

# Digital Socio-Economic Impact Assessment of COVID-19 on the Informal Sector in Liberia

26 June 2022

## ACKNOWLEDGEMENTS

Owing to this study, Liberia has now achieved reasonable gap-closure and experience in conducting Digital Socio-Economic Impact Assessments (SEIAs) on sectoral informality. This befell with full-scale digital evolution and innovation for data capture. This Assessment was guided by the leadership of the Honorable Samuel Tweh (Minister of Finance and Development Planning) who commissioned the study and provided policy guidance in determining the informal sector's contribution toward the economy, effects of the COVID-19 pandemic and recovery strategies required to respond to its socio-economic impacts; Mr. Stephen Rodrigues [United Nations Development Programme (UNDP) Resident Representative]; and before him, Dr. Pa Lamin Beyai (former UNDP Resident Representative). Technical leadership and oversight were provided by the Honorable Augustus Flomo (Deputy Minister for Economic Management) and others. The report is the outcome of extensive consultation and analysis, with thanks to the enduring commitment and support of dedicated colleagues and consultants who collaborated on this assessment.

This Digital SEIA report was jointly supported by the UNDP Liberia Country Office, in collaboration with the UNDP SURGE Data Hub, situated within the Crisis Bureau's Country Support Management Team. The latter collaborated with the Assessment Working Group (AWG) in lending significant technical expertise in conducting digital assessments and during all phases of planning, questionnaire and sampling design, and data collection, visualization, and analysis; built capacity in the use of digital tools in Liberia; and developed the final report. The AWG, coordinated by a core team comprising Mr. Fohn T. Gborweah, Senior Economist/Chief of Office Staff, Department of Economic Management, Mr. Boima H.M. Sonii, Director of Economic Statistics, Liberia Institute of Statistics and Geo-Information Services (LISGIS), Dr. Ligane Sene (UNDP Economic Advisor, Liberia and Sierra Leone), and Mr. Stanley Kamara (UNDP National Economist) served as focal persons, steered the production of the report, designed the assessment instrument, coordinated field training and testing, data validation, and report's quality assurance, in collaboration with the Liberia Institute of Statistics and Geo-Information Services (LISGIS), Ministry of Finance & Development Planning (MFDP), members of the AWG, and UNDP SURGE Data Hub.

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This analysis, findings, and opinions presented within this Report do not necessarily represent the official positions of the United Nations Development Programme (UNDP) Liberia Institute of Statistics and Geo-Information Services (LISGIS), Ministry of Finance and Development Planning, nor the UNDP SURGE Data Hub.



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## ACRONYMS

AWG.....	Assessment Working Group
CBL.....	Central Bank of Liberia
CDV.....	Cumulative Distribution Function
COVID-19.....	Coronavirus Disease 2019
EVD.....	Ebola Virus Disease
GBV.....	Gender-Based Violence
GDP.....	Gross Domestic Product
GHI.....	Global Hunger Index
FAO.....	Food and Agriculture Organization
ILO.....	International Labour Organization
LGBTQI+.....	Lesbian, Gay, Bisexual, Transgender, Questioning, Queer, Intersex, Asexual, Pansexual, and Allies
LISGIS.....	Liberia Institute of Statistics and Geo-Information Services
MoL.....	Ministry of Labour
MSME.....	Micro, Small and Medium Enterprise
MVI.....	Multi-dimensional Vulnerability Index
OSH.....	Occupational Safety and Health
PAPD.....	Pro-Poor Agenda for Prosperity and Development
PFM.....	Public Financial Management
SDG.....	Sustainable Development Goals
SEIA.....	Socio-Economic Impact Assessment
SPSS.....	Statistical Package for the Social Sciences
UN.....	United Nations
UNCT.....	United Nations Country Team
UNDP.....	United Nations Development Programme
UNFPA.....	United Nations Population Fund
UN WOMEN.....	United Nations Entity for Gender Equality and the Empowerment of Women
USD.....	United States Dollar

## FOREWARD

As the COVID-19 pandemic struck Liberia in early March 2020, the Government of Liberia, United Nations Country Team (UNCT) and development partners undertook a 'Rapid Assessment of COVID-19 impacts and Roadmap for Recovery in Liberia'. This Rapid Assessment of the socio-economic impact of the COVID-19 Pandemic unravelled the expected socio-economic shocks and potential impacts of COVID-19 on human development, livelihoods, social protection schemes, governance, gender and human rights, and basic services. Though not exhaustive, the report focused on understanding the unfolding realities and potential consequences of the pandemic on the economic recovery and sustainability of the Liberia's development process. It also expounded on the dynamics of social, political, and economic issues, and highlighted the impacts of COVID-19 on the expected outcomes of ongoing and planned initiatives in achieving the socio-economic transformation of Liberia as desired in the Pro-Poor Agenda for Prosperity and Development (PAPD, 2018-2023) and the implication for achieving the Sustainable Development Goals (SDGs). The motivation for the study was not only to support response and recovery planning, but to determine the crisis' impact on the Liberian society, the economy and vulnerable groups.

Considering Liberia's current social, economic, and political dynamics, discontentment in informal settlement communities and rural areas could arise from the segment of the population that are either poor or vulnerably employed. The need for social safety nets to protect poor and vulnerable groups from pandemic-related economic fallout cannot be overemphasized. The lockdown and associated emergency measures, including the closure and disruption of normal business activities, immensely affected daily livelihoods of Liberia's populace, and disproportionately impacted women, girls and other vulnerable segments of the population working within the informal sector. Strategic interventions to protect livelihoods and ensure early recovery will not only allow businesses to recover quickly from the impacts of the pandemic but can empower vulnerable populations. Predicated within the Rapid Assessment, COVID-19 has had significant impacts on the ability of affected populations to continue to earn the minimal income required for subsistence, thereby leading to rise in food insecurity and undernutrition. At the macro level, economic slowdowns have affected the fiscal position of the Government and constrained spending on social services.

Notwithstanding the informative nature of the Rapid Assessment, it comprised of a limited number of face-to-face interviews with key informants, given that the outbreak was yet to be brought under control. It was therefore difficult to undertake a comprehensive Digital Socio-Economic Impact Assessment (SEIA) of the pandemic at a micro-level within any of the affected counties. While the pandemic's surge has receded, but not yet rendered to zero transmission, concerns are mounting over enduring social and economic impacts, including multidimensional implications and substantial loss of income and employment, to potential price gouging associated with shortages in the supply of goods. A deepened understanding of the COVID-19 pandemic's impacts on the informal sector will illuminate the various dimensions and complexity of the impacts at the local and national levels, concerning both the humanitarian and developmental dimensions of the outbreak. Conducting a digital study on the informal sector assessment was seen as a key imperative in deepening understandings of COVID-19's impact on this sector, as well as evaluating the sector's

contribution to the economy and livelihoods, and how best to foster sector's formalization, improve skills and reduce the shadow economy to support post-pandemic recovery.

To this end, a national study on the impacts of COVID-19 using digital tools was proposed with a focus on the informal sector, noting that a further study was expected by this time as vaccinations were made available, and containment measures further accelerated a reduction in COVID-19 infections and fatality rates. This study is commissioned at the request of the Honorable Minister of Finance with Technical lead of LISGIS and supported by the UNDP Liberia Country Office and UNDP SURGE Data Hub, in partnership with ILO, UNFPA, MoL, UNWOMEN, FAO, and a host of other agencies, constituting the Assessment Working Group (AWG). This group has provided substantive contributions to the quality of the assessment, including sources of information, reviews, inputs, and validation of draft reports, and constituted a key component of the overall quality assurance process to ensure a credible report has been produced.

**Honorable Samuel D. Tweah Jr.**

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## PREFACE

Following a collaborative and comprehensive journey in partnership with the Ministry of Finance and Development Planning (MFDP), the Liberia Institute of Statistics and Geo-Information Services (LISGIS), UNDP SURGE Data Hub and members of the Assessment Working Group (AWG) we are delighted that findings and practical recommendations have culminated into an assessment and report on the socio-economic impacts of COVID-19 on the informal Sector. For the first time in Liberia, this report provides primary data on the characteristics of informal businesses, how they are impacted by the COVID-19 pandemic, their coping strategies and recovery needs. It also provides the first ever measure of Multidimensional Vulnerability, while unraveling the untapped potential of this sector for inclusive development in Liberia. The insightful findings and reflections provide an illuminating perspective on the fragility and vulnerability of businesses in the country. Assessing and understanding the vulnerability of informal businesses can provide policy designers with tools to effectively prepare for, and respond to, future post-COVID-19 shocks.

Through this assessment, it is apparent how the vulnerability of the informal sector could have profound implications for overall economic and social developments, while undermining progress toward the sustainable development aspiration of leaving no one behind. The COVID-19 pandemic has gravely affected the informal sector and resulted in sharply rising unemployment rates and deepening income inequalities. The report comes with an online and easy-to-navigate interactive visual dashboard, which provides geo-spatial data to measure the characteristics of informal activities, including, but not limited to, enterprise profiles, access to basic services, coping strategies, and recovery needs, while capturing different aspects of vulnerability at a subnational scale.

As the primary sector for many poor and vulnerably employed, an increased investiture in programmes and strategies aimed at building the resilience of the informal sector, as well as the formalized registration of enterprises, should be a key priority investment. Whilst the unprecedented socio-economic impacts of the COVID-19 pandemic have been damaging to both the informal sector and Liberian economy more broadly, it also presents an opportunity to reflect on how to build back better and more resiliently. It is our hope that the recommendations, policy options, and strategies that are made within this report, in addition to the accompanying interactive visual dashboards, will assist policymakers in increasing their focus on the informal sector, as one of the most critical sectors for job creation and livelihoods of the population.

As the UNDP Country Office in Liberia, we are pleased to have partnered with MFDP, LISGIS, and the UNDP SURGE Data Hub to produce this first-ever report on a sector that contributes enormously toward the livelihoods of Liberia's rural and urban poor and cannot be ignored in any sustainable development intervention. If it is not sustainable, it is not development. We believe this rich set of data gathered from 13 of the counties in Liberia will be valuable for decision-makers and practitioners who will influence policy shifts and help tackle the problems faced by this sector for the acceleration of inclusive economic growth in Liberia.

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## 1 INTRODUCTION

The primary objective of the Digital Socio-Economic Impact Assessment (SEIA), initiated by the United Nations Development Programme (UNDP) and Government of Liberia, is to support the latter in designing and implementing effective and targeted measures to alleviate the negative impacts of the COVID-19 pandemic on households and micro enterprises in the informal sector. This exercise has used digital tools to collect, collate, and provide the most up to date baseline data on informal sector, and contribute to highlighting the importance and use of sound data on informal sector and informal employment including individual workers and Micro, Small and Medium Enterprises (MSMEs).

This will, in turn, enable the development of evidence-based and data-driven policymaking and programming, support the process of improving statistics about informality in the country, and create a network of national stakeholders advocating for, and contributing to, improving the measurement of the informal economy. Ultimately, results will uncover insights on including geographies, locations, operating amenities, reasons for engaging in the informal sector and its competitive environment, the impacts of COVID-19 and coping strategies and recovery needs, contribution of the informal sector toward Gross Domestic Product (GDP) and advance steps to reduce the shadow economy through formalization and support provided to the sector.

## 2 BACKGROUND TO THE SOCIO-ECONOMIC IMPACT ASSESSMENT

### 2.1 Country Context

The Republic of Liberia lies on the West African coast, bordered by the Atlantic Ocean to its south and southwest, Sierra Leone to its northwest, Guinea to its north and Côte d'Ivoire to its East. The country covers an area of 111,369 square kilometres and hosts a population of approximately 5 million people. Liberia's capital is Monrovia and accommodates almost 1 million of the country's populace. While English is the official language, the country's 20 indigenous languages are indicative of its ethnic and cultural diversity<sup>i</sup>.

Despite its favourable geographic location and abundance of natural wealth, Liberia is among the poorest countries in the world. While the latter includes iron ore, diamonds, gold, fertile soil, fishery, and forestry, the economic and financial potential of these natural resource assets remains largely unexploited.

Following a period of contraction over two consecutive years, Liberia's economy is rebounding. The country's Gross Domestic Product (GDP) was projected at 3.6% in 2021<sup>ii</sup>, signifying the increase of per capita GDP for the first time since 2016. As per capita consumption continues to contract, it is anticipated that poverty will increase. Despite its rebounding economic performance, inflationary pressures have weakened. By July 2021 inflation rates steadily decreased to 7.1%, owing to declining food prices and the Central Bank of Liberia's (CBL) monetary position<sup>ii</sup>.

During the first five months of 2021, Liberia's fiscal position progressed, owing to increased revenues and spending consolidation. While total revenues and grants improved to \$249.3 million, total expenditure was \$284.4 million, achieving a fiscal deficit of 1.1% of GDP or \$37.1 million<sup>ii</sup>. The country's legislature established a dedicated budget to fund fiscal operations from 1 July to 31 December 2021 under the Public Financial Management (PFM) act which required Liberia to align its fiscal year to the calendar year by 2022. Total revenues and grants were projected at 12.7% of GDP or \$429 million, between 1 July and 31 December 2021, with domestic revenue representing 70% of public resources<sup>ii</sup>. Total expenditure is projected at 13.6% of GDP or \$458.2 million, including but not limited to donor-financed projects<sup>ii</sup>, with current expenditure representing 60% of the special budget. The fiscal deficit of the special budget was projected at 0.9% of GDP and was expected to be fully financed by external loans.

It was previously forecasted that Liberia's account deficit would contract in 2021. The recovery in the price of main export commodities, on the back of renewed and growing international demand, has increased the value of exports and improved the trade balance.

Liberia's economy is projected to expand by an average of 4.9% across 2022-23. It is likely that growth will continue to be driven primarily by the mining sector and external demand. Further, increased activity in mining, agriculture and construction are anticipated due to structural reforms and it is expected that per capita GDP will revert to pre-COVID-19 levels by 2023<sup>ii</sup>.

The 2016 household survey data indicated that more than half the population (50.9%) was living in poverty<sup>ii</sup> and over 2.2 million Liberians did not possess basic food supplies. Of the latter, 68% resided in rural areas<sup>iii</sup>. Concurrently, 1.6 million lived below the poverty line, while 670,000 lived in extreme poverty<sup>iii</sup>. Historically speaking, the urban-rural divide has been exacerbated by the compounding effects of the Ebola crisis and collapse of global commodity prices. Poverty remains more than twice as high in rural areas (71.6%) as in urban areas (31.5% per cent)<sup>iv</sup>. The national headcount poverty rate increased to a projected 55.5% in 2019, signalling negative per capita GDP growth rates and rising inflation<sup>iv</sup>.

## 2.2 The COVID-19 Pandemic

The outbreak of the Coronavirus Disease 2019 (COVID-19) in December 2019 rapidly morphed into an unprecedented health, geopolitical and socio-economic crisis. With over 513 million confirmed COVID-19 cases and more than 6.2 million deaths worldwide<sup>v</sup> at the time of this report, the pandemic continues to have unprecedented and catastrophic effects in most countries, triggering severe economic downturns and leaving millions in need of assistance across the globe.

Over the past two years, various COVID-19 testing methods have been developed to diagnose the disease. While several COVID-19 vaccines have been approved and distributed in various countries, initiating mass vaccination campaigns. Alternative preventative measures include social distancing and working remotely, while the use of face masks has been recommended in public settings to minimize the risk of transmission. In comparison to the 65.5% of the world's population, only 15.8% of those in low-income countries have received at least one dose of a COVID-19 vaccine<sup>vi</sup>. While 8.77 million doses are now administered globally each day, only 15.8% of people in low-income countries have received at least one dose<sup>vii</sup>.

In Liberia, there have been 7,732 infections and 294 coronavirus-related deaths reported in the country since the pandemic began<sup>viii</sup>. As of April 2022, 1,124,277 people have been fully vaccinated within the country, and efforts are ongoing to increase vaccine uptake to reach a wider proportion of the targeted population<sup>ix</sup>. Namely, Liberia continues to undertake mass vaccination activities at both the community and national levels.

