



RESETTLEMENT ACTION PLAN FOR THE PROPOSED WASTEWATER TREATMENT PLANT AT NGWERERE FINAL REPORT

Lusaka Sanitation Project

**Investment Component A: Construction of new WWTP at Ngwerere
Zambia**

European Investment Bank (EIB)
German Government via KfW Development Bank
Government of the Republic of Zambia

European Union External Actions / ACP-EC Partnership Agreement
Contract No.: LWSC/LSP/EIB/CS-001/2017)

REVISED – August 2023

Lead Company:

GITEC-IGIP GmbH (Germany) / IGIP mbH (Germany)



In association with:

Hydroment Consulting Engineers



Bari Zambia Limited



QUALITY ASSURANCE

Project's Title	Lusaka Sanitation Program – Construction of New Ngwerere Wastewater Treatment Plants
Services	Functional Design, Tendering and Construction Supervision
Document title	Resettlement Action Plan
Project No.	00091
Contract No.	LWSC/LSP/EIB/CS-003/2017
Technical Domain	Wastewater Treatment Construction / FIDIC Yellow Book

Ref.	Version	Date	Writer	Quality checker	Project Director
1	Draft	19.11.2021	Patrick Phiri	Mark Whippey	Bernd Bauerfeld
2	Final	15.04.2022	Patrick Phiri	Mark Whippey	Bernd Bauerfeld
3	Revised	23.09.2022	Patrick Phiri	Mark Whippey	Bernd Bauerfeld
3	Revised	15.08.2023	Patrick Phiri	Mark Whippey	Marcel Stürmer

EXECUTIVE SUMMARY

Preamble

This report formulates the Resettlement Action Plan (RAP) for the construction of the Lusaka Water Supply and Sanitation Company (LWSC) Wastewater Treatment Plant (WWTP) in Lusaka's Ngwerere East Township. It outlines the framework and results of the resettlement planning exercise undertaken by LWSC (Project Implementers) and the consultancy consortium consisting of GITEC-Igip of Germany, Hydroment of Greece and Bari Zambia Limited. This is also in consistency with the widely applied World Bank Group policy on Involuntary Resettlement, *ESS5: Land acquisition, restrictions on land use and involuntary resettlement*, supported by the project funders The European Investment Bank (EIB), together with the Kredit für Wiederaufbau (KfW) development bank and in compliance with the Laws of the Republic of Zambia.

The proposed site for the construction of the new wastewater treatment plant is within the Lusaka Water Supply and Sanitation Company Limited's land boundaries. This land has for many years been overrun by squatters. These local land invaders have turned some unused portions of the Lusaka Water Supply and Sanitation Company Limited's land into land for farming and gardening. It must be stressed that no temporary housing structures or other accommodation is present. Now that LWSC wishes to construct the new WWTP, the said farmers and gardeners need to surrender their illegal use of the land to LWSC.

To ensure that the project-affected persons are not left worse off because of the project, a resettlement action plan needed to be done. As an outcome of the screening process, appropriate guidelines for the preparation of a Resettlement Action Plan (RAP) needed to be drafted, approved by KfW, EIB, LWSC and ZEMA, disclosed and implemented prior to the project activity causing impact on individuals, households, economic activities and livelihoods.

Complementary to the RAP, and even though the project does not cause physical displacement to any community, a Livelihood Restoration Plan (LRP) is included as an extension to guarantee that the project-affected persons who have been gardening in the LWSC lands would not experience a decline in their livelihood standards. If possible, the plan aims to improve their livelihoods through the project's support, which may enable them to acquire skills to overcome the economic displacement caused by the implementation of the project.

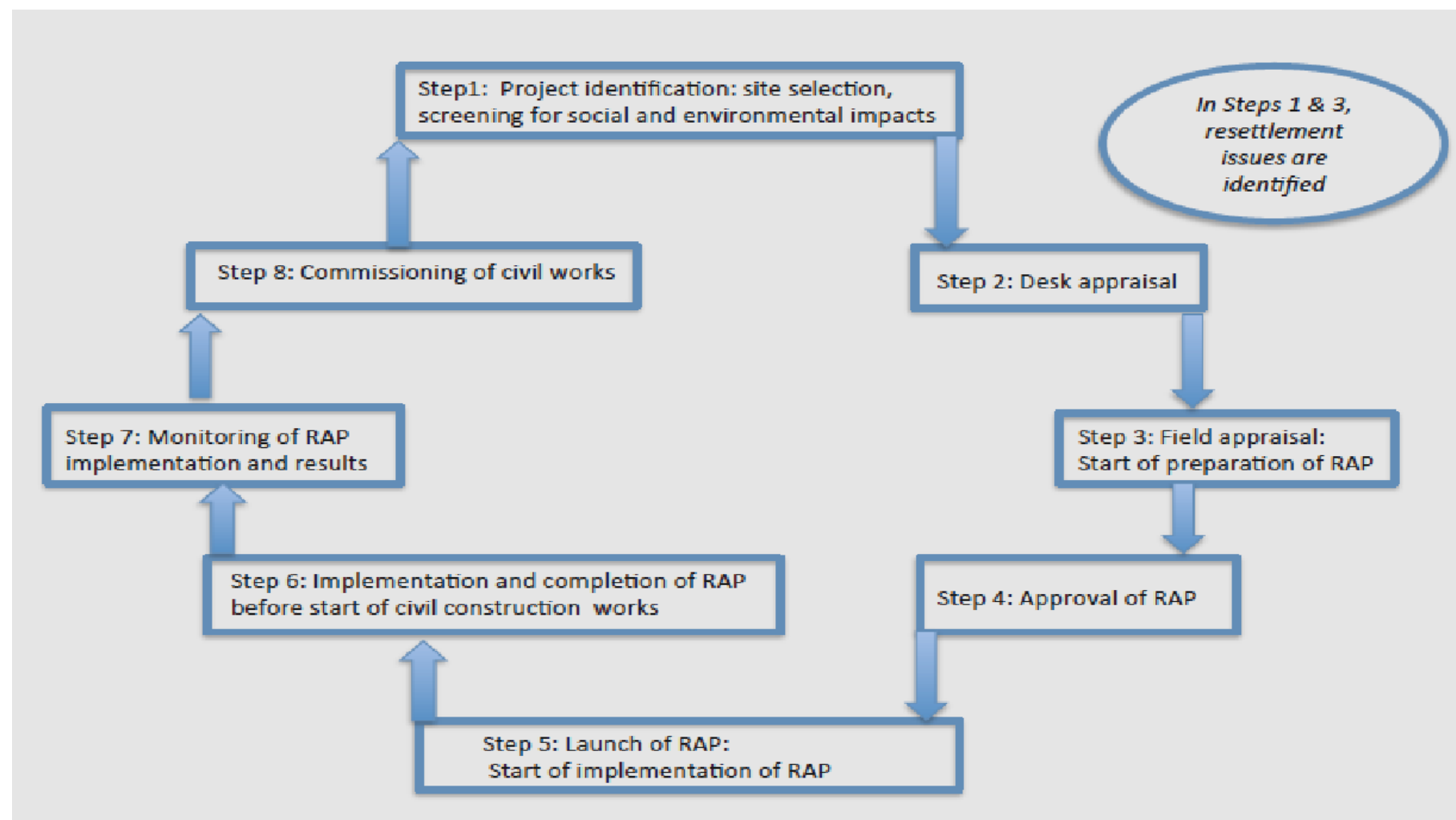


Figure 1: Generic RAP project cycle according to Zambia Social Action Fund

Area and number of people affected

The proposed project is located in Ngwerere township of Lusaka District. This WWTP is at coordinates - 15°18'46.21", 28°20'2.84". See Fig 1. As detailed further in the present document, the project does not cause physical displacement but only economic displacement.

Table 1: Summary of affected persons and assets

HH	Males	Females	land in ha	Houses	Other strucs
57	35	22	6.53	0	0

Vulnerable or High-Risk Groups

There are a few high-risk PAP that include the elderly and female-headed households. No household was found to be headed by children.

Table 2: Vulnerable PAP at the site

Female-headed (HH headed by widows)	HH headed by Elderly (65 yrs. plus)	HH headed by Children
1	3	0

Entitlement and Eligibility criteria

Households farming in the project area enumerated by census before the cut-off date, September 1, 2021, are eligible to be considered as directly affected by the project and might be given priority for employment opportunities during the construction of the treatment plants. However, not all may be able to work and so considerations will be made on how best to assist those who may be too old to work. The project affected persons have no property on the land, which is Lusaka Water Supply and Sanitation Company Limited's land. The Vulnerable person will be assisted with some amount of capital out of consideration by Lusaka Water Supply and Sanitation Company Limited. Note that the amounts to be paid to the vulnerable PAP are values estimated by the Social Officer deemed to be sufficient assistance to the PAP and their families. The rest of the PAP have been given an extension to grow their vegetables up to August, 2022 in order for them to raise capital for starting other forms of income generating activities. To help them further, LWSC will provide them with training in alternative income-generation ventures and financial management tips as a way of assisting them with sustainable income restoration (See Annex 9).

Cut-off Date

The cut-off date is the respective date of the community self-validation meeting or consultation meeting with affected households, which is determined by the conclusion of a census on the project-affected persons . It is the date after which no structure or field established in the Project area shall be eligible for any resettlement considerations. This has been explained during the fieldwork period to all interested parties. The cut-off date was set at a meeting with the affected representatives as September 1, 2021. It was explained that while the PAP would continue growing their vegetables in the said gardens until August, 2022, no new gardens were expected to be in the project area after the cut-off date of September 1, 2021.

Institutional arrangements

The table below shows a list of institutions and their various functions. Details of the responsibilities they would play in the event that resettlement of the PAP was required are in Table 18.

Table 3: Table shows institutions that could be called upon to assist as needed

	Institution	Role
1	Department of Resettlement	Works with officers that handle resettlement-related issues such as evaluators, land surveyors, sociologists and agricultural experts
2	Road Development Agency	Supervise and monitor the implementation of Environmental and Social Management Plans for all road construction projects in the country
3	Zambia Environmental Management Agency	Manages the EIA and RAP processes, giving approvals and making decisions and ensuring that management of the project occurs in accordance with decision made
4	Government Valuation Department	The role of this department is to do valuation for the project affected persons
5	Department of Infrastructure and Support Services	Guides infrastructure development and coordinates the works of other institutions such as the Local Authority, NGOs, Donors and Agencies.
6	Developer/Implementer These are LWSC	Implement the development project
7	Consultants	Provide professional advice to the developer
8	Contractor	Construct the development infrastructure
9	Social Welfare	Ensures welfare of all citizens, especially the poor and the marginalised
10	Local Authority	Helps in resolving grievances Guides the LDCs on matters of development
11	Local Development Committees (These are committees established in the constituencies as a starting point of development planning by the Local authority and the area councillor ensures that such committees are functioning well in his/her area).	Act as grass-root authority of the project areas

Transitional arrangement

Since there will be no physical relocation to resettlement sites, issues such as assistance for transport, involvement of resettlement-related institutions, and provision of resettlement sites and houses do not apply in this RAP.

Help in this kind of transition will take the form as explained under Annex 9.

Proposed compensation or rehabilitation assistance

Most of the affected people on this land are small-scale farmers and gardeners with no formal (long-term) employment, making up more than 90 per cent of the affected population.

To sustain livelihood restoration process, LWSC will train the farmers in financial literacy / entrepreneurship development for their income. This training will be arranged through the existing institutions or through a local farmer-tailored education program designed specifically to address issues of concern for the affected farmers and gardeners.

To help the farmers prepare to exit from the land earmarked for the project, Lusaka Water Supply and Sanitation Company Limited had since given the PAP more time to use the land up to August 30, 2022 so as to raise capital for alternative sources of income after they cease their farming activities in that month. This

opportunity was received well by the community and a consent form was signed to this effect (see Appendix 5).

Policy, Legal and Institutional Framework

Institutional Framework:

- The President
- Cabinet
- Parliament
- Office of the Vice President – Disaster Management and Mitigation Unit
- Government Valuation Department
- Office of the District Commissioner
- The Local Authority
- The Zambia Environmental Management Agency
- Public Social Welfare Assistance Scheme
- Non-Governmental Organisations

Policy Framework:

- Vision 2030
- The National Policy on Environment, 2008
- Involuntary Resettlement Guidelines from the OVP

Legal Framework

- The Constitution of Zambia (Amendment), 2016
- The Lands Acquisition Act, 1994
- The Urban and Regional Planning Act, 2015
- The Lands Act (Cap 184)
- The Local Government Act, Cap 22 of 1991
- The Land Survey Act – Cap 188
- The Environmental Management Act (EMA), No. 12 2011
- The Environmental Impact Assessment (EIA) Regulations, SI 28 of 1997
- Arbitration Act, No. 19 of 2000

International Standards

- World Bank Resettlement Guidelines
- International Finance Corporation Guidelines
- EIB Resettlement policy framework document
- LWSC Resettlement Framework

Implementation Schedule

The new WWTP at Ngwerere will form part of the Lusaka Sanitation Program (LSP), which includes expansion and upgrading of the Lusaka sewerage network and pumping stations. The implementation of the new WWTPs is currently in the preparatory stage; it is intended to launch the tender in fourth quarter 2022, and sign the construction contract in second quarter 2023. Actual construction works of the new WWTP for the

Ngwerere site is likely to commence in late 2023, following an initial 6-months period of detailed design. RAP Implementation will commence soon after ZEMA has given their No-objection in their Decision Letter, likely in the first quarter of 2023 and will be completed before commencement of construction works. See the implementation table in Chapter 13 for details of RAP activities.

Costs and Budget

The financing of the following project components will be provided by Lusaka Water Supply and Sanitation Company. The budget for RAP preparation and implementation is as shown in the Table 16.

1) Budget Justification

This RAP budget covers the assistance to the PAP who were found to be vulnerable by the assessment. There were 4 vulnerable PAP and their families. It also covers the costs during the construction period because that is when failure to honour the commitments to the PAP might happen. The contractor might want to do short-cuts to finish the work irrespective of who is negatively impacted. Daily monitoring is a must and so an officer should be employed from the consultant's side. This officer will work hand-in-hand with the LWSC safeguards unit to ensure no PAP is left worse off by the project than they were before the project. The costs involve remuneration for the Implementation Officers (see the list of officers in the Livelihood Restoration Plan attached to this RAP in Annex 9), once-off payments for other supporting Service Providers such as auditors, fuels, and allowances if necessary for food and overtime work by LWSC safeguards staff; It also includes 10 per cent of contingencies as shown in Table 16.

2) Valuation Process

One project-affected person (PAP) may have their land partially occupied during the installation of an outfall pipe, causing temporary economic displacement. The Environmental and Social Management Plan proposes adequate compensation defined by the Government Valuation Department (GVD), and the land will be reinstated to its original condition after the intervention. Other PAP have no physical assets that require valuation. The Social Officer will estimate what is needed to assist the PAP, based on their previous earnings from gardening. LWSC informed the PAP that the government would not release funds to compensate those who were illegally using LWSC land. Instead, the PAP were allowed an extension to grow their crops until August 2022 to raise their own capital for other businesses. The Social Officer proposed providing training on other forms of businesses and financial literacy.

3) Training Cost

As indicated earlier, the Social Officer proposed that the PAP be trained in other forms of income-generating activities so that they do not only rely on farming or gardening. It was proposed that hiring individual experts in this field would be more economical. As shown in the Table below, the assessment identified 3 vulnerable PAP in the project location. The Social Officer suggested a K20,000 assistance to be given to each vulnerable project affected household. This amount would also assist at least three (3) dependents of the vulnerable PAP (See Table 17).

4) RAP Implementation Agency/Unity

LWSC has a unit to oversee this implementation process. If their own unit handles this role, then this cost will be avoided as they will be doing their routine work. However, the cost reflects here because they may be overwhelmed by other projects and may need to hire an independent Agency to handle this role.

5) Monitoring Agency

For this project, LWSC has already engaged GITEC-Igip of Germany and their Consortium partners to handle this role. Their duty to oversee the project as monitoring consultants extends to Safeguards issues and will work with their corroborative partners Bari Zambia. The cost covers transport, fuels, remuneration for the officer who will be regularly at the site to do the actual monitoring on a day-to-day basis during the construction period and do community liaison work.

6) RAP Audit

A Resettlement Action Plan implementation audit will need to be done to ensure that all goals are met and the rights of PAP, especially the vulnerable, are respected.

Budget Summary

This budget does not consider the compensation for the temporary occupation by the works associated to the installation of the outfall pipeline in a private land as the valuation is still awaited from the Government Valuation Department (GDP) and will be placed in the final version of this report. Please find the summary of the budget in the table below.

Table 4: Summary of cost for RAP Implementation for Ngwerere WWTPs

Item	Cost (ZMK)
A. Total RAP Compensations costs	60,000
B. Total RAP Administration costs	343,200
C. Total Cost for Livelihood Restoration Plan	1,416,200
F. Total RAP and LRP Implementation (A+B+C)	1,819,200
D. Contingencies (10%)	181,920
TOTAL RAP IMPLEMENTATION (A+B+C+D)	2,001,120

Proposed Timing for the Plan

The RAP is planned to start in the year 2023. This means compensation to vulnerable persons and to the landowner where the discharge line will be completed before the commencement of the construction works, but after signing of the construction contract. The mid-term activities formulated within the LRP are planned to last at least three years (See Table 20 in Annex 9).

Consideration of Alternatives

1) Site Identification

There was no need for identifying sites for resettlement since there will be no physical relocation of any PAP. The PAP live within the nearby settlements and their residencies are not affected by the new WWTP project.

2) Selection of Resettlement Sites

As state in 1.14.1 above, there will be no physical relocation of any PAP, so the issue of selection of resettlement sites does not exist. If this was not the case, the Resettlement Department under the Office of the Vice-President would have been involved in assisting the PAP in their resettlement and livelihood restoration.

3) Product/Service

There is no alternative to effective water and sewerage system. No product can replace water.

4) Resettlement Land

There was no need to look for resettlement land in this project.

RAP issues Minimized

The RAP assessment team ensured that the RAP is cost-effective by:

- (1) Avoiding unnecessary acquisition of land for implementation of RAP which would result in adverse social impacts. For example, the access road from Ngwerere road to the site will need to be expanded but the recommendation is that this can be done without affecting the households along this road.
- (2) Engaging affected people on the RAP process to ensure consent and avoid back and forth activities that would be costly.
- (3) Establishing cut-off date (September 1, 2021) after the inventory of the affected persons and inform the PAP about the consequence of encroaching in LWSC land after this cut-off date; no compensation claims would be acceptable. This also ensures that the number of PAP is not increased by those who might later begin to claim that they too had gardens in the project area.
- (4) Making available a grievance redress mechanism for registering complaints which is responsive to the needs of the affected people so that issues are dealt with before they escalate into more serious concerns.

Approach and Methodology

In determining important environmental features and socio-economic aspects such as education, agriculture production, marketing and employment opportunities that exist in the project area, the team used literature review and consultative participatory approaches to gather information. In this sense, given that most of the collected data was qualitative in nature, and considering the fact that the PAP did not have fixed assets, the quantitative method was only used for figures non-related to compensation amounts.

1) Quantitative Approach (Questionnaire used)

In order to capture all households affected by the project, a census was conducted in the format of a questionnaire based for socio-economic household survey beginning in August, 2021. The census questionnaires in general comprised six parts: affected owner identification, agricultural land, household characteristics, tenancy and ownership, details of immovable assets, agricultural land produce, commercial affected trees, and livestock. Only those that applied to the prevailing situations at these sites have been placed in this report.

2) Qualitative approach

The social team gathered information about environmental features and socio-economic aspects related to a project location through literature review, consultative participatory approaches, and transect walks. They also interviewed individual PAP to understand their monthly income from utilizing gardens on the project location. Based on their findings, the team suggested providing income restoration assistance, including training in finance management and entrepreneurship, psychological counseling, and health guidance. They established a list of households and locations used for agricultural activities and obtained information on how they used the land and their monthly income.

Summary of Environmental and Social Impacts identified

The project will have both positive and negative impacts on the environment and society. The influx of people in the project areas may lead to a higher demand for services such as water provision, education, and health.

Wastewater pollution causes many human health problems, and the LWSC will upgrade the WWTP facility and ensure that maintenance and inspections of the facility are done regularly. The project will have a significant effect on public safety, and the LWSC will post signs warning surrounding communities about the dangers of activities that encroach on the project area. The implementation of the project will cause all farming activities to cease in the project area, and the staging of resettlement will allow the population to harvest their crops from the fields.

Various project activities, including land clearing and construction of the spillway, are anticipated to generate air pollutants, and the LWSC will implement dust suppression measures and impose speed limits on the

movement of vehicles. Land degradation is likely to occur as a result of erosion and land dereliction from project activities and materials such as spilled oil and fuels and other chemicals, and the LWSC will prevent and minimize waste generation and properly profile and landscape disturbed sites.

Ecological disturbance can occur due to land clearing for road expansion, haulage, borrow pits site, and service routes construction and other disturbing activities, and the LWSC will limit land clearing to required areas only.

On the other hand, the project would have positive impacts on the local, regional, and national level due to the fact that it would result in improved water and sanitation services and the socio-economy of the project area. The positive impacts include the eradication of potential diseases, general improvement in local livelihoods during construction and operation phases due to employment opportunities created, an increase in revenue to local authorities and institutions from levies, increased trade opportunities in the community due to increased population, an increased sense of pride and enhanced general feeling of modernity among the locals, and increased business opportunities for local suppliers. The LWSC will adopt good engineering practices and appropriate mitigation measures during construction and use of the wastewater treatment plants to avoid or minimize negative impacts while enhancing positive impacts or benefits derived from the project.

Project Location Map

The Ngwerere Wastewater Treatment is in Lusaka City. The Maps below show the location for Lusaka, and also a more detailed location within Lusaka area. More specific location for the sites is shown in the Google Earth map shown in Figure 3



Figure 2: Map showing the Lusaka District, the location of the project.

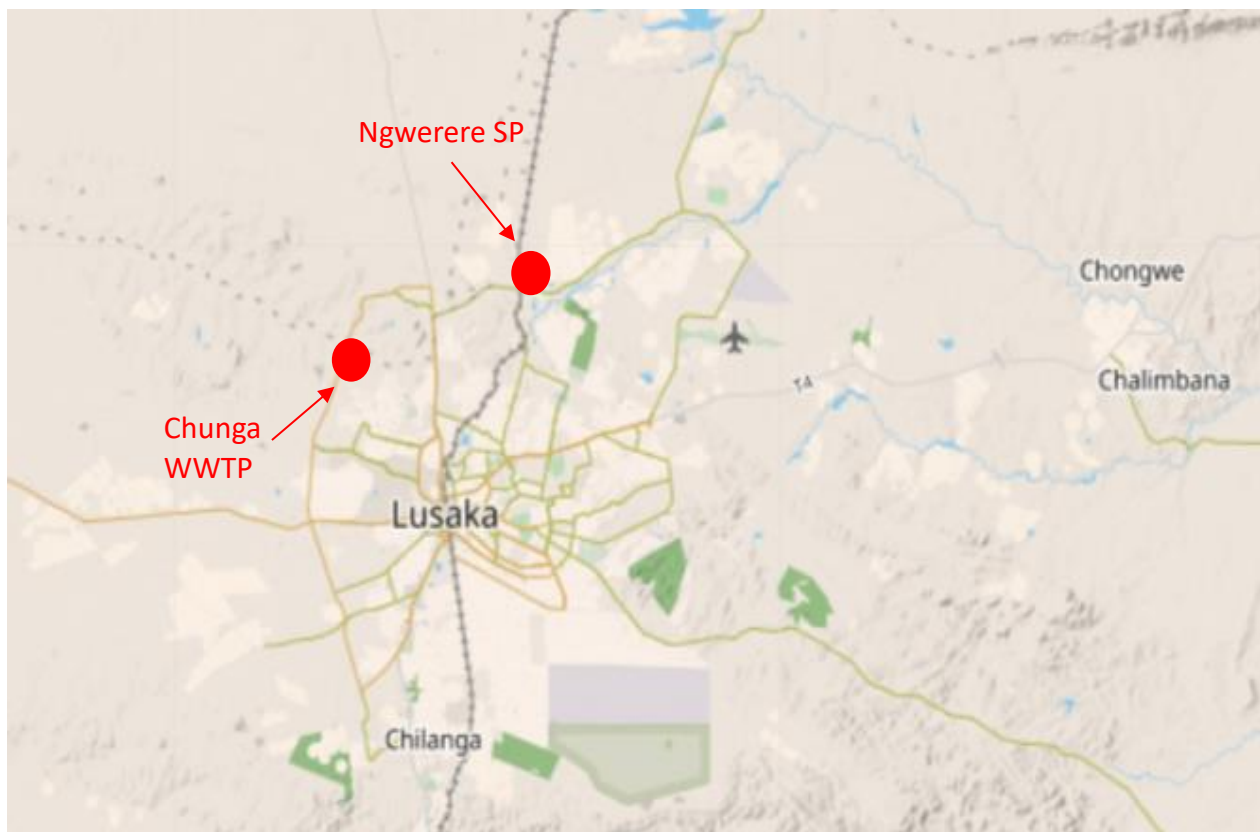


Figure 3: Map showing the Location of the Proposed WWTPs.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	iii
1. Introduction.....	24
1.1 RAP Justification	24
1.2 Description of the Project Location	24
1.2.1 Location coordinates.....	24
1.2.2 Location Map for Ngwerere WWTP	24
1.3 Main Activities of the RAP	25
1.4 Background Information on the Project Necessitating Income Restoration	25
1.5 Analysis of Alternatives justifying need for economic restoration	25
1.5.1 ‘Leave as it is’ option.....	26
1.5.2 ‘Look for another site where there are no people’ option	26
1.5.3 ‘PAP ceasing gardening and LWSC to offer income restoration’ option	26
1.6 Objectives of the Resettlement Project	26
1.7 Scope of RAP	26
1.8 Overall Estimate of Land Acquisition and Resettlement	27
2. Census and socio-economic surveys	28
2.1 Preamble.....	28
2.2 Approach and Methodology.....	28
2.2.1 Quantitative Approach (Questionnaire used):.....	28
2.2.2 Qualitative Approach:	28
2.3 Areas Directly or Indirectly Affected by the Project.....	29
2.4 PAP Directly or Indirectly Affected by the Project	29
2.5 Location of the affected gardens on Ngwerere WWTP site	30
2.6 Number of People directly affected by category of impacts.....	38
2.7 Vulnerable or High-Risk Groups	38
2.8 Relevant Baseline Social and Cultural information	38
2.8.1 Ngwerere.....	38
2.8.2 District Administration	44
2.9 Political System, Governance and Traditional Leadership	44
2.9.1 Demography.....	44
2.10 District Administrative Structure	45

2.10.1	Central Government System	45
2.10.2	Local Government System	45
2.10.3	Political System and Governance	45
2.10.4	Population of Lusaka	46
2.11	Population of the Project Area	46
2.11.1	Relevant Baseline Social and Cultural information specific to PAP	50
2.11.2	Traditional and Cultural Heritage.....	51
2.11.3	Land tenure and/or ownership rights of the affected population.....	51
2.11.4	Land holdings of affected population	51
2.11.5	Agricultural production, livestock, and other on-farm income.	51
2.11.6	Communal productive assets that may be affected	51
2.11.7	Other economic activities or local employment that might be affected.....	51
2.11.8	Land Use and Economic Activities.....	51
2.12	Household Income Levels.....	52
2.12.1	HH Income Levels for PAP in Ngwerere Compound	52
2.13	Public Infrastructure and social services that will be affected.....	56
2.14	Formats and tables for census surveys	56
2.15	Outline for socio-economic survey.....	56
2.16	Consultation on Results of Census Surveys.....	56
2.17	Need and Mechanism to Conduct Updates	2
3.	DEFINITIONS AND ELIGIBILITY CRITERIA.....	71
3.1	Project-Affected Household (PAH).....	71
3.2	Cut-off date.....	71
3.3	Displaced persons.....	71
3.4	Project-Affected Person (PAP).....	71
3.5	Livelihood	71
3.6	Host community	71
3.7	Replacement Cost.....	71
3.8	Rehabilitation Assistance.....	72
3.9	Resettlement Assistance	72
3.10	Involuntary resettlement.....	72
3.11	High risk/Vulnerable Groups	72
3.12	Project-Impacted Area.....	72
3.13	The Project.....	72
3.14	Buffer Zone(s)	72
3.15	Re-settlers.....	72

3.16	Tenant.....	72
3.17	Physical Displacement	73
3.18	Economic Displacement	73
3.19	Landowner	73
3.20	Relocatees	73
3.21	Compensation.....	73
3.22	Eligibility/entitlement criteria for compensation.....	73
3.23	Entitlement matrix.....	73
3.24	Qualification of loses and impact	73
3.25	RAP Implementation Unit.....	73
3.26	Project Management Unit (PMU).....	73
3.27	Project Implementation Unit (PIU).....	73
3.28	Income Restoration	74
3.29	Income Rehabilitation	74
3.30	Income Restoration Plan (IRP).....	74
3.31	Livelihood Restoration (LR) (Same as Income restoration)	74
3.32	Resettlement Policy Framework (RPF)	74
3.33	Restoration Plan (RP).....	74
4.	POLICY, ORGANISATIONAL AND INSTITUTIONAL FRAMEWORK	75
4.1	Institutional Framework	75
4.1.1	National Government	75
4.1.2	Provincial Level.....	75
4.1.3	District Government.....	75
4.1.4	The Local Authority	75
4.1.5	Governance at Ward Level.....	76
4.2	Legal Framework	76
4.2.1	Constitution of Zambia.....	76
4.2.2	Lands Acquisition Act of 1994	76
4.2.3	The Agricultural Lands Act of 1994	77
4.2.4	Environmental Protection	77
4.2.5	Environmental Management Act number 12 of 2011	77
4.3	International Best Practice	78
4.3.1	EIB Environmental and Social Standards	78
4.4	Resettlement Unit – Functions and Organizational Structure	80
5.	RESETTLEMENT SITES	82
6.	CONSIDERATION OF ALTERNATIVES.....	83

6.1	Site Identification	83
6.2	Selection of Resettlement Sites.....	83
6.3	Product/Service	83
6.4	Resettlement Land.....	83
7.	COMPENSATION AND REHABILITATION ASSISTANCE	84
7.1	Eligibility for Compensation and Assistance.....	84
7.1.1	PAP with formal legal rights	85
7.1.2	Persons with no formal legal rights	85
7.1.3	Vulnerable groups	85
7.1.4	Informal users	85
	Conclusion	85
7.1.5	Asset Restoration, Valuation and Compensation Approach.....	86
7.1.6	Land Value and Compensation Amounts.....	86
7.2	Compensation Entitlement Matrix.....	86
7.3	Restoration for each category of impacts	88
7.4	Negotiation Procedures.....	88
7.5	PAP Committee.....	88
7.5.1	Implementation Support.....	88
7.5.2	Compensation Agreements and Livelihood Restoration	89
7.5.3	Follow-up and Monitoring	89
7.6	Grievance Redress and Arbitration Procedures	89
8.	TRANSITIONAL ARRANGEMENTS	90
8.1	Loss of income	90
8.2	Loss of clientele for retail outlets	90
8.3	Legal Costs	90
8.4	Transport	90
8.5	Farmers who lose the current agricultural season.....	90
8.6	Dispute resolution	90
9.	ENVIRONMENTAL IMPACTS OF THE PROJECT AND MITIGATION MEASURES	91
9.1	Introduction.....	91
9.2	Magnitude of Resettlement Action Plan Activities	91
9.3	Methodology used in the Impact Assessment	91
9.4	Identified Expected Impacts, Analysis and Mitigation Measures.....	91
9.4.1	Influx of people in the project areas	91
9.4.2	Impact on natural resources	91
9.4.3	Nutrient pollution	92

9.4.4	Human Health and Socioeconomic impacts	92
9.4.5	Possible emergencies and plant failure	92
9.4.6	Impact of restoration program	92
9.4.7	Loss of Existing Gardening	92
9.4.8	Effect on Public Safety	92
9.4.9	Effect on Cropping Activities	93
9.4.10	Air pollution:	93
9.4.11	Land degradation	93
9.4.12	Ecological Disturbance	93
9.4.13	Plant odours (minimal odour Emissions), mosquitoes and other nuisances	94
9.4.14	Eradicates Potential Diseases.....	94
9.4.15	Affected Public Infrastructure	94
9.4.16	Other Socio-economic Impacts of the main project	94
10.	PUBLIC CONSULTATION.....	95
10.1	Resettlement Concerns	95
10.2	How the Concerns will be addressed:	96
11.	IMPLEMENTATION SCHEDULE.....	97
12.	COSTS AND BUDGETS	72
12.1	Budget for the Construction of WWTP and Sewer Ponds.....	72
12.2	Financing of RAP Preparation and Implementation.....	72
12.3	Costs and Budgets	72
12.3.1	Budget Justification.....	72
12.3.2	Valuation Process.....	72
12.3.3	Compensations.....	73
12.3.4	Training Cost	73
12.3.5	RAP Implementation Agency/Unity	73
12.3.6	Monitoring Agency.....	73
12.3.7	RAP Audit	73
12.4	Budget Details.....	73
12.4.1	Contingencies.....	73
13.	MONITORING AND EVALUATION	76
13.1	Introduction.....	76
13.2	Objective of Monitoring and Evaluation	76
13.3	Internal Monitoring	76
13.3.1	Monitoring Indicators	76
13.3.2	Staff for Internal Monitoring.....	77

13.4	External Monitoring.....	77
13.4.1	Objectives.....	77
13.4.2	Monitoring and Evaluation Indicators	77
13.5	Evaluation	78
13.6	Replacement Cost Survey	78
13.7	Monitoring Methodology	78
13.7.1	Database	79
13.7.2	Reporting.....	79
13.7.3	Monitoring Report Follow-Up	79
13.8	Recommendations on Rap Social Action Plans	82
13.9	Completion Audit of RAP Implementation	85
14.	References	86
15.	Maps and ANNEXES	87

List of Tables:

Table 1: Summary of affected persons and assets.....	v
Table 2: Vulnerable PAP at the site	v
Table 3: Table shows institutions that could be called upon to assist as needed.....	vi
Table 4: Summary of cost for RAP Implementation for Ngwerere WWTPs	ix
Table 5: Summary of affected persons and assets.....	27
Table 6: List of the affected persons at Ngwerere Wastewater Treatment Plant as shown on the map above in Figure 6.	38
Table 7: Number of People directly affected by category of impacts.....	38
Table 8: Inventory of the Vulnerable.....	38
Table 9: Income from the use of LWSC land by PAP	53
Table 10: Inventory of the PAP at Ngwerere WWTP.....	0
Table 11: Triggered standards defined in the EIB's No. 6 Standard: Involuntary Resettlement policy, in this RAP	78
Table 12: Institutions that might be involved either directly or not in the RAP processes.....	80
Table 13: Compensation Matrix as proposed in RPF 03.2015 and confirmed in 08.2016	86
Table 14: Income restoration/rehabilitation assistance	88
Table 15: RAP implementation activities.....	71
Table 16: Details of Costs for RAP Implementation for the Ngwerere WWTPs.....	74
Table 17: Matrix for Environmental and Social Monitoring	80
Table 18: Recommendation on the RAP Social Action Plans.....	83
Table 19 Grievance Significance Levels	116
Table 20 Livelihood Restoration Plan Implementation Table	136
Table 21: Format of an acquittal form to be used in case of any compensation of assets.....	148

List of Figures:

Figure 1: Generic RAP project cycle according to Zambia Social Action Fund	
Figure 2: Map showing the Lusaka District, the location of the project.	xi
Figure 3: Map showing the Location of the Proposed WWTPs.....	xii
Figure 4: Location map for Ngwerere WWTP is located at -15°18'51.46"N and 28°20'2.18"E.....	25
Figure 5: Some of the Photographs of the Ngwerere WWTP taken during a site visit	29
Figure 6: Map showing location of gardens on Ngwerere WWTP land	31
Figure 7: Map showing the nearest health centre in the proposed site area.....	41
Figure 8: HIV prevalence among adults, by province	42
Figure 9: Figure showing some of the churches within Ngwerere and surrounding areas.....	43
Figure 10 Photo of Area showing no buildings to be affected by the project.....	44
Figure 11: Map of Lusaka Province showing its districts (Source: Google Map).....	45
Figure 12: Map showing surrounding compounds of Ngwerere.....	46
Figure 13: Ngwerere's Population statistics for 2010.	50
Figure 14: Some of the vegetable gardens at Ngwerere Wastewater Treatment Plant.....	52
Figure 15: Top: measuring the gardens at the site. Botom: meeting with PAP and other stakeholders	95
Figure 16 Grievance Redress Flow Chart.....	117
Figure 17 Overall Project RAP/LRP Planning Team	135



ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
AS	Activated Sludge
BOD	Biochemical Oxygen Demand
BoQ	Bill of Quantities
CAS	Conventional Activated Sludge
CoC	Conditions of Contract
COD	Chemical Oxygen Demand
CSE	Collection System Extension
CSO	Central Statistical Office
CSU	Collection System Upgrade
CV	Curriculum Vitae
DNP	Defects Notification Period
E&M	Electrical and Mechanical
EIB	European Investment Bank
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and social Management Plan
EUR	Euro (European Currency)
FIDIC	Fédération Internationale des Ingénieurs-Conseils / The International Federation of Consulting Engineers
FaS	Faecal sludge
FS	Feasibility Study
FSTP	Faecal Sludge Treatment Plant
GI	Geotechnical Investigations
GITEC	GITEC-IGIP GmbH, Köln, Germany
GRZ	Government of the Republic of Zambia
GVD	Government Valuation Department
HH	Households

IR	Inception Report
ISO	International Organisation for Standardisation
KfW	Kredit für Wiederaufbau - KfW Development Bank
LCC	Lusaka City Council
LSP	Lusaka Sanitation Program
LRP	Livelihood Restoration Plan
LWSC	Lusaka Water Supply and Sanitation Company
M&E	Monitoring and Evaluation
MEUR	Million Euro
ML	Ministry of Lands
MLGH	Ministry of Local Government and Housing
MoM	Minutes of Meeting
MWDSEP	Ministry of Water Development, Sanitation and Environmental Protection
NCB	National Competitive Bidding
O&M	Operation and Maintenance
P&ID	Piping and instrumentation drawings
PAP	Project Affected Persons
PE	Population Equivalent
PMU	Program Management Unit
RAP	Resettlement Action Plan
SABS	South African Bureau of Standards
SCADA	Supervisory Control and Data Acquisition
SS	Septic sewage
TA	Technical Assistance
TF	Trickling Filter
ToR	Terms of Reference
WARMA	Water Resources Management Authority
WB	World Bank
WSS	Water supply and sanitation
WWQAC	Wastewater Quality Analysis Campaign
WWTP	Wastewater Treatment Plant

ZEMA Zambia Environmental Management Agency

1. INTRODUCTION

This report forms the Resettlement Action Plan (RAP) for the construction of the Lusaka Water Supply and Sanitation Company (LWSC) Wastewater Treatment Plant (WWTP) in Lusaka's Ngwerere East Township. It outlines the results of the resettlement planning exercise undertaken by LWSC (Project Implementers) and consultancy consortium consisting of GITEC-IGIP based on Germany, Hydroment based on Greece and Bari Zambia Limited based on Zambia. The report also contains a record of the commitments, procedures, and actions to be undertaken to ensure the smooth economic displacement of the Project Affected Persons (PAP) from the LWSC's owned land and where the project is meant to be implemented.

Despite the existence of illegal squatters, LWSC has taken it as their duty to ensure that the PAP leave the project's area in a dignified manner and in a way that will not adversely affect them economically. This planned resettlement of the PAP is aligned with the widely applied World Bank Group policies, one of which is defined in the Environmental and Social Standard 12 (ESS), Land Acquisition, Restrictions on Land Use and Involuntary resettlement; which simultaneously is in harmony with the standards of the project funders: the European Investment Bank (EIB) and the Kredit für Wiederaufbau (KfW); and in compliance with the Laws of the Republic of Zambia.

1.1 RAP Justification

As pointed out already, there might be impacts both negative and positive as a result of this project. The positive impacts need to be enhanced while the negative ones should be mitigated or even where possible avoided completely. Lusaka Water Supply and Sanitation Company will find ways to protect the people from the negative effects the project will cause.

The project's land is owned by Lusaka Water Supply and Sanitation Company, but the squatters have used it for gardening for years, and this, to some extent entitles them to receive assistance so that that livelihoods continue during and after the project implementation. No squatter should be left with no help to survive. Therefore, the RAP was done to ensure the following were done:

- Income rehabilitation activities.
- Provide adequate assistance in the form of training, capacity building, etc. to project affected persons (PAP).
- Ensure that no impoverishment of people shall result as a consequence of involuntary land acquisition or acquisition of assets.
- Ensure no impacted person is worse off as a result of the project.
- Assist adversely affected persons in dealing with the psychological, cultural, social and other stresses caused by compulsory ceasing of gardening on LWSC land.
- Make all affected persons aware of processes available for the redress of grievances that are easily accessible and immediately responsive.
- Assist the vulnerable ones among the PAP with income restoration.

1.2 Description of the Project Location

The location of the proposed New Waste Water Treatment Plant is in the Eastern part of Lusaka City, off Ngwerere Road. It is 22.5 kilometers from the Kenneth Kaunda International Airport. In the western part is Ngwerere Stream and south-west is the Railway to the Copperbelt.

1.2.1 Location coordinates

The Ngwerere WWTP is located at -15°18'51.46"N and 28°20'2.18"E.

1.2.2 Location Map for Ngwerere WWTP

The following Google Earth map shows the location for the WWTP in Ngwerere East. Additionally, maps showing the locations of the affected gardens are presented in Chapter 4 of this RAP.

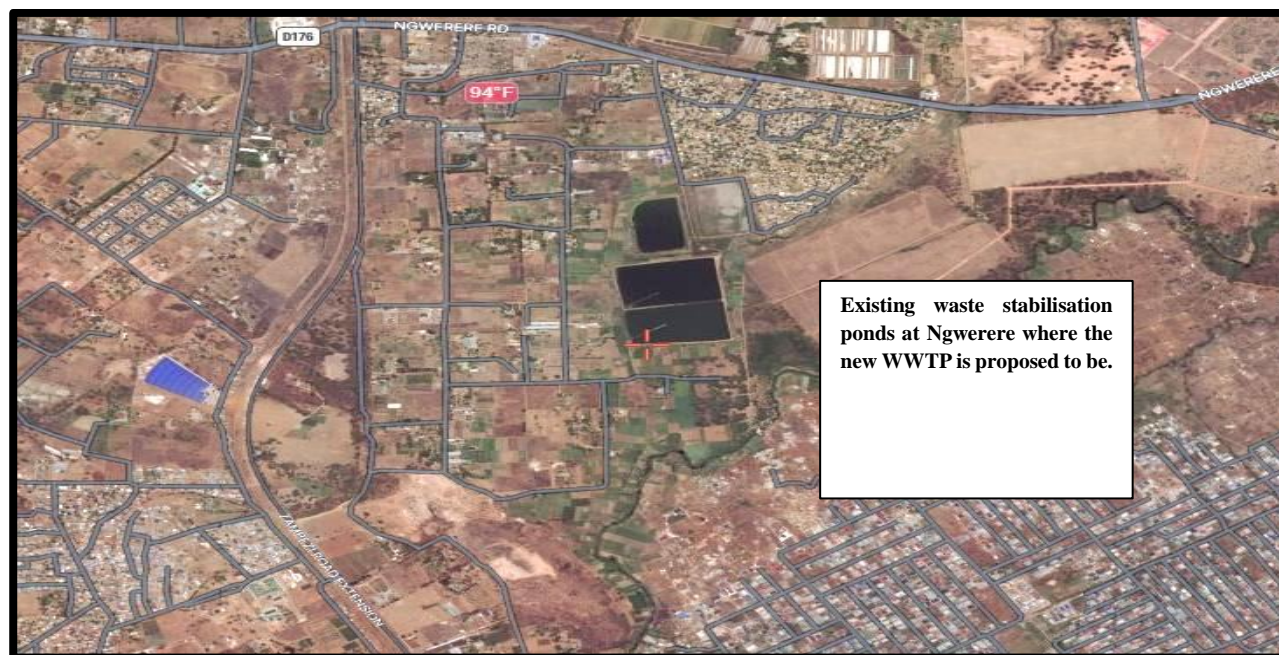


Figure 4: Location map for Ngwerere WWTP is located at -15°18'51.46"N and 28°20'2.18"E

1.3 Main Activities of the RAP

The RAP is dependent on the main project's activities and LWSC has the right to review the RAP prior to its implementation in case circumstances have changed with a result that more or fewer people are affected thereby affecting the scope of the RAP. However, Lusaka Water Supply and Sanitation Company cannot change their commitment to ensure what has been agreed with the PAP, and signed between LWSC and the PAP in the consent form is done accordingly. The following is a list of the main activities of the RAP:

- Developing proposals for income restoration activities
- Proposing measures of minimizing encroachment in future i.e. by LWSC fencing off their project area.
- Ensure that the PAP do not become poorer as a result of the project.
- Ensure no impacted person is worse off as a result of the project.
- Assist adversely affected persons in dealing with the psychological, cultural, social and other stresses caused due to their loss of gardening on LWSC land.
- Make all affected persons aware of processes available for the redress of grievances that are easily accessible and immediately responsive.
- Have in place a consultative, transparent and accountable involuntary land reclamation process with a timeframe agreed to by the sub-project implementer and the affected persons.

1.4 Background Information on the Project Necessitating Income Restoration

LWSC owns the land upon which the new Wastewater Treatment Plant is proposed to be constructed. For many years, the unused areas within the plant boundary have been used by local residents to grow vegetables and other crops for the purposes of self-sufficiency or to sell and make a small income. Now that LWSC wishes to construct the new WWTP, the affected persons need to give way to the project. It therefore, became imperative that a resettlement action plan be done to ensure the economic and social safety of the directly affected person's is given consideration.

1.5 Analysis of Alternatives justifying need for economic restoration

There are three alternatives: the '*leave as it is*', '*resettle and restore livelihoods*' or '*look for a site where there are no people*'. Several reasons justify the need for the movement of the affected persons out of the LWSC land by stopping their agricultural activities so as to allow the project to be carried out.

1.5.1 ‘Leave as it is’ option

This option is not advisable. If the PAP are left to continue gardening in the project sites and the current Wastewater treatment plants are left in their dilapidated state as they are, there will be a lot of unsanitary conditions. Water-borne diseases will abound. The affected people need to stop their gardening and maize growing as the land is required for the construction of the new WWTP. The new treatment plants are required to improve the health and welfare of a large proportion of the population of Lusaka who are currently adversely affected by the poor condition or lack of sanitation. Without doubt, cholera and other water-borne diseases could be the order of the day in Lusaka if wastewater is not properly treated. Therefore, ‘Leave as it is’ option is not the way to go.

1.5.2 ‘Look for another site where there are no people’ option

This option is not practically viable. To begin with, land in Lusaka is scarce, apart from the fact that the proposed land already belongs to Lusaka Water Supply and Sanitation Company and even the PAP are already aware of this fact. Also, if this option was to be taken, the PAP would continue gardening in these areas, but they would still have problem of water for their vegetables in dry season because the current ponds are the ones holding water in rain season which is accessible from the PAP’ wells in dry season.

1.5.3 ‘PAP ceasing gardening and LWSC to offer income restoration’ option

The existing location is the best option as sewer discharge at the Ngwerere plant site is very close to the existing rivers which is convenient for discharging the treated Wastewater. This validates the fact that there is no better alternative than the already proposed sites. Using this option, the illegality by the PAP of using LWSC land for their gardening will be stopped, the PAP will still be allowed time to garden and save money in preparation for a ceasing of gardening on the land, causing in some extent economic displacement for these PAP. They will use the saved money as capital for their other income-generating ventures, and the new WWTPs will be constructed. The new plants will improve on the sanitation of these areas and the Lusaka City as a whole.

1.6 Objectives of the Resettlement Project

The objectives of the RAP are to ensure that the land affected by the project is free from any settlements, and that the settlers currently on the land are compensated for the loss of land or property. In addition, the RAP also ensures that all affected people are consulted and informed about the project, and that the impacts the project will have on them are minimised. The RAP activities ensure that owners of the affected structures and land are adequately compensated.

