

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 TANATHI
WATER SERVICES 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 and Construction of Tank-Base and Guttering for Rainwater Harvesting in Tanathi Water Services Board Area.

The breakdown is as shown below:

No. of Schools for guttering	No. of tank Bases
130	130

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 Tanathi 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 130 schools within Tanathi Water Services Board area of jurisdiction. This includes i.e. Kitui, Machakos, Makueni and Kajiado counties. The breakdown is as shown in Table 1.

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

COUNTY	SUB COUNTY	NO.	NAME OF INSTITUTION
Kitui	Kitui West	1	Kwamukoo Primary
		2	Uvaani Primary
		3	Katheka Primary
	Kitui Central	4	Mulutu Primary
		5	Museve primary
	Nzambani	6	Ngomango Primary
		7	Kanguu Primary
		8	Mbangulo Primary
		9	Kwaaombe Primary
	Ikutha	10	Ndili Primary
		11	Kituvwi Primary
		12	Kanziko Primary
		13	Kalulini Primary
	Mutitu	14	Kalungu Primary
		15	Malemba Primary
		16	Mukunga Primary
		17	Masikalini Primary
	Kisasi	18	Kitungati Primary
		19	Seekia Primary
		20	Kyuasini Primary

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COUNTY	SUB COUNTY	NO.	NAME OF INSTITUTION
	Lower Yatta	21	Ituki Primary
		22	Mwaani Primary
	Katulani	23	Kilumya Primary
		24	Kikumini Primary
	Mutomo	25	Manooni Primary
		26	Ngunini Primary
	Matinyani	27	Kithunzi Primary
		28	Kithuiani Primary
		29	Kalia Primary
		30	Ndiuni Primary
	Mwingi Central	31	Muthwaani Primary
		32	Kilulu Primary
		33	Nyaanya Primary
		34	Enziu Primary
	Migwani	35	Kyangungi Primary
	Kyuso	36	Twimyua Primary
	Tseikuru	37	Katumbi Primary
		38	Kaivirya Primary
	Mumoni	39	Tondora Primary
		40	Thua Primary
		41	Katama Primary
Machakos	Kangundo	1	Kwa Mbalu Primary
		2	Kamutonga Primary
		3	Kawethei Primary
		4	Ngomani Primary
		5	Mususye Primary
		6	Kanzalu Primary
	Machakos	7	Kwa Muli Kiosk
		8	Kamweleni Dispensary
		9	Kwa Kyule Wendo 2
		10	Mwanyani Kiosk
		11	Kalumoni Kiosk
	Matungulu	12	Katuluni Primary
		13	Nguluni W/P
		14	Kwa Mutua W/P
		15	Kinyui W/P
		16	Kyeleni W/P
		17	King'oti SHG
	Mwala	18	Kathianio Primary
		19	Makutano District H/Q
		20	Kwa Mutwii
		21	Siathani primary
		22	Mutyangoi Primary
		23	Katulani Dispensary

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COUNTY	SUB COUNTY	NO.	NAME OF INSTITUTION
	Masinga	24	Ndovoini
		25	Nguka-Imwe Secondary
	Kathiani	26	Kituvu Primary
		27	Kituli Primary
		28	Kyamwee Primary
	Athi River	29	Embakasi Dispensary
		30	Sikia Dispensary
		31	Ole Shaiki Primary
	Makueni	Kilungu	1
2			Kavata Nzou Secondary
3			Divisional H/Q Ilima
4			Nunguni Central
5			Kambuku Primary
Kathonzweni		6	Kamuithi Primary
		7	Mikisi Primary
		8	Kanthuni Primary
Mukaa		9	Matiani primary
		10	Kamaku Primary
		11	Malili Primary
		12	Kiumoni Primary
Nzau		13	Mingingi Market
		14	Kiliku Secondary
		15	Mutyanbau Market
Makindu		16	Makutano W/P
		17	Musingini Community
		18	Makusu Primary
		19	Koboko
Kibwezi		20	Kathyaka Secondary
		21	Kalulini Secondary
		22	Ithayoni primary
Mbooni East		23	Kavingo Secondary
		24	Kitondo Secondary
		25	Itundu Secondary
Mbooni West		26	Tulimani Primary
		27	Uvaani Secondary

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COUNTY	SUB COUNTY	NO.	NAME OF INSTITUTION
		28	Mukaatini Secondary
	Makueni	29	Mandoi Secondary
		30	Utaati Primary
Kajiado	Mashuru	1	M.C.K Kiboko Primary
		2	Ilkelunyeti Primary
		3	Elerai Primary
		4	Mashuru Secondary
		5	Kalembwani Primary
		6	Olomayina Primary
		7	Sanare Primary
	Isinya	8	Enkelele
		9	Ilpolsat Primary
		10	Emblioy Primary
		11	Kikayaya Primary
		12	Noonkopil Secondary
		13	Enkutoto Primary
		14	Ereteti
	Kajiado Central	15	Emurkea Primary
		16	Olelepo Community B/H
		17	Iseuri Community B/H
		18	Olkejumok Community B/H
		19	Noosiktok Community B/H
	Loitoktok	20	Maisuyati
		21	Loolmueti
		22	Lemomngo (Kimana)
		23	Enchilishili (Lenkisim)
		24	Enkolili (Langata)
	Kajiado North	25	Ole Kasasi
		26	Nkaimurunya Primary
		27	Lemaiyan

COUNTY	SUB COUNTY	NO.	NAME OF INSTITUTION
		28	Ilgaraj Primary
		29	Esonorua H.C

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

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Symbol	Type of impact	Symbol	Type of impact
Sp	Specific/localized	W	Wide spread
R	Reversible	Ir	Irreversible
Sh	Short term	L	Long term
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

Phase	Anticipated Impact	Type / Level of Impact
	Interference with schools daily activities	-, sp, R, Sh, T, Y
	Risks of Accidents and Injuries to Workers and Students	-, sp, Ir, Sh, P, Y
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, hospitals and other public facilities which are constructed within public land and therefore there is no need of carrying out a detailed Resettlement Action Plan as per OP 4.12 (Involuntary Resettlement).