

ATHI WATER SERVICES BOARD



**WATER AND SANITATION SERVICES IMPROVEMENT PROJECT ADDITIONAL
FINANCING (WaSSIP AF)**

**ENVIRONMENTAL AND SOCIAL SCREENING REPORT FOR THE
INSTALLATION OF WATER TANKS, CONSTRUCTION OF TANK-BASE
AND GUTTERING FOR RAINWATER HARVESTING IN TANA WATER
SERVICE BOARD AREA**

MARCH 2016

1.0 BACKGROUND OF THE PROJECT

The Government of Kenya with the support from the World Bank has been implementing the Water and Sanitation Service Improvement Project (WaSSIP). The Government has now secured further financing from the World Bank under the Water and Sanitation Service Improvement Project Additional Financing (WaSSIP AF) project that was made possible because of the satisfactory implementation of the ‘original’ WaSSIP and its contribution to water services improvement. In order to consolidate gains so far realized and to scale up improvement of water services, WaSSIP AF will focus development of new water sources, rehabilitation and expansion of water and sanitation (WSS) infrastructure including drought response activities and capacity building for water sector institutions supported by the Project.

The Project’s development objectives are:

- a. To increase access to water supply and sanitation services; and
- b. To improve the water and wastewater services in the areas served by Athi Water Services Board, Lake Victoria North Water Services Board, and Coast Water Services Board.

Part 1 of the WASSIP AF Project involves Support to the Athi Water Services Board (AWSB). This component supports the rehabilitation and extension of water supply systems, the development of additional water sources for Nairobi, drought mitigation measures, and improvements in wastewater collection and treatment facilities in the jurisdiction of the Athi Water Services Board (AWSB). Technical assistance will also be provided to the AWSB and its water services providers, the Water Services Regulatory Board, and the Water Appeal Board.

As part of the implementation of the WaSSIP AF Project, AWSB is currently undertaking Installation of Water Tanks, Construction of Tank-Base and Guttering for Rainwater Harvesting in Tana Water Services Board Area.

The breakdown is as shown below:

No. of Schools for guttering	No. of tank Bases
40	40

2.0 ENVIRONMENTAL AND SOCIAL SCREENING

Environmental and social screening is a process whereby potential adverse environmental and social impacts of a particular project are identified with a view to mitigating them. This enables the project proponent determine whether the project will require an Environment and Social Impact Study which helps in developing practical mitigation measures for identified impacts.

2.1 Objective of Screening

The main objective of this screening process is to identify and highlight environmental and social issues that need to be taken into account in the planning, design and installation of water tanks, construction of tank-base and guttering for rainwater harvesting in Tana Water Services Board area. This process will enable the determination of the category of this project as per the Banks' guidelines as well as set the ground for further reports that may require to be done, especially to ensure compliance with World Bank safeguards. Further, this screening will assist in determining if this project requires a full Environmental and Social Impact Assessment study and Resettlement Action Plan done before its implementation. The aim is to support the sustainable implementation of the planned project and the screening is carried out at an early stage of the project (i.e., pre-feasibility), in accordance with the requirement for World Bank financed projects.

2.2 Categorization of Projects

The screening results may indicate that the investment either requires a full Environmental and Social Impact Assessment with implementation of mitigation measures or that no additional environmental and social work is needed because no adverse environmental and social impacts were identified. Based on the screening results, the appropriate *environmental category* (A, B, C) is assigned based on the Bank's OP 4.01 Environmental Assessment. These categories are defined as follows;

i. *Category A*

A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. Environmental Assessment for a Category A project examines the project's potential negative and positive environmental impacts, compares them with those of feasible alternatives (including the "without project" situation), and recommends any measures needed to prevent, minimize, mitigate or compensate for adverse impacts and improve environmental performance.

ii. *Category B*

A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas - including wetlands, forests, grasslands, and other natural habitats - are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigatory measures can be designed more readily than for Category A projects. The scope of Environmental Assessment for a Category B project may vary from project to project, but it is narrower than that of Category A. Like Category A Environmental Assessment, this category examines potential negative and positive environmental impacts of the proposed project and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance.

iii. *Category C*

A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts. Beyond screening, no further stand-alone Environmental Assessment action is required for a Category C project.

iv. *Category FI*

A proposed project is classified as Category FI if it involves investment of Bank funds through a financial intermediary, in subprojects that may result in adverse environmental impacts; in this case, it is not applicable to this project.

Together with determination of the need to carry out an Environmental and Social Impact Assessment of a project from the environmental screening and categorization of the project as

above, determination of whether to carry out a Resettlement Action Plan is also considered resulting from the screening. This is in accordance with the requirement for World Bank Environmental and Social Safeguards for Banks' financed projects, notably OP4.12 (Involuntary Resettlement).

From the above categorization, this project is considered as category C and therefore no further Environmental Assessment is required. The project will be implemented on school property which is considered public land. This means therefore that a Resettlement Action Plan is not required.

3.0 PROJECT DESCRIPTION AND SCOPE

The scope of the project will include installation of gutters and construction of tank bases in 40 schools within Tana Water Services Board area of jurisdiction. They include Nyeri, Murang'a, Embu, Tharaka-Nithi and Meru Counties. The breakdown is as shown in Table 1.

