

Cities Alliance Liberia Country Programme Baseline Report

21 June 2017

Contents

List of Tables	ii
List of Figures	ii
List of Acronyms.....	iv
Executive Summary.....	vi
Baseline Summary of findings against key programme indicators.....	vii
1.0 Introduction	1
1.1 Cities Alliance Country Programme Overview	2
1.2 Greater Monrovia Profile	7
2.0 Study Methodology.....	8
2.1 Survey data collection and analysis	8
2.1.1 Data reliability	8
2.1.2 Sample Population	9
2.1.3 Sampling procedure	10
2.2 Ethical considerations	11
2.3 Literature Review of program indicators	11
3.0 Status of basic services	12
3.1 Water and Sanitation	12
3.2 Access to Electricity and Infrastructure	13
3.3. Status of informal workers in Liberia	14
4. Presentation of findings.....	16
4.0 Findings from among urban slum dwellers in greater Monrovia	16
4.1 Social, economic and demographic characteristics of household survey respondents	16
4.2 Household characteristics in Greater Monrovia	18
4.2.1 Access to improved water source and water supply	19
4.2.2 Access to improved sanitation facilities.....	22
4.2.3 Waste disposal and management.....	23
4.2.4 Access to and flow of electricity	25
4.2.5 Access to and quality of road infrastructure.....	25
5.0 Informal workers in Greater Monrovia.....	28
5.1 Characteristics of petty traders and waste-pickers in Greater Monrovia	28
5.2 Constraints to the expansion of informal businesses	30
5.3 Working conditions of petty traders.....	32
5.4 Working conditions of waste-pickers.....	34

5.5 Business aspirations of petty traders and waste-pickers	36
6. Summary and conclusions	38
6.1 Engagement in income generating activities among informal workers	38
6.2 Access improved water source	38
6.3 Access to improved sanitation facilities.....	38
6.4 Waste disposal and management.....	39
6.5 Access to and flow of electricity	39
6.6 Access to road infrastructure.....	39
6.7 Petty traders working conditions and environment.....	39
6.8 Waste-pickers working conditions and environment.....	39
7. Recommendations for indicator collection.....	41
References	43

List of Tables

Table 1: Household survey sample size	10
Table 2: Background characteristics of urban dwellers.....	16
Table 3: Access to water sources and quality of drinking water	19
Table 4: Access to improved toilet facilities	23
Table 5: Household waste disposal and management	24
Table 6: Household access to and flow of electricity.....	25
Table 7: Access to and condition of road infrastructure	26
Table 8: Background characteristics of informal workers	28
Table 9: Petty trader working conditions and environment.....	33
Table 10: Waste picker working conditions and environment.....	35
Table 11: Business aspirations of informal workers by demographic characteristics	36
Table 12 Indicator evaluability.....	41

List of Figures

Figure 1: Cities Alliance Country Programme theory of change.....	6
Figure 2: Greater Monrovia administrative boundaries	7
Figure 3 : Engagement in income-generating activities.....	17
Figure 4: Reasons that hinder the urban dwellers from engaging in IGA.....	18
Figure 5: Income-generating activities among urban dwellers	18
Figure 6: Household water consumption in litres per day.....	20
Figure 7: Household main source of drinking water.....	21
Figure 8: Satisfaction about safety of water for drinking	22
Figure 9: Types of toilet facilities used by households	23
Figure 10: Satisfaction towards the general condition of the roads	27
Figure 11: Average monthly earnings and profits from petty trading.....	30
Figure 12: Three major challenges that hinder petty traders from expanding their businesses	31

Figure 13: Challenges that hinder CBEs from expanding the waste collection business.....	32
Figure 14 Availability and condition of garbage containers	35
Figure 15: Health risks related to collecting garbage by gender and age.....	35
Figure 16: Prospects for informal workers in 5-10 years.....	37
Figure 17: Challenges that would prevent informal workers from realising their plans.....	37

List of Acronyms

AEDE	Agency for Economic Development and Empowerment
AWF	Africa Water Facility
CBEs	Community-based enterprises
CDS	City Development Strategy
CUF	Community Upgrading Fund
FGDs	Focus group discussions
FOLUPS	Federation of Liberia Urban Poor Savers
FSPs	Finance Service Providers
GOL	Government of Liberia
HFHI	Habitat for Humanity International
IMF	International Monetary Fund
KIIs	Key informant interviews
LCP	Liberia Country Programme
LEGIT	Local Empowerment for Government Inclusion and Transparency
LGAs	Local Government Areas
LIPA	Liberia Institute of Public Administration
LISGIS	Liberia Institute of Statistics and Geo-Information Services (LISGIS)
LRA	Liberia Revenue Authority
LRD	Liberian Dollar
LWSC	Liberia Water and Sewerage Corporation LWSC
MCC	Monrovia City Corporation
MOU	Memorandum of Understanding
M&E	Monitoring and Evaluation
NAPETUL	National Association of Petty Traders Union of Liberia
NUP	National Urban Policy
PCC	Paynesville City Corporation
SDI	Shack/Slum Dweller International
SIP	Strategic Investment Plan
SWM	Solid Waste Management
UCLGA	United Cities and Local Governments Africa
UNDP	United Nations Development Programme
UNICEF	United Nations Children’s Fund
WIEGO	Women in Informal Employment: Globalizing and Organizing.
YMCA	Young Men’s Christian Association

Acknowledgements

The Cities Alliance Secretariat would like to thank the Agency for Economic Development and Empowerment (AEDE), which led the in-depth fieldwork and survey design, and Ms. Aisha Nansamba, Analytics Specialist, for producing this baseline report for the Liberia Country Programme. Hugh Goyder and Ulrich Graute provided extensive external reviews of the report as Cities Alliance International Technical Assessors.

The report was conducted under the management of Mr. Senjovu Andrew, Monitoring and Evaluation Analyst at the Cities Alliance Project Office in Monrovia with support from Cities Alliance colleagues William Cobbett Director, Bernadette Leon Program manager Liberia Country Programme, Omar Siddique Senior Urban Specialist, Julian Baskin Head of Programme unit, Hilary Balbuena Head of finance and operations, Federico Silva, Senior Programme specialist, Desmond Ngochi Project Analyst, David Daepf Programme Officer and Cynthia Sorenson Programme Assistant.

We would also like to thank Comic Relief, which provided funding for this report, and acknowledge major stakeholders who contributed, including: the Government of Liberia through the Ministry of Internal Affairs, Ministry of Public Works, Liberia Water and Sewerage Corporation (LWSC), Liberia Institute of Statistics and Geo-Information Services (LISGIS), Monrovia City Corporation, Paynesville City Corporation, West Point Township, Congo Town Township, New Georgia Township, Borough of New Kru Town, Johnsonville Township, Dixville Township, Garwolon Township, Gardnersville Township, Caldwell Township and Barnesville Township.

We are grateful to residents in various study locations who gave their consent and time to respond and participate in the interviews for the report, especially community members of the Federation of Liberia Urban Poor Savers (FOLUPS), National Association of Petty Traders Union of Liberia (NAPETUL). Their views and responses were vital to the findings and recommendations of this study. Our profound gratitude goes to the enumerators for collecting the required data.

The Cities Alliance also thanks the following implementing members of its Country Programme in Liberia for their support: Habitat for Humanity International (HFHI), Shack/Slum Dwellers International (SDI), United Cities and Local Governments Africa (UCLGA), UN-Habitat and Women in Informal Employment Globalizing and Organizing (WIEGO).

Executive Summary

Cities Alliance is the global partnership for poverty reduction and the promotion of sustainable development in cities, hosted by the United Nations Office for Project Services (UNOPS). Members include national governments, multilateral institutions, associations of local governments, international NGOs, private sector and foundations, and universities and knowledge networks.

Cities Alliance has four main business lines: Country Programmes, Joint Work Programmes, the Catalytic Fund, and communications and advocacy.

Established to bring more of a long-term, programmatic approach to development, Country Programmes seek to coordinate and fund a series of projects in a coherent manner, to achieve a single broad vision and impact at scale. They are tailored to a specific country's context to emphasize a collaborative design that engages and mobilises members and partners behind a jointly-designed programme of support. The programmes typically link past and current initiatives of Cities Alliance members and partners, filling technical assistance gaps and/or scaling up strategic work, as well as fostering local partner ownership of initiatives.

The Country Programmes are monitored by a Results Framework that centres around four tiers, tied to objectives set out in Cities Alliance Charter and Medium-Term Strategy. The tiers articulate the outputs, intermediate outcomes, outcomes and impact expected by Cities Alliance interventions:

- Tier One: Sustainable Development Goals (impact)
- Tier Two: Partner results as supported by Cities Alliance members (outcomes)
- Tier Three: Cities Alliance programmatic results (intermediate outcomes / outputs)
- Tier Four: Secretariat performance

An Outcome is defined as the intended effects or changes that will happen as a result of programme activities. An Output is defined as the Programme activities and the specific direct deliverables, such as the products, services or resources that are delivered through the work. Indicators are the main data/information the Cities Alliance measures to track progress towards achieving outcomes, by measuring the 'change' from the Programme's Theory of Change.

The Liberia Country Programme (LCP) was approved by the Cities Alliance Management Board in October 2015 to initially run until 2021. It is part of a 'second wave' of Country Programmes that incorporate lessons learned and external evaluations of the first set of five Country Programmes in Africa and Asia supported by the Bill & Melinda Gates Foundation from 2009-2015.

The Theory of Change of the Programme speaks to all four outputs to which Cities Alliance has committed itself:

- National policy frameworks developed and/or enhanced to address urban development needs
- Local inclusive strategies and plans developed and implemented
- Mechanisms to engage citizens in city/urban governance developed
- Capacities of cities to provide improved services to urban poor strengthened

To monitor the expected achievements of the Liberia Programme, Cities Alliance commissioned the current baseline study at the programme’s inception to benchmark subsequent results under Tier Two and Three of the programme’s Results Framework. A baseline study was conducted in late March-mid April 2017 in the 12 Local Government Areas (LGAs) of Greater Monrovia where programme activities are being implemented. A mid line and mid-term evaluation in 2018 and end line and final evaluation in 2021 will be carried out to evaluate the programme’s performance.

The baseline study was carried out for Tier II indicators within the 12 LGAs in Greater Monrovia where the programme is active. It applied a mixed (quantitative and qualitative) methodology that included a survey targeting households and petty traders in low income areas, key informant interviews, focus group discussions, and triangulation with secondary data. Tier III baselines were prepared in-house, collected in partnership with respective Cities Alliance implementing members of the programme.

Baseline Summary of findings against key Programme indicators

Tier II – Outcome Level Indicators for the programme. The below indicators measure the intended effects or changes that will happen as a result of the *meaningful contribution* of programme activities.

No	Indicator	Proportion (per cent)	Remarks
1	Average proportion of households with access to improved water source	85 per cent	Improved water sources were adopted from the 2013 Liberia Demographic and Health Survey (LDHS) and included i) Piped water into dwelling/yard/plot, ii) Public tap/standpipe, tube well or borehole, iii) hand pump or protected dug well, iv) protected spring, v) bottled/sack water, and vi) rainwater. In addition, the definition included distance away from dwelling (located within 200 meters from a home) and water safety. Water was considered (self-reported) to be free from chemical, physical and microbiological contamination.
1a	Proportion of households with access to potable water supply	60 per cent	Households were considered to have access to potable water supply if each household member used 20 litres per day from an improved water source and located within 200 meters from home.
1b	Proportion of households that consume more than 20 litres of water per person in a day	60.9 per cent	
2	Average proportion of households with improved sanitation facilities	15 per cent	Improved sanitation included designated toilet facilities considered to be improved and number of households using a particular toilet facility (one). Toilet facilities were adopted from the 2013 LDHS as those that prevent contact of excrete with humans.

3	Proportion of households in slum/low income areas with regular access to solid waste collection either public or private	36 per cent	
3a	Proportion of households in slum/low income areas with regular access to public solid waste collection	27 per cent	Access to regular public solid waste collection included municipality authority collecting solid waste from households
3b	Proportion of households in slum/low income areas with regular access to private solid waste collection	9 per cent	Access to regular private solid waste collection included collecting solid waste from households and disposing it to a pre-defined place
4	Proportion of street vendors and waste-pickers/CBEs in greater Monrovia with improved working conditions		Working conditions were considered as nature of the business structure, degree of harassment, theft and work-related meetings attended by street vendors and waste-pickers.
4a	Proportion of petty traders with access to storage facilities	89 per cent	Access to storage facilities is considered having a place to keep business goods after work
4b	Proportion of petty traders with access to sanitation facilities	91 per cent	Access to sanitation facilities considered presence of a toilet facility located within 500 meters from the workplace.
4c	Proportion of petty traders working in open space without any shelter	39 per cent	Working in open space without any shelter considered petty traders operating their businesses without protection against extreme weather conditions
4d	Proportion of petty traders that attended any meetings on work-related issues	43 per cent	The survey referred to meetings attended for six months prior to the survey
4e	Proportion of street vendors that experienced harassment	82 per cent	Harassment referred to disturbances from police during the six months prior to the survey.
4f	Proportion of petty traders who experienced theft of business goods	54 per cent	Theft of goods considered losing business goods at the work place during the past six months before the survey
4g	Proportion of waste-pickers that attended any meeting regarding work-related issues	53 per cent	The survey referred to meetings attended for the six months prior to the survey
4h	Proportion of waste-pickers denied access to waste	28 per cent	Denial from accessing waste implied being unable to collect garbage from a particular household due to waste collection by other service providers or by illegal waste collectors.
4i	Proportion of waste pickers that reported customer refusal to pay	92 per cent	Customer refusal to pay implied having any client(s) (households) that failed to pay for waste collection services during the past six months.
5	Kilometers of maintained roads in slum and/or low-income areas	Data not available	Kilometers of maintained road considered roads that have worked upon and improved by the Ministry of Public Works
	Road maintenance		

5a	Proportion of household members that reported presence of street or road lights along the roadside	8 per cent	Presence of street or road lights are considered as lights with permanent grid connected along the roadside
5b	Proportion of household members that reported presence of trenches by the roadside	18 per cent	Trenches are considered as water drainage channels maintained as a path of water to a pre-defined place
6	Proportion of households with regular electricity connections	49 per cent	Regular electricity connection is considered as a household that is connected by the grid, solar and community generator line.

The Tier III intermediate outcome indicators of the programme were collected in-house by Cities Alliance and its implementing members in Liberia. These indicators measure the use of outputs between 2016-2021 directly financed by the programme. They are presented in this report for reference.

