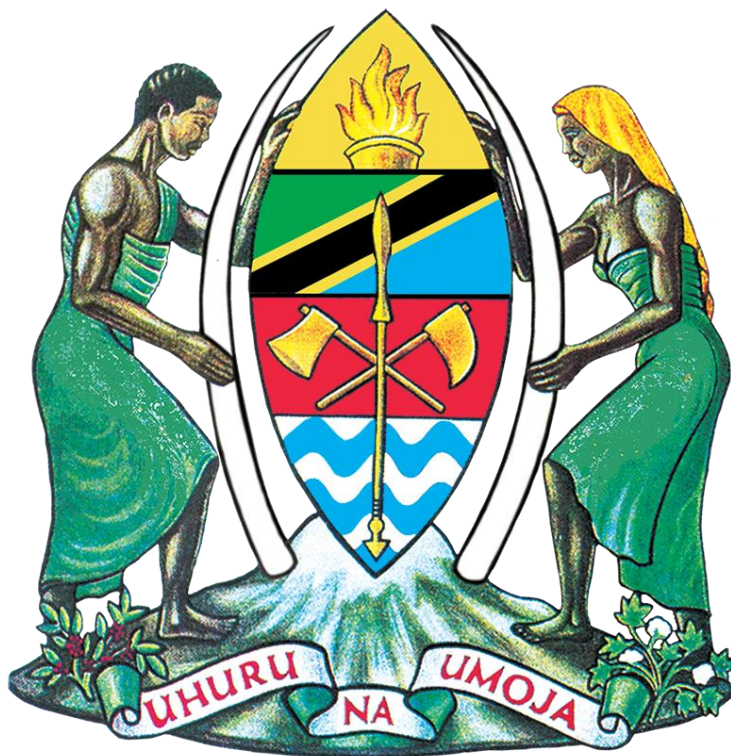




**ENVIROMENTAL AND MANAGEMENT PLAN (ESMP)**

**FOR**

**GROUNDWATER INVESTIGATION OF SEVEN VILLAGES WITHIN RUFIJI SUB CATCHMENT FOR POTENTIAL  
AUGMENTING DODOMA WATER SUPPLY**

**PROPONENT: UNITED REPUBLIC OF TANZANIA, RUFIJI BASIN WATER BOARD**

**MARCH 2025**

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**Contractor Details\*:**

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## **1. Project Description**

The Government is planning intensification of water security through enhanced natural storage and managed aquifer recharge at Makutupōra well fields that will provide innovative short- and medium- term solutions to Dodoma City's bulk water supply needs. At Makutupora, the fault patterns and dense fracture networks correspond to high yielding aquifers. It is expected that in the region more comparable structures exist, however, to date, little exploration has been done to find other aquifer systems.

The Government has been exploring the areas around Dodoma City to look for potential additional aquifers to enhance the water supply of the town. In view of this, the Ministry commissioned a study which has conducted geophysical investigation and drilled three (3) exploratory cum monitoring boreholes. The study area looks promising to provide enough water to augment water supply for Dodoma City. It is with this fact that the Government of Tanzania intends to use SADC GMI funds to complement on the current initiatives to develop well field to augment water supply of Dodoma City and nearby villages.

## **2. Project Location**

Location and Climate: the study area comprises of Seven Villages (Fufu, Nyabu, Seluka, Chipogolo, Iwondo, Igoji and Chamanda villages) which are found about 60 – 100 km from Dodoma City Centre along Dodoma Iringa Road in Chamwino and Mpwapwa districts. The study area falls under semi-arid climate, receiving a total annual rainfall ranging between 395 and 780 mm. The monthly maximum and minimum temperatures of the areas are relatively consistent, ranging between 29.6°C in February and 17.6°C in July, respectively.

## **3. Project Objectives**

The overall project objective is to carry out groundwater investigation coupled with isotopes techniques to establish a wellfield or supplying safe and reliable water to augment Dodoma City water supply.