Table 1: List of Schools to be provided with gutters and tank bases

S. No.	County	Sub-county	NO.	NAME OF SCHOOL
1.	Nyeri	Kieni West	1	Embaringo Dispensary
			2	Embaringo Secondary School
			3	Honi Primary School
		Kieni East	4	Karudas Primary School
			5	Macharia Primary Secondary
			6	Gakawa Special School
		Mukurweini	7	Gaikundo Secondary School
			8	Karundu Dispensary
			9	Karundu Primary School
2	Murang'a	Maragua	10	Maranjau Primary School
			11	Kitine Primary School
			12	Igikiro Primary School
		Murang'a East	13	Gakurwe Primary School

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S. No.	County	Sub-county	NO.	NAME OF SCHOOL
			14	Kiamuri Primary School
			15	Kiamuri Secondary School
3	Embu	Mbeere South	16	Mutus Secondary School
			17	Yonder Karwigi Secondary School
			18	Kangungi Secondary School
		Embu West	19	Kithumu Primary School
			20	Mungangu Secondary School
			21	Kamungunga Primary School
		Mbeere North	22	Karambari Secondary School
			23	Kianjogu Primary School
			24	Mukoroma Primary School
4	Tharaka-Nithi	Mara	25	Kaganjo Primary School
			26	Kanoro Secondary school
			27	Maatha Primary School
		Tharaka South	28	Chiakariga Primary School
			29	Kombo Primary School
			30	Kiamari Primary School
		Tharaka North	31	Uturini Primary School
		Meru South	32	Kathanje Secondary school
			33	Manyanga Primary School
			34	Mugere Primary School
5	Meru	Igembe North	35	Barenta Primary School
			36	Tiiri Primary School
			37	Muringene Primary School
		Tigania West	38	Nkanga Secondary School
			39	Uringu B/H Water Project
			40	Mwili Primary School

4.0 SENSITIVITY ANALYSIS

This section outlines the potential negative and positive impacts that are anticipated and will be associated with the works. The impacts will be related to activities carried out during construction, commissioning, operations, maintenance and decommissioning phases. The impacts of this sub-project during each of its life cycle stages can be categorized into impacts on the biophysical environment, health and safety impacts and socio-economic impacts. These impacts shall have a positive or negative bearing and can be direct or indirect. In general, environmental and social issues likely to be of concern during the construction phase of the sub-project include:

- i. Access to clean water
- ii. Air pollution due to noise and dust evolution from construction trucks
- iii. Safety concerns and disturbance to students within the schools
- iv. Material sourcing and supply for the construction, installation and maintenance works, and
- v. Interaction between students and the construction workers leading to social vices.

These impacts shall have a positive or negative bearing and can be direct or indirect. The magnitude of each impact is described in terms of being significant, minor or negligible, temporary or permanent, long term or short term, specific (localized) or widespread and reversible or irreversible. These parameters are indicated in the assessment table below:

Table 2: Environmental and social impact levels and mitigations

Symbol	Type of impact	Symbol	Type of impact
++	Major positive impact	+	Minor positive impact
--	Major negative impact	-	Minor negative impact
0	Negligible /zero impact	nc	No change
Sp	Specific/localized	W	Wide spread
R	Reversible	Ir	Irreversible
Sh	Short term	L	Long term

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Symbol	Type of impact	Symbol	Type of impact
T	Temporary	P	Permanent
Y	Mitigation of negative impact/enhancement of positive ones is possible	N	Mitigation of negative impact/enhancement of positive ones is not possible

Generally, temporary impacts have no obvious long-term consequences and are regarded as being minor. But those with long-term repercussions are classified as significant. Significant positive impacts are usually associated with improved rainwater harvesting, which forms the prime objective of this project. A summary of the anticipated impacts are as represented in Table 3, that is based on perceived environmental impact levels and mitigations as per the Table 2.

Table 3: Environmental and social impact levels and mitigations for this sub-project

Phase	Anticipated Impact	Type / Level of Impact
Construction	Creation of Employment Opportunities	+, sp, R, Sh, T, Y
	Provision of Market for Supply of Materials	+, sp, R, Sh, T, Y
	Noise	-, sp, R, Sh, T, Y
	Extraction and Use of Materials	-, sp, Ir, L, P, Y
	Exhaust Emissions	-, sp, Ir, Sh, T, Y
	Dust Emissions	-, sp, R, Sh, T, Y
	Safety Concerns	-, sp, R, Sh, T, Y
	Waste Generation	-, sp, R, Sh, T, Y
	Interference with schools daily activities	-, sp, R, Sh, T, Y
	Risks of Accidents and Injuries to Workers and Students	-, sp, Ir, Sh, P, Y

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Phase	Anticipated Impact	Type / Level of Impact
Operations & Maintenance	Increased Rain water Harvesting	++, sp, R, L, P, Y
	Time and money saved which could have been used to source water	++, sp, R, L, P, Y
	Improved Water Supply – better hygiene and human health	++, W, Ir, L, P, Y
Decommissioning	Solid waste generation	-, sp, R, Sh, T, Y
	Dust emissions	-, sp, R, Sh, T, Y
	Interference with school activities	-, sp, R, Sh, T, Y
	Noise	-, sp, R, Sh, T, Y
	Employment opportunities	+, sp, R, Sh, T, Y

5.0 RECOMMENDATIONS

Based on the above screening results, the proposed project has been assigned the environmental **category C** which does not require any further environmental and social assessment. The project area has no Project Affected Persons since the project will be undertaken within schools and dispensaries which are considered as public land and therefore there is no need of carrying out a detailed Resettlement Action Plan as per OP 4.12 (Involuntary Resettlement).