The following are the overall objectives of this RAP:

- Avoid or at least minimise involuntary resettlement.
- Mitigate adverse social and economic impacts from land acquisition by:
 - Ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected;
 - Providing compensation in case of loss of assets at replacement cost; and
 - Improve or at least restore the livelihoods and standards of living of the project-affected people.

Offer additional targeted assistance (e.g. training or job opportunities);

1.7 Scope of RAP

This RAP’s scope and level of detail is:

- (1) Identification of potential risks and impacts that the PAP will be subjected to
- (2) Results of the social survey of the affected persons
- (3) How the process was consultative
- (4) Description of grievance redress mechanism
- (5) Institutional arrangement during RAP Implementation

- (6) RAP Implementation Program (Appendix 10 – Income Restoration Plan)
- (7) Budget and monitoring activities

1.8 Overall Estimate of Land Acquisition and Resettlement

All land in the affected area is owned by LWSC, but the water utility did not prevent the people using the land for gardening in the recent years. In other words, the company did not stop the local residents from using the land, thereby, executing the project may cause economic displacement to people who have been gardening in the area, which makes necessary for these persons to be considered under the RAP.

Table 5: Summary of affected persons and assets

Summary of the affected people and assets							
	HH	Males	Females	Land in ha	Houses	Fruit trees	Other structures
GRAND TOTAL	57	35	22	6.53	0	0	0

2. CENSUS AND SOCIO-ECONOMIC SURVEYS

2.1 Preamble

The Consultative Participatory Approach of collecting information was conducted as part of the RAP activities through personal interviews and group meetings and this mainly involved getting views and consensus from Stakeholders who are directly or indirectly affected by the Project. The stakeholders included the area counsellors, chairpersons, and the people of Ngwerere Township. The field survey was conducted to have ground truthing, especially on the vegetation type, agriculture fields, land use patterns, water resources and other resources found on the proposed project site.

2.2 Approach and Methodology

Since most of the data collected was qualitative in nature, and considering the fact that the PAP did not have fixed assets, quantitative method was only used when dealing with figures not related to compensation amounts.

2.2.1 Quantitative Approach (Questionnaire used):

In order to capture all households affected by the project, a census was conducted in the format of a questionnaire based socio-economic household survey beginning August, 2021. The census questionnaires in general comprised six parts: affected owner identification, agricultural land, household characteristics, tenancy and ownership, details of immovable assets, agricultural land produce, commercial affected trees, and livestock. Only those that applied to the prevailing situations at these sites have been placed in this report.

2.2.2 Qualitative Approach:

In determining important environmental features and socio-economic aspects such as education, agriculture production, marketing and employment opportunities that exist in the project area, the team used literature review and consultative participatory approaches (such as key informant interviews of the area counsellor and his Community Development Leaders) to gather information.

The team also interviewed individual PAP to understand how much they made as income from utilizing the gardens on the LWSC land. This approach helped the team to come up with figures for what was each PAP's monthly income base on the size of the land they cultivated and the type of plants they had in the garden. Column number 12 in Table 9 shows figures of income per month as declared by the PAP themselves. The team only questioned the figures if what a PAP claimed was clearly too much for the size of garden they cultivated. The rest of the PAP told the team what they made per month and it was qualitatively judged as correct information. See column number 12 of Table 9. If the PAP were to be given cash compensation, the team would simply have multiplied the claimed amount by agreed upon number of months to find what would have been the compensation amount for each PAP. However, more months were given to the PAP to cultivate the gardens and save income to restore their livelihoods after ceasing gardening from the project land.

Even so, the RAP team suggested that there be some form of income restoration assistance by equipping the PAP to cope with life after ceasing gardening. Among them were training in finance management, psychological counselling, and entrepreneurship. Also, the identified vulnerable PAP were to be assisted with some form of start-up capital. A list of households and location of land used for agricultural activities was established. Through consultations with the Chairpersons, GRM committee and the area councilor in various meetings conducted, and interviewing individual households, information was obtained on how they used the land. As for what they realized as their income per month, each PAP told the team the amount (See Table 9, second last column).

Transect Walks were also done to physically get data around the project location.

2.3 Areas Directly or Indirectly Affected by the Project

The Consultative Participatory Approach of collecting information was conducted as part of the RAP activities through personal interviews and group meetings and this mainly involved getting views and consensus from Stakeholders who are directly or indirectly affected by the Project. The stakeholders included the area counsellors, chairpersons, and the local people of Ngwerere Township. The field survey was conducted to have ground truthing, especially on the vegetation type, agriculture fields, land use patterns, water resources and other resources found on the proposed project site. The photos below show some of the areas directly affected by the project.



Figure 5: Some of the Photographs of the Ngwerere WWTP taken during a site visit

2.4 PAP Directly or Indirectly Affected by the Project

All the project affected persons did not have fixed assets. They will only be affected in the sense that they have to cease gardening activities which was their daily source of income. That is all. Their social cohesion remains the same because not one PAP will be relocated physically from their residences. But the project will bring more opportunities of business and employment to the local people and priority will be provided to the PAP, and the vulnerable among them. The PAP will receive financial/development training and will be provided with psychosocial counselling to ensure that they are safe emotionally.

2.5 Location of the affected gardens on Ngwerere WWTP site

The RAP team carried out an inventory and captured all the PAP with gardens at the project site. It should be noted that this study did not find any fixed assets belonging to the PAP on the project site.

A total of 57 households were found using the LWSC land for growing vegetables. Most of them were selling these vegetables as their daily source of income and this was all-seasons, not just rain season.

Also noted was the fact that the youths in the Ngwerere East compound were using one of the dry sewer ponds as a pitch for playing football. These youths asked Lusaka Water Supply and Sanitation Company to consider giving them this pond for them to continue playing soccer, but because it was on one title with the rest of the project site and would be needed for the project, Lusaka Water Supply and Sanitation Company could not give the team. However, through the Contractor who will be doing the construction of the new wastewater treatment plant, LWSC will assist the PAP to prepare an alternative football ground if the PAP through their local leaders and their counsellor could find the land that can serve this purpose. Nevertheless, considering that this situation represents a loss of playing field rather than a loss of land, its mitigation will be addressed in the ESMP rather than in the RAP scope.

Figure 6 below shows the areas directly affected by the WWTP construction and the Serial No. of the affected persons are show in the table after the map. The strips on the map represent the exact location of the garden on the project site.

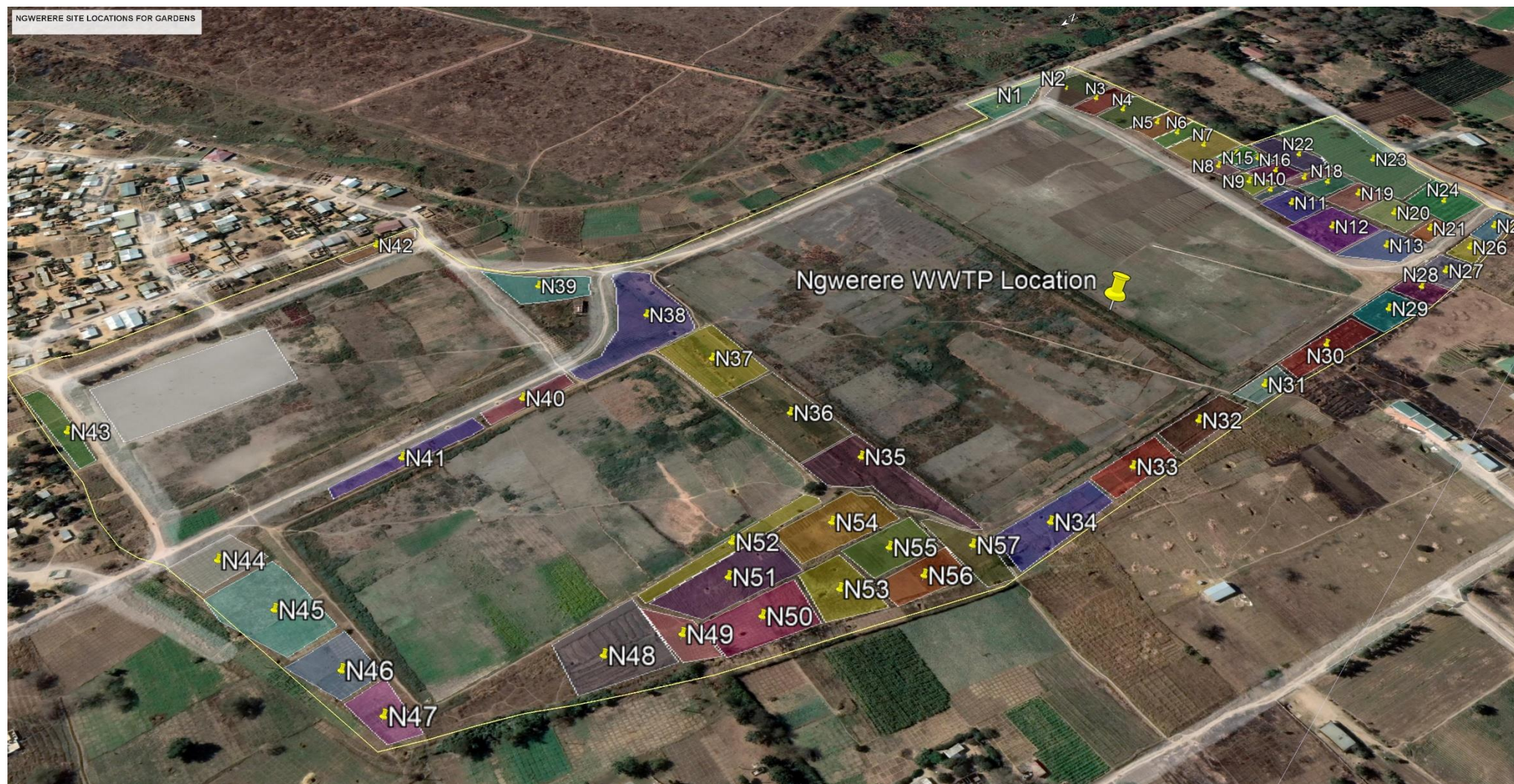


Figure 6: Map showing location of gardens on Ngwerere WWTP land

– See the corresponding names of PAP below

Table 6: List of the affected persons at Ngwerere Wastewater Treatment Plant as shown on the map above in Figure 6.

PAP at Ngwerere WWTP using the site for gardening were captured during the Census			
N1 Maliseni Mvula	N16 Timmy Phiri	N31 Dorothy Phiri	N46 Agnes Phiri
N2 Isaac Mvula	N17 Kalela Gilliad	N32 Charles Matongo	N47 Doreen Tembo
N3 Godfrey Banda	N18 Matthews Nyirongo	N33 Justine Meleki	N48 Edward Mwanza
N4 Victor Malambo	N19 Elias Phiri	N34 Josephine Zulu	N49 Moffat Zulu
N5 Nicholous Lupengwe	N20 Hamangaba Jailos	N35 Margret Chanda	N50 John Chewe
N 6 Benson Lupengwe	N21 Felistus Ngulube	N36 Daniel Zulu	N51 Nelia Tembo
N7 Gilbert Lupengwe	N22 Annet Mwinga	N37 Joseph Musonda	N52 Veronica Mtonga
N 8 Peter Banda	N23 Fatiness Tembo	N38 Paul Lungu	N53 Theresa Chinga
N9 Mary Phiri	N24 Peter Phiri	N39 Victor Ngobeka	N54 Mkonda Banda
N 10 Franil Silomba	N25 Sharon Tembo	N40 Joseph Nkhoma	N55 Jackson Mtonga
N 11 Jason Malama Banda	N26 Moses Mwaza	N41 Raphael Phiri	N56 Rosemary Tembo
N12 Lackson Banda	N27 Speedwell Malambo	N42 Agnes Phiri	N57 Fridah Njomvu
N13 Katongo Moses	N28 Tisa Mwanza	N43 Doreen Tembo	
N14 Dickson Njobvu	N29 Margaret Nkosi	N44 Edward Mwanza	
N15 Maggie Phiri	N30 Fred Malambo	N45 Chembwe Doris Chikubi	

2.6 Number of People directly affected by category of impacts

There are 57 project affected persons at the proposed Wastewater Treatment Plant. The inclusion of a dry pond which the local youth have turned into pitch for playing soccer bring the number of PAP's to 58. As shown in this Table, the only major impact of the ceasing of gardening activities on the project site is the cutting off the PAP' source of income.

Table 7: Number of People directly affected by category of impacts

Category of impacts	Number of PAP affected by loss of land	Number of PAP affected by loss of housing	Number of PAP affected by loss of other fixed assets	Number of PAP affected by loss of crops	Number of PAP affected by loss of livestock	Number of PAP affected by loss of income-generation	Number of PAP affected by loss of communal assets	Number of PAP affected by loss of Fruit trees
Total	0	0	0	0	0	57	0	0

2.7 Vulnerable or High-Risk Groups

There are a few high-risk PAP that include the elderly and female-headed households. No household was found to be headed by children. The Table below shows the PAP that are vulnerable and need to be assisted with some capital money after the proposed training as part of the income restoration program is carried out.

Table 8: Inventory of the Vulnerable

S/N	Name of household head	NRC No.	Age	Sex		Formal job Business	Agriculture type	Seasons	Size of agricultural land within site area		Claimed income per Month	Period of Use in yrs.
				M	F				Meter squared	In hectares		
N32	Charles Matongo	105780/73/1	89	1		None	Gardening	All seasons	33 x 40.2	0.13	1,400	27
N29	Margaret Nkosi		66		1	None	Gardening	All seasons	29.6 x 106	0.31	3,000	7
N18	Matthews Nyirongo	450563/11/1	67	1		Plumber	Gardening	All seasons	16.5 x 44.7	0.07	1,000	2

2.8 Relevant Baseline Social and Cultural information

This section covers an overview of the existing socio-economic conditions prevailing in the project area.

2.8.1 Ngwerere

Ngwerere area as a whole has seen immense growth over the past few years and continues to grow. New developments continue to spring up on what were once farmlands; houses and some shops along the Ngwerere road. The previously gravel Ngwerere road has now been hard surfaced. To the western site of the project location area is the Zambezi Road, again hard surfaced now, which connects the Ngwerere Road. These recent road improvements have resulted in better and faster service delivery, empowering the communities that live in the area. Although farmlands are being used for residential and commercial properties, the area maintains a large amount of commercial farming. Ngwerere is known for its poultry, beef, dairy, and maize farms. The project site is however only used by small scale garden farmers.

2.8.1.1 History of the area

According to the locals, the area gets its name from the Ngwerere Stream. The farmers now mainly use the stream for irrigation. The stream flows towards the Chongwe River which leads to the Chongwe Dam. When Honourable Silvia Masebo was an area MP, the people decided to name the Ngwerere project area as Masebo Compound. However, it was later changed to Ngwerere East.

2.8.1.2 Distance from key points (Airport/CBD)

The Kenneth Kaunda International Airport is approximately 22.5 km away from Ngwerere. This journey will take approximately 26 minutes via the Ngwerere Road. Lusaka's CBD is approximately 10 km away from the area.

2.8.1.3 Schools in the area

The closest school to the Ngwerere WWTP is the Eastview Primary Community School. This one is just about 300 meters from the project site. It's the only school in Ngwerere East compound. 2.04 kilometre north-east of the site is Ellensdale Primary School while St Francis and Clare School is found 2.29 kilometres south-west. Academy School and Asfolt Academy schools are found at kilometres 1.37 and 5.79 south-west respectively.

2.8.1.4 Hospitals Nearby

Ngwerere: Medlands, Coptic, Victoria hospital, and CFB are straight runs in from Ngwerere. The Levy Mwanawasa Hospital is adequated for COVID patients.

2.8.1.5 Nearby Restaurants

There are a number of restaurants within Ngwerere. Nearby Protea Hotel, next to Bonanza golf course, there are several restaurants, including the Done Pub and Grill. For light lunches and fun days out, Kalimba Reptile Farm and R and G Papa Joes are options for pub meals and fun days out. The Clubhouse at the Bonanza Golf Course with the Ngwerere area is another known restaurant in the area.

2.8.1.6 Nearby Special attractions

The Kalimba Reptile Park is located approximately 3km to the North of the site. It is a popular attraction offering activities, such as snake and crocodile viewing and fishing. The reptile park is an extension of Kalimba Farms which specializes primarily in crocodile farming. Chaminuka Estates is located approximately 29.4 using Ngwerere Road to the Northeast of the project site; it offers lodging, restaurants and game drives¹.

¹ Source: <https://www.homenetzambia.com/area-profiles/ngwerere/ngwerere/>

2.8.1.7 Education/Literacy Levels/ Gender Equity

More than 80 per cent of the PAP have only attained primary or basic education. This gives an indication of the level of education within the affected area, especially among the project affected people, and it also shows how much they need help in economic sustainability.

2.8.1.8 Health Services

Even though the Government of the Republic of Zambia is determined to provide quality health care, the health sector in the district as a whole faces problems due to Coronavirus and lack of medical support. Access to health facilities and quality care, cost-effective management of diseases such as Malaria, Diarrhea, Acute Respiratory Tract infections (ARI), Tuberculosis is vital.

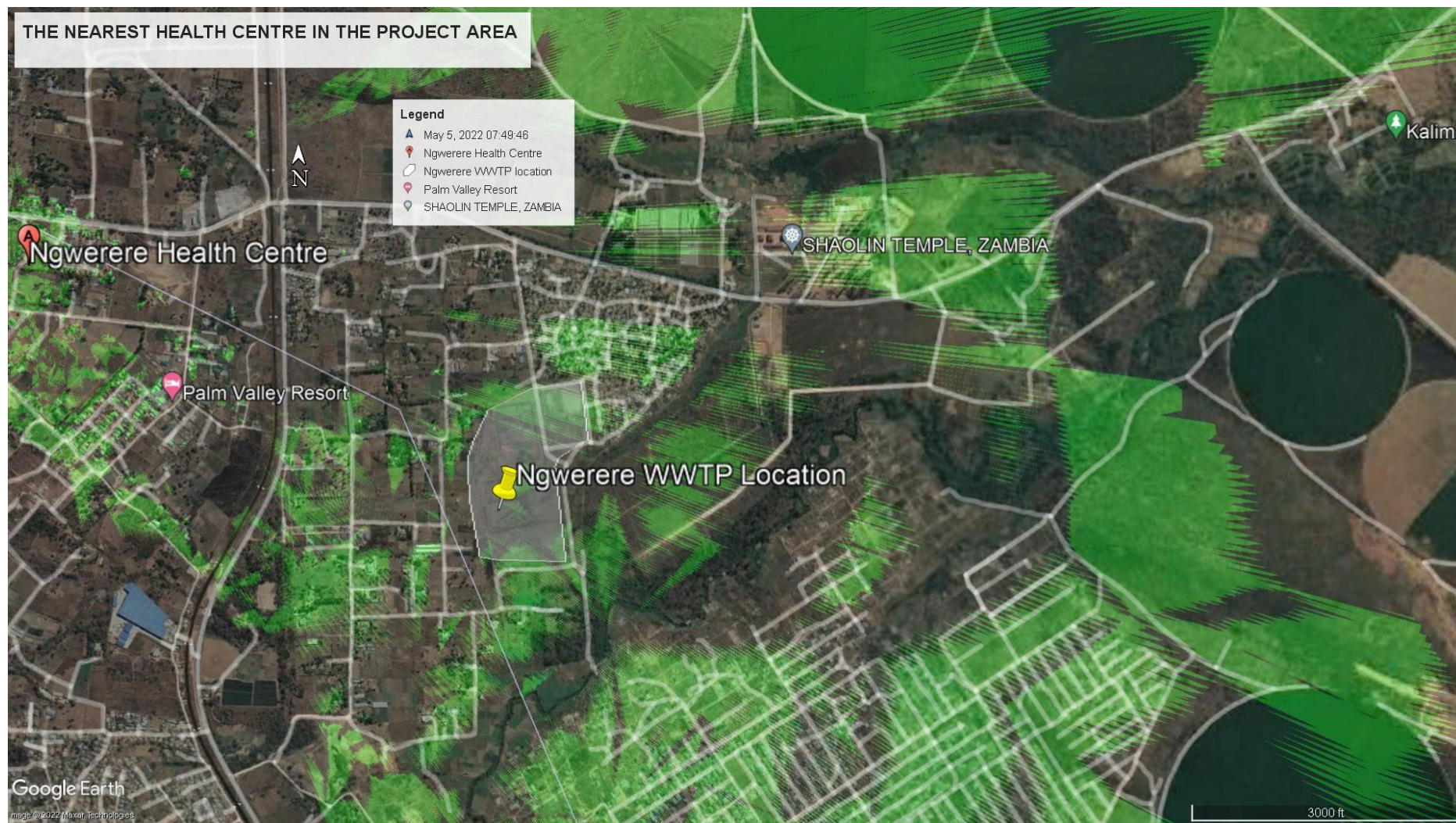


Figure 7: Map showing the nearest health centre in the proposed site area

2.8.1.9 HIV prevalence in Lusaka Province

The Zambia Population-Based HIV Impact Assessment (ZAMPHIA), a household-based national survey, was conducted between March and August 2016 in order to measure the status of Zambia's national HIV response. The following figure shows HIV prevalence among adults by province. As can be observed here, Lusaka has the highest prevalence. The Project therefore needs to assist in sensitization and distribution of materials for prevention such as condoms and fliers. Some provision regarding this aspect are considered in the Livelihood Restoration Plan, Annex 9.

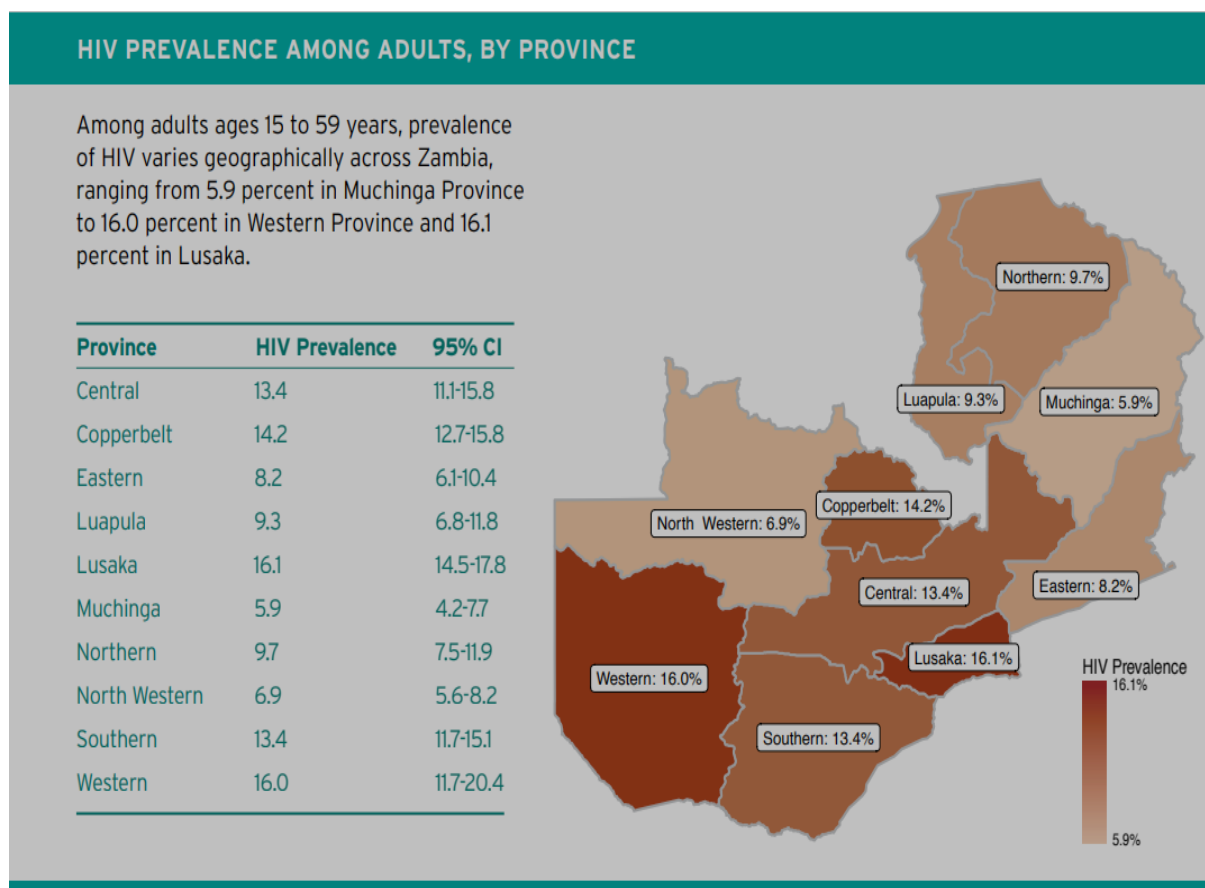


Figure 8: HIV prevalence among adults, by province

(Source: The Zambia Population-Based HIV Impact Assessment (ZAMPHIA))

2.8.1.10 Market Availability on Various Commodities

There are several business activities in Ngwerere Township, especially for groceries. Being within the Lusaka City, there are enough markets, shopping malls, mobile booths etc. for their PAP daily necessities. Due to the proposed project, their markets are expected to expand to cater for the workforce that will be employed during the construction period. No amenities will be disturbed due to the proposed project.

2.8.1.11 Religious Practices and Beliefs

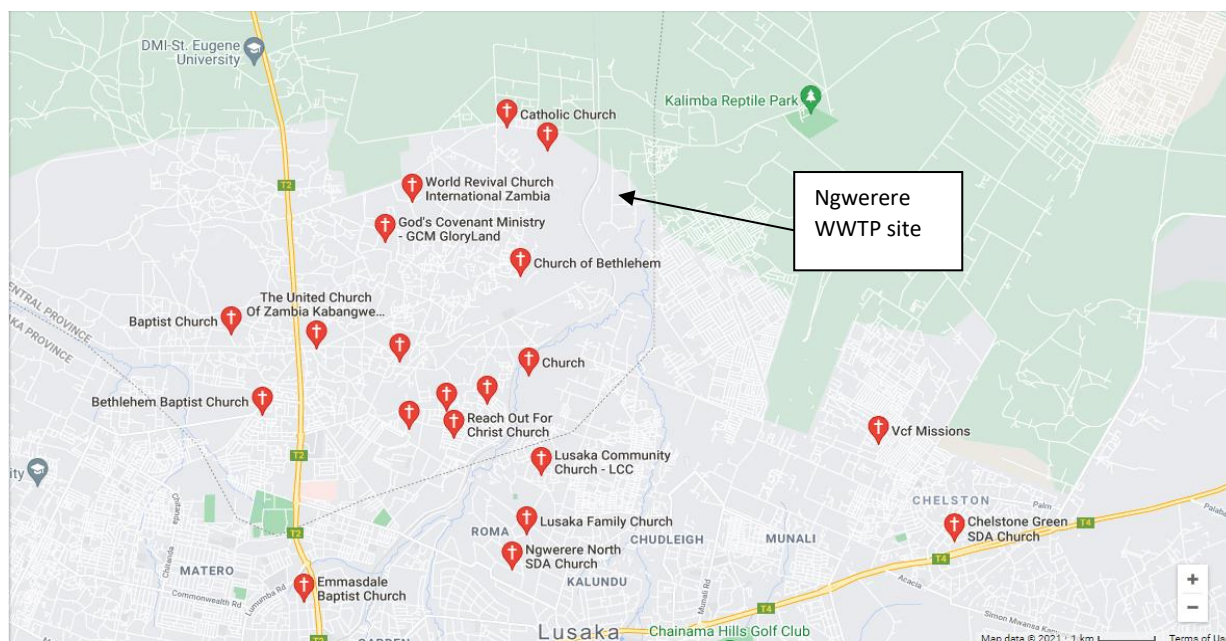


Figure 9: Figure showing some of the churches within Ngwerere and surrounding areas

Among the churches found within the area are Church of Bethlehem, God's Covenant Church International Zambia, World Revival Church International Zambia, and the Catholic Church.

2.8.1.12 Transport and Communication

The project site is well serviced by Ngwerere road. Public mini-buses also reach the area frequently. The environs of the study area are well-covered and served by the local radio and television network and local print media. The local newspapers are sold in shops within the area. The surrounding area is also well-covered by telephone (ZAMTEL) and mobile cell networks (AIRTEL, MTN and ZAMTEL). The power source to the project site shall be Zambia Electricity Supply Corporation (ZESCO) Limited.

2.8.1.13 Water and Sanitation

Ngwerere township water and sewerage services are managed by Lusaka Water Supply and Sanitation Company. The project area residents have dug a few shallow water-wells for watering their gardens.

In terms of clean water and sanitation, the proposed Lusaka Water Supply and Sanitation Company provides water and sanitation networks to the areas.

2.8.1.14 Built Environment

The built environment includes surrounding residential houses and some shops and make-shift stalls and phone booths.

2.8.1.15 Settlement Pattern

The settlement pattern at the project areas is characterized by houses as per township standard as show in the photograph below:



Figure 10 Photo of Area showing no buildings to be affected by the project.

2.8.2 District Administration

District Administration supervises, co-ordinates and monitors the operations of Government departments' parastatals and co-operating Non-Governmental Organisations (NGOs) and collaborates with the Local Authorities, which includes the formulation and implementation of development projects and programmes in developing the district. This is done to promote integrated development planning through structures like the District Development Coordinating Committee (DDCC).

2.8.2.1 District Council

There are four (4) City Councils, 14 Municipal Councils and 54 Local Authorities (Districts) today in Zambia. The Constitution of Zambia provides for the establishment of a democratically elected local government system based on universal suffrage. The 1991 Local Government Act provides for a single-tier system of local government comprising three types of councils: city, municipal and district. The project site falls under Chongwe Municipal Council.

2.9 Political System, Governance and Traditional Leadership

Lusaka District has seven (7) Constituencies and Thirty (33) Wards. There are two indigenous tribes namely, the 'Solis' and the 'Lenjes'. The Wards are smaller geographical demarcations in the seven (7) larger constituencies that constitute the broader boundary jurisdiction of the greater Lusaka City. From each constituency, one political leader is elected by popular vote as a Member of Parliament representing the community in the National Assembly; one councillor is elected in each ward and Two (2) chief's representatives are nominated to sit on the Council.

2.9.1 Demography

Lusaka Province is divided into eight districts, namely, Chilanga, Chirundu, Chongwe, Kafue, Luangwa, Lusaka, Rufunsa and Shibuyunji. All the district headquarters are the same as the district names. The figure below shows the districts in Lusaka Province.



Figure 11: Map of Lusaka Province showing its districts (Source: Google Map)

2.10 District Administrative Structure

There are two administration systems in the district, the Central and Local Government systems.

2.10.1 Central Government System

The Central Government System is composed of all government departmental heads, under the headship of the District Commissioner (DC) who co-ordinates all districts development activities. To discharge these functions, the District Commissioner and the Council Secretary co-chair the District Development Coordinating Committee (DDCC), whose composition encompasses district government departments, the Council, major companies in the district, Community Based Organisations (CBOs), Non-governmental Organisations (NGOs) and many other stakeholders.

2.10.2 Local Government System

The local government system is composed of the elected Councillors headed by the Council Chairman. These collectively constitute the council. The council is the highest policymaking body in the district. The Council discharges its functions through the committees such as finance and general purposes, plans, works and development, housing and social services, public health and establishment. The Chief Officers under the headship of the Council Secretary, the Chief Executive of the Council, with the labour force under them support the Council with regard to the implementation of policies and resolutions.

2.10.3 Political System and Governance

Lusaka, like all districts in the country, operate under a democratic multi-party political system. This entails that the people in wards, through elections, elect political leaders by voting.

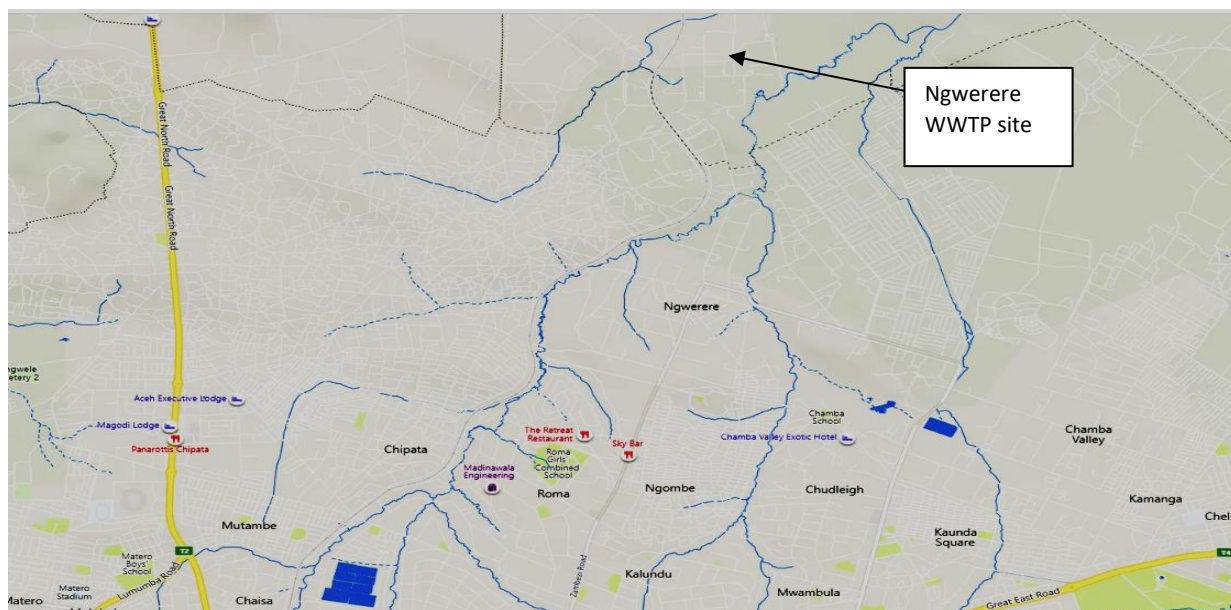


Figure 12: Map showing surrounding compounds of Ngwerere

2.10.4 Population of Lusaka

According to the UN World Urbanization Prospects, Lusaka's 2021 population is now estimated at 2,905,993. In 1950, the population of Lusaka was 31,169. The city has grown by 131,860 since 2015, which represents a 4.75% annual change. These estimates represent the urban accumulation of Lusaka, which typically includes Lusaka's population in addition to nearby out-of-town areas.

Chart and table of population level and growth rate for the Lusaka, Zambia metro area from 1950 to 2021. United Nations population projections are also included through the year 2035².

- The metro area population of Lusaka in 2021 was **2,906,000**, a **4.76% increase** from 2020.
- The metro area population of Lusaka in 2020 was **2,774,000**, a **4.8% increase** from 2019.
- The metro area population of Lusaka in 2019 was **2,647,000**, a **4.87% increase** from 2018.
- The metro area population of Lusaka in 2018 was **2,524,000**, a **4.9% increase** from 2017.

2.11 Population of the Project Area

The population of Ngwerere as well as related information and services are shown below:

Name	Status	Population Census 2010-10-16
Ngwerere	Ward	66,205
Ngwerere		
66,205 Population [2010] – Census 3.730 km ² Area 17,749/km² Population Density [2010]		

² Source: <https://www.macrotrends.net/cities/23277/lusaka/population>

Zambia	Republic	13,092,666
Source: Central Statistical Office Zambia (web).		
Further information about the population structure:		
Males Females49.7%50.3%		
Gender (C 2010)		
Males	32,911	
Females	33,294	
0-14 years = 39.4%		
15-64 years = 59.4%		
65+ years = 1.2%		
Age Groups (C 2010)		
0-14 years	26,067	
15-64 years	39,311	
65+ years	827	
Age Distribution (C 2010)		
0-9 years	17,908	
10-19 years	15,782	
20-29 years	14,676	
30-39 years	10,052	
40-49 years	4,231	
50-59 years	2,068	
60+ years	1,488	

Figure 13: Ngwerere's Population statistics for 2010.

Source: Central Statistical Office Zambia (web).

2.11.1 Relevant Baseline Social and Cultural information specific to PAP

Below are the main figures related to the PAP.

Households:

- A total of 57 households were found using the LWSC land for growing vegetables.

Gender:

- A total of 35 man headed households were found.
- A total of 22 women man headed households were found.

Education Levels:

- Primary: A total of 25 household heads have primary education.
- Secondary: A total of 9 household heads have primary education.

- No formal education: A total of 23 household heads have no formal education.

Formal Employment:

- Male with jobs: A total of 5 male household heads have a job.
- Female with jobs: No female household heads with job were identified.
- Male without jobs: A total of 30 male household heads do not have a job.
- Females without jobs: A total of 22 female household heads do not have a job.
- Total PAP with occupation: A total of 5 household heads do have an occupation.
- Total PAP without occupation: A total of 5 household heads do not have an occupation.

Other economic activities:

- Gardening: A total of 57 household heads conduct gardening activities in the lands of LWSC.

2.11.2 Traditional and Cultural Heritage

Most people in the project site area are able to speak one or more of the following languages: Nyanja, Bemba, Tonga, Lozi, Soli and Lenje. Due to the growth of Lusaka and general urbanization, many people from different ethnic tribes have migrated to the city surrounding areas to find work. Therefore the areas have a blend of different cultures, as well as a very definitive influence of Western standards.

2.11.3 Land tenure and/or ownership rights of the affected population

The affected people do not own any land within the project site.

2.11.4 Land holdings of affected population

Some of the affected population do own land in the Ngwerere East land surrounding the WWTP land. These people have been helped by the Government to have their land regularized and they do have occupancy certificates.

2.11.5 Agricultural production, livestock, and other on-farm income.

There is no livestock in the affected area. The PAP may have one or two chickens at their residences but the same will not be affected in any way.

2.11.6 Communal productive assets that may be affected

There are no communal productive assets that will be affected in this project.

2.11.7 Other economic activities or local employment that might be affected.

No one will lose its employment as a result of the project. Regarding the new job positions derived from the project, priority will be given to the PAP before being hired by the Contractors.

2.11.8 Land Use and Economic Activities

In general, the project's area could be described as a zone that presents environs with predominant residential use and some few fields in the eastern part of the project site, along the Ngwerere Stream. Some people in the nearby townships have backyard Gardens for their vegetables mainly for consumption. Some use the Ngwerere Stream to water their gardens while others have boreholes at their residences. These high cost areas surrounding the project site are also a source of house-help jobs for the Ngwerere East residents such as maids and garden-boys.

Coming to the project area, the proposed project land is used illegally by vegetable garden farmers. No PAP has any land or fixed asset within the project land. Pictures below shows how land is used at proposed project site. And the preceding maps show locations of fields and gardens.



Figure 14: Some of the vegetable gardens at Ngwerere Wastewater Treatment Plant

2.12 Household Income Levels

The household income levels for the PAP were meticulously gathered through comprehensive questionnaires administered during interviews (See Annex 13). Each PAP's response regarding the amount generated from their crops production was carefully scrutinized, taking into account the specific products cultivated in their garden and the size of the garden itself. Collaborating closely with local leaders, the RAP team diligently ensured that the reported income aligned with the expected earnings from each garden. Consequently, these data points were extracted from the forms and meticulously organized in the second-to-last column of Table 9. For a more in-depth understanding of the process involved in collecting household income levels for PAP, please refer to the RAP data collection questionnaires provided in Annex 13.

2.12.1 HH Income Levels for PAP in Ngwerere Compound

Most of the affected are small-scale farmers who do not pay for even basic services like water, sewerage, electricity and so on. The government helped to legalize their plots by giving them occupancy silences. However, of the affected people, only about five (5) are in formal employment. In terms of their income, please see the table below for details.

Table 9: Income from the use of LWSC land by PAP

S/N	Name of Household Head	NRC No.	Age	Sex		Formal job Business	Agriculture type	Seasons	Size of agric land Within site area		Claimed income per Month	Period of land use in yrs.
			yrs.	M	F				L X W = meter squared	In hectares		
N1	Maliseni Mvula	328347/52/1	58	1		None	Gardening	All seasons	26.5 x 26.2 and 30.3 x 54.3	0.23	200	
N2	Isaac Mvula	363486/10/1	35	1		None	Gardening	All seasons	4 x 58.4	0.02	4,000	15
N3	Godfrey Banda	579154/11/1	49	1		None	Gardening	All seasons	18.4 X 48.1	0.09	3,600	1
N4	Victor Malambo	682760/43/1	43	1		None	Gardening	All seasons	42.9 X 48.1	0.21	8,000	10
N5	Nicholous Lupengwe	384699/10/1	27	1		Farmer	Gardening	All seasons	32 X 34	0.11	None	6
N6	Benson Lupengwe	381776/10/1	22	1		None	Gardening	All seasons	28.8 X 62.3	0.18	2,500	15
N7	Gilbert Lupengwe	205153/19/1	20	1		None	Gardening	All seasons	31.4 X 15.1	0.05	4,000	5
N8	Peter Banda	672686/11/1	40	1		None	Gardening	All seasons	16 X 34	0.05	5,000	7
N9	Mary Phiri	208549/11/1	42		1	None	Gardening	All seasons	15.1 X 11.8	0.02	1,000	
N10	Frank Silomba	197669/16/1	57	1		Farmer	Gardening	All seasons	18.1 X 22.7	0.04	4,000	
N11	Jason Malama	641700/11/1	39	1		Gardener	Gardening	All seasons	31 X 44.5 and 16.8 x 74.6	0.26	4,000	8
N12	Lackson Banda	674030/11/1	50	1		None	Gardening	All seasons	42.1 x 30.7	0.13	4,000	10
N13	Katongo Moses	126743/45/1	51	1		None	Gardening	All seasons	5 x 184.8	0.09	3,700	25
N14	Dickson Njobvu	514949/11/1	54	1		None	Gardening	All seasons	11.3 x 44.7	0.05	4,000	5
N15	Maggie Phiri	181745/75/1	56		1	Farmer	Gardening	All seasons	35.9 x 10.1	0.04	1,500	7
N16	Timmy Phiri	292847/17/1	32	1		None	Gardening	All seasons	5.3 x 44.7	0.02	8,000	7
N17	Kalela Gliad	612229/11/1	47	1		None	Gardening	All seasons	20.6 x 10.1	0.02	5,000	7

N18	Matthews Nyirongo	450563/11/1	67	1		Plumber	Gardening	All seasons	16.5 x 44.7	0.07	1,000	2
N19	Elias Phiri		29	1		None	Gardening	All seasons	95.4 x 10.2	0.10	4,000	18
N20	Hamangaba Jailos	153925/75/1	58	1		None	Gardening	All seasons	27 x 44.7	0.12	6,000	7
N21	Felistus Ngulube	488191/11/1	50		1	None	Gardening	All seasons	18.9 x 21.2	0.04	500	8
N22	Annet Mwinga	688312/11/1	44		1	None	Gardening	All seasons	13.1 x 88.1	0.12	1,800	
N23	Fatiness Tembo	381480/11/1	58		1	None	Gardening	All seasons	30.7 48.8	0.15	8,000	
N24	Peter Phiri	160113/19/1	34	1		None	Gardening	All seasons	16 x 65	0.10	2,400	8
N25	Sharon Tembo	106983/19/1	39		1	None	Gardening	All seasons	26.7 50.4	0.13	2,800	4
N26	Moses Mwanza	162812/11/1	40	1		None	Gardening	All seasons	69.9 x 12.1	0.08	3,000	7
N27	Speedwell Malambo	259142/14/1	56	1		None	Gardening	All seasons	50.4 x 26.1 & 51.4 x 92.7 & 14.7 x 25	0.64	5,000	9
N28	Tisa Mwanza	106762/19/1	41		1	None	Gardening	All seasons	41.5 x 20.3	0.08	5,000	25
N29	Margaret Nkosi		66		1	None	Gardening	All seasons	29.6 x 106	0.31	3,000	7
N30	Fred Malambo			1		None	Gardening	All seasons	17.7 x 13.2	0.02		10
N31	Dorothy Phiri	117549/55/1	45		1	None	Gardening	All seasons	23.2 x 43.1	0.10	1,600	5
N32	Charles Matongo	105780/73/1	89	1		None	Gardening	All seasons	33 x 40.2	0.13	1,400	27
N33	Justine Meleki	802693/11/1	41		1	None	Gardening	All seasons	34.2 x 40.2 and 28.6 x 31	0.23	2,600	10
N34	Josephine Zulu	106093/19/1	42		1	None	Gardening	All seasons	29.3 x 30.1	0.09	1,500	8
N35	Margret Chanda	106467/19/1	39		1	None	Gardening	All seasons	30.1 x 27.3 and 17.3 x 8.6	0.08	1,000	16
N36	Daniel Zulu	682794/11/1	44	1		Plumber	Gardening	All seasons	147 x 26 and 15.8 x 37.6	0.10	500	20
N37	Joseph Musonda	191996/41/1	45	1		None	Gardening	All seasons	7.7 x 9.1 and 39.8 x 36	0.15	5,000	15

N38	Paul Lungu	759935/11/1	42	1		None	Gardening	All seasons	27.8 x 9.3	0.03	1,500	3
N39	Victor Ngobeka	161025/19/1	38	1		Worker LWSC	Gardening	All seasons	16.7 x 20	0.03	8,000	30
N40	Joseph Nkhoma	207252/19/1	21	1		None	Gardening	All seasons	41 x 17.6	0.07	1,500	20
N41	Raphael Phiri	386503/52/1	58	1		None	Gardening	All seasons	45.3 x 15.2	0.07	800	7
N42	Eunice Chalwe	220612/16/1	51		1	None	Gardening	All seasons	42.7 x 18	0.08	5,000	7
N43	Margaret Ngulube	125337/18/1	46		1	None	Gardening	All seasons	9.7 x 64.2	0.06	5,500	10
N44	John Lubasi	161241/19/1	35	1		None	Gardening	All seasons	15 x 75 and 36.1 x 5.3	0.13	5,600	7
N45	Chembwe Doris Chikubi	152954/63/1	51		1	None	Gardening	All seasons	16.2 x 75.5	0.12	6,000	5
N46	Agnes Phiri	476917/11/1	59		1			All seasons	28.1 x 43.1	0.12	800	30
N47	Doreen Tembo	675821/11/1	44		1	None	Gardening	All seasons	15 x 56	0.08	1,300	4
N48	Edward Mwanza	214312/16/1	60	1		None	Gardening	All seasons	13 x 21	0.03	600	5
N49	Moffat Zulu	186218/73/1	53	1		None	Gardening	All seasons	15.2 x 33.5	0.05	2,500	5
N50	John Chewe	179276/51/1	57	1		Business	Gardening	All seasons	55.5 x 15 and 17.4 x 15.4	0.11	800	1
N51	Nelia Tembo	674039/11/1	43		1	None	Gardening	All seasons	15.6 x 46.8	0.07	1,500	7
N52	Veronica Mutonga	667055/11/1	43		1	None	Gardening	All seasons	12.6 x 24.1	0.03	1,500	7
N53	Theresa Chinga	149883/19/1	51	1		Business	Gardening	All seasons	85.5 x 58.4	0.50	3,000	16
N54	Mkonda Banda	361809/54/1	53		1	None	Gardening	All seasons	42.6 x 54.1	0.23	2,000	10
N55	Jackson Mtonga	161174/19/1	38	1		None	Gardening	All seasons	86.1 x 8.7	0.07	4,500	7
N56	Rosemary Tembo	499665/11/1	51		1	None	Gardening	All seasons	29.5 x 66.9	0.20	3,000	
N57	Fridah Njomvu	141183/18/1	37		1	None	Gardening	All seasons	15 x 20	0.03	4,000	2
	TOTALS:			35	22					6.53	181,000	

2.13 Public Infrastructure and social services that will be affected

No public infrastructure will be negatively affected by the construction of the new Treatment Plant at Ngwerere Treatment Plant. The access road to the WWTP will be expanded, but it is wide enough for the expansion without affecting the houses along the roads. And for avoiding any negative impact on hedges and fruit trees along the left-hand side of the access road in keeping with the pre-construction phase activities defined in the ESIA, it is going to be required Contractor to implement site fencing when widening activities be implemented.

