

## REDI II National Fisheries Authority Tilapia Upgrade Project-73748

### Site Specific Environment and Social Management Plan

Possible Environmental Impact	Response	Mitigation of Impact
Is the project by virtue of its location extremely vulnerable to the impacts of climate change and natural disasters?	Yes	The project must be designed to mitigate against all potential risk. The design must be approved by the necessary local authorities. Conduct meaningful consultations with the necessary stakeholders to ensure that the project design is informed by local knowledge of the environment. Conduct strict supervision of the project to ensure that the project is constructed according to design. Ensure that a maintenance committee is the necessary training and equipment provided.
Is the project a livestock production operation?	Yes	The project will be implemented in accordance with the JSIF's environmental and social policies and funders environmental and social management framework to include all applicable Standards. Tertiary level wastewater treatment system must be included in the project design if trade effluent will be discharged into the environment. Ensure that any applicable permit is obtained, and the conditions of the permit adhered to. Provisions must be made to control odour onsite and pest infestation.
Will the project involve construction or rehabilitation of physical infrastructure?	Yes	The project will be implemented in accordance with the JSIF's environmental and social policies and funders environmental and social management framework to include all applicable Standards. Conduct consultation with stakeholders to inform the project design. Ensure that the required "No Objection" is obtained from the Municipal Corporation.
Is the project area zoned for the intended land use?	Yes	No issue, PROCEED with project appraisal
Will the project involve the employment of labourers?	Yes	No issue. Conduct training and sensitization sessions with stakeholders regarding employment procedures. Ensure that contractors are aware of and comply with labour laws. Conduct frequent monitoring and investigation to help prevent child labour and/or forced labour. Ensure there is gender equity in hiring practice and payment process. Report any case of non-compliance with the labour laws.
Will the project produce any unsafe physical conditions for workers such as poor sanitation, excavation, working from height and working with heavy equipment, etc.?	Yes	Ensure cost to mitigate against safety risks is included in project bills of quantity. Conduct regular sensitization of project workers, contractors, and consultants about safety management onsite. Conduct safety meetings prior to starting work. Provide workers with suitable personal protective equipment and supervise them to ensure that they are being used. Inform all workers about hazards onsite. Restrict access to the site using hoarding. Barricade unsafe locations. Install warning signs to highlight excavations. Maintain a well-equipped safety kit onsite.

Will the project because of its proposed design and operation result in excessive consumption of water?	Yes	Design the project to include sustainable water use features, such as rainwater harvesting, low flow faucets and showers and low flush toilets etc. Recycle wastewater where necessary. Provide sensitization training on water conservation practices. Establish and train maintenance committee.
Will the project because of its design and operation, result in excessive use of energy?	Yes	Design the project to include sustainable energy use features, LED lighting, sensor/motion switches, renewable energy (wind or solar), and Energy Star appliances. Provide sensitization training on energy conservation practices. Establish and train maintenance committee.
Will the project involve a sewage and/or wastewater treatment solution?	Yes	The project must be designed with a tertiary level sewage treatment system. The necessary permit must be obtained from NEPA and checked by the environmental health unit of the Ministry of Health and wellness. The treatment system must be applicable or fit for purpose for the site. The treatment system must be constructed and operated in accordance with the conditions of the permit.
Does the project involve the sourcing of aggregate material e.g., sand, limestone and gravel?	Yes	Aggregates must be obtained from a reputable source. The supplier must have an updated certification. Aggregates must be delivered in colour trucks.
Will the project involve generation of non-hazardous waste?	Yes	Project stakeholders must be sensitized about the management of waste onsite. The contractor must provide bins/drums for storage of garbage. The garbage should be bagged prior to placement in the bins. The bins should always be kept closed. The garbage must be bagged prior to placement in the bins. Plastics can be separated from the regular waste for recycling. Garbage should be disposed of at a National Solid waste Management Authority disposal facility.  Construction and Demolition waste should be removed from the site as soon as the quantity to fill a truckload is achieved. If the CSD waste is not going to be used onsite, it should be disposed of at the quickest time. While onsite, the waste must be covered with plastic sheeting when not in use. The waste should also be bordered by perimeter berm to prevent discharge of sediments. The waste should be stored in designated area.
Will the project result in the release of dust to the environment?	Yes	In residential areas where works are being conducted in the dry season, exposed areas will be wet often along with stockpiles of earth materials, particularly fine particles. Haulage vehicles transporting aggregate will be required to cover aggregate/particulates during transportation. As it relates to workers health and safety, all workers will be supplied with dust masks. Water will be applied to the source of origin, over demolition materials during demolition and loading activities to prevent airborne dust particles migrating into the surrounding environment.
Will the project generate noise? If so, are there sensitive noise	Yes	Blasting should only be conducted by a certified contractor and all safety requirements, including deployment of blasting mats, inspection of buildings within the designated

receptors nearby (homes, schools, hospitals)?		blasting radius, before and after blasting. There will be strict supervision to prevent access by unauthorized persons. Provide workers and visitors to the site with safety gear e.g., earmuffs, dust masks, hard hats. Construction work will only be carried out from 8:00 am to 6:00 pm adhere to the JSIF and local regulations. Blasting will only be allowed during daylight and residents will be advised prior to when blasting will occur. Appropriately maintained and serviced machinery, with low noise emissions will be used onsite.
Will the project involve hoarding (temporary fencing of project site during construction to reduce unauthorized access)?	Yes	Hoarding will be erected where necessary to reduce access to the site by unauthorized persons. Trees should not be cut to build hoarding; purchase the lumber from a reputable supplier. In cases where an existing cut tree is used as hoarding, the owner of the tree must be compensated in accordance with the JSIF's Environmental and Social Framework.
Will the project create hazardous driving conditions e.g. detours, missing bridges, lack of shoulders on roadways, heavy equipment crossings, piles of stones on roads, etc.?	Yes	Residents Will be informed of project risks. Adequate signage will be implemented to provide direction to the residents. Hazardous locations will be protected with the use of protective barriers. Flagmen will be employed to help direct traffic. The contractor will be required to supply workers PPEs. Training will be conducted for stakeholders.
Were all the necessary stakeholders consulted?	Yes	No issue, PROCEED