One of the hardest-hit countries by the Ebola Virus Disease (EVD), Liberia was still recovering from the health crisis that took thousands of lives and devastated the economy when the COVID-19 pandemic started. Liberians remain disproportionately vulnerable to the impacts of COVID-19 due to the country's political fragility, weak public health and social protection systems, and elevated levels of food insecurity and malnutrition<sup>x</sup>. The country was already confronted with a challenging economic environment characterized by high inflation, frequent and severe fuel shortages, decrease of electricity supply and high exchange rate in a dual currency economy<sup>xi</sup>. Due to COVID-19-related containment measures, the Liberian economy was projected to contract by 3% in 2020. This represents a sharp contraction, considering an earlier projected economic recovery of 3.2% in January 2020. IMF projections had estimated a modest recovery of 3.2% in 2021. World Bank estimates an increase in the population living under the national poverty line from 55.5% to 65.2%. An estimated 335,000 to 526,000 Liberians are at risk of falling into poverty due to COVID-19.



Accordingly, inequity will continue to widen, while deprivations faced by children in Liberia will multiply.

Akin to other countries, urban areas have been the epicenter of COVID-19 infections. Most cases in Liberia have emerged within Montserrado country, hosting the capital city of Monrovia in which one quarter of the country's populace reside. State-imposed containment measures have disproportionately impacted urban informal sector enterprises and workers<sup>xii</sup>. The urban informal non-farming sector has been heavily affected by social distancing policies and curfews, enforced to contain the spread of the disease. As most informal sector workers depend on daily economic activities, such as street selling within casual markets, spill-over effects from reduced economic activity overall have significantly impacted their livelihoods.

The unprecedented nature of the COVID-19 pandemic exposed the urgent need for increased multilateral collaboration and warranted an immediate international response to stabilize economies and capacities for resilience. The pandemic has exposed fundamental weaknesses within our global systems, having demonstrated how incidences of poverty, weak health infrastructure, inadequate education levels, and insufficient global cooperation have exacerbated the crisis. As such, this Digital SEIA report delineates the impacts of COVID-19 on the wellbeing and livelihoods of the informal sector in Liberia, to inform targeted programming and resource mobilisation by the Government of Liberia, UN (United Nations) agencies, and development partners to recover from the current crisis and ensure that no one is left behind.

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### 2.3 Classifying the Informal Sector

For the purposes of this Digital SEIA, informal sector laborers in Liberia are classified as such if they meet either of the following criteria:

1. Laborers working in businesses that are not registered; or,
2. Laborers working in businesses that:
  - a. Are not involved in agriculture; and,
  - b. Are not involved a privately owned company; and,
  - c. Are not a public institution; and
  - d. Possess the following attributes:
    - i. Employment is not based on a written contract; and,
    - ii. The business has less than 5 employees; and,
    - iii. The business does not pay social contributions (including pension and an unemployment fund); and/or does not pay annual leave or compensation for annual leave; and/or does not provide benefits for sick leave in case of illness.

To the layperson, the terms 'informal sector', 'informal economy', 'employment in the informal sector' and 'informal employment' might seem to be interchangeable; however, they are not. Within the statistical community, the application of accurate terminology is of critical significance, and nuances associated with each term remain extremely influential from a technical point of view.

The following serves as a reference for the terminology associated with informality and its technical definitions:

1. Informal economy  
All economic activities by workers or economic units that are - in law or practice - not covered or sufficiently covered by formal arrangements<sup>1</sup>.
2. Informal sector  
A group of production units (unincorporated enterprises owned by households) including “informal own-account enterprises” and “enterprises of informal employers”<sup>2</sup>.
3. Informal sector enterprise  
Unregistered and/or small-scale private unincorporated enterprises engaged in non-agricultural activities with at least some of the goods or services produced for sale or barter<sup>3</sup>.
4. Employment in the informal sector  
All jobs in informal sector enterprises (c), or all persons who were employed in at least one informal sector enterprise, irrespective of their status in employment and whether it was their main or a secondary job<sup>3</sup>.
5. Informal wage employment  
All employee jobs characterized by an employment relationship that is not subject to national labour legislation, income taxation, social protection, or entitlement to certain employment benefits<sup>1</sup>.
6. Informal employment  
Total number of informal jobs, whether carried out in formal sector enterprises, informal sector enterprises, or households; including employees holding informal jobs (e); employers and own-account workers employed in their own informal sector enterprises; members of informal producers’ cooperatives; contributing family workers in formal or informal sector enterprises; and own-account workers engaged in the production of goods for own end use by their household.

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## 2.4 The Informal Sector Landscape in Liberia

90% of Liberia’s populace work within the informal sector<sup>xiii</sup>. Informal employment, globally characterized by the lack of labor-based social protection, constitutes most of the employment in developing countries, and is underscored by level of vulnerability to poverty and other risks that are borne by all who are dependent on informal work income<sup>xiv</sup>.

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<sup>1</sup> Based on International Labour Conference 2002.

<sup>2</sup> Based on 15th International Conference of Labour Statisticians.

<sup>3</sup> Based on 17th International Conference of Labour Statisticians.

The Government of Liberia has taken decisive measures to enforce worker protection policies, including the June 2015 'Decent Work Act'<sup>xv</sup>, constituting the country's first labor law since the 1950s. Fundamentally, the Act delineates fundamental worker rights, and labour institutions and administration, and stipulates on recruitment and termination of work, minimum conditions of employment, OSH (Occupational Safety and Health), workers' compensation, industrial relations, and employment agencies<sup>xvi</sup>. The Act has set the basic standard for safe working environments and the collective-bargaining rights for workers in the informal sector. It has also sought to regulate standard minimum wages for skilled and unskilled workers respectively (\$5.50 and \$3.50 per hour, respectively) and paid leave benefits<sup>xvii</sup>. The law has succeeded in setting a standard for what constitutes a national minimum wage. However, given the dominance of the informal economy and women's overrepresentation within it, few experts perceive this as a far-reaching solution <sup>xviii</sup>. Informal sector workers remain subjected to elevated levels of poverty, food insecurity and illiteracy<sup>xix</sup>.

As in most countries around the world, women comprise most of these laborers. 74% of all female workers in Liberia are informal labourers, with 41% of university-educated women working informally, in comparison to 24% of university-educated men. Opportunities for increasing female informal workers' economic participation are hindered by a lack of access to credit and banking services, inadequate financial literacy, and business-related education, limited social protection or childcare schemes, safety concerns and poor sanitation within marketplaces <sup>xx</sup>. The Liberian government has made significant strides toward increasing economic growth and achieving economic parity, including enhancing protections for women's rights and opportunities within the workplace. Government policies have targeted moving women from the informal to the formal sector by means of adding value to women's businesses and enhancing education, financial inclusion, and capacity-building<sup>xx</sup>. However, gender equality within the workplace has yet to be achieved. Government personnel in the Ministry of Gender, Children and Social Protection have acknowledged shortfalls and continue to prioritize the development of policies that protect female informal workers while enabling their transition to the formal economy<sup>xx</sup>.

## 3 HOUSEHOLD THEMATIC ASPECTS

As the analytical components and findings of this report include, but are not limited to, themes including gender, livelihoods, youth and food security, a contextual overview of these foci have been provided herewith.

### 3.1 Gender

The extent of gender-related inequalities and developmental issues in Liberia varies according to the urban-rural divide, status, region, culture, and sub-cultures. Women are still limited in their participation in political processes, and LGBTQI+ people continue to face discrimination and hostility per law as well as within individual communities<sup>xxii</sup>. As of December 2020, only 41% of the indicators required to monitor gender-related advancements per the SDGs were available. Key gaps include labour market indicators, such as the gender pay gap and disparities in skills. Further, thematic areas including gender and poverty, women's access to assets such as land ownership, and gender and the environment, lack methodologies for regular monitoring and comparative statistics.

According to UN Women sources<sup>xxi</sup>, the adolescent birth rate in 2018 was 128 per 1,000 women aged 15-19 as of 2018, down from 150.3 per 1,000 in 2015. Meanwhile, as of February 2021, only 11% of seats in parliament were held by women. Women and girls aged 15+ spend 6.7% of their time on unpaid care and domestic work, as compared to 2.6% spent by men<sup>xxi</sup>.

Gender-Based Violence (GBV) remains widespread in Liberia. According to the 2019-2020 Liberia Demographic and Health Survey, 60% of women aged 15-49 years experienced physical violence and 9% have experienced sexual violence<sup>xxi</sup>. In 2018, 26.9% of women aged 15-49 years reported experiencing physical and/or sexual violence by an intimate partner within the past 12 months<sup>xxi</sup>. Less than half (42%) of women who have experienced physical or sexual violence have ever sought help. Women of reproductive age (15-49 years) also often face barriers with respect to their sexual and reproductive health and rights: despite progress, in 2020, 41% of women indicated needs for family planning with modern methods<sup>xxi</sup>.

It is noted that little to no other research has been carried out on the gender intersectionality especially on women with disability. More than often women with disabilities face double discrimination in service and labor force participation. Moreover, no research exists on humanitarian and developmental challenges faced by other gendered groups.

### 3.2 Livelihoods

The negative effects of unemployment, underemployment, and low productivity on economic growth have made employment the most urgent demand of the population and the top priority for Government action. Fourteen years of civil conflict (1989-2003) have destroyed Liberia's social and economic infrastructure. Labourers who came of age during the conflict are largely unskilled, and the supply of workers exceeds demand by a substantial

margin<sup>xxii</sup>. Employment remains a key for poverty reduction, with one in five workers unemployed or underemployed. The structure of Liberia's economy limits prospects for formal sector employment, with job growth in the formal sector are constrained by factors including the absence of labor-intensive public works programs and education and training opportunities.

According to UNDP sources<sup>xxiii</sup>, only two sectors of the economy currently provide income and livelihoods: agriculture and informal Micro, Small and Medium Enterprises (MSMEs), and these face a myriad of challenges. The agricultural sector continued to be constrained by low human capital, poor infrastructure (roads, access to energy, machinery, and technology), poor access to farm inputs, credit and extension services, weak policies that deter private investments, and a lack of trust among market actors to engage in bulk purchasing, storage and marketing<sup>xxiv</sup>. MSMEs, on the other hand are constrained by weak management, fragmented markets, limited diversification, high operating costs, limited access to capital and credit; limited skilled workforce, the absence of long-term planning, among others.

Forestry remains the fourth largest contributor to the economy after services, agriculture, and fisheries, mining, and planning<sup>xxv</sup>. In Liberia, half of the population lives within 2.5 kilometres of a forest. The formal forest sector contributes 10% to GDP and employs 39,880 full-time equivalent workers, of whom 35% are women<sup>xxv</sup>. Within forestry, a significant source of revenue is non-timber forest produce, providing gives sustainable livelihoods to the community while facilitating a harmonious co-existence with nature. Chainsaw milling provides up to 24,000 regular jobs and contributes each year, up to \$41 million, or 3-4% of GDP. Meanwhile, the charcoal industry employs up to 28,000 people on a regular basis<sup>xxv</sup>. Non-timber goods, including, but not limited to, fruits, honey, meat, nuts, and plants are vital to the livelihoods of most of the rural population. Upon the occurrence of environmental hazard events, such as droughts, fires or floods, forests provide a safety net, offering resources to recover from the shocks. Informal and largely unmeasured, forest activities provide an important source of jobs, income, and food security.

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### 3.3 Youth

While Liberia's economy has not fully recovered to pre-war levels (prior to 1989), its population continues to increase at an accelerated rate<sup>xxv</sup>. Liberia's youth, under 25 years of age, constitute 64% of the population, with most (60%) having not completed primary schooling<sup>xxiv</sup>. The country faces challenges owing to a significantly large youth population (with over 70 percent are below the age of 35), and a critical lack of job opportunities, resulting in high levels of vulnerability among its youth. Only 3.5 percent of youth ages 15-24 have stable jobs in the formal sector<sup>xxvi</sup>. The majority are employed in the informal sector, either as unpaid family workers or self-employed.

Within the past decade, the Ministry of Labor has adopted several policies to ensure that much greater economic and political opportunities are created for all Liberians especially young people<sup>xxvi</sup>. Policy interventions include the policies on "Youth and Labor Market in Liberia 2014" and the "National Employment Policy of 2009" among other policy instruments, to empower young people and enhance their productivity and contribution toward national economic development<sup>xxvii</sup>. However, despite these efforts, the necessity for

youth employment remains an enormous challenge for the country. Unemployment and underemployment among young people remain extremely high and interlinked with interrelated developmental challenges and the attainment of other rights.

### 3.4 Food security

Liberia is classified as a food-deficit country, with 16% of the country's population characterized as food insecure<sup>xxvii</sup>. Malnutrition and hunger worsened during the country's civil war and were further exacerbated by the 2014–2016 outbreak of the Ebola virus. Food insecurity has been further exacerbated by the economic and developmental consequences of Ebola epidemic and the COVID-19 pandemic.

Liberia ranks 112th out of 117 countries on the 2019 Global Hunger Index (GHI), comprised of an index consisting of a range of scores, from 0.0 - 50.0, where Liberia holds a score of 34.9. While the current score ranks the country's hunger levels as 'serious', it may soon fall into the higher tier of 'alarming'. Yet, according to the previous index scores, Liberia has consistently improved their conditions and lowered their GHI score by 13.7 points throughout a course of 19 years, from 48.6 in 2000 to 34.9 in 2019.

45% of Liberians are chronically or acutely malnourished<sup>xxviii</sup>, while over 30% of children under five years of age are stunted and 3% are malnourished<sup>xxix</sup>. Additionally, in the country's capital of, Monrovia, 45% of deaths of children under the age of five are due to a lack of food and being underweight<sup>xxx</sup>. Meanwhile, less than 10% of Liberians have access to safely managed drinking water and sanitation services<sup>xxxi</sup>.

Compounded by an alarming rise in poverty and persistently low agricultural production, the presence of COVID-19 has intensified food insecurity and health-related conditions in Liberia<sup>xxxii</sup>. Access to food products and services remains far from equal. Despite the efforts applied by the Government of Liberia in minimizing COVID-19's impacts across the country on food insecurity and health, the populace continues to experience significant food insecurity and poor health due to high unemployment rates and low purchasing power<sup>xxx</sup>.

## 4 METHODOLOGY

### 4.1 Sampling

In devising the sampling plan for Liberia's Digital SEIA on the informal sector, two sets of information were considered: 1) the number of households per county, and 2) the number of businesses by county. The latter was drawn from the 2017 economic census survey, in which 17,641 businesses were interviewed. Since the target population of the Digital SEIA is informal businesses, this number is restricted to Sole proprietorship and partnership businesses (N=17,113), which are likely to be informal businesses. With an estimate of 50,000 informal businesses in Greater Monrovia, the total number of informal businesses can be summed up as 67,113 businesses. This number leads to a minimum sample size of 6,145 businesses for 1% precision and 1,065 businesses for 2.5% precision.

The sampling strategy consisted of two-stages. In the first, 11 counties were selected with a probability proportional to the economic density, which is the ratio of the number of businesses to the number of households in the county. Assuming each county has  $N_i$  number of informal businesses and  $N$  is the total number of informal businesses, the probability of a county to be selected in the first stage is given by:

$$Prob_1i = 11 \times \frac{N_i}{N}$$

While household visits were used to reach informal businesses and business owners, the target population remains informal businesses. Hence, businesses were selected at the second stage in each county, with a sample size proportional to the minimum sample size of informal businesses to be interviewed. Assuming  $n_i$  informal businesses will be interviewed in each county  $i$ , the probability of a business being selected in the second stage is:

$$Prob_2 = \frac{n_i}{N_i}$$

Given that a two-stage sampling strategy has been adopted, the sample weights are obtained using the following formula:

$$W_i = \frac{1}{Prob_1 \times Prob_2} = \frac{N}{11n_i}$$

Table 1 presents the counties selected in the first stage, the minimum number of informal businesses to be interviewed in each county at the second stage, and the sample weights.

Table 1: Sample

County selected in the first stage	Number of households	Number of businesses	Min Sample size (1% precision)	Prob1	Prob2	Weight
Grand Bassa	47440	468	44	0.077	0.094	138.7
Gbarpolu	14533	124	12	0.020	0.097	508.4
Grand Gedeh	18143	487	46	0.080	0.094	132.6
Greater Monrovia	200934	50000	4740	8.195	0.095	1.3
Lofa	49642	599	57	0.098	0.095	107.0
Montserrado	31651	11837	1122	1.940	0.095	5.4
Nimba	80734	795	75	0.130	0.094	81.3
Sinoe	15829	511	48	0.084	0.094	127.1
Bong	69810	469	45	0.077	0.096	135.6
River Gee	9822	71	7	0.012	0.099	871.6
Margibi	45095	610	59	0.100	0.097	103.4
<b>Total</b>	<b>583633</b>	<b>65971</b>	<b>6255</b>			

## 4.2 Questionnaire

UNDP SURGE Data Hub's Digital SEIA 'Library of Questions' served as a critical resource in developing the questionnaire, which is broken down into 11 sections as shown in Table 2 below.