Indicator	Description	Baseline
Intermediate Outcome 1: Strengthened capacity of slum dweller and working poor associations to organise, negotiate, and actively influence city governance, planning and service delivery.		
Indicator a	Number of slum dweller leaders with capacity to profile, map and enumerate settlements	7
Indicator b	Number of street vendor leaders capacitated to promote safe labour conditions in partnership with local government	5
Indicator c	Number of community group members supported by the Programme to increase their ability to organize and manage savings	0
Indicator d	Number of savings groups supported by the programme in Greater Monrovia	33
Indicator e	Number of street vendors and informal trader members with secure trading sites as a result of a negotiated agreement with	0

	local authorities supported by the programme	
Indicator f	Strengthened capacity of the slum dweller association to organise and engage local government on equitable service delivery	<p>1</p> <p>Rating scale:</p> <p>0 – no organised slum dweller association exists</p> <p>1 – Slum dweller association exists but lacks citywide coverage</p> <p>2 – Slum dweller association exists with citywide coverage of membership</p> <p>3 – Representative slum dweller association exists with clear, democratic internal governance procedures being implemented</p> <p>4 – Representative slum dweller association maintains an institutionalised relationship with the local government in planning equitable city services</p>
Indicator g	Strengthened capacity of the street vendor union to organise and negotiate rights and services with local government	<p>1</p> <p>Rating scale:</p> <p>0 – No organised citywide street vendor union exists</p> <p>1 – Citywide street vendor union exists but is not able to organise its interests effectively with local and national government</p> <p>2 – Citywide street vendor union is able to effectively negotiate a mutually beneficial partnership agreement with local and national government, but lack the capacity for implementation</p> <p>3 – Citywide street vendor union maintains an institutionalised relationship with local and national government and they work together to plan future public economic spaces</p> <p>4 – Citywide street vendor union is able to effectively implement a partnership agreement with local government which allows for the space and rights of its members to operate freely</p>

Indicator h	Slum dweller association with functional accountability systems in place	<p>0</p> <p>Rating Scale:</p> <p>0 – Slum dweller association without documented accountability systems</p> <p>1 – Slum dweller association with documented accountability systems</p> <p>2 – Slum dweller association with documented accountability systems and evidence of implementation</p>
Indicator i	Street vendor union with functional capacity and operational systems in place	<p>1</p> <p>Rating Scale:</p> <p>0 – Street vendor union has no constitutional or operational procedures (including financial) in place and limited membership coverage</p> <p>1 – Street vendor union has a constitution in place and operational procedures exist</p> <p>2 – Street vendor union has constitution and systematic membership records within Monrovia</p> <p>3 – Street vendor union implements operational procedures systematically with its members in full compliance with the constitution and achieves increased membership within and outside Monrovia</p>
Intermediate Outcome 2: Empowerment of slum dweller and working poor communities to meaningfully participate in and shape more equitable city governance, planning and service delivery.		
Indicator a	Number of slum dwellers meaningfully representing their interests in citywide negotiating forums and dialogues	0
Indicator b	Number of street vendors meaningfully representing their interests in citywide negotiating forums and dialogues	0

Indicator c	Quality of slum dwellers' participation in the design of the criteria for the CUF	0
Indicator d	Quality of slum dwellers' participation in the design of CUF projects	0
Indicator e	Quality of street vendors' participation in the design of the criteria for the CUF	0
Indicator f	Quality of street vendors' participation in the design of CUF projects	0
Indicator g	<p>Degree of harassment faced by street vendors supported by the programme in Greater Monrovia</p> <p>Harassment is defined by physical violence and extortion by local authorities, confiscation of goods and eviction from public spaces</p>	<p>0</p> <p>Rating scale:</p> <p>0 – Street vendors report constant, extreme harassment</p> <p>1 – Mechanisms are established to negotiate public space for trading with local government, but they do not lead to improved space for public vending</p> <p>2 – Street vendors report safe public space for selling and storage of goods without harassment through an relationship with local government.</p>
<p>Intermediate Outcome 3: Improved provision of slum upgrading and incremental housing solutions, identifying investment opportunities to scale up affordable housing for the urban poor.</p>		
Indicator a	<p>Number of slum and/or low-income households who access housing finance</p> <p>Housing Finance: Housing finance can refer to lien-based mortgages to acquire land/entire homes or small, non-mortgage-backed loans offered in succession to support the existing incremental building practices of low-income populations. It can include a range of financial</p>	0

	services that support informal shelter improvements such as home repair and expansions, the addition of water and sanitation services, energy upgrades, and land documentation.	
Indicator b	Number of low income/slum households which demonstrate ability to repay housing related loans.	0
Indicator c	Number of housing finance service providers (FSPs) able to demonstrate profitability.	0
Indicator d	<p>Number of slum/low-income households who access technical support/housing support services.</p> <p>Technical Support/Housing Support Services: Include providing households with non-financial products and services depending on their needs and priorities. These will come via other market actors in the housing value chain who wish to develop or expand non-financial housing products and services. Examples could include more affordable construction materials, information dissemination, construction labourer training and certification, housing micro insurance, etc.</p>	0
Indicator e	Total financial resources mobilised for follow-up implementation of endorsed slum upgrading (SU) strategy	0
Indicator f	Extent to which slum/low income households receive technical assistance for improvements in the resilience of their housing against	<p>0</p> <p>Maturity scale</p> <ul style="list-style-type: none"> • 0 – Slum/low income households have no technical assistance from government or market actors to

	locational, climatic, non-climatic and climate change risks and hazards.	<p>address locational, climatic, non-climatic and climate change risks and hazards that affects their dwellings.</p> <ul style="list-style-type: none"> • 1 – Slum/low income households receive one time/minimal technical support from government or market actors to address locational, climatic, non-climatic and climate change risks and hazards that affects their dwellings • 2 – Slum/low income households receive sustained support from government or market actors to address surface flooding, drainage or coastal erosion that affects their dwellings • 3– Slum/low income households receive sustained technical and financial support from government or market actors to address surface flooding, drainage or coastal erosion that affects their dwellings
Indicator g	Extent to which a slum upgrading and affordable housing framework is adopted	<p>0</p> <p>Maturity scale</p> <ul style="list-style-type: none"> • 0 –The housing policy environment pays no policy attention to slum upgrading and affordable housing for low income households • 1– A slum upgrading and affordable housing policy framework is adopted without concrete implementation or financial mechanisms • 2 – A slum upgrading and affordable housing policy framework is adopted with requisite institutional and financial investments
Intermediate Outcome 4: National- and city-level policy and planning environment for resilient and inclusive urbanization benefits recognition and voice of the urban poor.		
Indicator a	Number of local government officials who report positive quality of engagement in the National Urban Policy process	0
Indicator b	Number of slum dwellers who report positive quality of engagement in the CDS strategy process	0
Indicator c	Number of street vendors who report positive quality of engagement in the CDS	0
Indicator d	Number of local government and national officials who	0

	report positive quality of engagement in the CDS process	
Indicator e	Total financial resources mobilised for follow up implementation of endorsed CDS	0
Indicator f	Number of working groups that produce CDS policy options and strategies for action in Greater Monrovia	0
Indicator g	<p>Percentage completion of CDS</p> <p>Phase 1: <i>Where are we now?</i> Getting organised and situation analysis</p> <p>Phase 2: <i>Where do we want to go?</i> Visioning and strategic objectives</p> <p>Phase 3: <i>How do we get there?</i> Strategy formulation</p> <p>Phase 4: <i>How we know we have arrived?</i> Strategy implementation and monitoring and evaluation</p> <p>Each Phase is 25 per cent; please note that phases do not proceed sequentially.</p>	0
Indicator h	Percentage completion of National Urban Policy options and strategies formulated by the national government steering group and endorsed by local government and civil society stakeholders	<p>0</p> <p>Area 1: Feasibility assessment and policy roadmap</p> <p>Area 2: Institutional and sectoral gaps for cities in existing national policies and ministries identified and assessed</p> <p>Area 3: Inter-ministerial dialogue and cooperation at National Urban Forums</p> <p>Area 4: Policy guidance for national government for integrated urban development response</p> <p>Each area is 25 per cent; please note that phases do not proceed sequentially.</p>

Indicator i	Degree of inclusiveness of the NUP process from slum dweller association representatives	<p>0</p> <p>Maturity scale:</p> <p>0=Slum dweller association representatives do not participate in the NUP process</p> <p>1=Slum dweller association representatives participate in the NUP process, but informality and slum settlements are not considered in the outcomes of policy (token)</p> <p>2=Slum dweller association representatives' inputs, including profiling data and issues regarding informal settlements, are incorporated into the NUP analysis (consulted/informed)</p>
Indicator j	Degree of inclusiveness of the NUP process from street vendor union representatives	<p>0</p> <p>Maturity scale:</p> <p>0=Street vendor union representatives do not participate in the NUP process</p> <p>1=Street vendor union representatives participate in the NUP process, but their inputs are not considered in the policy formulation dialogues (token)</p> <p>2=Street vendor union representatives' inputs, including for management of public space for livelihoods, are incorporated into the NUP analysis documentation (consulted/informed)</p>
Indicator k	Evidence of local government officials capacitated of their degree of learning and application of knowledge of pro-poor urban planning	0

1.0 Introduction

In the devastating aftermath of Liberia's 14-year civil war, the Government of Liberia (GOL) embarked on the road to recovery starting in 2005. As one example, President Ellen Johnson-Sirleaf included providing public electricity in Monrovia among the government's prospects (Cook, 2005). The Liberian government has also enacted various policies and key projects to support the country's recovery, including:

- A Poverty Reduction Strategy (PRS) 2008–2011 to ensure development of detailed plans, strengthening of human capacity, passing of laws, strengthening of institutional and physical systems, and development of the infrastructure;
- Projects including Fostering Innovative Sanitation and Hygiene in Monrovia project (FISH)¹, Urban Water Supply and Sanitation Project II (UWSSP II)², and Monrovia Water Supply and Sanitation Rehabilitation Project (MWRSSP)³ (SIP, 2013), implemented together with the AfDB's African Water Facility.
- The Liberian government received funding from the World Bank, European Union and UNICEF for redevelopment of urban water supply and sanitation, capacity and infrastructure development.
- The Solid Waste Management (SWM) SIP 2012 -2017, which envisions collecting more than half (60 per cent) of the solid waste in Monrovia.
- Liberia Water Supply, Sanitation and Hygiene (WASH) Sector Investment Plan (SIP) 2012 – 2017⁴ (SIP, 2013; IMF, 2012).
- The WASH SIP (2013) highlighted the government's plans to implement projects to improve the water supply from 2012–2017 including the Programme Management Consultancy⁵, Monrovia Water Distribution Project⁶, Monrovia Well Protection Project⁷, and Monrovia Water Supply Expansion Project⁸.

1 The project focused on improving facilities to handle the sludge from septic tanks and improved communal sanitation facilities for about 6,000 persons in Monrovia.

2 The project, which was implemented in Monrovia and three cities, included a small sanitation component for rehabilitation of sewer lines in central Monrovia and Sinkor, as well as construction of 16 Ecosan systems and 27 VIP latrines in markets and schools. To rehabilitate the White Plains piped system to its original capacity of 59,000 m³/d and construct two new groundwater systems of 7000 m³/d each was another project focus

3 The project was particularly meant for emergency rehabilitation of the White Plains System to 15,000 m³/d 25 per cent of its original capacity

4 The plan provides both the long-term and short-term objective of the water, supply and sanitation sector.

5 The consultants' roles included programme management and coordinating all of the water and sanitation projects that are to be undertaken in Monrovia.

6 Project focus is on full rehabilitation of the existing distribution system and extension of the system to increase coverage in Greater Monrovia.

7 Entails improvements to 1,032 existing communal wells to improve the water quality serving 250,000 people and hygiene promotion to ensure potable water from private wells.

8 Design of the extension to the Monrovia piped water supply system to meet the needs of Greater Monrovia in 2022 by doubling the capacity of the White Plains production to 118,000 m³/d.

- Sanitation projects featured in the SIP 2013 include Sanitation Master Plan for Monrovia⁹, Fiamah Sewage Treatment Plant¹⁰, Monrovia On-Site Sanitation Project¹¹, and Monrovia Sewerage and treatment Expansion Project¹².
- The national government also undertook community sensitisation on water treatment to encourage construction of latrines among households and to promote good personal hygiene practices and improve the quality of the water (SIP, 2013).

These policies and strategies have improved the status of some socio-economic indicators. From 2008–2011, economic growth increased, especially in urban areas; poverty declined; and there was some improvement in the physical infrastructure, among other achievements (IMF, 2012). However, it should be noted that data on socio-economic conditions in urban informal settlements is often lacking, making comparisons between slum and non-slum areas difficult.

Despite the measures in place and the improvements achieved, socio-economic conditions in Liberia are not yet to the level of national and global satisfaction. Liberia ranks 177 out of 188 countries in the 2016 Gender Inequality Index (GII)¹³ and 177 out of 188 countries on the Human Development Index (HDI)¹⁴ (UNDP, 2016). And according to the IMF, the government of Liberia’s ability to deliver basic services such as education, roads, environment, and labor protection has been slow (2012). The less-than-satisfactory outcomes in these areas – despite the fact that most deliverables were completed – indicate the need for more attention, and perhaps some rethinking of strategy in the next development plan (IMF, 2012). The slow progress can be explained mainly by poor implementation capacity, sustainability, and cost recovery for services (SIP, 2013).

1.1 Cities Alliance Country Programme Overview

The Cities Alliance Liberia Country Programme mobilises urban poor groups and equips them to improve their own lives. It works with city and national government to improve strategic urban planning frameworks and enhance the national enabling environment for Liberian cities through the country’s first National Urban Policy and Local Government Association.

Community grants support slum upgrading, including improved access to water and sanitation. Investments in citywide slum upgrading and incremental housing policy frameworks transform the living

9 The master plan concentrates on i) the overall approach to sanitation in Monrovia, especially the future sewerage system and possible technological alternatives for temporary or permanent on-site sanitation solutions; ii) financial sustainability and consumers’ ability and willingness to pay for piped sewerage; iii) future institutional arrangements, including responsibilities for piped sewer systems and non-piped sanitation and tariff requirements for a financially sustainable sewerage system; iv) technical issues such as sewage treatment options and a deep sea outfall, different sewage treatment processes and the sludge implications, septic tank options including how to dispose of the effluent if this is not connected to a sewer, options for public toilets.

10 The plan is to construct a new sewerage treatment plant at Fiamah with a capacity of 23,000 m³/d to serve the rehabilitated existing sewer system.

11 The improvements to the central sewerage system and treatment plant will improve the environmental conditions in Monrovia. The main increase in coverage to achieve the target coverage of 61 percent by 2017 will therefore need to come from households presently using unlined and uncovered pit latrines or open defecation that will invest in improved pit latrines or other toilet facilities. A substantial increase could also be achieved by enforcing the bylaws that oblige landlords to make toilet facilities available for rented accommodation.

12 Three new satellite systems will be constructed as proposed in the Sector Strategic Plan.

13 The index ranks country status based on dimensions (reproductive health, empowerment and labour markets).

14 Ranking considers a long and healthy life, access to knowledge, and a decent standard of living.

conditions of urban poor households. Communities are supported to create vibrant local associations so they are better able to work with local authorities and achieve long-term improvements in their living conditions. The programme also recognises and supports the contributions of the informal economy by supporting street vendors – the largest informal worker group in Greater Monrovia – to negotiate better working conditions with city government.

The Liberia Country Programme is co-chaired by the Monrovia City Corporation and the Ministry of Internal Affairs, working with the following Cities Alliance implementing members in Liberia:

- Habitat for Humanity International (HFHI), in partnership with the National Housing Authority
- UN-Habitat, in partnership with the Ministry of Internal Affairs
- Shack/Slum Dwellers International (SDI), in partnership with YMCA Liberia and the Federation of Liberia Urban Poor Savers (FOLUPS)
- WIEGO, in partnership with StreetNet International and the National Petty Trader Union of Liberia (NAPETUL)
- United Cities and Local Governments Africa (UCLGA), in partnership with the Ministry of Internal Affairs

Activities implemented in the first year

The Programme has implemented several activities in its first year, including:

- **Slum profiling and enumeration:** 40 slum community members were trained by YMCA Liberia, supported by SDI, to profile, map and enumerate basic services in the communities. Trained community members were equipped with knowledge of profiling and mapping using GPS.
- **Community mobilisation, saving groups and slum dweller federation building:** YMCA Liberia supported verification of all existing saving groups and members, worked on mobilising new saving groups, and provided support to existing ones. There were 62 active saving groups in 6 communities with 2,027 savers (1,541 female and 486 male). At the end of the first year, the new Federation of Liberia Urban Poor Savers (FOLUPS) was launched thanks to the institutional strengthening support provided by the Programme to the slum federation.
- **Improving the Working Conditions of Street Vendors in Partnership with City Government:** 50 NAPETUL members attended a negotiation meeting in 2016. Regular negotiation meetings between the NAPETUL-MCC Police and MCC-Planning to discuss ongoing tensions related to designated trading spaces. NAPETUL developed a draft MoU for Paynesville petty traders and submitted it to the mayor of Paynesville for further discussions. In parallel, the Programme has worked to build the capacity of the informal worker association to be more accountable, transparent and effective in its organizational structure to better serve its members. This has included a new Constitution and elections to be implemented in the second year of the Programme.
- **The first greater Monrovia citywide forum** was conducted emphasizing five key thematic areas: Service, governance, citizenship, environment and the economy. Local government and communities were driving development of a shared city strategy. Volunteers to lead and manage working groups for each of the 5 thematic areas were selected and met to discuss the themes further. The results/progress from each thematic team will be assessed in the second city forum in 2018 against the benchmark results of the first city forum.

