

## **1.1. Environmental and Social Safeguards**

### **2.5.1 Introduction**

The section describes in detail the potential environmental and social impacts associated with the Drilling of a **Mechanized Solar Powered water system in Chikho Village in TA Kasakula** and outline mitigation measures required to address the identified impacts.

The Council through GESD funds will construct a Solar Power Water system in TA Kasakula. A contractor shall be hired to construct this Mechanized Solar Power water system.

In respect to the interventions highlighted above, an assessment was undertaken to identify environmental and social issues that could arise from the construction of the Mechanized Solar Powered Water system. The assessment was conducted on 8<sup>th</sup> February, 2022 by the Council Officers. A screening form was used to guide the assessment of the planned activities. The screening form was adapted from EIA guidelines of Malawi (1997). The assessment revealed that, the proposed project activities have the potential to cause some minor, short-term and localized environmental and social impacts. Therefore, Environmental District Officer recommended that a site specific Environmental and Social Management Plan (ESMP) be prepared (as presented in the Table below)

## 2.5.2 Environmental and Social Management Plan for Mechanized Solar Powered Water System

The ESMP outlines environmental and social impacts; mitigation measures to be undertaken, designates responsibilities, schedules of tasks and allocates costs for measures that may require financial support.

**Table 1: ESMP for Mechanized Solar Powered Water System**

Environmental Component/ Aspect	Expected Impacts	Mitigation/Enhancement Measures	Output Indicator	Target	Responsible persons	Time Frame	Estimated Cost (MK)
<b>Negative impacts during Drilling of mechanized Solar Powered water system</b>							
Land	Nuisance from dust emission during drilling	Provision of PPEs to workers such as facial masks, Overalls, gloves Helmets and Gumboots	Number	Various	Contractor	During drilling	-
Waste	Increased Solid waste generation during drilling of mechanized Solar powered system	The Contactor shall dig a refuse pit on the drilling site	No of refuse pits constructed	-	Contractor	Before drilling commences	-
Community health	Increased cases of open defecation	Construction of toilet	No of toilets constructed	1	DEHO/EDO	During drilling	100,000
Land	Creation of borrow pits arising from extraction of construction materials such as quarry and sand	(i) The contractor shall refill the created borrow-pits	No of borrow pits refilled	-	Contractor	During drilling completion	-

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Land	Generation of rubble/Heaps of excavated soils	Levelling and removing the unwanted soils and refill in other areas	No of rubble/Heaps	-	Contractor	After drilling	-
Land	Disturbalization of river banks due to sand mining for construction	Planting trees along River banks	No of trees	100	Community	During drilling	150,000,
Socioeconomic	Disruption of marriages during the drilling exercise	Conduct awareness meetings	Number of cases	Monthly	Community Executive	During drilling	
Community health	Risk of injuries to workers and communities during drilling	Provision of PPEs( Facial masks, Overalls, Gumboots, Helmets)	No of PPEs	-	Contractor	During drilling	
Occupational Health and safety	Risk of Increased incidences of Sexually Transmitted Diseases (STIs) and HIV and AIDS.	Conduct sensitisation meetings targeting the surrounding communities and workers on the dangers of HIV/AIDS pandemic	No of awareness meetings conducted	1/ Month	Executive	During drilling	-

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Community social	Increase cases of gender based violence	Community awareness meetings	No of meetings	1/month	Executive	During drilling	-
Socio-economic	Increase in cases of theft and crime during drilling period	Employ a security guard	Number of guards employed	Monthly	Community	During drilling	200,000
							<b>200,000</b>