## **4. Project Activities**

Activities related to the project Groundwater investigation including geophysical survey to locate proper location for drilling three (3) exploratory boreholes

- Groundwater investigation including geophysical survey to locate proper location for drilling seven exploratory boreholes
- Hydrogeological and Geophysical survey
- Drilling of two (2) monitoring wells including pumping test.
- Drilling one (1) production boreholes Supervision of drilling work
- Conduct a detailed assessment of the study area to know the extent of the aquifer and establish Recharge mechanism

## **5. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**

The Environmental and Social Management Plan (ESMP) sets the “environmental and social conditions” that will be abided by client in the course of implementing the project. It aims at ensuring effective implementation of the proposed mitigation measures. The objective of the ESMP is to set out clearly the key components of environmental and socio-economic management for the project and thereby ensure that the basic concepts are realized throughout the construction and installation, operation and closure (if any) phases of the Project. The basic concepts for consideration are:

- i. Negative impacts on physical, biological and socio-economic setting are mitigated;
- ii. Benefits that will arise from the development of the Project are enhanced;
- iii. Compliance with Tanzanian legislation and consistency with international guidelines and best practice is achieved;
- iv. Development programs are identified and implemented with the active involvement of the community and sustainable outcomes are achieved; and
- v. Good will and good relations with communities, civil society and governments at local and national levels are maintained.

- vi. The Project will endeavour to ensure that resources are available to implement the ESMP throughout all phases of project development and closure.

### **1.1 IMPLEMENTING AND REPORTING PROCEDURE**

The overall implementation of the mitigation measures is the primary responsibility of the client/developer. Client/developer is responsible for making sure that the aspects of the ESMP that are to be implemented during operations are adhered and need to ensure that the mitigation measures are implemented.

Other institutions involved in the implementation of the ESMP include developer, Contractor and communities at large with responsibilities as follows:

The developer and contractor are responsible for executing the mitigation measures during mobilization, construction, operations and the day-to-day monitoring that these measures are being implemented according to the approved ESMP.

### **1.2 ENVIRONMENTAL AND SOCIAL MONITORING PLAN**

Monitoring is a long-term process, which helps to ensure that the proposed mitigation measures are effective in managing the impacts that have been identified. Its purpose is to establish benchmarks so that the nature and magnitude of anticipated environmental and social impacts can be continually assessed. Monitoring involves the continuous or periodic review of construction and maintenance activities to determine the effectiveness of recommended mitigation measures. Consequently, trends in environmental degradation or improvement can be established, and previously unforeseen impacts can be identified or pre-empted and averted.

| Item                                                 | Mitigation, Management and Enhancement Measures                                                                                                                | Means of Verification                                                                         | Responsibility                                                                                                                         | Monitoring Procedure                                                                                   |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>A. General Requirements for ESHS Management</b>   |                                                                                                                                                                |                                                                                               |                                                                                                                                        |                                                                                                        |
| <b><u>Responsibilities and Liabilities</u></b>       | Ensure that all workers, suppliers and possible subcontractors are familiar and comply with the ESHS requirements and specifications of this ESMP.             | Induction training performed and recorded.<br><br>Contracts with subcontractors and suppliers | Hired contractor will implement the mitigations and Rufiji Basin Water Board and Ministry of Water will monitor and verify compliances | Review of training records<br><br>Review of Contracts to ensure that Project requirements are included |
|                                                      | Prepare Environmental and Social Monitoring Plan                                                                                                               | Final Rufiji ESMP                                                                             | Rufiji Basin Water Board<br><br>Rufiji Water Board and Ministry of Water                                                               | Will be determined according to monitoring parameters                                                  |
| <b><u>Resources allocated to ESHS Management</u></b> | Assign ESHS responsible expert from Rufiji Basin Board/ Ministry of water who will be reporting the implementation of ES throughout the project implementation | Final Rufiji ESMP<br><br>Inform the relevant authorities about the ESHS expert responsible.   | Rufiji Basin Water Board/Ministry of Water                                                                                             | Periodic/monthly ESMP implementation Reports                                                           |
|                                                      | Include ESHS management in the Bidding document for Contactor to include it in their budget                                                                    | Contract management document                                                                  | Rufiji Basin Water Board                                                                                                               | Project implementation Reports                                                                         |
|                                                      | Contractor to include ESHS expert                                                                                                                              | Contract management document                                                                  | Contractor supervised my Ministry                                                                                                      | ESHS implementation report                                                                             |