2.14 Formats and tables for census surveys

A list of households and location of land used for agricultural activities was established through consultations with the Chairpersons, GRM committee and the area councillor in various meetings conducted, and interviewing individual households. In Annex 11 are presented the tables were used during data collection.

2.15 Outline for socio-economic survey

- To narrow down the focus of the RAP onto issues of potential significance, scoping was done in which issues of priority were identified.
- Next was to profile baseline environmental and socioeconomic conditions of the two WWTP to define measurable indicators of valued socioeconomic components.
- Based on the analysis of the information gathered from issues of scoping, baseline profiling and past experience, the RAP team predicted both negative and positive impacts of the project.
- Then the mitigation measures for adverse/negative impacts and enhancement measures for the positive impacts were identified.
- Evaluation of the significance of the mitigation measures was done alongside monitoring program so as to apply the good measures and adjust those that require refinements.

2.16 Consultation on Results of Census Surveys

A number of meetings were held at the Project Site, in which a lot of stakeholders were in attendance. Minutes of these meetings are attached in the Appendices.

The table below show the results of the census survey conducted at the Ngwerere WWTP.

Table 10: Inventory of the PAP at Ngwerere WWTP

No.	Name of Household Head	NRC NO.	Age	Sex		Formal job Business	Agriculture type	Seasons	Size of agric land Within site area	
			yrs.	M	F				L X W = meter squared	In hectares
N1	Maliseni Mvula	328347/52/1	58	1		None	Gardening	All seasons	26.5 x 26.2 and 30.3 x 54.3	0.23
N2	Isaac Mvula	363486/10/1	35	1		None	Gardening	All seasons	4 x 58.4	0.02
N3	Godfrey Banda	579154/11/1	49	1		None	Gardening	All seasons	18.4 X 48.1	0.09
N4	Victor Malambo	682760/43/1	43	1		None	Gardening	All seasons	42.9 X 48.1	0.21
N5	Nicholous Lupengwe	384699/10/1	27	1		Farmer	Gardening	All seasons	32 X 34	0.11
N6	Benson Lupengwe	381776/10/1	22	1		None	Gardening	All seasons	28.8 X 62.3	0.18
N7	Gilbert Lupengwe	205153/19/1	20	1		None	Gardening	All seasons	31.4 X 15.1	0.05
N8	Peter Banda	672686/11/1	40	1		None	Gardening	All seasons	16 X 34	0.05
N9	Mary Phiri	208549/11/1	42		1	None	Gardening	All seasons	15.1 X 11.8	0.02
N10	Frank Silomba	197669/16/1	57	1		Farmer	Gardening	All seasons	18.1 X 22.7	0.04
N11	Jason Malama	641700/11/1	39	1		Gardener	Gardening	All seasons	31 X 44.5 and 16.8 x 74.6	0.26
N12	Lackson Banda	674030/11/1	50	1		None	Gardening	All seasons	42.1 x 30.7	0.13
N13	Katongo Moses	126743/45/1	51	1		None	Gardening	All seasons	5 x 184.8	0.09
N14	Dickson Njobvu	514949/11/1	54	1		None	Gardening	All seasons	11.3 x 44.7	0.05
N15	Maggie Phiri	181745/75/1	56		1	Farmer	Gardening	All seasons	35.9 x 10.1	0.04
N16	Timmy Phiri	292847/17/1	32	1		None	Gardening	All seasons	5.3 x 44.7	0.02
N17	Kalela Gliad	612229/11/1	47	1		None	Gardening	All seasons	20.6 x 10.1	0.02
N18	Matthews Nyirongo	450563/11/1	67	1		Plumber	Gardening	All seasons	16.5 x 44.7	0.07
N19	Elias Phiri		29	1		None	Gardening	All seasons	95.4 x 10.2	0.10
N20	Hamangaba Jailos	153925/75/1	58	1		None	Gardening	All seasons	27 x 44.7	0.12
N21	Felistus Ngulube	488191/11/1	50		1	None	Gardening	All seasons	18.9 x 21.2	0.04

No.	Name of Household Head	NRC NO.	Age	Sex		Formal job Business	Agriculture type	Seasons	Size of agric land Within site area	
			yrs.	M	F				L X W = meter squared	In hectares
N22	Annet Mwinga	688312/11/1	44		1	None	Gardening	All seasons	13.1 x 88.1	0.12
N23	Fatiness Tembo	381480/11/1	58		1	None	Gardening	All seasons	30.7 48.8	0.15
N24	Peter Phiri	160113/19/1	34	1		None	Gardening	All seasons	16 x 65	0.10
N25	Sharon Tembo	106983/19/1	39		1	None	Gardening	All seasons	26.7 50.4	0.13
N26	Moses Mwanza	162812/11/1	40	1		None	Gardening	All seasons	69.9 x 12.1	0.08
N27	Speedwell Malambo	259142/14/1	56	1		None	Gardening	All seasons	50.4 x 26.1 & 51.4 x 92.7 & 14.7 x 25	0.64
N28	Tisa Mwanza	106762/19/1	41		1	None	Gardening	All seasons	41.5 x 20.3	0.08
N29	Margaret Nkosi		66		1	None	Gardening	All seasons	29.6 x 106	0.31
N30	Fred Malambo			1		None	Gardening	All seasons	17.7 x 13.2	0.02
N31	Dorothy Phiri	117549/55/1	45		1	None	Gardening	All seasons	23.2 x 43.1	0.10
N32	Charles Matongo	105780/73/1	89	1		None	Gardening	All seasons	33 x 40.2	0.13
N33	Justine Meleki	802693/11/1	41		1	None	Gardening	All seasons	34.2 x 40.2 and 28.6 x 31	0.23
N34	Josephine Zulu	106093/19/1	42		1	None	Gardening	All seasons	29.3 x 30.1	0.09
N35	Margret Chanda	106467/19/1	39		1	None	Gardening	All seasons	30.1 x 27.3 and 17.3 x 8.6	0.08
N36	Daniel Zulu	682794/11/1	44	1		Plumber	Gardening	All seasons	147 x 26 and 15.8 x 37.6	0.10
N37	Joseph Musonda	191996/41/1	45	1		None	Gardening	All seasons	7.7 x 9.1 and 39.8 x 36	0.15
N38	Paul Lungu	759935/11/1	42	1		None	Gardening	All seasons	27.8 x 9.3	0.03
N39	Victor Ngobeka	161025/19/1	38	1		Worker LWSC	Gardening	All seasons	16.7 x 20	0.03
N40	Joseph Nkhoma	207252/19/1	21	1		None	Gardening	All seasons	41 x 17.6	0.07
N41	Raphael Phiri	386503/52/1	58	1		None	Gardening	All seasons	45.3 x 15.2	0.07

No.	Name of Household Head	NRC NO.	Age	Sex		Formal job Business	Agriculture type	Seasons	Size of agric land Within site area	
			yrs.	M	F				L X W = meter squared	In hectares
N42	Eunice Chalwe	220612/16/1	51		1	None	Gardening	All seasons	42.7 x 18	0.08
N43	Margaret Ngulube	125337/18/1	46		1	None	Gardening	All seasons	9.7 x 64.2	0.06
N44	John Lubasi	161241/19/1	35	1		None	Gardening	All seasons	15 x 75 and 36.1 x 5.3	0.13
N45	Chembwe Doris Chikubi	152954/63/1	51		1	None	Gardening	All seasons	16.2 x 75.5	0.12
N46	Agnes Phiri	476917/11/1	59		1			All seasons	28.1 x 43.1	0.12
N47	Doreen Tembo	675821/11/1	44		1	None	Gardening	All seasons	15 x 56	0.08
N48	Edward Mwanza	214312/16/1	60	1		None	Gardening	All seasons	13 x 21	0.03
N49	Moffat Zulu	186218/73/1	53	1		None	Gardening	All seasons	15.2 x 33.5	0.05
N50	John Chewe	179276/51/1	57	1		Business	Gardening	All seasons	55.5 x 15 and 17.4 x 15.4	0.11
N51	Nelia Tembo	674039/11/1	43		1	None	Gardening	All seasons	15.6 x 46.8	0.07
N52	Veronica Mutonga	667055/11/1	43		1	None	Gardening	All seasons	12.6 x 24.1	0.03
N53	Theresa Chinga	149883/19/1	51	1		Business	Gardening	All seasons	85.5 x 58.4	0.50
N54	Mkonda Banda	361809/54/1	53		1	None	Gardening	All seasons	42.6 x 54.1	0.23
N55	Jackson Mtonga	161174/19/1	38	1		None	Gardening	All seasons	86.1 x 8.7	0.07
N56	Rosemary Tembo	499665/11/1	51		1	None	Gardening	All seasons	29.5 x 66.9	0.20
N57	Fridah Njomvu	141183/18/1	37		1	None	Gardening	All seasons	15 x 20	0.03
	TOTALS:			35	22					6.53

2.17 Need and Mechanism to Conduct Updates

There will be need for updates to the RAP to ensure that no intended beneficiary is left out and that the resettlement plan is working accordingly. The monitoring program put in place will help identify indicators of project's likely success or failure.

3. DEFINITIONS AND ELIGIBILITY CRITERIA

3.1 Project-Affected Household (PAH)

A PAH is a household that loses assets and/or usage rights and/or income generation capacities because these assets/rights/capacities are located in the Project-Impacted Area. A PAH will usually include a head of household, his/her spouse and their children, but may also include other dependents living in the same dwelling or set of dwellings, like close relatives (e.g., parents, grandchildren). There are 57 project affected households on this project land.

3.2 Cut-off date

This is the date after which no structures, houses or anything else should be constructed within the affected area. Any such structures will not be considered for compensation. The cut-off date for this project was 1st September, 2021. The date was arrived at in a consultative meeting at Eastview Primary School (See minutes in Appendix 1). This date was announced at a meeting with all stakeholders who included the local leaders, the area councillor, the project affected persons, Lusaka Water Supply and Sanitation Company Social Safeguards Specialist and other local interested persons and consultants.

3.3 Displaced persons

These are people who have been driven from their homeland or place of residence by war, internal upheaval, or natural disaster.

3.4 Project-Affected Person (PAP)

Any person who, as a result of the implementation of a Project, loses the right to own, use, or otherwise benefit from a built structure, land (residential, agricultural, or pasture), annual or perennial crops and trees, or any other fixed or moveable asset, either in full or in part, permanently or temporarily.

3.5 Livelihood

Means of supporting one's existence, especially financially; a living.

3.6 Host community

When RAP involves physical relocation of PAP to another place, the resettlement place will have local residents known as the host community. These would be part of the affected persons because their lives would be impacted by the coming in of the PAP to settle near them. Such host community is engaged in the whole process of resettlement to ensure the PAP are welcomed by the local people. The host community is considered and consulted on how the project could assist them in welcoming their new neighbours.

3.7 Replacement Cost

With regard to land and structures, “**replacement value**” is defined as follows:

- (1) **Land in urban areas:** the market value of land of equal size and use, with similar or improved public infrastructure facilities and services, preferably located in the vicinity of the affected land, plus the cost of any registration and transfer taxes;
- (2) **Agricultural land:** the market value of land of equal productive use or potential located in the vicinity of the affected land, plus the cost of preparation to levels similar to or better than those of the affected land, plus the cost of any registration and transfer taxes;
- (3) **Household and public structures:** the cost of purchasing or building a new structure, with an area and quality similar to or better than those of the affected structure, or of repairing a partially affected structure, including labour and contractors' fees and any registration and transfer taxes. In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of the benefits to be derived from the Project deducted from the valuation of an affected asset.

3.8 Rehabilitation Assistance

Means the provision of development assistance in addition to compensation such as land preparation, credit facilities, training, or job opportunities, needed to enable Project Affected Persons and Displaced Persons to improve their living standards, income earning capacity and production levels; or at least maintain them at pre-project levels.

3.9 Resettlement Assistance

Support provided to people who are physically displaced by the Project. Assistance may include transportation, and social or other services that are provided to affected people during their relocation. Assistance may also include cash allowances that compensate affected people for the inconvenience associated with resettlement and defray the expenses of a transition to a new locale, such as moving expenses and lost workdays.

3.10 Involuntary resettlement

Resettlement is involuntary when it occurs without the informed consent of the displaced persons or if they give their consent without having the power to refuse resettlement. According to European Investment Bank (EIB) environmental and social standards, “Projects often necessitate land acquisition, expropriation and/or restrictions on land use, resulting in the temporary or permanent resettlement of people from their original places of residence or their economic activities or subsistence practices. When affected persons and communities do not have the choice to refuse such displacement, this process is known as involuntary resettlement.”

3.11 High risk/Vulnerable Groups

Vulnerable Groups: People who by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage, or social status may be more adversely affected by resettlement than others and who may be limited in their ability to claim or take advantage of resettlement assistance and related development benefits.

3.12 Project-Impacted Area

An area which is subject to a change in use as a result of the construction or operation of the Project and which has therefore to be acquired by Lusaka Water Supply and Sanitation Company Limited.

3.13 The Project

A venture to construct new wastewater treatment plant. The Project includes construction of the sewer pond, the water treatment plant, the spillway, and all other developments required for the project’s full operation. These may include, such as access roads, borrow pits, pipelines, resettlement sites, together with access roads to these sites and all ancillary facilities required.

3.14 Buffer Zone(s)

A strip around some elements of the Project. Since some people will likely continue to garden outside the Lusaka Water Supply and Sanitation Company project land, It will be important to fence off the project land to avoid future encroachments.

3.15 Re-settlers

Project-affected Households that are entitled to and choose to move to a new resettlement area, if it involves physical resettlement.

3.16 Tenant

Means an individual/institution/household occupying real estate under a private agreement with the owner whereby occupancy is paid for in cash or otherwise to the owner.

3.17 Physical Displacement

Loss of shelter and assets resulting from the acquisition of land associated with the Project that requires the affected person(s) to move to another location.

3.18 Economic Displacement

Loss of income streams or means of livelihood resulting from land acquisition or obstructed access to resources (land, water or forest) caused by the construction or operation of the Project or its associated facilities. Not all economically displaced people need to relocate due to the Project.

3.19 Landowner

Means an individual/ household/ institution recognized by Zambian law as owning land and having a valid ownership title.

3.20 Relocatees

Project-Affected Households that are entitled to and choose to accept cash compensation for their assets and move to a location of their choice.

3.21 Compensation

Payment in cash or in kind at replacement value for an asset or a resource that is acquired or affected by the Project at the time the assets need to be replaced.

3.22 Eligibility/entitlement criteria for compensation

In this RAP, only people found doing gardening in the project area at the time of the census and before the Cut-off date was communicated to the PAP are entitled to compensation in kind and livelihood restoration or other assistance as outlined in the Entitlements Matrix in Section 9. It should be noted that there are no houses, fruit trees, or any other physical property belonging to the PAP that will be will need to be compensated for in the project land.

3.23 Entitlement matrix

Households farming in the project area enumerated by census before the cut-off date, September 1, 2021, i.e., 57 households, are eligible to be considered as directly affected by the project and might be given priority for employment opportunities during the construction of the treatment plants. Out of the 57 households, not all may be able to work. Therefore, considerations will be made on how best to assist those who may be too old to work. The project affected persons have no property on the land, which is Lusaka Water's land. The vulnerable person will be assisted with some amount of capital out of consideration by Lusaka Water Supply and Sanitation Company Limited. See Section 9 for details and Annex 9 for the livelihood restoration plan.

3.24 Qualification of losses and impact

The people or entities directly affected by a project through the loss of land and the resulting loss of residences, other structures, businesses, or other assets do qualify for compensation by the project developer. In this RAP, the PAP will lose the opportunity they had of illegally using LWSC land for gardening.

3.25 RAP Implementation Unit

Team to handle the actual implementation of the RAP (they could be assigned by Lusaka Water Supply and Sanitation Company).

3.26 Project Management Unit (PMU)

Those who make up the management team for the whole project form this unit.

3.27 Project Implementation Unit (PIU)

Those who make up the supervisory team for the whole project form this unit.

3.28 Income Restoration

Re-establishing productivity and livelihood of PAP.

3.29 Income Rehabilitation

Assistance provided to the affected persons to supplement their income losses to improve, or at least achieve full restoration of their pre-project living standards and quality of life.

3.30 Income Restoration Plan (IRP)

The IRP is an implementation plan for this RAP, a tool that will guide the implementors of the RAP to ensure all is done according to acceptable standards.

3.31 Livelihood Restoration (LR) (Same as Income restoration)

Provision of assistance to enable project affected persons to maintain or improve their living standards, income earning capacity and production levels, either through similar or new activities.

3.32 Resettlement Policy Framework (RPF)

Framework guiding the preparation of a resettlement plan such as a Resettlement Action Plan (RAP) or an Abbreviated Resettlement Action Plan (RAP).

3.33 Restoration Plan (RP)

Shot form for income restoration plan.

4. POLICY, ORGANISATIONAL AND INSTITUTIONAL FRAMEWORK

This section provides an overview of the institutional and legal framework that has guided preparation and implementation of this Resettlement Action Plan. The framework involves every aspect of the resettlement process, from the identification of principles to the site identification and eventual movement of affected people from the land they squatted on for farming and gardening.

4.1 Institutional Framework

4.1.1 National Government

The President of the Republic of Zambia, elected for a maximum of two five-year terms, is head of state and heads the national government. The President exercises executive authority under provisions of the Constitution, extending to the execution and maintenance of the Constitution and all laws made under or continued in force by the Constitution:-

“As Head of State the President shall perform with dignity and leadership all acts necessary or expedient for, or reasonably incidental to, the discharge of the executive function of Government subject to the overriding terms of this Constitution, obliged to protect, administer and execute”.

The Cabinet, made up of the President, Vice-President, and Ministers assists the President in the determination of the government’s general policy.

A unicameral Parliament, popularly elected every five years, exercises legislative power. The Parliament enacts laws to ensure the governance of the country. Parliament controls and regulates the finances of the state through the passage of annual revenue and expenditure budgets.

4.1.2 Provincial Level

At provincial level, the hierarchy starts from the Provincial minister who is in charge of development implementation and governance in his province. He supervises the Local Authorities in each district of his province.

4.1.3 District Government

The administration of the District is vested in the Office of the District Commissioner, established by the Government in 1999 as part of the decentralization process. The office coordinates the functions of all development agencies at the district level as well as harmonizing the functions of Central Government and those of Local Government (Authority). All development agencies working in the district are members of the District Development Coordinating Committee (DDCC) that is chaired by the District Commissioner. The District Council provides the secretariat.

4.1.4 The Local Authority

The District Council usually referred to as the Local Authority, is a semi-autonomous institution operating as an agent of Central Government. It is authorized to perform specific functions on behalf of Government. The Council is the highest decision-making body at the district level. It formulates policies in the form of by-laws. The Local Authority provides a forum for local representation of the public by electing their local representatives, the Councillors.

The Local Authority is responsible to the Ministry of Local Government and Rural Development. The Local Authority possesses the statutory powers to make by-laws and regulations. According to the provisions under the Local Government Act No 22 of 1991, the Ministry of Local Government and Rural Development can amend or revoke by-laws issued by council and make regulations that Council has to conform to, through circulars and statutory instruments.

A Management Team, which is employed by the Council for specific responsibilities, administers the Council. However, the general establishment of the Council is bigger. It comprises the Council Secretary who is the Chief Executive Officer supported by Chief Officers and other auxiliary staff.

4.1.5 Governance at Ward Level

Wards make up Constituencies and they are under the oversight of ward chairpersons who report their area councillors. This is the grassroots leadership level where development planning starts from.

4.2 Legal Framework

This section describes how and on what basis the resettlements are done in Zambia, though there is no physical resettlement in the Wastewater Treatment Plants construction project at Ngwerere Township by Lusaka Water Supply and Sanitation Company as earlier mentioned. There is only economic resettlement. However, this section puts to perspective what regulations have been followed in doing this RAP.

4.2.1 Constitution of Zambia

The Fourth Republican Constitution (1996) recognizes the right to private property and to protection by the State of property. Part II of the Constitution enshrines the fundamental rights and freedoms of the individual. Section 11 (d) offers:-

“Protection for the privacy of his home and other property and from deprivation of property without compensation”.

The protection of private property is expanded further in Section 6 (1):-

“Except as provided in this Article, property of any description shall not be compulsorily taken possession of, and interest in or right over property of any description shall not be compulsorily acquired, unless by or under the authority of an Act of Parliament which provides for payment of adequate compensation for the property or interest or right to be taken possession of or acquired”.

Relevance: Although there is no relocation of the PAP and or fixed assets in this project, the process of assessment had to ensure that the provisions of this Act are strictly followed by determining whether or not the PAP had assets requiring to be compensated. Also, if later LWSC changes the design and wants to make the access road even bigger than the suggested size, then they will need to stick to this Act as they will definitely affect the residential area on the left hand side of the Access road and this will require an addendum.

4.2.2 Lands Acquisition Act of 1994

Section 12 (b) of The Lands Acquisition Act of 1994 provides that any person whose property is affected by a public project is entitled to compensation, and provides a mechanism by which people not satisfied with compensation may seek redress through the courts of law. It states:-

“The value of property shall, subject as hereinafter provided, be the amount which the property might be expected to realize if sold in the open market by a willing seller at the time of publication under section seven of the notice to yield up possession”.

The basis for assessment of compensation includes:-

Enhancement of value of land by reason of proximity of any improvements or works made or constructed on part acquired; and

Damage if any, sustained by the person having an estate or interest in land by reason of severance of such land.

Relevance: This Act will be applicable if the final decision will be to acquire extra land from a private farm for laying the treated Wastewater discharge pipe. The owner of the land is already agreeable to acquisition of this land by LWSC. Although there are no fixed assets belonging to the PAP to be evaluated in this project, in the event that during the project implementation some asset is for any PAP is impacted negatively, then this Act would guide the compensation arrangement.

4.2.3 The Agricultural Lands Act of 1994

Section 40 of The Agricultural Lands Act of 1994 identifies improvements qualifying for compensation to include:-

- Planting of orchards or fruit bushes;
- Improvement to watercourses for water supply – domestic and agricultural;
- Boreholes/wells, ponds; and
- Erection, alteration and enlargement of building

Relevance: The PAP have been given enough time to ensure they harvest whatever they planted by August, 2022. However, if LWSC were to do any preliminary works that would destroy the crops before this agreed month, then the PAP would be compensated for their crops.

4.2.4 Environmental Protection

The Zambia Environmental Management Agency (ZEMA) reports that prior to 1985, Zambia had no coherent and comprehensive policy framework and an apex institution for the management and utilization of environment and natural resources. Thereafter, important policy and institutional developments have taken place. These include: the adoption of the National Conservation Strategy; the enactment of the Environmental Protection and Pollution Control Act (EPPCA) and the subsequent establishment of the Environmental Council of Zambia (ECZ), the repealing of the EPPCA and the enactment the environmental Management Act and the subsequent renaming of ECZ to ZEMA. The results have been development of major programmes such as the National Environmental Action Plan (NEAP), the Environmental Support Programme (ESP), the Zambia National Biodiversity and Action Plan (NBSAP), the Zambia Forestry Action Plan (ZFAP), the National Action Plan (NAP) for the implementation of the United Nations Convention to Combat Desertification (UNCCD) the Zambia Wetland Strategy and Action Plan and the Copperbelt Environment Project (CEP). To achieve an integrated approach to the sustainable use and management of natural resources, the Government in 2004 embarked on the development of a National Policy on Environment (NPE). The main purpose of the policy is to ensure that socio-economic development will be achieved effectively without damaging the integrity of the environment or its resources.

Relevance: Component A had two stand-alone ESIA's that were approved during the development of the Terms of Reference guiding the development of a Single RAP for Component A.. The project will ensure that all environmental concerns are addressed in line with the provisions of the law on environment.

4.2.5 Environmental Management Act number 12 of 2011

The legal basis in Zambia for conducting the survey is the Environmental Management Act number 12 of 2011 that stipulates under section 23 that:

“The proponent of a policy, programme or plan that could have an adverse effect on environmental management or on the sustainable management and utilisation of natural resources shall conduct a strategic environmental assessment of the draft policy, programme or plan and present a strategic environmental assessment report to the Zambia Environmental Management Agency, for approval”

The Strategic Environmental Assessment, founded on the legal framework above, was carried out to support and guide the implementation of the proposed project in Ngwerere township of Lusaka District.

4.3 International Best Practice

4.3.1 EIB Environmental and Social Standards

Chapter 6 of the **EIB Environmental and Social Standards** outlines objectives of the following EIB Standards as follows:

- Avoid or, at least minimise, project-induced resettlement whenever feasible by exploring alternative project designs;
- Avoid and/or prevent forced evictions and provide effective remedy to minimise their negative impacts should prevention fail;
- Ensure that any eviction which may be exceptionally required is carried out lawfully, respects the rights to life, dignity, liberty and security of those affected who must have access to an effective remedy against arbitrary evictions;
- Respect individuals', groups' and communities' right to adequate housing and to an adequate standard of living, as well as other rights that may be impacted by resettlement;
- Respect right to property of all affected people and communities and mitigate any adverse impacts arising from their loss of assets, or access to assets and/or restrictions of land use, whether temporary or permanent, direct or indirect, partial or in their totality. Assist all displaced persons to improve, or at least restore, their former livelihoods and living standards and adequately compensate for incurred losses, regardless of the character of existing land tenure arrangements (including title holders and those without the title) or income-earning and subsistence strategies;
- Uphold the right to adequate housing, promoting security of tenure at resettlement sites;
- Ensure that resettlement measures are designed and implemented through the informed and meaningful consultation and participation of the project-affected people throughout the resettlement process and,
- Give particular attention to vulnerable groups, including women and minorities, who may require special assistance and whose participation should be vigilantly promoted.

The table below points out the EIB Environmental and Social Standards and explains whether or not the same are triggered in this project.

Table 11: Triggered standards defined in the EIB's No. 6 Standard: Involuntary Resettlement policy, in this RAP

Standard	Status	Explanation
Census, Baseline Data and Cut-Off Date Paragraphs in Standard 6 No. 30, 31 and 32	Triggered	In section 4 is presented the census and socio-economic baseline survey to determine the number of people to be displaced, and livelihoods affected. Also in section 5 is presented the cut-off date for eligibility claims alongside the cut-off date, following public information dissemination. The socio-economic survey identified the affected persons' current profile and resilience. Cut-off dates determined eligibility for compensation, and assets acquired after the cut-off date are not eligible.
Eligibility Criteria and Relocation Sites Paragraphs in Standard 6 No. 33, 34, 35, 36, 37, 38.	Triggered	Section 5 of this RAP outlines the eligibility for compensation and resettlement assistance for those negatively affected by a project. This section explains whether is presence of people with formal land titles, customary or traditional rights to the land, and those who occupy the land but have no formal title. Also section 8 explains if relocation sites apply and meet certain criteria defined in standards such, not being situated on polluted land, not being located in disaster-prone areas, and being culturally appropriate. Also is explained conditions of these project in specific where gardening land is impacted, and the compensation suggested.

Standard	Status	Explanation
Compensation and Income Restoration Resettlement Assistance Paragraphs in Standard 6 No. 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49.	Triggered	The section 9 in the current RAP outlines guidelines for compensating individuals affected by implementation of the project. This section explains how compensation is provided for restore the loses simultaneously to commensurate quality, size, and value or better. Compensation measures in the present plan include improvements to the business losses and other economically assessable damage. Also, a Livelihood Restoration Plan has been developed to ensure that compensation and income restoration measures are implemented without discrimination based on gender, race, ethnicity, religion, disability or other prohibited grounds.
Consultations Paragraphs in Standard 6 No. 50, 51, 52.	Triggered	Section 12 of in the plan presents how the consultation with all involved parties were and will be implemented, to mitigate adverse project impacts and ensure sustainable benefits. Consultation included women, vulnerable and marginalized groups.
Grievance Mechanism Paragraphs in Standard 6 No. 53.	Triggered	A Grievance Redress Mechanism has been included in the present plan. Which is independent, free an in line with all EIB's standards regarding stakeholder engagement. This mechanism will address all concerns about compensation and livelihood restoration from the affected people.
Forced Evictions Paragraphs in Standard 6 No. 54, 55.	Triggered	The project will involve eviction of PAP from the land they have been using as gardens for over 8 years. LWSC will ensure that they provide livelihood restoration in kind i.e. employment to the PAP or their relatives. In addition, there will be training of the PAP to equip them with knowledge of how to survive without the gardening they are currently doing.
Screening and appraisal Paragraphs in Standard 6 56, 57, 58.	Triggered	Section 11 in the plan outlines the process for determining the applicability of Standard 6 to the promoter adopting the EIB's environmental and social screening process. In the referenced section is assessed any potential impacts related to economic displacement and effects on livelihood. All potential impacts are identified, alongside with their nature and magnitude of the likely involuntary resettlement; and the respective measures to minimize the effects of displacement, and provide information on the capacity of sponsors or competent public authorities to support the processes involved. The project also has provided EIB with an acceptable Resettlement Policy Framework before developing the current document.
Planning Tools Implementation and Monitoring Paragraphs in Standard 6 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71.	Triggered	This RAP defines the roles and responsibilities in the resettlement process, emphasizing the importance of avoiding expropriation and using negotiated settlements. In this case where involuntary resettlement is unavoidable, a Resettlement Policy Framework (RPF) and Resettlement Action Plan (RAP) has been implemented, with measures in place to ensure affected persons are informed, consulted, compensated, and provided with assistance for livelihood restoration. The RAP has included guiding principles, an analysis of impacts and legal frameworks, eligibility criteria, compensation measures, sustainable arrangements, and a grievance mechanism. Also, section 15 includes guidelines for monitoring and reporting on implementation, with the effectiveness of the resettlement action plan subject to monitoring and review by qualified resettlement specialists.

The following objectives and targets shall be adopted to buttress the resettlement planning and implementation process:-

- The resettlement process shall be characterized by transparency and structure and will include the active participation of the affected households and communities;
- The Resettlement Action Plan (RAP) shall be put together by independent and suitably qualified specialists;
- Affected people shall be notified of the need to move from the project site as early as possible to facilitate their own planning;
- The livelihoods of the PAP shall be subjected to a regular process of independent monitoring and evaluation.

4.4 Resettlement Unit – Functions and Organizational Structure

As it has been mentioned already, this RAP only involves economic displacement. To that end, this RAP simply explains the roles which the institutions play as their routine work whenever there is a development program that involves physical resettlement of PAP or assets. Participation of several key institutions might be involved in different ways during the planning and implementation of the RAP. The main ones include Road Development Agency (RDA), Zambia Environmental Management Agency (ZEMA), Department of Resettlement (Vice President's Office), and Government Valuation Department (if land for discharge pipe will be required and if the access road expansion will impact on any private property, which is unlikely), Chongwe Municipal Council, Local Development Committees from Ngwerere compound. Table 12 summarizes the functions of the various organization in this project.

Table 12: Institutions that might be involved either directly or not in the RAP processes

	Institution	Role	Responsibility	Importance
1	Department of Resettlement	Works with officers that handle resettlement-related issues such as evaluators, land surveyors, sociologists and agricultural experts	Observe how the economic resettlement will be handled.	It is important because should there be need, the Department will advise LWSC on best way forward of critical issues
2	Road Development Agency	Supervise and monitor the implementation of Environmental and Social Management Plans for all road construction projects in the country	Supervise the expansion of the WWTPs access road	It's important because the contractor will need to abide by RDA standards for road construction
3	Zambia Environmental Management Agency	Manages the EIA and RAP processes, giving approvals and making decisions and ensuring that management of the project occurs in accordance with decision made	ZEMA will approve the RAP and guide the economic restoration process	This is very important because no development project is done without ZEMA approval
4	Government Valuation Department	The role of this department is to do valuation for the project affected persons	If later required, they will be involved in valuation of fixed assets	Valuations must be carried out by certified valuers
5	Department of Infrastructure and Support Services	Guides infrastructure development and coordinates the works of other institutions such as the Local Authority, NGOs, Donors and Agencies.	The department will: - Render support to Local Authority on expansion of access road. - Render support in designing infrastructure at the sites.	This is important because the project involves infrastructure development

	Institution	Role	Responsibility	Importance
6	Developer/Implementer These are LWSC	Implement the development project	Construct new wastewater treatment plants via their contractor and consultants Approve funds for the various needs of the project	Without the developer, there will be no project
7	Consultants	Provide professional advice to the developer	Do the EIS, RAP and help implement the project and supervise contractors and sub-contractors	It's a must to have independent consultants to ensure effective monitoring and supervision of the project
8	Contractor	Construct the development infrastructure	Construct the WWTPs on Ngwerere site	Construction of the treatment plants needs a contractor of contractors
9	Social Welfare	Ensures welfare of all citizens, especially the poor and the marginalised	Monitor welfare of the PAP as their routine work, especially the vulnerable PAP	The project affects vulnerable PAP economically
10	Local Authority	Helps in resolving grievances Guides the LDCs on matters of development	Assist whenever required in conflict resolution via the area councillor's office	They are owners or the surrounding areas of the project and must be consulted at every stage
11	Local Development Committees (These are committees established in the constituencies as a starting point of development planning by the Local authority and the area councillor ensures that such committees are functioning well in his/her area).	Act as grass-root authority of the project areas	-Support the construction of the WWTPs by explaining it to local residents -Ensure that the local people are not disadvantaged in any way by the project	Very important as the beginning of authority at local level Guide on who is local resident and who is not when need for employment arises.

5. RESETTLEMENT SITES

No resettlement sites are required as there is no one who has lost their homes/houses, land or any other property. The fields and gardens are in the land belonging to the Lusaka Water Supply and Sanitation Limited.

6. CONSIDERATION OF ALTERNATIVES

6.1 Site Identification

There was no need for identifying sites for resettlement since there will be no physical relocation of any PAP. The PAP live within the nearby settlements and their residencies are not be affected by the new WWTP.

6.2 Selection of Resettlement Sites

As state in 8.1 above, there will be no physical relocation of any PAP, and therefore there was no need for selecting sites for resettlement since. So the issue of selection of resettlement sites does not exist. If this was not the case, the Resettlement Department under the Office of the Vice-President would have been involved in assisting the PAP in their resettlement and livelihood restoration.

6.3 Product/Service

There is no alternative to effective water and sewerage system. No product can replace water.

6.4 Resettlement Land

Land in Lusaka is generally “finished”, the existing WWTP site is the best option because the site is on land already owned by Lusaka Water Supply and Sanitation Company Limited, and are located close to watercourses needed for discharge of the treated effluent, and at the downstream of the existing sewerage system.

7. COMPENSATION AND REHABILITATION ASSISTANCE

It should be stated in no uncertain terms that the project affected persons at the proposed site is not entitled to land compensation because the land does not belong to PAP. The fact that they are not entitled to land compensation is in line with the World Bank policies on resettlement as outlined in Environmental & Social Framework 5, Land Acquisition, Restrictions on Land Use and Involuntary Resettlement (ESS5, World Bank, 2017) and supported by KfW and EIB. These policies are also cited in the Operational Framework for this RAP (See *Final Outline RPF LWWP* Annex 14).

The land is under the ownership of LWSC and is on Title Deeds (See Title Deeds in Appendix 8). This being the case, physical relocation is not required as the PAP will remain in their current residential places because the residences are not affected. What are affected are the pieces of land they used for farming and gardening. The sizes of these pieces of land were measured during the census by the RAP team (See Tables 15 for inventory of the affected persons)

However, the construction of the new wastewater treatment plant in this area will have a number of negative economic impacts on the affected population because for years now, these PAP have been using the land for farming and earning a mediocre income out of it. Hence, the project, in some extent may cause economic displacement to these PAP. The fact that they do not own the land does not disqualify them from receiving assistance for livelihood restoration after the displacement. IFC Handbook for Preparing a Resettlement Action Plan says on page 32 that ***“the absence of legal title to land or other assets is not, in itself, a bar to compensation for lost assets or to other resettlement assistance.”*** In other words, Squatters are entitled to resettlement assistance if they occupied the project area before an established cut-off date, which is the case in this project. However, Lusaka Water Supply and Sanitation Company has given the PAP one extra full season to grow their fields and gardens. This will give the PAP enough time to use the proceeds from the gardens and fields to plan for their future sources of income.

“The population affected by the project may include people who are residing on or otherwise occupying land at or near the project site in violation of local or national laws. People who belong to this group, often referred to as “squatters,” are not entitled to compensation for loss of land under IFC policy. However, they are entitled to compensation for any improvements made to the land (such as structures, perennial crops, and trees) as well as to resettlement assistance if they occupied the project area before an established cut-off date” (IFC Handbook for Preparing a Resettlement Action Plan)

IFC Guidance Note 5 says in point 29 that *“Transitional support should be provided as necessary to all economically displaced persons, based on a reasonable estimate of the time required to restore their income-earning capacity, production levels, and standards of living.”* This is transition from the state of being a squatter to the state of being without any means of sustenance and eventually to a state of having an established alternative source of income. This is done because there can be economic displacement with or without physical displacement.

7.1 Eligibility for Compensation and Assistance

People found in doing gardening in the project area are entitled to compensation and/or livelihood restoration or other assistance as outlined in the Entitlements Matrix in the following section. It should be noted that there are no PAP whose houses, fruit trees, or any other physical legally titled property is located on the project land. Therefore, the only entitlement by the PAP in these areas are compensation for crops if the PAP are not allowed to harvest and the compensation for inconvenience if they are not given enough time to prepare their exit from the land.

7.1.1 PAP with formal legal rights

In this project, there are no persons with formal legal rights recorded at the project site. All the PAP are utilizing Lusaka Water Supply and Sanitation land for their gardening. Those with houses along the access road are also not affected as their houses are far enough to allow the expansion of the access road without any serious impact on their houses.

7.1.2 Persons with no formal legal rights

All the PAP gardening on the LWSC land can be classified as persons with no formal legal rights to the land they were gardening on at the time of the census. The date of the completion of the survey on informal users coincides with the cut-off date September 1, 2021, meaning that any individuals/ households that use/occupy the project affected land (without legal rights or claims) after this date are not entitled to compensation and/or livelihood restoration assistance.

7.1.3 Vulnerable groups

Some individuals or groups were considered more vulnerable than most of the affected population and required the implementation of special livelihood restoration assistance measures. Such groups might include:

- Informal users of affected land who have no sources of income or assets of their own;
- Persons who depend on the affected land for incomes/livelihoods and it is the only land they own or use;
- Elderly single headed households, single parent households, households headed by children etc.;
- Old Persons who will be affected by the economic displacement, beneficiaries of social welfare;
- Disabled or differently abled persons: The results of the interviews indicate that none of the household surveyed claimed to have disabled persons in their families.

7.1.4 Informal users

All the PAP in the project site are Informal Users who cultivate the land of LWSC without express approval by the company, nor even a verbal agreement. However, they were not stopped from using the land until the need for this project to use the land came in. Since they were left unstopped and they have been using this land for daily income, they should also receive special attention from the PIU to assist them with livelihood restoration.

Conclusion: All the PAP are eligible for livelihood restoration since they will have to cease gardening on the LWSC land to give way to the construction of the WWTPs. LWSC will ensure that they are helped with livelihood restoration so that none of them will be left worse off than before the project. Much as they do not own the land on which they are gardening, and are therefore not eligible for land compensation, they are entitled to livelihood restoration. LWSC will therefore:

- (1) Compensate the vulnerable persons among the PAP to assist them with business capital.
- (2) Provide training to all the PAP in businesses other than gardening and in financial management tips.
- (3) Allow all PAP to do the gardening for up to August, 2022 to help them save money and prepare themselves for ceasing gardening on the project land.
- (4) If the project removed them before the agreed upon month of August 2022, then their crops will be assessed and compensated for by Lusaka Water Supply and Sanitation Company Limited.

7.1.5 Asset Restoration, Valuation and Compensation Approach

There has been no asset valuation since no assets or land belonging to the PAP will be impacted by the project. The land PAP were using for farming and gardening belongs to LWSC. The Consultants and Lusaka Water Supply and Sanitation Company have been meeting with representatives of the affected people at the WWTP site to ensure they are engaged and are aware of the intention to carry out the new water treatment plants project. The minutes of the meetings are herein attached as annexes in Annex 1 and Annex 3.

7.1.6 Land Value and Compensation Amounts

There is no land compensation in this project because the land in question belongs to Lusaka Water Supply and Sanitation Company Limited. The matter of the economic displacement has been addressed as in last paragraph of 9.1.1 above.

7.2 Compensation Entitlement Matrix

The following table shows the Compensation Matrix which has been considered in this RAP as was proposed in the RPF March, 2015 and ratified in the RPF of August, 2016. Most of these standards were not applied in this RAP because the scope of impacts does not include impacts of fixed assets. Table 20 below shows how many PAP, what their impacts are, and how the impacts will be addressed.

Table 13: Compensation Matrix as proposed in RPF 03.2015 and confirmed in 08.2016

General Description	Definition	Compensation Approach/Types	Compensation Mechanism	Implementation Approach
Loss of portion or total loss of residential land	Land owned by individual landowners adjacent to access road which may be required permanently since the start of construction for extension of the road.	Replacement of or compensation for the land shall be negotiated with the owner and shall form part of the construction contract for the sub-project.	Market value or replacement cost whichever is higher. When possible, replacement shall be of an equivalent value and in-kind. Other resettlement assistance will be considered in relation to the socio-economic assessment.	Team consisting of a technical expert, social expert, legal expert and the contracted asset transfer professional valuation expert, in consultation with the PAP.
Loss of agricultural land	Area in cultivation, being prepared for cultivation, or cultivated during the last agricultural season.	Loss of land, labour, and crop loss shall be compensated by LWSC through provision of land of equal productive capacity and which is satisfactory to the PAP.	Using a single rate regardless of the crop, incorporating the combined at market value of all staple crops lost, costs for preparing new land at the time of compensation will be paid.	Preliminary identification has occurred and possible areas of impact identified. Land mapping to be performed for Option 5 by LWSC specialist team.

General Description	Definition	Compensation Approach/Types	Compensation Mechanism	Implementation Approach
Temporary loss of leased land	Land that will be acquired for a set period of time as a result of the project, including damage to or restricted access to driveways, as well as land owned by Road Development Agency or City Council on which PAP solution for access	General agreement on compensatory measures with relevant agency and in consultation with PAP.	All damages to private land or property shall be compensated at prevailing market rates including compensation for tenants, if any, regarding rental fees and dislocation allowances for when the land/structure is inaccessible.	Negotiations between contractors and land-owners so that expenses can be included in the bid price. Damage during road crossing to be negotiated with Road Development Agency directly.
Temporary loss of access to market space	Land that is part of the road right-of-way that has been used as market space with implicit permission.	Compensation agreement between LWSC, and the market representatives. The marketers do not pay any rent to LCC because such places are not officially designated for such land use, and the marketers are in such places unofficially.	LWSC will meet the reinstallation cost for marketers' structures and loss of revenue for the downtime in view of the census and social assessment.	LWSC valuation team in consultation with the PAP.
Loss of agricultural produce	Standing seasonal crops – grown near ponds or as encroachments in right-of-way such as tomatoes, cabbage, maize, rape; this may also include productive	PAP to be compensated for their (temporary) loss of income and standing crops. Productive trees will be reimbursed.	Crops shall be compensated at prevailing market rates.	LWSC valuation team in consultation with PAP.
Loss of permanent physical assets	Fixed assets other than land (e.g., housing, market stalls).	Replacement to be negotiated with owner; should form part of the construction contract Option 4B.	When possible, replacement shall be of an equivalent value and in-kind. Where cash is paid for assets, payment will take into account market.	LWSC valuation team in consultation with PAP.
Loss of temporary physical assets	Buildings located along the edges of the property boundaries and/or encroaching on the road right-of-way; toilets, makeshift kitchen, temporary animal structures and tuck shops.	Compensation agreement between LWSC and the PAP. Notification period will be agreed as well.	Compensation for physical assets will be paid based on the replacement cost or market value, whichever is higher. Loss of economic base of livelihood will be considered.	LWSC valuation team.
Temporary loss of access to leased land bid price.	Land along the right-of-way that is leased for billboard placement.	Agreement on compensatory measures between LWSC, LCC and the Marketers.representatives.	LWSC will compensate for the lost rent at LCC rates, and meet the reinstallation cost for advertising structures.	LWSC valuation team.

7.3 Restoration for each category of impacts

All the 57 affected households in Ngwerere need livelihood restoration because the gardens should not be viewed as their only source of income. They all need to be trained in other financial literacy / entrepreneurship development for their income outside agriculture that do not require big pieces of land. Taking advantage of the allowance to do farming this season, they can raise capital to start do any other small businesses which can eventually grow and sustain them. So what they need at the moment is knowledge of how to do these things. In the suggested budget for this RAP is a suggestion for the training costs (see section 14.2).

Table 14: Income restoration/rehabilitation assistance

Township	Affected households	Type of impact	Mitigation measures	Other Assistance
Ngwerere East	57	Ceasing gardening activities leading to economic disruption.	Extension of gardening to prepare for exit from the land. Employment priority to be offered to the PAP or their dependents unless there is need to import a special skill.	Training of the PAP in alternative Survival skills i.e. financial & entrepreneurship.
	1	Land use restriction where the discharge pipe will pass.	Cash compensation and the value to be determined by GVD.	Disturbance allowance will be 20% of the value of land compensation.

7.4 Negotiation Procedures

Several meetings on negotiation were held and the PAP were talked to over their loss of agricultural activities. Chairpersons and other local leaders and the affected people were all involved in the negotiation process by attending and participating in these meetings. Procedures followed are registered in Annex 8.

The PAP at the site do gardening every month of the year using shallow wells dug by themselves for the purpose of obtaining water for irrigation. For this reason, and for the fact that most of them are not formally working as seen in the inventory tables above, the PAP needed to be handled with a lot of consideration to ensure that their livelihoods are maintained. So to ensure that they exit the Lusaka Water Supply and Sanitation Company land without serious difficulties, Lusaka Water Supply and Sanitation Company decided to give them the opportunity to grow their gardens up to August, 2022. This decision was welcomed by the PAP and they since promised to abide by their commitment to leave the land in the agreed upon month.

7.5 PAP Committee

A Project Affected Persons Committee is going to be advocated by the promoter, at the beginning of the RAP implementation. This committee will represent the interests of the community members who will be affected by the economic displacement caused by the project. The committee will consist of community members who represent the diverse interests and concerns of the affected population; the members will be selected through a transparent and participatory process that involves the community in the selection process; and the selection criteria will include knowledge of the project, leadership skills, and willingness to serve the community.

7.5.1 Implementation Support

The committee will work closely with the project promoter to ensure that the rights of the affected people are protected. Also, will provide guidance and support to the project promoter to implement the project in

a way that minimizes the negative impact on the community and will advocate for the interests of the affected people and ensure that their voices are heard.

The Committee meetings are going to be supported by the promoter to be held regularly and in a location that is accessible to all members. The committee will establish a schedule of meetings and ensure that all members are informed in advance. These meetings will be conducted in a respectful and inclusive manner, allowing all members to express their opinions and concerns.

The committee will establish communication channels with the project promoter, authorities, and other stakeholders; and ensure that the affected people are informed about the project and its impact on their lives.. The committee will work to build relationships with stakeholders and ensure that the interests of the affected people are represented in further decision-making processes.

7.5.2 Compensation Agreements and Livelihood Restoration

The committee will supervise the implementation of compensation agreements with the project promoter on behalf of the affected people and work with the promoter to execute the livelihood restoration plan that ensures that the affected people are able to maintain their standard of living.

Similarly, the committee will monitor the implementation of the compensation agreements and livelihood restoration plan to ensure that they are being implemented effectively.

7.5.3 Follow-up and Monitoring

The committee will establish a system for follow-up and monitoring to ensure that the project is implemented in a way that minimizes the negative impact on the community. In this sense, the committee will conduct regular site visits to monitor the progress of the project and ensure that the compensation agreements and livelihood restoration plan are being implemented effectively.

The committee will provide regular updates to the community on the progress of the project and the implementation of the compensation agreements and livelihood restoration plan.

7.6 Grievance Redress and Arbitration Procedures

The procedures for submission of the grievance, acknowledgement, investigation, resolution, and dissemination of results, are comprehensively defined in Annex 8.