- HFHI produced an **Affordable Housing and Slum Upgrading Framework** for Greater Monrovia following a housing and value chain assessment and community hazards and climate vulnerability assessment.
- Planning for a **local government capacity development programme** with the Liberian Institute for Public Administration (LIPA) was linked to the City Development Strategy development.
- **The National Urban Forum**, which provided a platform for dialogue about urban matters, presented Liberia's National Habitat III report and received buy in and inputs for the development of the National Urban Policy.
- **The National Urban Policy** institutional framework and feasibility study was produced and validated by different stakeholders through technical assistance from UN-Habitat and political leadership from the Ministry of Internal Affairs.
- **Support for the formation and functioning of a Liberia association of local governments:** A workshop of city mayors was held in February 2017 hosted by the Ministry of Internal Affairs, where the UCLGA tabled the approach to establish the country readiness for a national association by conducting studies to assess the level local government maturity and readiness for the National Association of Local Governments. By the end of the first year of the Programme, the Association of Mayors and Local Governments of Liberia (AMLOGAL) was provided technical assistance for a Constitution, By Laws and Strategic Plan. AMLOGAL will be launched and induct its officers, of which the majority are women local government leaders, on June 29th 2017 under the auspices of H.E. President Ellen Johnson Sirleaf and the UCLGA Secretary General and President.
- The **Programme's 3rd and 4th Steering Committee meetings** focused on building coherence across different projects, sharing the progress of each implementing partner, while focusing on key issues of joint concern for the Programme. Forced evictions was one such issue, where the 3rd Steering Committee meeting in 2016 brought together experts from the Kenyan SDI affiliate and UN-Habitat Participatory Slum Upgrading Programme (PSUP) to share their solutions in providing alternatives to eviction with government. The 4th Steering Committee in February 2017 set up a working group on land and densification to address the Programme's approach to this issue.

Similar assessments carried out in Liberia

Oxfam

Oxfam, with support from UNICEF, conducted a baseline to identify the current levels of community access to and practices on WASH in 25 districts and 5 cities in selected rural and urban settlements in Liberia (Source: 2013 WASH UNICEF and Oxfam). The main aim of the study was to get baseline information on water, sanitation and hygiene and practices in the target areas (25 administrative districts and 5 cities). Objectives were to:

- Identify current levels of community access to and practices related to WASH facilities;
- Provide information on people's knowledge, attitude and practices that will allow the development of the programme's Behavioural Change and Communication/Communication for Development activities; and

- Provide disaggregated data and information on programme indicators in both rural and urban contexts.

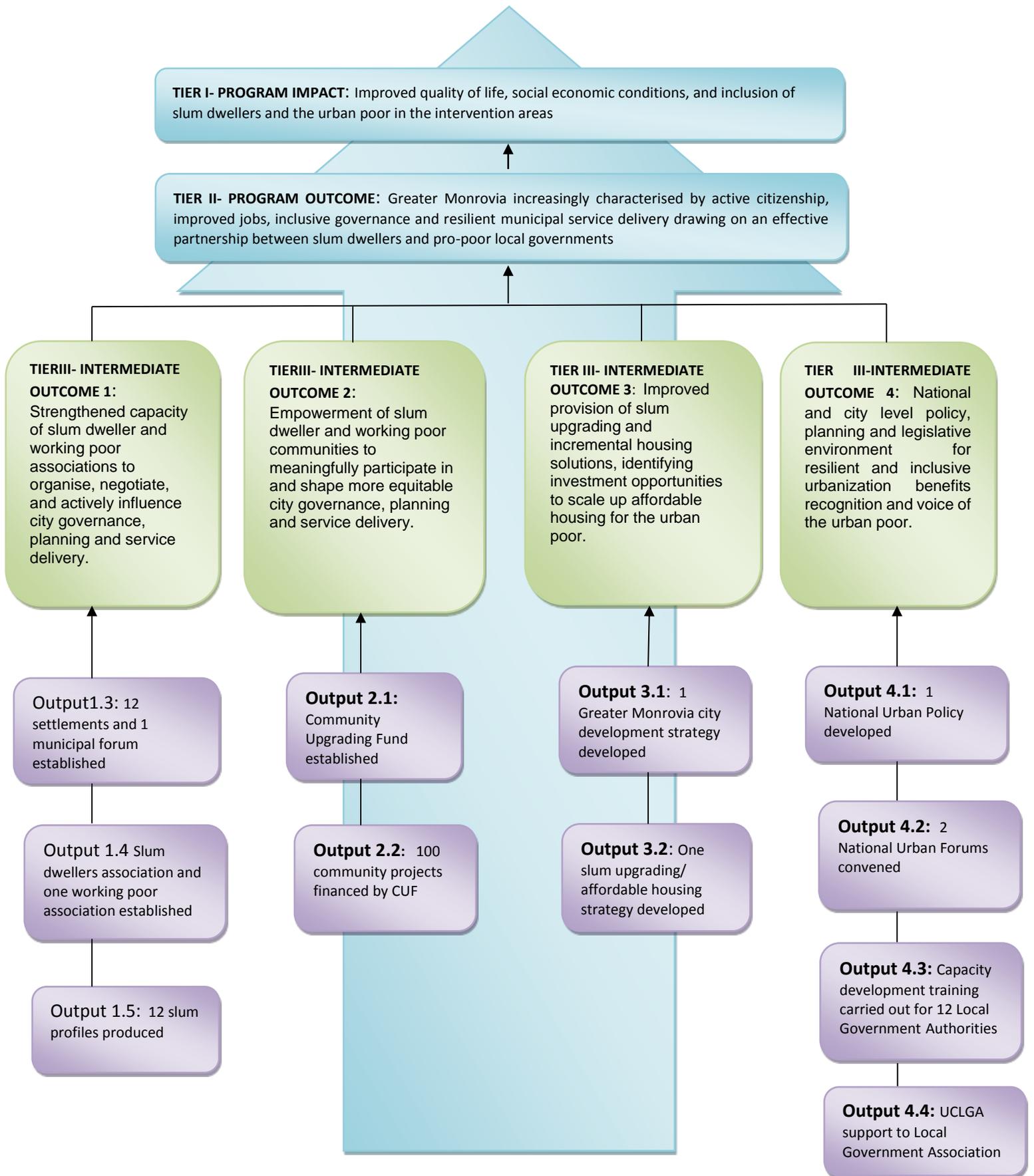
Y Care International

Y Care International (YCI), in collaboration with the YMCA Liberia, conducted a needs assessment to gauge the situation of marginalised and vulnerable young people in West Point, Liberia's largest slum community. The 36-month project (February 2016 –January 2019) is funded by UK Aid Match, and has sought to increase beneficiaries' access to health and hygiene services and information and economic resilience. It also aims to increase disaster resilience and support young slum dwellers to participate in community decision-making processes and demand their socio-economic rights. The overarching goal was to assess the political, social and economic conditions of young people and community members in West Point, as well as assess institutional capacity for disaster risk reduction (MYSDL Baseline assessment report, YMCA-Liberia and Y-Care International).

USAID LEGIT

The Local Empowerment for Government Inclusion and Transparency (LEGIT) is a USAID-funded project to increase the accountability, transparency and effectiveness of sub-national government resources in Liberia. It provides support to the Ministry of Internal Affairs and Governance Commission as they lead, monitor and coordinate the implementation of the government's decentralisation agenda. It also strengthens sub-national institutions in at least three counties and three cities to be more capable, transparent and responsive to citizens, improving the government's information on how public resources are used at sub-national levels. LEGIT supports participatory decision-making approaches to improve citizen participation and monitoring of existing and future services at the sub-national level and focuses on developing and strengthening working relationships between the government and citizens (Source: LEGIT project snapshot).

Figure 1: Cities Alliance Country Programme Theory of Change



2.0 Study Methodology

2.1 Survey data collection and analysis

The study used a mixed method comprising both qualitative and quantitative data collection and analyses, with a structured survey, interviews and secondary source reviews as tools for data collection. The survey combined the collection of quantitative data through close-ended questions and qualitative data through open-ended questions or interviews. Further qualitative data for in-depth insights was collected through focus group discussions and key informant interviews.

Triangulation of the slum profiling data with data from midline will be done in 2018, since the first round of profiling will be done by end of 2017. SDI and YMCA-Liberia plan to redo the profiling for the entire city in 2020. This will be used during the programme endline and final evaluation in 2021.

The survey, focus group discussions and key informant interviews were conducted in late March–mid April 2017 in the 12 LGAs where the programme activities are being implemented. Enumerators were trained and sent out to the field to meet face-to-face with the respondents. The data entry was performed using Microsoft Access, the quantitative data was analysed using STATA14.2, and the recordings from focus group discussions and key informant interviews were also transcribed and analysed.

2.1.1 Data reliability

A pilot survey was carried out prior to data collection to equip the enumerators with the field skills and experiences. Pilot questionnaires were checked, and the gaps identified corrected before the main survey was conducted.

During the data collection exercise, enumerators were divided in to three teams of 4 team members headed by a team leader. The leader was responsible for ensuring sampled households and informal workers were interviewed, cross-checking for consistency in the questionnaires, and introducing the team members to community leaders and members.

In addition, one analytical specialist and two AEDE staff served as field coordinators to oversee survey implementation activities. They were also on the ground to ensure the quality of the data collected through random verification of respondents that had already been interviewed. Each questionnaire was cross-checked by the supervisor daily, and further cross-checking was done by the analytic specialist before and during data entry.

The Cities Alliance Monitoring and Evaluation Analyst also supervised the entire process of design, training, data collection, entry and transcription of the qualitative data to ensure high-level data was collected and entered in the data masks.

2.1.2 Sample Population

The survey was carried out on two sets of sample populations residing in the 12 LGAs¹⁷: (i) Households in low income areas or slum dwellers¹⁸, and (ii) petty traders and waste-pickers operating their businesses. Slum communities in the 12 LGAs in Greater Monrovia were specifically selected for interviews because slum and low-income areas are inhabited by the urban poor (people without access to quality water, sanitation services and adequate housing).

Each sample size was estimated as follows:

The Slovin's formula $n = \frac{N}{(1+Ne^2)}$ was used to determine the sample size.

In the formula,

N = the estimated total population of households or petty traders

n = sample size

e = tolerable error.

The study utilized 95 per cent confidence level to determine the sample size with a 0.05 margins of error.

According to LISGIS (2008), Greater Monrovia had 183,596 households in total. For the population of petty traders and waste-pickers, the assumption was made to use the membership of NAPETUL.

NAPETUL has approximately 5,000 members in Greater Monrovia

Therefore, by substituting;

$$N=183,596 \text{ and } e=0.05 \text{ in } n = \frac{N}{(1+Ne^2)}; n = \frac{183,596}{(1+183,596 \times 0.05^2)} = 399.13 \approx 400.$$

Due to anticipated errors that could occur during data collection and entry, the sample size was overestimated by 5 per cent and a planned sample size of 420 households used for the study (See Table 1).

The same statistical formula was used to compute the sample size of the petty traders. Assuming the presence of 5,000 petty traders, the survey intended to capture information from among 454 petty traders. However, due to high willingness to participate in the survey, the enumerators interviewed more respondents. The survey information was obtained from 449 heads of household and 555 petty traders in total.

Regarding the sample size calculation (n) for Community Based Enterprises (CBEs) involved in waste picking, four parameters were considered – margin of error (ME), standard error (SE), confidence interval (CI), and response rate. The parameters were set as follow:

Margin of error = 0.025

Confidence interval = 0.05 (1.96 z-score)

¹⁷ The LGAs included: Monrovia City Corporation, Paynesville City Corporation, New Georgia Township, Garwolon Township, West Point Township, Congo Town, Gardnersville Township, Barnersville Township, Johnsonville Township, Dixville Township, Caldwell Township and the Borough of New Kru Town

¹⁸ These included individuals who had stayed in the area for at least 6 months and were aged 18 years and older.

Standard error =SE= $MEz\text{-score} \div 2 = SE = 0.0251.96 \div 2 = 0.0001627$

Assumed response rate = 99.2 per cent responses from waste-pickers from among 99.9 per cent of the CBEs in general.

$$\text{Therefore, } n = \frac{\text{Response Rate} * 1 - \text{Response Rate}}{SE} = \frac{0.999 * 1 - 0.999}{0.0001627} = 6 \text{ CBEs}$$

$$\text{Therefore, } n = \frac{\text{Response Rate} * 1 - \text{Response Rate}}{SE} = \frac{0.992 * 1 - 0.992}{0.0001627} = 48.7 \approx 49 \text{ or } 50 \text{ waste-pickers}$$

There was a total sample size of 50 waste-pickers from among 6 CBEs (eight interviews from each CBE, on average), so that the interviews among waste-pickers from the target sample size would be representative of the total population of waste-pickers.

Table 1: Household survey sample size

S/N	LGA Name	Total Number of communities	Communities selected for interview	Target HH Sample size	Achieved HH sample size
1	Barnesville	8	3	25	23
2	Caldwell	11	4	34	34
3	Congo Town	6	3	33	29
4	Dixville	12	4	37	40
5	Gardnersville	12	4	37	38
6	Garwolon	10	4	31	31
7	Johnsonville	1	1	5	10
8	Monrovia City	21	9	64	86
9	New Georgia	11	4	34	38
10	New Kru Town	14	5	42	42
11	Paynesville	24	11	58	60
12	West Point	6	3	20	18
	Total	136	55	420	449

The household survey sample was stratified by communities to allow representation.

2.1.3 Sampling procedure

Two sampling methods were used for the study:

- (i) Purposive sampling¹⁹ for selecting participants for the key informant interviews and focus group discussions to include men, women, and youths. The method was applied to ensure that the selected participants could provide the relevant information and insight to achieve the objective of the study.
- (ii) Systematic sampling to select the communities in the particular LGAs and individual households²⁰ for interview. The household heads²¹ were interviewed and in case the household head was away, a knowledgeable household respondent (a knowledgeable

19 Purposive sampling is a non-probability sampling where study participants are selected based on the objective/s of the study.

20 Every 16th household in the selected communities was chosen to be interviewed.

21 A knowledgeable household member was interviewed in case the household head was away.

member of the household above 18 years old) was selected for interview. A list of all communities in a particular LGA served as a sampling frame or roster from which the communities²² to be surveyed were selected.

Further qualitative data was also collected through 16 focus group discussions and 12 key informant interviews in total.

- Slum dwellers: Eight focus group discussions were conducted with slum-dweller household heads including: Two all-male, two all-female, two combined (with both male and female), and two among the youth (as defined by the Government of Liberia are individuals aged between 18 – 35 years).
- Petty traders: Eight focus group discussions were conducted with petty traders: two all-male, two all-female, two combined (including both male and female), and two among the youth.

In-depth interviews were also conducted among 12 key informants including two city mayors, two city planners, two commissioners, and representatives or leaders from Ministry of Public Works, WASH Consortium, Liberia Water and Sewerage Corporation (LWSC), FOLUPS members, NAPETUL members and waste-pickers members of CBEs.

2.2 Ethical considerations

Each questionnaire contained an Informed Consent note as well as details of the purpose of the study, estimated interview duration, and a statement on voluntary participation in the survey. This was done to ensure anonymity of the interviewees and confidentiality of the process, to seek the respondents' informed consent prior to starting the interview, and to ensure that respondents were fully aware of the relevance of giving their vital information and their rights.

The datasets obtained were completely anonymised by assigning a unique Identification number (ID no) to each respondent, so there would be no way for anyone outside the research team to link the information about the baseline survey results to any respondent.

2.3 Literature Review of program indicators

The survey data was then triangulated with data from reviewed secondary sources where applicable and available. This entailed a desk review of reports prepared by the Liberia Institute of Statistics and Geo-Information Services (LISGIS) with national statistics, including Liberia Demographic and Health Survey 2013 report and the 2008 National Population and housing Census Report. The study also involved review of sector plans including the WASH SIP 2012 – 2017.

Researchers utilised internet searches to obtain more data sources. The study included review of only secondary resources that were published or had been produced during the past five years to include the most recent statistics. Where recent information was unavailable, some documents published in the past 5 – 10 years were also reviewed.

²² With the exception of one LG (Johnsonville) which had only one community, every second community in the respective LGAs was selected.

3.0 Status of Basic Services

3.1 Water and Sanitation

The Liberia Water and Sewer Corporation (LWSC) is responsible for providing water and sewerage service in urban areas. It is envisaged that, over time, municipalities and town authorities will develop capacity and assume responsibilities for WASH services, including solid waste management in cities and towns outside Monrovia (SIP, 2008). For instance, MCC²³ and PCC²⁴ intend to enhance sanitation in the cities in FY2016–17 (ROL, 2016).