| Item                                               | Mitigation, Management and Enhancement Measures                                                                                                                                                                                                                                                                                                                                                                                       | Means of Verification                                                                              | Responsibility                                                     | Monitoring Procedure                                                                                                                        |
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| <b>A. General Requirements for ESHS Management</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                    |                                                                    |                                                                                                                                             |
| <b><u>Reporting</u></b>                            | Report progress and incidents, accidents, observations, near misses on a timely basis.                                                                                                                                                                                                                                                                                                                                                | Final Rufiji ESMP<br>Reporting protocol for ESHS incidents                                         | Contractor<br>Rufiji Basin Water Board<br>SADC-GMI                 | Review monthly ESMP implementation report                                                                                                   |
| Code of Conduct                                    | Include in the contract agreement with the selected contractor the SADC-GMI project-approved Code of Conduct (including procedures for safeguarding) which will take into consideration (as a minimum standard practice) national legislation, safety rules, substance abuse, environmental sensitivity, communicable diseases, gender issues (sexual harassment), respect for local beliefs and customs, community interactions etc. | Code of Conduct in place and rules shared with personnel<br><br>Workers to sign the CoC in English | Rufiji Basin Water Board<br><br>Ministry<br>SADC-GMI<br>Contractor | Review of Code of Conduct induction records<br><br>Review of reported punishable or misconduct behaviour<br><br>Review of grievance records |
| <b><u>ESHS Training</u></b>                        | Provide H&S induction and training and awareness to the workforce regarding H&S risks and mitigation measures (including indirect workers) tailored to Project scope.                                                                                                                                                                                                                                                                 | Training performed and recorded                                                                    | Contractor<br>Rufiji Basin Water Board                             | Once off review of training records                                                                                                         |

| Item                                                                                                    | Mitigation, Management and Enhancement Measures                                                                                                                                                                                                                                                           | Means of Verification                                                                                                                                                                                         | Responsibility                                              | Monitoring Procedure                                           |
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| <b>B. Protection of the Environment</b>                                                                 |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                               |                                                             |                                                                |
| ction of adjacent areas<br>Selection of borrow areas, backfill material stockpile sites and access road | Ensure that means of protection are in place to avoid or minimise adverse effects on vegetation, soils, groundwater and surface water, biodiversity, natural drainage and the water quality in areas within the works area.<br>Select drilling methods that will minimize impacts to the extent possible. | No of impacts identified in the adjacent environment                                                                                                                                                          | Contractor/ Rufiji Basin Water Board<br>Ministry            | Monthly monitoring of adjacent natural resources.              |
|                                                                                                         | Ensure that work site boundaries and limits are in accordance with plans agreed upon in advance. All drilling activities should be carried out within boundaries.                                                                                                                                         | Marking the borders of works site boundaries and usage of warning signs                                                                                                                                       | Contractor /Rufiji Basin Water Board / Ministry             | Site inspection prior to commencement of activities.           |
|                                                                                                         |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                               |                                                             |                                                                |
|                                                                                                         | Ensure to keep adequate distances from permanent water course and outside of floodable areas; sensitive urban services and buildings (health centre, school,);                                                                                                                                            | Marking the borders of works site boundaries in line with given limits and usage of warning signs                                                                                                             | Contractor, Rufiji Basin Water Board and Ministry of Water  | Site inspection prior to commencement of activities.           |
|                                                                                                         | Minimize visual impacts                                                                                                                                                                                                                                                                                   | Visual inspection and comparison with adjacent undisturbed areas.                                                                                                                                             | Contractor Rufiji Basin Water Board                         | Monthly review of grievance records                            |
|                                                                                                         | Ensure all works carried out minimise pollution risk (e.g. liquid effluents, air emissions, noise and vibration management, vehicle and equipment maintenance and selection, fuel, oil and chemical storage and handling) including the whole duration of the Project.                                    | Ensure that potential pollutants are not stored and handled within 50m of sensitive receptors (particularly watercourses).<br>Ensure that potential pollutants are safely stored i.e. stored above catch pan. | Contractor<br>Rufiji Basin Water Board<br>Ministry of Water | Regular site inspection<br>Monthly Review of grievance records |