8. TRANSITIONAL ARRANGEMENTS

There will be need for the developer to take care that the affected persons' lives are not worse off after the project is executed due to their discontinuation of farming and gardening. Transition from a situation where they used LWSC land for earning a living to a situation where they have to start looking for a different source of income is not going to be easy for them. Monitoring of the welfare of these affected people after evicting them from the land they cultivated will help the project to ensure these people are living well in the following areas.

8.1 Loss of income

There will be no loss of income for the farmers as they will be given enough time to harvest their produce before they can be asked to leave the affected fields. Since they have been informed of the upcoming project in advance, they have enough time to find alternative land for farming. This is especially so because for this farming season, they have been allowed to grow crops until they harvest in August, 2022.

8.2 Loss of clientele for retail outlets

There are no retail outlets in the affected area so there is no loss of clientele.

8.3 Legal Costs

There are no legal costs to be incurred by the affected as well as the client. The land in question is already on title deed and is exclusively owned by Lusaka Water Supply and Sanitation Company.

8.4 Transport

The affected will not need to be assisted with any transport since they will not need to be relocated to some other area. No resettlement sites were necessary to arrange since the project only affected gardens and fields within Lusaka Water Supply and Sanitation Company land and no permanent structures were found within the project land.

8.5 Farmers who lose the current agricultural season

No farmer will be forced to leave their agricultural fields un-harvested since they will have enough time to do so.

8.6 Dispute resolution

Any dispute resulting from the relocation process will be resolved through the Grievance Redress Mechanism discussed in Chapter 9. All compensation-related issues are also discussed in Chapter 9.

9. ENVIRONMENTAL IMPACTS OF THE PROJECT AND MITIGATION MEASURES

9.1 Introduction

This section describes in brief some of the impacts expected and their mitigation measures. A detailed description of the impacts is covered in the EIS. The Construction of the wastewater treatment plant in Ngwerere will have direct implications on the households living within the project area. The following are some of the impacts:

9.2 Magnitude of Resettlement Action Plan Activities

No PAP will be physically resettled or relocated to anywhere. The displacement or disallowing of the local communities to use LWSC land will be carried out when the company initiates the proposed project. The people have been adequately informed in all matters relating to the future regarding farming on the two treatment plants. Affected households in project areas, who usually vegetable gardens will be allowed time to harvest their crops prior to project commencement. They are 57 households who have been using the land belonging to LWSC to sustain themselves and their families. The fact that there will be no physical relocations and there are no fixed assets belonging to the PAP makes this resettlement action plan a lot easier.

9.3 Methodology used in the Impact Assessment

- (1) Ground truthing – this is information obtained by direct observation and measurement and not information provided by inference. The RAP team physically carried out site visits and actually inspected the sites to see the possible impacts of the project.
- (2) Checklists – use of a checklist to ensure a comprehensive assessment of impacts.
- (3) Impact analysis and provision of related recommendations.

9.4 Identified Expected Impacts, Analysis and Mitigation Measures

As pointed out already, there will be impacts both negative and positive as a result of this project. The positive impacts need to be enhanced while the negative ones should be mitigated or even where possible avoided completely. Below is an analysis of some of the expected impacts:

9.4.1 Influx of people in the project areas

The RAP will basically be dealing with the same people who have been identified as affected, and their residences will not be impacted in any way. However, where there is development taking place, there is a strong attraction so much so that some people will come from elsewhere in search of employment. Even some of the relatives of the affected persons currently living elsewhere might join them hoping to get employed. This influx could lead to a higher demand on services such as water provision, education and health.

Mitigation measures: LWSC will ensure increased water supply and sanitation so that the people in these areas have enough facilities. Also, the contractor under the supervision of LWSC will ensure that the employees are provided with enough clean drinking water and sanitation at the construction site. For education and health, there are already enough facilities not far from these areas.

9.4.2 Impact on natural resources

The main natural resource benefiting the locals is water for gardening. If not handled properly, the people on the downstream of the Ngwerere Stream would have contaminated water, thereby threatening their health. The project will have no effect on other natural resources.

Mitigation: LWSC will ensure that only treated wastewater is discharged into the nearby streams for people in the downstream to use in their gardens.

9.4.3 Nutrient pollution

Municipal wastewater effluents contain nutrients such as nitrogen and phosphorous. Although they are beneficial to plant life, high concentration can result in adverse effects. Excess plant growth, especially algae, leads to eutrophication of the receiving surface water bodies such as Ngwerere stream. This condition of excess growth leads to degradation of the aquatic ecosystem and bioaccumulation and bio magnification of chemicals in grown crown using the wastewater which is not fully treated especially during the trial period of the plant after construction.

Mitigation measures: LWSC to ensure that proper treatment of the wastewater by using technology that can handle this impact. Testing of the treated water to ensure management of such impacts

9.4.4 Human Health and Socioeconomic impacts

Wastewater pollution causes many human health problems. Contaminants may be ingested in drinking water by the local residents using hand dug well and borehole water for drinking. The presence of microbial pathogens in wastewater effluents creates a human health risk, many water-related health problems result from human sewage contamination from bacteria, viruses, or other microorganisms.

Mitigation measures: In order to ensure problems arising from contamination are tackled, the LWSC will upgrade the WWTPs facilities and make sure that maintenances and inspections of the facility is done on regular basis.

9.4.5 Possible emergencies and plant failure

Operational difficulties maybe experienced at plant start-up or during periods when equipment malfunctions, particularly the equipment providing aeration for biological treatment stage. The effluent discharged under these emergency conditions would still be improvement over the existing condition where raw sewage and wastewater is directly discharged into the Ngwerere stream due to human blockage.

Mitigation measures: The frequency of such incidents is likely to remain low as long as adequate training of operator personnel is maintained and supplies of spare parts are kept available and utilized as recommended to keep all units operational at close to design efficiency levels.

9.4.6 Impact of restoration program

The restoration program will involve training of the PAP in survival skills that will attract other local people who might want to participate and may cause commotion.

Mitigation measure: LWSC will ensure proper management of the process by including only those that have been clearly identified as PAP in this project.

9.4.7 Loss of Existing Gardening

The PAP are not going to lose any land because they did not own the garden land they are using in the first place. However, the implementation of the proposed project will result in loss of the income-generation gardening activity. This may have serious implications on the livelihoods of the residents whose main income is generated from vegetable gardening.

Mitigation: Lusaka Water Supply and Sanitation Company will assist then PAP by allowing them time to generate capital through their gardening up to August 2022. Additionally, the PAP will undergo some training as a way of empowering them with knowledge about alternative business they can do and how to effectively manage their incomes.

9.4.8 Effect on Public Safety

The project will have a significant effect on public safety. Activities other than those authorized by the project phases will cause a breach in public safety.

Mitigation measure: To this effect, signs will be posted warning surrounding communities to the dangers of activities that encroach on the project area.

9.4.9 Effect on Cropping Activities

The implementation of the project will cause all farming activities to cease in the project area.

Mitigation Measure: The staging of resettlement will be implemented in such a way that allows the population to harvest their crops from the fields. All the PAP are already aware that they will have to harvest their crops not later than August 2022.

9.4.10 Air pollution:

Various project activities including land clearing, and construction of the spillway, and establishment of support infrastructure are anticipated to generate air pollutants. Dust is expected from land clearing, earth moving, material handling and transportation activities during construction of the treatment plants.

Mitigation measures will involve dust suppression by spraying water on all ground to be worked and any surface with potential to generate dust, adequate cleaning of working area to reduce on dust prevalence with potential to blow off, covering stored materials, imposing speed limits on movement of vehicles, strict adherence to designated haulage routes.

9.4.11 Land degradation

This is likely to occur as a result of erosion and land dereliction from project activities and materials such as spilled oil, and fuels and other chemicals, poorly disposed of domestic, commercial and industrial waste products including construction wastes, packaging waste, plant and equipment maintenance wastes, sludge from oil storage tanks and from oil and sediment traps, etc.

Mitigation measures will involve prevention and minimisation of waste generation; localisation of waste to areas of generation and designated collection points; reuse and sale of recyclable materials such as used oil and scrap metal; segregation and safe containment of wastes for disposal using approved ZEMA disposal methods. Other measures will include proper profiling and landscaping of disturbed sites to blend into the surrounding area.

9.4.12 Ecological Disturbance

There is likely to be ecological disturbance due to land clearing for road expansion, haulage; borrow pits site and service routes construction and other disturbing activities.

Mitigation Measures will include limiting land clearing to absolutely required areas.

On the other hand, it is envisaged that the project would have positive impacts on the local, regional and national level due to the fact that it would result in improved water and sanitation services and socio-economy of the project area.

Many of the negative impacts can be avoided or minimised to acceptable levels while positive impacts or benefits derived from the project would be enhanced by adopting good engineering practices and appropriate mitigation measures during construction and use of the Wastewater treatment plants. Some of the positive impacts are listed below.

Positive impacts

9.4.13 Plant odours (minimal odour Emissions), mosquitoes and other nuisances

Odours from the plants are expected to be reduced from existing levels and not pose a major problem due to the introduction of the new wastewater treatment plant In Ngwerere. All of the process units which are known to cause odours will be contained within buildings and provided with odour removal equipment.

Enhancement measures: Ensure the project is accomplished

9.4.14 Eradicates Potential Diseases

Construction of the new WWTP eliminates disease-causing bacteria and kills harmful organisms. It filters out contaminants before the wastewater leaves the tank and enters the ground. The filtering process prevents diseases from entering water sources or reaching plants and farms and animals.

Enhancement measure: Ensure that the new waste water treatment plant project is a success so that the new technology takes care of the possibility of contamination of downstream water resources.

9.4.15 Affected Public Infrastructure

There will be no public infrastructure that will be affected in the project area due to the construction of the wastewater treatment plants.

Enhancement measure: The construction works will be restricted to the project sites to avoid affected other areas that might include public infrastructure.

9.4.16 Other Socio-economic Impacts of the main project

- General improvement in local livelihoods during construction and operation phase due to employment opportunities created,
- Increase in revenue to local authorities and institutions from levies,
- Increased trade opportunities in the community due to increased population,
- Increased sense of pride and enhanced general feeling of modernity among the locals.
- Increased business opportunities for local suppliers

10. PUBLIC CONSULTATION

LWSC widely consulted the general public on the issue of resettlement. Several stakeholders were consulted including the affected people at the site (farmers who are illegally using the LWSC land) were also consulted.

Meeting on resettlement were conducted on 28th July 2021 to inform the land users of the incoming project which is the construction of the new WWTP, on 29th July another, meetings was held at Ngwerere WWTP and the people that attended the meetings were local farmers that have been using sewer ponds water to irrigate their gardens (in which they grow different vegetables and crops such as rape, cabbage, Chinese, maize, tomatoes and others. The meetings held also involved the measuring of land portions that the farmers are using, personal details of land encroachers (see pictures below).



Figure 15: Top: measuring the gardens at the site. Bottom: meeting with PAP and other stakeholders

10.1 Resettlement Concerns

The major concern expressed by the affected people was the farming fields. They were concerned about where they would be doing their regular farming using the sewer ponds to irrigate their vegetables. The people are concerned about what would happen to most of them as the majority are depending on the ponds for their survival, once they sell the vegetables the income is used for taking care of their families, pay schools fees for their children, build decent houses and buy solar panels since most of the affected people come from Ngwerere East Compound (formally known as Silver Masebo Compound) which does not have electricity connection.

The other concerns were, once the project is completed will the farmers be allowed to go back to their farming or this marks the end of the farming activities. Can they continue to use the land till when the project commences. Will there be any compensations especially for the farmers since their lives are centred on gardening. Some of the concerns were raised by their leaders and the Councillor and the following shows how the concerned will be addressed:

10.2 How the Concerns will be addressed:

Addressing the concerns: In addressing these concerns, Lusaka Water Supply and Sanitation Company has since given the PAP more time to use the land up to August 30, 2022 so as to raise capital for alternative sources of income after they cease their farming activities in that month. This opportunity was received well by the community and a consent form was signed to this effect (see Appendix 5). Also, the income restoration program will assist the PAP.

- (1) That much as the works are already planned, it would be important for ZEMA to ascertain that it is still safe to have the sewer dams there since the area has changed from what it was 10 years ago.
ZEMA will send inspectors in their process of RAP approval. ZEMA's guidance will be made clear during the Public Disclosure meeting which they will call as part of their process of assessing whether the RAP is adequate or not. If not adequate, LWSC will need to address all concerns by ZEMA and only then will ZEMA give a Decision Letter for the project to go ahead.
- (2) That the people should be considered for compensation by the project because they have been acting as caretakers of the said land, thereby protecting it from the cadres who could have by now shared the land.
The RAPs will be compensated in kind i.e. some will be employed during construction of the new WWTP, or their relatives will and the opportunity will be given to them. Also, they will receive some training as explained under Income Restoration in this RAP.
- (3) That the people have no alternative sources of income and gardening and farming has been their only source of money to take care of their families.
Lusaka Water Supply and Sanitation Company will ensure that the income restoration process is monitored and if not adequate adjusted accordingly
- (4) That Lusaka Water Supply and Sanitation Company being a government institution needed to remember that the project is actually for the people and they should be taken care of by government
- (5) He even suggested that if it were possible, Lusaka Water Supply and Sanitation Company could give the pond where the youths play football share between the team and the gardeners or find another piece of land for them nearby.
LWSC through their contractor will help prepare a football pitch if the youths, through their area councillor finds land for the same.
- (6) He made it clear that he did not support the idea of simply moving the people from the gardens without considering what they would be doing to feed their families and implored LWSC to assist the PAP in this regard.
- (7) As pointed out above, the income restoration program will help resolve this concern. As it is being implemented, LWSC will keep monitoring and evaluating the process and ensure it works out well for the PAP.

11. IMPLEMENTATION SCHEDULE

Construction works of the new WWTP for Ngwerere is likely to commence in late 2023, following a 6-month detailed design period at the commencement of the contract. RAP Implementation will commence soon after ZEMA has given their No-objection in their Decision Letter, likely in the first quarter of 2023 and will be completed before commencement of main construction works. However no compensation or training will take place until after signing of the works construction contracts. See the implementation table below for details of RAP activities.

Table 15: RAP implementation activities

ACTIVITY	YEAR 1 (2021)				YEAR 2 (2022)				YEAR 3 (2023)				YEAR 4 (2024)				YEAR 5 (2025)				YEAR 6 (2025)			
	1	2	3	1	2	3	4	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
RAP PREPARATION																								
Census and Socio-economic baseline studies																								
Cadastral Survey																								
Setting Up Committees																								
Valuation of fixed assets																								
Cut-off date establishment																								
Data Validation and Consultation																								
Public Disclosure																								
Negotiations and Signing Of Agreement forms																								
Updating Draft / Final RAP and Submit to ZEMA																								
RESETTLEMENT																								
Constitution of PAP Committee																								
Finalising compensation rates and allocations and system for funds transfer																								
Notify entitlements to PAP in different categories																								
Payment of compensation to the vulnerable PAP																								
Monitoring the disbursement of funds																								
Guide overall resettlement																								
Review progress internal monitoring																								
External Evaluation (Quarterly)																								
Impact Monitoring																								
LRP implementation *																								
Completion Auditing																								

*See Annex 9

12. COSTS AND BUDGETS

12.1 Budget for the Construction of WWTP and Sewer Ponds

The European Investment Bank (EIB), together with the Kredit für Wiederaufbau (KfW) development bank agreed a loan of EUR 102.5 million to the Government of the Republic of Zambia (GRZ) in order to implement the Lusaka Sanitation program. The GRZ agreed a subsidiary loan agreement with Lusaka Water Supply and Sanitation Company (LWSC). The subsidiary loan agreement dated 04.06.2018 indicates the following:

- The GRZ agreed to on-lend EUR 20.5 Million to the LWSC for the LSP.
- The GRZ agreed to on-grant EUR 82 Million to the LWSC for the LSP.

12.2 Financing of RAP Preparation and Implementation

12.3 Costs and Budgets

The financing of the following project components will be provided by Lusaka Water Supply and Sanitation Company. The budget for RAP preparation and implementation is as shown in the table below and it is subject to refinements and adjustments by Lusaka Water Supply and Sanitation at this planning stage.

12.3.1 Budget Justification

This RAP budget covers the assistance to the PAP who were found vulnerable by the assessment. They were 3 vulnerable PAP and their families. It also covers the monitoring costs during the construction period because that is when failure to honour the commitments to the PAP might happen; given that contractors might want to do short-cuts to finish the work irrespective of who is negatively impacted. So daily monitoring is a must and so an officer should be employed from the consultant's side. This officer will work hand in hand with the LWSC safeguard unit to ensure no PAP is left worse off by the project than they were before the project. And the costs of the Livelihood Restoration Plan, developed in the Annex 9, are also included (see Table 17).

12.3.2 Valuation Process

There is one project-affected person whose lands might be partially occupied by interventions related with the installation of the outfall pipe, on the existing track. Given that these works are proposed during a specific period of time, the occupation might cause eventual temporary economic displacement; therefore, as proposed in the Environmental and Social Management Plan, an adequate compensation defined by Government Valuation Department (GVD) is considered and the land will be reinstated to original conditions at the end of the interventions.. Apart from the previous one there were no additional physical assets belonging to the PAP that would need valuation exercise. The Government Valuation Department was engaged and are yet to value the affected private land. According to a GVD valuation officer consulted, if the rest of the PAP owned the pieces of land they were using, the officers from the Ministry of Agriculture would have been requested to carry out an assessment and the GVD would have used the Agriculture Officer's report to put values to the fields. As the case is for this project where it was up to LWSC to ensure that the PAP were not left worse off than before the project, the Social Officer was to use estimates to determine what would suffice to assist the PAP and the estimates would be based on what the PAP were earning before the ceasing of the gardening per month times a number of months like 6 months. During one of the meetings with the PAP, LWSC guided that the government would not release funds to compensate the people who were illegally using LWSC land which was on Title Deed. So this meant that the only help to the PAP in this regard was livelihood restoration. To do so, the PAP were allowed an extension to grow their crops for up to August, 2022 in order to raise their own capital for to try other businesses. The PAP agreed to that idea. The Social Officer proposed that it was not enough just to give them the extension time of gardening; training on other forms of businesses and financial literacy was necessary. In addition, the vulnerable would still need assistance with some capital after this training.

12.3.3 Compensations

As shown in the Table below, the assessment identified 3 vulnerable PAP in the project location. The Social Officer suggested a K5,000 assistance to be given to each vulnerable project affected person. This has been adjusted to include assistance that could cover **at least 3 of their dependents** and so each vulnerable PAP. So it will be K5,000 per vulnerable PAP plus K15,000 to cover his or her dependents; totaling K20,000 per vulnerable PAP (Table 16).

12.3.4 Training Cost

As indicated previously, the Social Officer proposed that the PAP be trained in other forms of income-generating activities so that they do not only rely on farming or gardening. It was proposed that hiring individual experts in this field would be more economical. This program is widely developed in the Annex 9, Livelihood Restoration Plan.

12.3.5 RAP Implementation Agency/Unity

LWSC has a unit to oversee this implementation process. If their own unit handles this role, then this cost will be avoided as they will be doing their routine work. However, the cost reflects here because they may be overwhelmed by other projects and may need to hire an independent Agency to handle this role, in which case the cost would be **estimated at 25,000 per month**.

12.3.6 Monitoring Agency

For this project, LWSC has already engaged GITEC-IGIP Consulting Group in Association with Bari Zambia Limited to handle the external monitoring. Their duty to oversee the project as monitoring consultants extends to Safeguards issues and will work with their corroborative partners Bari Zambia. The cost covers transport, fuels, remuneration for the officer who will be regularly at the site to do the actual monitoring on a day-to-day basis during the construction period and do community liaison work.

12.3.7 RAP Audit

To identify any gaps or outstanding issues and to propose a time-bound Corrective Action Plan with key Actions, dedicated Human Resources, propose Timeline for close-out and Budget, an Implementation Completion Audit of RAP will have to be carried out. The cost for this is estimated at 150, 000.

12.4 Budget Details

From the aforementioned, the budget estimates below are deemed reasonable and are based on the current market prices. LWSC reserved the right to adjust the figures at this preparatory stage if necessary but cannot change after ZEMA approval of the RAP. The table below contains details of the proposed budget and explanations are contained herein. Please note that while there are only three (3) vulnerable PAP at the project site, it has been suggested in this RAP to put their capital at 20,000 each in order to assist them to look after their dependents. This money is for their capital to start small businesses after the training during the income restoration program implementation.

12.4.1 Contingencies

A 10 per cent of the total budget has been added as amount for contingencies to ensure that all expenses are covered in the event of unforeseen occurrences.

Table 16: Details of Costs for RAP Implementation for the Ngwerere WWTPs

Item	Cost Breakdown	Cost (ZMK)
Topping Up Allowances:		
Assistance to the vulnerable households. There are 3 vulnerable PAP directly affected in this project (See Table 8 above). Each vulnerable PAP takes care of at least 3 dependents on average, who should be considered in the budget. This gives us a total of 12 persons to be considered.	K5000 x 4 persons (1 PAP plus 3 dependents) per household x 3 vulnerable households	60,000
A. Total Compensations		60,000
Administration Costs:		
RAP Implementation Unit (LWSC Safeguards Team). <u>The cost includes logistic costs of the implementation unit for their routine work at the proposed site.</u>	Routine work: Monthly fuel cost for the whole unit for the project period 1,200 per month x 3 staff = 3600 x 12 month = 43,200 per year	43,200
Monitoring Agency cost per year (Safeguards compliance monitoring i.e. CESMP, HSMP, and TMP). <u>The cost covers monthly pay for the Socioeconomic Officer who will do daily monitoring at site plus his/her fuel and food cost during the construction period.</u>	25,000 x 12 months	300,000
B. Total RAP Administration costs		343,200
Costs for Implementation of Livelihood Restoration Programs (LRPs) ^a :		
Financial Literacy Trainings	Allowance for PAP K500 each plus training cost per PAP K1000 each per year = K1,500 x 57 PAP x 3 years	342,000
Entrepreneurship Development Training	Allowance for PAP K500 each plus training cost per PAP K1,000 each = K1,500 x 57 PAP	342,000
HIV/AIDS Vulnerability and GBV campaigns	6,000 per month x 36 months	216,000
Psychosocial Counselling estimated at K12,000 per month	12,000 per month x 18 months	216,000
RAP and LRP Audit and monitoring	300.000	300,000
C. Total Cost for Livelihood Restoration Plan		1,416,000
Total RAP and LRP Cost (A+B+C)		1,819,200
D. Contingencies to meet any unforeseen impacts costs of compensation and allowances (10% of the total cost)		181,920
TOTAL RAP IMPLEMENTATION (A+B+C+D)		2,001,120

^a The livelihood restoration programs are comprehensively developed in Annex 9.

Please note: This budget does not contain the values of the compensation for the temporary occupation by works associated to the installation of the outfall pipeline in a private land as the valuation is still awaited from the Government Valuation Department (GDP) and will be placed in the final version of this report.

13. MONITORING AND EVALUATION

13.1 Introduction

Monitoring means the process of regularly measuring the progress in effectively completing project activities and in achieving the goal and objectives of the project. Evaluation is assessment at one given point of time of the impact of intervention, and the extent to which stated objectives have been achieved. Generally, the objective of monitoring is to ensure timely and accurate compensation and implementation of the resettlement program as defined in the RAP.

Monitoring and evaluation helps to ensure that the affected people have been compensated and that the process has been done in the most professional manner. Monitoring and evaluation will be done at two levels namely internal and external.

Internal monitoring will mainly assess whether the implementation of the resettlement program is in accordance with the approved plans. This will therefore involve the review of the actual implementation process, including preparatory phases, against the planned time schedule and budget assessing, how the operationalised communication channels are working, whether compensation due to affected people are met.

External monitoring and evaluation will mainly assess the attainment of the overall goal of resettlement and such will focus on the post resettlement results. This will assess whether the RAP has compensated the affected people in accordance with the law.

Finally, given the sensitivity of the program and realising interested parties go far beyond the affected people, it is important that every issue that comes up is resolved without delay.

13.2 Objective of Monitoring and Evaluation

RP implementation will be monitored both internally and externally with the objective of providing feedback to management on implementation and identifying problems and successes as early as possible to facilitate timely adjustment of implementation arrangements. Regular monitoring of the RAP implementation will be conducted by the implementing agencies, as well as by an external Independent Monitoring Organization (IMO).

13.3 Internal Monitoring

The Sanitation Project's Management Unit (PMU), with assistance from project consultants, will be responsible for internal monitoring of all aspects related to RP implementation. An internal monitoring staff will be provided by Lusaka Water Supply and Sanitation Company. The PMU will oversee the progress in resettlement preparations and implementation through regular monthly progress reports. The RAP implementation unit will do the actual implementation of Income Restoration Plan on the ground while the PMU as management will monitor the activities internally (self-monitoring) and the External Consultants forming the independent monitoring organisation (IMO) will do the external monitoring. So, RAP implementation unit (sometimes on the contractor's side) reports to the PMU.

13.3.1 Monitoring Indicators

The main indicators to be regularly monitored by the PMU are:

- (1) Payment of compensation to PAP at the level described in this RAP;
- (2) Training of severely affected PAP;
- (3) Conformity to grievance procedures;
- (4) Priority of PAP regarding the options offered;
- (5) Adherence to grievance procedures and outstanding issues requiring management's attention;

- (6) Coordination and completion of resettlement activities in relation to the award of civil works contract with starting plan of civil works;
- (7) Project information and consultation to be given to APs, in accordance with procedures described in this RAP;
- (8) Rehabilitation of public affected structures.

13.3.2 Staff for Internal Monitoring

The internal monitoring staff provided by the PIU of the LWSC is responsible for internal monitoring of resettlement implementation. The assigned monitor collects information on progress and results of resettlement implementation every month. Based on this information, he establishes and maintains a database of resettlement monitoring information. This database is updated every month. Lusaka Water Supply and Sanitation Company assisted by the Project Consultants, will submit to the Project Sponsors as part of PMU's regular quarterly progress report, a monitoring report on the progress of implementation of the RAP every 3 months.

The internal reports include the following topics:

- (a) The number of PAP by category of impact per component, and the status of relocation and income restoration for each category;
- (b) The eventual outcome of complaints and grievances and any outstanding issues requiring management or Sponsor's assistance;
- (c) The amount of funds allocated for operations or for compensation and the amount of funds disbursed for each;
- (d) Implementation problems; and
- (e) Revised actual resettlement implementation schedule.

13.4 External Monitoring.

LWSC has appointed a consultancy consortium consisting of GITEC-Igip of Germany, Hydroment of Greece and Bari Zambia experienced in resettlement monitoring who will act as Independent Monitoring Organisation (IMO). The appointed organization shall start their monitoring work as soon as the updated RP has been approved and the construction contracts have been awarded.

13.4.1 Objectives

The general objectives for external monitoring are:

- 1) To provide an independent source of evaluation during the implementation process of resettlement and compensation. The external monitor will offer, if needed, external support and technical expertise to PAP compensation committees and implementing agencies;
- 2) To contribute advice to solve both anticipated and unanticipated problems that may arise as the programs defined in this RAP are carried out; and
- 3) To provide an overall assessment of RAP programs from a broader, long-term socioeconomic perspective.

13.4.2 Monitoring and Evaluation Indicators

- (1) The following indicators will be monitored and evaluated by the IMO: Payment of Economic Disruption Compensation:
 - (a) Full payment of compensation should be made to the vulnerable PAP; and
 - (b) Compensation for affected land where the discharge pipe will pass should be equivalent to the replacement cost of the land with no deductions made for depreciation of the local currency.
- (2) Coordination of Resettlement Activities with Civil Works Schedule: the completion of land acquisition and resettlement activities for any component should be completed prior to commencement of the civil works activities for that component.
- (3) Public Consultation and Awareness of Compensation Policy:

- (a) PAP should be fully informed and consulted on all RAP activities;
 - (b) At least once a month, the IMO should monitor consultation procedures, problems and issues arisen during the meetings and solutions proposed;
 - (c) Public awareness of the compensation policy and entitlements will be assessed among the APs; and
 - (d) Assessment of awareness of various options available to APs as provided for in the RP.
- (4) Restoration of Income Loss: PAP will be monitored on their restoration of their productive activities.
- (5) Training:
- (a) PAP that are eligible for training, as per this RAP, will be monitored;
 - (b) Type of training depends on the PAP' preferences, and the training course available; and
 - (c) Training will be done preferably within 3 months of project impact.
- (6) Level of APs Satisfaction:
- (a) Level of PAP satisfaction with various aspects of resettlement and compensation will be monitored and recorded; and
 - (b) Operation of grievance redress mechanism, redress results, and effectiveness of grievance resolution will be monitored.
- (7) Standards of Living: throughout resettlement implementation process, the trends of living standards of APs will be observed and surveyed, and any potential problems in restoration of living standards will be recorded and reported.

13.5 Evaluation

Lusaka Water Supply and Sanitation Company will conduct an evaluation of the resettlement process and impacts 6 to 12 months after completion of all resettlement activities, using the same survey questionnaire and sample as used during the monitoring activities.

13.6 Replacement Cost Survey

There are no assets requiring replacement in this project. Should this arise by any means, Lusaka Water Supply and Sanitation Company shall carry out a replacement cost survey to verify and update the compensation rates and ensure that the current market rates are applied and are acceptable as replacement values to both PAP and Lusaka Water Supply and Sanitation Company. This will be done independent of the replacement cost survey by Project Supervision Consultants.

13.7 Monitoring Methodology

The methodology for conducting monitoring and evaluation of the RAP implementation is described as follows:

- (1) Methods of gathering information is based on:
 - (a) Discussions with Project Management Unit (PMU), Project Implementation Unit (PIU), and the affected people;
 - (b) Direct interviews with APs;
 - (c) Group interviews and focus group discussions with APs and other stakeholders;
 - (d) Public meetings with APs;
 - (e) Informal surveys and interviews of APs, special interest or vulnerable groups, and women;
 - (f) In-depth case studies of problems that have arisen during internal or external monitoring requiring special efforts for resolution; and
 - (g) Household questionnaire surveys.
- (2) To quantify the quality of resettlement implementation, IMO will use sample socioeconomic surveys before, during and after resettlement implementation to provide a clear comparison of success and/or failures of the RAP. The sample should be 100% of economically disrupted PAP and at least 20% of all other households.
- (3) The sample survey should be conducted twice a year using the same or similar questionnaire as that used for baseline studies, and sampling the same groups of PAP, if possible.

13.7.1 Database

The IMO will create and maintain a database of resettlement monitoring information that will be updated every three months. It will contain certain files on each affected household and will be updated based on information collected in successive rounds of data collection. All databases compiled will be fully accessible by implementing agencies and the PMU.

13.7.2 Reporting

The IMO will be required to submit the findings of the periodical monitoring every 3 months (or any agreed period). These monitoring reports shall be submitted at the end of each quarter of monitoring activity to the PMU, which in turn will submit these reports to the Project sponsors as an annex of its progress report.

The report should contain:

- (1) A report on the progress of implementation of Project RAP;
- (2) Deviations, if any, from the provisions and principles of the RAP; and
- (3) Identification of problems and recommended solutions, so that implementing agencies are informed about the ongoing situation, and can resolve problems in a timely manner.

13.7.3 Monitoring Report Follow-Up

The monitoring reports will be discussed in a meeting between the IMO, PMU and implementing agencies held immediately after submission of the report. Necessary follow-up action will be taken based on the problems and issues identified in the reports and follow-up discussions. Below is a monitoring schedule to ensure compliance to recommended measures in this RAP.

Table 17: Matrix for Environmental and Social Monitoring

Subject	Location	Parameter Monitored	Frequency of Monitoring	Monitoring Resource	Responsibility for monitoring	Recommendation
RAP	Ngwerere East Compound	Within the Community for the PAP	Monthly	RAP Review and community consultation	Specialist – Social and ECO	Need to set up a Community Liaison Committee to act as contact group between community and contractor Need for LWSC to establish a complaint procedure mechanism
HIV/AIDS Awareness, counselling, Testing, care and Prevention among construction employees and general public	Employees	Contractor HIV/AIDS mitigation plan	Monthly	Review documentation	Specialist- Medical person or organization Recommended by MoH through District Health Offices.	Need for LWSC to come up with adequate HIV/AIDS mitigation plan and have this plan approved by relevant Health authorities before implementation
Footpaths within the project area	Construction site	Footpaths within the construction area	Monthly	Project baseline map	Specialist- Social and LWSC Safety Dept.	Need to set up the Community Liaison Committee which will help in carrying out communication campaigns. All existing foot paths have been mapped
Risk Movement of people and livestock	Construction site	Passage of people and animals in project construction area	Monthly	Project baseline map	Specialist- Social and LWSC Safety Dept.	Need to set up the Community Liaison Committee which will help in carrying out communication campaigns.
Archaeology	Construction site	Archaeological sites and artefacts	Monthly		Specialist Archaeologist	An approved archaeologist must be appointed to survey both construction sites before commencement of construction
Local employment	Project area	Number of employees from the surrounding community	Monthly	Contractor	Specialist Social	LWSC is being reminded to give preference to the local people as far as it is possible.
Local business enhancement	Project area	Number of supply contracts awarded to locals	Monthly			Lusaka Water Supply and Sanitation Company and Contractor are being reminded to give preference to the local suppliers as far as it is possible.

Subject	Location	Parameter Monitored	Frequency of Monitoring	Monitoring Resource	Responsibility for monitoring	Recommendation
Roll Back Malaria Control and Campaign	Project area	Number of malarial cases	Monthly			Lusaka Water Supply and Sanitation Company and Contractor are being reminded to put in place a malaria control and prevention program

13.8 Recommendations on Rap Social Action Plans

There will be need to always ensure that monitoring that issues that require management are monitored and the following table shows what should be managed, why it should be managed, how to should be managed, when it should be managed, how frequently it should be monitored and who should monitor and manage it.

Table 18: Recommendation on the RAP Social Action Plans

What should be managed?	Why it should be managed?	How it should be managed	Timing of Management Activities		Frequency of Monitoring	Performance Indicators	Responsible Person or team	Recommendation
			Start	End				
Issue that require management : Land use within project area								
Footpaths within the project area	To prevent people from being exposed to project hazards.	Carry out risk communication campaigns and awareness. Design alternative access routes.	August 2022	Until project ends	Monthly	Reports and pictures showing monitoring is being carried out	Community Liaison Officer	Use already established Community Liaison Committee or Officer that will help in carrying out communication campaigns.
Archaeology	To protect archaeological sites and artefacts that might be present on site.	An approved archaeologist must survey ALL construction sites before commencement of construction.	January 2022	Before construction works start	One off survey	Report on results of survey	Archaeological Surveyor	The approved archaeologist must work with the Community Liaison Officer and relevant national agencies in establishing the existence of archaeological sites
Risk Movement of people	To prevent accident involving people.	Conduct education campaigns and erect warning signs and enclose dangerous working areas.	August 2022	Until project end	Every three months	Report showing adherence or not to the RAP document	Social-economic Consultant	Use Community Liaison Committee or Officer that will help in carrying out communication campaigns.
Local employment	In order to optimize benefits of the project to the local economy	Contractor will develop an employment plan.	August, 2022		Every employment contract period	Report showing adherence or not to the RAP document	Social-economic Consultant	The contractor should remember to give preference to the local people as far as it is possible.
Local business enhancement	To reduce levels of unemployment among the local communities.	Contractor must include local entrepreneurs as suppliers. Procurement	August, 2022	Until project ends	Every business contract period	Report showing adherence or not to the RAP document	Social-economic Consultant	The contractor needs to give preference to the local suppliers as far as it is possible.

		procedures must be explained to the local suppliers.						
HIV/AIDS Awareness, counselling, Testing, care and Prevention among construction employees and general public	To Prevent further spread of HIV/AIDS infections and reduce deaths among workers, their families and community.	Contractor must develop an HIV/AIDS policy.	August, 2022	To end of construction period	Monthly at onset, quarterly	Report showing adherence or not to HIV/AIDS policy	Lusaka's appointed Health and safety officer Contractor may engage a Service Provider to handle HIV/AIDS-related sensitizations	The contractor should put in place an HIV/AIDS policy. Also the contractor MUST DISPLAY HIV/AIDS educational material in all buildings frequented by employees.
Roll Back Malaria Control and Campaign	To reduce incidences of malaria among construction workers.	In Consultation with Ministry of Health, undertake preventive campaigns and implement preventive strategies.	August, 2022	To end of construction period	Every six months	Report on success or failure of efforts to being made to prevent malaria	Lusaka's appointed Health and Safety Officer	The contractor should put in place a malaria control and prevention program

13.9 Completion Audit of RAP Implementation

To identify any gaps or outstanding issues and to propose a time-bound Corrective Action Plan with key Actions, dedicated Human Resources, propose Timeline for close-out and Budget, an Implementation Completion Audit of RAP will have to be carried out. It would draw upon information gathered from routine monitoring, supplemented by information from surveys or studies, including baseline and follow-up studies and other sources.

The exercise would help gain a deeper understanding and perspective of project outcomes and impacts. The exercise may be carried out by Lusaka Water Supply and Sanitation Company's Environmental Consultants at the end of one year from the start date of RAP Implementation.

However, in case there are any outstanding issues that require attention, administering of additional measures for resolution, the exercise would continue up to the time Either the RAP/LRP objectives are fully achieved; OR until they are deemed to be substantially achieved with systems and processes in place that are adequate to complete pending actions.

It should measure the levels of satisfaction towards implementation arrangements, grievances resolution and performance of stakeholder partner institutions.

14. REFERENCES

- CSO, MoH and ICF International. (2015). *Zambia Demographic and Health Survey 2013-14*.
- CSO. (2011). *Living Conditions Monitoring Survey Report 2006 and 2010*.
- CSO. (2013). *2010 Census of Population and Housing: Descriptive Tables, Series F, G, H and I, Lusaka Province*, Central Statistics Office, Lusaka.
- CSO. (2013b). *2010 Census of Population and Housing: Descriptive Tables, Series E – Economic Tables, Lusaka Province*, CSO, Lusaka.
- CSO. (2013c). *2010 Census of Population and Housing: Descriptive Tables, Series F, G, H and I, Lusaka Province*, Central Statistics Office, Lusaka.
- European Investment Bank, 2022. *Environmental and Social Standards*. [Eib.org/en/publications/eib-environmental-and-social-standards#](https://eib.org/en/publications/eib-environmental-and-social-standards#)
- Final Resettlement Policy Framework by CES Consulting Engineers Salzgitter GmbH – Option 5
- GIC - Hydroment - Bari Zambia. (2021). *Inception Report - New Ngwerere and Chunga WWTPs in Lusaka Project*.
- International Finance Corporation - World Bank Group. (2012). *Performance Standards on Environmental and Social Sustainability*.
- International Finance Corporation, 1998. *Doing Better Business through Effective Public Consultation and Disclosure: A Good Practice Manual*
- KfW Development Bank. (2022). *Sustainability Guideline Assessment and management of Environmental, Social, and Climate Aspects: Principles and Procedures*.
- US Census Bureau. <https://worldpopulationreview.com/world-cities/lusaka-population>
- World Bank Group. (2007). *Environmental, Health and Safety Guidelines for Water and Sanitation*.
- World Bank Group. (2017). *Environmental and Social Framework*.
- World Bank, 2000. *Resettlement and Rehabilitation Guidance*.

15. MAPS AND ANNEXES

Annex 1 Minutes of the Community Engagement Meeting Held at Ngwerere Eastview Community School, on July 29, 2021

N°	Company	Name	Function	Presence		
				P	A	D
	LWSC	Lusungu Nyirenda (LN)	Contract Manager	X		X
	LWSC	James Mwale (JM1)	Community Development Specialist	X		X
	BARI ZAMBIA	Patrick Phiri (PP)	RAP consultant	X		X
	BARI ZAMBIA	Ethel Kangwa (EK)	Social Expert	X		X
	NGWERERE EAST	Harry Miyanda (HM)	Area Councillor	X		
	NGWERERE EAST	Maggie Phiri (MP)	Resident	X		
	NGWERERE EAST	Alex Tembo (AT)	Resident	X		
	NGWERERE EAST	Victor Malambo (VM)	Resident	X		
	NGWERERE EAST	Lackson Mtonga (LM)	Resident	X		
	NGWERERE EAST	Evans Alfonso (E)	Ward Chairman	X		
	NGWERERE	Jackson Moonga (JM2)	Resident	X		
	NGWERERE - EAT	James Banda (JB)	Resident	X		
	NGWERERE - EAT	Habasamu	Resident	X		

P: Present; A: Absent; D: Distribution

No	Topic	Action	Person in charge	Deadline
e	Resettlement Action Plan-Community Engagement/Consultative Meeting at Eastview Community School, Ngwerere East			


	<p>The meeting started at 10am with 71 people in attendance. It began with an opening prayer followed by self-introductions by a few notable people.</p> <p>JM1: Gave a brief summary of the project.</p> <p>PP: The RAP consultant made the presentation in which he spoke about the positive and negative impacts of the project and their mitigations which was followed by a question and answer session.</p> <p>Ward Chairman - Evans Alfonso - After coordinating the opening prayer he asked for the opening remarks from area counsellor.</p> <p>LWSC Community Development Specialist- James Mwale; Requested that we allow the area counsellor to speak last so that we start with a presentation from the RAP consultant to guide us on the purpose for the meeting and get to the question and answer session.</p> <p>BARI Zambia RAP consultant Presentation - In his presentation Mr Patrick Phiri explained to the gathered residents that the purpose for the meeting was as a result of the intentions by Lusaka Water Supply and Sanitation (LWSC) to replace the Ngwerere sewer ponds with modern, state of the art Wastewater Treatment Plant (WWTP). He told the meeting that this development project will come with both the negative and positive effects on the community. In line with that, he indicated that the purpose for the meeting was to discuss with the community how to minimize or mitigate the negative effects and maximize or take full advantage of the positive effects of the project to the local community. Beginning with the negative effects, Mr Phiri explained as follows;</p> <p>Loss of income to those with vegetable Gardens around the sewer ponds because they will not be allowed to continue their crop production activities once the construction project begins.</p> <p>Possibility of importing disease like HIV/AIDS, Covovid-19 into the area through community interaction with construction workers.</p> <p>Noise pollution</p> <p>Possibility of people drowning in the sewer ponds</p> <p>Positive Effects</p> <p>Employment opportunity - priority consideration will be given to the local for all jobs that the locals are able to do and only the jobs whose skill is lacking locally will but sought elsewhere.</p> <p>Improvement livelihood through safe (non-smelly) sewer ponds</p> <p>Water from the ponds flowing in Ngwerere will only be the treated neutralised water because the ponds will be working well.</p>			
--	---	--	--	--

	<p>Possibility of some compensation in-kind since the land in question belongs to Lusaka Water Supply and Sanitation Company and the people using it were doing so illegally. Improved safety through fencing off of the ponds area. As LWSC continues to function well, there would be overall improved GDP of the nation.</p> <p>In conclusion, Mr. Phiri said for all those with Gardens, they should take 1st September 2021 as the cut-off date because the census had been done for the gardens. He explained that after this date, the company did not expect new claims of people owning gardens in the area. So all those with complaints were to raise them during the Question and Answer session of immediately after the meeting to be attended to immediately. He ended the presentation by requesting the community to come up with a Grievance Redress committee comprising of 8 community leaders, males and females (2) representing each of the 4 sections of Kapwayambale Ward.</p> <p>Question and Answer Session</p> <p>Question: Maggie Phiri - Resident; I have gardens within the LWSC land and I'm wondering what will happen when displaced because my livelihood depends on it. Answer: JM - LWSC - To avoid affecting the crops that are already on the ground, enough notice would be given for vegetable garden farmers to harvest their crops. To be specific the cut-off date for use of land would be in January 2022 before the start of the project in March 2022.</p> <p>Question: Alex Tembo – Resident: What will happen to us whose gardens are right outside LWSC land? And also asked if a bridge can be erected to connect Ngwerere and Meanwood because most of the people work in Meanwood. Answer: JM – LWSC: Nothing will happen to your garden although you might just be affected by dust and noise during construction. On the bridge connecting to Meanwood, Mr. Mwale said consideration had been given to the construction of modern bridge to help people travelling across Ngwerere for work and other activities.</p> <p>Question: Victor Malambo- Resident: What have you arranged for the displaced community Answer: JM – LWSC: For the affected members of the community, 2 weeks' final notice would be given. He further mentioned that priority consideration for employment opportunity will be given to the affected local people.</p>			
--	---	--	--	--

	<p>Question Jackson Moonga - Resident: You spoke about offering employment to the people after displacing 'their' gardens, are you going to employ the elderly ones as well because they are part of the people that own gardens?</p> <p>Answer: JM – LWSC: Those that are able will still be employed, but for the most venerable elderly garden owners, we will write recommendations for the social cash transfer considerations to the relevant government offices.</p> <p>Question Jackson Moonga – Resident: Where will people be passing when the ponds are fenced off because the fence will pass through the path that people use?</p> <p>Answer: JM – LWSC: Some land will be left for people to use</p> <p>Question Alfonso Evans - Ward Chairman: What will come first cut-off date notice or compensation?</p> <p>Answer: JM – LWSC: There will be no compensation but people (Garden owners) will be paid in kind by giving them jobs when the construction works begin. There is only one farm owner who will be compensated because our pipes will pass through his farm. Cut-off date notice has been given today in this meeting. All the crops should be harvested by January 2022 before commencement of the project construction in March 2022</p> <p>Question: Alex Tembo - Resident: What will happen to crops/vegetables which would not have been ready for harvest by cut-off date? Also is it possible for those construction workers to undergo the HIV/AIDS tests.</p> <p>Answer: JM – LWSC: We will have no choice but remove them as the cut-off date would have already been communicated.</p> <p>Answer PP BARI RAP consultant: Voluntary counselling and testing will be arranged for all employees in addition to educating them on the dangers of HIV/AIDS.</p> <p>Question: James Banda - Resident: Since One of the ponds has been turned into an only community football pitch, what consideration are you going to make to this social amenity, as it is the only pitch that we have?</p> <p>Answer: JM – LWSC: We will allow you to use it but this does not mean it is yours, it is still LWSC property and should there be need for us to use it, we will communicate to your via the office of the councillor.</p> <p>James Banda – Resident - Suggested that displaced garden owners be allowed to use the no-man's land near the stream.</p> <p>Answer: JM – LWSC: Mr Mwale said the land in question is outside Lusaka Water Supply and Sanitation Company land, and he referred the option to the office of area counsellor for consideration.</p>			
--	--	--	--	--

	<p>Harry Miyanda - Area Counsellor: In his closing remarks, Mr. Miyanda the area counsellor asked LWSC to fulfil its corporate social responsibility and said his office was always open to offer support. He specially talked about consideration for the East View Community school at which the meeting was held. He asked the residents to be patient as he had already registered the matter to the council chambers. He ended by saying that that was just the begging of more meetings and informed the audience that he was going to give feedback after sitting with the 8 community leaders that were going to be selected from each of the four (4) sections of Kapayambale Ward.</p> <p>Alfonso Evans - Ward chairman: In his final remarks, the ward chairman, requested that a written recommendation be made to LWSC to indicate that the affected residents in Ngwerere were requesting for compensation consideration on their loss of income on the gardens around the ponds.</p> <p>Closing Payer: After closing prayer by Mr. Habasumu the meeting ended at 11:30</p>			
Signatures of the Meeting Minutes				
	The Client : LWSC	Contract Manager		
	The Project Implementation Consultant :	Team Leader		
	The Consultant for Component A : Consortium GITEC-IGIP/HYDROMENT/BARI ZAMBIA	Team Leader		

Annex 2 Attendance Sheet for the RAP Consultative Meeting Held at Ngwerere East WWTP



LUSAKA WATER AND SEWERAGE COMPANY LIMITED

**ATTENDANCE SHEET FOR RESETTLEMENT ACTION PLAN (RAP) CONSULTATIVE MEETING
VIS-À-VIS THE PROPOSED UPGRADING OF NGWERERE WASTE WATER TREATMENT PLANT**

VENUE: DATE: SEPTEMBER 1, 2021. TIME: 10:00 HOURS TO 11:30 HOURS

	NAME	REPRESENTED INSTITUTION	POSITION (IF APPLICABLE)	PHONE NUMBER	SIGN
1.	VICTOR MALAMBO	NGWERERE EAST	PAP	0979-883338	V. Malambo
2.	VICTOR NGOBELA	NGWERERE		0978061347	V. Ngobela
3.	LACKSON KANNA	NGWERERE EAST	PAP	0967-636835	L. Kanna
4.	FRED MALAMBO	NGWERERE EAST	PAP	0968-461800	F. Malambo
5.	FRIDAY WDHLEWA	NGWERERE EAST	PAP	0971611545	F. Wdhlewa
6.	JULIUS NDOLO	NGWERERE EAST	PAP	0973193843	J. Ndo
7.	ALEX TEMBO	NGWERERE	PAP	0977343587	A. Tembo
8.	ABRAHAM PHIRI	NGWERERE	PAP	0977161190	A. Phiri
9.	MOFFAT ZUHO	NGWERERE EAST	PAP	0967-305433	M. Zulu
10.	PATRICK PHIRI	NGWERERE EAST	PAP	0977453082	P. Phiri
11.	NEENZI PHIRI	NGWERERE EAST	PAP	0974-98728	N. Phiri
12.	DANIEL ZUHO	NGWERERE EAST	PAP	0953-570974	D. Zulu
13.	ZACHARIA SIKAMBA	NGWERERE EAST	PAP	0963-329944	Z. Sikamba
14.	JOSEPH NDOLO	NGWERERE EAST	PAP	0978-915411	J. Ndo
15.	JOSEPH MUSAHA	NGWERERE EAST	PAP	0762-332510	J. Musaha
16.	ISAAC MUSAHA	NGWERERE EAST	PAP	0976-858892	I. Musaha
17.	CAVEOUS KUNGU	NGWERERE EAST	PAP	0964-742921	C. Kungu
18.	AGNESS BANDA	NGWERERE EAST	PAP	-	A. Banda
19.	EUPHROSINE BANDA	NGWERERE	PAP	0977252020	E. Banda
20.	DORRIN TEMBO	NGWERERE	PAP	0764-220280	D. Tembo



LUSAKA WATER AND SEWERAGE COMPANY LIMITED

ATTENDANCE SHEET FOR RESETTLEMENT ACTION PLAN (RAP) CONSULTATIVE MEETING
VIS-À-VIS THE PROPOSED UPGRADING OF NGWERERE WASTE WATER TREATMENT PLANT

VENUE:

DATE: SEPTEMBER 1, 2021.