In Monrovia, water and sanitation coverage is reportedly at 65 per cent and 57 per cent, respectively, while solid waste management services are only available in Monrovia, covering around half (55 per cent) of the solid waste in the capital (SIP, 2012). Oxfam (2013) indicates that household waste in urban areas are usually disposed of in garbage pits (31 per cent), followed by public disposal areas (23 per cent) and disposed anywhere (18 per cent).

National statistics show that 73 per cent of Liberian households have access to improved water sources²⁵. Households in urban areas (86 per cent) are more likely than those in rural areas (56 per cent) to have access to an improved source of water (LDHS, 2014). Monrovia has the highest proportion (90 per cent) of households in urban areas with access to improved water sources (Oxfam, 2013)²⁶. Only 8 per cent have a water source located on their living premises (LDHS, 2014). Households in urban areas are two times (10 per cent) more likely to have access to water sources on the premise, compared to 5 per cent among households in the rural areas. The situation can be partially attributed to non-existing piped water or existing water point sources and sewerage infrastructure in Monrovia (SIP, 2012). It should also be noted that these figures do not often include adequate data on access in urban informal settlements.

Research also indicates poor access to good quality drinking water. Only 43 per cent of households in urban areas reported access to protected drinking water sources such as hand pumps, bore holes or tube wells (Oxfam, 2013). The majority of households (86 per cent) don't treat the water prior to drinking. Only 14 per cent of households in Liberia appropriately treat their drinking water including by boiling, bleaching, PUR, Water Guard, filtering, and solar disinfecting. Oxfam (2013) finds that only 36 per cent of households in urban areas practice water treatment, with most using chlorination (96 per cent).

23 MCC objective in FY2016/17 is to “ensure that Monrovia is a safe and healthy City; ensure that Monrovia stays clean and green; adopt the practice of Good Governance; implement the MCC strategic plan; target economic growth, and produce an integrated urban plan”. (ROL, 2016)

24 In FY2016/17, the PCC's main objectives included hiring trucks and yellow machines to collect garbage within the city, city police managed and controlled street vendors, and traffic congestion control.

25 The sources include piped water into dwelling/yard/plot, Public tap/standpipe, tube well or borehole, hand pump or protected dug well, protected spring, bottled/sack water, and rainwater.

26 Oxfam utilised same facilities to define access to improved water facilities including piped water supply, public taps/standpipes, tube wells and boreholes, protected dug wells, protected spring and protected rain catchment.

Access to adequate toilet facilities is another indicator used to measure sanitation conditions. Having access to an improved toilet facility²⁷ refers to toilet use only by members from one family (WHO and UNICEF, 2012a). According to results from a nationally representative survey, only 14 per cent of households in Liberia use improved toilet facilities (LDHS, 2014). In addition, use of improved toilet facilities was low (22 per cent) in the urban areas. Research conducted in 11 counties in Liberia, including five urban ones, indicates only 40 per cent of households in urban slum areas have access to improved sanitation facilities (Oxfam, 2013). The same study also indicates less than half (45 per cent) of households in Monrovia have access to improved sanitation facilities.

More than half (58 per cent) of households reportedly use non-improved toilet facilities (LDHS, 2014). Around half (45 per cent) either don't have a toilet facility or utilise bush or field as toilet facility. About three quarters (74 per cent) of households in the urban areas either don't have a toilet facility or utilise bush or field as toilet facility. More than a quarter (28 per cent) of households use shared facilities²⁸. Sharing of toilet facilities is more common among households in urban areas (36 per cent), in contrast to 16 per cent among households in rural areas (LDHS, 2014). Results from a study that was conducted by Oxfam showed that 42 per cent of households in urban areas mentioned sharing with neighbours as the most common method for defecation (Oxfam, 2013).

3.2 Access to Electricity and Infrastructure

Electricity

Between 2007 and 2011, access to electricity increased from 3 per cent to 10 per cent among the entire population in Liberia (LDHS, 2014; LDHS, 2007). However, the increase was only realised among households in urban areas (from 7 per cent to 16 per cent) compared to households in rural areas, whose accessibility has remained static.

Despite these increases, electricity coverage is still low in Liberia, and only 10 per cent of households have electricity that is connected. Rural and urban differentials are evident here as well (16 percent in urban areas compared with one percent in rural areas). At the same time, the flow of electricity remains a challenge, especially in slums. Consequently, many people use sources of energy that are likely to pollute the environment in the long run. Around half (49 per cent) of the households use Chinese lamps²⁹ (53 per cent in urban areas and 44 per cent in rural ones) for lighting, followed by flashlight or torch (15 per cent) and batteries (16 per cent). Nearly all (98 per cent) of households use primarily solid fuel such as wood, fire coal or charcoal for cooking.

Infrastructure

Liberia cannot break the cycle of poverty without an effective road network to connect its people and resources. The country's infrastructure network is the most visible sign of the former conflict, and it

27 LDHS, (2014) identified four types of improved toilet facilities including : i) toilets that flush or pour flush into a piped sewer system, ii) septic tank, or pit latrine; iii) ventilated improved pit (VIP) latrines; and iv) pit latrines with a slab. Non-improved facilities include Flush/pour flush not to sewer/septic tank/pit latrine, pit latrine without slab/open pit, bucket, hanging toilet/hanging latrine, and No facility/bush/field

28 Such facilities would be considered improved if they were not shared by more than one household (LDHS, 2014).

29 Type of lantern which can either be recharged using electricity or dry cell batteries, depending on the type.

stifles access to markets outside the capital. Broken roads also decrease the food supply and exacerbate hunger and malnutrition in rural Liberia (USAID).

Approximately the size and shape of Tennessee, Liberia has only 66,000 miles of roads, and of these less than 7 per cent are paved. By comparison, Tennessee has more than 93,000 miles of paved roads. Quantity is only part of the problem; potholes the size of small vehicles scar what few paved roads exist, while dirt roads become muddy parking lots during the rainy season of May to October. In Bong County, a heavily populated agricultural region, citizens regularly voice frustration at their inability to access markets, hospitals, and government services.

3.3. Status of informal workers in Liberia

Employment in the informal economy is defined as a percentage of total non-agricultural employment. It includes all jobs in unregistered and/or small-scale private unincorporated enterprises that produce goods or services meant for sale or barter. Self-employed street vendors, taxi drivers and home-based workers, regardless of size, are all considered enterprises. However, agricultural and related activities, households producing goods exclusively for their own use (e.g. subsistence farming, domestic housework, care work, and employment of paid domestic workers), and volunteer services rendered to the community are excluded (Source: International Labour Organization, Key Indicators of the Labour Market database).

The 17th International Conference on Labour Statistics (ICLS) described informal employment as employment arrangements that leave individuals without legal or social employment engagements or without any legal or social protection, and therefore exposes the individuals to greater economic risks, regardless of whether they are employed with formal or informal enterprises (Chen *et al*, 2013). According to the Liberia Institute of Statistics and Geo-Information Services (2011), informal workers include persons who are economically engaged but are not (a) professionals, (b) working in establishments registered with the Ministry of Commerce and Industry (MOCI), (c) working in establishments with more than four workers, or (d) receiving benefits from their employer. The ILO mentions the need for transition from the informal to the formal sector (ILO,2004).

However, the labour forces of most developing countries in Africa are predominantly involved in informal income generating activities (IGAs). According to LISGIS (2011), 68 per cent of the Liberian working population engages in informal employment³⁰. The same report indicates that more than half (59 per cent) of the population in urban areas in Liberia are engaged in informal IGAs. Group, regional, and gender variations are evident in informal employment. For instance, in Africa, street vendors constitute a sizeable proportion of urban employment (Chen *et al*, 2013), informal workers are mainly found in Monrovia (55 per cent) and they are predominantly women (72 per cent). In urban areas throughout Africa, most street vendors are women (Chen *et al* 2013).

Within Greater Monrovia, LISGIS (2011) found more than half of adults to be involved in informal employment (57 per cent). The report also indicates that women are more engaged in informal economic activities (69 per cent) than males (45 per cent).

30 This includes persons who are economically engaged but are not professionals, working in establishments registered with the Ministry of Commerce or Foreign Affairs, working in establishments with more than 4 workers, or receiving benefits from their employer)

According to a labour survey conducted in 2010, 55.4 per cent of informal workers were engaged in agriculture, forestry and fishing; 27.2 per cent in wholesale and retail trade; 5.8 per cent in manufacturing; 2.6 per cent in accommodation and food services, 1.7 per cent in transportation and storage; and 1.3 per cent in mining and quarrying.

4. Presentation of Findings

Findings are categorized according to survey type: household, petty traders, and waste-pickers. Findings from each survey category include results on background characteristics of the respondents and conditions of basic services among the surveyed population.

4.0 Findings from urban slum dwellers in Greater Monrovia

Findings in this sub-section include statistics on background characteristics of urban slum dwellers in Greater Monrovia and details about access to basic services, including water and sanitation, electricity, and infrastructure (roads in particular).

4.1 Social, economic and demographic characteristics of household survey respondents

The household survey included responses from both genders (55 per cent females and 45 per cent males), as well as youths. Sixty-two percent of respondents were above 35 years, and 38 per cent between the ages of 18 – 35 (See Table 2). Sizeable proportions (33 per cent and 21 per cent of the slum dwellers interviewed) completed senior high and university education. The survey also found considerable proportions of urban dwellers with poor educational background below junior high, including 16 per cent who only completed elementary level and 18 per cent without any educational level achieved.

Most respondents had been residing in the current location for more than 2 years (76 per cent), guaranteeing informed survey responses.

Table 2: Background characteristics of urban dwellers

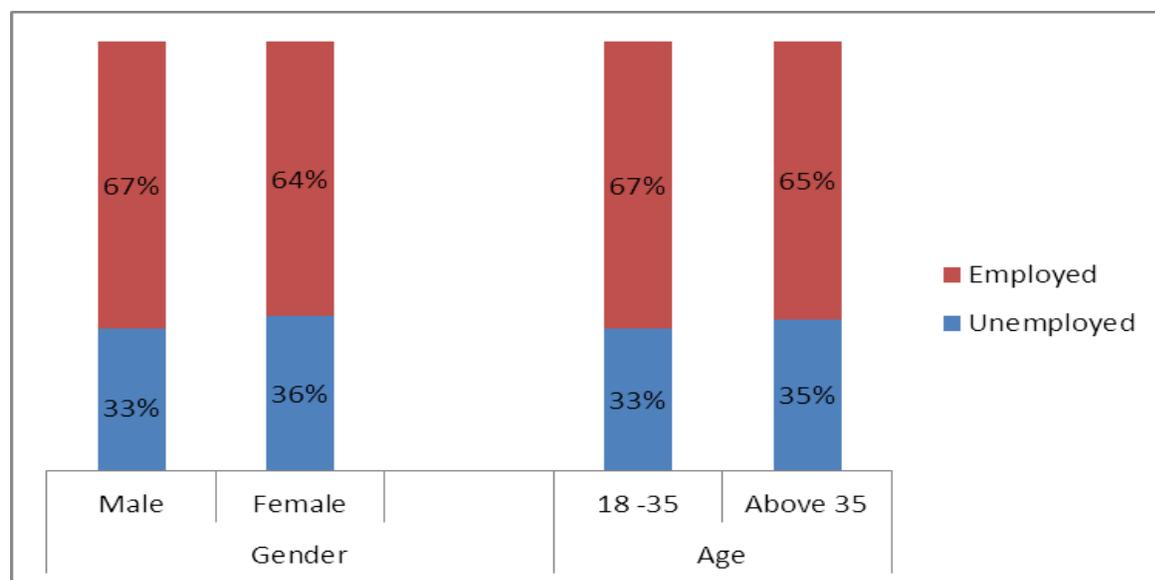
Gender	Percentage	Number of Respondents
Male	44.7	245
Female	55.3	198
Age		
18 – 35	38.1	171
Above 35	61.9	278
Highest level of education		
No Education	18	81
Elementary	15.8	71
Junior High	10.9	49
Senior High	33.2	149
University	20.5	92
Vocational	1.6	7
Duration of stay		
Less than six months	4	18
6 - 11 months	8.9	40
1 year +	10.7	48
More than 2 years	76.3	341

Economically engaged	65	251
Unemployed	35	133

Among respondents aged 18 or above, 65 per cent were engaged in some economic activity at the time of the survey; 35 per cent were not engaged in any economic activity in the 12 months prior to the survey and they were willing or available to work (See Table 2). Our survey found no observable age and gender differentials. For instance, 36 per cent of female and 33 per cent of male urban dwellers were unemployed (See Figure 3). Household survey results showed 33 per cent unemployment among youth (aged 18-35), and 35 per cent among respondents older than 35. National-level employment details are captured for a population aged 15 to 49 years, so both employment and unemployment results from our survey are slightly higher and lower than the national statistic from the 2013 LDHS in Greater Monrovia (58 per cent and 40 per cent, respectively).

Our findings are in alignment with the 2013 LDHS employment and unemployment levels among the population residing in urban areas in general (59 per cent and 39 per cent, respectively). They show a higher unemployment rate among the slum dwellers, compared to 28 per cent of Liberians residing in rural areas (LDHS, 2014). Unlike results from LDHS (2014),

Figure 3 : Engagement in income-generating activities



Some 78 per cent of respondents attributed unemployment to a lack of access to financial support (See Figure 4). Other minor challenges which were mentioned included high business competition characterised by unprofitable businesses, low sales, and lack of a ready market for those who wanted to grow and expand their businesses.

Figure 4: Reasons that hinder urban dwellers from engaging in IGA

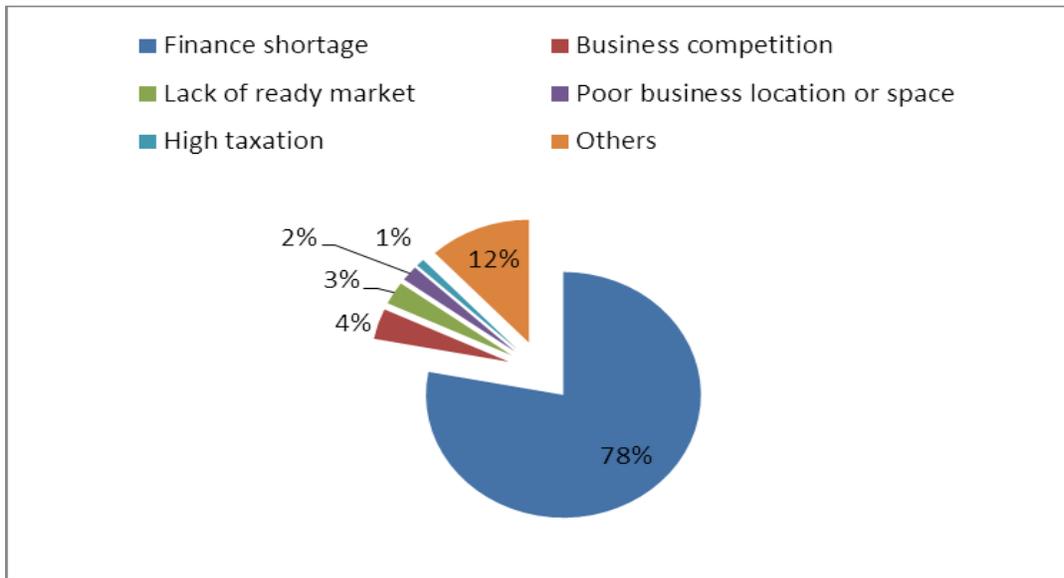
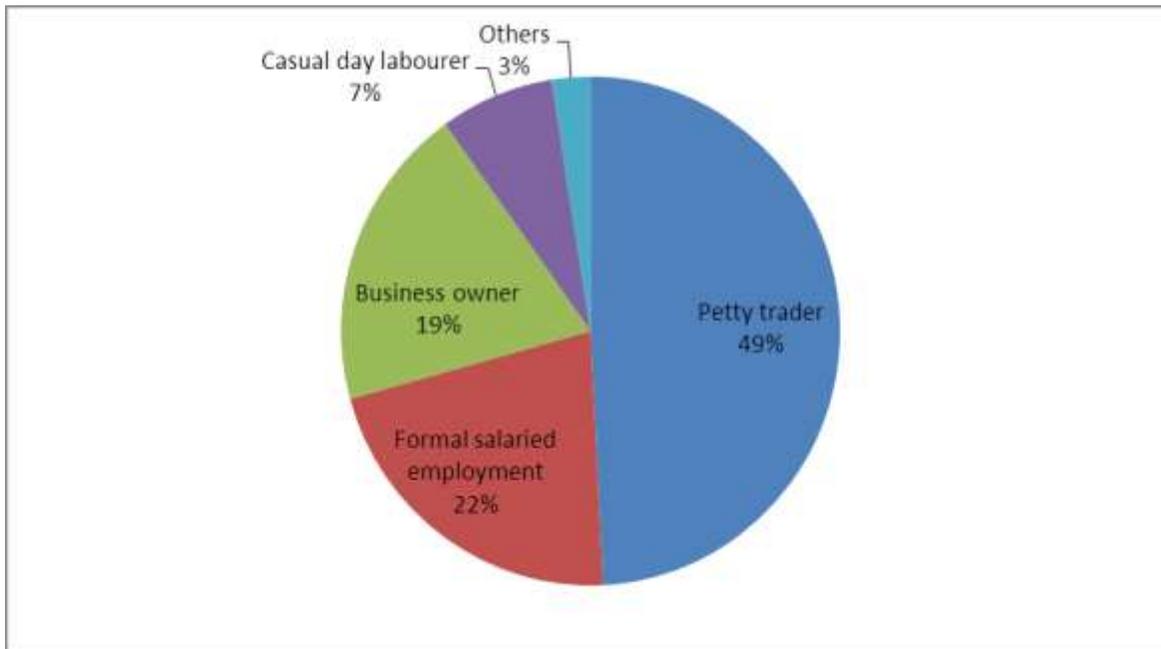


Figure 5 illustrates that most of the urban poor (49 per cent) were engaged in petty trading. About a quarter (22 per cent) were formally employed and 19 per cent owned businesses.

