

**ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT REPORT  
FOR REHABILITATION AND EXPANSION OF WATER SUPPLY  
INFRASTRUCTURE IN MAGU TOWN, MAGU DISTRICT, MWANZA  
REGION – TANZANIA  
(LVWATSAN – Mwanza Project)**

**Non – Technical Executive Summary  
(English and Swahili Version)**

**PREPARED FOR:**

Mwanza Urban Water and Sanitation Authority (MWAUWASA) /  
European Investment Bank (EIB)  
P.O. Box 317  
**Makongoro Road, Mwanza**

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**SUBMITTED TO:**

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19<sup>th</sup>, September, 2016

## EXECUTIVE SUMMARY

**A: Title and Location of the Project:** Rehabilitation and Expansion of Water Supply Infrastructure in Magu Town, Magu District, Mwanza Region

**B: Name and Contact of the Proponent:**

Mwanza Urban Water and Sanitation Authority (MWAUWASA) /  
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**C: Name and Contacts of consultants undertaking this ESIA study:**

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**C: Brief description of the Proposed Project:**

The Lake Victoria Water and Sanitation (LVWATSAN) – Mwanza Project, funded by the Ministry of Water and Irrigation (MoWI) and the European Investment Bank (EIB), and implemented between 2014 and 2019, aims at protecting the Lake Victoria environment and wellbeing of the population in the Lake Basin. The Project has several components, one of these being the rehabilitation and expansion of existing water supply infrastructure Magu Town.

An Environmental and Social Impact Assessment (ESIA) study for the works in Magu town was conducted in January-August 2016; the results have been presented in an ESIA report that was completed on 19<sup>th</sup>, August 2016, and then submitted to NEMC for review and approval.

With exception of some components in the existing water distribution network in the town, many parts of the system are in poor condition and need to be replaced. Current water supply

does not meet the demand and a substantial part of the population is not served and relies on alternative water sources.

The proposed rehabilitation and extension of the water infrastructure works in Magu town consist of nine (9) components, i.e. (i) building a raw water intake; (ii) power supplies to the water treatment plant and high lift pumping station; (iii) building or upgrading the water treatment plant; (iv) building a high-lift pumping station; (v) replacing 10.8 km of main water supply transmission pipes; (vi) building two above ground water storage reservoirs; (vii) replacing existing and expanding some 63 km of water supply distribution networks; (viii) replacing more than 5,000 existing house connections and customer water meters, and constructing 33 communal water collection points; and optionally (ix) delivering water to Bugabu village and the existing Nyashimba Hill reservoir can be re-connected to the water distribution network. Total costs of these interventions are estimated at EUR 5.3 million (including the budget for construction of the faecal sludge treatment plant for Magu which is subject of a separate ESIA study and report). Construction works are expected to start in November 2016, to last for 24 months, followed by a defect period of 12 months.

Construction of the works is expected to be relatively simple and straightforward: lands on which the above-ground structures will be built (e.g. intake, water treatment plant, pumps, and reservoirs) are already owned by the local government and do not involve replacement or compensation of people. Roads along which most of the pipes will be laid are unpaved and wide and have low traffic intensity, so major disruption is not expected. Transmission main replacement will be along the existing line but if construction works take place outside the cropping season adverse impact will be avoided. Expected negative impacts of operation of the works are minimal and can also easily be mitigated.

It is therefore concluded that the negative impacts associated with the proposed interventions are generally site-specific, short-term, reversible in nature, low significance, and can be easily mitigated and that major adverse impacts of the planned interventions are not expected. The usual package of mitigation measures associated with this sort of development are recommended to prevent soil erosion due to excavation and back-filling works, pollution of soil and water sources, dust and noise, spreading of disease and assuring safety for workers and the public in general.

A systematic assessment of expected impacts of the interventions learns that the planned development is expected to lead to a number of positive impacts notably improved water supply for Magu population, some employment and business opportunities.

**TATHMINI YA ATHARI YA MAZINGIRA NA KIJAMII YA UJENZI  
NA UPANUZI WA MIUNDOMBINU YA MAJI SAFIKATIKA MJI WA  
MAGU, WILAYA YA MAGU, MKOANI MWANZA**

**(Muhtasari Rasmi usio wa Kiufundi)**

**MWENYE MRADI:**

Mamlaka ya Maji Safi na Usafi wa Mazingira Mwanza (MWAUWASA) /  
Benki ya Maendeleo ya Ulaya (EIB)  
S. L.P 317  
**Barabara ya Makongoro, Mwanza**

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19, Septemba, 2016

## **MAELEZO YA MRADI KWA UFUPI.**

Mradi wa Maji Safi na Maji Taka katika Mkoa wa Mwanza unafadhiliwa na Wizara ya Maji na Umwagiliaji kwa kushirikiana na Benki ya Maendeleo ya Ulaya, ambao utekelezaji wa mradi huu ni katika kipindi cha mwaka wa 2014 na 2019, lengo kuu likiwa na kulinda Mazingira ya Ziwa Victoria na uhai wa watu wanaoishi katika eneo la Bonde la Ziwa Victoria.