TIME: 10:00 HOURS TO 11:30 HOURS

	NAME	REPRESENTED INSTITUTION	POSITION (IF APPLICABLE)	PHONE NUMBER	SIGN
1.	MAWERE BETTY	BARI - ZAMBIA	ENVIRONMENTAL	0979-389539	BAR
2.	STEPHEN PHIRI	"	SURVEYOR	0166 96 9073	(Signature)
3.	PATRICK PHIRI	BARI-ZAMBIA	RAP Consultant	0177961152	(Signature)
4.	SHAM KAYULA	NGWERERE EAST	PAP	0974780270	(Signature)
5.	SPERWELL MALAMBA	NGWERERE EAST	PAP	0962441921	(Signature)
6.	HARRY MUYANDA	KAPWAYAMBE WCD	AREA COUNCILOR	0969226283	(Signature)
7.	FONSO EYAS	KAPWAYAMBE WCD	WARD CHAIRMAN	0974428819	(Signature)
8.	GIBSON NJOBVO	NGWERERE EAST	PAP	0969-547757	(Signature)
9.	MATHEW NJIROHISO	NGWERERE EAST	PAP	0977876295	(Signature)
10.	LACKSON MUYISA	NGWERERE EAST	PAP	0977702064	(Signature)
11.	KATONHO MOSES C	NGWERERE EAST	PAP	0971049693	(Signature)
12.	Peter Banda	NGWERERE EAST	PAP	0970136340	(Signature)
13.	MOSES MWANZA	NGWERERE	PAP	0975112130	(Signature)
14.	GODFREY BANDA	NGWERERE EAST	PAP	0966967801	(Signature)
15.	James (025283)	LSP/LWSC	CDS	0770879767	(Signature)
16.	MALISENI MUYISA	NGWERERE EAST	PAP	0961-652794	(Signature)
17.	Ethel Kangwa	BARI ZAMBIA	SOCIAL EXPERT	0979574826	(Signature)
18.	JUSTIN METERI	NGWERERE EAST	PAP	0966 297529	(Signature)
19.	Hamangah TAIRE	NGWERERE EAST	PAP	0975355500	(Signature)
20.	JASON M. BANDA	NGWERERE EAST	PAP	0979-269752	(Signature)



LUSAKA WATER AND SEWERAGE COMPANY LIMITED

ATTENDANCE SHEET FOR RESETTLEMENT ACTION PLAN (RAP) CONSULTATIVE MEETING
VIS-À-VIS THE PROPOSED UPGRADING OF NGWERERE WASTE WATER TREATMENT PLANT

VENUE:

DATE: SEPTEMBER 1, 2021.

TIME: 10:00 HOURS TO 11:30 HOURS

	NAME	REPRESENTED INSTITUTION	POSITION (IF APPLICABLE)	PHONE NUMBER	SIGN
1.	MAWERE BETTY	BARI - ZAMBIA	ENVIRONMENTALIST	0979-389539	BAR
2.	STEPHEN PHIRI	"	SURVEYOR	0166 969072	Phiri
3.	PATRICK PHIRI	BARI-ZAMBIA	RAP Consultant	0177961152	Phiri
4.	SAM KAYULA	NGWERERE EAST	PAP	0974780270	Kayula
5.	SPERWELL MALAMBANG	NGWERERE EAST	PAP	0962441821	Malambang
6.	HARRY MUYANDA	KAPWAYAMBALE WWD	AREA COUNCILLOR	0969226283	Muyanda
7.	FONSO EYAS	KAPWAYAMBALE WWD	WARD CHAIRMAN	0974428819	Eyas
8.	GIBSON NJOBVU	NGWERERE EAST	PAP	0969-847757	Njobvu
9.	MATHEW NJIROHISO	NGWERERE EAST	PAP	0977876295	Njirahiso
10.	LACKSON MUYASA	NGWERERE EAST	PAP	0977702064	Muyasa
11.	KATONHO MOSES C	NGWERERE EAST	PAP	0971049693	Katono
12.	Peter Banda	NGWERERE EAST	PAP	0970136340	Banda
13.	MOSES MWANZA	NGWERERE	PAP	0978112130	Mwanza
14.	GODFREY BANDA	NGWERERE EAST	PAP	0966967801	Banda
15.	James Banda	LSP/INST	CDS	0720879767	Banda
16.	MARISENI MUYA	NGWERERE EAST	PAP	0961-652794	Muyasi
17.	Ethel Kangwa	BARI ZAMBIA	SOCIAL EXPERT	0979574824	Kangwa
18.	JUSTIN MEIER	NGWERERE EAST	PAP	0966249529	Meier
19.	HARMAUNGAI TAIRO	NGWERERE EAST	PAP	0978355504	Tairo
20.	JASON M. EYAS	NGWERERE EAST	PAP	0979-269758	Eyas



LUSAKA WATER AND SEWERAGE COMPANY LIMITED

ATTENDANCE SHEET FOR RESETTLEMENT ACTION PLAN (RAP) CONSULTATIVE MEETING
VIS-À-VIS THE PROPOSED UPGRADING OF NGWERERE WASTE WATER TREATMENT PLANT

VENUE:

DATE: SEPTEMBER 1, 2021.

TIME: 10:00 HOURS TO 11:30 HOURS

	NAME	REPRESENTED INSTITUTION	POSITION (IF APPLICABLE)	PHONE NUMBER	SIGN
1.	AGNESS PHIRI	NGWERERE EAST	PAP	—	A. Phiri
2.	DOROTHY PHIRI	NGWERERE EAST	PAP	0976-330459	D. Phiri
3.	JOSEPHINE ZULU	NGWERERE EAST	PAP	0777-423929	J. Zulu
4.	MARGARET CHANDA	NGWERERE EAST	PAP	—	M. Chanda
5.	ROSEMARY TEMBO	NGWERERE EAST	PAP	0973-233095	R. Tembo
6.	JANIFER KABULO	NGWERERE EAST	PAP	0964-436170	J. Kabulo
7.	FERISTUS NGULUBE	NGWERERE EAST	PAP	—	F. Ngulube
8.	TISA MWANZA	NGWERERE EAST	PAP	—	T. Mwanza
9.	EAKESI BANDA	NGWERERE EAST	PAP	—	E. Banda
10.	EUNICE CHALWE	NGWERERE EAST	PAP	0972-774491	E. Chalwe
11.	CATHERINE CHIPETA	NGWERERE EAST	PAP	—	C. Chipeta
12.	BONIS SICHABA	NGWERERE EAST	PAP	0963-772654	B. Sichaba
13.	MILONDA BANDA	NGWERERE EAST	PAP	0976-168021	M. Banda
14.	MARY PHIRI	NGWERERE EAST	PAP	0 —	M. Phiri
15.	LYDIA MAKANDA	NGWERERE EAST	PAP	0970181347	L. Makanda
16.	BRIDGET MALAMBO	NGWERERE EAST	PAP	0971743172	B. Malambo
17.	FATNESS TEMBO	NGWERERE EAST	PAP	—	F. Tembo
18.	OLIBERT LUPENYU	NGWERERE EAST	PAP	0973-339026	O. Lupenyu
19.	ANITA MUGABA	NGWERERE EAST	PAP	0978-368298	A. Mugaba
20.	ANNET MWINGA	NGWERERE EAST	PAP	0977-518392	A. Mwinga



LUSAKA WATER AND SEWERAGE COMPANY LIMITED

ATTENDANCE SHEET FOR RESETTLEMENT ACTION PLAN (RAP) CONSULTATIVE MEETING
VIS-À-VIS THE PROPOSED UPGRADING OF CHUNGA WASTE WATER TREATMENT PLANT

VENUE: NGWERERE
COMMUNITY SCHOOL

DATE: SEPTEMBER 1, 2021.

TIME: 14:00 HOURS TO 15:30 HOURS

	NAME	REPRESENTED INSTITUTION	POSITION (IF APPLICABLE)	PHONE NUMBER	SIGN
1.	MACHILE WIKOSI	NGWERERE EAST	PAP	—	M. Wikosi
2.	MACHILE PHIRI	NGWERERE EAST	PAP	0965-32485	M. Phiri
3.	JEFF BANDA	NGWERERE EAST	PAP	0965-399193	J. Banda
4.	JOSEPH MUSHIRA	NGWERERE EAST	PAP	0967-924841	J. Mushira
5.	HUMFRED BANDA	NGWERERE EAST	PAP	—	H. Banda
6.	Mpheto Bevin	NGWERERE EAST	PAP	0975-689287	M. Bevin
7.	Mwinda Susan	NGWERERE EAST	PAP	0960682223	S. Mwinda
8.	Mulenga Bawanda	NGWERERE EAST	PAP	0978-822799	M. Bawanda
9.	Zulu Basimo	NGWERERE EAST	PAP	0974-152323	Z. Basimo
10.	Clement Banda	NGWERERE EAST	—	0978-922943	C. Banda
11.	Ivungu Nyikende	LWSC	Contact Mgr	0955323278	I. Nyikende
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					



LUSAKA WATER AND SEWERAGE COMPANY LIMITED

ATTENDANCE SHEET FOR RESETTLEMENT ACTION PLAN (RAP) CONSULTATIVE MEETING
VIS-À-VIS THE PROPOSED UPGRADING OF CHUNGA WASTE WATER TREATMENT PLANT

VENUE: NGWERERE
COMMUNITY SCHOOL

DATE: SEPTEMBER 1, 2021.

TIME: 14:00 HOURS TO 15:30 HOURS

	NAME	REPRESENTED INSTITUTION	POSITION (IF APPLICABLE)	PHONE NUMBER	SIGN
1.	MACHILE NIKOSI	NGWERERE EAST	PAP	—	M. NIKOSI
2.	MACHILE PHIRI	NGWERERE EAST	PAP	0965-324985	M. Phiri
3.	JEFF BANDA	NGWERERE EAST	PAP	0965-349193	J. Banda
4.	JOSEPH MUSHIRA	NGWERERE EAST	PAP	0967-924841	J. Mushira
5.	HUMFREY BANDA	NGWERERE EAST	PAP	—	H. Banda
6.	Mphemo Beavin	NGWERERE EAST	PAP	0975-689285	M. Beavin
7.	Mwinda Susan	NGWERERE EAST	PAP	0960682223	S. Mwinda
8.	Mulenga Kawendo	NGWERERE EAST	PAP	0978-522749	M. Kawendo
9.	Zulu Basimo	NGWERERE EAST	PAP	0974-192323	Z. Basimo
10.	Clement Banda	NGWERERE EAST	—	0978-922943	C. Banda
11.	Iusungu Nyiranda	LWSC	Contract Mgr	0955323878	I. Nyiranda
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					



LUSAKA WATER AND SEWERAGE COMPANY LIMITED

ATTENDANCE SHEET FOR RESETTLEMENT ACTION PLAN (RAP) CONSULTATIVE MEETING
VIS-À-VIS THE PROPOSED UPGRADING OF NGWERERE WASTE WATER TREATMENT PLANT

VENUE:

DATE: SEPTEMBER 1, 2021.

TIME: 10:00 HOURS TO 11:30 HOURS

	NAME	REPRESENTED INSTITUTION	POSITION (IF APPLICABLE)	PHONE NUMBER	SIGN
1.	MAWERE BETTY	BARI - ZAMBIA	ENVIRONMENTALIST	0979-359539	BAR.
2.	STEPHEN PHIRI	"	SURVEYOR	0166 969072	(Signature)
3.	PATRICK PHIRI	BARI - ZAMBIA	RAP Consultant	0177961152	(Signature)
4.	SAM KAYULA	NGWERERE EAST	PAP	0974780270	(Signature)
5.	PERWILL MALAMBANG	NGWERERE EAST	PAP	0962441921	(Signature)
6.	HARRY MIYAPPA	KAPWAYAMBALE WRD	AREA COUNCILLOR	0969226283	(Signature)
7.	FONSO EYANDS	KAPWAYAMBALE WRD	WARD CHAIRMAN	0974428819	(Signature)
8.	CHUBSON NJOBVU	NGWERERE EAST	PAP	0969-847757	(Signature)
9.	MATHEW NJIROHISO	NGWERERE EAST	PAP	0977876295	(Signature)
10.	LACKSON MTONGA	NGWERERE EAST	PAP	0977702064	(Signature)
11.	KATONHO MOSES C	NGWERERE EAST	PAP	0971049693	(Signature)
12.	Peter Banda	NGWERERE EAST	PAP	0970136340	(Signature)
13.	MOSES MWANZA	NGWERERE	PAP	0975112130	(Signature)
14.	GODFREY BANDA	NGWERERE EAST	PAP	0966767801	(Signature)
15.	James (07583)	LSP/LWSC	CDS	0770879767	(Signature)
16.	MALISENI MUYHA	NGWERERE EAST	PAP	0961-652794	(Signature)
17.	Ethel Kangwa	BARI ZAMBIA	SOCIAL EXPERT	0979574824	(Signature)
18.	Justin METERI	NGWERERE EAST	PAP	0966242529	(Signature)
19.	Haroldangai TAIRI	NGWERERE EAST	PAP	0975355504	(Signature)
20.	JASON M. BANDA	NGWERERE EAST	PAP	0979-269752	(Signature)



LUSAKA WATER AND SEWERAGE COMPANY LIMITED

ATTENDANCE SHEET FOR RESETTLEMENT ACTION PLAN (RAP) CONSULTATIVE MEETING
VIS-À-VIS THE PROPOSED UPGRADING OF NGWERERE WASTE WATER TREATMENT PLANT

VENUE:

DATE: SEPTEMBER 1, 2021.

TIME: 10:00 HOURS TO 11:30 HOURS

	NAME	REPRESENTED INSTITUTION	POSITION (IF APPLICABLE)	PHONE NUMBER	SIGN
1.	VICTOR MALAMBA	NGWERERE EAST	PAP	0979-883338	V. Malamba
2.	VICTOR Ngobeka	NGWERERE		0978061347	V. Ngobeka
3.	LACKSON. BAWA	NGWERERE EAST	PAP	0967-036835	L. Bawa
4.	FRED MALAMBA	NGWERERE EAST	PAP	0968-46800	F. Malamba
5.	FRIDNY WADLWA	NGWERERE EAST	PAP	0971611545	F. Wadlwa
6.	JULIUS M. M. M. M.	NGWERERE EAST	PAP	0978193343	J. M. M. M.
7.	ALEX TEMBO	NGWERERE	PAP	0977343587	A. Tembo
8.	ABRAHAM PHIRI	NGWERERE	PAP	0979181190	A. Phiri
9.	MOFFAT ZUHO	NGWERERE EAST	PAP	0967-305435	M. Zuhu
10.	PATRICK PHIRI	NGWERERE EAST	PAP	0977433082	P. Phiri
11.	NENANI PHIRI	NGWERERE EAST	PAP	0974-98728	N. Phiri
12.	DANISH ZUHO	NGWERERE EAST	PAP	0953-570974	D. Zuhu
13.	ZANIK SILAMBA	NGWERERE EAST	PAP	0963-329944	Z. Silamba
14.	JOSEPH NIAHOTA	NGWERERE EAST	PAP	0978-915411	J. Niahota
15.	JOSEPH MUSEKA	NGWERERE EAST	PAP	0762-332510	J. Museka
16.	ISAAC MUYILA	NGWERERE EAST	PAP	0976-858892	I. Muyila
17.	CAVEOUS KUNGU	NGWERERE EAST	PAP	0964-742921	C. Kungu
18.	AGNESS BANDA	NGWERERE EAST	PAP	-	A. Banda
19.	EUPHENA BANJI	NGWERERE	PAP	0977252020	E. Banchi
20.	DORFEN TEMBO	NGWERERE	PAP	0764-220270	D. Tembo

Annex 3 Minutes of the RAP Steering Meeting for the Proposed Construction of New Wastewater Treatment Plants. Venue: Lusaka Water Supply and Sanitation Company Sanitation Office. Date: October 1, 2021.

No.	Company	Name	Function	Presence		
				P	A	D
	LWSC	Lusungu Nyirenda (LN)	Contract Manager	X		X
	LWSC	James Mwale (JM1)	Community Development Specialist	X		X
	LWSC	Eunice Chimfwembe	Environmental Safeguards Specialist	X		X
	GITEC-IGIP	Mark Whipey	Consultant Team Leader	X		X
	BARI ZAMBIA	Patrick Phiri (PP)	RAP consultant	X		X

P: Present; A: Absent; D: Distribution

No.	Topic	Action	Person in charge	Deadline
e	Additional land required for WWTP effluent discharge pipe			
	<p>MW enquired on progress regarding the strip of land that will be required for the effluent discharge pipe. JM stated no approach has been made to the owner as yet and requested the consultant to make the first approach and explain that the land is required for a government project and will just involve installing a buried pipe along the eastern edge of the property. Ideally it would be good if the owner was willing to allow the land to be used without any payment. MW pointed out that the land needs to be owned by LWSC, or somehow protected in order to ensure maintenance access, and avoid structures being constructed over the pipeline in the future.</p> <p>Post Meeting Note: It was initially agreed that PP would make an approach to the owner, but later it was decided that JM would follow up on the matter and PP should concentrate on the RAP.</p>	To liaise with the owner, obtain details and enquire on willingness to allow use of the land	JM	

	MW enquired regarding the possibility of the effluent pipe passing through the land on the east side of the footpath, as this would present a shorter route to the river. JM stated that the land is owned by a commercial farm and will be very expensive to purchase. There may also be access problems for maintenance of the river outfall structure.			
e	Land for Plant Access Road			
	<p>MW enquired as to why the Resettlement Policy Framework (2017) indicated 20 to 30 houses would require relocation when the road can be widened on the west side on open land. JM said that at the time the RPF was prepared it was uncertain as to the required width and alignment, therefore it was assumed that some houses would require relocating. It was agreed that any road widening should utilise land on the west side of the access road, which is most likely a reserve for the powerline and is currently used as farmland. As in 1 above, JM would determine ownership of the land while PP does the draft RAP.</p> <p>During construction the speed along the road must be limited by flagmen, and during operation phase speed humps should be installed.</p>	<p>Determine ownership of the land on the west side of the existing access road.</p> <p>Ensure these points are included in the contract documents</p>	<p>JM</p> <p>MW</p>	
	Compensation Issues			
	<p>PP informed the meeting that all affected farmers had refused to sign the consent forms.</p> <p>PP highlighted the differences between the types of compensation as per Zambian constitution and the KfW/EIB resettlement guidelines which are basically the same as World Bank guidelines. He indicated that gardening for those in the Ngwerere site was all-season income generating venture, and for KfW/EIB this would mean that the developer (Lusaka Water Supply and Sanitation Company) should provide livelihood restoration, but compensation would not be given to the PAP since the land was not theirs. However, according to the Zambian statutory regulations on resettlement, the squatters cannot be compensated for land and could only be compensated if they had structures or property on the said land if such structures were built before the cut-off date. PP then asked how this difference/gap between the two guidelines would be bridged in the RAP.</p> <p>JM highlighted the fact that the farmers should not be using the sewage from the ponds to irrigate crops as the sewage contains bacteria such as e-coli, Salmonella and Shigella and heavy metals such</p>	<p>Modify the consent form and submit to LWSC for review</p>	<p>PP</p> <p>MW</p>	

	<p>as mercury, zinc and lead as these metals can easily be absorbed by living organisms such as plants later consumed by humans. EC also highlighted that they have minutes of previous meetings informing the residents not to grow crops on the LWSC land.</p> <p>JM and EC highlighted the possible problem of allowing compensation for livelihood and crops within the LWSC land area; whilst there may be only 58 affected ‘farmers’ at present, the number and amounts claimed would substantially increase in the future once others became aware. But at the same time it is recognised that we must ensure goodwill of the residents and affected farmers. It was decided the best course of action is to revise the consent form such that it indicates the farmers may continue growing crops for one more year (up to 30.09.2022), providing they agree to then vacate the land and not claim any form of compensation against the landowner (LWSC). The consent form can also indicate that <u>wherever possible</u> the affected farmers will be considered for employment during construction of the new plant and also during the operation phase by LWSC. Also mention that the farmers should look for alternative land to cultivate away from the LWSC ponds.</p>	Ensure these points are included in the contract documents		
Signatures of the Meeting Minutes				
	The Client: LWSC	Contract Manager		
	The Project Implementation Consultant:	Team Leader		
	The Consultant for Component A: Consortium GITEC-IGIP/HYDROMENT/BARI ZAMBIA	Team Leader		

Annex 4 Minutes of Engagement Meeting with Grievance Redress Committee at Ngwerere, on November 1, 2021

NO.	Company	Name	Function	Presence		
				P	A	D
	BARI ZAMBIA	Patrick Phiri (PP)	RAP consultant	X		
	NGWERERE	Hamangaba Jailo	Chairman	X		
	NGWERERE EAST	Speedwell Malambo	Vice Chairman	X		
	NGWERERE EAST	Victor Malambo (VM)	Trustee	X		
	NGWERERE EAST	Lackson Mtonga (LM)	Trustee	X		
	NGWERERE	Beatrice Namutenda	Secretary	X		
	NGWERERE EAST	Alex Tembo (AT)	Vice Secretary	X		
	BARI ZAMBIA	Stephen Phiri	Surveyor	X		
	NGWERERE EAST	Harry Miyanda (HM)	Area Councillor		X	
	NGWERERE EAST	Evans Alfonso (E)	Ward Chairman		X	
	NGWERERE EAST	Victor Ngobeka (VN)	Trustee		X	

P: Present; A: Absent; D: Distribution

NO.	Topic	Action	Person in charge	Deadline
e	Resettlement Action Plan-Community Engagement Meeting with Community Leaders at Eastview Community School Ngwerere East			
	<p>The meeting started at 5 pm with 8 people in attendance, with an apology for other stakeholders attending the funeral in the community. It began with an opening prayer by Mr. Hamangaba Jailo followed by some introductions. PP: Started with an apology for starting the meeting late, but was quick to mention that he had come with the good news to the project-affected persons. He revealed to the gathered community leaders that following the previous meeting that was held on 1 September 2021 at which it was announced that there shall be no garden farming activities on LWSC land this year, Lusaka Water Supply and Sanitation Company management had decided to extend the gardening period for one more season. This is to allow preparation time for the disruption of the source of income for the affected farmers by extending the farming activities to up to 30th August, 2022. He went further to clarify that following this advance notice, there was a written document called “consent form” that would be used as evidence that the farmers had been told and had accepted to cease farming activities by the said date and that there would be No compensation for destroyed crops on LWSC land after August, 2022. Following this explanation, he asked Mr Stephen Phiri (SP) to read out the Consent to the leaders followed by a question and answer session.</p> <p>Question and Answer Session:</p> <p>Question: Speedwell Malambo - Vice Chairman: What Consideration have you put in place to mitigate the loss of income to the affected people?</p> <p>Answer: PP: - RAP Consultant: Using the established list of legitimate Garden owners, priority for employment consideration will be given to the eligible members based on abilities and professional skills.</p> <p>Lackson Mtonga (LM) - Trustee: The football pitch is the only social amenity for our youths in the community, what consideration have you put in place for our children?</p> <p>Answer: PP: The land that our children have turned into a football pitch is Lusaka Water Supply and Sanitation Company land which is on title deed in the name of water utility company. LWSC needs a lot of land for this project to take off, apart from the fact that a lot is involved in sub-dividing the already titled land into a different name for a different purpose. With that in mind, we would advise you through your area counsellor to find an alternative land at which you can request the project contractor to use their equipment to help clear and make the land suitable for a football pitch in their corporate social responsibility.</p> <p>Question: Speedwell Malambo - Vice Chairman: How are you going to ensure that the locals and not outsiders are employed?</p> <p>Answer: PP - Consultant: The final RAP Report in which there is a list of the people directly affected by the project, once approved, will be shared with the Council and can be used by you the community leaders working with the area</p>			

	<p>counsellor as reference for identifying affected families with skills and qualifications relevant to the project for employment consideration.</p> <p>Question: Victor Malambo - Resident: What happens to my employment opportunity if I have no skill relevant to the construction project?</p> <p>Answer: PP - Bari Zambia Consultant: There is no job that is guaranteed, if someone is not disciplined at work that person will lose the job, but for the project affected members who may not have any skill in line with the project, consideration will be given to their close relatives such as sons, daughters or grand children with skills that the contractor may find useful. This is in addition to opportunities for general works such as flag carriers.</p> <p>Question: Speedwell Malambo - Vice Chairman: If employed, for how long are we going to be in employment with some source of income? In other words, how long will this project construction be?</p> <p>Answer: PP - Bari Zambia Consultant: I may not be very accurate on the duration, but it will not be less than a year. So you are assured that if employed, you will have some income for that period.</p> <p>Speedwell Malambo - Vice Chairman: In his final remarks, the vice chairman, requested for consideration to Ngwerere East View Community School, the place that has served as venue for the meetings. It is a school that requires assistance as it has no desks and the classroom blocks are not in good shape, yet that's the school that takes up most primary school-going children from Ngwerere East.</p> <p>Closing Payer: After closing prayer by Mr. Jailos Hamangaba, the meeting ended at 17:50</p>			
Signatures of the Meeting Minutes				
	The Client : LWSC	Contract Manager		
	The Project Implementation Consultant :	Team Leader		

Annex 5 Consent and Agreement Forms Signed

CONSENT FORM ON CEASING GARDENING ACTIVITIES ON LWSC LAND NGWERERE WASTE WATER TREATMENT PLANT						
WE, THE UNDERSIGNED LEADERS ON BEHALF OF THE PROJECT AFFECT PERSONS IN THE TABLE BELOW, DO HEREBY CONFIRM THAT OUR FARMERS HAVE BEEN GIVEN ENOUGH ADVANCE NOTICE TO VACATE THE LUSAKA WATER LAND WHICH THEY HAVE BEEN USING FOR GARDENING ACTIVITIES. IN VIEW OF THIS ADVANCE NOTICE, WE FURTHER ACCEPT THAT EFFECTIVE AUGUST 30, 2022, THERE SHALL BE NO FARMING ACTIVITIES NOR COMPENSATION FOR ANY ACTIVITIES ON THE SAID LAND.						
NO.	NAME OF THE ECONOMICALLY DISPLACED PERSON	NRC NO.	SEX	IMPACT DESCRIPTION	DIMENSIONS OF WHAT IS AFFECTED 3 (SIZE OF AFFECTED GARDEN)	MOBILE NO.
1	Veronica Mutonga	667055/11/1	F	Loss of garden as squatter	26.5 x 26.2 & 30.3 x 54.3	0979894741
2	Maliseni Mvula	328347/52/1	M	Loss of garden as squatter	4 x 58.4	0961652794
3	Theresa Chunga	149883/19/1	F	Loss of garden as squatter	18.4 X 48.1	097277449
4	Mkonda Banda	361809/54/1	M	Loss of garden as squatter	42.9 X 48.1	0976188022
5	Isaac Mvula	363486/10/1	M	Loss of garden as squatter	32 X 34	0976858892
6	Jackson Mtonga	161174/19/1	M	Loss of garden as squatter	28.8 X 62.3	0978198848
7	Rosemary Tembo	499665/11/1	F	Loss of garden as squatter	31.4 X 15.1	0963329944
8	Godfrey Banda	579154/11/1	M	Loss of garden as squatter	16 X 34	0975112130
9	Fridah Njomvu	141183/18/1	F	Loss of garden as squatter	15.1 X 11.8	0971411348
10	John Lubasi	161241/19/1	M	Loss of garden as squatter	18.1 X 22.7	09777274775
11	Victor Malambo	682760/43/1	M	Loss of garden as squatter	31 X 44.5 & 16.8 x 74.6	0979882338
12	Eunice Chalwe	220612/16/1	F	Loss of garden as squatter	42.1 x 30.7	0979595268
13	Margaret Ngulube	125337/18/1	F	Loss of garden as squatter	5 x 184.8	0977367450
14	Nicholous Lupengwe	384699/10/1	M	Loss of garden as squatter	11.3 x 44.7	0964376366
15	Agness Phiri	476917/11/1	F	Loss of garden as squatter	35.9 x 10.1	0975707285
16	Benson Lupengwe	381776/10/1	M	Loss of garden as squatter	5.3 x 44.7	0972252020
17	Doreen Tembo	675821/11/1	F	Loss of garden as squatter	20.6 x 10.1	
18	Gilbert Lupengwe	205153/19/1	M	Loss of garden as squatter	16.5 x 44.7	
19	Edward Mwanza	214312/16/1	M	Loss of garden as squatter	95.4 10.2	0964404933
20	Peter Banda	672686/11/1	M	Loss of garden as squatter	27 x 44.7	0966788208

1

21	Mary Phiri	208549/11/1	F	Loss of garden as squatter	18.9 x 21.2	0978061347
22	Moffat Zulu	186218/73/1	M	Loss of garden as squatter	13.1 x 88.1	0967305433
23	FranilSilomba	197669/16/1	M	Loss of garden as squatter	30.7 48.8	0963329944
24	Matthews Nyirongo	450563/11/1	M	Loss of garden as squatter	16 x 65	0977876295
25	Jason Malambo	641700/11/1	M	Loss of garden as squatter	26.7 50.4	0979267952
26	Chembwe Doris Chikubi	152954/63/1	F	Loss of garden as squatter	69.9 x 12.1	0963772654
27	Lackson Banda	674030/11/1	M	Loss of garden as squatter	50.4 x 26.1 & 51.4 x 92.7 & 14.7 x 25	
28	Raphael Phiri	386503/52/1	M	Loss of garden as squatter	41.5 x 20.3	
29	Katongo Moses	126743/45/1	M	Loss of garden as squatter	29.6 x 106	0968346092
30	John Chewe	179276/51/1	M	Loss of garden as squatter	17.7 x 13.2	
31	Nelia Tembo	674039/11/1	F	Loss of garden as squatter	23.2 x 43.1	
32	Dickson Njobvu	514949/11/1	M	Loss of garden as squatter	33 x 40.2	0975530712
33	Maggie Phiri	181745/75/1	F	Loss of garden as squatter	34.2 x 40.2 and 28.6 31	0977161190
34	Timmy Phiri	292847/17/1	M	Loss of garden as squatter	29.3 30.1	
35	Kalela Gilliad	612229/11/1	M	Loss of garden as squatter	30.1 x 27.3 and 17.3 8.6	0968436270
36	Elias Phiri		M	Loss of garden as squatter	147 x 26 and 15.8 x 37.6	0777516117
37	Hamangaba Jaiolos	153925/75/1	M	Loss of garden as squatter	7.7 9.1 and 39.8 x 36	0962582146
38	Felistus Ngulube	488191/11/1	M	Loss of garden as squatter	27.8 x 9.3	0777516117
39	Annet Mwinga	688312/11/1	F	Loss of garden as squatter	16.7 x 20	0977518392
40	Fatiness Tembo	381480/11/1	F	Loss of garden as squatter	41 x 17.6	0967689997
41	Peter Phiri	160113/19/1		Loss of garden as squatter	45.3 x 15.2	0974628583
42	Sharon Tembo	106983/19/1	F	Loss of garden as squatter	42.7 x 18	0974628583
43	Moses Mwaza	162812/11/1	M	Loss of garden as squatter	9.7 x 64.2	0966967801
44	Speedwell Malambo	259142/14/1	M	Loss of garden as squatter	15 x 75 and 36.1 x 5.3	
45	Tisa Mwanza	106762/19/1	F	Loss of garden as squatter	16.2 x 75.5	
46	Margaret Nkosi		F	Loss of garden as squatter	28.1 x 43.1	
47	Fred Malambo		M	Loss of garden as squatter	15 x 56	0979882338
48	Dorothy Phiri	117549/55/1	F	Loss of garden as squatter	13 x 21	0976330459
49	Charles Matongo	105780/73/1	M	Loss of garden as squatter	15.2 33.5	0974734002
50	Justine Meleki	802693/11/1	M	Loss of garden as squatter	55.5 x 15 and 17.4 x 15.4	0966242529

51	Josephine Zulu	106093/19/1	M	Loss of garden as squatter	15.6 x 46.8	0777473929
52	Margret Chanda	106467/19/1	F	Loss of garden as squatter	12.6 x 24.1	0977599777
53	Daniel Zulu	682794/11/1	M	Loss of garden as squatter	85.5 x 58.4	0953570974
54	Joseph Musonda	191996/41/1	M	Loss of garden as squatter	42.6 x 54.1	0970558757
55	Paul Lungu	759935/11/1	M	Loss of garden as squatter	86.1 x 8.7	0967044846
56	Victor Ngobeka	161025/19/1	M	Loss of garden as squatter	29.5 x 66.9	
57	Joseph Nkhoma	207252/19/1	M	Loss of garden as squatter	15 x 20	0968488193
58				As the land is on title deed for Lusaka Water, the team members will need to leave the pitch. However, they are free to engage Lusaka Water for amicable resolution of the matter.		Young Zega Football Club
59				Loss of land to give way for the discharge pipeline into Ngwerere Stream	5m x 329m	
				NAME	WARD	SIGN
	COUNCILLOR			Hemangebo Jairo Kapwiyambale		Hemangebo Jairo
	CHAIRMAN			Spedwell Makambo	11	Spedwell Makambo
	SECRETARY			Laelson Tembo	11	Laelson Tembo
	PROJECT-AFFECTED PERSON					

Annex 6 Pictures of Different Activities during Rap Preparation



Annex 7 Picture Template of Consultative Meetings Held With the PAP and Other Stakeholders



Annex 8 Grievance Redress Mechanisms

GRIEVANCE REDRESS MECHANISMS

It is a requirement by the EIB and KfW that all projects funded by them have a Grievance Redress Mechanism (GRM) or complaint handling policy in place. Feedback and GRM are essential for the successful implementation of projects. The GRM will ensure that community members or any stakeholders are able to raise their concerns regarding project-related activities, including the application of relevant E&S safeguards and mitigation measures. The GRM, once fully functional, will give LWSC a method of effectively collecting and responding to key stakeholders' inquiries, suggestions, concerns, and complaints that, if left unresolved, may result in the derailment of the whole project.

Effectively addressing grievances from people impacted by the project is a core component of managing operational risk and improving a project result. The GRM can be an effective tool for early identification, assessment, and resolution of complaints on projects.

8.1. Objectives

This Grievance Redress Mechanism will be applied to stakeholder complaints and grievances, perceived or actual, which relate to the activities of the LWSC and its contractors in relation to the Project components. Objectives of the grievance redress process are:

- To be responsive to the needs of the beneficiaries by providing a channel for feedback and resolving grievances and disputes at the various levels in the project area;
- To provide PAPs with accessible procedures for resolving perceived or actual harm done to their well-being or their belongings as a result of Project activities, and for the settlement of disputes, including the possibility of third-party adjudication;
- To provide an opportunity to the aggrieved party and the project developer to resolve disputes in a short time before they escalate to big problems;
- To identify and implement appropriate and mutually acceptable corrective actions to address complaints;
- To provide an opportunity to the aggrieved party and the project implementers to resolve disputes in a short time before they escalate to big problems;
- To enhance the project's legitimacy among stakeholders by promoting transparency and accountability, and deterring fraud and corruption;
- To provide a platform to ensure compliance with the provisions of the laws, regulations, and cultural and traditional rules in the project area; and
- To avoid, wherever possible, the need to resort to judicial proceedings.

8.2. Guiding Principles

This GRM shall be guided by the following principles:

- (a) **Equity:** no complaint is too big or small. All complaints received shall be treated with the urgency and the attention they deserve. All Aggrieved Parties regardless of their social standing, gender, political affiliation, religious affiliation shall be given opportunity to be heard by the responsible officers without prejudice.
- (b) **Accountability:** the project outcomes should benefit the people in the targeted communities and as such the Project Management is accountable to the people in the communities they operate in. The project should be responsive to the needs of the community including their complaints and grievances.

- (c) Transparency: members of the community or aggrieved parties have the right to information on the grievance mechanism, how to access it, who is responsible for handling their complaints and the potential outcome of the processes.
- (d) Accessibility: all people in the target communities must have unrestricted and free access to the GRM. The project shall publicize the GRM to all those who may wish to access it and provide adequate assistance for aggrieved parties who may face barriers of access, including language, literacy, awareness, finance, distance, or fear of reprisal. The Aggrieved Party shall be kept informed at each stage of the process.
- (e) Anonymity: the GRM will not disclose the identity(s) of the complainant by name or otherwise to maintain confidentiality
- (f) Timely Response: this GRM will function promptly and speedily. Prompt action is not only desirable from the complainant's point of view, but also from the LWSC's point of view. Since delay causes frustration and tempers may rise, it is necessary that grievances should be dealt with speedily. It is a common saying that justice delayed is justice denied. However, any 'unnecessary delay constitutes another grievance. Settlement of grievances "in the shortest possible time and at the lowest level possible," is the ideal one. Some of these cases and incidences might require reporting to RDA and possibly to WB Team immediately.
- (g) Confidentiality: Grievances will be treated confidentially. Complainant's names and personally identifiable information will be kept in the strictest confidence.
- (h) Building on existing informal and formal dispute resolution flows: the GRM will build on existing structures of informal and formal dispute resolution to enhance cost effectiveness. The GRM will rely on two existing systems: informal dispute resolution practices (through the existing traditional conflict resolution flows) and formal resolution practices (through existing administrative and judicial flows by arbitration and courts of law). By doing this, the mechanism can easily become acceptable as the majority of stakeholders are already familiar with it.

8.3. Types of Grievances and Disputes

The following types of grievances are anticipated in this project implementation:

- Complaints about survey activities;
- Complaints about scope / lack of information provided by the Project; and
- Claims of unfair exclusion from engagement activities.
- Entitlement processing:
- Misidentification of occupier of a particular garden;
- Complaints about income restoration assistance; and
- Complaints about the entitlement policy.
- Livelihood restoration:
- Complaints about allocation of livelihood opportunities; and
- Complaints about Project training, employment and recruitment opportunities and procedures.

8.4. Grievance Management Process & Resolution Mechanisms

Implementation of the Grievance Redress Mechanism for Chunga Wastewater Treatment Plant project will be the responsibility of the Grievance Manager (GM) with support from a wider team including the Grievance Office and, LWSC Social Safeguards team. Upon receipt of a grievance, the GM will confer with the complainant to verify that this is the first time that this grievance has been submitted by this complainant. If the grievance is related to a previous submission, the GM will inform the complainant of the status of that grievance and record that the grievance has been re-submitted.

A register of all grievances submitted, identifying who received the grievance, and the status of the grievance will present on site at all times. If the grievance is new, the GO will fill in a grievance form, and create an entry in the Grievance Database. This form will track how the grievance is dealt with from submission through to resolution.

Open grievances will be reviewed weekly. Those that are not being resolved in a timely fashion or have been assessed at a higher level of severity, will be referred to management, as described in Table 60. People who submit grievances but feel unsatisfied by the process retain their rights to refer their grievance to the court system as a formal judicial action.

8.4.1 Roles and Responsibilities

Grievance Manager: Will be appointed to coordinate the grievance resolution process. The GM will address and track grievances as they emerge and prepare relevant reports, the grievance process and how to access it will be widely communicated to Project-affected communities.

Grievance Officer and LWSC Safeguards Team: To seek to resolve the grievance, in a transparent and impartial manner. They meet with the complainant to understand the basis for the grievance and the resolution sought. They will conduct any investigation required, including meeting with the Respondent. If the person lodging the grievance is unable to write, the grievance and relevant personal information will be recorded on their behalf and read back to the complainant for their approval. Once the description of the grievance has been approved by the claimant, they will mark the document with their thumbprint.

Grievance Committee: Plays a crucial role in ensuring that the project developer respects the rights and interests of the affected communities and stakeholders and that any grievances are addressed in a fair and transparent manner. This committee will investigate the unresolved grievances from the previous instances, verifying the facts related to the complaints. Also, will facilitate the dialogue and negotiation between the project developer and the affected parties for unresolved grievances. The Grievance Committee should provide a platform for PAPs to voice their concerns and suggestions for project implementation. Also, it will monitor the implementation of grievance resolution and ensuring compliance with relevant laws and regulations; and supervise the reporting on the status of grievances and the effectiveness of the grievance mechanism to relevant authorities and stakeholders. When required, the Grievance Committee will provide recommendations for improving the project's social and environmental performance based on lessons learned from grievance resolution.

The committee will be composed of a traditional leader from the local community, a representative from the local authorities, a representative from ZEMA, a delegate from the top management of the LWSC, and the Grievance Manager. Decisions made by the committee must be reached by a consensus of no less than 70% of the votes. A constitution document will be created to establish the committee, and will be updated whenever is change of its members, and it will hold meetings at least twice a year or whenever an important issue needs to be resolved. The Grievance Manager is responsible for documenting each meeting and recording its results in the minutes.

8.4.2 Resources

The following resources will also need to be in place:

- An auditable system for receipt, recording and tracking of the process (for example a grievance log, database etc.) shall be in place.
- Dedicated budget for resourcing management of Grievance Redress Mechanism and addressing grievances through financial or in-kind compensation as and when needed.

8.4.3 Grievance Process

The GRM has been designed to provide a timely, responsive and effective system of resolving community groups or individual's grievances in the areas the project is implementing activities. It is a multi-stage process that ensures that all stakeholders from the community level structures to the National office are involved in finding solutions to the grievances raised by the communities the project is targeting.

All complainants will be informed of their rights to raise grievances pertaining to the Project. Mechanisms will be put in place to ensure that grievances are recorded and considered fairly and appropriately. Project management will issue and publicize a grievance redress policy that clearly states that management embraces grievance reports and views them as opportunities for project improvement. The policy will identify guiding principles; defining the scope and types of grievances to be addressed; setting out a user-friendly procedure for lodging grievances; outlining a grievance redress structure; describing performance standards; and spelling grievance review mechanisms.

The GRM Process is divided into six key steps as follows:

- 1) Receive and log grievance:** A register of grievances will be held by the Grievance Officer (GO) who or any other appointed person by the project. The complainant must register their grievances with the (GO).
To register the grievance, the complainant will provide information to the (GO) to be captured in the Grievances Registration Form. The GRM will accept complaints from the complainants submitted through verbal, email, phone, meeting or letter to the office of the (GO), in English or any local language spoken in that region or district. The focal point persons handling grievances will transcribe verbal submissions. Receipt of grievances shall be acknowledged as soon as possible, by letter or by verbal means.
When a complaint is made, i.e., when somebody asks to submit a grievance or upon receipt of a grievance (i.e., by mail, grievance form, orally or email), the GO opens the case and begins the preliminary investigation. This may begin immediately if the grievance is submitted in person or may require the GO to locate the complainant. As above, the name of the complainant and their contact details are recorded, as well as the details of the grievance. Complainants will be presented with a standardized written acknowledgment that the grievance has been received. Once the grievance is logged and acknowledged, the significance is assessed, based on the criteria described in Table 60 of the GRM. For second, third and fourth level grievances, higher levels of management will need to be informed and involved in the grievance process.
- 2) Acknowledge grievance:** The (GO) will acknowledge receipt of a complaint in a communication that outlines the grievance process; provides contact details and, if possible, the name of the person who is responsible for handling the grievance; and notes how long it is likely to take to resolve the grievance. Complainants will receive periodic updates on the status of their grievances.
- 3) Assess and Investigate:** This step involves gathering information about the grievance to determine its validity and resolving the grievance. The merit of grievances will be judged objectively against clearly defined standards.
Grievances that are straight forward (such as queries and suggestions) will be resolved quickly by contacting the complainant.

Having received and registered a complaint, the next step in the complaint-handling process is for the focal points to establish the eligibility of the complaint received. The (GO) who is the Grievances Registration Officer once a complaint or grievance is registered, shall within 7 days assess the registered complaint or grievances to determine its validity and relevance i.e. is it within the scope of the GRM as defined in this document. The following criteria can be used to assess and verify eligibility:

- The complainant is affected by the project;
- The complaint has a direct relationship to the project;
- The issues raised in the complaint fall within the scope of the issues that the GRM is mandated to address.

Having completed the complaint assessment, a response can be formulated on how to proceed with the complaint. This response will be communicated to the complainant. The response will include the following elements:

- Acceptance or rejection of the complaint;
- Reasons for acceptance or rejection;
- Next steps – where to forward the complaint;
- If accepted, further documents and evidence required for investigation e.g. field investigations.

Once the registered grievance or complaint has been determined as falling within the scope of this GRM, the (GO) and the Grievance Manager (GM) shall investigate the complaint. Investigation of the complaint will include the following:

- On site visit and verification;
- Focus Group discussions and interviews with key informers;
- Review of secondary records (books, reports, public records); and
- Consultations with local government and traditional authorities.

The (GM) will ensure that investigators are neutral and do not have any stake in the outcome of the investigation. At the end of the field investigation, the (GO) shall compile a Grievance Investigation Report (GIR) using a standard template on the outcomes of the investigations and the specific recommendation to resolve the grievance or complaint.

- 4) Grievance Resolution:** After the investigations, the (GM) shall inform the complainant of the outcome of the investigations and the recommended remedies if any. The complainant shall be provided with written response clearly outlining the course of action the project shall undertake to redress the grievances and the specific terminal date by which the recommended remedies shall be completed. Potential actions will include responding to a query or comment, providing users with a status update, imposing sanctions, or referring the grievance to another level of the system for further action. The project will take some action on every grievance. If the recommended remedy involves monetary compensation, the (GM) must then seek the approval of the Site Agent and Monitoring Consultants.

The complainant shall, provide a response agreeing or disagreeing with the proposed course of action within a minimum reasonable period after receiving the recommended actions.

- 5) Sign-off on grievance:** In the event that the complainant is satisfied with the decision made, the (GM) will document the pleasing determination, in interview with the complainant. In cases where there have been major dangers, impacts and/or negative reputation, we will incorporate composed documentation from the complainant showing fulfilment with the reaction.
- 6) Monitor:** Monitoring and Evaluation will be carried out to avoid certain impacts and grievances in future and also to learn from the processes in the past.