Table 2: Outline of the main questionnaire

Section	Description
A	ID and Location
B	Demographic Information
C	Employment Status
D	Status and organization of businesses/ services
E	Sales and Production
F	Labor
G	Financial Aspects
H	Household sources of livelihoods, and expenditures on materials and stocks
I	Household access to food and basic services
J	Household coping strategies and supports
K	Problems, prospects, and recovery needs



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### 4.3 Data collection

85 enumerators were recruited for data collection. Training activities were conducted in two phases. Phase one was implemented over the course of three days from 13-15<sup>th</sup> December 2021 to primarily provide an overview of the survey's content and its deployment on Kobo Toolbox, while facilitating an understanding of ethical considerations during data collection. Following phase 1 of the training, the questionnaire was revised in accordance with findings and experiences had during the training experience, in addition to from the assessment's stakeholders. The three-day refresher training between 19<sup>th</sup> to 21<sup>st</sup> January 2022 involved a one-day revision of the survey on Kobo Toolbox to familiarize enumerators with the revised questionnaire, followed by a two-day pilot test of the survey.

Upon fieldwork, enumerators were organized into 5 teams covering all counties included within the sampling plan. The fieldwork lasted for a period of 8 weeks between January 23<sup>rd</sup> to March 16<sup>th</sup>, 2022. Each field team were led by a supervisor, who assumed responsibility and oversight of fieldwork within each region. Supervisors were also responsible for daily briefing and de-briefing meetings to attain feedback on the fieldwork's progress and jointly work with team mates to resolve challenges. The field team worked closely with UNDP SURGE Data Hub who provided remote support in monitoring of the quality on in-coming data on Kobo Toolbox.

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### 4.4 Data cleaning

The data collected from Kobo Toolbox was cleaned using Microsoft Excel, following standard data cleaning protocols. The data was exported to Microsoft Power BI where weekly reports during data collection were visualized and published to verify the progress and quality of data being collected. Data was also exported to SPSS and Stata for further statistical analysis.

## 5 FINDINGS FOR INFORMAL BUSINESSES

### 5.1 General profile of the businesses

8428 workers have been assessed for the purposes of this assessment, of which **80% are informal sector workers** (Figure 1); namely, 6,729 informal workers or businesses. **This figure can be used in macroeconomic projections to estimate the contribution of the informal sector to the country GDP.**

Since the survey took place partly during the Christmas and New Year period, a question was introduced to identify the businesses that were created specifically to sell products related to these two events. 773 informal businesses appeared to be created to sell Christmas and new year products, of which 109 reported that the business will be closed after Christmas and new year celebrations (Table 3). To reduce seasonal influences, we excluded these 109 businesses from the larger analysis; ultimately, the latter constituted a sample size of 6,620 informal sector workers and businesses, on which sample weights were applied to ensure the generalisability of findings across the whole population.

Figure 1: Distribution of workers in the assessment

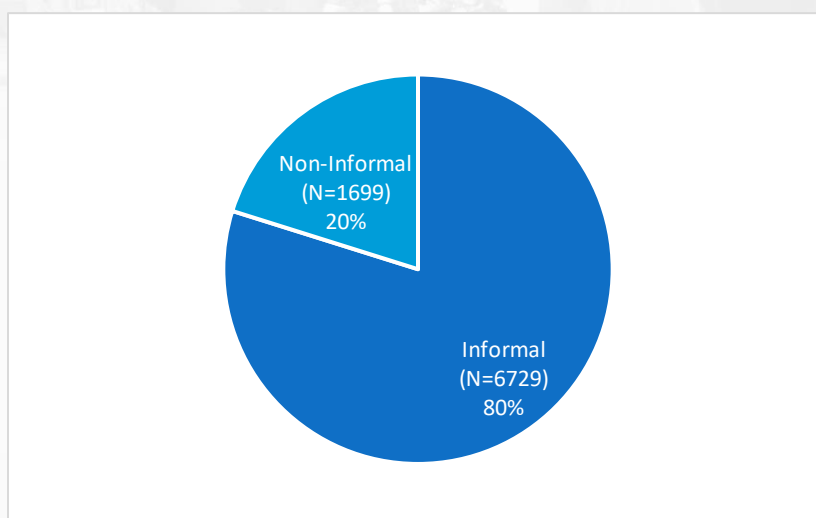


Table 3: Distribution of informal businesses by county

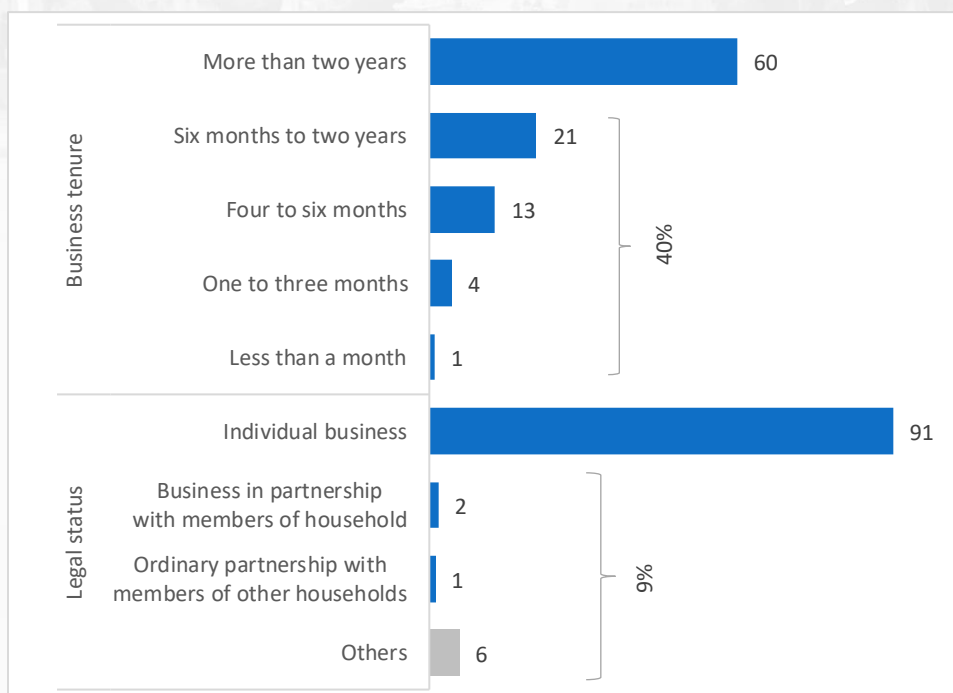
Location	Freq.	Percent	Cumulative
Lofa	3	0.04	0.04
Maryland	9	0.1	0.2
Sinoe	12	0.2	0.4
Grand Bassa	40	0.6	0.9
River Gee	41	0.6	1.6
Grand Gedeh	70	1.0	2.6
Bong	87	1.3	3.9
Margibi	103	1.5	5.4
Gbarpolu	105	1.6	7.0

	Nimba	106	1.6	8.6
	Montserrado	1,114	16.6	25.1
	Greater Monrovia	5,039	74.9	100
	<b>Total</b>	<b>6,729</b>	<b>100</b>	
<b>Business created for Christmas</b>	Yes, the business will be closed after Christmas and new year celebrations	109	14.1	14.1
	No, business will be permanent	664	85.9	100
	<b>Total</b>	<b>773</b>	<b>100</b>	

Most informal businesses, or 60% of those surveyed, have been operating for over two years (Figure 2). The remaining 40% are shared between informal businesses that are 6 months to 2 years (21%), 4 to 6 months (13%), and less than 4 months (Only 5%) of age.

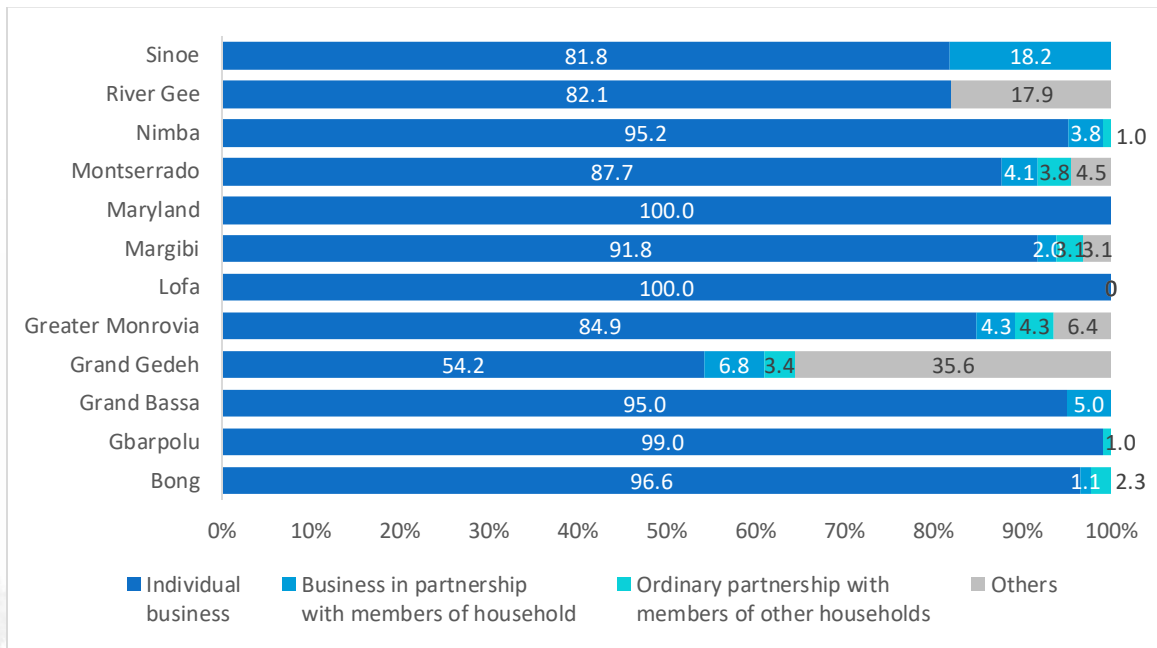
Figure 1 also illustrates that most informal businesses (91%) are individual businesses. Only 2% are in partnership with other members of the same household while only 1% are in partnership with members of other households.

Figure 2: Distribution of informal businesses by age and legal status



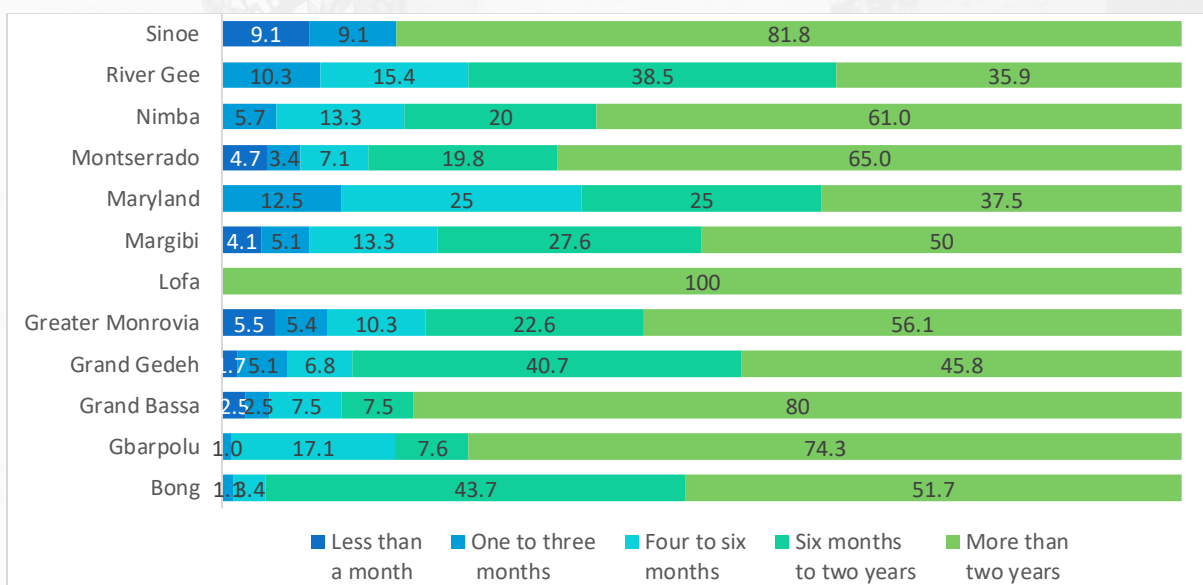
The trend observed at national level is confirmed at counties level in Figure 33, with most informal businesses being individual businesses, especially in Gbarpolu (99%), Bong (97%) and Grand Bassa (95%).

Figure 3: Informal businesses by legal status and county



While most informal businesses within the counties assessed are over two years old, some disparities exist; for example, a significant share of businesses is still younger in counties such as River Gee, Maryland, Margibi, Grand Gedeh, and Bong. In fact, 2 out of 3 informal businesses are less than two years old in River Gee and Maryland, while half of the businesses in Margibi are less than two years old (Figure 4). As for Grand Gedeh and Bong, the shares of informal businesses that are less than two years old are 54% and 48% respectively.

Figure 4: Informal businesses by age and counties



Regardless of the legal status, most of the informal businesses are over two years old (Figure 5). Upon examining businesses that are relatively younger, almost half (47%) of the businesses in partnership with members of the same household are still less than two years old, with 20% even aging one to three months (Figure 5).

Figure 5: Informal businesses by age and legal status

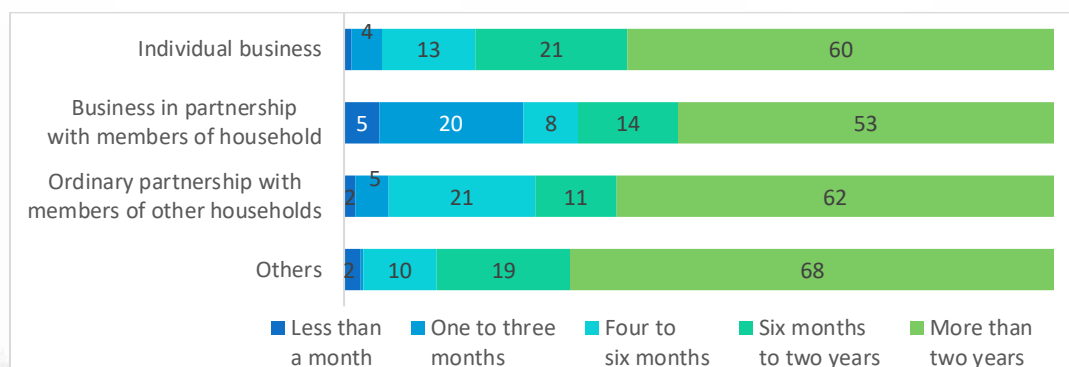
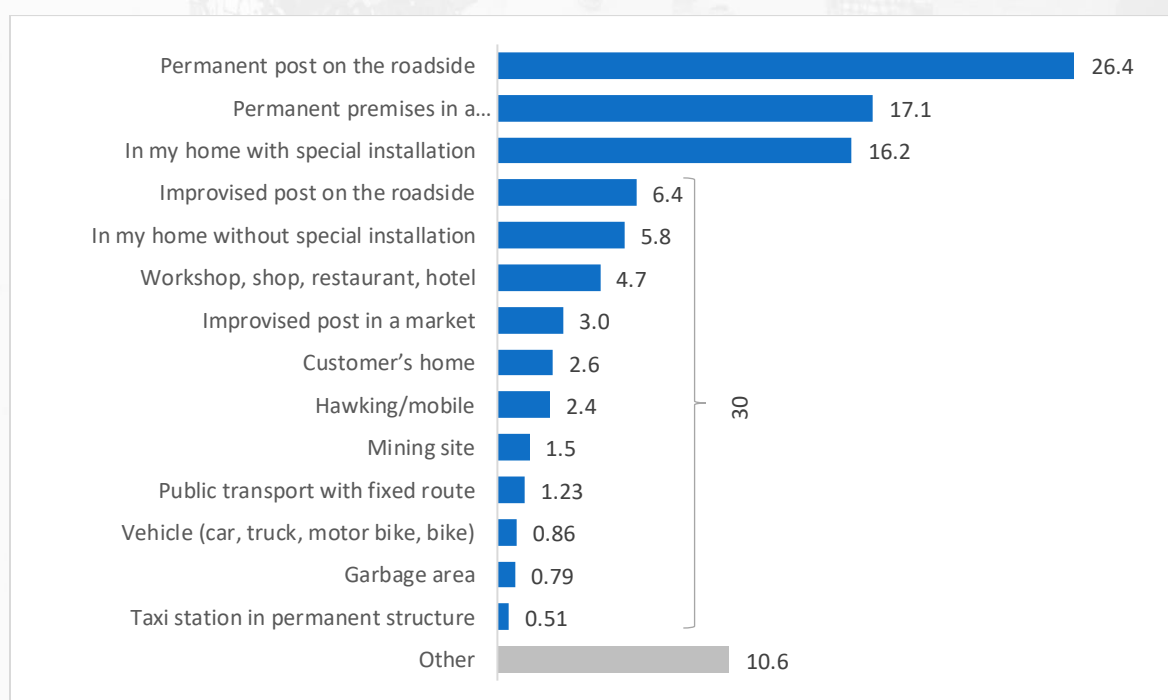


Figure 65 illustrates the distribution of informal businesses by type of premises. The top 3 premises used by informal businesses are permanent posts on the roadside (26% of businesses), permanent premises in a market (17%), and special installation in own home (16%). These figures indicate that most informal businesses in Liberia operate in a fixed location.

