation is a problem to many people who end up not receiving treatment because of the inefficiencies of the system. The issue of decreased TB-HIV/AIDS received second level of responses (29%) as this is the main thrust of the proposed project.

The other major social issue raised was the potential for temporary disturbances at the health centre with 19%. This may require shifting of wards to make way for the refurbishments. It was followed by the potential for social misdemeanours (20%). This is because once people are grouped and start working together and start receiving some income, relationships start to develop which may affect the established social fabrics. The refurbishments will definitely cause some noise for the patients (10%). It will also cause people to migrate less for medical reasons as the health care services will now be available.

A.10.5 PUBLIC AWARENESS AND CONSULTATION PLAN

For the successful identification and assessment of project specific environmental and social impacts and development/recommendation, implementation and monitoring of the respective mitigation or enhancement measures, a continuous consultative process is required. The implementing agency, Ministry of Health (MoH) has the responsibility to effectively engage stakeholders in achieving the project objectives for the benefit of all. Through consultations, it will create a bridge of communication between the public and the Government, which will improve the efficiency and transparency of project execution. This public consultation plan (PCP) forms part of the ESMP and is the same for all categories of the planned sub-projects. The development of this ESMF is based on a consultative process comprising key stakeholders at the national, district and local levels and sought their feedback. Key government agencies and NGOs have been consulted at the various levels to obtain their consent on the ESMF (Appendix 11).

10.5.1 Objectives of the Plan

This plan provides 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 to the satisfaction of all concerned. The goals of the public consultations are to provide the PCU with:

- Status of implementation of the identified measures,
- A sense of the concerns, priorities and aspirations of the beneficiaries as they implement the measures,
- Information to shape the programs of the project as it progresses,
- Whenever possible, specific recommendations and proposals.

In addition to the aforementioned goals, the key objectives of public consultation during the preparation of safeguards instruments including ESMF include:

- To provide the participating districts with:
  - A forum to interact constructively and make progress towards solutions and actions
  - Feedback from PCU on information received and steps to follow

10.5.2 Principles

To ensure effective implementation of this plan, the PCU shall be committed to the following principles:

- promoting openness and communication;
- ensuring effective stakeholder involvement;
- Evaluating the effectiveness of the engagement plan in accordance with the expected outcomes.

Thus the Beneficiaries are given:

- Clear information on the purpose and objectives of the meeting
- Opportunity to express individual views without interruption or contradiction
- Opportunity to build on views expressed and, whenever possible, to discuss and reach conclusions, consensus or recommendations
- Opportunity to engage in open-ended discussion (generally at the conclusion of the meeting)

10.5.3 Structure of the Consultations

Consultation meetings will generally take two approaches; (i) individual interviews involving completion of a standard questionnaire, (ii) focus group meetings. The consultations will also be structured along the following lines:

- Advance notification
- Introduction and information
- Early break-up into work groups or roundtables
- Opportunity for each participant to make a presentation
- A closing session to allow open discussion between participants and PCU members

The PCU will normally act as facilitators, although professional facilitators may be employed when it is appropriate. Members of the general public may state their views:

- In a brief presented at the meeting or submitted to the PCU before the established deadline.
- Speaking at the public meeting, using whatever form of presentation they consider appropriate.

10.5.4 Public Disclosure Plan

Following the public consultation, all comments and briefs will be analyzed by the PCU, which shall prepare a report for the MoH. **The report will be published and made available to the concerned community grouping and to anyone else upon request.**

For projects such as the **Tuberculosis and Health Systems Support Project**, the World Bank procedures require that an ESMF be prepared and publicly disclosed prior to project appraisal. This allows the public and other stakeholders to comment on the possible environmental and social impacts of the project, and the appraisal team to strengthen the frameworks as necessary, particularly measures and plans to prevent or mitigate any adverse environmental and social impacts.

In line with this, the ESMF will be available at the relevant institutions at all levels and be publicly disclosed both in country and at the World Bank's Info-Shop. The MoH will make copies of the ESMF available in selected public places in English and local language in compliance with the World Bank's *Public Consultation and Disclosure Policy*. It is proposed that the locations of copies are announced through radio announcement in addition to press releases.

Any ESMPs and other safeguards instruments that will be prepared for sub-projects under the **Tuberculosis and Health Systems Support Project** will also needed to be disclosed to the public and Bank/s info-Shop. Copies of the EMPs should be made available to communities and interested parties in accessible locations through local government authorities, (e.g., local councils, district offices). Copies of the ESMPs should also be provided to the implementing agencies and submitted to the World Bank. This will ensure record keeping of all activities implemented under the ESMF and ensure that third party audits have adequate information when undertaking annual environmental and social audits