» GRMF Environmental and Social Safeguard Requirements and Applicable Standards

GRMF – 8th Application Round Pre-Bidding Workshop – 22th January 2025

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Bank aus Verantwortung



GRMF Developer Manual, Section 11 Comprehensive Information on E&S Requirements and Applicable Standards



Department of Infrastructure and Energy

GEOTHERMAL RISK MITIGATION FACILITY FOR EASTERN AFRICA (GRMF)



Developer Manual (Fifteenth Edition) 15 January 2025

Project funded by:



TECHNICAL CONSULTANT

Rödl & Partner

COWI

» Environmental and Social Risk Management

- The assessment of environmental and social impacts and risks, including their significance and materiality, as well as the development of adequate management plans and programmes are key tools for achieving sound environmental and social performance for undertakings funded by GRMF.
- The central tool to address and manage the specific risks and impacts of geothermal projects is an appropriate environmental and social management system (ESMS), in line with relevant legislation of the host country and compliant with the Applicable Standards.

(GRMF Developer Manual)



- □ The Developer's E&S Assessment and Management System (ESMS)
- E&S/Sustainability Policy;
- Identification of Risks and Impacts;
- Management Programme;
- Organisational Capacity and Competence;
- Emergency Preparedness and Response;
- Monitoring and Review;
- Stakeholder Engagement;
- External Communications and Grievance Mechanism; and.
- Continuous Reporting to Affected Communities.

»» The Applicable Standards

 Host Country Law and regulations (including international law and treaties and conventions adopted by the host country and applicable to the project)

In addition:

- IFC Environmental and Social Performance Standards (IFC 2012)
- World Bank Group's General Environmental and Health and Safety Guidelines and selected Industry Sector Specific EHS Guidelines (e.g. Guidelines for Geothermal Power Generation)
- ILO Core Labor Standards
- For resettlement aspects: UN Basic Principles and Guidelines on Development-based Evictions and Displacement
- Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT, FAO 2012)

Human Rights Diligence: GRMF Human Rights Guidance for Developers (December 2020)

» IFC Environmental and Social Performance Standards (PS1-PS 8), 2012 Human Rights Di

Human Rights Diligence, e.g. Labor Rights, Land Rights, Non-Discrimination, Participation Rights



PS1: Assessment and Management of Environmental and Social Risks and Impacts



PS 2: Labor and Working Conditions



PS 3: Ressource Efficiency and Pollution Prevention



PS 4: Community Health, Safety and Security



PS 5: Land Acquisition and Involuntary Resettlement



PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources



PS 7: Indigenous Peoples



PS 8: Cultural Heritage

Stakeholder Engagement

- Developer is required to prepare and implement a continuous process of stakeholder engagement to be built into project planning and implementation.
- Information exchange with all identified stakeholder groups prior to the start of the project and at key decision-making points:
 - Inform about project's risks and impacts
 - Consultation of affected communities during project implementation to allow for expression of their views on project risks, impacts, and mitigation measures
- Stakeholder Engagement Plan: formal Description of this approach
- Grievance Mechanism from the commencement of activities onwards

Special Case: Indigenous People

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- Some countries are not granting specific recognition or rights to Indigenous Peoples as a unique group as they emphasizes equality and non-discrimination for all citizens ("marginalized" or "vulnerable" with distinct cultures, traditions, and close connection to their ancestral lands)
- Assessment at the very outset of the project whether indigenous communities are present in the wider concession area.
- IFC PS 7 is triggered --> apply the principle of free, prior and informed consent (FPIC)

Geothermal Development >>>> Environmental and Social Risks (examples)

- Impacts on Flora and Fauna from earthworks, vegetation clearance, noise and vibration and emissions during the Project life.
- Loss of wildlife migratory corridors and pastoralist grazing lands through fencing and erection of Project infrastructure.
- Impact on protected areas (national parks, forest reserve, international designated areas as Ramsar sites, IBA, Unesco World Heritage sites, AZE etc.) and protected species (national, IUCN)
- Soil erosion from earthworks, material sourcing, alteration of drainage patterns and increased run-off from paved surfaces.
- Landslides and soil creep from acutely cut areas, quarries other weakened slopes from Project works.





Geothermal Development Environmental and Social Risks (examples)

- Increase in water resource abstraction from rivers, lakes or through boreholes for use in Project exploration, construction and operation.
- Increased air quality degradation from dust, vehicular emissions and gases released during Project operations.
- Noise and vibration from equipment operations, machine and turbine engines.
- □ Waste generation from construction activities, process effluents and accommodation.
- Occupation health and safety risks from machine/ equipment use, transport, poor workmanship...if the workforce is not well trained on safety and health.