Figure 5: Income generating activities among urban dwellers



4.2 Household characteristics in Greater Monrovia

The household survey captured details about the condition of household characteristics: Water and sanitation, electricity, and road infrastructure. These findings are presented in sub sections 5.2.1 to 5.2.5 including i) access to water source, supply and quality of water; ii) access to sanitation facilities; iii)

access to waste disposal services and practices; iv) access to electricity and quality of electricity flow; and v) access to road infrastructure and maintenance.

4.2.1 Access to improved water sources and supply

Considering only the type of water source (Section 3.1), the survey indicates nearly all (95 per cent) of households in urban slums of Greater Monrovia have access to improved water source. According to our survey definition, 85 per cent of the households in slum/low income areas have access to improved water³¹ source within 200 metres from dwelling places (see Table 3). This finding implies that most households in urban slum areas in Greater Monrovia have access to improved water sources located within close proximity of their houses or homes. The survey result is equivalent to the national statistic (86 per cent) among households in urban areas of Liberia (LDHS, 2014). In addition, the survey result is closely representative of the population in Monrovia that reported 90 per cent access to improved water sources (Oxfam, 2013). Oxfam (2013) indicates that 73 per cent of households in urban areas have water sources located within 500 metres from dwelling places, although the study did not capture the proportions in the respective urban areas.

Common water sources included bottled water, which was mentioned by 28 per cent of households; 25 per cent from dug well or hand pump; 15 per cent from piped water into dwellings; and 12 per cent from public tap or stand point (See Figure 7). Concerning water supply, most respondents (73 per cent) reported constant water flow for about 15 hours per day, on average (See Table 3).

Figure 6 shows that 60.9 per cent of households consume more than 20 litres of water per person per day, given an average household size of 4.9. In contrast, Oxfam (2013) found nearly all (96 per cent) of household members in Liberia’s urban areas consumed 20 or more litres of water per person per day, although no disaggregation by urban area was done. Our survey results highlight that water consumption among urban slum dwellers is low compared to other urban areas. On the other hand, utilising average quantities, the survey found adequate water consumption among the households. Every household member utilises 48.4 litres per day on average, which is enough for the recommended quantity to drink. The result can be explained by slightly more than average access to a regular supply of potable water³² reported by 60 per cent among households in urban slums.

Table 3: Access to water sources and quality of drinking water

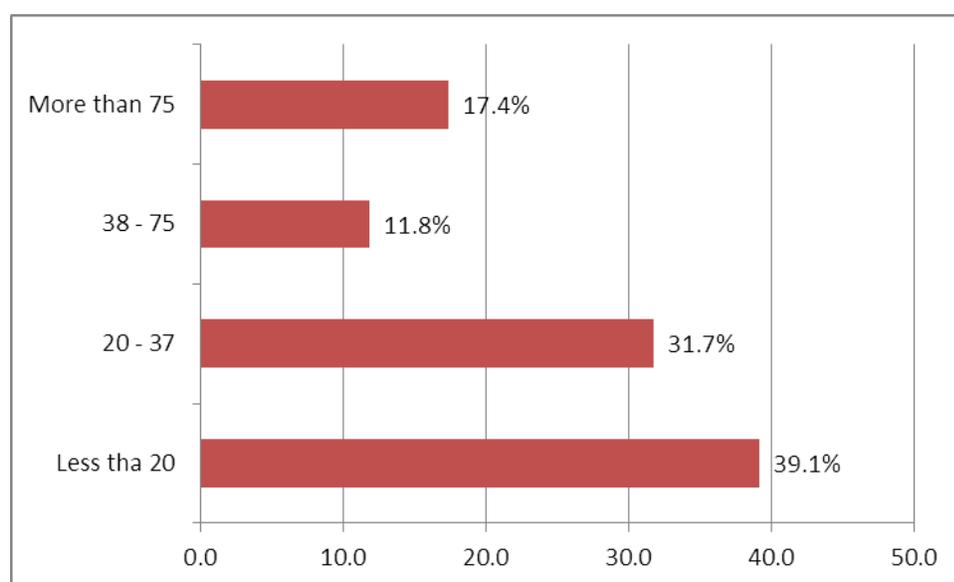
Indicator	Percentage	Number of Respondents
Access to a water source	95.0	448
How far is the major source of water (Metres)		
0 -200 metres (Access to improved water source)	84.5	375
More than 200 metres	16.5	74
How far is the water source (Time)		
Less than 10 minutes	58.9	264
10 - 20 minutes	24.8	111
More than 20 minutes	16.3	73

31 Includes access to water from the following water sources: Piped water into dwelling/yard/plot, Public tap/standpipe, tube well or borehole, hand pump or protected dug well, protected spring, bottled/sack water, and rainwater. The water source should be located within 200 m from home.

32 Adequate water (20 litres per person per day) from the recognised improved water sources and considered to be of good quality.

Mean litres of water used per day per person (Litres)	48.2	442
Access to potable water	60.0	442
Constant water flow (Everyday)	72.6	449
Water flow per day (average no. of hours)	15.37	434
Causes of water shortage		
High population	55.8	168
Irregular supply	31.2	94
Water pollution	8.3	25
Destruction of water pipes	4.0	14

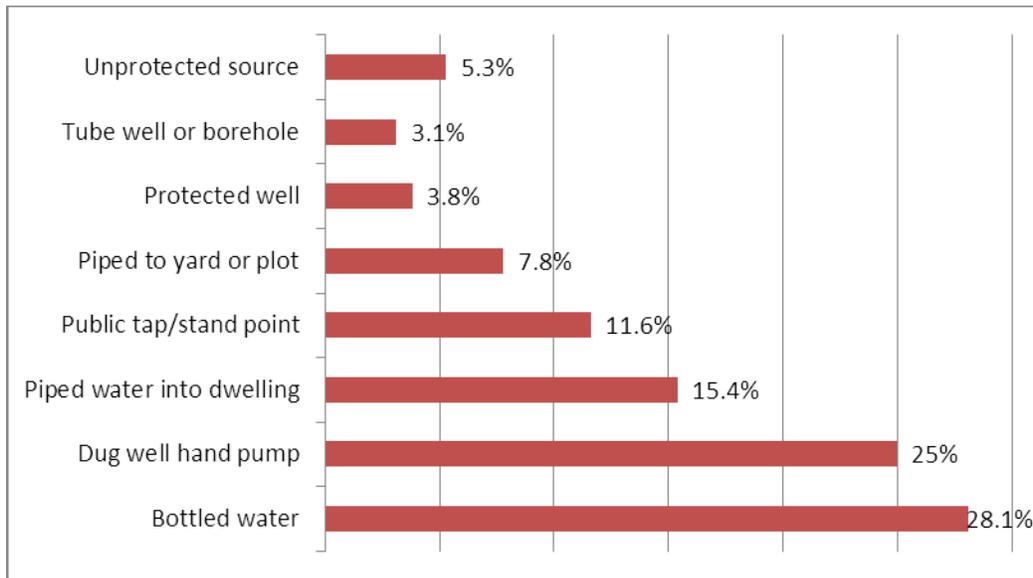
Figure 6: Household members' water consumption in litres per day



Respondents cited occurrence of water shortages at times. The shortages were mainly attributed to high population in the respective communities (56 per cent of the respondents) and irregular water supply (31 per cent). The results show that challenges partly arise from both demand and supply side, which should be addressed concurrently. Irregular supply of water was partly attributed to damaged hand pumps due to the persistent use by the huge population, which was mentioned in West Point and Town Hall communities.

Weather condition was another factor mentioned during the qualitative interviews. The Commissioner of Garnerville noted that communities usually experience water shortages in the dry season, which causes the water table to drop. The Deputy Managing Director Liberia Water and Sewer Corporation (LWSC) also cited ongoing repairs of water pipes.

Figure 7: Household main source of drinking water

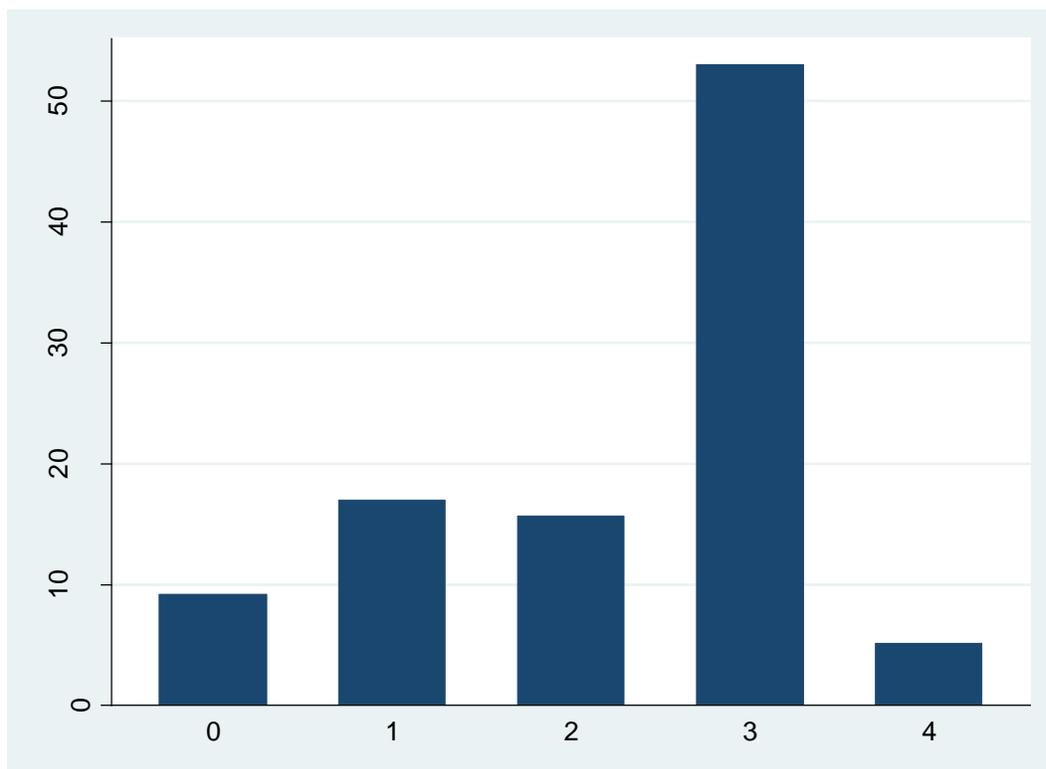


The figure above shows that most households in slum/low income areas mainly use bottled water (28.1 per cent) as the primary source of drinking water. This has negative implications for the environment if plastic bottles and polythene bags are not well managed such as land, air and water pollution if these bottles are burnt. Management of the plastic bottles through recycling on the other hand can be a source of income and employment opportunity for slum/low income households.

Regarding water quality, sizeable proportion (42 per cent) of households felt that the water from the main water sources wasn't safe to drink. Figure 8 indicates that on a scale of 0 – 4, about half of households felt that the water was safe to drink, while a good number mentioned that the water was unsafe or moderately safe. Interviews with key leaders revealed similar results. For instance, slum dwellers in Clara Town Community mentioned that water in the water sources can turn yellow at times. The Commissioner of Garnerville honorable Vamba Kenneh noted that water from most water sources, especially the wells, may not be safe to drink because the wells are not chlorinated often. He further stated that the wells are at times treated using chlorine, mostly provided by NGOs. The Deputy Managing Director of the Liberia Water and Sewer Corporation (LWSC) Christie Sherman also noted that water from LWSC is usually treated using chlorine before it is sold in trucks.

Discussions among slum dwellers revealed the existence of community initiatives to ensure water purification. According to household members in Barchue Community, members pay a fee of LRD 25.00 per month to purchase chlorine for regular chlorination of the wells. However, poor water quality was attributed to poor water source maintenance by the slum dwellers. For instance, community dwellers in West Point noted that the wells are left open most of the time. A female respondent in Barchue Community stated that *"..... When it rains, water changes colour and because this is the only source of water we have in this community, people go on using the water which isn't safe for our health"*.

Figure 8: Satisfaction about safety of water for drinking



Scale implies: 0= Very unsafe, 1=Unsafe, 2=Moderately safe, 3=Safe, 4=Very safe

4.2.2 Access to improved sanitation facilities

Nearly all households reportedly had access to toilet facilities located within 100 m. About half (52 per cent) had toilet facilities located within the household, and around one third (34 per cent) used facilities situated not more than 100 m from their houses. Most households reported easy access to toilet facilities at all times. Results therefore denote easy access to sanitation facilities from dwelling places.

LDHS, (2014) and Oxfam (2013), captured 30 per cent and 45 per cent access to improved sanitation facilities among households in urban areas in Liberia and Monrovia, respectively. Results in Table 4 show that only 15 per cent of households among urban slum dwellers in Greater Monrovia use improved toilet facilities that were not shared with other households, highlighting that access to improved toilet facilities is lower among urban slum dwellers than other categories of groups in the urban areas.