Figure 6: Informal businesses by type of premises



Disparities between counties can be seen in Table 4. In Bong, the two premises most used by informal businesses are permanent premises in a market (41%) and hawking/mobile (17%). In Lofa, the second most premises are workshop, shop, restaurant, and hotel (33% of the informal businesses).

Table 4: Type of premises by counties

	Bong	Gbarpolu	Grand Bassa	Grand Gedeh	Greater Monrovia	Lofa	Margibi	Maryland	Montserrado	Nimba	River Gee	Sinoe	Total
<b>Permanent premises in a market</b>	41	3	40	12	11	67	43	0	14	41	13	9	17
<b>Workshop, shop, restaurant, hotel</b>	1	0	18	0	8	33	15	0	3	7	5	0	5
<b>Taxi station in permanent structure</b>	0	1	0	0	2	0	1	0	1	0	0	0	1
<b>Public transport with fixed route</b>	2	0	3	0	1	0	2	0	2	4	3	0	1
<b>Mining site</b>	5	0	5	3	4	0	1	13	3	1	0	0	1
<b>Hawking/mobile</b>	17	0	0	0	4	0	0	0	1	18	0	0	2
<b>Improvised post on the roadside</b>	5	3	5	7	12	0	3	25	13	10	10	0	6
<b>Permanent post on the roadside</b>	5	56	8	15	13	0	2	25	21	8	13	9	26
<b>Vehicle (car, truck, motor bike, bike)</b>	3	0	0	3	2	0	1	0	1	5	0	0	1
<b>Customer's home</b>	2	1	5	2	5	0	6	0	3	1	5	0	3
<b>Home without special installation</b>	1	8	10	8	8	0	7	0	6	4	3	18	6
<b>In my home with special installation</b>	3	29	3	8	11	0	4	25	11	0	10	45	16
<b>Improvised post in a market</b>	3	0	0	3	3	0	4	0	3	1	10	0	3
<b>Garbage area</b>	0	0	0	0	0	0	0	13	2	0	0	9	1
<b>Other</b>	10	0	5	37	14	0	10	0	15	2	28	9	11
<b>Total</b>	100	100	100	100	100	100	100	100	100	100	100	100	100

Irrespective of the legal status of the informal businesses, the top 3 business operating premises are permanent roadside posts, permanent market premises, and special installation in own home (Table 5). However, the business premises mostly used by individual businesses and those in partnership with members of other households are permanent posts on the roadside, as 28% and 31% respectively. Regarding businesses in partnership with members of the same household, they mostly use permanent premises in a market (36%) for their business operations.

Table 5 also illustrates that most businesses created in less than a month (35%) operate from their home without any special installation, while those that are slightly older, more than three months, operate at permanent premises in a market or permanent posts on the roadside.

Table 5. Business premise by legal status and business tenure (in %)

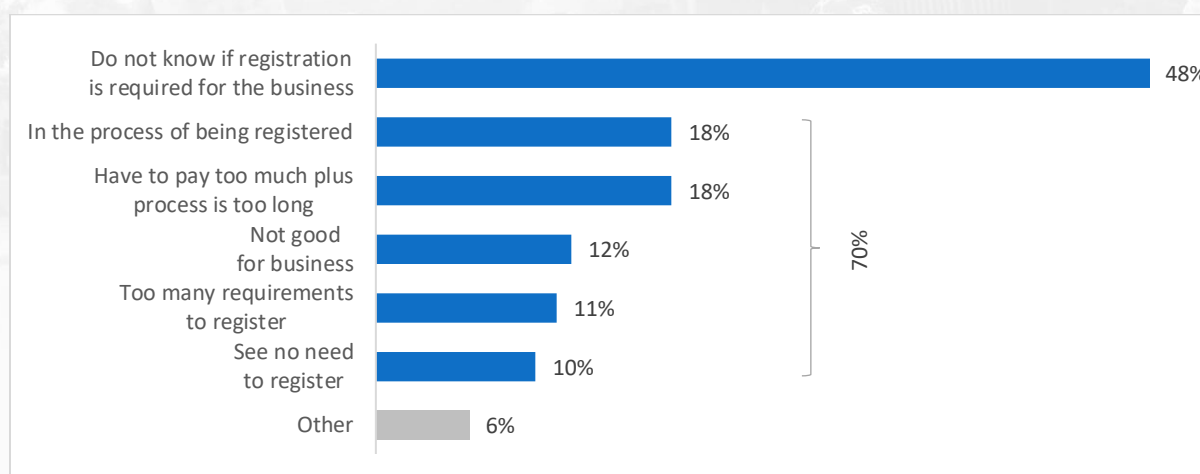
	Legal status					Business tenure					
	Individual business	Business in partnership with members of household	Ordinary partnership with members of other households	Others	Total	Less than a month	One to three months	Four to six months	Six months to two years	More than two years	Total
Permanent premises in a market	18	36	16	1	17	13	25	10	27	15	17
Workshop, shop, restaurant, hotel	5	8	7	0	5	2	3	3	5	5	5
Taxi station in permanent structure/	0	0	0	1	1	1	0	3	0	0	1
Public transport with fixed route	1	0	1	0	1	0	1	1	4	0	1
Mining site	1	0	0	2	1	1	2	0	0	2	1
Hawking/mobile	2	4	8	0	2	0	0	1	5	2	2
Improvised post on the roadside	7	7	3	0	6	10	15	9	4	6	6
Permanent post on the roadside	28	12	31	2	26	4	17	29	16	31	26
Vehicle (car, truck, motor bike, bike)	1	0	5	0	1	0	1	1	1	1	1
Customer's home	3	6	3	0	3	0	2	8	1	2	3
In my home without special installation	6	1	1	2	6	35	1	10	4	5	6
In my home with special installation	18	3	8	0	16	3	12	9	13	19	16
Improvised post in a market	3	5	6	1	3	8	12	5	3	2	3
Garbage area	1	17	1	0	1	0	7	0	2	0	1
Other	6	2	10	90	11	21	2	11	14	10	11
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

## 5.2 Business environment

Registration is one of the main criteria for classifying a business as 'informal'. The survey endeavoured to ascertain why informal business owners refrain from embarking upon the formal registration process. Findings are reported in Figure 7, which shows that a significant share of informal businesses (48%) do not know if formal registration is required for their businesses to operate. This is particularly prevalent in Montserrado and other counties, where 49% and 36% of the businesses are currently in the process of being registered (Figure 8).

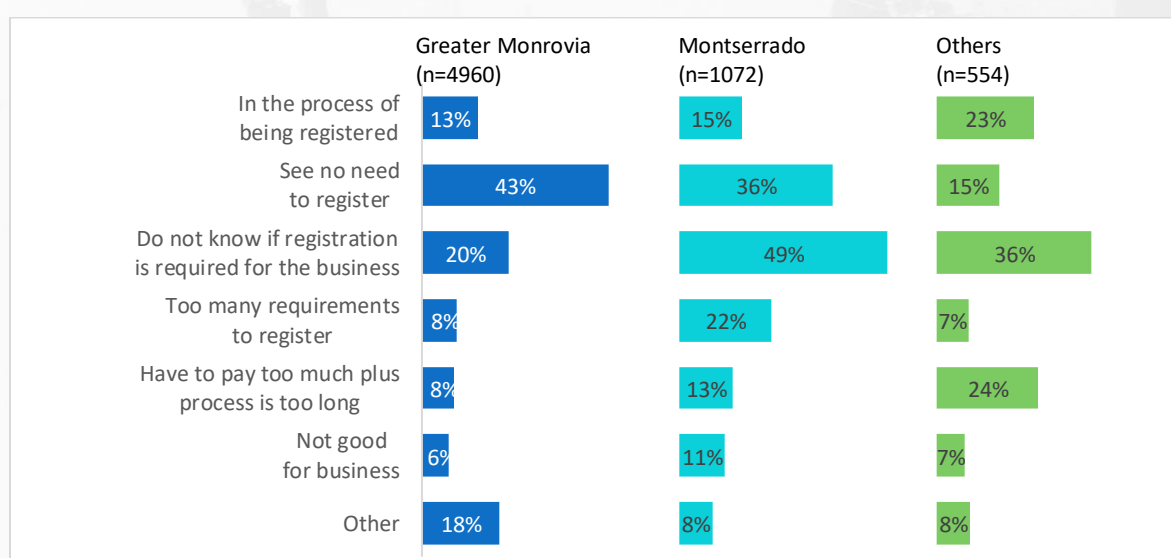
Across all counties, consistently 18% of informal businesses perceived having to pay too much to register, while the registration process is considered a lengthy process (Figure 7). This is noticeable in the rest of Montserrado and in other counties where 15% and 23% of the informal businesses argue that they must pay too much to register, while the registration process is also too long (Figure 8).

Figure 7: Reasons not registered



Note: Multiple selection

Figure 8: Reasons not registered by county





Note: Multiple selection

Upon asking informal business workers about the perceived advantages of registration, most (43%) reported that being registered would improve their access to loans or financial services (Figure 9). A significant share (35%) also think that registration will allow them to be eligible for other support. However, while one in four informal businesses expressed that registration would increase their chances of selling, or the business could be protected legally, one in four informal businesses see no advantages in being registered.

Figure 9: Advantages for being registered



In Greater Monrovia, for most informal businesses, registration will either increase their access to loans and financial services (41%) or improve their eligibility for other supports (33%) (Figure 10). While these two advantages are reported by informal businesses in Montserrado and other counties, another advantage for registration is found in addition to these two. In fact, 40% and 43% of informal businesses think that registration would increase their chance of selling in the rest of Montserrado and other counties, respectively. Figure 10 also illustrates that Greater Monrovia is the county where a higher share of businesses (31%) sees no advantage in being registered.

Figure 10: Advantages for registration by county

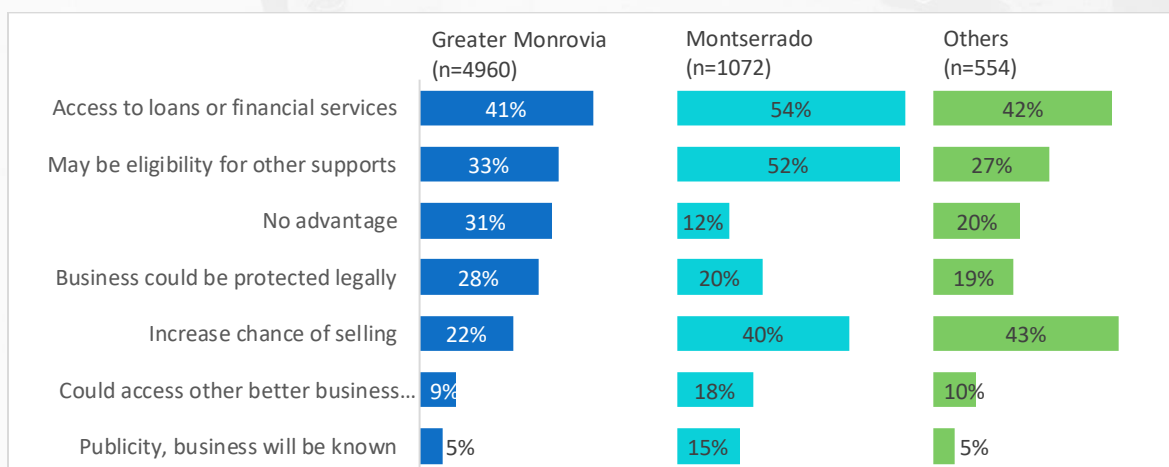
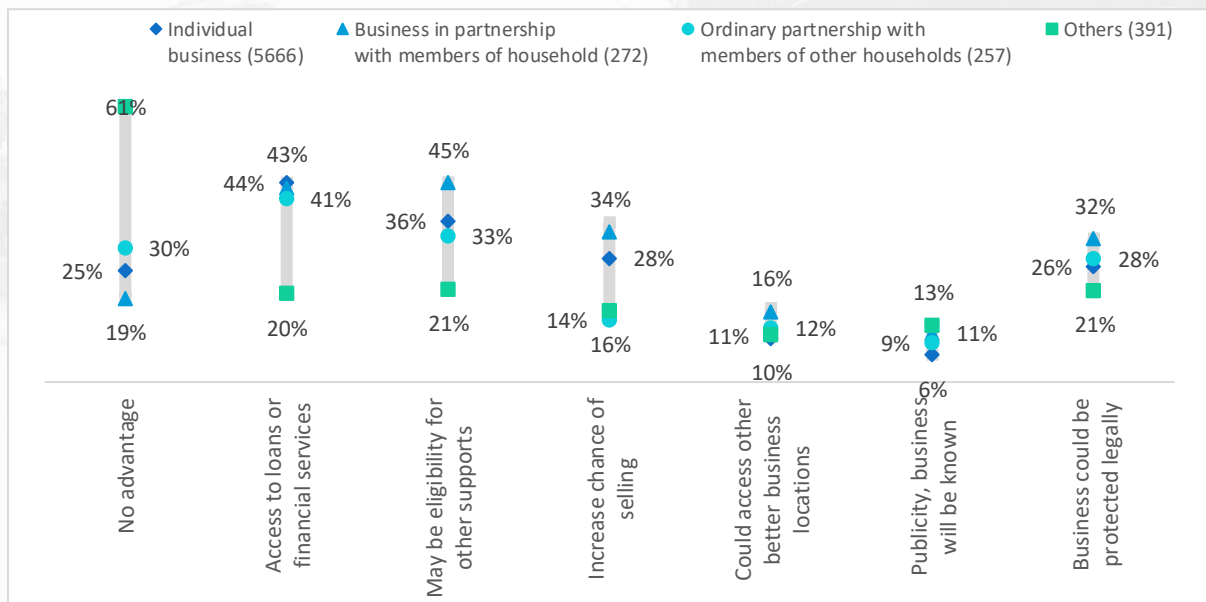


Figure 11 facilitates an understanding of the benefits of registration by the type of informal business. It illustrates that, apart from other types of businesses, businesses in partnership with members of other households are those that mostly see no advantage for registration in the counties assessed (30%), as compared to 25% for individuals' businesses and 19% for businesses in partnership with members of the same household. In terms of access to financial services, all three types of businesses equally consider registration as likely to increase their access to loans or other financial services. As for informal businesses that think registration will enhance their eligibility to other supports, the highest share (45%) is found among businesses in partnership with members of the same household. The same result is found for three of the remaining advantages listed in the survey; namely, increased chances of selling, access other better business locations, and legal protection for businesses.

Figure 11: Advantages for registration by legal status



Only a minority of informal businesses are in possession of a bank account. As shown in Figure 12, only 6% have a bank account, with most holding the account under their own name.

When disaggregated by county, it is found that the top three counties with highest shares of informal businesses that have a bank account are Nimba (30%), Sinoe (18%), and Maryland (13%) (Figure 13).