Geothermal Development

^w Environmental and Social Risks (examples)

- Physical displacement associated with land take.
- Economic displacement due to loss of livelihood activities or reduction in income due to Project activities.
- Conflicts over resources.
- Immigration of workers from other areas into the local community. Staff accommodation and management.
- Spread of communicable diseases from workforce/interaction with locals (HIV / AIDs and Sexually Transmitted Infections)
- Social Change and disruption associated with presence of immigrants or workforce.
- Possible marginalization of sections of the indigenous community due to introduction of new cultures and immigrant population for the Project.

»» Project Example Impacts

Odour from steam production.

Reduced access to pastureland due to

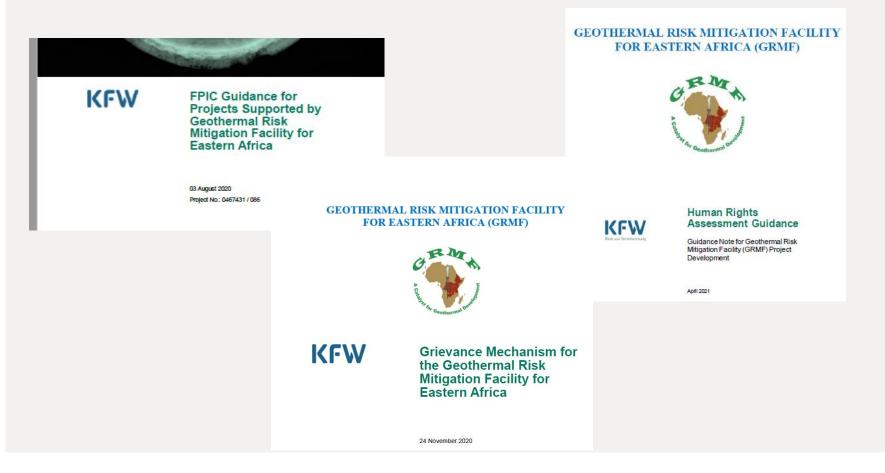
Fencing of grazing land for geothermal well development.

Improved development in the area has also resulted in influx, which has reduced access to pastureland.

- Road cutting on steep terrain increases incidents of livestock accidents falling off of steep slopes.
- Noise pollution from drilling of geothermal wells and generators, which primarily impacts households closest to the well developments.
- Some instances of vehicles colliding with livestock (especially goats)
- Cultural heritage sites impacted by road cutting and preparation of well pads.
- Delayed compensation payment some households had to sell their livestock.
- □ Traditional medicinal trees and shrines are impacted by the construction activities (e.g road).

Geothermal Development Human Rights Risks

GRMF Guidance to support targeted integration of Human Rights Risks into the development of ESIA and any environmental and social management plans. Available on GRMF's Website



»» Requirements for Surface Studies



→ Review by GRMF, subject to No Objection

 Approved documentation becomes part of the Grant Agreement

Environmental and Social Risk Screening Report

Initial environmental and social information and risk and impact screening of planned activities, work plan for acquisition of further environmental and social information and related activities during surface study phase

Draft Stakeholder Engagement Plan (SEP)

Overall approach for stakeholder engagement and corresponding activities to be undertaken during Surface Study phase, i.e. how will stakeholders be informed and consulted

Completion Surface Studies

- → Review by GRMF, subject to No Objection
- → Condition for disbursement

Environmental and Social Scoping report

Identification of key issues to be considered in the full ESIA for Exploration Drilling, Terms of Reference for full ESIA **Stakeholder Engagement Plan**

Draft SEP + information obtained during the surface study phase + outlook for engagement in exploration drilling phase

Any other <u>E&S documentation</u> as required by national legislation

»» Requirements for Drilling Projects



- Environmental and Social Impact Assessment(ESIA) including assessment of Human Rights Risks.
- Environmental and Social Management Plan (ESMP)
- Stakeholder Engagement Plan (SEP) covering all project phases;
- Any other environmental and social management plans as identified as required and applicable (e.g. Resettlement Action Plan, Livelihood Restauration Plan, etc.)
- Evaluation of Application: Environmental and Social Due Diligence (ESDD), comprising a Gap Analysis against the Applicable Standards.
- Any gaps and respective actions to close these gaps become part of the Environmental and Social Action Plan (ESAP).
- > Overall ESAP will become integral part of the Grant Agreement.
- Disbursements will require due implementation of the ESAP actions (Independent Review of Developer's E&S reports and No Objection from GRMF)

Completion Exploration Drilling

 Approved final E&S Report as prerequisite for final disbursement Final E&S Report, referring to full implementation of the ESAP including all sub-plans

»» Reporting requirements

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During Surface Study Phase:

- Monthly status reports, comprising information
 - on stakeholder engagement activities and respective findings
 - on the progress of environmental and social field studies
 - \rightarrow Template of E&S reporting will be attached to the grant contract

During Exploration Drilling Phase:

- Monthly status reports, comprising information
 - on stakeholder engagement activities and respective findings
 - on environmental and social performance
 - \rightarrow Template of E&S reporting will be attached to the grant contract



Thank you for your attention

Q&A