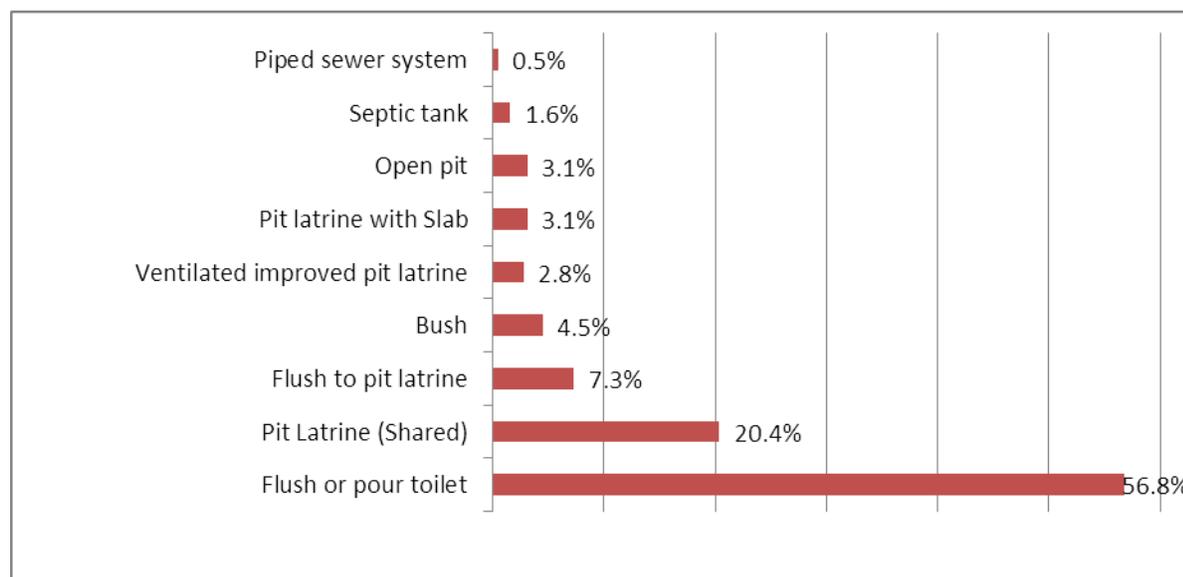
Sharing of toilet facilities by many residents led to poor functioning at times. *“Septic tanks fill at times which makes it difficult to flush the stool, since there is only one general toilet in Town Hall community,”* said one respondent. Households commonly use toilets that flush or pour into a piped sewer system, septic tank, or pit latrine (57 per cent); 20 per cent used pit latrines (See Figure 9); and 5 per cent use bush or open space, which is likely to lead to contamination of water sources. Open defecation is practiced by household members due to inability to afford toilet charges and convenience. In Barchue Community, slum dwellers reportedly paid LRD 10 for each visit to the toilet facilities. They further commented that *“children use the beach as toilet during the day and the adults do so in the night because the beaches are just one mile away and one does not need to pay”*. Another participant in one

of the focus group discussions in Clara Town mentioned that “*riverside is free and nobody pays a cent to use it for toileting. But one has to pay to use the private facility, LRD 500 on average per month.*”

Table 4: Access to improved toilet facilities

Toilet facility type	Percentage	Number of Respondents
Household has access to a toilet facility	92.5	426
Household has access to an improved toilet (both shared and not shared)	72.1	426
Household has access to an improved toilet facility (not shared)	15.3	426
Location of toilet facility		
In the house	51.9	231
Less than 50 m	34.2	152
50 - 100 m	9.9	44
More than 100 m	4	18
Access to toilet facility (24 hours)	91	427

Figure 9: Types of toilet facilities used by households



4.2.3 Waste disposal and management

Results in Table 5 show that only 36 per cent of households in urban slum areas have access to regular solid waste collection. The survey finding is very low compared to the 2012 – 2017 National WASH Sector Investment Plan, which indicates that 55 per cent of households in Monrovia have access to solid waste management services. It is unclear if the plan captured coverage in both Monrovia and Paynesville.

Our survey was conducted among households in urban slum areas, making the results distinct. Eight-two per cent of households had at least one garbage bin. Most households dispose of their garbage daily (70 per cent). Around a quarter mentioned that the garbage is disposed within two to three days. On the other hand, only 36 per cent of households reported preferred ways of disposing garbage, including using municipality authorities and predefined landfill areas. Only 25 per cent of households reportedly paid for garbage collection. Each household paid LRD 375 per month on average for the service.

Households in urban slum areas mainly utilise poor methods which can endanger the environment as well as their health. Common garbage disposal practices among the households included wild disposal³³, mentioned by 23 per cent of household members; burning (15 per cent); and dump in river or lake (14 per cent). Results denote the need for community sensitisation about the benefits of proper waste disposal methods as well enactment of policies to enforce solid waste disposal by either public or private waste-pickers among household members. Similarly, Oxfam (2013) indicated that sizeable proportions (18 per cent and 9 per cent) of households in urban areas in Liberia dispose solid waste anywhere and in water bodies, respectively.

Slum dwellers noted lack of predefined space for dumping garbage. Household members in Barchue Community said *“majority of our community dwellers dump dirt either on the streets or in the drainages. There is no specific place here in the community for disposing dirt”*. Some slum dwellers in Barchue also noted that some land owners in the swamp areas ask household members to dump there to dry the swamps. A similar complaint was captured among slum dwellers in Clara Town community *“... majority of us place garbage in buckets and our children take it to the riverside because there are no dumping sites”*.

Residents in New Kru Town mentioned experiencing problem with flies, cockroaches and rats due to lack of proper garbage disposal.

Table 5: Household waste disposal and management

Indicator	Percentage	Number of Respondents
Household owns a garbage bin	82.4	443
How often is the garbage disposed off		
Daily	70.2	316
2 - 3 days	22.2	99
4 -7 days	6.0	25
More than a week	1.0	6
Access to regular solid waste collection	35.9	446
Use proper method to dispose garbage	36.0	444
Garbage disposal method		
Municipality authorities	27.0	120
Wild disposal area	23.7	105
Burning	15.1	67
River or lake	14.2	63
Predefined landfill	9.0	40

³³ Garbage or waste disposal in areas that are uninhabited or desolate

Bury the garbage	4.5	20
Others	6.5	29
Type of sewerage system		
Sewage system, city main line	3.9	13
Septic tank disposed weekly by municipality	1.2	4
Septic tank disposed weekly by private services	94.5	312
Discharged direct to a river or landsite	0.3	1
Pays for garbage disposal services	25.2	441
Average waste disposal per month (LRD)	374.7	110

4.2.4 Access to and flow of electricity

Around half (49 per cent) of households surveyed had access to a regular electricity connection. Contrary, LDHS (2014) reported only 16 per cent of households in urban areas of Liberia had access to regular electricity connection. Our survey findings can be partially explained by the Liberian government's strategy to provide access to electricity for 70 per cent of the population in Monrovia by 2030, as mentioned in the 2013 Liberia rapid assessment and gap analysis. In fact, the national government launched a new hydro power station in December 2016.

Respondents highlighted poor electricity supply as a problem. For example, only 31 per cent of households usually received constant flow of electricity in a day. Half had electricity flowing for half a day. Thirty-eight per cent experienced interruptions in flow of electricity every day. A good proportion also experienced interruptions in electricity supply more than once in a week. Commissioner of Garnerville Honorable Vamba Kenneh termed the flow of electricity as *"an off and on situation"*.

Table 6: Household access to and flow of electricity

	Percentage (per cent)	Number of Respondents
Household has electricity	48.6	449
Electricity flow in a day		
All day	31.2	68
Half day	49.5	108
Less than half a day	19.3	42
Interruptions in electricity flow		
Every day	37.6	82
More than once in a week	43.6	95
Once in a week	14.2	31
Stable	4.6	10

4.2.5 Access to and quality of road infrastructure

Most households (74 per cent) mentioned availability of unpaved roads in their respective communities, and 78 per cent stated that the roads can be used by cars. However, the survey results found the roads

to be poorly maintained. Only 8 per cent of the households reported the presence of street/road lights along the roads, and 18 per cent of households mentioned the existence of trenches by the roadside.

According to slum dwellers in Town Hall community, *“There were lights placed on the streets at the time the poles were planted, but the lights stopped working 3 years ago”*. In fact, over 80 per cent of the households expressed dissatisfaction with the general condition of the roads in their communities (See Figure 10). Discussions with the slum dwellers highlighted poor road maintenance. Participants in an focus group discussion in Barchue Community noted *“..... this road has lots of sand which sometimes causes cars to get stuck”*. *“Our road isn’t always clean, in fact there is no person assigned to clean the roads, the day we see it clean, it means that somebody who is tired seeing the dirt in front of their house which is closer to street tried to clean it”*.

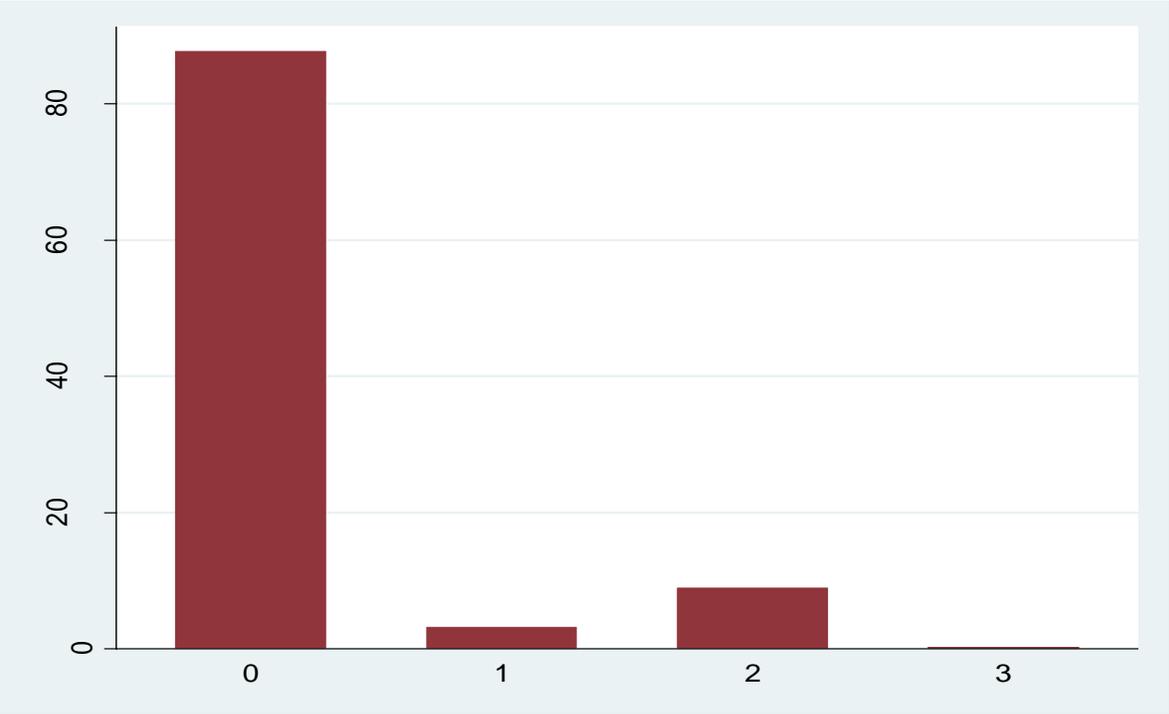
Various leaders also expressed discontent on the same issue. The roles of relevant stakeholders were highlighted during in-depth interviews. The Ministry of Public Works Program Information Management Officer (WASH) Mr. Habakkuk Watara Sackor noted that *“.... road maintenance is done by the government and community-based groups do the cleaning..... households should on average pay LRD 10 – 20 to community self-initiatives”*. Residents in Town Hall Community in Paynesville commended Paynesville City Corporation for managing and maintaining the roads in their community. He further commented that he was also not satisfied with the general cleanliness of the roads due to lack of lack of cleaning mechanism in the communities. The Commissioner of Garnerville also emphasised that the roads should be maintained through community initiatives. Residents in Duan Town Community confirmed that they pay around LRD 10 – 20 whenever the road cleaning exercise is to be done.

Households also contribute to the poor condition of the roads. The Commissioner of West Point Mr. Sampson Nyan said *“..... not satisfied with the general cleanliness. The challenge in having the roads cleaned is that the community members use the road to dump their garbage direct”*. He also noted that the roads in West Point had trenches, but no lights.

Table 7: Access to and condition of road infrastructure

Indicator	Percentage	Number of Respondents
Type of Roads		
Paved	10	45
Only a foot path	16	70
Unpaved	74	333
Quality of roads		
Road is accessible by cars	77.6	447
Availability of road lights	8.3	444
Road lights are functional	37.1	35
Lights are on every night	43.8	32
Roads have trenches	18.0	438
Trenches are clean most of the time	85.9	78

Figure 10: Satisfaction towards the general condition of the roads



Scale implies: 0= Not satisfied, 1=Moderately satisfied, 2=Satisfied, 3=Very satisfied

5.0 Informal workers in Greater Monrovia

The study included two categories of informal workers (petty traders and waste-pickers). Survey respondents were asked to provide background demographics and socio-economic characteristics, details about their businesses, working conditions, and business prospects.

5.1 Characteristics of petty traders and waste-pickers in Greater Monrovia

Survey responses among informal workers included 58 per cent male and 42 per cent female petty traders. In addition, survey responses were captured from 76 per cent male and 24 per cent female waste-pickers. Most (68 per cent) of the petty traders were aged 18 – 35, while over half (54 per cent) of the waste-pickers were older than 35. This result denotes high engagement of youth in petty trading, compared to waste collection related activities. Half (53 per cent) of the petty traders completed senior high, as well as 40 per cent of the waste-pickers. However, good proportions (43 per cent) of both the petty traders (43 per cent) and waste-pickers (60 per cent) reported poor educational backgrounds including junior high, elementary and no education. The results highlight low literacy levels among the target population.

Table 8: Background characteristic of informal workers

Indicator	Petty traders		Waste-Pickers	
	Percentage (per cent)	Respondents	Percentage (per cent)	Respondents
Gender				
Female	42	232	24	12
Male	58	323	76	38
Age (Years)				
18 – 35	68	176	46	23
36+	32	371	54	27
Highest level of education				
No Education	18	102	10	5
Elementary	10	55	28	14
Junior High	15	82	22	11
Senior High	53	293	40	20
Other*	4	23	-	-
Main economic activity				
Petty trading	98	542	N/A	N/A
Other	2	11	N/A	N/A
Business characteristics				
Business age (Years)	7.3	547		
Paid tax	12	550	100	6
Mean Tax paid (LRD)	7,294	67	42,827	

*Includes university and vocational

Results in Table 8 indicate an overwhelming (98 per cent) reliance on petty trade for livelihood among the petty traders and a significant engagement in performing similar activities (seven years), on average. Qualitative interviews found that petty traders engage in the sale of various products including:

cosmetics, slippers, stationery, T-shirts, underwear, and coal. Petty traders reportedly earn LRD 9,525 (approximately USD 95) and make profits worth LRD 3298 (approximately USD 33), on average per month (See Figure 11).

Regarding taxation, only 12 per cent of petty traders reportedly paid tax to operate their businesses during the past year, worth LRD 7294 (USD 73) on average per person. However, the petty traders expressed their willingness to pay tax on the condition that they do not experience harassment from police, which was highlighted in all the focus groups.

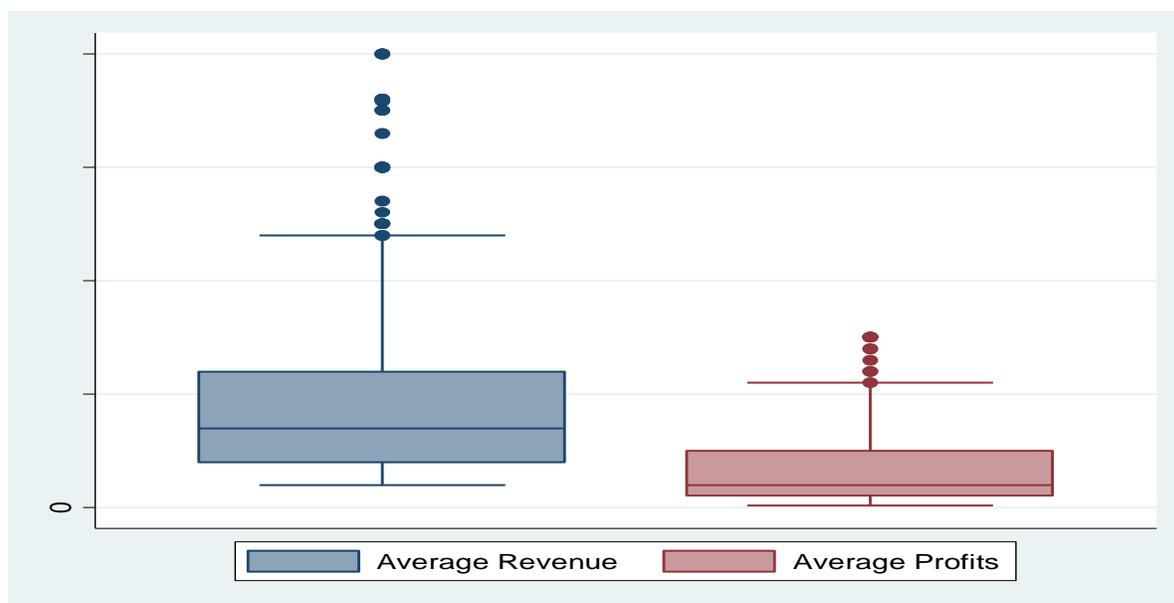
During the focus group discussions, some petty traders mentioned that their businesses were registered and some wished to do so. A female respondent from Red Light Market, the largest marketplace in the country located in Paynesville, stated *"Yes, some of our members have their businesses registered. I can recall in certain time the Liberia Revenue Authority came around asking people to go and register their businesses. People who had larger tables like 3ft-4ft were asked to go and register. If you had your table in front of a shop or had a little place that is covered, LRA would ask you to go and register; so, they were asking everybody to go and register their business"*.