| Item                                                                                                              | Mitigation, Management and Enhancement Measures                                                                                                     | Means of Verification                                                                 | Responsibility                                             | Monitoring Procedure                                                                                                                                        |
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| <b>B. Protection of the Environment</b>                                                                           |                                                                                                                                                     |                                                                                       |                                                            |                                                                                                                                                             |
|                                                                                                                   | Ensure appropriate containment and storage of drilling wastewater, including sanitary water.<br>Ensure no untreated effluent is discharged.         | No untreated wastewater discharge                                                     | Contactor<br>Rufiji Basin Water Board<br>Ministry of water | Regular site inspection<br>Monthly review of grievance records                                                                                              |
|                                                                                                                   | Use, to the extent possible, vehicles in appropriate technical conditions.<br>Provide emissions control equipment where applicable (e.g. filters).  | Technical Specification Sheet                                                         | Contactor<br>Rufiji Basin Water Board<br>Ministry of water | Prior to commencement of work and each time new equipment/vehicle is used at the site.<br>Review of grievance records<br>Visual inspection on regular basis |
| Selection of borrow areas, backfill material stockpile sites and access road<br>Pollution prevention<br>Effluents | Use low Sulphur content fuels, in line with legal provisions in force as well as local availability.                                                | Technical Specification Sheet                                                         | Contractor, Rufiji Basin Water Board and Ministry of Water | Monthly documentation inspection                                                                                                                            |
|                                                                                                                   | Ensure vehicles are switched off when not in use. Sensitize drivers.                                                                                | Engines switched off when not in use                                                  | Contractor, Rufiji Basin Water Board and Ministry of Water | Monthly Site inspection                                                                                                                                     |
|                                                                                                                   | Best practice to ensure minimisation of dust emissions (e.g. proper stockpiling, watering etc.) during dry and windy conditions and transportation. | Watering conducted, number of dust emissions observed, number of workers' grievances  | Contractor, Rufiji Basin Water Board and Ministry of Water | Regular site inspection<br>Monthly review of grievance records                                                                                              |
|                                                                                                                   | Ensure speed limits on site.<br>Sensitize drivers on safe driving.                                                                                  | Speed signs installed<br>Training performed and recorded<br>Accident/incident reports | Contractor, Rufiji Basin Water Board and Ministry of Water | Random site inspection<br>Review of accident/incident records<br>Review of training records                                                                 |

| Item                                    | Mitigation, Management and Enhancement Measures                                                                                                                                                                                                                       | Means of Verification                                                                                                                                | Responsibility                                             | Monitoring Procedure                                                                        |
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| <b>B. Protection of the Environment</b> |                                                                                                                                                                                                                                                                       |                                                                                                                                                      |                                                            |                                                                                             |
| Emissions and dust                      | Avoid operations and vehicle movements at night.                                                                                                                                                                                                                      | No of grievances received                                                                                                                            | Contractor, Rufiji Basin Water Board and Ministry of Water | Random site inspection<br>Review of accident/incident records<br>Review of training records |
| Noise and Vibration                     | Locate stationary equipment (such as power generators) as far as possible from nearby receptors (e.g. worker resting areas, populated areas and environmentally sensitive areas). Make sure that noise levels don't exceed 120db in case of equipment or vehicle use. | Effective distances between equipment and receptors are kept<br><br>Use of sound detector to ensure that noise level is kept below recommended level | Contractor, Rufiji Basin Water Board and Ministry of Water | Once prior to commencement of works<br>Review of grievance records                          |
| Waste Management                        | Identify waste management facilities and waste management contractors.<br><br>Ensure disposal through waste contractors licensed for treatment/removal/recycling of each of the waste types.                                                                          | Waste management through licensed contractors, if feasible                                                                                           | Contractor, Rufiji Basin Water Board and Ministry of Water | Inspect waste management facilities<br>Review of waste transfer records                     |
|                                         | Ensure that all wastes produced are properly collected, segregated, stored, transported and treated<br><br>Comply with national regulations and good industrial international practices in waste management                                                           | Waste collection inventories<br>Waste transfer notes                                                                                                 | Contractor, Rufiji Basin Water Board and Ministry of Water | Random site inspection<br>Review of waste inventories<br>Review of waste transfer records   |
|                                         | Minimize the waste production to the extent possible.                                                                                                                                                                                                                 | Records of waste production are kept<br>Waste Management Plan<br>Training performed and recorded                                                     | Contractor, Rufiji Basin Water Board and Ministry of Water | Monitor (e.g. monthly) the amount of waste produced<br>Review of training records           |