Figure 12. Share of informal businesses that have a bank account

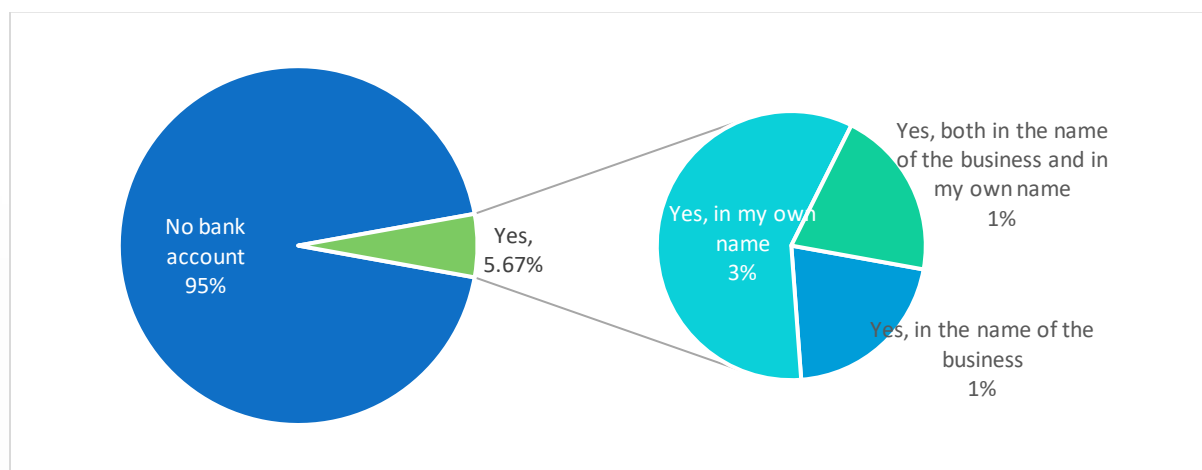


Figure 13: Share of businesses that have a bank account by county

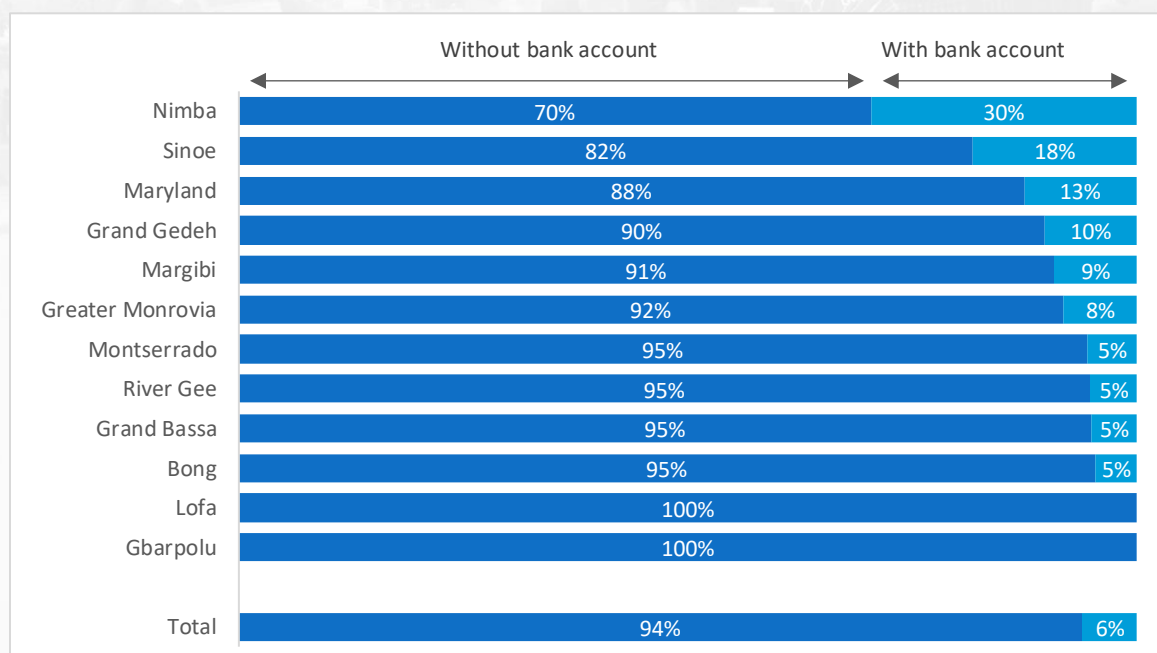
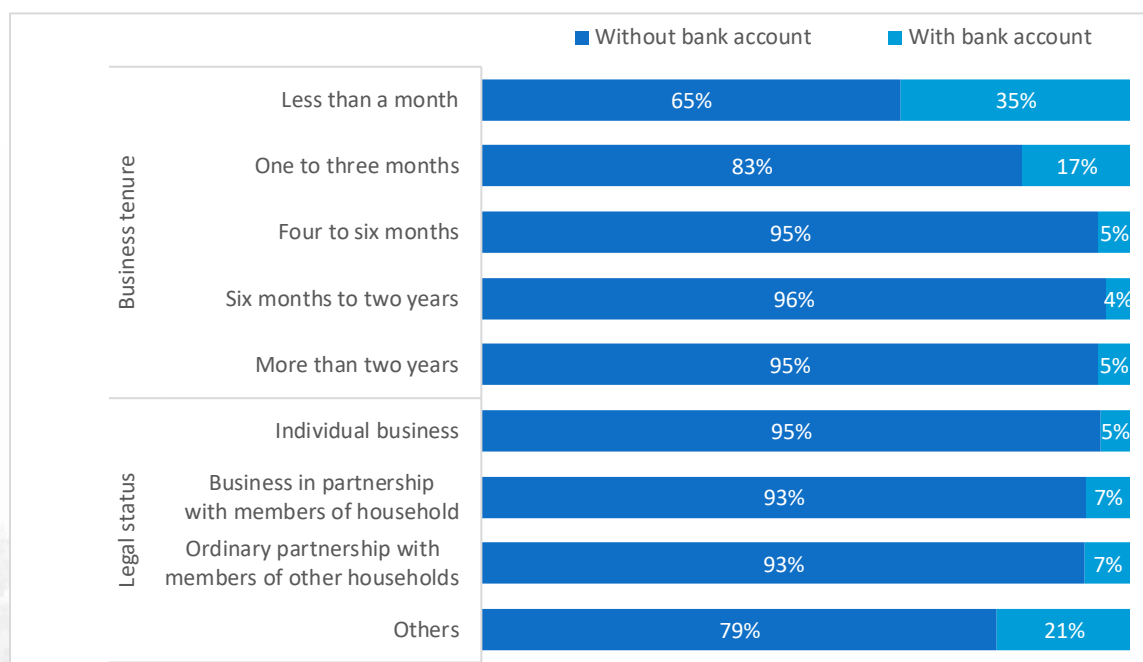


Figure 14 presents a negative correlation between a business' age and the ownership of a bank account; namely, the older a business is, the less likely it is to have a bank account. The share of businesses that have a bank account is higher among younger informal businesses, at 35% among those created less than a month ago, and 17% for those that have been operating for one to three months. Of businesses that are four to six months old, or are older than two years, only 5% have a bank account.

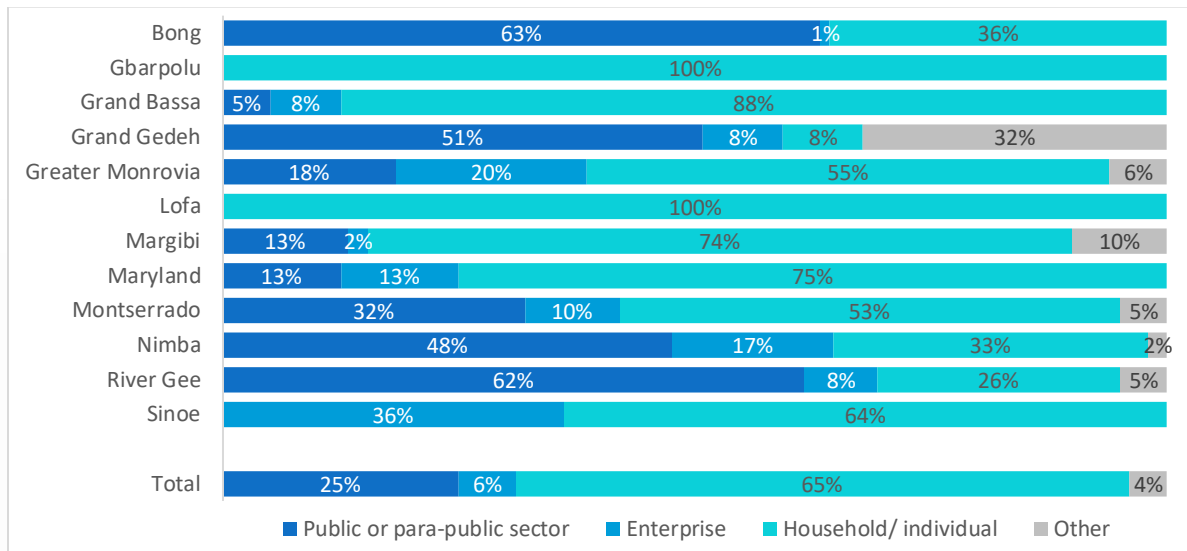
Save for other types of businesses which are not common in the informal sector, the most prevalent types of informal businesses have lower share of businesses that have a bank account. As shown in Figure 14, only 5% of individual businesses have a bank account, while 7% of both businesses in partnership with members of the same households and those in partnership with other households have a bank account.

Figure 14: Share of businesses that have a bank account by business tenure and legal status



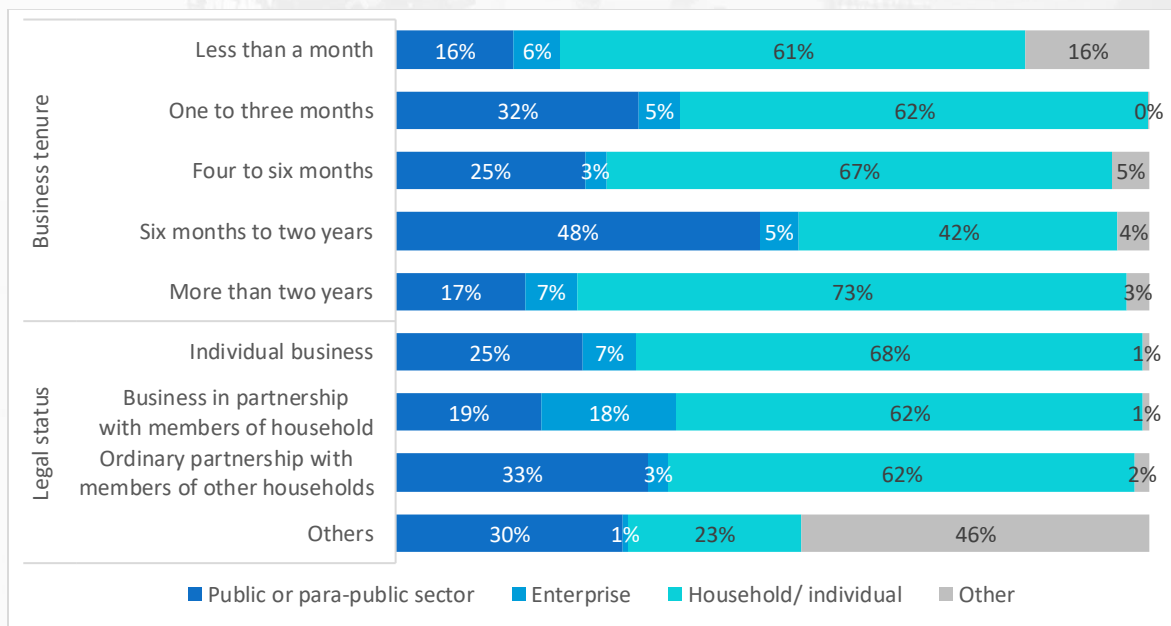
The main customers of informal businesses are households or individuals. At the national level, 2 in 3 informal businesses have households or individuals as main customers, followed by agents from public or para-public sectors (25% of informal businesses) (Figure 15). However, there are some differences at the county-level. While in most counties households and individuals are the main customers of informal businesses, in some including Bong, Grand Gedeh, Nimba, and River Gee, the main customers of informal businesses are public or para-public sector operators. As shown in Figure 15, the share of informal businesses for which public or para-public sector's operators are the main customers is 63% in Bong, 51% in Grand Gedeh, 48% in Nimba, and 62% in River Gee.

Figure 15: Main customers by county



Excluding businesses that are six months to two years of age, households or individuals constitute the main customers of informal businesses, when considering the age of the business. In fact, for over 60% of informal businesses that are either less than six months or more than two years of operating age, the main customers are households or individuals (Figure 16). However, for businesses that are six months to two years old, the two main customers are public or para-public operators (48%) and households (42%).

Figure 16: Main customers by business legal status and its tenure



Households and/or individuals constitute the main suppliers of informal enterprises. This is illustrated in Figure 17, which shows that almost 2 in 3 informal businesses have individual or household traders as main suppliers. Only 14% deal with small businesses, while a narrow 8% have large private companies as suppliers.

At the regional level, household or individual traders are the main suppliers for informal businesses in most counties, except in Greater Monrovia, Maryland, River Gee, Grand Gedeh, and Margibi (Figure 17). In Greater Monrovia, Maryland, River Gee, and Margibi, both households and small businesses are the two main suppliers of informal businesses. However, in Greater Monrovia, the share of informal businesses for which small businesses are the main customers (39%) is slightly higher than that for which households are the main suppliers (31%).

Figure 17: Main suppliers by county

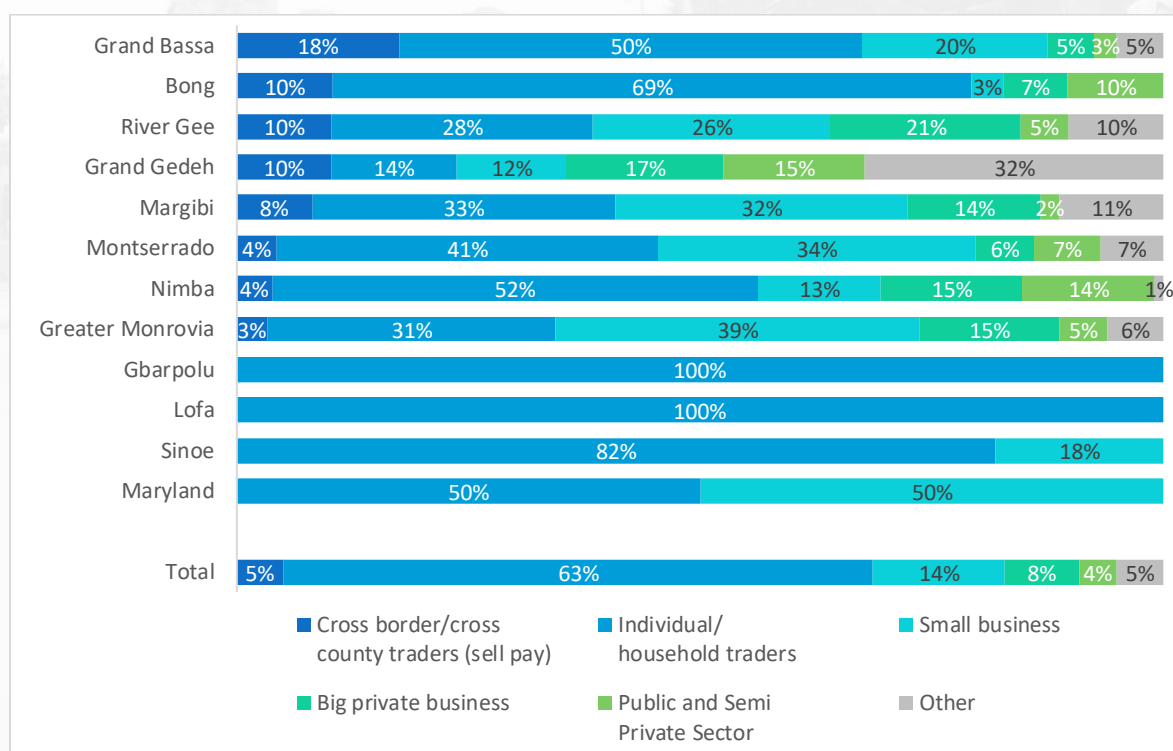
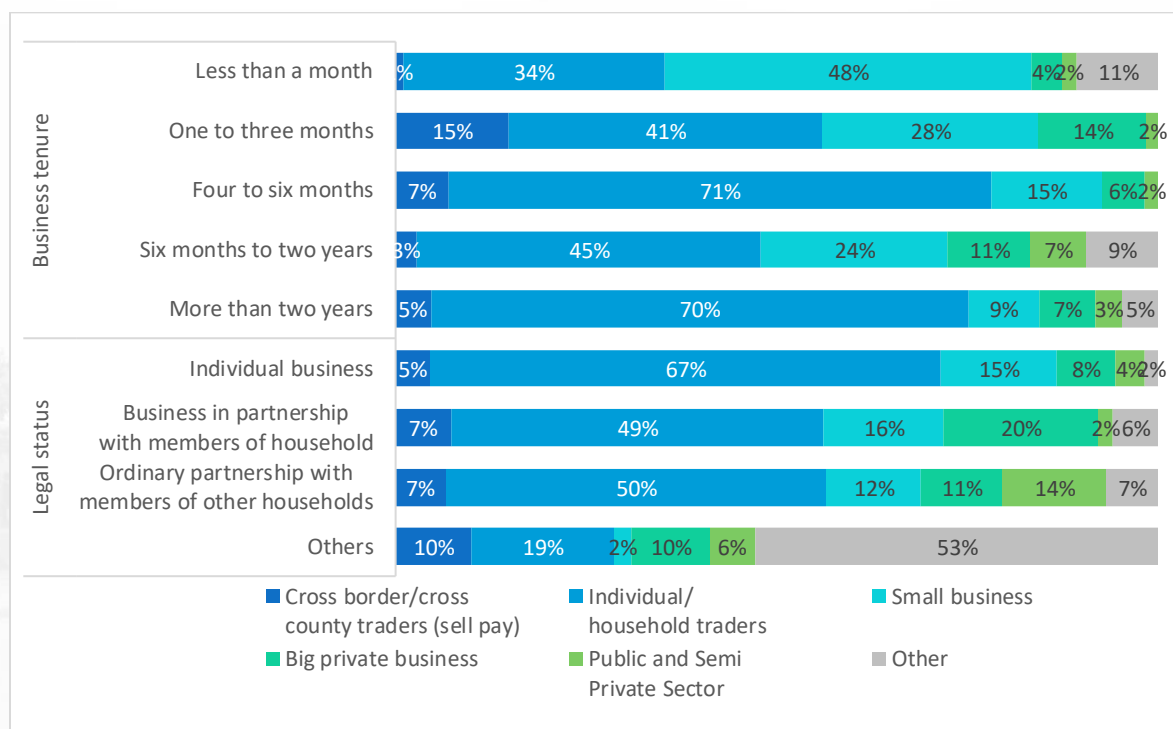


Figure 18 displays the main suppliers of informal businesses with regard to their legal status and their age or tenure. It illustrates that households or individual traders are the main suppliers of business that have been operating for more than a month. The share of businesses for which households or individuals’ traders are the main supplier is particularly higher among businesses that have operated for four to six months and those for over two years, at 70%. Surprisingly, almost half of businesses (48%) that have operated for less than a month have small businesses as their main supplier.