".... some of us aren't registered, but if government asks us to do so, we will be willing to do". The petty traders felt that business registration can serve as protection for their business. For example, women in Red Light felt it would help them stay safe from the police, especially regarding confiscation of their goods. The women noted that the leaders of the petty traders were on the verge of signing an MoU with the Paynesville City Corporation, with support from the Country Programme. The traders also mentioned recent registration of petty businesses. Authorities from PCC reportedly collected tax worth LRD 1000 from each petty trader in 2010. The Chairperson of Jesus the True Vine (saving group member of Federation of Liberian Urban Poor Savers) mentioned that all petty traders with businesses in specific places usually have their businesses registered.

For many, however, the uncertainty regarding business existence hinders them from doing so. For instance, during a focus group in Red Light, a male respondent commented that *".... When the government tell us about registration we will say no, because petty trading in Liberia is actually understood to be those who are selling in the street. The only time you will register a business is when that business is sheltered..."* Another reason cited in the focus group was lack of protection related to space. A male petty trader commented *"..... the only reason that is hindering petty traders from registering is the issue of protection; our businesses aren't protected. The moment government can provide us protection and a stable place to sell; we won't have problem registration our businesses."* The Chairperson of Jesus the True Vine (FOLUPS) Deborah Zarboe also noted that lack of suitable and stable places for conducting business hinder petty traders from registering their businesses.

All CBE owners who were interviewed stated that they paid tax during the past year, approximately LRD 42,827 per CBE (Table 8).

Figure 11: Average monthly earnings and profits from petty trading among petty traders



5.2 Constraints to the expansion of informal businesses

Informal workers encounter some difficulties while attending to their businesses. Figure 12 illustrates the challenges that hinder the petty traders from expanding their businesses, including:

- 1) A lack of access to financial support, which was mentioned by a majority (80.4 per cent) of the petty traders;
- 2) Limited space for selling (50.3 per cent); and
- 3) Harassment from police (82 per cent).

The three challenges were highlighted in all five focus groups conducted among the petty traders. For example, below are some of the statements which were recorded from the qualitative interviews:

A male respondent from Red Light market commented, *“Our challenges are enormous. One serious one is the constant harassment from the National Police and also the City Police. The next issue is that our businesses aren’t protected. The second thing is that we don’t have stable places to sell. We are given places which we paid for to sell and few days later, we are asked to leave. The third issue is the land owners in front of whose places we sell. They are requesting money from us for selling before their places, while at the same time the City Police are doing the same”.*

A female petty trader in Red Light Market commented *“The City ordinance said we should be 7 feet away from a store and we are obeying, but the store owners and even the land owners are asking us to pay additional money to sell in the front of their stores, which is costly”.*

A challenge of using dual currency was another constraint highlighted by petty traders during the qualitative interviews. A female respondent was quoted saying *“.....we are selling in Liberian Dollars and the store owners are requesting us to buy in USD, so we will have to buy the USD at a higher rate, which is a loss on our part”.*

High prices of commodities to be sold and competition from store owners were also among the issues mentioned by the petty traders during focus groups.

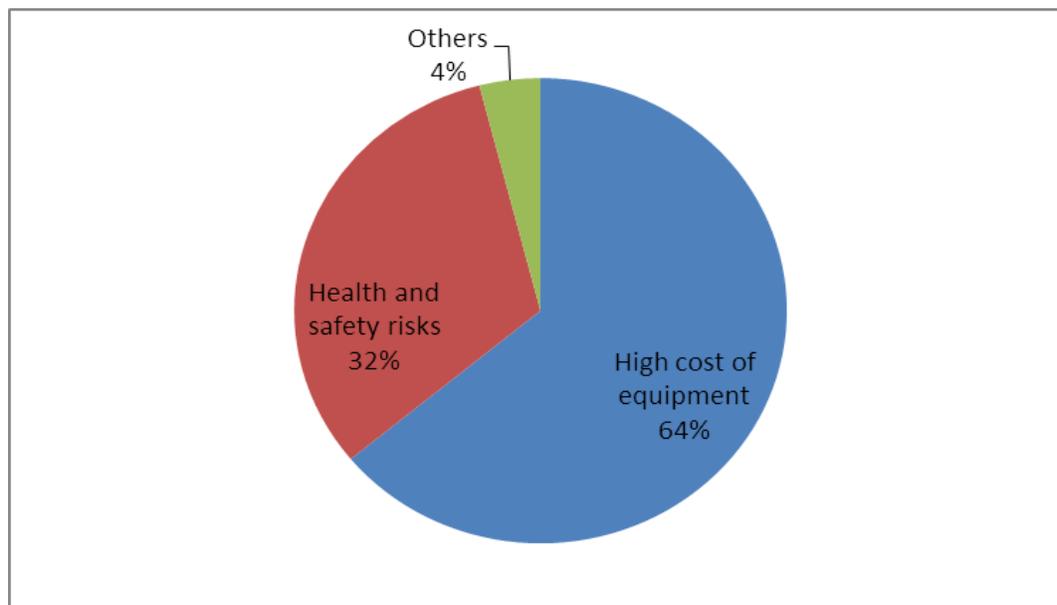
Figure 12: Three major challenges that hinder the petty traders from expanding their businesses



Common reasons for not expanding waste collection businesses mentioned by the CBE owners included the high cost of equipment (64 per cent) and health and safety risks associated with waste or garbage (32 per cent) (See Figure 13). The Director of Solid Waste Management, Paynesville City Corporation Mr. Kolubah David also commented “..... CBEs lack technical capacities to reach out to the length and breadth of the city. They are currently operating in a limited area of the city. Due to their incapacities to reach out deep into our cities, the City Corporation has reinforced the issue of the garbage can at the level of the communities”. That can discourage other people from joining the business. He further noted that there are only two duly registered CBEs in PCC so far, yet the communities require their services.

Another challenge mentioned during key informant interviews and focus groups was competition from the small and medium-sized enterprises, among CBEs. According to the MCC mayor Honorable Clara Mvogo, “... the boundary between Paynesville and Congo Town is close, so you find people subscribing and collecting waste from the Paynesville end”. Also, competition from illegal waste collectors was mentioned too. MCC Mayor Honorable Clara Mvogo mentioned “..... there are illegal waste collectors in Monrovia, springing up because they know there is money into going from home to home collecting waste for LRD 10 or 20 per month. They are now springing up but because they cannot dump into MCC cans, they are illegally dumping and we are actively going after them”. The Director of Solid Waste Management for PCC Mr. David Kolubah mentioned that CBEs complained of some community dwellers or casual labourers who collect garbage from CBE clients, which is causing problem for their operations.

Figure 13: Challenges that hinder CBEs from expanding the waste collection business



The government has some plans to help the CBEs expand their business. According to the Director of Solid Waste Management for PCC Mr. David Kolubah and MCC solid waste management Head Mr. Fredric Cole, plans are underway to open a waste management market so that people can invest more into collecting waste.

5.3 Working conditions of petty traders

The ILO defines decent work conditions as working environments that involve opportunities for work that deliver:

- Security in the workplace;
- Better prospects for personal development and social integration,
- Freedom for people to express their concerns, organise and participate in the decisions that affect their lives; and
- Equality of opportunity and treatment for all women and men.

For our study, we utilised the following indicators:

- Proportion that experienced harassment to assess equality of opportunity and treatment for all women and men;
- Proportion that experienced theft of business goods to assess security at the work place;
- Future business aspirations to capture prospects for personal development and social integration;
- Attendance of meetings intended to express views concerning working conditions to capture freedom for people to express their concerns, organise and participation in decisions that affect their lives; and

- Access to sanitation and storage facilities to assess to basic services among the petty traders.

The study also captured working conditions among the waste-pickers. The survey revealed easy access to services by petty traders, including 89 per cent access to storage facilities and 91 per cent access to sanitation³⁴ facilities. The petty traders also commended the City Corporation authorities and their leaders for ensuring a clean working environment. For example, women in Red Light mentioned that the petty traders' union had a sanitation team that does the cleaning and collects the waste daily. However, the traders who engage in business at night make the streets dirty, and petty traders who engage in business during the day find the street dirty in the morning. One male respondent stated *"Our business sites of recent are being clean and we are satisfied with the level of cleanliness. I think those responsible are doing well and we appreciate them for that. When you even look on the streets, the places are clean. The places are cleaned on every Wednesday and Saturday"*.

Female petty traders in Red Light expressed their need for extra support to facilitate garbage collection, since the daily charges are not enough. Also, the services are accessible at a cost. Petty traders in Red Light reportedly incur LRD 5 and 15 each time they urinate in the toilet facilities. A male respondent commented that *"... because the owners noticed that some people were taking advantage and paying LRD 5 and toileting instead of urinating, they increased the prices. We are now paying LRD 15 for toileting and 10 in some facilities for urinating"*. During focus groups, petty traders mentioned that they paid money for storage services on a weekly basis, and that the charges varied according to the quantity of goods.

The survey revealed poor access to financial services among petty traders. Only 7 per cent had access to a business loan in the year prior to the survey. In-depth discussions revealed that the loan requirements are way beyond the means of the petty traders. They commented that they are sometimes required to provide a land deed as security for obtaining a loan.

Survey results indicate that petty traders work under poor conditions and environments. More than a third (39 per cent) operated their businesses in open spaces (without any movable or temporary shelter). During field visits, it was observed that some petty traders display their goods on the ground, small tables, wheel barrows and others on the head. The results denote exposure to harsh weather conditions like heavy rainfall and high temperatures.

Some 82 per cent percent of the petty traders reported to have experienced harassment from the police in the six months prior to data collection. At the same time, more than half (54 per cent) stated that they had experienced theft of their goods in the same period. The same challenges were highlighted during FGDs. For example, a male respondent stated that *"Constant harassment from the police in the Red Light area is a major problem for petty traders. Our goods are seized almost every other time and when we go to retrieve them, we are made to pay fines. What is more frustrating is that, when our goods are returned, they are never correct"*.

Table 9: Petty trader working conditions and environment

Indicator	All	Gender (per cent)		T-stat	OBS	Age (per cent)		T-stat	OBS
		Male	Female			18-35	Above 35		
Business location									
Open space without shelter	39	49	29	(0.0519)***	363	39	46	(-1.373)	363

³⁴ Located within 500 m from the workplace

Open space with shelter	61	51	71	(3.925)***	361	61	54	-1.31	361
Has access to store	89	84	93	(3.549)***	551	89	85	-1.17	543
Toilet located within 500m	91	88	93	(2.134)**	554	89	90	(-0.317)	546
Attended meeting	43	43	43	-0.0316	547	41	46	(-0.965)	539
Experienced harassment	82	82	82	-0.00411	545	86	73	(3.635)***	537
Experienced theft of goods	54	47	61	(3.231)***	551	53	53	(-0.0335)	543
Access to loan	7	8	6	(-0.897)	551	5	12	(-3.049)***	543

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1, clustered at community level

Survey results found gender and age differentials. For instance, males were more likely to conduct their business in open space (49 per cent), compared with 29 per cent of their female counterparts (Table 9). Female petty traders reported easier access to storage and toilet facilities. Theft of business goods was reported high (61 per cent) among the female petty traders, compared with 47 per cent among their male colleagues. The survey found the youths to be more vulnerable. Only 5 per cent of the youths reported having access to a loan in the year preceding the survey, compared to 12 per cent of the respondents who were over 35. More youths (86 per cent) reported harassment from police compared to 73 per cent among those over 35.

5.4 Working conditions of waste-pickers

Community-based enterprises had three automobiles used for collecting waste. Most respondents (92 per cent) reported access to garbage collection containers (See Figure 13). The containers were reported to have enough capacity to accommodate waste, which was mentioned by 90 per cent of the waste-pickers. Most respondents (75 per cent) commented that the garbage containers are emptied often. More than half (53 per cent) of the waste-pickers reported to have attended at least one meeting to discuss issues related to the working conditions in the six months before the survey, which denotes freedom of expression of concerns among waste-pickers to a certain extent. In fact, the MCC Mayor Honorable Clara Mvogo commented that the MCC convenes meetings with the waste-pickers every 3-6 months to learn about their progress and challenges so as to derive solutions. The MCC Mayor Honorable Clara Mvogo stated that, “... in Monrovia, some of them have combined and formed groups; so they are combining and working together”.

Results in Table 10 indicate poor working conditions and environment among waste-pickers as well. Overall, 43 per cent reported being exploited or harassed by intermediaries in the six months before the survey. A sizeable proportion (43 per cent) had fallen sick or been injured related to garbage collection at least two times in the six months preceding data collection. This can be attributed to lack of access to protective items such as gloves and boots. All the key informants noted that some of the waste-pickers do not wear protective gears, yet it is the responsibility of CBE owners to provide the waste-pickers with such items.

Majority (92 per cent) highlighted customer refusal to pay for the services. These results emphasised the need for procedures or policies to enforce payment for garbage collection from households. Some 25 per cent of the waste-pickers were denied access to recyclables, and more than a quarter (28 per cent) highlighted denial of access to garbage.

The MCC Mayor Honorable Clara Mvogo noted that, “CBEs are supposed to collect waste from households and small businesses. However, they go beyond the limits at times”. She further mentioned that “.....the big companies are sometimes upset because our small companies are collecting their waste.

Like in some areas in the Bushrod Island areas, the small guys are upset because the bigger companies are collecting dirt from even homes, so it's vice versa."

Figure 15 illustrates gender and age health risk differentials. Some 61 per cent of female waste-pickers experienced an illness or were injured while collecting waste, in contrast to male colleagues (25 per cent). Older waste-pickers were found to be more vulnerable (74 per cent), unlike their counterparts aged 18–35 (26 per cent).

Table 10: Waste-picker working conditions and environment

VARIABLES	All	Gender				Age			
		Male	Female	T-stat	Obs	18-35	Above 35	T-stat	Obs
No of vehicles	3	3	3	-0.31	6	2	3	(-1.074)	6
Attended meeting	53	58	47	(-0.652)	50	39	59	(-1.419)	50
Experienced harassment	43	46	40	(-0.349)	49	30	50	(-1.390)	49
Frequency of experiencing harassment	3	3	3	-0.338	20	3	3	(-0.941)	20
Frequency of falling sick/getting injured	2	2	2	(-0.480)	26	2	2	(-0.931)	26
Denied access to waste	28	17	11	(-0.561)	50	13	11	-0.205	50
Customer refused to pay	92	92	92	-0.0478	50	91	93	(-0.164)	50

Note: obs is number of observations

Figure 14 Availability and condition of garbage containers

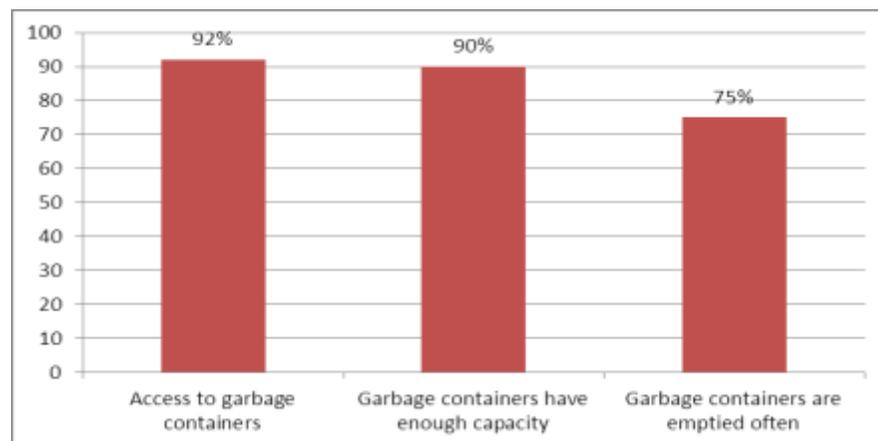
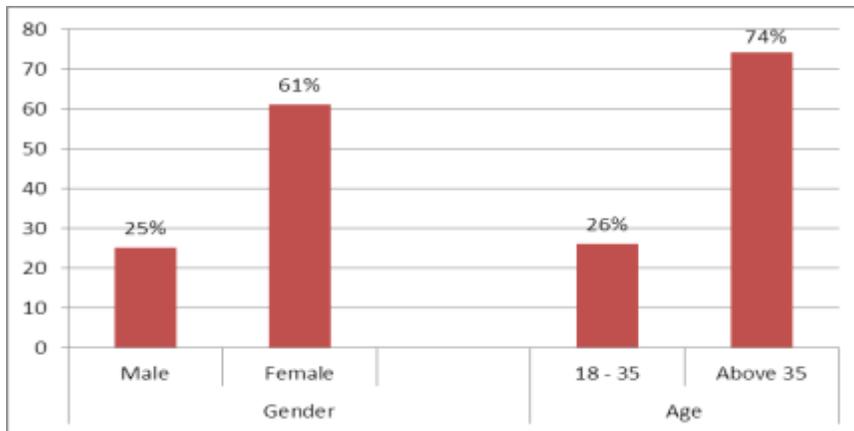


Figure 15: Health risks related to collecting garbage by gender and age



5.5 Business aspirations of petty traders and waste-pickers

Most petty traders expressed positive prospects. For example, over half (55 per cent) reportedly had plans to start a new IGA in the next six months after data collection. 70 per cent mentioned that they would be still working in the year after the survey. A female respondent in Red Light was quoted saying *“Some of us will want to own our own store. Some of us have the plans to leave the street in less than 3 years; going out of the country and bring in our own goods to sell”*.