| Item                                    | Mitigation, Management and Enhancement Measures                                                                                                                                                             | Means of Verification                                                                                          | Responsibility                                             | Monitoring Procedure                                                                          |
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| <b>B. Protection of the Environment</b> |                                                                                                                                                                                                             |                                                                                                                |                                                            |                                                                                               |
|                                         | Document all waste related operations (type of wastes, quantities produced etc.).                                                                                                                           | Storage, transport and treatment of waste is documented<br>Waste transfer notes<br>Waste inventories           | Contractor, Rufiji Basin Water Board and Ministry of Water | Review of waste transfer records<br>Review of waste inventories                               |
|                                         | Appropriate and safe storage of fuels, drilling materials, wastes and any materials that can cause spills (e.g. batteries from energy generators).                                                          | Safe storage of materials<br>Spill response procedure<br>Spill response and remediation equipment in place.    | Contractor, Rufiji Basin Water Board and Ministry of Water | Random site inspection                                                                        |
| Vegetation Clearing                     | Limit vegetation clearing to areas within the site boundary where it is strictly necessary.                                                                                                                 | Vegetation clearing minimal<br>Marking the borders of works site boundaries                                    | Contractor, Rufiji Basin Water Board and Ministry of Water | Site inspection prior to commencement of activities.                                          |
|                                         | Describe the methods of vegetation clearance. Ensure that no chemicals/pesticides are used, burning of vegetation is restricted etc. Do not clear vegetation more than two months in advance of operations. | No use of fires or chemicals on site<br>Marking the borders of works site boundaries<br>Usage of warning signs | Contractor, Rufiji Basin Water Board and Ministry of Water | Site inspection prior to commencement of activities.<br>Site inspection during site clearance |

| Item                                    | Mitigation, Management and Enhancement Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Means of Verification             | Responsibility                                             | Monitoring Procedure                                                               |
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| <b>B. Protection of the Environment</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                   |                                                            |                                                                                    |
|                                         | <p>Avoid clearing mature trees and endangered species.</p> <p>In areas where endangered species are known to exist, carry out adequate evaluation to ensure that no adverse impact to endangered species will be caused by the works. Plan adequate mitigation measures to ensure that the works will not negatively affect the endangered species.</p> <p>If endangered species are found unexpectedly during works, halt all works and provide ad-hoc assessment of the areas for endangered species and establish adequate mitigation measures.</p> | No of mature trees cleared        | Contractor, Rufiji Basin Water Board and Ministry of Water | Site inspection prior to commencement of activities.                               |
| Vegetation Clearing                     | Avoid to the extent possible areas of ecological value.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Areas of ecological value avoided | Contractor, Rufiji Basin Water Board and Ministry of Water | Site assessment prior to site selection.<br>Ecological value assessment if needed. |
|                                         | Avoid natural habitats disturbance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | No of habitats disturbed          | Contractor, Rufiji Basin Water Board and Ministry of Water | Inspection of drilling practices.                                                  |
|                                         | Ensure that rehabilitated areas don't pose health and safety risks (such as holes, ponds).                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Reinstatement completed           | Contractor, Rufiji Basin Water Board and Ministry of Water | Inspection after drilling<br>Inspection after heavy rainfalls and snow             |