Table 19 Grievance Significance Levels

Significance Level	Type of Grievance	Responsible Party
Level 1	A grievance that is isolated or 'one-off' and essentially local in nature and restricted to one complainant. Note: Some one-off grievances may be significant enough to be assessed as a Level 4 grievance e.g., when a national or international law is broken (see Level 4 below)	Grievance Officer
Level 2	A grievance that extends to the local community or region and has occurred more than once, which is judged to have the potential generate negative comment from local media or other local stakeholders	Grievance Officer & Grievance Manager
Level 3	A grievance which is widespread and repeated or has resulted in long-term damage and/or has led to negative comment from local media or is judged to have the potential to generate negative media and local stakeholder comments.	Grievance Manager
Level 4	A one-off complaint, or one which is widespread or repeated and, in addition, has resulted in a serious breach of LWSC policies, Zambian or International Law and / or has led to negative national / international media attention, or is judged to have the potential to generate negative comment from the media or other key stakeholders (e.g. failure to pay compensation where appropriate)	Grievance Manager and LWSC Management Team.

The Project proponent commits to recording, assessing and acknowledging receipt of the grievance, within seven days. All grievances submitted will be investigated fully, and will involve other departments, contractors and senior management as required to fully understand the circumstances that led to the grievance being raised. The grievance process will aim to resolve any grievances within 30 days from the date that it was initially received. This timeframe can be extended to 60 days for more complex grievances (i.e., level 3 or 4 grievances), if required.

The grievance resolution process includes the following steps:

- Obtain as much information as possible from the person who received the complaint, as well as from the complainant to gain a first-hand understanding of the grievance.
- Undertake a site visit, if required, to clarify the parties and issues involved. Gather the views of other stakeholders including LWSC employees, if necessary and identify initial options for settlement that parties have considered.
- Determine whether the grievance is eligible or ineligible, determine the more appropriate vehicle for addressing the issue, a full explanation as to the reasons for its ineligibility will be given to the complainant and recorded in the Grievance Database. If the grievance is eligible, we will determine its severity level using the significance criteria in Table 19. This will help to determine whether the grievance can be resolved immediately or requires further investigation and whether senior management will need to be informed of the grievance and who specifically. If the grievance concerns physical damage, (e.g., crop, house, community asset) we will take a photograph of the damage and record the exact location as accurately as possible.
- Inform the complainant of the expected timeframe for resolution of the grievance.
- Enter the findings of the investigation in the Grievance Database.

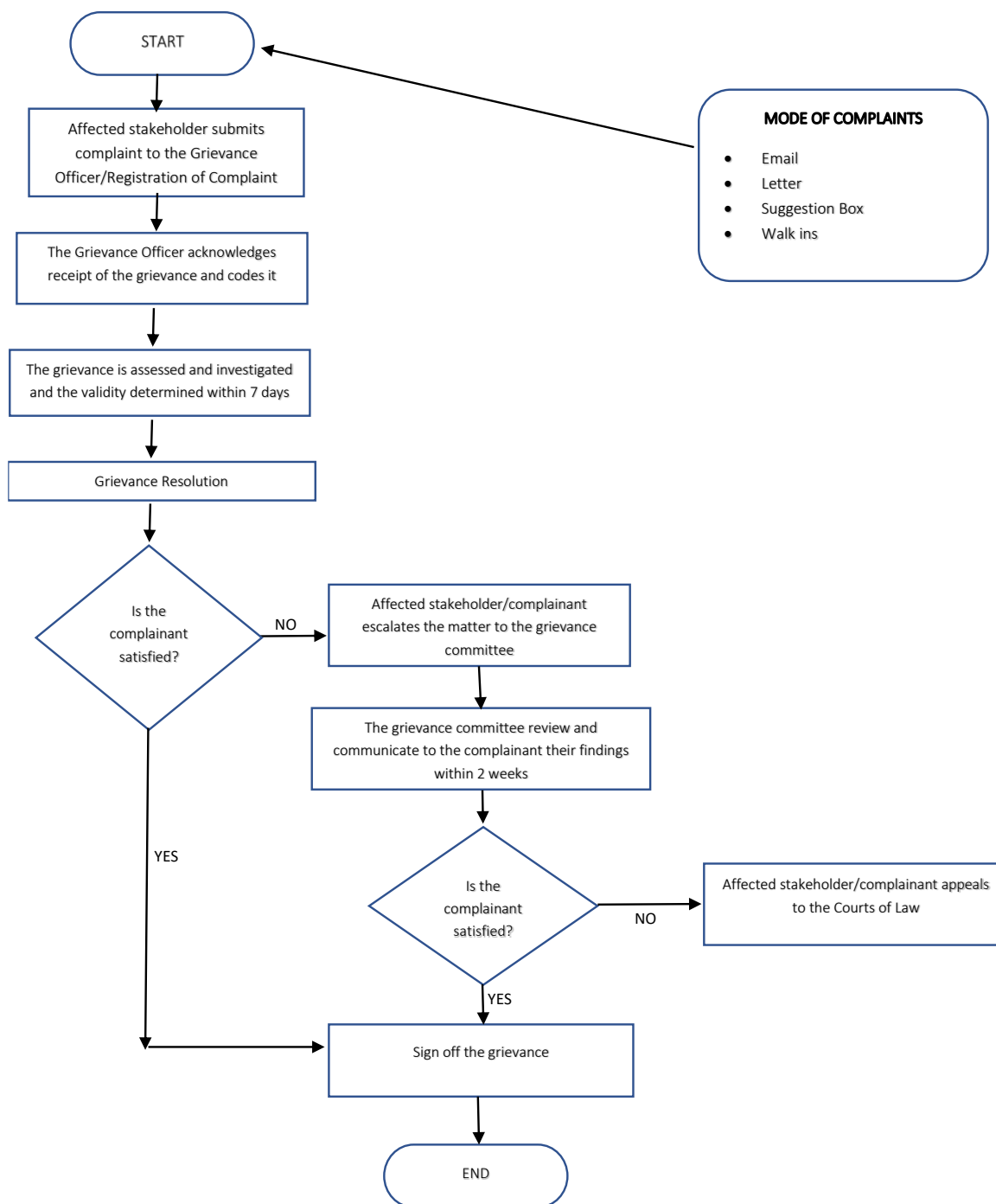


Figure 16 Grievance Redress Flow Chart

8.4.4 Grievance Settlement and Resolution Approach

All grievances will be addressed on a case-by-case basis. The proposed resolution should be respectful and thoughtful, including the reasoning and any data used to develop it. If broader consultation is required, grievances will be referred to the Grievances Committee.

The recommendations made by the Grievances Committee must be well-regarded and agreed upon by both the project developer and the affected parties. If further arbitration is necessary, appropriate legal or government involvement will be sought.

8.5. Monitoring and Reporting

Grievances will be monitored routinely as part of the broader management of the Project. This entails good record keeping of complaints raised throughout the life of the construction and operation of the Project. On receipt of grievances, electronic notification to management will be distributed. Grievance records shall be always made available to management, and the appropriate protocols established and followed for high level grievances.

Monthly internal reports will be compiled by the Grievance Officer and distributed to the management team. These grievance reports will include:

- The number of grievances logged in the preceding period by level and type.
- The number of stakeholders that have come back after 30 days stating they are not satisfied with the resolution.
- The number of grievances unresolved after 60 days by level and type.
- The number of grievances resolved between LWSC and complainant, without accessing legal or third-party mediators, by level and type
- The number of grievances of the same or similar issue
- LWSC's responses to the concerns raised by the various stakeholders.
- The measures taken to incorporate these responses into project design and implementation.
- These reports and other records will be made available for external review if required.

The grievance database will allow for the relative success of the grievance resolution process outlined above to be regularly monitored and evaluated. Internally, grievance resolution timeframes will be monitored through weekly meetings between the GM and LWSC team. Open grievances will be reviewed, and emergent and recurring issues discussed. Where grievances remain open beyond the established timeframe, the GO will be responsible for providing the complainants with an explanation and an assurance that their grievance has not been lost or forgotten.

Lastly, reporting on grievances will be provided to external auditors as a component of the regular evaluations that will be conducted for the resettlement process overall.

8.6. Recourse to the Judicial System

Although it is hoped that all grievances will be resolved internally and through the aforementioned process, it will be communicated to stakeholders that at any time during the grievance resolution process, they retain their rights to refer their grievance to the appropriate arbitral or legal body within the Zambian judicial system.

In the event that a grievance becomes a case presented by the claimant's legal counsel, the Project's Legal Advisor will be directly responsible for responding to the claim.

Annex 9 Livelihood restoration plan

LIVELIHOOD RESTORATION PLAN

9.1. Acronyms and abbreviations

LWSC: Lusaka Water Supply and Sanitation Company

CHW: Community Health Workers

CSR: Corporate Social Responsibility

ESIA: Environmental and Social Impact Assessment

ESS5: Environmental and Social Safeguard Policy 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

ESMP: Environmental and Social Management Plan

HIV/AIDS: Human-Immunodeficiency Virus / Acquired Immunodeficiency Syndrome

KII: Key Informant Interview

GO: Grievance Officer

GM: Grievance Manager

LRP: Livelihood Restoration Plan

GRM: Grievance Redress Mechanism

M&E: Monitoring and Evaluation

PAH: Project-Affected Household

PAPProject-Affected Person

SEP: Stakeholder Engagement Plan

RAP: Abbreviated Resettlement Action Plan

RPF: Resettlement Policy Framework

VSP: Vulnerable Support Program

9.2. Definitions

Affected Persons: Any individual, persons, family, household, group, or collective body that is affected by either physical or economic displacement and are deemed eligible to resettlement assistance and/or compensation under this RPF.

Compensation: The forms or combination of cash or in-kind replacement assets to be provided to Affected Persons for compensation of the acquisition of land or the loss of assets.

Cut-off Date: The date, which establishes the deadlines for entitlement to Compensation and/ or entitlements in respect of eligible land, crops, trees and structures. Persons occupying the project footprint after the cut-off date are not eligible for compensation and/or resettlement assistance. Similarly, fixed assets (such as built structures, crops, fruit trees, and woodlots) established after the cut-off date (usually the date of completion of the assets inventory, or an alternative mutually agreed on date), will not be compensated.

Economic Displacement: The loss of assets or access to assets that leads to loss of income sources or livelihoods but does NOT necessarily result in the direct loss of a place of residence.

Eligible Persons: See Affected Persons.

Entitlement Framework: A framework that establishes the specific entitlements (i.e., forms of compensation) granted to Affected Persons whom will lose proven assets, as determined during the Asset Inventory.

Improvements: Anything resulting from expenditure of capital or labour – including carrying out of any building, engineering, clearing, improvement, or other operations in, on, over, or under land, or the making of any material change in the use of any building or land and charges for services provided and other expenses incurred in the development or towards the development of land.

Livelihood Restoration: A range of measures and programs that ensure that the existing livelihoods of Affected Persons is restored, or ideally improved, during and after the land acquisition and/or resettlement process.

Livelihood Restoration Plan: A plan that establishes the entitlements (e.g., compensation, other assistance) of affected persons and/or communities economically displaced by a Project, in order to provide them with adequate opportunity to re-establish their livelihoods. The Project will not involve any physical displacement (i.e., to a place of residence), solely economic displacement.

Physical Displacement: The displacement, loss, or destruction of the place of residence as a direct result of the development of the Project.

Resettlement Policy Framework: The framework document previously prepared for the Project that defines the principles and steps to be adopted in the development of this Livelihood Restoration Plan.

Resettlement Action Plan: is a plan prepared by the sponsor or other parties responsible for resettlement (such as government agencies), specifying the procedures it will follow and the actions it will take to properly resettle and compensate people and communities physically displaced by a Project.

Specially Gazetted Land: This is agricultural land, which has been identified for compulsory acquisition and has been gazetted for such acquisition.

State Land: Land that is not customary.

9.3. Introduction

This Livelihood Restoration Plan (LRP) sets out the guiding principles and procedures that will be followed in managing the impacts of the project affected person's ceasing gardening on Lusaka Water Supply and Sanitation Company's (LWSC) land meant for construction of new Wastewater Treatment Plant in Ngwerere East Township.

No PAP has any fixed asset in the area. Therefore, this Livelihood Restoration Plan is an addendum to the RAP so as to clearly state what procedure will be followed in the Livelihood Restoration Program.

9.3.1 Overall Project Description

As indicated in the RAP, LWSC intends to use their land on which some local people are gardening vegetables in Ngwerere East Township. This land has become a source of income for the people using it and LWSC will need to assist them with Livelihood restoration so that they continue to have an income after ceasing gardening.

9.3.2 Land Acquisition and Resettlement Context

The project does not involve land acquisition as the target land for the project actually already belongs to the project implementers, the Lusaka Water Supply and Sanitation Company Limited. Hence, no physical resettlement is involved and the programs here defined will focus in mitigate the economical displacement caused to the communities gardening in the lands owned by LWSC.

9.4. Legal and institutional framework

This Section provides a summary of the legal and institutional framework guiding the preparation of this LRP. It describes Zambian national legislative requirements relevant to land access and resettlement, and compares them with the World Bank's Environmental & Social Standard 5 (ESS5), Land Acquisition, Restrictions on Land Use and Involuntary Resettlement.

9.4.1 Legislative Framework

The most relevant Acts related to land access and acquisition are listed below and described in subsequent sections:

- Constitution of Zambia;
- The Lands Act;
- The Land Acquisition Act;
- Local Government Act; and
- Chiefs Act.

9.4.1.1 The Constitution of Zambia (Amendment) Act, No. 2 of 2016

The Constitution is the supreme law of Zambia and establishes the fundamental rights with respect to human dignity, equity, social justice, equality, and non-discrimination.

Article 253 states that land will be held, used and managed with consideration to ensure equitable access to land, protecting the tenure for lawful landholders, and that land-use planning be conducted in a consultative and participatory manner.

Relevant to this LRP are the sections in the Constitution that refer to the alienation of rights to land or acquisition of land. Articles 233 and 254 grant powers to the President, through the Commissioner of Lands, to alienate land held by both citizens and non-citizens. The Constitution however does not provide any specific procedures, or exclusions regarding the legal power to alienate land.

9.4.1.2 Lands Act, Cap 1853

The Lands Act, states that all land in Zambia be held in perpetuity and in trust on behalf of the people of Zambia.

Article 3(2) grants power to the President to alienate land from any Zambian or Non-Zambian citizen. The President may only alienate land held under customary tenure when they have taken consideration of local customary law on land tenure, consulting the local Chief and authorities as well as consulting with any persons or body with a vested interest in the land.

In addition, the President shall not alienate land without providing any consideration or monies for such alienation except where the alienation is for a public purpose.

9.4.1.3 Land Acquisition Act, 189

The Land Acquisition Act grants powers to the President to acquire any property of any description, where the President is of the opinion that such acquisition is desirable or in the interests of the Republic.

Under Article 4, the President, via the Ministry of Land or any authorized person, is permitted to access the targeted land to undertake surveys or any other act necessary to ascertain whether the land is or may be suitable for the purpose in question.

Article 12 defines the principles for the assessment of compensation, which include:

- The value of property shall be the amount which the property might be expected to realise if sold in the open market by a willing seller;
- Any deductions related to any returns and assessments of capital value for taxation made or accepted by the claimant;
- Any deductions related to any money, services, equipment granted by the Government, by a Company or any other body unless any contributor indicates in writing that the contribution was specifically made for the use and benefit of the registered owner;
- The special suitability or adaptability of the property for any purpose shall not be considered;
- No allowance shall be made on account of any improvements effected or works constructed after the publication of the notice to yield up possession;
- Where part only of the land held by any person is acquired, there shall be considered any probable enhancement of the value of the residue of the land by reason of the proximity of any improvements or works made;
- Allowance shall be made for the damage by reason of the severance of the acquired land from any other land belonging to the same person; and
- No allowance shall be made for any probable enhancement in the future of the value of the land to be acquired.

9.4.1.4 Local Government Act, Cap 281 of 19914

The Local Government Act grants powers to the relevant councils in acquiring any land by agreement whether by way of purchase, lease, exchange, or gift. Where such acquisition cannot be agreed between the relevant parties, the Council may approach the President to compulsory acquire the land consistent with the Land Acquisition

9.4.1.5 Act.Chiefs Act, Chapter 287

This Act makes provision for the recognition, appointment, and functions of Chiefs and Deputy Chiefs. The Chief is required to discharge the traditional functions of his office under African customary law as far as the discharge of such functions is not contrary to the Constitution or any written law and is not repugnant to natural justice or morality.

Please see Section 6 of the Resettlement Action Plan for more details on Legal Framework and International Best Practice.

9.5. Existing socio-economic conditions

9.5.1 Introduction

This section provides a general overview of the baseline socio-economic conditions in communities that will be affected by the WWTP construction.

9.5.2 Methodology

In order to assess the baseline conditions of households associated with the area for the proposed Staff Township, the following methods were applied:

- A questionnaire administered on the PAP;
- Interviews and consultations with key stakeholders; and
- Transect walk.

9.5.2.1 Questionnaire

Forms were administered by the enumerators who asked questions to each PAP to get the baseline information about them as shown in the attachments in the RAP (See section 4.5 in the RAP and Annex 12).

9.5.2.2 Key Informant Interview

Primary data was collected through semi-structured Key Informant Interview (KIIs) with the following parties:

Councillor and community chairmen were interviewed informally to get more information about the people of Ngwerere East.

9.5.2.3 Transect Walk

A transect walk through the project land area was held to gain a deeper understanding of the land's importance to livelihoods for communities within the area.

9.5.3 Characteristics of the Site

The proposed site is an area containing sewer ponds that belong to LWSC which are old and not functional. Surrounding the site are residential houses for the local residents of the Ngwerere East Compound.

9.5.3.1 Land Use

The primary economic activity undertaken by the Ngwerere East community members is vegetable gardening.

9.5.3.2 Natural Resources

The most important natural resources to local communities is the Ngwerere stream, which is used for irrigation on the downstream.

9.5.4 Demographics

9.5.4.1 Population Size

As described in chapter 4 in the RAP.

9.5.4.2 Religion, Ethnicity and Language

Christianity was the dominant religion in the Project Area. Denominations included Roman Catholic, New Apostle, Apostolic Faith Mission, Church of Christ, Baptist and Seventh Day Adventist. Most people in the area speak Nyanja and Bemba languages.

9.5.4.2.1 Gender and Age Distribution

As described in chapter 4 in the RAP.

9.5.4.2.2 Land Tenure and Ownership

The proposed site is state land belonging to Lusaka Water Supply and Sanitation Company (See attached title deed in the Annex 10).

9.5.4.3 Livelihoods and Economy

As is the case with many communities in the broader region, those located near the proposed project site are primarily subsistence farmers who sell any surplus crops they produce to generate a modest income.

9.5.4.4 Economic and Livelihood Activities in the Project Area

9.5.4.4.1 Livestock Rearing

Livestock rearing (chickens) is one of the few livelihood activities in the area.

9.5.4.4.2 Crop Farming and Gardening

Primary livelihoods in the wider Project Area are almost entirely agriculture based and irrigation is used as vegetable are grown all year round. Seeds are sourced from previous harvests or, when previous harvests are poor, they are bought at commercial seed outlets. Vegetable gardening is undertaken in all communities and used for both subsistence and economic purposes. Commonly grown plants include tomato, cabbage, onion, butternut, peppers, eggplant, carrots and beans.

9.5.4.4.3 Kiosks

Those whose land face the Ngwerere Road have a chance to own kiosks commonly known as Tuntemba in Nyanja, where they sell small daily need home items such as cooking oil, packs of mealie-meal (ka Pamela), washing soap and vegetables.

9.5.4.5 Household Income and Expenditure

Where greater income to supplement the free education and where healthcare is required, vegetable sales become an important income generator. In many cases households found it difficult to estimate monthly expenditure on key items as money tends to be spent as soon as it is obtained. Table 8 in the RAP shows what the PAP claimed was their monthly income.

9.5.5 Education

Despite the national policy of free primary education, a number of children do not attend school because their parents or guardians cannot afford the additional costs of uniforms, food, transportation and books. There is only one school in Nwerere East, which is a community primary school that needs assistance in terms of classrooms and desks.

9.5.6 Health

Medlands, Coptic, Victoria hospital, and CFB are straight runs in from Ngwerere. The Levy Mwanawasa Hospital is excellent for COVID patients.

9.5.7 Services and Infrastructure

9.5.7.1 Transportation

Ngwerere Road and the Railway line are the prominent transportation features in the area. Within the township, roads are almost non-existent. However, the Chongwe Council through the area councillor is planning to work on some roads within the compound.

9.5.7.2 Water

Communities in the Project Area accessed water from wells/boreholes and Ngwerere stream. Wells and boreholes were the most popular source of water for both household and agricultural activities.

9.5.8 Telecommunications

Most people in the area owned mobile phones and used them as their primary means of communication. Telephone reception is good in the area.

9.5.8.1 Recreational facilities

Sport is an important social activity everywhere and youths in the area have been relying on one of the disused pond areas as a football pitch. Lusaka Water Supply and Sanitation Company, though the contractor will assist the football team after engaging them on best way forward about the pitch.

9.6. Consultation and disclosure

This section describes stakeholder engagement activities undertaken and planned for the implementation of the LRP. It highlights the Project's approach to ensuring free, prior and informed consultation of stakeholders to participate in the process of RAP and its income restoration.

Stakeholder engagement activities are divided into four sections:

- **Stakeholder engagement approach:** Description of the overall approach to stakeholder engagement, and the specific goals and objectives of the engagement strategy.
- **Stakeholder identification and engagement methods:** Identification of key stakeholder groups and individuals at the affected community, local, district and provincial level, and how they will be involved in resettlement discussions and planning.
- **Key issues raised by stakeholders:** Summary of key issues raised by stakeholders during recent field activities; and
- **Disclosure:** Disclosure of the LRP and description of planned engagements moving forward.

In addition to this LRP, a detailed Stakeholder Engagement Plan (SEP) is being prepared. The SEP outlines the roles and responsibilities for keeping all stakeholders appropriately informed of Project progress and involved in income restoration program implementation. The SEP will identify and map all Project stakeholders with an interest and provide guidance on the establishment of Project steering and advisory committees.

9.6.1 Engagement Approach

Stakeholder engagement is the broad, inclusive, and continuous process of relationship building between a Project proponent and its stakeholders, particularly those directly affected.

The specific approach to stakeholder engagement for livelihood restoration plan implementation during the proposed construction of a wastewater treatment plant in Ngwerere include the following:

- Establish and maintain a constructive, ongoing relationship with the PAP, as well as other stakeholders, based on mutual understanding, respect and trust;
- Ensure that engagement activities are undertaken in a manner that is inclusive, culturally appropriate, and tailored to the language preferences and decision-making processes of the PAP, and the needs of vulnerable groups therein;
- Establish the general terms and conditions that will guide the livelihood restoration process;
- Undertake good faith negotiations with individual affected households on the basis of the general terms and conditions established through the group engagement described above;
- Effective disclosure of timely, relevant and understandable, information, capacity building, and third party appointments;
- Ensure that all engagement activities are free of intimidation or coercion, and all participants are fully aware of their rights according to national law and international standards; and
- Work towards creating broad community support for the livelihood restoration.

9.6.2 Stakeholder Identification and Engagement Methods

Stakeholders are those individuals, groups and organizations with a legitimate interest in the livelihood restoration processes. In particular, stakeholders are those people and households that experience displacement directly. In the context of this LRP, key stakeholders fall into one of the following categories:

- Government officials and bodies at the national, provincial, district and ward level;
- Elected officials responsible for the Project Area such as the Mayor and the councillors;
- Individuals/Households accessing the livelihood restoration; and
- Community based organizations active in the area.

The methods for engaging stakeholders include informal engagement and information sharing such as phone calls and emails. The Implementation Team to be established will work collaboratively with Project stakeholders to ensure livelihood restoration aligns with the Resettlement Policy Framework and the commitments made in the RAP and this LRP.

Key issues requiring stakeholder participation include:

- Reviewing and finalizing the criteria for Project eligibility and components of the entitlement matrix;
- Management of grievances; and
- Livelihood restoration monitoring and evaluation.

9.6.3 Engagement to date

Field work was undertaken during the census for the RAP including participant observation and transect walks through the proposed site. As mentioned in the RAP, a questionnaire was administered since the survey was done during COVID-19 and physical interaction in big groups was not allowed.

9.6.3.1 Perceptions on land access in affected communities

People understood and respected the fact that the land in question was not theirs but for LWSC. They said they always knew that the land belonged to Lusaka Water Supply and Sanitation Company and were ready to stop using the land as requested. However, they asked the LWSC could find a way of helping them out since that was the only means of their livelihood.

9.6.3.2 Other key issues raised by stakeholders

The community concerns regarding the proposed project included the need for better bridge on Ngwerere Stream as the current one was in bad shape. The other concern was that of Football Pitch for the youths (See RAP for details).

9.6.3.3 Future engagement

Additional meetings will be held with key government ministries, departments, and officials from the local government to ensure that all necessary permissions for the Project to occupy the proposed Ngwerere East Township area are properly secured.

9.6.3.4 LRP disclosure

A summary of the LRP, in the appropriate local language will be prepared and distributed to all stakeholders and PAP. They will be encouraged to post the summary in affected communities and will be provided with Project support in sharing its content in meetings with their constituents.

9.7. Project impacts

See section 1.17 in the RAP's Executive Summary and Chapter 11 of the RAP document for description of the impacts resulting from the ceasing of gardening on LWSC's land required for the proposed construction of new wastewater treatment plant in Ngwerere Township.

9.8. Eligibility, entitlements and compensation

9.8.1 Introduction

The objective of the eligibility and entitlement framework is to provide transparent, fair, and timely restoration of livelihoods that have been impacted by the project, in accordance with Zambian law and international standards of good practice, such as the World Bank Environmental and Social Safeguard Policy Standard 5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement (ESS5), as well as the European Investment Bank's Environmental and Social Standards (EIB ESS).

9.8.2 Eligibility

Eligible persons include all persons with a formal interest in the land required by the Project – this may take the form of proprietary ownership, co-proprietary, tenants, or any persons with other limited interests. The term is further expanded to include affected persons – persons who gain a benefit or utilise the land or improvements made on that land irrespective of their legal standing. There are no fixed assets in this project to warrant detailed list of eligibility factors other than the list of those found gardening illegally on the land during the census totalling 57 who were captured before the cutoff cut-off date: September 1, 2021. These are the only ones eligible for income restoration program being arranged.

9.8.3 Entitlement Framework

The Entitlement Framework defines the types of compensation or resettlement assistance that will be provided to eligible persons based on the type of asset that will be lost. In this sense, it was determined that there are no compensations to be made to any PAP on this project since they do not own land or assets. However, those captured as having been gardening on the Lusaka Water Supply and Sanitation Company land before the cut-off date are eligible for a livelihood restoration, which is the purpose of this Addendum to the RAP. Where possible and reasonable, a range of livelihood assistance options will be provided.

Entitlements generally fall into the following categories:

- Provide training and support mechanisms for individuals with varying income levels to restore their previous income;
- Prioritize PAP for suitable job positions available in the project if possible;
- Cash compensation, which involves the payment of cash to the PAHs considered by the RAP Survey as vulnerable (see budget in RAP's Table 17).

The Project favours the provision of in-kind compensation over cash compensation wherever feasible, as it represents a reduced risk – for both the Project and those affected – of entitlement mismanagement, inequitable distribution, and long-term impoverishment.

The Entitlement Matrix (see Table 13 in the RAP) defines the types of compensation or assistance to be provided to eligible persons. It will be presented together with the eligibility criteria to local stakeholders during LRP disclosure and any necessary adjustments will be made to this LRP and its associated RAP.

9.8.4 Loss of Access Points

It is recognized that the proposed project site provides an important pathway to other nearby Townships. The PAP were assured that such access will be maintained by ensuring that the bridge on Ngwerere Stream is properly worked on to assist the community. Improvements to the new routes to facilitate access will be provided, if required.

9.9. Livelihood restoration

9.9.1 Introduction

Livelihood may include wage-based income, agriculture, fishing, petty trade, and bartering. International standards define ‘livelihoods’ as the full range of activities that individuals, families, and communities engage in to make a living.

This section details the Project’s approach to livelihood restoration for the economically impacted households to ensure that the livelihood of each household affected by the proposed project is restored and improved to a level not less than the level before the project implementation.

The livelihood programs detailed within this LRP will evolve over time as additional feedback is received from various stakeholders; it will be participative and iterative process.

9.9.2 Livelihood Restoration Plan (LRP)

As noted above, this section expands upon the Entitlement Framework found in the RAP and LRP, and details how the livelihood restoration program is achieved. The LRP comprises tailored programs that are based on the existing livelihood activities of the affected population and the degree to which the Project impacts people's livelihoods.

9.9.2.1 Goals and Objectives

The goal of the LRP will be to help restore, and where possible improve, the livelihoods and living standards of the project affected households. The LRP will assist men, women, youth, and communities in re-establishing and strengthening current livelihood practices in the short and medium term, and develop transferable skills and engender self-reliance in the long term.

The specific objectives of the LRP include:

- Provide support so that the abilities, resources, and assets of PAHs are effectively deployed in meaningful livelihood initiatives;
- Enable PAHs to benefit from multiple sustainable livelihood activities within the Project Area;
- Meet all commitments – as agreed with PAP – to effectively and sustainably manage the assistance for the vulnerable PAHs;
- Support the improvement of commercial skill-based livelihoods to create opportunities for PAHs to benefit from a skills-based economy;
- Deliver training, and provide people with work experience and transferable skills that will help them compete for Project-related jobs and future opportunities; and
- Provide support so that PAHs and communities are able to maintain equal access to development programs.

9.9.2.2 Principles

The following principles will be applied in the implementation of the LRP:

- Identify livelihood impacts systematically – Livelihood impacts on local people have been determined systematically through surveys and engagement with those affected in the RAP. The impacts have been quantified and the affected people identified individually. Impacts will be considered even if the affected people do not own the land meant for the project.
- Plan and negotiate appropriate measures with affected people – The planning of livelihood restoration / improvement is not a purely technical exercise, but requires a high level of interaction with the affected people in order to develop the most feasible and desirable mitigation measures. The agreed measures have been consented to by the PAP as shown in the RAP (See Annex 5 of the RAP).

9.9.2.3 Livelihood Restoration Programs

9.9.2.3.1 Financial Literacy and Entrepreneurship Development Program

This program aims to provide financial literacy training to vulnerable communities by endowing individuals with the necessary skills to start and manage their own businesses, promoting economic empowerment, and reducing poverty. The program will conduct training and workshops on financial literacy and entrepreneurship development. Additionally, it will provide mentorship and coaching to the participants interested in starting their own businesses and facilitate access to microfinance institutions and other financial resources. The main activities include:

- Conducting financial literacy trainings and workshops
- Providing mentorship and coaching to individuals interested in starting their own businesses
- Facilitating access to microfinance institutions and other financial resources
- Monitoring and evaluating the impact of the program

9.9.2.3.2 HIV/AIDS Vulnerability and GBV Campaign Program

Aims to raise awareness on the risks and vulnerabilities of HIV/AIDS and GBV by implementing prevention and mitigation strategies such as reduction of stigma and discrimination against affected individuals and communities, health campaigns, and promotion of gender equality. Based on the collaboration with local organizations and community leaders, maximum participation and engagement of the PAP will be searched. Programs and workshops will be conducted with the PAP to outreach to educate and empower women and girls, gender equality and prevent gender-based violence. The main activities include:

- Conducting community outreach programs in areas with high rates of gender-based violence and HIV/AIDS vulnerability
- Hosting workshops and training sessions for women and girls on HIV/AIDS prevention, gender-based violence prevention, and gender equality
- Distributing informational brochures and flyers in schools, clinics, and other public spaces to increase awareness about the link between HIV/AIDS vulnerability and gender-based violence
- Providing access to HIV/AIDS and GBV prevention and treatment services

9.9.2.3.3 Psychosocial Counselling Program

Will aim to provide individuals affected by livelihood and income loss with the emotional and psychological support they need to recover and restore their livelihoods, by providing a range of counselling approaches, skill-building workshops, and follow-up support, the program will help individuals to build resilience and move forward with their lives. The program will be conducted by trained counsellors who will provide one-on-one counselling sessions to individuals affected by livelihood and income loss. The program will be conducted in a safe and confidential environment, to ensure that individuals feel comfortable sharing their experiences and emotions. The counselling program will use a range of tools to help individuals recover and restore their livelihoods. These may include cognitive-behavioural therapy, mindfulness techniques, stress management techniques, and other evidence-based counselling approaches. The general activities in this program include:

- Needs assessment: The first step in the counselling program will be to conduct a needs assessment to identify the specific needs and challenges faced by individuals affected by livelihood and income loss.
- Counselling sessions: Trained counsellors will provide one-on-one counselling sessions to individuals affected by livelihood and income loss. These sessions will focus on helping individuals to cope with the emotional and psychological impact of their loss, and to develop strategies for restoring their livelihoods.
- Group counselling: In addition to one-on-one counselling sessions, the program may also include group counselling sessions. These sessions will provide individuals with an opportunity to connect with others who are going through similar experiences, and to share their experiences and emotions in a supportive environment.

- Skill-building workshops: To help individuals restore their livelihoods, the program may also include skill-building workshops. These workshops may focus on developing new skills, such as entrepreneurship or financial management, or on enhancing existing skills.
- Follow-up support: The counselling program will include follow-up support to ensure that individuals are able to sustain their livelihoods over the long-term. This may include ongoing counselling sessions, as well as referrals to other support services as needed.

9.9.2.3.4 Job Placement Program

The program aims to provide job opportunities to PAP, prioritizing them for suitable job positions available in the project and facilitating their access to job placement services and resources. This will include mentorship and coaching to individuals to enhance their employability. The program will include the following activities:

- Prioritizing affected individuals for suitable job positions available in the project
- Facilitating access to job placement services and resources
- Providing mentorship and coaching to PAP to enhance their employability

9.9.3 Optimization of Local Employment

As previously mentioned, the construction of the WWTP in Ngwerere Township will create a range of employment opportunities, including short-term positions during the construction phase. Although not part of RAP/LRP activities or budget, local employment will be important in maintaining and enhancing the income of affected households. Where possible, the project will give first priority selection of unskilled labor positions to PAHs as part of the local employment plan. Candidates will be selected through an independent committee and validated using information in the RAP/LRP database.

It is anticipated that the majority of jobs will consist of construction roles that traditionally disadvantage female candidates and candidates with lower physical capital due to age or handicap. Therefore, the project will integrate gender and other social dimensions into existing policies to build and maintain a diverse and gender-balanced workforce.

9.10. Vulnerable support

Vulnerable persons are defined by the World Bank as those who, “by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage, or social status, may be more adversely affected by resettlement than others, and who may be limited in their ability to claim or take advantage of resettlement assistance and related development benefits.” These standards require that particular attention be paid to the needs of the poor and vulnerable in resettlement planning.

All the identified vulnerable households will be assisted with small capital money to venture into small income generating businesses after they have received training (See budget for the vulnerable in the RAP).

9.10.1 Vulnerable Support Program (VSP)

For the Project as a whole, a Vulnerable Support Program has been developed which includes three main components:

- Established interventions to ensure that the implementation of LRP activities 130 minimizes Project-induced vulnerability while assisting PAHs with pre-existing vulnerability.
- Continuous monitoring, identification, tracking, and follow-up of all PAHs to ensure they have access to, and benefit from, LRP activities and Project interventions.
- Referral of vulnerable households to existing reputable community service providers such as the Ministry of Social Welfare for further assistance when LRP activities are unable to sufficiently address pre-existing or Project-induced vulnerability.

9.10.2 Vulnerable Support Program (VSP) Goals and Objectives

The VSP focuses primarily on monitoring, follow-up, and referral of vulnerable households to the LRP implementation team and/or existing community service providers.

The goal of the VSP is to identify, assess, support, and provide remedial assistance and follow-up for affected households experiencing severe hardship as a result of Project impacts.

The specific program objectives include:

- Ensure that PAHs are provided with supplementary support or assistance so they can participate and benefit from LRP programs, particularly the LRP;
- Identify PAHs who may potentially be vulnerable and ensure that they are able to participate in all aspects of the planning, implementation, and monitoring of the LRP(s); and
- Strengthen individual, household, and community support services.

9.10.3 Identification of Vulnerable Persons

Any PAHs that exhibit markers of vulnerability will be eligible to participate in the support programming outlined in the VSP.

A three-stage process will be used to monitor, identify, and track vulnerability:

- (1) Inclusion in the Project's Vulnerable Watch List using proxy vulnerability benchmarks;
- (2) Verification through discussion with the Ministry of Social Welfare, local leaders, or through a Vulnerable Assessment Home Visit;
- (3) Approval of eligibility and referral to appropriate assistance and service providers such as the DMMU food distribution scheme, Ministry of Social Welfare for social cash transfer program and so on and or for medical treatment assistance.

9.10.3.1 Vulnerable Watch List

A Vulnerable Watch List will be used to identify potentially vulnerable PAHs using broad proxy vulnerability benchmarks. The main function of the Vulnerable Watch List is to highlight households that may be vulnerable for closer monitoring and support. As such, the Vulnerable Watch List serves as an early warning system to identify potential issues with LRP implementation that may result in vulnerability.

The indicators of potential vulnerability include at least the following (also shown in the RAP).

- Elderly, frail people lacking adequate extended family support who do not own means of production;
- Persons with HIV/AIDS or other chronic illnesses or disabilities who are unable to regularly engage in income generating activities;
- Households with limited means of production, particularly female-headed, but a high number of dependents (i.e. orphans); and
- Child-headed households.

9.10.3.2 Confirmation of Vulnerability

During LRP implementation, PAHs on the Vulnerable Watch List will be considered for a home visit to determine if they require referral for supplementary assistance. Where home visits are appropriate, they will be conducted by a representative from the Project, local health care professionals or representative from social welfare, and any relevant community support organizations.

9.11. GRM

See Annex 8.

9.12. Monitoring and evaluation

Monitoring and Evaluation (M&E) provides timely, concise, indicative information on whether livelihood restoration initiatives and commitments are on schedule, as well as on track to achieve sustainable restoration of livelihoods and living conditions, or if adjustments are required.

M&E will involve the direct and active participation of the PAP and stakeholders, and the incorporation of their feedback into the livelihood restoration activities. M&E activities will continue until it can be demonstrated that the PAHs have successfully re-established their livelihoods and restored their quality of life. This will be confirmed by means of a completion audit.

9.12.1 Internal Monitoring

An internal performance and impact monitoring system will regularly track and report on the following:

- Progress against the detailed LRP implementation schedule such as:
 - Alternative community access routes identified and mapped; and
 - Livelihood restoration measures initiated and completed.
- Alignment with overall Project schedule and budget;
- Review of grievances submitted including analysis of trends which may require program adjustments; and
- Stakeholder engagement milestones achieved.

Internal progress monitoring reports will be prepared at regular intervals beginning with the commencement of implementation activities. There will be more frequent reporting during the earlier phases to ensure implementation is on track.

Outcome monitoring will assess the effectiveness of the LRP in supporting Project-affected people as they are re-establishing their livelihood. It will involve surveys of affected households and focus groups to collect information. The collected data will be compared with baseline data prior to land access in order to better understand:

- Changes in household income levels;
- Changes in household expenditure patterns; and
- Satisfaction of affected communities with compensation (such as the vulnerable PAP and/or livelihood restoration activities).

The timing of the outcome monitoring will take into consideration the implementation schedule and assist the Project Implementation Team in making program adjustments and preparing for external evaluations.

9.12.1.1 Monitoring of Livelihoods Restoration

Those economically displaced households participating in the Project's livelihood restoration programs will be monitored beginning one year after livelihood assistance has been delivered. The purpose of this monitoring is to assess their socio-economic quality of life and learn if they have restored their livelihoods after impact mitigation activities have ended. Based on the analysis of data collected within the livelihood restoration programs, an assessment will be made whether affected households have been given a reasonable opportunity to restore their livelihoods. This mid-term assessment will guide the course for taking corrective action, if needed.

In order to document whether livelihoods have been fully restored, a long-term evaluation will take place normally 5 to 7 years after displacement. If the livelihoods of the vast majority of households have been restored, LRP implementation can be considered complete.

9.12.1.2 Vulnerability Monitoring

The primary objective of vulnerability monitoring is to avoid the occurrence of project-induced vulnerability, and if it occurs, to mitigate this through support measures and follow-up monitoring.

International standards stipulate that:

- Project proponents identify individuals and groups that may be differentially or disproportionately affected by the project because of their disadvantaged or vulnerable status;
- Project sponsors assess potential impacts on these individuals and groups and propose as necessary, specific measures and accommodations to address potential impacts; and
- Project monitoring track the well-being of these individuals and/or households on a disaggregated basis. Data collected from all households will be analysed periodically to identify households whose pre-existing vulnerable status may be exacerbated as a result of the Project, or who may become vulnerable resulting from the construction of the new wastewater treatment plant.

9.12.2 External Monitoring and Completion Audit

The key objective external monitoring is to determine whether Project efforts to restore / improve the living standards and livelihoods of the affected communities have been formed and applied. The audits evaluate whether the mitigation measures prescribed in the LRP and any corrective actions developed and implemented since the LRP have had the desired effect. Also, the audits verify that all physical inputs committed to in the LRP have been delivered and all livelihood restoration measures provided

As shown in the RAP, there will be a third-party auditor to undertake annual reviews during Project implementation to assess compliance with commitments contained in both the RPF and RAP with its LRP. They will provide the Project Implementation Team with recommendations for improving LRP implementation and addressing any gaps. They will also determine when the final LRP completion audit should be performed to determine the following:

- Verify that implementation complies with applicable international policies;
- Verify that all entitlement and commitments described in the LRP(s) have been delivered;
- Assessment of the fairness, adequacy and promptness of the restoration procedures as implemented;
- Determine whether the measures identified in the LRP have been effective in restoring and enhancing affected peoples' livelihood and quality of life;
- Check on any systemic grievances that may be outstanding; and
- Identify any corrective actions necessary to achieve completion of LRP commitments.

9.13. Implementation arrangements

This Section describes the responsibilities and time schedule for implementing this LRP.

9.13.1 Organizational Arrangements

There are three main bodies with responsibility for the development and implementation of the LRP(s): the LWSC; local government and traditional leaders in the Project Area; and the Government of Zambia.

The LWSC supported by EIA/RAP consultants, will be the primary responsible party in terms of adherence to this LRP, consistent with its legal obligations under current environmental regulations. This will include the management and financing of all required studies, negotiation on entitlements, stakeholder engagement, provision of livelihood assistance, and payment of capital compensation to the vulnerable PAP. The financing for the Project and the resettlement will however be sourced from the project financiers via LWSC.

The role of the LRP Implementation Team, made up of a mix of LWSC staff, government staff and third party service providers, will be to lead the stakeholder engagement process, undertake technical work in support

of suggested business establishment process, and check that international standards are met, assess partners in their capacity and ability to provide day-to-day oversight of LRP programs, facilitate consultation and engagement with Project stakeholders, and alert the PAP to any potential problems. Proposed roles and responsibilities are outlined in the following sections.

9.13.2 Management

A Livelihood Restoration Manager will manage the Livelihood Restoration Implementation Team's activities, guiding the engagement process, assessment and management of third-party partners, technical work streams and overseeing implementation of this Livelihood Restoration Plan. This will include coordinating the government approvals and permits if needed.

9.13.3 Data Management Groups

- Data Management Coordinator and GIS Specialist, will be responsible for managing the database / GIS, reporting on surveyed data, and supporting the engagement and negotiations process.
- Data Entry Clerks, who will enter gathered data into the database / GIS.

9.13.4 Stakeholder Engagement Group

- Engagement Coordinator will manage stakeholder meetings and feedback forums, and administer the grievance management system.
- Community Liaison Officers will support the Engagement Coordinator in the above.
- Grievance Manager, will manage the grievance management system.

9.13.5 Livelihood & Vulnerable Support Group

- Livelihood Restoration Coordinator, will oversee implementation of appropriate scaled livelihood and vulnerable support activities and in documenting and reporting on the process.
- Sector Specialists (e.g. business consultant and psychosocial councillor), as deemed necessary by the Livelihood Restoration Coordinator.

9.13.6 Work Plan

Table 20 presents an indicative work plan, the outcome of which will be a finalized LRP sanctioned by Project stakeholders and completed preparations for the required trainings.