Households or individual traders remain the main suppliers for the three most prevalent types of informal businesses; namely, individual businesses, businesses in partnership with members of the same household, and businesses in partnership with members of other

households. However, individual businesses have the highest proportion of businesses (67%) that primarily deal with households or individual traders. It is noticeable that large private companies are the second suppliers for businesses that are in ordinary partnership with members of other households. 20% of them are supplied by large private companies.

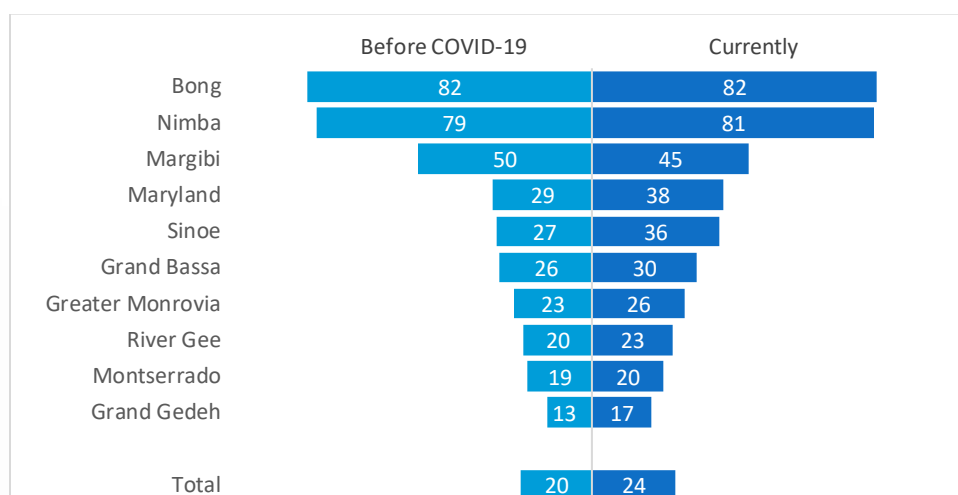
Figure 18: Main suppliers by business legal status and its tenure



One might expect the share of street peddlers to be higher among informal businesses, especially individual businesses. However, this assessment shows that only 20% of the informal businesses were street peddlers (Figure 20). While COVID-19 has resulted in some workers becoming street peddlers, the increase is only by 4 points of percentage. Bong has the highest share of street peddlers among the informal businesses, followed by Nimba and Margibi. There was no increase in the number of street peddler in Bong, in contrast to Nimba where there was an increase of 2 points of percentage and Margibi where there was a decrease of 5 points of percentage.

Across all counties, Maryland and Sinoe have encountered the highest increase in the share of street peddlers (+9 points for each).

Figure 19: Currently vs before COVID-19 street peddler by business location



Financial difficulties constitute the most prevalent type of challenges faced by most informal businesses (Figure 20). 84% have indicated financial difficulties as the greatest challenge since the outbreak of COVID-19. Only 7% experienced fewer clients, while a small proportion (3%) expressed too much control by state authorities.

These findings are consistent, irrespective of business tenure and legal status (Table 6), with financial difficulties being the greatest challenge faced by most informal businesses since the outbreak of COVID-19. However, the lack of customers constitutes a serious challenge for businesses in partnership with members of the same household; 27% of them are facing this difficulty. Meanwhile, businesses that have been in operation for under one month are also facing significant challenges in attracting customers, with 23% of them reporting a lack of customers. This may be because they are still not as well known by the public, given that they are only just beginning to operate within the market.

Figure 20: Top serious problems faced by informal businesses

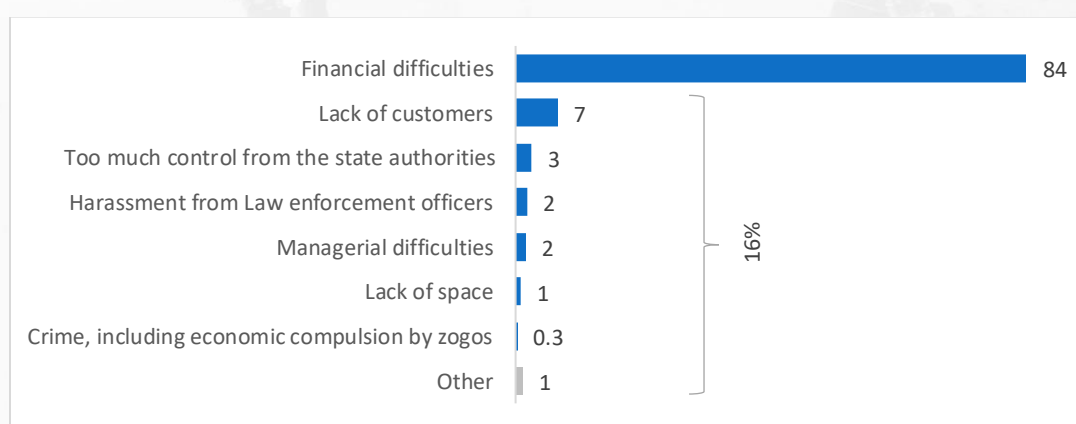




Table 6: Top serious problems by business legal status and its tenure

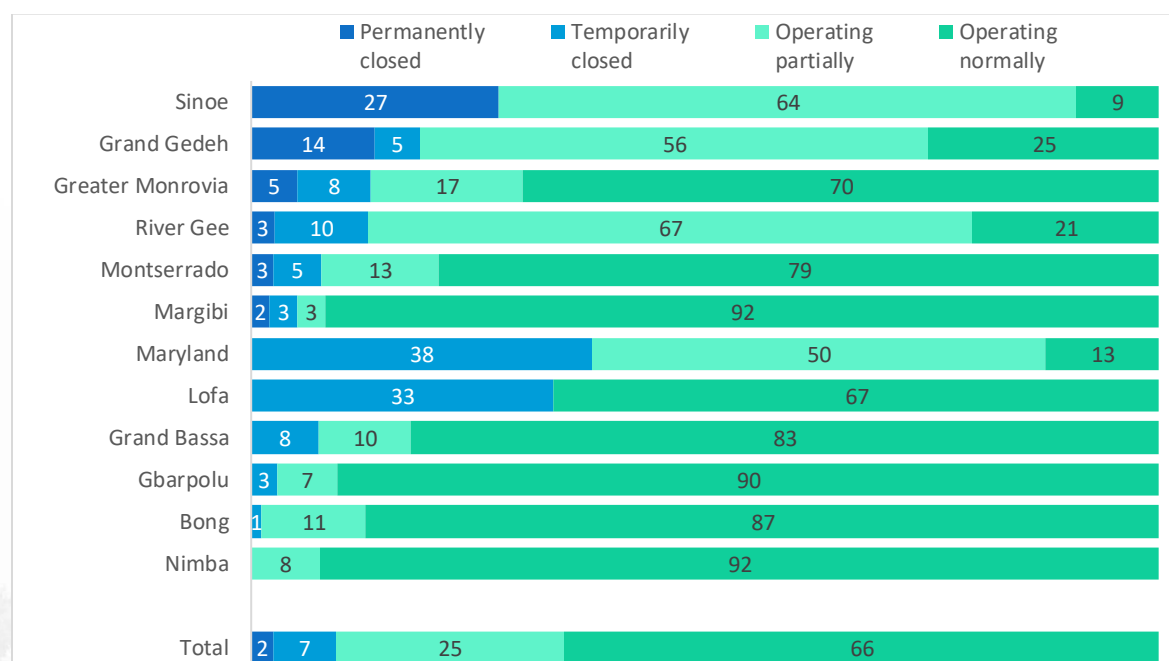
		Financial difficulties	Lack of customers	Lack of space	Harassment from Law enforcement officers	Too much control from the state authorities	Managerial difficulties	Other	Total
<b>Legal status</b>	Individual business	86	7	1	2	2	1	1	100
	Business in partnership with members of household	42	27	5	17	5	0	4	100
	Ordinary partnership with members of other households	75	11	0	1	0	1	11	100
	Others, specify	76	1	0	1	9	9	4	100
<b>Business tenure</b>	Less than a month	54	23	7	0	0	0	16	100
	One to three months	85	4	0	7	0	0	4	100
	Four to six months	93	3	0	0	0	1	3	100
	Six months to two years	87	6	1	1	3	1	1	100
	More than two years	82	8	1	2	3	2	1	100

### 5.3 Business operation

One of the main aspects covered within this assessment concerns business operations during the COVID-19 pandemic.

One question within the survey read, “currently, is your business or the business where you are working open, temporarily closed, or permanently closed?”, and was answered by the selection of one of four predetermined answer types. Figure 21 illustrates the status of businesses operating by business location during COVID-19. The highest share of businesses which are permanently closed are in Sinoe (27%), followed by those in Grand Gedeh (14%). On the other hand, the highest share of businesses which are temporarily closed are found in Maryland (38%), followed by Lofa (33%). In Nimba, no businesses are permanently nor temporarily closed (0%), constituting the highest rate of businesses operating normally (92%). Besides the case of Nimba, the share of businesses operating normally is relatively high in Margibi (92%), Gbarpolu (90%) and in Bong (87%). It seems that closed businesses correlate with those which operate partially. Thus, businesses located in River Gee (67%), Sinoe (64%), Grand Gedeh (56%) and Maryland (50%), reflect the highest share of businesses operating partially. In short, most businesses operated either partially or normally across all counties (91% = 25% + 66%).

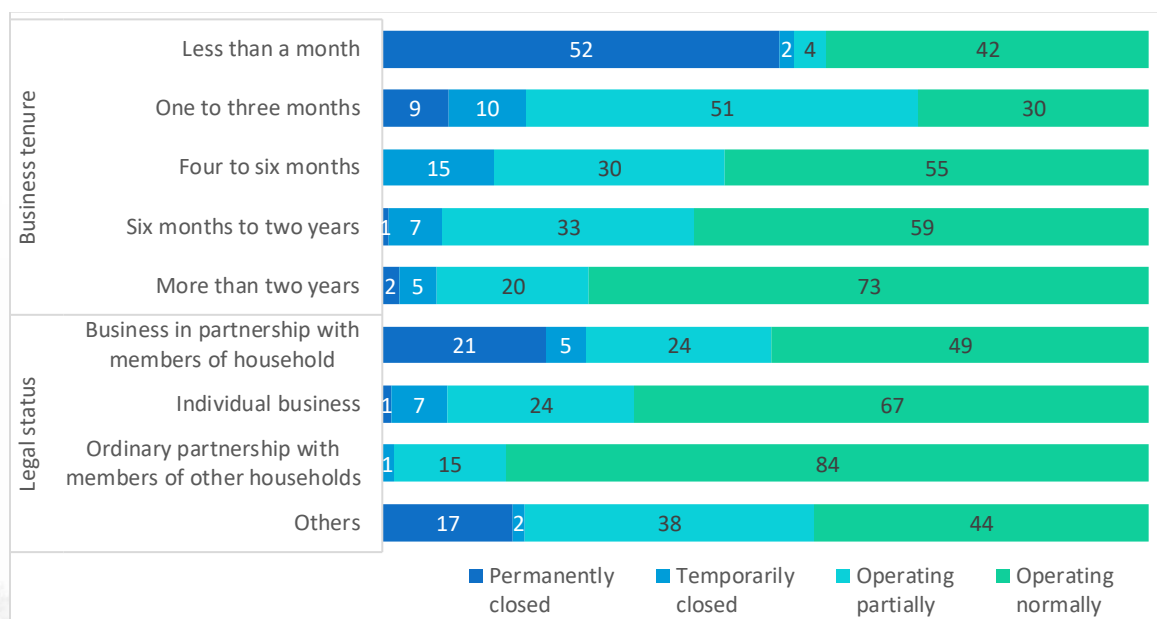
Figure 21: Business operating by business location



The operation of businesses during the COVID-19 pandemic has been analysed by considering the business' legal status and tenure (age). This analysis is plotted in Figure 22. The figure below illustrates the case of legal status and business operation. Currently, the most affected businesses are those in partnership with members of the household, reflecting the highest share of businesses that are closed (26% = permanently, 21%; temporarily, 5%). On the other hand, ordinary partnerships with members of other households have the highest share of businesses operating either normally (84%) or partially (15%). Less than 10% of the individual businesses have closed the activity either permanently or temporarily.

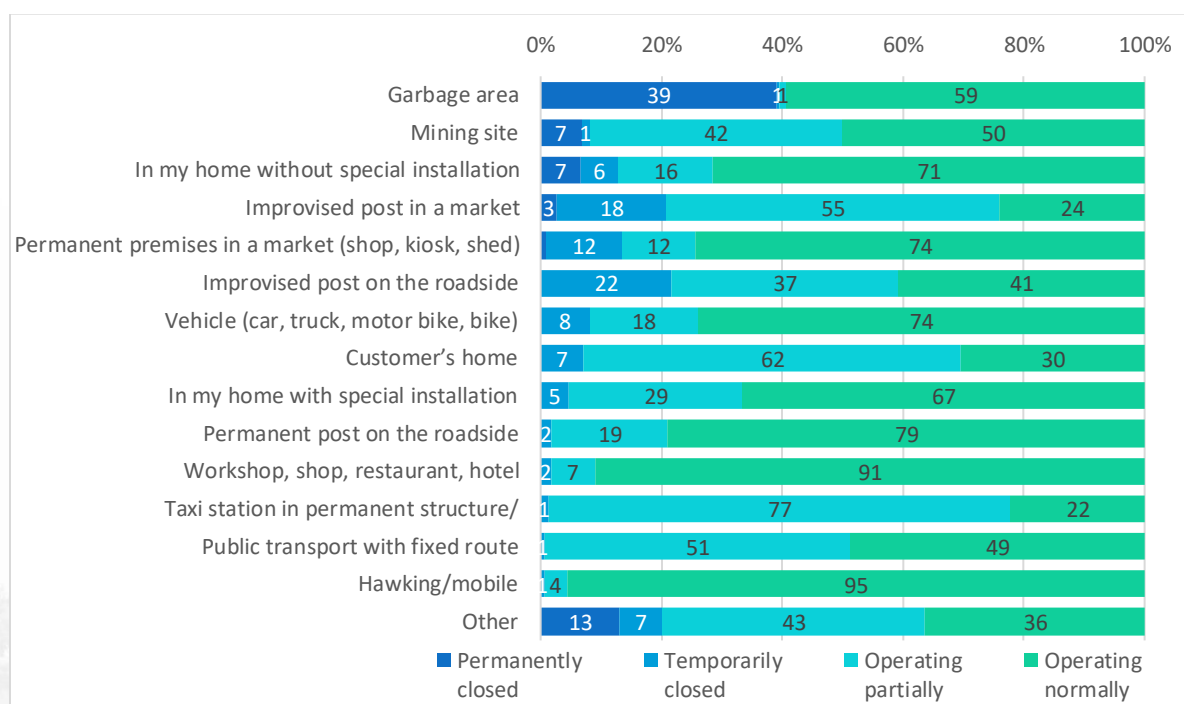
Regarding business operation across the categories of business tenure (age), the most affected businesses are those that have been in operation for less than one month. The figure shows that currently most of these businesses are closed (52% permanently and 2% temporarily). In this context, the second most affected businesses are those which have one to three months operating in the market. The assessment shows that one out of five businesses which have one to three months operating in the market are closed (19% = 9% permanently + 10% temporarily). It seems that businesses which have experience in the market are less affected by the COVID-19 pandemic, as compared to those that are young in the market. Thus, the results show that most businesses with four or more months of experience operated partially or normally during the pandemic (see Figure 22). In addition, nine out of ten businesses with more than two years in the market operated partially (20%) or normally (73%).