| Item                                         | Mitigation, Management and Enhancement Measures                                                                                                                                                                           | Means of Verification                                                                     | Responsibility                                             | Monitoring Procedure                                  |
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| <b>C. Health and Safety</b>                  |                                                                                                                                                                                                                           |                                                                                           |                                                            |                                                       |
| <b><u>Health and Safety Plan</u></b>         | Develop a Health and Safety Plan.                                                                                                                                                                                         | H&S Plan in place                                                                         | Contractor, Rufiji Basin Water Board and Ministry of Water | Review of H&S Plan                                    |
| <b><u>Accident reporting</u></b>             | Ensure all environmental, social, H&S related incidents (e.g. observations, accidents) on site are recorded and followed up properly.                                                                                     | Incident recording process in place                                                       | Contractor, Rufiji Basin Water Board and Ministry of Water | Check incident/accident records                       |
| <b><u>Personal protective equipment</u></b>  | Ensure the provision of Personal Protective Equipment (PPE) for workers (hardhats, masks, safety glasses, safety boots etc. depending on project type).                                                                   | PPE used by everyone on-site<br>Training performed and recorded                           | Contractor, Rufiji Basin Water Board and Ministry of Water | Random site inspection<br>Review training records     |
| <b><u>Emergency scenarios prevention</u></b> | Ensure immediate cleaning of any spills and remediation of contaminated areas after drilling                                                                                                                              | Workers trained.                                                                          | Contractor, Rufiji Basin Water Board and Ministry of Water | Review of training records                            |
|                                              | Provide necessary prevention equipment and teams on site in line with applicable regulations to respond to emergency scenarios e.g. fire, explosion, natural hazards etc.                                                 | Prevention equipment and team is in place<br>Training performed and recorded              | Contractor, Rufiji Basin Water Board and Ministry of Water | Regular site inspection<br>Review of training records |
|                                              | Maintain high standards in housekeeping on site. Drilling materials and light equipment should be stored properly.                                                                                                        | Visual verification of good housekeeping on-site                                          | Contractor, Rufiji Basin Water Board and Ministry of Water | Random site inspection                                |
| <b><u>First-aid</u></b>                      | Ensure minimum first aid provisions on site (suitably stocked first-aid kits; a person, respectively an adequate number of first-aid helpers and ensure that staff and workers are informed about first-aid arrangements) | Suitable first aid kits on site<br>Ensure the presence of first aid helpers in all shifts | Contractor<br><br>Rufiji basin Water Board                 | Regular monitoring of first aid kits                  |

| Item                            | Mitigation, Management and Enhancement Measures                                                                                                 | Means of Verification           | Responsibility                         | Monitoring Procedure       |
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| <b>C. Health and Safety</b>     |                                                                                                                                                 |                                 |                                        |                            |
| Hygiene, accommodation and food | Report any occurrence of any communicable diseases amongst the workforce (STD, HIV/AIDS, TB, malaria and Hepatitis B and C). Sensitize workers. | Training performed and recorded | Contractor<br>Rufiji Basin Water Board | Review of training records |