Mradi huu unahusisha ujenzi wa miundombinu mbalimbali ya maji safi pamoja na maji taka, miongoni mwa miradi itakayotelezwa katika mradi huu ni pamoja na ujenzi na upanuzi wa miundombinu ya Maji Safi katika Mji wa Magu

Kulingana na Sheria ya Mazingira ya mwaka 2004 na kanuni zake za 2005, miradi hii inahitaji kufanyiwa tathmini ya Athari kwa Mazingira na Kijamii, ambapo kwa mradi wa Maji safi katika Mji wa Magu, tathmini ilifanyika katika kipindi cha kuanzia Januari – August 2016, na majibu ya tathmini hii yalikamilika 19 Agosti, 2016 na kuwasilishwa katika Baraza la Taifa la Uhifadhi na Usimamizi wa Mazingira, Ofisi ya Kanda ya Ziwa kwa ajili ya uhakiki na kupitishwa

Kwa baadhi ya miundombinu ya usambazaji ya maji safi katika mji wa Magu, sehemu kubwa ya miundombinu hiyo ipo katika hali mbaya kiubora hivyo inahitaji kubadilishwa au kujengwa upya. Kwa sasa usambazaji wa maji katika mji huu haukidhi mahitaji ya wananchi jambo ambalo linawafanya wananchi wengi kutafuta njia mbadala ya kupata maji kwa ajili ya matumizi yao ya kila siku ikiwemo kutoka katika vyanzo mbadala vya maji kama visima, ziwani pamoja na malambo.

Katika mradi huu wa ujenzi na upanuzi wa miundombinu ya maji Magu mjini utahusisha maeneo makuu tisa (9) ambayo ni:- (i) Ujenzi wa chanzo cha maji, (ii) usambazaji wa umeme katika maeneo ya kutibia maji na maeneo ya mitambo ya kuukuma maji, (iii) ujenzi au uboreshaji wa mitambo ya kutibu maji, (iv) ujenzi wa mtambo wa kusukuma maji, (v) kubadilisha bomba lenye urefu wa kilometa 10.8, (vi) ujenzi matenki mawili ya kuhifadhia maji, (vii) ubadilishaji na uboreshaji wa bomba la kusambaza maji lenye urefu wa kilometa 63, (viii) ubadilishaji na uunganishaji wa mita kwa wateja Zaidi ya 5,000, pamoja na ujenzi wa visima vya jumuiya 33, (ix) kupeleka bomba la maji Katika kijiji cha Bugabuna na Tanki la Nyashimba litaimarishwa na kuwa katika mfumo wa usambazaji maji.

Gharama ya mradi huu inakadiriwa kufikia EUR 5.3 milioni (ikijumuisha gharama za ujenzi wa mradi wa mabwawa ya kuhifadha na kutibia maji taka, ambao ulihitaji kuwa katika ripoti ya kimazingira inayojitegemea).

Ujenzi huu utakua katika mfumo wa kawaida wa ujenzi wa miundombinu ya maji safi, Maeneo ambayo miundombinu ya maji itakapowekwa hususan kwa miundombinu ya juu ya ardhi (chanzo cha maji, mtambo wa kutibia maji, mtambo wa kusukuma maji, na matenki ya kuhifadha maji) maeneo haya tayari yanamilikiwa na serikali kupitia Halmashauri ya Wilaya ya Magu hivyo haitahitajika uhamishaji wa watu, au kulipa fidia.

Maeneo ya hifadhi za barabara ndiyo yatakayotumiwa kwa ajili ya kulaza mabomba ya kusambaza maji, barabara hizo nyingi ni barabara ambazo sio za lami na ambazo hazina msongamano mkubwa wa magari hivyo athari nyingi za kimazingira hazitarajiwi.

Bomba kuu la maji la mradi huu tarajiwa litakua sambamba na bomba kuu la maji la sasa, ila kama kama ujenzi utakua unafanyika kipindi cha kilimo athari zitokanazo na mradi zitazuiwa kwa umakini. Athari hasi katika kipindi cha baada ya ujenzi zinatarajiwa kuwa za kiwango cha chini na kwa kiasi kikubwa athari hizo zinaweza kuepukika kwa kutumia njia mbadala za ufumbuzi wa athari.

Kwa kuhitimisha, madhara yatakayosababishwa na mradi huu, itayakumba maeneo ya miradi pekee, na madhara yake yatakua ya muda mfupi, yanayoweza kutatuliwa kwa muda mfupi, na yanaweza kuepukika, pamoja na kwamba madhara hayo yanaweza yasijitokeze kama umakini kipindi cha mradi utapewa kipaumbele.

Katika mradi huu mbinu mbadala za kutatua changamoto ambazo zinaweza kujitokeza au kusababishwa na mradi huu ni pamoja na kuhakikisha suala la kuzuia mmomonyoko wa udongo katika eneo la mradi kipindi cha kuchimba na kufukia, kuhakikisha hakuna uchafuzi wa udongo na vyanzo vya maji, kuzuia kusambaa kwa magonjwa pamoja na kuhakikisha afya na usalama wa wafanyakazi na jamii kwa ujumla.

Majibu ya utafiti huu yanaonyesha kuwa, mradi huu tarajiwa utakua na faida kubwa kwa jamii ikiwa ni pamoja na kusaidia katika upatikanaji wa maji safi na salama kwa jamii ya Magu, ongezeko la ajira pamoja na kukua kwa fursa za kibiashara.