Figure 22: Business operating by business legal status and its tenure



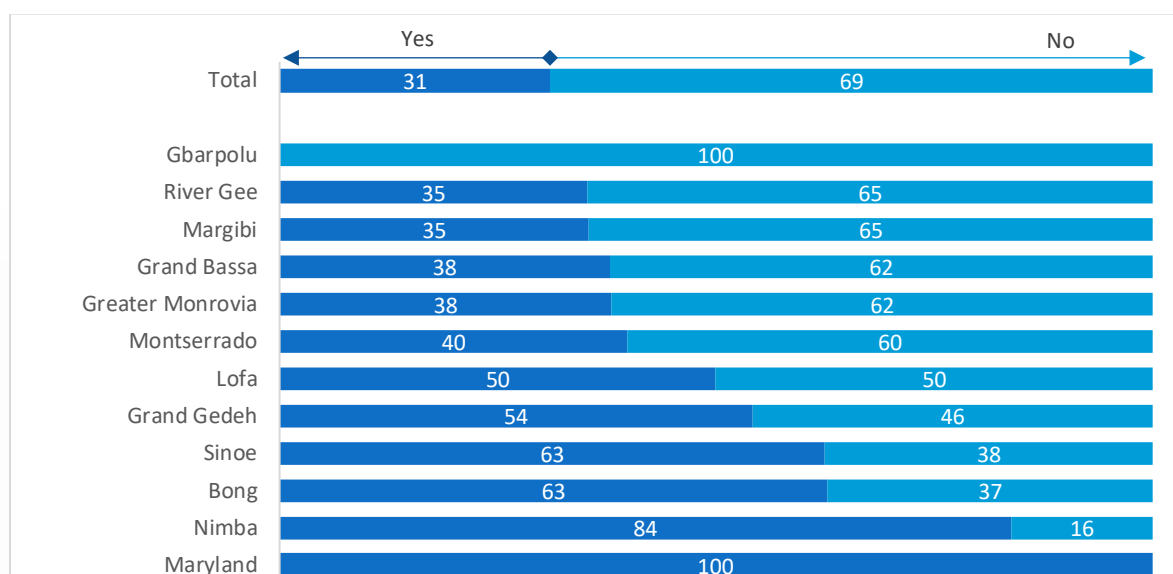
In addition to the analysis of businesses’ operating by business location, legal status and its tenure, below is a crosstabulation of business operation by business premise (see Figure 23). This assessment finds that businesses that have as garbage areas as their premises are most affected by the COVID-19 pandemic, since two out of five such businesses are permanently closed (40%). This figure is a considerable one. Businesses with premises such as “mining sites” and “in my home without special installation” constitute the same rate of permanently closed, which is 7%. Businesses with premises like “permanent spot on the roadside”, “workshop, shop, restaurant and hotel”, “taxi station in permanent structure”, “public transport with fixed route” and “hawking/mobile” exhibit the highest share of businesses which currently operate either partially or normally, which is almost 100%.

Figure 23: Business operating by business premise



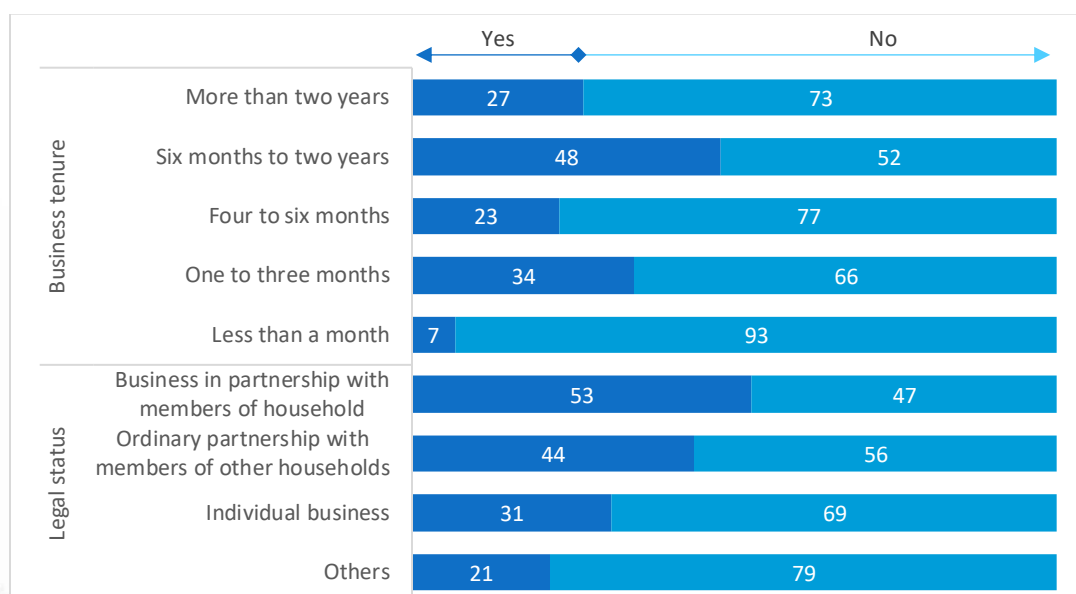
One of the questions included within the survey points to businesses closed temporarily because of the COVID-19 pandemic. The question reads “did your business or the business where you are working close temporarily since the COVID-19 outbreak?” and it has two options: “Yes” or “No”. The results of the assessment show that one out of three businesses were closed temporarily (31%). In Maryland, all businesses were temporarily closed because of COVID-19, while businesses operating in Gbarpolu did not close at all (0%). Figure 24 illustrates this information for all other locations included in this assessment. Hence, four in five businesses operating in Nimba closed temporarily following the outbreak of COVID-19, followed by those operating in Bong and Sinoe (63% each). On the other hand, businesses operating in River Gee and Margibi reflect the lowest share of businesses closed temporarily due to COVID-19 (35%).

Figure 24: Temporarily closed because of COVID-19 by business location



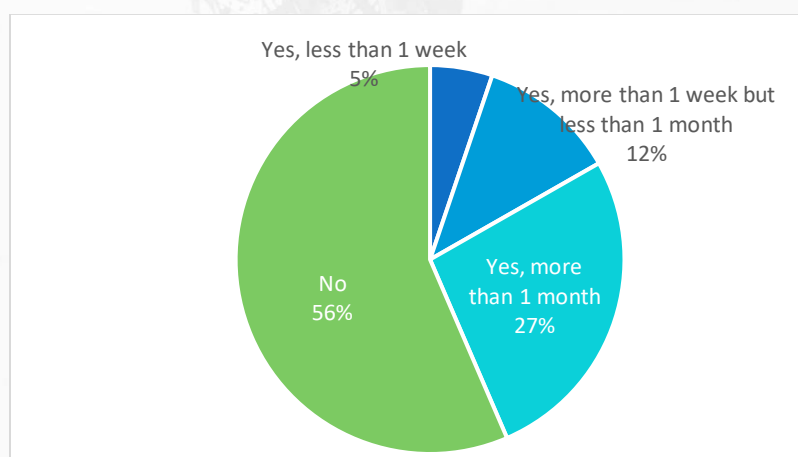
Information on business that were temporarily closed during the COVID-19 pandemic is disaggregated by business legal status and its tenure (see Figure 25). Businesses in partnership with members of their households reflect the highest share of those which were temporarily closed because of COVID-19 (53%), half of the businesses in this category. The second category of legal status which has a higher share of temporarily closed businesses is ordinary partnership with members of other households (44%). Regarding business tenure, no evidence of a positive correlation with temporarily closed businesses was found. Thus, the highest share is found in case of businesses operating in the market for six months to two years, with almost half of them temporarily closed because of COVID-19. The second in the order is held by those with one to three months (34%). Less than one in three businesses with more than two years operating in the market was temporarily closed because of COVID-19 (27%).

Figure 25: Temporarily closed because of COVID-19 by business legal status and its tenure



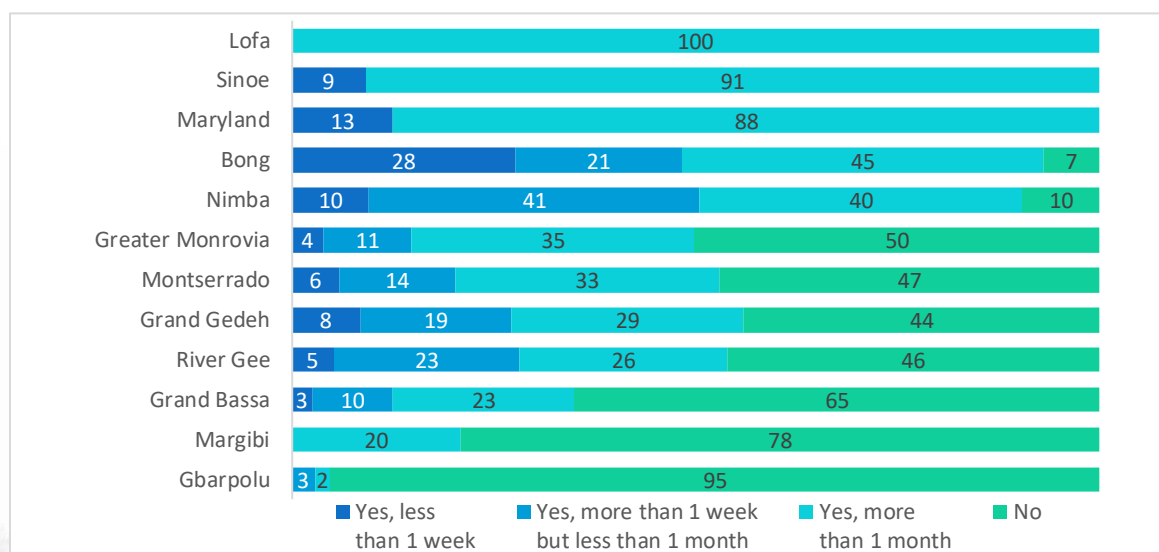
The above information does not offer a full picture over the impacts of COVID-19 on businesses' operations. It lacks information on the intensity of the COVID-19 pandemic's impacts. Such knowledge gaps are filled by asking the respondents about the length of time that a business closed (i.e., ceased operating) during the COVID-19 pandemic. Figure 26 illustrates this information. Almost half of the businesses closed at least for one week (44%). Less than one in three businesses ceased operations during COVID-19 (27%).

Figure 26: Length of closed businesses activity



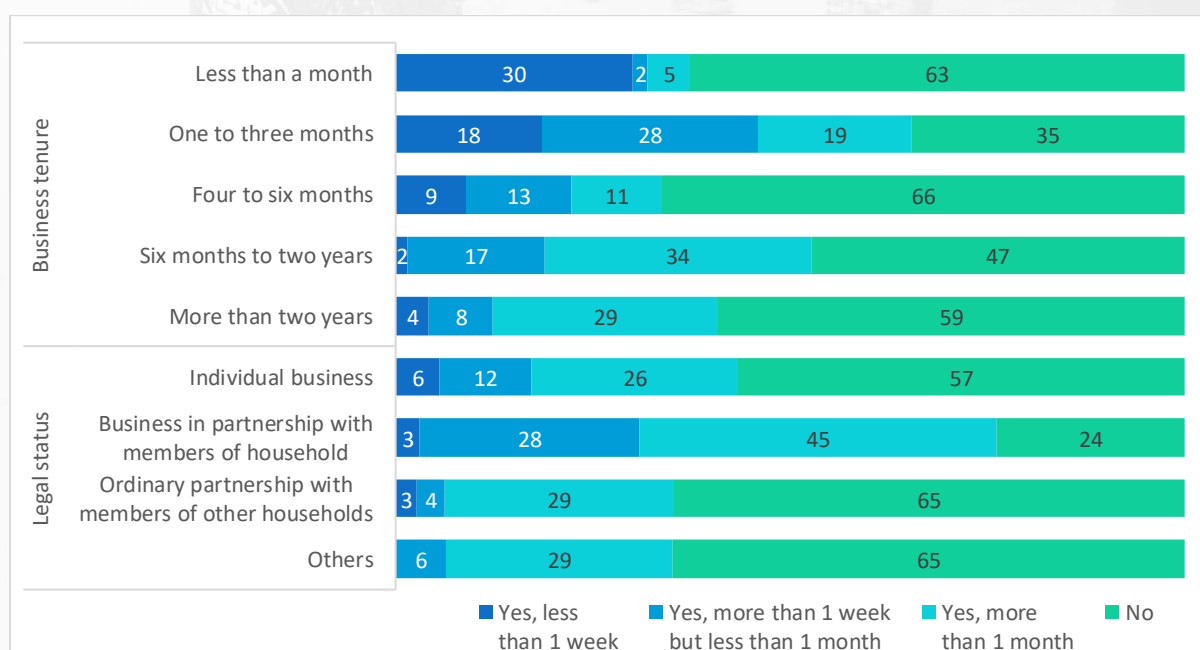
Information on the length of closed business activity is disaggregated by business location, as shown in Figure 27. It is interesting that businesses in Lofa have all been closed for more than one month. The second and third in the list are Sinoe and Maryland, where nine in ten businesses stopped their activities for more than one month. The lowest shares of closed businesses are found in Gbarpolu (5%) and Margibi (20%).

Figure 27: Length of closed businesses activity by location



The disaggregation of businesses which have been closed for some time during COVID-19 by business tenure and its legal status is illustrated in Figure 28. Businesses that operate in the market for six to two years are those which reflected the highest rate of closed business activity for more than one month (34%), followed by those with more than two years of activity (29%).

Figure 28: Length of closed businesses activity by legal status and its tenure



Regarding the distribution of the length of closed activity during COVID-19 by business legal status, analysis shows that businesses in partnership with members of household reflect the highest share of those which closed the activity for more than one month (45%).

It is important to explore whether businesses have made their employed redundant during the COVID-19 pandemic and disaggregate this information by business location, legal status, and tenure. Overall, one in three businesses have let go of their employees during COVID-19 (34%) (see Figure 29). This share is higher for businesses operating in River Gee (50%) and Grand Gedeh (40%). Beside these two locations, it is seen that businesses operating in only Greater Monrovia and Montserrado have made employees redundant. On the other hand, businesses located in Greater Monrovia (15%) and Montserrado (14%) exhibit a lower share of employees that have been let go.