| Item                                                  | Mitigation, Management and Enhancement Measures                                                                                                                                    | Means of Verification                                                                   | Responsibility                                    | Monitoring Procedure                                                                                                      |
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| <b>D. Labour and relations with local communities</b> |                                                                                                                                                                                    |                                                                                         |                                                   |                                                                                                                           |
| <b><u>Labour conditions</u></b>                       | Ensure minimum legal labour standards as per ESS2 regulations (child/forced labour, sexual assault, no discrimination, equal opportunities, working hours, minimum wages) are met. | Grievance Mechanism Records,<br>Training performed and recorded                         | Contractor<br>Rufiji Basin Water Board            | Review of Inspection reports (also from labour authorities),<br>Review of grievance records<br>Review of training records |
|                                                       | Ensure that all direct and indirect workers have access to and are aware of the Grievance Mechanism where they can raise workplace relevant complaints anonymously.                | Grievance Mechanism in place and grievances recorded<br>Training performed and recorded | Rufiji Basin Water Board and<br>Ministry of Water | Review of grievance register<br>Review of training records                                                                |
|                                                       | Ensure all workers have the same rights and are treated equally.                                                                                                                   | Non-discrimination policy in place                                                      | Rufiji Basin Water Board and<br>Ministry of Water | Random site inspection<br>Review of grievance register                                                                    |
| <b>Local recruitment</b>                              | Ensure local communities are preferred for the supply of goods and services to the Project and Project personnel, where appropriate.                                               | Local Procurement and Employment Records                                                | Rufiji Basin Water Board                          | Review procurement and employment rules and records<br>Review of grievance register                                       |

| Item                                                  | Mitigation, Management and Enhancement Measures                                                                                                                                                                                                                                                                                                                                                                    | Means of Verification                               | Responsibility                                 | Monitoring Procedure                                                                          |
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| <b>D. Labour and relations with local communities</b> |                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                     |                                                |                                                                                               |
| <b><u>Community interaction</u></b>                   | Engage/ communicate/inform communities. Ensure consultations with the local authorities and communities regarding the drilling. Obtain local knowledge regarding chance finds and land acquisition matters.                                                                                                                                                                                                        | Minutes of Meetings<br>Grievance Mechanism          | Rufiji Basin Water Board and Ministry of Water | Review of grievance register<br>Minutes of consultation meetings                              |
|                                                       | Initiate an efficient Grievance Mechanism to allow potentially affected individuals to raise their concerns. If there will be any grievances Ministry of Water and Rufiji Basin Water Board (grantee) will fast track through the GRMC                                                                                                                                                                             | Grievance Mechanism in place, grievances recorded   | Rufiji Basin Water Board and Ministry of Water | Review of grievance register                                                                  |
|                                                       | Engage with the local community and potential affected households to understand their needs and identify the risk of damage to their livelihood basis through the Project (e.g. take of pasture land, lack of access to water).                                                                                                                                                                                    | Minutes of Meetings<br>Grievance Mechanism records  | Rufiji Basin Water Board and Ministry of Water | Review of grievance register and meeting minutes                                              |
| <b>Damage to people and property</b>                  | Ensure all contractors implement codes of conduct concerning employment and workforce behaviour (including but not limited to safety rules, zero tolerance for substance abuse, environmental sensitivity of the area, dangers of sexually transmissible diseases and HIV/AIDS, gender equality and sexual harassment, respect for the beliefs and customs of the populations and community relations in general). | Code of Conduct<br>Grievance Mechanism records      | Rufiji Basin Water Board and Ministry of Water | Worker interviews, Review of grievance log                                                    |
|                                                       | Ensure that site areas are provided with appropriate security, fencing, signage and lighting. Use hazard notices/signs/barriers to protect children and other vulnerable people from harm and prevent access to non-workers.                                                                                                                                                                                       | H&S planning of drilling site done, items installed | Rufiji Basin Water Board and Ministry of Water | Inspection prior to the activities.<br>Random site inspection<br>Review of grievance register |

| Item                                                  | Mitigation, Management and Enhancement Measures                                                                                                                                                | Means of Verification                                 | Responsibility                                 | Monitoring Procedure                                          |
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| <b>D. Labour and relations with local communities</b> |                                                                                                                                                                                                |                                                       |                                                |                                                               |
| <b>Traffic management</b>                             | Ensure safe driving by Project personnel (e.g. through training/induction).                                                                                                                    | Driver Training Records as part of Induction training | Rufiji Basin Water Board and Ministry of Water | Review of training records                                    |
|                                                       | Target signage and outreach activities to improve public awareness of traffic changes and potential hazards for high-risk sections of public roads, including near the site and laydown areas. | Warning signs<br>Minutes of Meetings                  | Rufiji Basin Water Board and Ministry of Water | Inspection of traffic routes,<br>Review of grievance register |