Figure 17 Overall Project RAP/LRP Planning Team

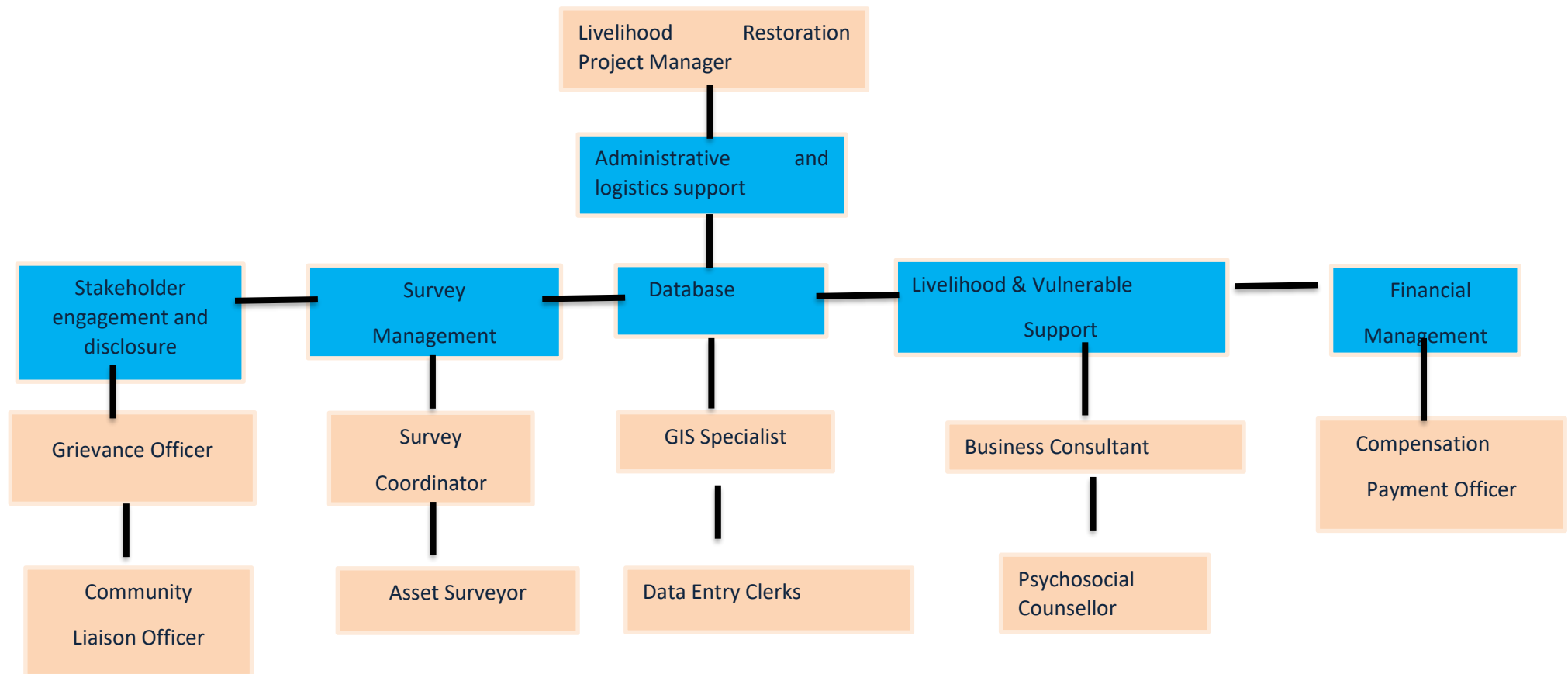


Table 20 Livelihood Restoration Plan Implementation Table

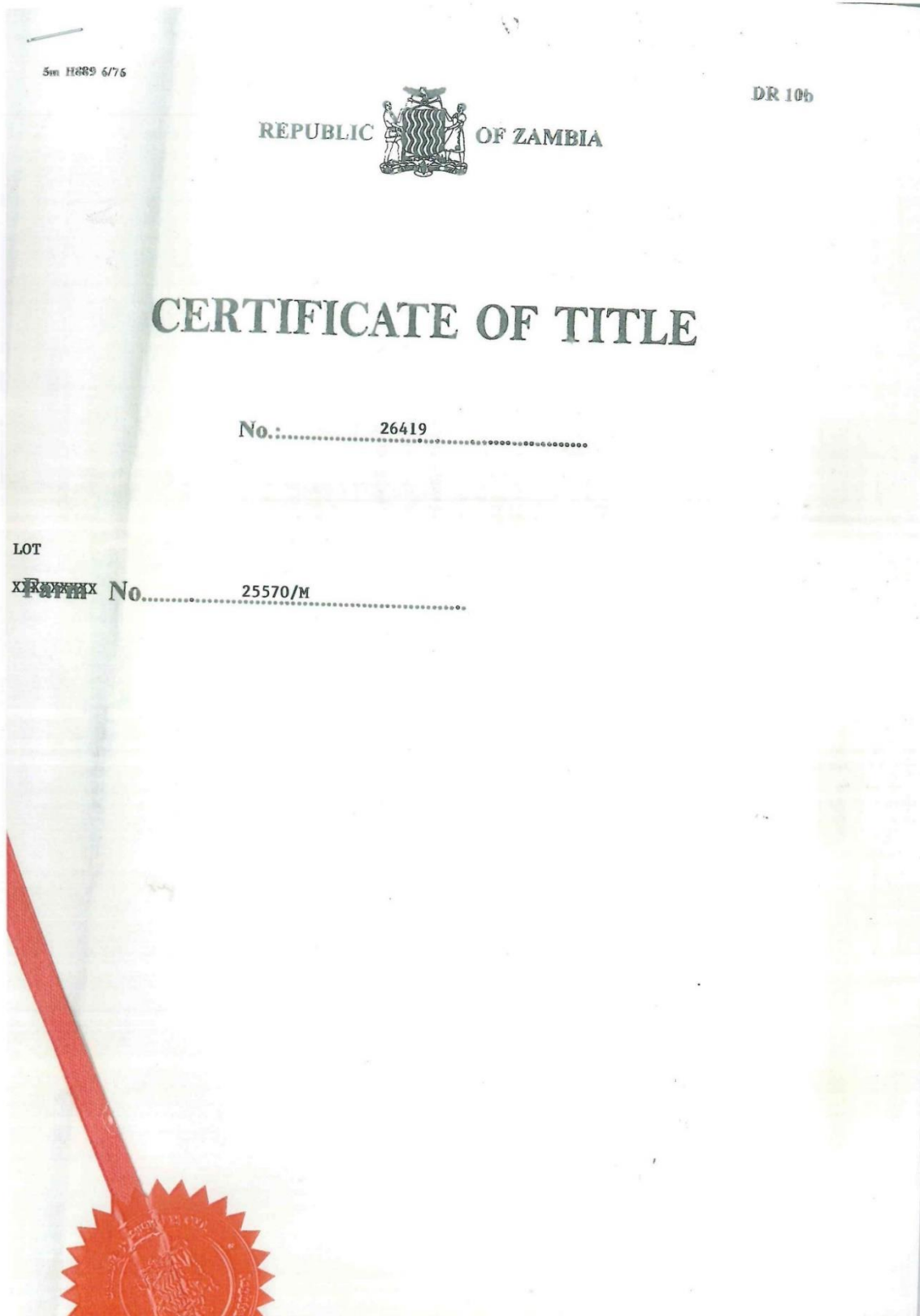
		Year 1		Year 2		Year 3		Year 4	
		Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2
1.0 LRP PLANNING									
1.1	Mobilize Livelihood Restoration Team for LRP Implementation								
1.2	Operationalize the Grievance Management System								
1.3	Establish LRP Database								
2.0 LRP DISCLOSURE									
2.1	Present LRP and get more Feedback								
2.2	Prepare Community Sign-off								
3.0 IMPLEMENTATION									
3.1	Financial Literacy and Entrepreneurship Development Program								
3.2	HIV-AIDS Vulnerability and GBV Campaign Program								
3.3	Psychological Counselling Program								
3.4	Job Placement Program								
4.0 MONITORING AND EVALUATION									

9.14. Conclusion

This LRP specifies in brief and clear terms the policies, procedures, methodology, entitlements, and livelihood restoration measures that will be implemented to support economically displaced households to restore their standard of living and livelihoods in Ngwerere East Township of Zambia. It also describes the activities that will be undertaken throughout the implementation of livelihood restoration program as well as procedures to monitor the effectiveness of the LRP in delivering its intended outcomes so that necessary adjustments can be made. It should be noted that this LRP is a living document and therefore will be updated throughout the development of continued technical planning and subsequent consultations with Project stakeholders.

Next steps in technical planning will be harmonized with other Project activities undertaken as part of ESIA disclosure activities. Next steps also include the establishment of relevant committees detailed in the Resettlement Policy Framework.

Annex 10 Title Deed for Ngwerere WWTP Site



REPUBLIC OF ZAMBIA
Registered No. 25570/M/2
THE LANDS AND DEEDS REGISTRY ACT
(Section 45)

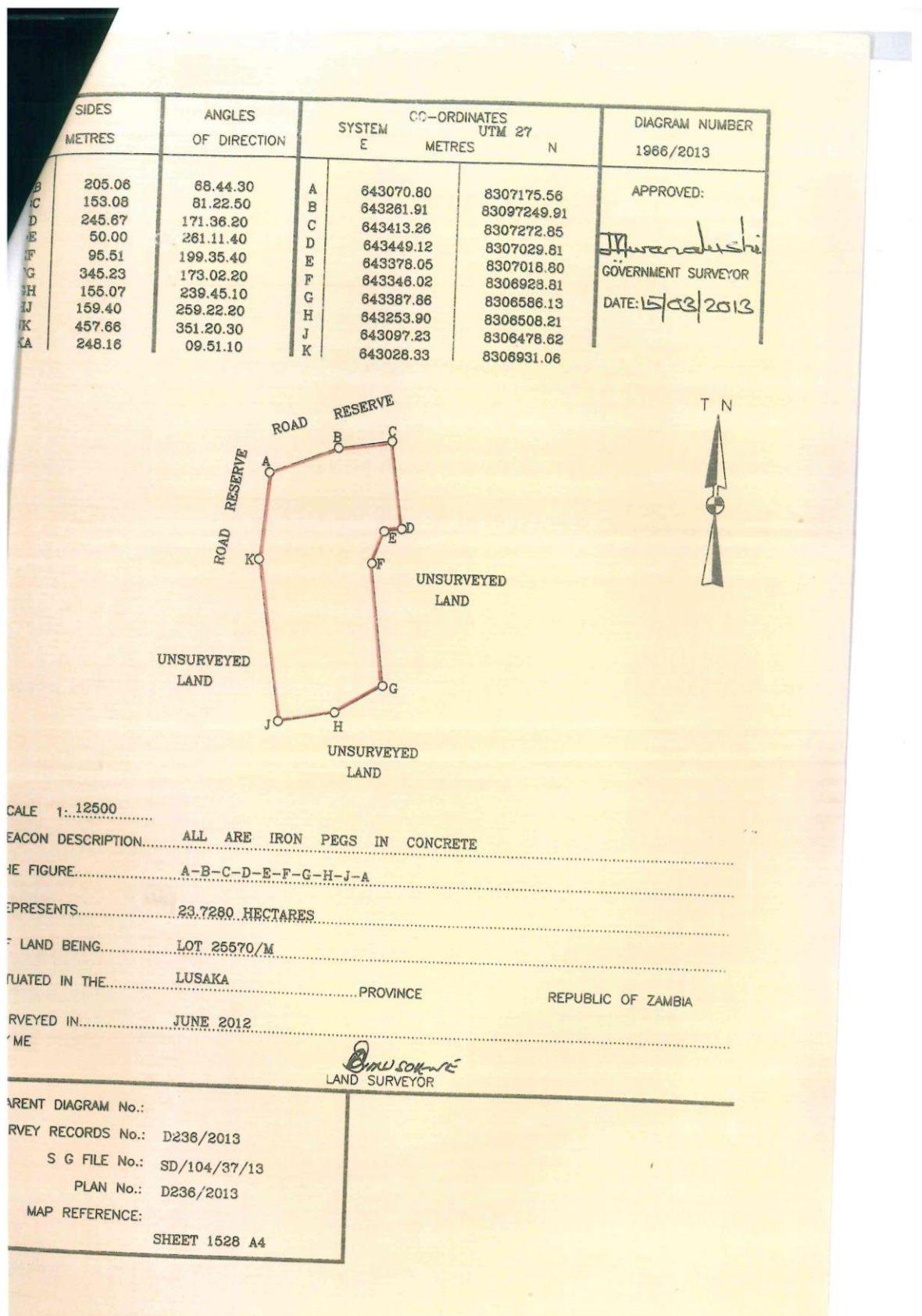
CERTIFICATE OF TITLE

THIS Certificate, dated the TWENTY-SEVENTH day of OCTOBER TWO thousand and SIXTEEN under the hand and seal of the Registrar of the Lands and Deeds Registry of Zambia WITNESSETH that LUSAKA WATER and SEWERAGE COMPANY a Company incorporated in Zambia and having its registered office at Lusaka is a tenant or lessee for the unexpired residue of a term of 99 years from the first day of June 2016 (subject to such reservations, restrictions, incumbrances, liens, estates and interests as are notified by memorial underwritten or endorsed hereon) of and in ALL that Piece of land in extent 23.7280 hectares more or less being Lot No. 25570/M situate in the Lusaka Province of Zambia which piece of land is more particularly delineated and described on Diagram No. 1966 of 2013 except and reserved all minerals oils and precious stones whatsoever upon or under the said land.....



[Signature]
Registrar

Memorials			Cancellation
Date of Document	Date of Registration	Registered No.	
27/10/2016	27/10/2016	25570/M/1	Subject to the exceptions reservations restrictions restrictive covenants and conditions mentioned contained or referred to in a lease (a copy of which is attached hereto) made between The President of the Republic of Zambia of the one part and LUSAKA WATER and SEWERAGE COMPANY of the other part.



LANDS REGISTER

Printed on: 31/10/2016

Entry number L/25570/M

MERCY NKONDE KAIRA

PRELIMINARY REGISTRATION

ENTRY NO. 1 DATE OF DOC 27/10/2016 DATE OF REG 27/10/2016

Lessor THE PRESIDENT OF ZAMBIA

Lessee LUSAKA WATER AND SEWERAGE COMPANY

NATURE OF DOC STATE LEASE FOR 99 YEARS FROM 01/06/2016 WITH AREA SIZE 23.7280 HECTARES

AREA 23.7280 Ha

PRELIMINARY REGISTRATION

ENTRY NO. 2 DATE OF DOC 27/10/2016 DATE OF REG 27/10/2016

Title holder LUSAKA WATER AND SEWERAGE COMPANY

NATURE OF DOC Certificate of Title NO. CT_26419

AREA 23.7280 Ha


Produced by ZILMIS system

1

1-9-2-16

LF/1
Stocked by Lands
10m M593 12/34 S&T

C/T: 26419
Reg: 25570/2
Date: 27/10/16


REPUBLIC OF ZAMBIA

Lease No. WE-7661

Province LUSAKA

LOT No. 25570/M

THIS LEASE MADE the 27th day of OCTOBER
SIXTEEN BETWEEN HIS
EXCELLENCY THE PRESIDENT OF ZAMBIA (hereinafter called 'the President') of one
part LUSAKA WATER AND SEWERAGE COMPANY a Company incorporated in Zambia
limited by shares.

(Hereinafter called 'the Lessee' which expression where the context so admits includes.....
itself, its successors in title and assigns.....) of the other part

WITNESSETH as follows

1. In consideration of the sum of K...0.00.....now paid
by the Lessee to the President receipt whereof the President doth hereby acknowledge and of
the rent hereinafter reserved and the covenants and condition herein after contained the President
hereby demises unto the Lessee ALL THAT piece of land
In extent.....23,7280 Hectares.....
More or less being.....LOT No. 25570/M.....
situated in.....Lusaka.....
province of ZAMBIA which piece of land is more particularly delineated and described on.....
.....Diagram No. 1966 of 2013.....
attached to.....these present.....
(hereinafter called 'the said land')TO HOLD unto the Lessee for terms of.....
.....99.....years from the first day of.....June.....
two thousand and.....Sixteen.....(herein called 'the said terms')
YIELDING AND PAYING therefor during the said term the rent as hereinafter provided.
EXCEPTING AND RESERVING out of the demise hereby made all minerals, mineral oils and
precious stones whatsoever upon or under the said land.
2. The Lessee foritself, its successors in title and assigns.....
.....
hereby covenant with the President as follows:
 - (1) To pay all such rates taxes assessment an imposition whatsoever as may hereafter become
payable in respect of the said land according to the law
 - (2) To permit during the said term the President or any person or persons authorised by the
President to enter on the said land at any reasonable time during the day for the purpose of
inspection or to lay or have access to water mains drains sewer pipes telegraph or telephone wires
and electric manis of all description whether the same or any of them be overhead or underground
provided that just and fair compensation shall be paid by the President to the Lessee for any loss
or damage occasioned thereby.
 - (3) To pay on or before the execution of these presents the sum of K...333.60.....
being rent for the period from the date of commencement or the said to the.....Thirty First
day of.....December.....two thousand and.....Sixteen.....and thereafter a
yearly rent of K...0.00.....on the.....Thirty First
.....December.....in each successive year in arrear free of all deductions.

.....w paid) within a period of twenty-four months from the date of the certificate of title to erect on the said
and of land good and substantial buildings to the approval of the planning Authority and to the value
President as assessed by the local authority of not less than K0.00.....and to complete the
foundations thereof within twelve months from the date of the certificate of title.

.....5) At all times during the said term well and sufficiently to repair, cleanse, uphold, maintain and keep
any messuage or buildings which may be erected on the said land and all additions thereto
and the wall fences, sewers drains and amendments and to execute at the lessee's own cost all such
sanitary and other works as may from time to time be lawfully required by the local authority.

.....6) Except with the prior written consent of the President not to assign sublet mortgage charge or
any manner whatsoever encumber or part with possession of the said land or any part thereof
or interest therein or concerning the same or attempt so to assign sublet mortgage charge encumber
or part with possession of the said land.

.....id terms') (7) Except with the prior written consent of the President not to use the said land or the buildings
thereon or to be erected thereon or any part thereof for any purpose other than for.....
COMMERCIAL: Purposes in accordance with the approved development plan
or any amendment thereof and for which an application for planning
permission has been submitted to and approved by the Provincial Planning
Authority.

.....ils and e President hereby covenants with the Lessee that the Lessee paying the rent of K0.00.....
reby reserved and observing and performing the several covenants and condition herein on the Lessee's
art contained shall peacefully hold and enjoy the said land during the said term without any interruption
the President or any person lawfully claiming under the President.

.....PROVIDED ALWAYS and it is hereby mutually agreed as follows:

by the (1) If and whenever the rent hereby reserved or any party thereof shall be in arrear and unpaid for
se of twenty-eight days after the same shall have become due (whether legally demanded or not) or if
wires the Lessee shall at any time make default in the observance of any of the covenants and conditions
round herein contained on the Lessee's part to be performed or observed it shall be lawful for the
loss President to re-entre upon the said land and hold the same as of his former estate as if this Lease
had not been made but without prejudice to any right of action or remedy of the Lessor in respect of
any prior breach non-performance non-observance of any of the lessee's covenants or conditions
herein contained.

.....(2) The annual rent stated in sub-clause shall at the option of the President be subject to revision during
ter a the subsistence of the Lease or any extension thereof, at such periods as the President might in his
of absolute discretion decide.

ons.

Annex 11 **Location Map for Ngwerere WWTPs**



Annex 12 Formats and Tables used for Census Surveys

OWNER IDENTIFICATION

	NAME OF HH HEAD	NRC	VILLAGE	HEADMAN/chairman
1				
2				
3				

B. HOUSEHOLD CHARACTERISTICS

	HH HEAD	SEX	AGE	TRIBE	MALES	FEMALES
1						

C. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
1					

In the event that any cash compensation is made, the following two forms, D (i) and D (ii) will be used.

D. (i) Cash Compensation Form

CONSTRUCTION OF NEW WASTEWATER TREATMENT PLANT IN NGWERERE

CASH COMPENSATION FORM

I _____ of NRC No. _____ do hereby acknowledge receipt of compensation/loss of business in the sum of _____ for my property (ies) _____ located along the _____ road in _____ district. I therefore confirm that LWSC is no longer liable to me for any further compensation.

Signature: _____ Date: _____

The compensation payment was made by:

Name: _____

Position: _____

Institution: _____

NRC: _____

Signature: _____ Date: _____

The Compensation was witnessed by:

Witness No. 1	Witness No. 2
Name:	Name:
Position:	Position:
Institution:	Institution:
NRC:	NRC:
Signature:	Signature:
Date:	Date:

D (ii): Acquittal Form

All who might receive compensation, whether cash or in kind, for their project affected property will sign the acquittal form to indicate that they are satisfied with the measure taken to mitigate the impact of the project on their property. Only one person might sign this form and the cash compensation form since the discharge pipeline for treated wastewater will pass in his land. He is very cooperative so far, but negotiations are still underway. Below is the acquittal form:

ACQUITTAL FORM SIGNED AFTER COMPENSATION FOR LAND ACQUISITION BY LWSC FOR THE CONSTRUCTION OF NEW TREATMENT PLANT IN NGWERERE

Table 21: Format of an acquittal form to be used in case of any compensation of assets

No.	Type of Structure	Location	Mitigation Measure that was undertaken	Is the displaced person satisfied with the mitigation measure (s) that were undertaken by the Developer (YES/NO)	Name of the Displaced Person or Representative	Mobile No.	NRC No.	Date	Signature
1									
2									
3									
4									
5									

Annex 13 Completed Census Data Collection Forms

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A. OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
1.	VERONICA MNTONGA		667055/11/1	43	✓		4 CAKORAW	TUMBUKA	N/A	NONE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	VERONICA MNTONGA	F	43	TUMBUKA	1	3	—

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	GARDENING	ALL SEASONS	12.6 X 24.1	K 1,500

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
—	—	7 YEARS	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
2.	MAKISENI-MVUHA CEH:0961-6527 44	8.	328347 /52/1	58		✓	3 CHILDREN 3 DEPENDANTS AND A WIFE	TUMBUKA	BASIC LEVEL	N/A

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST.	M. MVUHA	M	58	TUMBUKA	5	3	None

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE-FARMING	ALL SEASONS	4m BY 55.4m	1200 / MONTH

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			15 YEARS		AGRICULTURAL LAND (GARDENING)

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
-	-	-	-	-	-	-	-

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
3	TERESA CHINGA 0972-774491	5	149883/191	51	✓		4 Children	Bemba	N/A	N/A Business

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	TERESA CHINGA	FEMALE	51	BEMBA	2	3	N/A

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT INCOME PER MONTHS
	Vegetable Grower	All seasons	184X48.1	K300/-/month

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			1 year		Cultivate land (Red)

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
4	MKONDA BANDA	5	361809/54	53	✓		4 Children	CHEWA	N/A	N/A
									NONE	NONE

0976188022
B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	MKONDA BANDA	F	53	CHEWA	2	3	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	Vegetables	ALL SEASONS	42.9 X 48.1	K2800 / Month

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		10 YRS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
5.	ISAAC MUNDA	5	363486 1/10/1	35		✓	WIFE 3 CHILDREN	TUMBWA	BASIC LEVEL	FARMER

0976-858892.

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST.	I. MUNDA	M	35	TUMBWA	31	2	-

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR ROUND	32 m by 34 m.	124,000 / MONTHLY.

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	-		6 YEARS	-	-

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
-	-	-	-	-	-	-	-

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
6	JACKSON MUNDA	10	161174/1911	38		✓	Spouse/Girlfriend Wife	Tonga	Grade 11 PRIMARY EDUCATION	FARMER

0978-198848

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	38	MALE	38	TONGA	4	6	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT INCOME PER MONTHS
	Vegetables	All Seasons	28.8 x 62.3	K 4,500.00

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			15 YRS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
7	ROSEMARY TEMBO	5	499665/11	51	✓		daughter son	Ngema	NONE	N/A N/A

0963-329944

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lane etc.)
	NGWERERE EAST	ROSEMARY TEMBO	FEMALE	51	NGEMA	3	2	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
			31.4 X 15.1 M	K 30000

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			5 yrs		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
8.	GODFREY BANDA.	8	579154 11/11	49.		✓	4-CHILDREN WIFE	NGOPI	SECONDARY LEVEL.	N/A FARMER.

0975-112130

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST.	CA. BANDA.	M.	49	TONGA.	3	5	

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN.	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL-YEAR ROUND	16m By 34m.	K3,600 / MONTHLY.

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			7-YEARS.		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
9	FRIDAY NJOBVU	4	141183/181	37		✓	Spouse	NSENGA	primary level	NONE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE SITE	FRIDAY NJOBVU	MALE	37	NSENGA	2	2	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
		ALL SEASONS	15/1 X 11.8	K 4000 /MONTH

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
10	JOHN LUBASI 09977-274775	6	161241/19/1	35		✓	Brother & Sister Siblings	Lozi	PRIMARY LEVEL	None

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	JOHN LUBASI	MALE	35	Lozi	4	2	None

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	Vegies	All seasons	18.1 x 22.7	K 1400/week → 4500/m

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
11.	VICTOR MAHAMBO	9	682760 /1111.	43		✓	5 - CHILDREN WIFE 2 - NEPHEWS	TONGA	SECONDARY LEVEL	N/A N/A

0979-882338.

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST.	V. MAHAMBO	M.	43	TONGA.	4	5	NONE.

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL-SEASONS	31m BY 44.5m 16.8m BY 74.6m.	K 8,000 /MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			8-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
12	EUNICE CHALWE 0979-595268	8	220612/16/1	51	✓		4 children 4 dependant	Bemba	Grade 1 primary Lg rest	none

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE FAS	EUNICE CHALWE	FEMALE	51	BEMBA	3	5	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
		All seasons	42.1 x 30.7	K5000 / Month

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			10 yrs		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
13	MALGATE NANUABE 0977-267450	11	125337	18/1 46	✓		4 CHILDREN 3 DEPENDANTS 3 GRANDCHILDREN	CHEWA	N/A N/A	NONE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	NANUABE	FEMALE	46	CHEWA	4	7	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT INCOME PER MONTHS
	Vegetables	All seasons	5x184.8m	K 5,000.00

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		25/15		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
14	NICHOLAS LUPENGWE	3	384699 11011	27		✓	-1 - CHILD - WIFE	KAONDE	SECONDARY LEVEL	N/A (FARMER)

0964-376366

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	N. LUPENGWE	M	27	KAONDE	1	2	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE - FARMING	ALL SEASONS	11.3 M BY 44.7M	123,000 / MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			5-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
15	ANES PHILI 0915-707285	7	476917/11/1	59	✓			CHENWA	DONE	NONE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	ANES PHILI	FEMALE	59 yrs	CHENWA	4	3	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	Vegies	all seasons	3.59x10.1	K800

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		NO	7/12		NONE

E. AFFECTED COMMUNAL INFRASTRUCTURE .

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
16	BENSON HUPENOME	4	381776 1/10/11	22		✓	MOTHER 2-BROTHERS	KAONDE	BASIC LEVEL	N/A

0972-252020

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	EUPHemia BANJI	F	42	TONGA	3	1	

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE - FARMING	ALL-YEAR ROUND	5.3M BY 44.7M	K 2,500 / MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			7-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
-	-	-	-	-	-	-	-

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
17	DREEN TEMBO D9	7	675821/01	44	✓		1. CHAMPIONER 2. DEPENDANT	NGENGA	N/A NONE	N/A

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWENGA CAMP	DREEN TEMBO	FEMALE	44	NGENGA	4	3	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	Vegies	ALL SEASONS	20.6 X 101	K 1.300

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			7712		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
18	CHIBERT LUPENCWE.	4	205153 11911	20		✓	MOTHER 2 BROTHERS	KAGWA	STILL IN SCHOOL (CT.9)	N/A

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST.	EUPHENA BANSI.	F	42	TONGA.	2	2	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT INCOME PER MONTHS
	VEGETABLE FARMING	ALL-YEAR ROUND	16.5 M BY 44.7 M	K 4,000 / MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			2-YEARS.		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
19	EDWARD MWAJIRA 0964-404933	8	214312/161	60		✓	WIFE 1 CHILD 2 DEPENDANTS	NJENGA	N/A Grade 6 primary level	ADJVE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE CAST.					5	3	none.

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	Vegies	All seasons	95.4 X 10.2	K 600/month

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			18 yrs		

E. AFFECTED COMMUNAL INFRASTRUCTURE.

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
20	PETER BANDA	5	672686 11111	40		✓	3 CHILDREN WIFE	CHEWA	PRIMARY LEVEL	N/A

0966-788205

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	P. BANDA	M	40	CHEWA	2	3	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT INCOME PER MONTHS
	VEGETABLE-FARMING	ALL-YEAR-ROUND	27m BY 447m	125,000 / MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			7-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
✓	✓	✓	✓	✓	✓	✓	✓

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
21	MARY PHIRI	5	208549 1/1/1	42	✓		HUSBAND 3 CHILDREN	NSENGA	N/A	N/A NONE

0978-061347

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NSWENGO EAST	M. PHIRI	F	42	NSENGA	2	3	

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT INCOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR	18.9m BY 21.2m	1K1,000 / MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		8-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
2	Moffat Zulu 6967 305433	3	196218/73/1	53		✓	3 children	Chewa	5 Primary Level	NONE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	Ngwerere East	Moffat Zulu	Male	53	Chewa	1	2	NONE.

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	Vegs	All seasons	13.1 x 88.1	K2,500=

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
23	FRANK SIHOMBA	9	197669 / 16/1	57		✓	4 CHILDREN 2 NIGGES 1 NEPHEW	NYIKA	PRIMARY LEVEL	N/A (FARMER)

0963-329944

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	F. SIHOMBA	M.	57	NYIKA	4	5	

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT INCOME PER MONTHS
	VEGETABLE FARMING	ALL-YEAR ROUND	30.7 M BY 48.8 M	124,000 / MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
AGENTING				

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
24	MATTHEWS NYIRONGO	4	450563 11 19	67		✓	WIFE 2 CHILDREN	Tumbuka	SECONDARY LEVEL	PLUMBER
0977-876295										

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	KABANAPA	M. NYIRONGO	M	67	TUMBUKA	1	3	- NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR ROUND	16M BY 65M	141,000 / MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	-		8 YEARS	-	-

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
	-	-	-	-	-	-	-

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
25	JASON MAHANGA BANDA	6	6417001 11/1	39		✓	4 CHILDREN WIFE	CHEWA	BASIC LEVEL	WORKING AS A CARDNER.
0979-267952.										

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	J. M BANDA	M	39	CHEWA	2	4	

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR	26.7M BY 50.4M	124,000.

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	RENTING	4 YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

HC PAYS 121,500 IN SIX MONTHS TO MR MAHANGA WHO CLAIMS HC OWNS THE LAND.

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
26	CHAMBWE DZIS CHIKUBI 0963-772654	9	152954/63	51	✓		4 children 2 dependants 2 grandchild	Bemba	Go 8 Basic level	N/A none

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST		F	51	Bemba	5	4	none

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	Vegetables	All seasons	0.999.12.1	K 600

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			740		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
27	LACKSON BANDA	7	674030 /11/1	50		✓	MOTHER	NGONI	PRIMARY LEVEL	N/A HOUSE
							WIFE			
							4 DEPENDANTS			

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE CST.	L. BANDA	M	50	NGONI	3	4	—

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR ROUND	50.4 M BY 26.1 M 51.4 M BY 42.7 M 14.7 M BY 25 M	K 4,000/MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	—	—	9 YEARS	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
28	RAPHEAL	8	386503	58		✓	MOTHER	CHEWA	BASIC LEVEL	BUSINESS MAN.
	PHIRI		15211				WIFE			
							5 GRANDKIDS			

0777-937277

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	D. PHIRI	M	58	CHEWA	41	4	—

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARM	ALL YEAR ROUND	41.5M BY 20.3	12800

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	—	—	25 YEARS	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
29	IKATONGO MOSSES	6	126743 14511	51		✓	4 CHILDREN WIFE	BEMBA	PRIMARY LEVEL	N/A

0968-346092

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	IKATONGO MOSSES	M		BEMBA	3	3	None

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL-YEAR	29.7m By 106m	1237,000 R. / month

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			7-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
30	JOHN CHEWE BA	6	177276	57		✓	WIFE 3 CHILDREN 1 GRANDCHILD	Bemba	Grade 10 SECONDARY LEVEL	Black making Business

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	POWERSHOP EAST	JOHN CHEWE	male	57	Bemba	2	4	none

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	Vegetables	ALL SEASONS	17.7 x 13.2	K8000

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			10-12		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
31	NELIA TEMBA	7	674039111	43	✓		3 CHILDREN 2 DEPENDANTS 1 NISCE	NGOZI	8 BASIC EDUCATION	NONE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAS	NELIA TEMBA	FEMALE	43	NGOZI	5	2	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	Vegies	All seasons	23.2 x 43.1	K1,500.00

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			5/1		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
32	DICHLSON NJOBU	14	514949/ 11/1	54		L	6 CHILDREN 4 NEPHEWS WIFE	NSAKA	PRIMARY LEVEL	SECURITY GUARD

0975-530712

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE ID. EAST.	NJOBU	M	54	NSAKA	4	10	None

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL-YEAR ROUND	33m By 40.2m	14,000 /MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			27 YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
33	MAGGIE PHIRI	6	181745 / 7511	56	✓		4 CHILDREN HUSBAND	CHEWA	PRIMARY LEVEL	N/A (FARMER)
0977-161190										

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	M. PHIRI	F.		CHEWA	4	2	— none

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE-FARMING	ALL-YEAR ROUND	34.2m BY 40.2m 28.6m BY 31m	1K1,500 / MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
—	—	10-YEARS	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
34	TIMMY PHIRI	4	292847/17/11	32		L	2 CHILDREN WIFE	CHEWA	BASIC LEVEL	N/A

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	T. PHIRI	M.	32	CHEWA	1	3	none

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL-YEAR-ROUND	29.3M BY 30.1M	18,000

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			8 YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
35.	WAKELA CHILLIAD	8	612229/ 11/1	47		✓	4 CHILDREN WIFE 2 DEPENDANTS	SWAKA	N/A. NONE	N/A. NONE

0965-436270

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	CH. WAKELA	M.	47	SWAKA	3	5	

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING MAIZE FARMING	ALL-YEAR ROUND	30.1m BY 27.3m 17.3m BY 8.6m	K5,000/MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		16-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
36	ELIAS PHIRI	4		29		✓	2 CHILDREN WIFE	CHEWA	PRIMARY LEVEL	N/A. NONE

0777-816117

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST.	E. PHIRI	M	29	CHEWA	2	2	NONE.

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL SEASONS	147 M BY 26. M 15.8M BY 37.6M	12,100 / MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		20 YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
37	HAMANGABA JAILOS	10	153925/ 7511	58		✓	3 CHILDREN WIFE 5 DEPENDANTS	TONGA	BASIC LEVEL	N/A

0962-582146

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	J. HAMANGABA	M	58	TONGA	4	6	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL SEASONS	7.7 M BY 9.1 M 39.8m BY 36m	1261000/MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
			15-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
38	FELISTUS NGULUBE	5	488191/ 11/1	56	✓		H CHILDREN	TUMBUKA	PRIMARY LEVEL	N/A

08777-51617

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	F. NGULUBE	F	50	TUMBUKA	2	3	NONE.

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE GROWING	ALL-YEAR ROUND	27'8M BY 93M	1K 500 / MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		3-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
39.	ANNET MWINCIA	18	688312 11/11	44	✓		6 CHILDREN 4 GRAND KIDS 4 DEPENDANTS	TONGA	N/A NILL	N/A UNEMPLOYED

0977-518392

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	A. MWINCIA	F	44	TONGA	9	9	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR ROUND	16.7m BY 20m	K11800 / MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		30-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
40	FATINCESS TEMBO	8	351480/ 11/1	58	✓		5 CHILDREN 2 DEPENDANTS	NGWERA	PRIMARY LEVEL	N/A
0967-689997										

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERA EAST	TEMBO	F	58	NGWERA	3	5	None

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT INCOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR ROUND	41M BY 17.6M	128,000 / MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		20+ YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
41	PETER PHIRI	6	160113/19/11	34		✓	4 CHILDREN WIFE	CHEWA	N/A	N/A UNEMPLOYED

0974-628583

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	P. PHIRI	M.	34	CHEWA	2	4	none

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
		ALL SEASONS	45.3m BY 15.2m	K2,400 /MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		7-YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
42.	SHARON TCMBO	5	106983 /19/1	39	✓		4 CHILDREN	CHEWA	PRIMARY LEVEL	N/A NONE

0974-628583

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST.	S. TCMBO	F	39	CHEWA	2	3	none

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR ROUND	42.7M BY 18M	12,500 /MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	✓	7-YEARS	USE	

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
43	MOSGS MWANZA	7	162812/ 11/1	40		✓	4 CHILDREN WIFE 1 GRANDCHILD	NSENGA	PRIMARY LEVEL	N/A NONE.

0966-967801

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	M. MWANZA	M.	40	NSENGA	4	3	NONE.

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL SEASONS	9.7m BY 64.2m	12,000 / MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	N/A		10 YEARS.		N/A

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
44	SPGCDWCH MAHAMBO	7	259142/ 1411	56		✓	5 CHILDREN WIFE	TONGA	PRIMARY LEVEL	BUSINESS MAN

Q962-441821

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	S. MAHAMBO	M	56	TONGA	4	3	none

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR ROUND	15M BY 75M 36.1M BY 5.3M	K5,000 / MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	N/A		7 YEARS	N/A	N/A

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
45	TISA MWANZA	5	106762/ 19/1	41	✓		4 CHILDREN	KUNDA	BASIC LEVEL	N/A NONE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	T. MWANZA	F	41	KUNDA	3	2	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR ROUND	16.2M BY 755M	K 5,000 / MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	N/A		5 YEARS	N/A	N/A

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
46	MARCIET WIKOSI	6	NONE	66	✓		4 GRANDCHILDREN 1 CHILD	NGONI	N/A N/A	N/A NONE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE GAST.	M. WIKOSI	F	66	NGONI	4	2	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR ROUND	28.1m BY 43.4m	123,000 / MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	N/A		30 YEARS	N/A	N/A

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
47	FRED MALAMBO	—	—	1		✓		TONJA	—	—

0979-852338

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	—	M	—	TONJA	1	—	None

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ANN YEAR	15M BY 50M	14

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
—		4 YEARS	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
48	DOROTHY PHIRI	7	117549/5511	45	✓		4 CHILDREN 2 DEPENDANTS	CHEWA	NONE	NONE
0976-330459										

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	D. PHIRI	F	45	CHEWA	3	4	NONE

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR	13M BY 21M	121,600 / MONTH

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	—	—	5 YEARS	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	* Tribe	Level of Education	Occupation
					Female	Male				
49	CHARLES MATONGO	14	105780/7311	89		✓	10 GRANDCHILDREN WIFE 2 CHILDREN	TONGA	NONE	UNEMPLOYED

0974-734002

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	C. MATONGO	F.	89	TONGA	5	9	

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ANY YEAR	15.2m By 33.5m	K1,400 /MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	—		5 YEARS	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
50	JUSTIN MEHEKI	4	802693/11/1	41		✓	3 CHILDREN	LEWSE	BASIC LEVEL	UNEMPLOYED
0966-242529										

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST.	M. MEHEKI	M	41	SOLO	1	3	—

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT INCOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR	55.5M BY 15M 17.4M BY 15.4M	12,600 / MONTHLY

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	—		1 YEAR	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
51	JOSEPHINE ZUHU	8	106093/19/1	42	✓		5 CHILDREN 2 DEPENDANTS	SOA	NONE	NONE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	J. ZUHU	F	42	SOA	3	5	-

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL SEASONS	15.6 M BY 46.8M	121,500 / MONTH

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	-		7-YEARS	-	-

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
-	-	-	-	-	-	-	-

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
52	MARGRET CHANDA	5	106467114/1	39	✓		3 CHILDREN HUSBAND	CHANDA BEMBA	NONE	NONE

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	MICHANDA	F	39	BEMBA	3	2	—

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL SEASONS	12.6m BY 24.1m	14,000

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	—		7 YEARS	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
53	DANIEL ZUKU	6	682794 11/1	44		✓	WIFE 4 CHILDREN	NSENGA	PRIMARY BALEVA	PLUMBER

0953-570974
B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	D. ZUKU	M	44	NSENGA	41	2	-

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL SEASONS	85.5M BY 55.4M	K500 / MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
-		16 YEARS	-	-

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
✓	-	-	-	-	-	-	-

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
54	JOSEPH MUSONDA	6	191996/ 41/1	45		✓		BEMBA	PRIMARY LEVEL	NONE

0970-558757

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	J. MUSONDA	M	45	BEMBA	4	2	

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE	ALL SEASONS	42.6m BY 54.1m	K5,000 /MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
		10 YEARS		

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
SS.	PAUL LUNCU	6	759935 111/1	42		✓	WIFE 4 CHILDREN	NGONI	PRIMARY LEVEL	UNEMPLOYED

0967-044846

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	P. LUNCU	M	42	NGONI	3	3	-

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR ROUND	86.1M BY 8.7M	K1,500 / MONTHLY

D. TENANCY AND OWNERSHIP

NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
-	-	7 YEARS	-	-

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
-	-	-	-	-	-	-	-

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
56	VICTOR NGOBEKA	6	161025/ 19/11	38		✓	4 CHILDREN WIFE	SAI	BASIC LEVEL	CONTRACT WORKER AT LWSG

0978-061347 B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	V. NGOBEKA	M		SAI	2	4	—

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
		ALL YEAR ROUND	29.5m BY 66.9m	128,000.

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	—			—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
57	JOSEPH NIKHOMA	4	207252/19/11	38 21		✓	WIFE 2 CHILDREN	CHewa	NONE	Nikh.

0908-488193 B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
	NGWERERE EAST	J. NIKHOMA	M	21	CHewa	2	2	—

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TPYE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LANDWITHIN	CURRENT ICOME PER MONTHS
	VEGETABLE FARMING	ALL YEAR	15m BY 20m	121,500 / MONTH

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY USE	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
	—	—	2-YEARS	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
	—	—	—	—	—	—	—

LUSAKA WATER & SEWERAGE WWTP PROJECT RAP INVENTORY TOTALS

A: OWNER IDENTIFICATION

No	Names	No of Household members	NRC Number	Age (years)	Sex		Relationship with Family Head	Tribe	Level of Education	Occupation
					Female	Male				
528	YOUNG ZEGA FC	30 people	—	—		✓	Term MAF			
ISAAC MASHINDA - 09767088959										

B. HOUSEHOLD CHARACTERISTICS

No.	Residence	Names Of HH Head	Sex	Age Of HH Head	Tribe	Males	Females	No. of Vulnerable persons (Specify i.e. Blind, Lame etc.)
—	NGWERERE EAST	—	—	—	—	—	—	—

C. AGRICULTURAL LAND LOCATION: NGWERERE SITE

No.	TYPE OF AGRICULTURE	SEASONS	SIZE OF AGRIC LAND WITHIN	CURRENT ICOME PER MONTHS
—	—	DAY SEASON	(SEWER POND)	—

D. TENANCY AND OWNERSHIP

	NAME OF HH HEAD	OWNER OR NOT (YES/NO)	PERIOD OF TENANCY	PROOF OF OWNERSHIP	STRUCTURES OR NOT (YES/NO)
—	—	—	10 yrs	—	—

E. AFFECTED COMMUNAL INFRASTRUCTURE

No.	Site: Sew	Churches	Schools	Health Centers	Water points	Playground	Other specify
—	—	—	—	—	—	PLAYGROUND	—

The team is planning for consideration to spare the pond which has been taken into account

Annex 14 Resettlement Policy Framework Outline

REPUBLIC OF ZAMBIA



Financial Cooperation between the
Republic of Zambia and the Federal Republic of Germany

Ministry of Local Government and Housing (MLGH)

KFW

LUSAKA WASTEWATER PROJECT **CONSULTANCY SERVICES FOR ENVIRONMENTAL AND** **SOCIAL IMPACT ASSESSMENT (ESIA)**

BMZ. NO: 2099 14 656

FINAL RESETTLEMENT POLICY FRAMEWORK OUTLINE ***ATTACHMENT TO FINAL ESIA REPORT***

DATE: FEBRUARY 2017



TABLE OF CONTENT

1	INTRODUCTION, BACKGROUND, JUSTIFICATION AND METHODOLOGY	1-1
	1.1 Introduction	1-1
	1.2 Background	1-1
	1.3 Justification for this Resettlement Policy Framework Outline	1-2
	1.4 Methodology	1-3
2	PROJECT DESCRIPTION	2-1
	2.1 Objectives of the Resettlement Policy Framework Outline	2-1
	2.2 Description of the Project Affected Area	2-2
	2.2.1 Land Use	2-2
	2.2.2 Housing and Basic Services	2-3
	2.2.3 Project Affected Persons (estimation)	2-3
	2.3 Potential Socio-Economic Impacts from Resettlement	2-4
3	POLICY AND LEGAL FRAMEWORK FOR RESETTLEMENT	3-1
	3.1 Land Tenure Systems	3-1
	3.1.1 Land Tenure in Silvia Masebo Compound and around Ngwerere Ponds	3-2
	3.2 Local Legislation	3-2
	3.3 Policies of LSP Financing Agencies on Resettlement	3-4
	3.4 Comparison between Policies of LSP Financing Agencies and Zambian Legislation on Resettlement	3-4
4	GUIDING PRINCIPLES FOR RESETTLEMENT IN THE LSP	4-1
5	METHODS FOR THE VALUATION OF ASSETS	5-1
6	PROJECT AFFECTED PERSONS AND COMPENSATION MEASURES	6-1
	6.1 Definition	6-1
	6.2 Delivery of Compensations	6-1
7	GRIEVANCE REDRESS MECHANISMS ON RESETTLEMENT ACTIVITIES	7-1
8	RESETTLEMENT SCREENING FOR OPTION 5	8-1
9	PREPARATION OF RESETTLEMENT ACTION PLAN	9-1

10	SUMMARY	10-1
	10.1 Preparation of RAP – Further Proceedings	10-1
	10.2 Implications on Potential Compensation Measures	10-1

LIST OF FIGURES

Figure 2-1:	Ngwerere site: sewage ponds, new WWTP layout and surrounding land use	2-2
Figure 9-1:	Generic RAP project cycle according to Zambia Social Action Fund	9-2

LIST OF TABLES

Table 2-1:	Overview of relevant social and economic impacts from resettlement activities	2-4
Table 3-1:	Overview of Zambian legislation concerning resettlement and relocation	3-2
Table 6-1:	Compensation Matrix as proposed in RPF 03.2015 and confirmed in 08.2016	6-1

LIST OF ABBREVIATIONS

CBO	Community Based Organisation
CES	CES Consulting Engineers Salzgitter GmbH
EIB	European Investment Bank
ESIA	Environmental and Social Impact Assessment
ESIS	Environmental and Social Impact Study
ESMP	Environmental and Social Management Plan
FS	Feasibility Study
IAPs	Interested and Affected Parties
KfW	KfW Development Bank
LSP	Lusaka Sanitation Project
LWSC	Lusaka Water and Sewerage Company
LWWP	Lusaka Waste Water Project
NGO	Non-Governmental Organisation
PE	Population Equivalent
PFS	Pre-feasibility Study
RPF	Resettlement Policy Framework
SEP	Stakeholder Engagement Plan
SMC	Silvia Masebo Compound
WB	World Bank
WWTP	Wastewater Treatment Plant
ZEMA	Zambian Environmental Management Agency

1 INTRODUCTION, BACKGROUND, JUSTIFICATION AND METHODOLOGY

1.1 Introduction

In March 2015, a Resettlement Policy Framework (RPF) for the Lusaka Sanitation Project (LSP) was published by the Lusaka Water and Sewerage Company and the World Bank¹. This document clearly underlines the purpose of the Resettlement Policy Framework (RPF) “to guide the LSP in addressing land acquisition and resettlement/relocation issues on the impact of the project by the Lusaka Water and Sewerage Company and its stakeholders”². The draft outline of the RPF presented here (referred to as RPF 09.2016) is therefore based on and aligned with the previous document (cited as RPF 03.2015) in order to avoid any repetition and contradictions.

Whilst in November 2015 the Consultant established an RPF outline (RPF 11.2015) for the then relevant Options 1 – 4, the present RPF outline (RPF 09.2016) makes exclusive reference to the preferred **Option 5**.

1.2 Background

At the time of the RPF 03.2015 formulation, the final version of the “Feasibility Study for the Rehabilitation and Upgrading of Wastewater Treatment Plants and Wastewater Collection Systems in Lusaka (Reference Code: TA2014050 ZM IF3) - WWTP Options & Sludge Management Plan Report” (cited as FS Options 10.2015), was not yet approved. Hence, the current preferred Option 5 has not yet been developed as part of the LSP. Nevertheless, the RPF 03.2015 already set out the framework for the LSP resettlement policies, stipulating that “this RPF will direct resettlement related work as part of the LSP from the period of 2015 to 2020. It will be accompanied by the necessary safeguard documents at sub-project level, such as RAPs for the specific investment and construction activities. All future resettlement related issues will be derived from the provisions of this RPF. LWSC is committed to the full implementation of this RPF through adequate resourcing, staffing, implementation and monitoring.”³

RPF 03.2015 looks in general at the impacts of resettlement due to wastewater treatment options and the extension of the sewer network. RPF 09.2016 now only refers to Option 5 as the preferred option, as this option will impact on existing residential and agricultural areas both planned and unplanned.

The purpose of this draft RPF outline is to support the Lusaka Water and Sewerage Company (LWSC) in addressing land acquisition and resettlement issues during the implementation stage of Option 5, mainly regarding the Silvia Masebo Compound (SMC) which neighbours the new WWTP location, where currently the Ngwerere Ponds site is situated.

¹ - <http://www.worldbank.org/projects/P149091?lang=en> - last retrieved on September 08, 2016: The Republic of Zambia - Ministry of Local Government and Housing - Lusaka Water and Sewerage Company: Resettlement Policy Framework (RPF) for the Lusaka Sanitation Project (LSP); March 2015; Public Disclosure Authorized (cited as RPF 3.2015)

² RPF 3.2015, page iv

³ RPF 3.2015, page vi

Option 5 involves all three currently managed WWTP sites, and the proposed wastewater transfer pipeline from Manchinchí WWTP to Ngwerere site, although to different degrees:

- Manchinchí: Decommissioning and reduction of the WWTP land requirement to faecal sludge acceptance and transfer stations only.
- New Chunga WWTP: Treatment concept based on trickling filters, anaerobic sludge treatment and potential biogas utilization; entire site of 14 ha owned by the LWSC will be included in the rehabilitation of the WWTP.
- New Ngwerere WWTP: The new treatment concept is based on trickling filters, anaerobic digestion of sludge and potential biogas utilization. The existing Ngwerere pond system will be replaced, making it necessary to construct an appropriate access road. Considering the 2025 load, the new treatment system will be implemented within the existing 24 ha site which is already in the ownership of the LWSC. In the year 2040 a moderate extension of the area by ~ 10 ha is envisaged.
- Wastewater transfer: Wastewater generated at Manchinchí WWTP, but also wastewater generated in the Ngwerere catchment is proposed to be conveyed to the new Ngwerere WWTP for treatment. The flow will be by gravity along the existing CSU-07 pipeline route which is approximately 10,400 meters long.
- Pumping stations: Altogether five pumping stations, namely Mass Media, Kamwala, Kabwata, Woodlands, and Lumumba PS will be subject to a full technological rehabilitation.

1.3 Justification for this Resettlement Policy Framework Outline

The purpose of this specific RPF outline is to provide a guide to addressing land acquisition and resettlement issues in the Ngwerere Ponds area as one of the considerable impacts of the project.