During a focus group in Red Light, a male participant stated that *“In 5-10 years’ time, I want to own my own place and be travelling out of the country to bring my own goods. Most of us are planning to leave the streets and be at our own business places”*. Another male participant mentioned, *“Some of us are planning to leave the street selling to owning their stores. We want to assure you that in the coming 5-6 years, you will see more younger faces here rather than us, because at this time, some of us would have been far ahead with our businesses, owning our own establishments; like for example, owning our own stores and computer schools to help educate our younger generation”*.

The survey found the males to be more ambitious³⁵. Seventy-four per cent of males felt that they would still be working in 5-10 years, compared to 65 per cent of females. In addition, 82 per cent of the male waste-pickers mentioned plans to have an IGA in the next 5–10 years, while only half (50 per cent) of women did so. Figure 16 illustrates the specific prospects among petty traders and waste-pickers. Most (63 per cent) expressed their desire to be prominent business persons in 5–10 years after the survey. A quarter (25 per cent) of petty traders were not sure exactly what they would be doing in 5–10 years from the time of the survey. The results highlight uncertainty about having a source of livelihood in the future among the petty traders.

Table 11: Business aspirations of informal workers by demographic characteristics

VARIABLES	Gender				Age				
	All	Male	Female	T-stat	Obs	Adults	Youths	T-stat	Obs
Petty traders									
Plans to start new IGA	55	57	53	-0.0429	551	50	57	-1.549	543
Still be working in the next one year	70	74	65	(-2.210)**	552	71	69	(-0.291)	544
Waste-pickers									
Plans to start new IGA		82	50	(0.141)**		87	63	(1.963)*	50

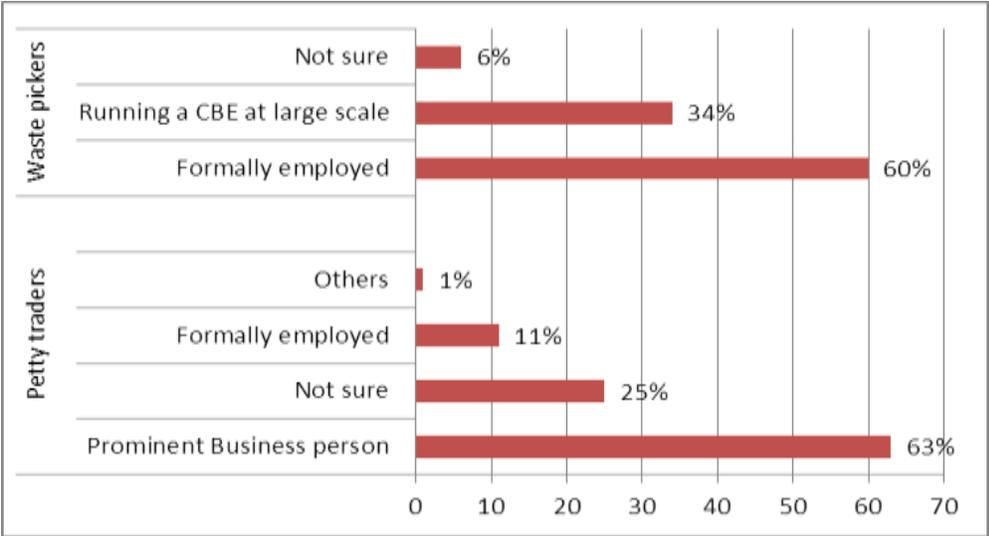
35 Males expressed better prospects for personal development and social integration.

Still be working in the next one year	76	42	(2.318)**	74	63	-0.816	42
---------------------------------------	----	----	-----------	----	----	--------	----

The Director of Solid Waste Management, PCC Mr. David Kolubah noted *“The CBEs are profit-making entities unlike the City Corporation. What they need to do to improve their work is to acquire equipment that will serve their workers and not the ones that will be breaking down every other week. They need to get quality equipment to be able to provide quality services to their customers”*. The statement highlighted the need for waste-pickers to have access to quality equipment to allow business expansion.

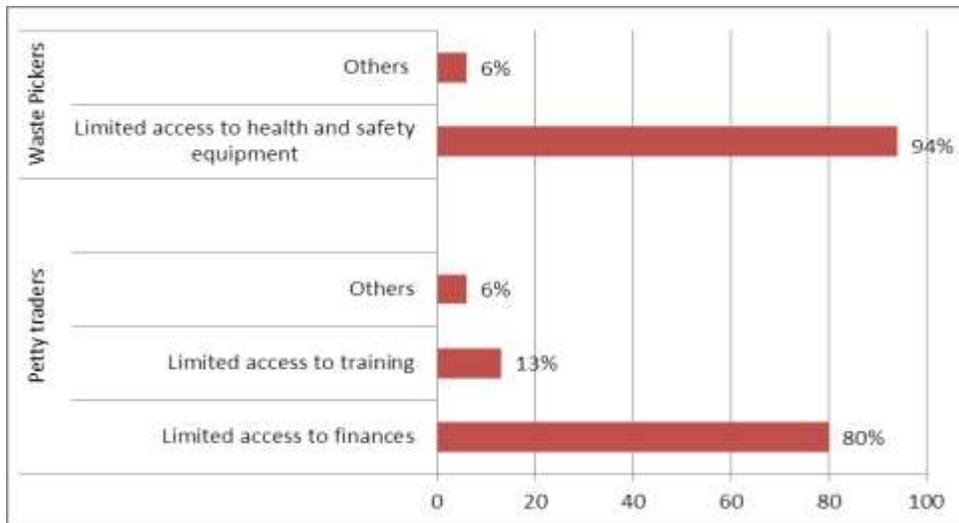
Males in Red Light *“What we find very needed for us is access to micro-loans. The requirements for accessing loan in Liberia are high and many of us are unable to meet up with this. Therefore, if this made available, we can have a very fruitful business environment. Finance could be a major factor that could delay or prevent us from expanding our businesses. The second issue is the land space. There aren’t stable places given to us to sell. The third issue could be the constant harassment from the police or the city police”*.

Figure 16: Specific prospects in 5-10 years among informal workers



Petty traders pointed out limited access to financial services (80 per cent) as the key hindrance to obtaining prospects (Figure 17), which emphasised the need for access to financial support to enable the petty traders to realise their prospects for personal development and socio-economic integration. Waste-pickers highlighted limited access to health and safety equipment (94 per cent) as the major challenge that can stop them from realising their plans in future. The result indicates the need to prioritise access to equipment related to waste collection to allow waste-pickers to achieve prospects.

Figure 17: Challenges that would stop the informal workers from realising their plans



6. Summary and Conclusions

6.1 Engagement in income-generating activities among informal workers

A considerable proportion of the informal workers were not engaged in any economic activity, and unemployment was mainly attributed to lack of access to financial support. Results show the need for financial support for informal workers. Other minor challenges which were mentioned include business competition and lack of market, which denotes the need for marketing skills training among the informal workers.

6.2 Access to improved water sources

Our survey results indicate easy access to improved water sources among households in urban slum settlements in Greater Monrovia. On the other hand, the survey found inadequate water consumption among the households in the urban slums, which can be explained by inadequate supply of potable water mainly attributed to high population and irregular water supply. The results highlighted the existence of both demand and supply constraints, which should be addressed concurrently to improve supply of water. Weather conditions, especially during the dry season, was another factor noted during the qualitative interviews, which draws attention to weather-resistant mitigation measures.

Another indicator which requires attention is access to quality water; most households felt that the water from the main water sources wasn't safe to drink. The poor water quality was largely blamed on poor maintenance of the water sources. Results emphasise the need to mobilise the respective stakeholders responsible for maintaining the water sources.

6.3 Access to improved sanitation facilities

Survey findings indicate poor access to sanitation facilities among households in urban slum areas in Greater Monrovia. The survey also revealed challenges, including toilet system failure and high charges encountered while utilising the available sanitation facilities, that lead to open defecation at times. Paying attention to the above mentioned challenges could improve the sanitation conditions in urban slum communities.

6.4 Waste disposal and management

The survey found poor regular access to solid waste collection. Most households practice poor garbage disposal methods including wild disposal, burning, and dump in river or lake. Poor garbage disposal practices were commonly attributed to lack of dumping sites and inability to afford garbage collection charges. Results highlight the need to demand waste collection public services, streamline the waste collection charges, and enforce payment for waste collection services.

6.5 Access to and flow of electricity

Around half of the households that were surveyed had access to grid electricity. However, respondents highlighted poor electricity supply, which appears to be another indicator that requires attention to enhance the quality of electricity supply.

6.6 Access to road infrastructure

Most households use unpaved roads in their respective communities, and the roads were reportedly accessible. However, the survey revealed poor road maintenance such as lack of road or street lights and trenches along the roadsides. Some of the factors that contributed to the poor condition of the roads were lack of maintenance systems and households' use of roads for garbage or waste disposal. The results emphasised the need for road maintenance systems to improve the condition of roads in urban slum areas.

6.7 Petty trader working conditions and environment

The survey revealed easy access to social services, including storage and toilet facilities, among the petty traders, although both are accessible at a cost. The waste-pickers expressed their need for extra support to facilitate garbage collection. On the other hand, the survey revealed poor access to financial services among petty traders due to the unaffordability of requirements by the financial institutions.

Results also indicate that petty traders work under poor conditions and environment. For example, good proportions of the petty traders operated their businesses in open space without any movable or temporary shelter. Most had experienced harassment from the police within the six months prior to data collection. More than half stated that they had experienced theft of their goods.

Furthermore, survey results showed existence of gender and age differentials. For instance, males were more likely to conduct their business in open space, unlike their female counterparts. Female petty traders reported easier access to storage and toilet facilities. Theft of business goods was reported high among the female petty traders, contrary to among their male colleagues. Youth were less likely to have access to loan services and more likely to experience harassment from police than their colleagues who were older than 35. Such differentials need to be addressed to improve the working conditions among all petty traders.

Although most petty traders expressed positive prospects, a quarter were not sure of what exactly they would be doing in 5-10 years from the time of the survey, mainly because of limited access to financial services, poor access to space from where to perform their business, and harassment from police.

6.8 Waste-picker working conditions and environment

Half of the waste-pickers reported to have attended at least one meeting to discuss issues related to the working conditions, which revealed existence of freedom of expression of concerns related to work (to a certain extent).

However, results indicate poor working conditions and environment among waste-pickers. A good number of the waste-pickers experienced exploitation or harassment from intermediaries and reported to have fallen sick or been injured due to garbage collection, which was attributed to lack of access to protective items (gloves and boots). Majority highlighted customer refusal to pay for services, emphasising the need to enforce payment for garbage collection services among urban slum dwellers. Also, more than a quarter were denied access to recyclables and a quarter denied access to garbage.

7. Recommendations for indicator collection

Given weather changes and abrupt events, M& E should be done on a quarterly basis to ensure easy recall and cater to seasonality of events that might affect the main outcome variables. For example, irregular water supply due to weather changes, indicators related to water and sanitation, abrupt harassment by the police of the petty traders.

It would be beneficial to use both proportions and averages to report on indicators, especially related to water consumption. Average statistics depict an aggregate mean, while proportions provide the exact statistics. Water source functionality should also be monitored, since it was mentioned among the factors which partly contribute to water shortages.

Both quantitative and qualitative methods, especially observation, could be applied to capture certain indicators that are observable to understand processes and actual availability. For example, presence of garbage bins or number of garbage bins, or predefined land-fills that are added.

It is important to keep track of any community initiative or government and partner events that might be performed during the programme's life span. This would help in understanding the extraneous variables which can enhance programme success.

It would also be helpful to follow up with the Ministry of Public Works for road maintenance activities in slum/low-income areas of Greater Monrovia. This would help the programme track the kilometres of roads maintained in these areas.

Table 12 Indicator evaluability

NO	Indicator	Frequency of data collection	Method of data collection	Indicator Evaluability
1	Average proportion of households in slum/low income areas in greater Monrovia with access to improved water source	Quarterly	<ol style="list-style-type: none"> 1. Interviews: Use of questionnaires, FGDs and Key informant interviews 2. Observation 3. Document review 	Evaluation of the indicators is possible since information can easily be obtained from slum dwellers. Many studies have also been done to evaluate these indicators which aids triangulation of the Programme data.
2	Average proportion of households in slum and/or low-income areas in greater Monrovia with access to improved sanitation. facilities	Quarterly		
3	Proportion of street vendors and waste-pickers/CBEs in greater with improved working conditions	Quarterly		
4	Kilometers of maintained roads in slum/low income areas	Bi-annually	<ol style="list-style-type: none"> 1. Review of Documents 2. Observation 	Evaluation of this indicator will be challenging for the Programme. Data on kilometers of roads maintained in slum areas may not be available

5	Proportion of households in slum and/or low-income areas with regular electricity connection	Quarterly	<ol style="list-style-type: none"> 1. Interviews: Use of questionnaires, FGDs and Key informant interviews 2. Observation 	Evaluation of these indicators is highly possible. Information can readily be obtained from households in slum/low income areas and triangulated with secondary data sources.
6	Proportion of households in slum and/or low-income areas served by regular solid waste collection (either publicly or privately)	Quarterly	<ol style="list-style-type: none"> 1. Interviews: Use of questionnaires, FGDs and Key informant interviews 2. Observation 3. Document review 	

References

Cook. N., (2005), Liberia's post-war recovery: Key issues and development. CRS report for congress. Order Code RL33185. Monrovia, Liberia.

IMF (2012), *Liberia: Poverty Reduction Strategy Paper—Annual Progress Report*. IMF Country Report No. 12/45. N.W. Washington, D.C.

Liberia Institute of Statistics & Geo-Information Services (LISGIS) (2011), 2010 Liberia labour survey.

Liberia Institute of Statistics and Geo-Information Services (LISGIS), Ministry of Health and Social Welfare [Liberia], National AIDS Control Programme [Liberia], and ICF International. (2014), *Liberia Demographic and Health Survey 2013*. Monrovia, Liberia: Liberia Institute of Statistics and Geo-Information Services (LISGIS) and ICF International.

Liberia Institute of Statistics and Geo-Information Services (LISGIS), Ministry of Health and Social Welfare (MOHSW), National AIDS Control Program, and Macro International Inc. (2008). *Liberia Demographic and Health Survey 2007*. Monrovia, Liberia: Liberia Institute of Statistics and Geo-Information Services (LISGIS) and Macro International Inc.

ROL (2016), *National Budget, Fiscal Year 2016-2017*. Ministry of Finance, Development and Planning. Monrovia, Liberia. Available at <https://www.mfdp.gov.lr>

SIP (2013), *Liberia water supply, sanitation and hygiene: WASH Sector investment plan 2012 – 2017*. Detailed report, Vol 1. Monrovia, Liberia.

UNDP (2016), *Human development report 2016: Human development for everyone*. New York.

WHO and UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation (2012a), *Progress on Drinking Water and Sanitation: 2012 Update*. Geneva and New York: WHO/UNICEF. http://www.wssinfo.org/fileadmin/user_upload/resources/JMP-report-2012-en.pdf.