

Monitoring Form

Project: The Project for The Improvement of Major Roads in The City of Lilongwe

Construction Phase (including Detail Design Phase)

1. Response/Actions to Comments and Guidance from Government Authorities and the Public

Monitoring Item	Monitoring Results during Report Period
Number and contents of formal comments made by public	0
Number and contents from Government agencies	Monthly Environmental and Social Monitoring No.29

2. Pollution

(1) Air Pollution

Item	Monitoring Results during Report Period	Measured to be Taken	Frequency
Confirmation for environmental mitigation measures in construction plan	Yes	-	Before commencement of construction activities
Confirmation for implementation of environmental mitigation measures on construction activities			Any time during construction phase
· Water spray in/around the project site	Yes	-	
· Regular inspection of construction machinery	Yes	-	
· Rational operation of construction machinery	Yes	-	

(2) Water Pollution (Lilongwe River)

Item	Monitoring Results during Report Period	Measured to be Taken	Frequency
Confirmation for environmental mitigation measures in construction plan	Yes	-	Before commencement of construction activities
Confirmation for implementation of environmental mitigation measures on construction activities			Any time during construction phase
· Water quality (turbid) of Lilongwe river (visual inspection)	Yes	-	
· Protection of embankment slope	Yes	-	
· Sampling of water	Yes	-	(Sampling of water) Semiyearly

Criteria of Water Sampling

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards (Effluence)	Reference (measured value in feasibility survey)	Referred International Standards*	Measurement Point	Frequency
pH			8.69	6.5 – 9.0	7.53 - 7.63	7.0-8.3	Lilongwe river (Construction areas of piers)	Semiyearly
DO	mg/L		6.91	>5.0	5.16 - 6.10	=>2		
BOD	mg/L		1.46	20	2.2 – 2.8	=>5.0		
COD	mg/L		9	70	11.8 – 14.1	-		
SS	mg/L		35	50	97 - 140	-		

Item	Unit	Measured Value (Mean)	Measured Value (Max)	Country's Standards (Effluence)	Reference (measured value feasibility survey) in	Referred International Standards*	Measurement Point	Frequency
FC	Counts/100mL		-	-	100 - 300	≦8		

*: MoE, Japan

(3) Soil Pollution

Item	Monitoring Results during Report Period	Survey Points	Frequency
Confirmation for environmental mitigation measures in construction plan	Yes	-	Before commencement of construction activities
Confirmation for implementation of environmental mitigation measures on construction activities <ul style="list-style-type: none"> Regular inspection of construction machinery 	Yes	Project site	Any time during construction phase

(4) Waste

Item	Monitoring Results during Report Period	Measured to be Taken	Frequency
Confirmation for environmental mitigation measures in construction plan	Yes	-	Before commencement of construction activities
Confirmation for implementation of environmental mitigation measures on construction activities <ul style="list-style-type: none"> Dumping of construction wastes 	Yes	-	Any time during construction phase

(5) Noise (Construction Noise)

Item	Monitoring Results during Report Period	Measured to be Taken	Frequency
Confirmation for environmental mitigation measures in construction plan	Yes	-	Before commencement of construction activities
Confirmation for implementation of environmental mitigation measures on construction activities <ul style="list-style-type: none"> Regular inspection of construction machinery Rational operation of construction machinery 	Yes Yes	- -	Any time during construction phase

3. Natural Environment

(1) Ecosystem

Item	Monitoring Results during Report Period	Survey Points	Frequency
Confirmation for the plan of tree cutting and reforestation	N/A	-	Before commencement of construction activities
Confirmation for the reforestation	N/A	-	Any time during construction phase

(2) Hydrology

Item	Monitoring Results during Report Period	Survey Point	Frequency
Condition of pier design of Lilongwe bridge (mitigation measures against water flow obstruction)	Yes	-	During Detail Design phase

4. Social Environment

(1) Resettlement /Poor

Item	Monitoring Results during Report Period	Survey Point	Frequency
Review of ARAP	Yes	-	Before commencement of construction activities
Progress of land acquisition and resettlement under ARAP	Complete	Project site	Before commencement construction activities, and during construction activities

(2) Local economies, such as employment, livelihood, etc.

Including in Resettlement / Poor: Local people have been employed

(3) Misdistribution of benefits and damages

Including in Resettlement / Poor: None

(4) HIV/AIDS and other STDs

Item	Monitoring Results during Report Period	Measured to be Taken	Frequency
Confirmation of construction plan (education and enlightenment)	Yes	-	Before commencement of construction activities
Confirmation of records of construction activities including protection against HIV/AIDS	Yes	-	During construction period

(5) Working Environment (including Safety)

Item	Monitoring Results during Report Period	Measured to be Taken	Frequency
Confirmation of safety plan of construction work	Yes	-	Before commencement of construction work
Confirmation of records of construction activities including safety	Yes	-	During construction phase

(6) Trans-boundary impacts or climate change

Item	Monitoring Results during Report Period	Measured to be Taken	Frequency
(Maintenance of construction machinery) Confirmation of construction records	Yes	-	During construction period

Item	Monitoring Results during Report Period	Measured to be Taken	Frequency
(Reforestation) Confirmation of records of construction activities and field reconnaissance	N/A	-	After completion of replanting

4. Others

(1) Grievance on Environmental and Social Matters

Number of Grievance	Details of Grievance	Handling and Outcomes
0	-	-
0	-	-