The selected Option 5 involves:

- Ngwerere: Re-construction, paving and broadening of the existing access road.
The implementation of Option 5 will require the **relocation of at least about 20 to 30 households along the access road** and the change of land use from agricultural to WWTP purposes. Formal land acquisition has to be prepared and carried out due to Silvia Masebo Compound (SMC) having been formalized as a residential area in 2008, and the residents are in the process of obtaining their ownership documentation for their plots. The World Bank policy on Involuntary Resettlement (OP 4.12) is therefore triggered.
- Ngwerere: In the reference year 2040 the extension of 10 ha (total area in the year 2040: ~ 34 ha) of the WWTP area is required; therefore the **resettlement of about 20 households and /or compensation for agricultural soil could then be required**.
However, the direction in which this WWTP extension will take place has not yet been decided. In the best case scenario for SMC residents, the extension area to the southern or south-eastern side of the current pond area will be chosen, thus only affecting those households living along the access road to the WWTP site.
- Chunga: Treatment concept based on trickling filters and anaerobic sludge treatment; the entire site of 14 ha owned by the LWSC will be included in the concept and will be protected from neighbours who (illegally) use the terrain for agricultural activities. **Nonetheless, no resettlement or compensation activities are required.**
- Wastewater transfer pipeline from Manchinchí site to Ngwerere site: The investigation of all sections has revealed that there is no requirement for resettlement, except for the section crossing Mazyopa Compound (section from manholes M 98 – M 75). However, as proposed by the EIB FS Consultant, crossing this section can be avoided by re-routing this pipeline sec-

tion. **Respectively, applying this measure will avoid the necessity of a Resettlement Action Plan.**

While undertaking a transect walk along the existing sewer lines, it became obvious that in a number of places the pipeline is below residential houses and commercial buildings. In addition, fibre optic cables, electricity cables and water supply pipes are buried in the ground and require special attention during the mechanical trenching of the pipeline extension. However, none of the locations require resettlement as far as the pipeline is concerned. As indicated above, in the case of Mazyopa Compound, relocation of families could be avoided by changing the route of the pipeline towards currently available open space.

- Pumping stations: Altogether five pumping stations, namely Mass Media, Kamwala, Kabwata, Woodlands, and Lumumba PS will be subject to full technological rehabilitation. **Amongst all the PS, Lumumba station requires the most attention.** Being surrounded by the central bus station and central local market the PS is located in a commercial area with a very high activity ratio. During the daytime the PS is almost inaccessible.

1.4 Methodology

As part of the preparation for this RPF outline, consultations with the LWSC Safeguard Officer, residents and community leaders in SMC as key stakeholders, were carried out. More specific consultations will have to be conducted in the next phase as soon as detailed planning and the implementation of the project beings. These consultations are necessary for the resettlement screening and the drafting and final formation of the Resettlement Action Plan (RAP), which should contain a platform for the participation of stakeholders to engage in the formulation of the resettlement related compensation process. Ward councillors and further representatives of the community, such as leaders of the local Women Association, teachers, health workers, and NGOs, need to be involved in order to make sure that the rights and interests of all vulnerable groups within the community, such as orphans, disabled individuals, and female-headed households, are considered.

These local leaders will be intensely involved in the screening, the RAP formulation, and redress of any grievances.

While RPF 03.2015 guides the resettlement related work for the LSP from the period of 2015 to 2020, RPF 09.2016 focuses only on the potential resettlement needs related to the implementation of Option 5. Depending on the start-up of the construction work at Ngwerere ponds site, the resettlement of and compensation for those 20 – 30 households living along the future access road, should be prepared and carried out according to the guidelines established in RPF 03.2015.

In the reference year 2040, Option 5 requires the extension of the current WWTP area and therefore the land acquisition of about 10 hectares. The potential requirement to resettle additional households as a result of this extension (currently about 20) will depend on the geographical direction in which this extension takes place, of which the detailed planning has not yet been established.

2 PROJECT DESCRIPTION

Urban growth in Lusaka has resulted in increased wastewater generation. The necessary disposal and treatment systems as a result of this increase have however not been implemented in accordance with the increasing demand. An overall insufficiency in investment into sanitation infrastructure in Lusaka over the last decades is therefore critically evident.

In order to cope with the situation, the Lusaka Water and Sewerage Company (LWSC) in cooperation with international donors and other stakeholders, has established the Lusaka Waste Water Project (LWWP). Under this project significant investments to improve Lusaka's wastewater infrastructure are planned. This includes the upgrade and/or construction of wastewater treatment plants, the upgrading of six pumping stations and the extension of the sewer network by 520 km.

For this purpose four (4) relevant main options on wastewater treatment plants, sub-divided into seven (7) project variants – referred to as Options 1 - 4 (A-C) - were investigated. The option analyses executed by the EIB Feasibility Study Consultant refer to the identification of the most appropriate solution with regards to technical, operational and economic conditions. Along with this study, environmental and social relevant aspects were investigated and presented in the Draft ESIA Report submitted to LWSC and KfW in November 2015, backed up by the WB approved RPF 03.2015.

As a result of the preliminary outcome, Option 4B had been recommended for the project implementation. Subsequently, it was decided amongst the involved stakeholders to analyse one more option, **Option 5, which was finally accepted as the preferred option in May 2016.**

2.1 Objectives of the Resettlement Policy Framework Outline

The Objectives of the RPF outline are to coordinate the necessary resettlement planning with the Lusaka Sanitation Project, funded by a different donor, in order to minimize negative social impacts.

As already presented in RPF 03.2015, the specific objectives of the RPF outline are to briefly describe the:

- Steps in resettlement screening and how to incorporate the appraisal system during project implementation,
- Potential socio-economic impacts resulting from resettlement events,
- Policies to govern resettlement caused by the implementation of the project,
- Policy and legal framework on land acquisition and resettlement in Zambia,
- Eligibility criteria for compensation towards various groups of people affected by the project,
- Methods of valuing affected assets for purposes of compensation,
- Institutional arrangements in the implementation of resettlement processes,
- Budget estimates and funding arrangements for resettlement, and

- Guidelines for the preparation of a Resettlement Action Plan (RAP), which need to be drafted, approved by KfW, EIB and LWSC, disclosed, and implemented prior to the project activity having an impact on individuals, households, economic activities and livelihoods.

2.2 Description of the Project Affected Area

2.2.1 Land Use

The area neighbouring Ngwerere Ponds presents diverse land use patterns:

To the North and North-East of the area the residential Silvia Masebo Compound (SMC), is characterized as having the most unplanned structure with very limited access roads leading into the inner parts of the settlement. The main access road to Ngwerere Ponds however is one which borders the SMC.

To the North and North-East, as well as to the South, subsistence and small-scale market oriented farming plots (vegetables) are maintained by SMC residents in the immediate vicinity of the sewer ponds. Some of these farming activities take place within the boundaries of the pond system. Despite being illegal, this practice is still accepted by the LWSC.

To the South-East of the area, large-scale agriculture takes place with the growth of secondary bush savannah.

Further to the South a new upmarket housing development is under construction.

To the West, pasture and bush-land stretches between Ngwerere Ponds and the road linking the area to the T2 highway.

To the North and North-West, agri-businesses including large-scale irrigation agriculture and poultry farm(s) have been established.



Figure 2-1: Ngwerere site: sewage ponds, new WWTP layout and surrounding land use

Source: Option 5: COWI (2016) - Feasibility Study - Final (Appendix H - Option 5 Analysis)

2.2.2 Housing and Basic Services

Houses in the SMC consist of mainly low cost houses, mostly concrete walls and ordinary corrugated iron sheet or asbestos roofs.

The settlement is not sewerred, and about 2/3 of the 1200 households use simple shallow pit latrines. As the area is water logged and prone to floods, the water table during the rainy season is very high. Potable water is not delivered to SMC by LWSC: the entire village of about 10,000 people depends on a number of shallow wells and 3 boreholes.

2.2.3 Project Affected Persons (estimation)

A Rapid Socio-Economic Survey was conducted to estimate the number of affected households who would have to be resettled as an impact of the project, and those who would require compensation. The estimation is based on several on-site visits in SMC and the Community Meeting held on 12 September 2015. Although at the time of the Community Meeting the chosen Option 5 had not yet been identified as such, the issue of potential resettlement had been discussed since the Scoping Workshop on 23 June 2015.

In order to neither create positive nor negative expectations and confusion among the residents, indirect questions and direct observations were used to collect the needed information in order to come up with adequate estimations.

In September 2015, 34 vegetable farmers in SMC used the wastewater ponds as a source of irrigation for their crops such as rape, cabbage, Chinese cabbage, tomatoes, maize and pumpkin; rape being the most popular one. At an unemployment rate among the economically active population of about 75%, the local economy depends on governmental pensions, small-scale private services and self-employment, which mainly consists of selling own products (vegetables and flowers) on the market. The average monthly earnings of the group of vegetable farmers is given at ZMW 200.00 each.

With the implementation of Option 5, it has to be expected that a maximum of 50 households in SMC will be affected by resettlement issues, resulting in an estimated number of 350 persons out of about 10,000 residents residing in SMC.

This maximum of 50 households expected to be subject to resettlement issues, refers to the current 20-30 households living along the Ngwerere pond system access road which needs to be re-constructed, paved and broadened in line with the start of the pre-construction phase (as well as demolition of the existing pond structures) up to the reference year 2025.

In the reference year 2040, the WWTP area needs to be extended by ~10 ha, totalising 34 ha. Corresponding to the required land acquisition process a roughly estimated number of 20 households might be affected.

In addition, at least 34 small-scale vegetable farmers and their households (about 240 persons) will be affected by the land use change that could destroy the economic base of their already poverty-bound livelihood.

2.3 Potential Socio-Economic Impacts from Resettlement

Resettlement actions caused by the implementation of Option 5 means relocation of people from their homesteads, and possible land acquisition for LWSC. Option 5, in the case of the Ngwerere ponds / SMC, has an impact on residents' access to natural resources such as agricultural soils and water for irrigation. Although probably only affecting a maximum of 50 households through permanent relocation, the loss of social cohesion and relations could impact on these 350 people throughout the project life cycle. Some of the potential socio-economic impacts are listed in Table 2-1.

Table 2-1: Overview of relevant social and economic impacts from resettlement activities

Category of Losses	Socio-economic impacts	Nature	Project Phase	Probability of occurrence	Significance	Areal Coverage
Displacement from land	Landlessness Loss of productive resource for agriculture and other businesses.	Direct and negative	Pre-Construction	Probable	Significant	Low
Loss of residential property and homestead	Landlessness, homelessness Impoverishment Disturbance of household livelihood Loss of sources of income Loss of, or weakening of community system and social networks Loss of access routes to social amenities such as access to transport to health centre / hospital and schools	Direct and negative	Pre-Construction	Probable	Significant	Low
Loss of assets or access to assets	Impoverishment Loss of sources of income Loss of self- / employment opportunities	Direct and negative	Construction	Probable	Significant	Moderate
Loss of income sources or means of livelihood	Impoverishment Loss of self-employment opportunities (farming) Disruption of attainment of services such as schools, health services resulting in	Direct and negative	Pre-Construction	Certainly	Significant	Low

LUSAKA WASTE WATER PROJECT
RESETTLEMENT POLICY FRAMEWORK OUTLINE

Category of Losses	Socio-economic impacts	Nature	Project Phase	Probability of occurrence	Significance	Areal Coverage
	malnourishment					
Loss of access or proximity to social amenities e.g. water sources, (e.g. boreholes), schools, hospitals and clinics, markets	Impoverishment Loss of sources of income Increased time to access social amenities Loss or shortage of time for other activities	Direct and Negative	Construction	Likely	Significant	Moderate
Blockage of access roads/ footpaths/ pathways	Increase in travel distance due to longer route and less transport opportunities Loss of business (market sale) Inconvenience to farmers	Direct and negative	Construction	Certainly	Significant	High
Disruption of phone services	Not applicable in SMC					
Disruption of power and water supply	Not applicable in SMC					

Overview based on own observations and RPF 3.2015, page 19 - 21

3 POLICY AND LEGAL FRAMEWORK FOR RESETTLEMENT

3.1 Land Tenure Systems

In Zambia, six distinct land tenure classes exist. The implementation of Option 5, especially in Ngwerere site as Chunga WWTP will be constructed on entirely LWSC land, may coincide with some of the following classes⁴

1. Customary Land
2. Leasehold Land
3. Freehold Land
4. State Land
5. Public Land

Customary Land: This is land held in trust for all Zambian citizens by the State President, who delegates his authority to traditional chiefs. The land is commonly held and distributed to the people through local chiefs. Although each individual has recognised ownership of a piece of land, he or she cannot trade it off as the land can be reassigned to others if and when the chief deems it fit. A coherent system regarding the distribution of land exists in both patrilineal and matrilineal societies. This system has allowed smallholder agricultural farming to survive without access to bank loans.

Leasehold Land: This is a part of private land that is leased to individuals or other legal residents. The lease period varies according to the type of land use someone has applied for. Currently these fall into three groups, 21 year old leases for agricultural use, 33 to 99 year leases for property and infra-structural development, and an over 99 year lease for those who wish to sublease to tenants for 99 years.

Freehold Land: This is land which has been granted to persons for perpetuity. The government has no specific control on transactions except for on the planning permission of land uses. This lease is now limited to Zambian citizenship only. It is difficult to enforce conservation measures on this land because of the exclusivity that the owners enjoy, particularly those owners who live overseas.

State Land: This is land which is owned and used by the government for public utilities, schools, hospitals, government offices and other properties, markets, government farms and other public goods throughout the country.

Public Land: Land that is managed by agencies of the government and traditional leaders on behalf of Zambian citizens, which is openly used or accessible to the public at large. This includes catchment areas, protected forest reserves, national parks, game reserves, dambos (flood plains), community forests, riverines, flood plains, wet lands, military sites and others.

⁴ Land classification / tenure system as outlined in the World Bank RPF for the Lusaka Sanitation Programme (March 2015), Chapter 2.1.10

3.1.1 Land Tenure in Silvia Masebo Compound and around Ngwerere Ponds

As far as information is currently available, SMC was legalized in 2008, and the majority of the households have paid and applied for the relevant documentation to obtain freehold land ownership over their respective plots.

A more detailed analysis of the land ownership situation, regarding the land that neighbours the Ngwerere Ponds area which is in the ownership of LWSC, should be conducted during the project's resettlement screening process.

3.2 Local Legislation

Currently, policies and legal arrangements in Zambia only deal with voluntary resettlement and not with involuntary resettlement. However, various acts and regulations provide guidance regarding legal provisions for resettlement. The following table gives an overview of the legal regulations that might be of concern if resettlement due to the implementation of Option 5 were to be necessary.

Table 3-1: Overview of Zambian legislation concerning resettlement and relocation

Law / Act / Regulation	Content and relevance to Option 5
Constitution of Zambia	Chapter 1, Article 16 emphasises the fundamental right to property and protects persons from the deprivation of property: ... except for under the authority of an Act of Parliament, which provides for adequate payment in compensation. This provision could be applied in the event of failure to agree on valuations during the RAP formulations, otherwise the RAP negotiations are expected to be seen as fair and equitable by LWSC and the Project Affected Persons (PAPs)
Land Acquisition Act (LAA) Chapter 189	Section 3 empowers the President of the Republic to acquire property unrestricted. Sections 5 to 7 refer to the issuing of notices to provide information on the intention to acquire, yield up, or take possession of a particular property. Section 10 provides for compensation. The value of the property for purposes of compensation shall be the amount which the property is expected to realize if sold on the open market, by a willing seller, at the time of publication. This Act usually applies in cases where the government is acquiring land for development projects. Though the compulsory land acquisition processes will not be applied in this RPF, the land acquisition processes inform the LSP resettlement processes on how to achieve fairness regarding compensation.
Town and Country Planning Act (TCPA)	Part III deals with development plans. Section 16 (2) provides for development plan mapping to illustrate the proposals, and in particular to designate land subject to compulsory acquisition by the President or by a local or township authority: (a) Land reserved for government or local authority purposes; (b) Areas designated for comprehensive development, and adjacent areas; (c) Other land in order to secure its vocation for planning purposes. This section also provides for the designation of compulsory acquisition areas that are not well laid out and need future attention, or areas that are obsolete for development needs. Part VII on Land Acquisition (Sections 40-44) refers to the provisions of the LAA (Chapter 189), making relevant necessary adjustments to permit the acquisition of land by a local authority. Most of the land targeted by Option 5 falls under the jurisdiction of the local authority. The Act creates a good basis for liaison with the Chongwe District Authorities in particularly handling the compensations for land and assets that are within local authority rented areas

Law / Act / Regulation	Content and relevance to Option 5
Water and Sanitation Act	<p>No 28 of 1997, part V, 23(1) gives the President of Zambia the power to acquire land considered necessary for the provision of water supply and sanitation services. Adequate compensation must be paid in accordance with the LAA.</p> <p>Section 29 states that the service provider shall do as little damage as possible and shall provide full compensation to persons who have sustained damage. The amount of compensation would be determined by arbitration.</p>
Local Government Act (22 of 1991 as amended) (Chapter 281) (LGA)	<p>This is the key enabling legislation that defines the authority given to LCC and its various roles in the Lusaka Sanitation Project. It governs the establishment, powers and operations of the local administration, and its representative function (members of the Council).</p> <p>Section 61 provides legal authority for the functions of Councils, and give details in the Second Schedule which are relevant to the overall Lusaka Sanitation Project</p> <p>This Act is essential for the enforcement of sanitation standards within the project area.</p>
The Environmental Management Act (12 of 2011) EMA 2011	<p>EMA 2011 is the national supreme environmental law for implementing environmental policies and standards. Zambia Environmental Management Agency (ZEMA) procedures state that no project that may have an effect on the environment may be undertaken without written approval and needs to be in accordance with any conditions imposed in that approval. First Schedule of Regulation 3 specifies which types of development require a project brief, which include resettlement schemes.</p> <p>Regulation 10 provides for public consultation by the developer before submitting the environmental impact statement to ZEMA.</p> <p>The Act itself enforces the need for fair and equitable compensation of all resettlement impacts. The RAP will be reviewed and monitored by ZEMA, thus creating an external monitoring system for resettlement to LWSC.</p>
Roads and Traffic Act Volume 26 Cap 464	<p>The Public Roads Act, 2002 section 18 (3) gives authority to the Road Development Agency (RDA) to enter any land for the purposes of extraction of materials for road formation. The Act under the same section underlines the need to notify the property landowner before preparation and commencement of the extraction of materials takes place. Under Section 18 (4), compensation should be paid to the affected landowner.</p> <p>The access road to Ngwerere Ponds has to be built, and the existing dirt road has to be broadened to allow for construction vehicles to pass. This activity will result in the resettlement of about 20 to 25 house- and landowners.</p>
Agricultural Lands Act, volume 12 Cap 187 (ALA)	<p>Provides for the establishment of the Agricultural Lands Board and for tenant farming schemes. The Act gives the Minister power to declare any state land, and with the consent of the registered owner any freehold land, and to alienate any declared land in any of the following ways: by state grant; by the lease of holdings or by any other state lease or tenancy.</p> <p>Where disputes arise, they shall be referred for arbitration under the provision of the Arbitration Act. This Act does not have a direct relationship with the project</p>
COMPENSATION AND VALUATIONS	
LAA Chapter 189	<p>Assessment for compensation for involuntary acquisition of land/property must be at Market Value. It indicates that the value of the property shall be equal to the amount the property is expected to realize if sold in the open market, by a willing seller, at the time of publication. The market value describes an exchange between parties that are unconnected and operating freely in the market place ignoring any price distortions caused by special or synergistic value. It represents the most likely price that would be obtained for a property across a wide range of circumstances. The Zambian Land Acquisition Act is referenced in Chapter 4 and additional information on the Zambian land tenure system</p> <p>Property valuation in Zambia is carried out by valuation professionals registered under the Valuation Surveyors Act Chapter 206 of the laws of Zambia. A registered valuation surveyor under the Valuation Surveyors Board is a trained professional who has a thorough knowledge and understanding of the factors that create, maintain or diminish values of real estate or assets. Valuation of assets is done in accordance with the Practice Statements and Guidance Notes published by the International Valuation Standards Committee (IVSC), adopted and recognized by international accounting standards and risk management professionals. This</p>

Law / Act / Regulation	Content and relevance to Option 5
	law is important for the qualification of the valuation expert for the respective sub-project RAPs
Arbitration Act No. 19 of 2000	Provides for arbitration in cases where the land owner / occupier does not agree with the amount of compensation being offered. Under Section 12 (2) of the Act, the parties involved in the arbitration are free to determine the procedure for appointing the arbitrator or arbitrators. Under section 12 (3) (b), if the parties are unable to agree on the arbitration, the arbitrator shall be appointed, upon request of the party, by an arbitral institution

This list might not be exhaustive – for further details refer to RPF 03.2015, pages 23 - 30

3.3 Policies of LSP Financing Agencies on Resettlement

World Bank policies on resettlement are outlined in Operational Policy (OP 4.12), and supported by KfW and EIB. The overall objective of this safeguard is to avoid or minimize involuntary resettlement where feasible, and explore all viable alternative project designs. OP 4.12 encourages community participation in the planning and implementation of any resettlement action. Where resettlement is unavoidable, OP 4.12 stipulates the criteria for eligibility of compensation regarding project affected persons, as well as resettlement and rehabilitation assistance measures especially to those who have:

- a. Formal legal rights to land, including customary and traditional rights recognized under the legal laws or traditional practices of Zambia. This group of people includes those holding leasehold land, freehold land and land held within the family or passed down through generations.
- b. A claim to such land or assets. However, no formal legal rights to land at the time of the census provided that such claims are recognized under the legal or traditional laws of Zambia. Among these uses are vendors, commercial billboards and other infrastructure using land with approval from local authorities.
- c. No legal right or claim to the land they are occupying prior to an established cut-off date (date of original census). These people include squatters and those that settle somewhere on a semi-permanent basis, or those that settle in a place without any formal grant or authority.

Project affected persons classified under paragraph (a) and (b) shall be provided with compensation, resettlement and rehabilitation assistance for the land, building or fixed assets on the land and buildings taken or impacted on by the project, in accordance with the provisions of this framework if they occupy the project area prior to the cut-off date (date of commencement of the census). Project affected persons classified under paragraph (c) shall be eligible for compensation for their assets, but not for their land.

3.4 Comparison between Policies of LSP Financing Agencies and Zambian Legislation on Resettlement

The policies of the LSP financing agencies led by World Bank's OP 4.12, and those of the Zambian Government, have a number of common aspects with regards to the management of resettlement. For

example, both emphasise efforts to minimise the extent to which resettlement practices affect residents, as well as recommend fair and adequate compensation to project affected persons. However, gaps exist between the LSP financing agencies' policies and those of the Zambian Government⁵. The following list contains some of the policy differences which are relevant to the implementation of Option 5:

1. Referring to compensation on assets, the World Bank and the LSP financing agencies policies on resettlement include illegally built structures, such as squatters, as eligible for compensation. Whereas, according to the national legal regulations, such claimants are not entitled to compensation.
2. Referring to compensation on land, the national policies consider the different intrinsic values associated with various classes of land; rates for compensation on land therefore vary from one site to another and from one class of land tenure to the other. The World Bank and LSP financing agencies' policies do not distinguish between land classes and different market rates.
3. Referring to the compensation for loss of land, OP 4.12 prefers land-for-land compensation. In Zambia, the compensation of land for land loss mainly only happens in customary land transactions, while financial compensation for land loss is common in urban areas.
4. OP 4.12 stipulates resettlement as an upfront project during which all issues of land acquisition and relocation of project affected people have to be finalized prior to the commencement of any project on the acquired site. The national policies do not clearly define this approach. It is common to treat resettlement issues as a separate case outside of the project planning and implementation process.
5. Zambian legislation does not clearly define the extent to which resettlement assistance needs to be given to the relocated people. LSP financing agencies' policies recommend for adequate resettlement and rehabilitation assistance to be provided to relocated people as a way of restoring and enhancing livelihoods and socio-economic standards. This is supposed to be undertaken within the first few years of relocation to the new sites.
6. OP 4.12 covers both resettlement and compensation issues in order to ensure that project affected persons are also assisted at the new site. In determining the cost of compensation, estimates are given at the new replacement value of the property being lost, whereas in the case of national legislation, it is the value of the property at the time of it being sold. International donors such as KfW, EIB and the World Bank emphasise restoration or maintenance of previous livelihood levels, whereas the Zambian Government's responsibility towards affected people ends after compensating for the depreciated value of the lost asset.

⁵ RPF 3.2015, pages 31- 35

7. Zambian legislation emphasizes compensation more than resettlement: If there are standing crops or improvements to housing structures, the Government has to pay the compensation at the current value of either the property or standing crops.

To overcome these discrepancies between the Government and the financing agencies policies, it is recommended (in RPF 03.2015) to focus on policy aspects which positively favour the project affected persons, and omit those which have a negative impact on them. This recommendation is based on the observation that the common ground between the financing agencies' Policy on Resettlement and that of the Constitution of Zambia is the guarantee of fair and adequate compensation, and adequate resettlement assistance for the project affected persons. In this regard, suitable options to be adopted are stipulated by RPF 03.2015:

1. Compensations in form of land for land loss regarding those who have been displaced, will be a top priority;
2. Compensations related to customary land acquisition are to be made on open market values as opposed to the previous practice of considering customary land as a free commodity;
3. Compensations should be paid to project affected people as long as they are covered within the cut-off date;
4. Compensations should be made in relation to labour inputs in gardens and maintenance of trees and crops within the last year;
5. Provisions of basic and social services (such as potable water, graded access roads, sanitation facilities, subsidised farm inputs, and income generating activities) should be provided to project affected people within the new area of relocation. Such support would enhance the restoration and even improve the standard of living of project affected people; hence increasing the motivation to agree to resettlement;
6. LWSC as the implementing agency of the LSP on behalf of the Government of Zambia has to formally agree to implement the policy principles as stated in this RPF and be consistent with the World Bank OP 4.12 resettlement policy. Harmonization of the two legal provisions is a cardinal measure as the primary aim of this RPF is to improve the livelihoods of the project affected persons beyond the original status of their economic, social and cultural well-being.

4 GUIDING PRINCIPLES FOR RESETTLEMENT IN THE LSP

The approved and disclosed World Bank RPF from March 2015 formulates the following principles for resettlement within the LSP⁶. These principles would especially apply if Option 5 were to be selected.

Principle 1: Sub-project activities shall be proposed at suitable sites. Suitable sites for the funding of a sub-project are those sites where the implementation of a sub-project would not bring about any involuntary resettlement, voluntary or involuntary physical displacement, eviction of squatters, loss of land (whether ownership is recognized by customary land tenure or land titles), impact on cultivations and property, loss of access to property, loss of access to natural resources and other economic resources

Principle 2: Sub-projects proposed within a site where resettlement, including impact on assets, is unavoidable, communities must be involved in the planning and implementation stages of the resettlement well in advance of the sub-project implementation. This includes preparation of a Resettlement Action Plan (RAP).

Resettlement activities in the communities should be implemented considering the following sub-principles:

i. Genuine stakeholder consultation and participation must take place

For the implementation of Option 5, LWSC has to adequately consider the views, rights and interests of the residents in Silvia Masebo Compound, as it requires involuntary relocation. SMC residents made it very clear in September 2015 that they are not interested in moving out.

ii. A pre – resettlement socioeconomic baseline assessment must be conducted

LWSC, being the implementing institution of the project, thus has to prepare resettlement action plans based on the socio-economic baseline surveys of the project affected persons around Ngwerere Ponds. This survey will include and not be limited to:

- Current occupancy of the residents in the sub-project area and establish a baseline for the design of the RAP. This will also help exclude the influx of new occupants into SMC and the surrounding area and control eligibility of compensation and resettlement assistance to those entitled to it.
- Characteristics of the households to be relocated.
- Magnitude of expected resettlement impact including economic losses from changes in land use.

iii. LWSC to provide resettlement assistance to project affected persons

Project affected people have to be provided with necessary support during the course of relocation. The support will include the provision of transport and prioritize access to basic services with regards to the new settlement sites.

⁶ RPF 3.2015, pages 35 & 36

iv. A fair and equitable set of compensation options must be negotiated

In the case of resettlement of SMC residents and other affected persons around Ngwerere Ponds, LWSC has to compensate assets based on the open market or replacement value - whichever is higher.

v. Vulnerable social groups must be specifically catered for

Compensation and resettlement assistance has to cover all entitled categories of project affected persons including vulnerable groups such as those living in squatters, female-headed households (widows, unmarried females), child-headed families and orphans, the elderly, widowers and disabled persons.

vi. Setting up of accessible grievance redress mechanisms

LWSC has to put in place user friendly and cost effective mechanisms for addressing complaints from project affected persons. The mechanisms should include use of local grievance redress mechanisms administered by local traditional authorities as well use of administrative courts under the Magistrates.

vii. Compliance to relevant policies and laws

Land acquisition and resettlement activities regarding Option 5 must be implemented in compliance with the relevant government policies and laws, with OP 4.12, and with the World Bank and LSP financing agencies' policies.

5 METHODS FOR THE VALUATION OF ASSETS

If Option 5 were to be implemented in SMC, the land acquisition and compensation for assets has to be based on fair and equitable valuation. Valuation of assets, including buildings, trees, fruit trees, crops, and vegetables will be based on market assessments. As a first step, this requires the establishment of compensation schedules which list assets affected by the project as well as their agreed value. In the vicinity of Ngwerere Ponds the compensation schedules will include at least the following groups of assets:

(a) Land holdings

The required land for Option 5 may belong to the Local Authority, to the Road Development Authority (RDA) or to individuals. Whichever the case, land required for the project will be acquired through full consent and participation of the Project Affected Persons only. For the road reserve, liaison with the RDA and a general agreement for cooperation on this regard has been made; however, for the specific location at Ngwerere Ponds in Chongwe District, the RDA will be consulted. Any impact related to the road construction will be consulted and supervised by RDA.

For the land belonging to the local authority, a general agreement for cooperation has to be secured and consultations will be made for this specific sub-project. For land belonging to individuals, negotiations based on market rates will be made and agreement for compensation secured. Where possible, land for land compensation will be prioritized.

(b) Agricultural produce such as crops, fruit trees, orchards and flowers beds

Around Ngwerere Ponds agricultural production is the main purpose of land use. LWSC therefore has to compensate for the affected crops as well as assets demolished or impacted on. A team of technical, social and valuation experts should undertake the valuation of crops, trees and further assets in consultation with the affected farmers. After all parties have agreed on a compensation schedule, LWSC is in charge of maintaining this compensation schedule including a detailed list of the names of the affected persons and values of their assets to be used for the compensation.

(c) Permanent physical assets such as buildings, agricultural productive soil, and boreholes

Damage to individual buildings or any related assets will be negotiated with the individually affected household or person directly. The replacement or market price, whichever is higher and agreeable will be used.

(d) Temporary physical assets like billboards, boundary walls, and mobile work stations like vending areas

These structures include temporary houses, toilets and makeshift kitchens, temporary animal structures, and tuck shops. LWSC will have to list the assets for compensation. The valuation team consist-

ing of the technical expert, social expert and professional valuation expert will be deployed. The social expert will ensure that a detailed social assessment is done to ensure that the compensation takes into account all livelihoods and vulnerability issues associated with such demolitions. Impacts on a tuck shop, vending stall and other livelihood related assets will be assessed with the intention to preserve livelihoods. Compensation for physical assets will be paid based on the replacement cost or market value, whichever is higher. Land for land compensation will be prioritized where possible.

RPF 03.2015 proposes approaches to the valuation process, which are also appropriate to SMC conditions in 09.2016:

(a) Delivery of compensation based on official valuations by LWSC

This valuation mechanism is based on what the valuation team and the project affected persons mutually agree on. Once agreement is achieved, the agreed valuation is payable to them by LWSC.

(b) Delivery of compensation based on values arbitrated by formal courts

Such incidents occur when some people appeal to the court for review of the compensation packages. The courts' decision will be followed by LWSC for compensation to project affected people.

Concerning the "Limitations of Valuation Methods and Mitigation thereof", please refer to RPF 03.2015, pages 41 & 42.

The selection of people eligible for compensation and resettlement assistance will be determined by the census carried out by LWSC, following the Option 5 resettlement screening results. The general guidelines for the criteria of eligibility for the World Bank O.P 4.12 Involuntary Resettlement will be adapted according to the prevailing resettlement conditions. The guiding principle is that the affected households should not be left worse-off than before by the project-induced resettlement.

6 PROJECT AFFECTED PERSONS AND COMPENSATION MEASURES

6.1 Definition

The following definitions of Project Affected Persons (PAP) will be used in accordance with the LSP Resettlement Policy Framework⁷ to determine individual eligibility for compensation and resettlement assistance:

- (a) **PAP with formal legal rights to land, including customary and traditional rights recognized under the laws of Zambia.** This group of people includes those holding leasehold land, freehold land and land held within the family or passed down through generations.
- (b) **PAP without formal legal rights to land:** this group includes those that originate from outside the specified area and are given land by the local chief to settle.
- (c) **PAP without legal right or claim to the land they are occupying.** These people include those that settle in a place on a semi-permanent basis, or those settling in a place without any formal grant or authority.

According to RPF 3.2015, PAPs classified under (a) and (b) shall be provided with compensation from the sub-project for the land, building or fixed assets on the land and buildings taken by the sub-project, in accordance with the provisions of this framework if they occupy the project area prior to the cut-off date (date of commencement of the census). Impacted persons classified under (c) shall be eligible for compensation from the sub-project for their assets but not for land. Persons who encroach on the project area after the cut-off date shall not be entitled to any compensation, any resettlement assistance, or any other form of rehabilitation assistance.⁸

6.2 Delivery of Compensations

Once the valuation of impacts on the land and assets has been finalized, it is the responsibility of the LWSC to submit it to ZEMA for their review and approval of the compensation packages from the sub-project, as part of the RAP and in association with the sub-project's ESIA. The compensation payment process has to be sped up to reduce the risk of inflation on cash payments. LWSC shall deliver the compensation within a period of three months from the date of the finalised asset valuation.

Table 6-1: Compensation Matrix as proposed in RPF 03.2015 and confirmed in 08.2016

General Description	Definition	Compensation Approach/Types	Compensation Mechanism	Implementation Approach
Loss of portion or total loss of residential	Land owned by individual landowners adjacent to access road which	Replacement of or compensation for the land shall be negotiated with the owner and	Market value or replacement cost whichever is higher. When possible, replacement shall be of	Team consisting of a technical expert, social expert, legal

⁷ RPF 3.2015, pages 42 & 43

⁸ RPF 3.2015, page 43

LUSAKA WASTE WATER PROJECT
RESETTLEMENT POLICY FRAMEWORK OUTLINE

General Description	Definition	Compensation Approach/Types	Compensation Mechanism	Implementation Approach
land	may be required permanently since the start of construction for extension of the road	shall form part of the construction contract for the sub-project	an equivalent value and in-kind. Other resettlement assistance will be considered in relation to the socio-economic assessment.	expert and the contracted asset transfer professional valuation expert, in consultation with the PAP.
Loss of agricultural land	Area in cultivation, being prepared for cultivation, or cultivated during the last agricultural season	Loss of land, labour, and crop loss shall be compensated by LWSC through provision of land of equal productive capacity and which is satisfactory to the PAP	Using a single rate regardless of the crop, incorporating the combined at market value of all staple crops lost, costs for preparing new land at the time of compensation will be paid	Preliminary identification has occurred and possible areas of impact identified. Land mapping to be performed for Option 5 by LWSC specialist team
Temporary loss of leased land	Land that will be acquired for a set period of time as a result of the project, including damage to or restricted access to driveways, as well as land owned by Road Development Agency or City Council on which PAP rely on for access	General agreement on compensatory measures with relevant agency and in consultation with PAP	All damages to private land or property shall be compensated at prevailing market rates including compensation for tenants, if any, regarding rental fees and dislocation allowances for when the land/structure is inaccessible	Negotiations between contractors and landowners so that expenses can be included in the bid price. Damage during road crossing to be negotiated with Road Development Agency directly
Temporary loss of access to market space	Land that is part of the road right-of-way that has been used as market space with implicit permission	Compensation agreement between LWSC, and the market representatives. The marketers do not pay any rent to LCC because such places are not officially designated for such land use, and the marketers are in such places unofficially	LWSC will meet the reinstallation cost for marketers' structures and loss of revenue for the downtime in view of the census and social assessment	LWSC valuation team in consultation with the PAP
Loss of agricultural produce	Standing seasonal crops – grown near ponds or as encroachments in right-of-way such as tomatoes, cabbage, maize, rape; this may also include productive trees	PAP to be compensated for their (temporary) loss of income and standing crops. Productive trees will be reimbursed	Crops shall be compensated at prevailing market rates	LWSC valuation team in consultation with PAP
Loss of permanent physical assets	Fixed assets other than land (e.g., housing, market stalls)	Replacement to be negotiated with owner; should form part of the construction contract Option 4B	When possible, replacement shall be of an equivalent value and in-kind. Where cash is paid for assets, payment will take into account market	LWSC valuation team in consultation with PAP

LUSAKA WASTE WATER PROJECT
RESETTLEMENT POLICY FRAMEWORK OUTLINE

General Description	Definition	Compensation Approach/Types	Compensation Mechanism	Implementation Approach
			values for structures and materials. Replacement costs shall be determined prior to construction and included as part of the bid price.	
Loss of temporary physical assets	Buildings located along the edges of the property boundaries and/or encroaching on the road right-of-way; toilets, makeshift kitchen, temporary animal structures and tuck shops.	Compensation agreement between LWSC and the PAP. Notification period will be agreed as well	Compensation for physical assets will be paid based on the replacement cost or market value, whichever is higher. Loss of economic base of livelihood will be considered.	LWSC valuation team
Temporary loss of access to leased land	Land along the right-of-way that is leased for billboard placement	Agreement on compensatory measures between LWSC, LCC and the Marketers representatives.	LWSC will compensate for the lost rent at LCC rates, and meet the reinstallation cost for advertising structures.	LWSC valuation team

7 GRIEVANCE REDRESS MECHANISMS ON RESETTLEMENT ACTIVITIES

Following the approved and disclosed RPF 03.2015, the Resettlement Screening will ensure that resettlement related grievances are addressed during the identification and appraisal of Option 5 sites.

Depending on the nature of the grievance and the reason for the disputing parties, the first action is to undertake a field verification of the matters arising. The LWSC will deploy the safeguard team to investigate the matter within 24 hours of a complaint being directly made to LWSC, the Contractor, the Ward Councillor, or any other available channels open to complainants. The LWSC has structures already in place for the resolution of grievances, which work hand in hand with the World Bank Grievance Redress System (GRS) established in December 2014. The local GRM will be implemented first, and the World Bank GRS will only be applied in situations where the local GRM has failed to effectively resolve the grievance. PAP living and working around Ngwerere Ponds will however be informed of the existence and operation of both mechanisms with emphasis on implementing the local mechanism first.

Stakeholders in the local Grievance Redress Mechanism are (1) the Ward Development Committee; (2) Formal Courts; (3) The Zambia Republic Police; (4) NGOs; (5) ZEMA; and (6) LWSC. Their specific roles, responsibilities and tasks will have to be defined in the Resettlement Action Plan.⁹

⁹ RPF 3.2015, pages 47 - 51

8 RESETTLEMENT SCREENING FOR OPTION 5

A Resettlement Screening Process consists of a series of appraisal activities prior to the approval of the sub-project, in this case Option 5. This has to be based on a technical assessment and consultation with SMC residents as they will be the most affected community neighbouring the new WWTP site at Ngwerere Ponds. According to RPF 03.2015 (pages 52 – 55), the objectives of this screening process are:

- To guide LWSC in the identification of appropriate sites for various sub-projects within the local communities.
- To guide communities in the identification of measures to address resettlement impacts prior to project implementation.
- To monitor measures in addressing the social impacts of resettlement

The Resettlement Screening Process should consider the following appraisals:

1. Desk Appraisal of the Proposed Site and the Project
2. Field Appraisal of the Proposed Site and the Project
3. Conclusions and recommendations resulting in
 - a) Rejection of the proposed Option 5; or
 - b) Approval of the proposed Option 5.

9 PREPARATION OF RESETTLEMENT ACTION PLAN

Following the resettlement screening and the decision that Option 5 is acceptable for the Ngwerere Ponds site with the satisfaction of the requirements for a RAP, it will be the responsibility of LWSC to mobilize an appropriate team of experts to prepare a RAP within the project preparation time frame. RPF 3.2015 (pages 53 & 54) stipulates a list of chapters which have to be contained within a RAP for sub-projects of the LSP, and which applies to the implementation of Option 5 at Ngwerere Ponds site:

- Description of the location of the proposed Option 5.
- Size of land which Option 5 will take up and its current uses.
- Detailed inventory of all valuated assets to be lost or impacted on by all households and individuals affected by having to move their place of residence or business to allow for the construction of the access road and the WWTP. This must include a baseline survey (census of the area) and the ensuing valuation report against which the future well-being of the household can be measured. A plan of action for the resettlement of impacted assets must be drawn. This should also detail how and how much compensation for crops will be paid, where replacement of land will be found (if necessary), and which steps will be followed to ensure that the households' productive base is re-established.
- Inventory of the people who will potentially lose land over which they have established ownership or rights of usufruct (either permanently or temporary fashion) to allow for construction of the facility. This must include a baseline survey (census of the area) against which the future well-being of the households can be measured. A plan of action for the resettlement or replacement of homestead must be drawn.
- A plan of action which ensures that the communally held resource base is replaced / re-established to ensure that no one is worse off after the project implementation than before.
- Activities and schedule (time line) required for resettlement and compensation.
- Calculation of budget required for resettlement and compensation.
- Monitoring mechanisms for the implementation of resettlement and compensation.

The preparation and implementation of the RAP will be undertaken as a collaborative effort between LWSC, local leadership and the affected SMC community. The key officials to be involved will be the District Lands Officer, District Forestry Officer, District Water Officer, Environmental District Officer, Community Development Officer and extension workers. This group of experts is expected to support the Ward Development Committee in order to produce a credible compensation schedule regarding the project affected people.

The following diagrammatic flow chart regarding the preparation and implementation of a Resettlement Action Plan was already depicted in RPF 03.2015 (page 55), and has been slightly adapted for Option 5 – WWTP at Ngwerere Ponds as a sub-project of the LSP.

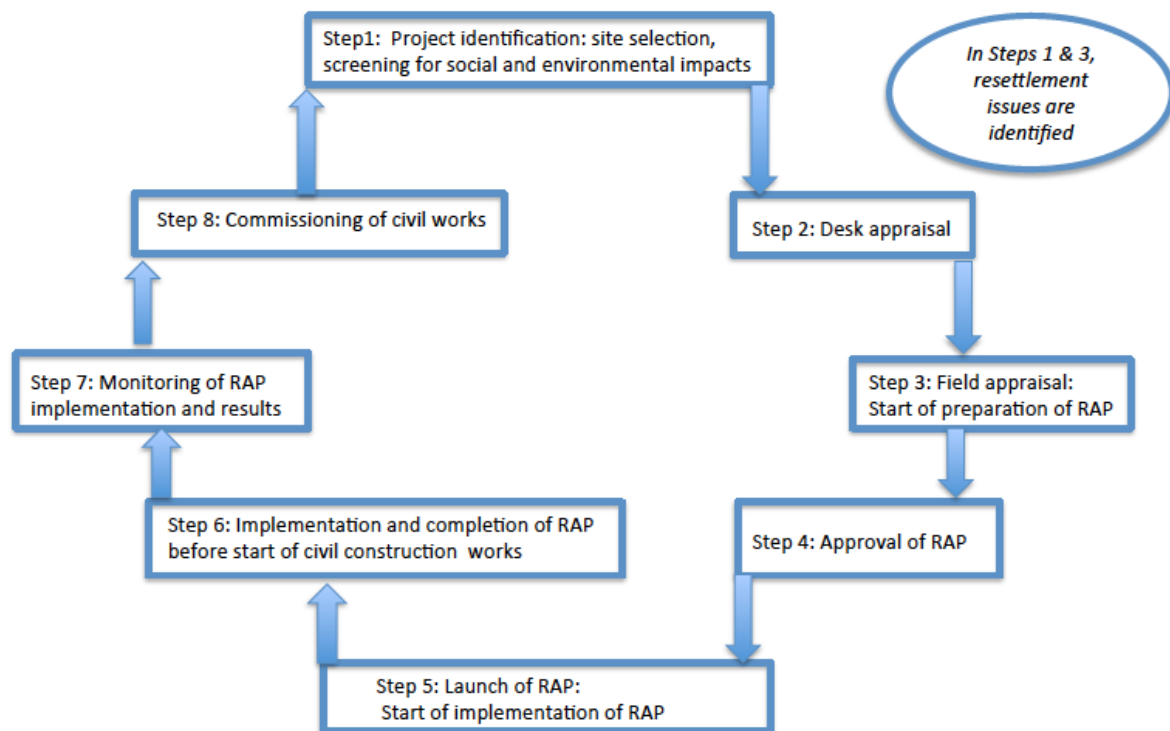


Figure 9-1: Generic RAP project cycle according to Zambia Social Action Fund

10 SUMMARY

The purpose of this draft RPF outline is to support the LWSC in addressing potential land acquisition and resettlement issues during the implementation of Option 5, mainly regarding the Silvia Masebo Compound (SMC) which neighbours the new WWTP locations where currently the Ngwerere Ponds site is situated. This draft RPF further outlines additional components of Option 5 as and when they become relevant.

In March 2015, a RPF for the LSP was published by LWSC and the World Bank in order „to guide the LSP in addressing land acquisition and resettlement/relocation issues in the corridors of impact of the project by LWSC together with its stakeholders“. Based on this document the current RPF outline only refers to Option 5 as it is the preferred option, and may impact on existing residential and agricultural areas both planned and unplanned.

10.1 Preparation of RAP – Further Proceedings

Ngwerere site/Silvia Masebo Compound: The re-construction, paving and broadening of the existing access road will potentially require the relocation of at least 20 to 30 households along the access road and the change of land use from agriculture to WWTP purposes.

In the reference year 2040 the extension of 10 ha (total area in the year 2040: ~ 34 ha) of the WWTP area might be required, therefore the tentative resettlement of about 50 households and /or compensation for agricultural soil could be required. However, it has not yet been determined whether this extension is finally required, and if so, in which direction this WWTP extension will take place.

Accepting this situation the further proceedings are proposed:

- Formal land acquisition has to be prepared and carried out as the SMC was formalized as a residential area in 2008, and the residents are in the process of obtaining their land ownership documentation for their plots. This process should be completed as soon as possible with active support from the LWSC.
- A Resettlement Screening Process consisting of a series of appraisal activities should be executed. This activity might be an integrative part of the individual ESIA preparation in accordance with ZEMA standards.
- As an outcome of the screening process, appropriate guidelines for the preparation of a Resettlement Action Plan (RAP) should be drafted, approved by KfW, EIB and LWSC, disclosed and implemented prior to the project activity causing impact on individuals, households, economic activities and livelihoods.

10.2 Implications on Potential Compensation Measures

- Resettlement screening, and as far as required the establishment of a RAP, will result in the identification of resettlement related compensations. In this process, Ward councillors and further representatives of the community, such as leaders of the local Women Association, teachers, health workers, and NGOs, have to be involved to ensure that the rights and interests of all vulnerable group in the community, such as orphans, disabled and female-headed households, are considered.

- As imposed by Zambian regulations, the assessment of compensation for involuntary acquisition of land/property must be taken at Market Value. It indicates that the value of the property shall be equal to the amount at which the property might be expected to realize if sold in the open market, by a willing seller, at the time of publication. In this context, property valuation in Zambia is carried out by valuation professionals registered under the Valuation Surveyors Act Chapter 206 of the laws of Zambia.
- Once the valuation of the project's impact on land and assets has been finalized, it is then the responsibility of LWSC to submit this valuation to ZEMA for review and approval of the compensation packages from the sub-project as part of RAP, and in association with the sub-project's ESIA. The compensation payment process has to be sped up to reduce the risk of inflation on cash payments. The LWSC shall deliver the compensation within a period of three months from the date that the valuation of the assets is finalised.