Figure 29: Let go employee by business location

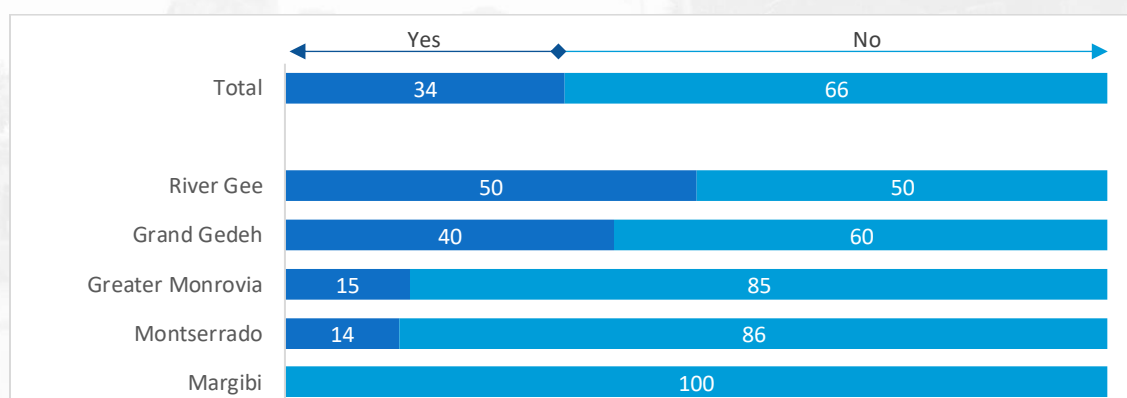
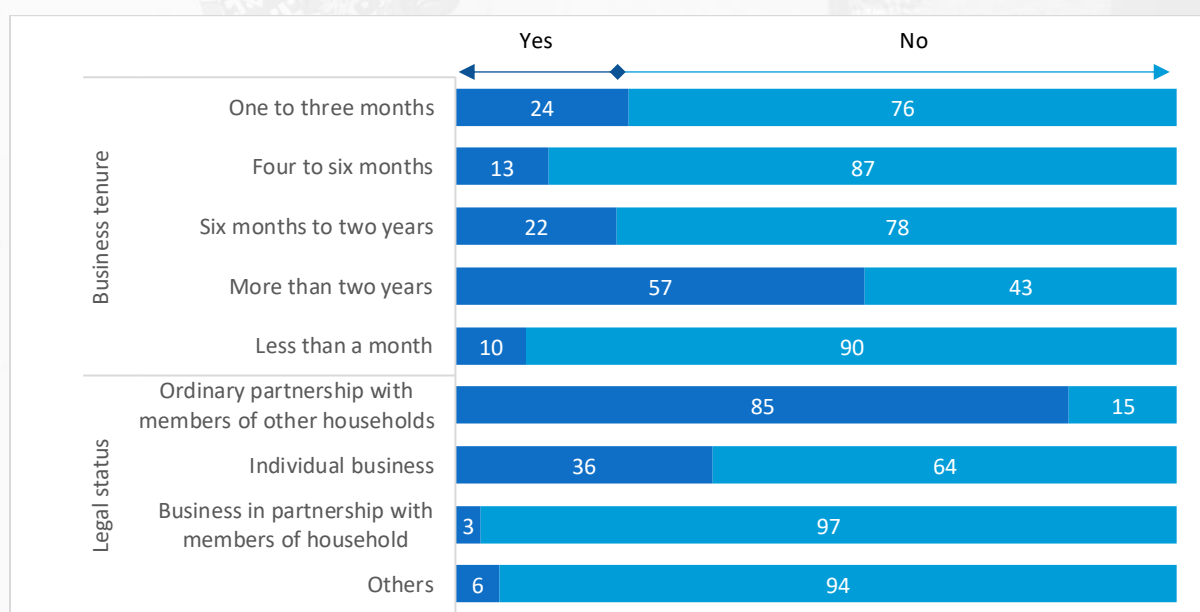


Figure 30: Let go employee by business legal status and its tenure





As mentioned above, employees that have been made redundant are disaggregated by the business’ legal status and tenure. Figure 30 illustrates this aspect. A significant 85% of the ordinary partnership with members of other households have made employees redundant. Meanwhile, one in three individual businesses have let go of employees during the COVID-19 pandemic (36%). The other categories of legal status (business in partnership with members of household and other) constitute a low rate of employees that are let go (3 - 6%).

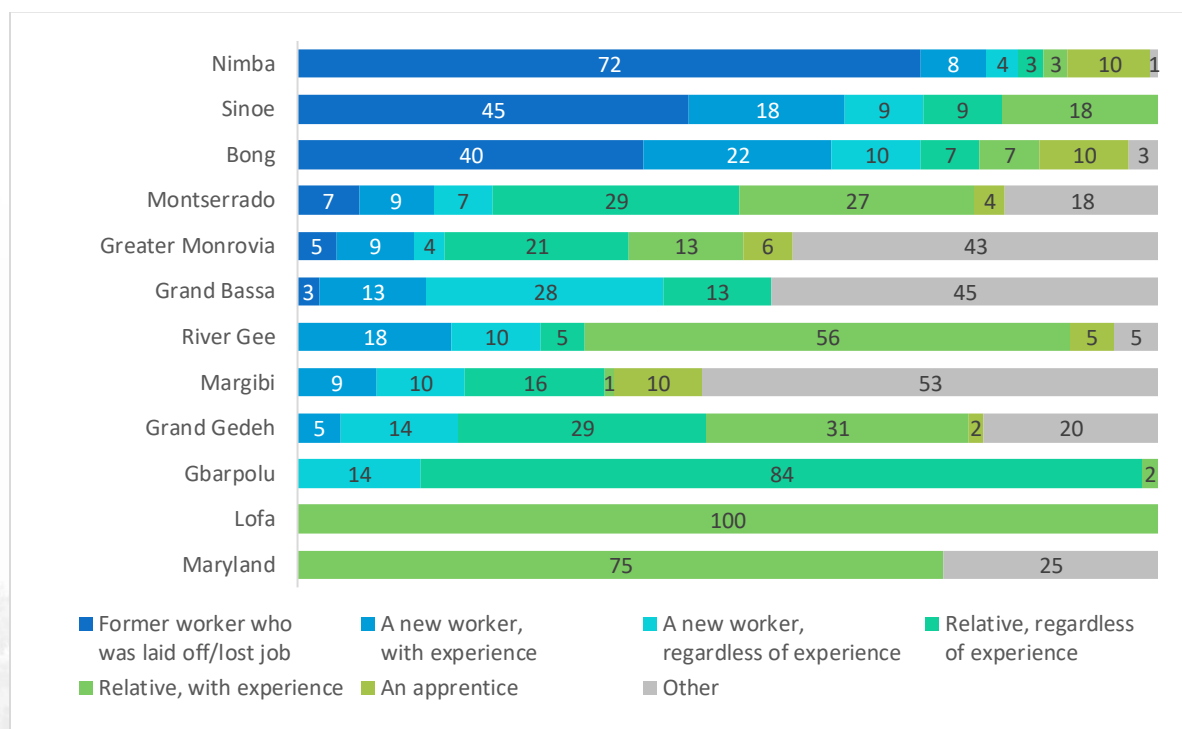
While businesses have indeed made their employees redundant, it is important to note that the survey also includes a question regarding the hiring of new employees. The question reads, “if you or the business where you are working are planning to hire workers on a paid basis, who would you prefer to hire?” Its categories are shown in Figure 31. The following paragraphs analyse this aspect by business location, legal status, and business tenure. Overall, it seems that majority of businesses prefer to hire a relative as a new employee (36%, relative, regardless of experience; 22%, relative, with experience). Only 8% of the businesses indicated that, in case of hiring a new employee, they would like to employ a worker with experience.

Figure 31: Prefer to hire



Figure 32 illustrates the distribution of businesses by the preference on who to hire and business location. Most of the businesses in Nimba (80%), Sinoe (63%), and Bong (62%) prefer to hire a former worker who was lied off or a new worker with experience. However, in some other locations like Lofa, Gbarpolu, Maryland, River Gee, Grand Gedeh, and Montserrado, most businesses prefer to hire a relative (with or without experience).

Figure 32: Prefer to hire by business location

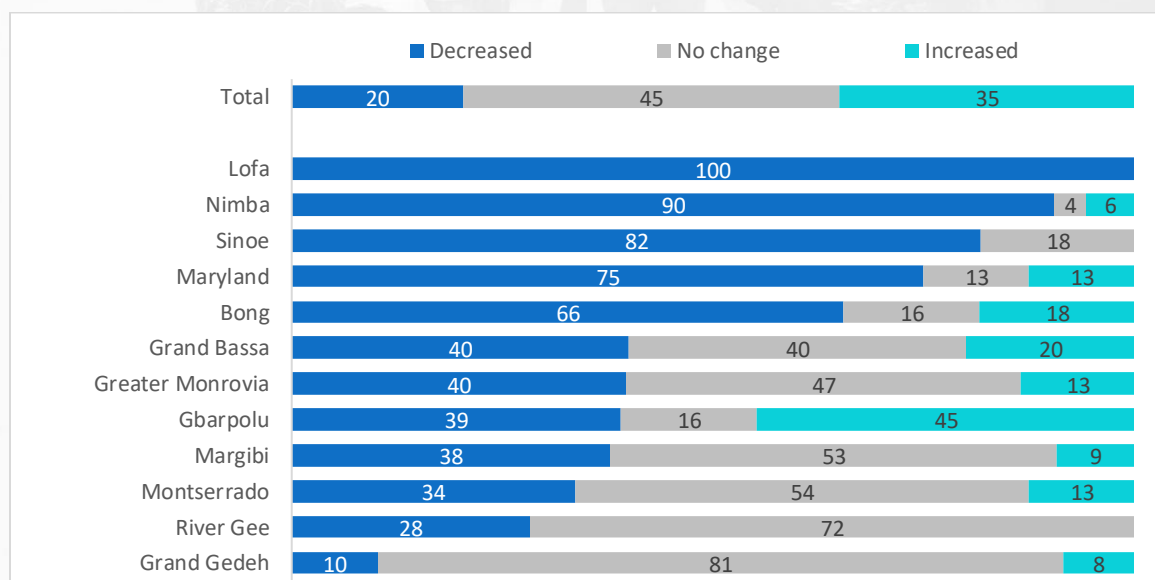


## 5.4 Financial profitability

Business' financial profitability is an important component of this assessment. It is worth mentioning that financial profitability is one of the key aspects that signal business activity, including crisis situations such as the COVID-19 pandemic. This section of the report illustrates findings on the average change in sales and frequency of increased and decreased sales.

The average change in sales of businesses by location is shown in Figure 33. Overall, one out of five businesses have experienced a decrease in sales during the COVID-19 pandemic, whereas one in three businesses recorded an increase in sales. The analysis shows that less than a half of businesses (45%) reflected no change in sales during COVID-19. According to the survey, all businesses located in Lofa have experienced a decrease in sales, followed by those operating in Nimba (90%) and Sinoe (82%). Most businesses operating in Maryland (75%) and Bong (66%) reported a decrease in sales. In other locations, the share of businesses that demonstrated a decrease in sales is less than half. On the other hand, some businesses had experienced increases in sales during the pandemic. Hence, almost half of businesses in Gbarpolu (45%) reported an increase in sales during the COVID-19 pandemic. The second position in increased sales is held by businesses operating in Grand Bassa (20%), followed by those in Bong (18%). No businesses in River Gee and Sinoe experienced an increase in sales.

Figure 33: Average change in sales by business location

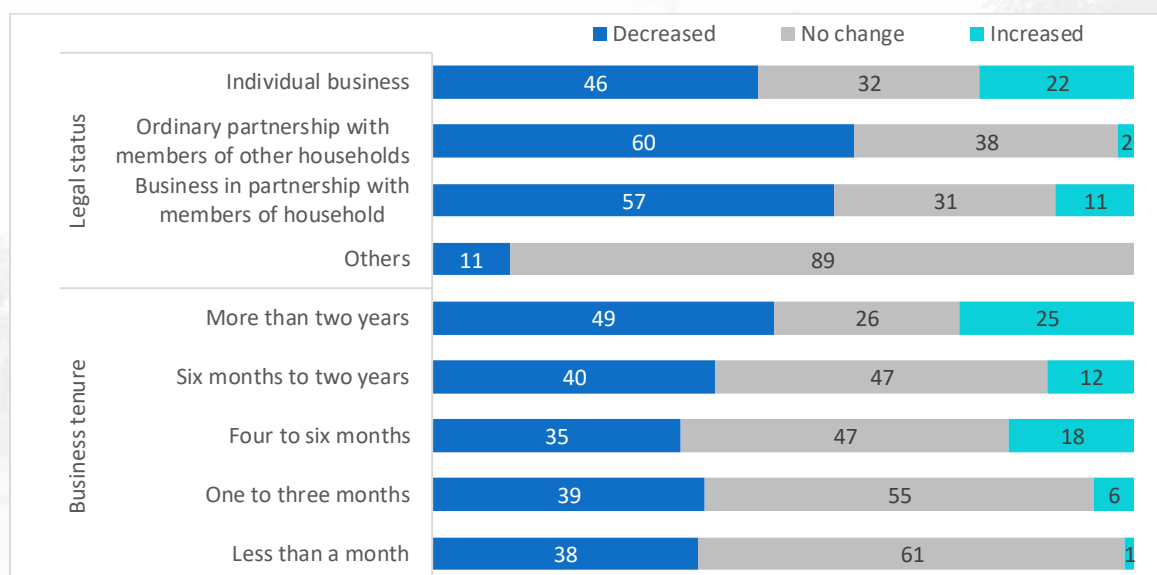


The average change in sales is disaggregated by business' legal status and tenure (age), in addition to business' location, as illustrated in Figure 34. Half of the businesses that constitute individual businesses (46%), ordinary partnership with members of other households (60%) and businesses in partnership with household members (57%) had decreases in sales during the pandemic, while those who had increased sales during the same period vary across business categories. One in five of individual businesses and one

in ten businesses in partnership with members of household experienced an increase in sales.

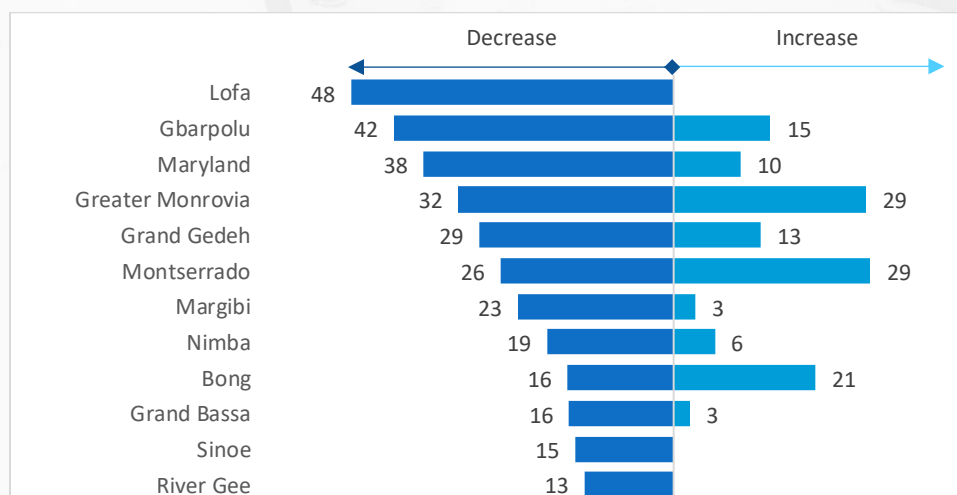
The linkage between decreased sales and business tenure is positive; whereby, as the age of a business increases, as does the share of businesses’ decrease in sales. Interestingly, similar patterns are seen in the share of businesses that demonstrated an increase in sales. The opposite can be said for the share of businesses that had no change in sales during the pandemic (see Figure 34).

Figure 34: Average change in sales by business legal status and its tenure



Follow up analyses shed light on the magnitude of the increase or decrease in sales. One question in the survey reads “on average, what has been the approximate percentage in the increase/decrease in sales comparing your sales (the business where you are working) for 2021 with 2020?” The answer for this question should be an integer.

Figure 35: Average decrease and increase in sales by business location



The average decrease and increase in sales by location is plotted in Figure 35. The highest average decrease in sales is found to be for businesses located in Lofa (half of businesses), followed by those in Gbarpolu (42%) and Maryland (38%). On the other hand, the highest average increase in sales is for businesses operating in Great Monrovia and Montserrado, sharing the same percentage (29%), followed by Bong (21%).

Disaggregating the average decrease/increase in sale by legal status and business tenure can provide additional insights for policymakers. Figure 36 illustrates this information. The highest average decrease in sales is experienced by individual businesses (30%), followed by those in ordinary partnerships with members of other households (23%). When it comes to the average increase in sales, ordinary partnerships with members of other households comprises the highest value (27%).

Regarding the disaggregation of this information by business tenure, results show that younger firms at less than a month old are more likely to experience a decrease in sales than those that have more years of experience in the market. Interestingly, the average increase in sales decreases as businesses become more mature. Hence, businesses with less than a month in the market reflect a 30% average increase in sales, while those that are older than two years constitute half of this increase.

Figure 36: Average decrease and increase in sales by business legal status and its tenure

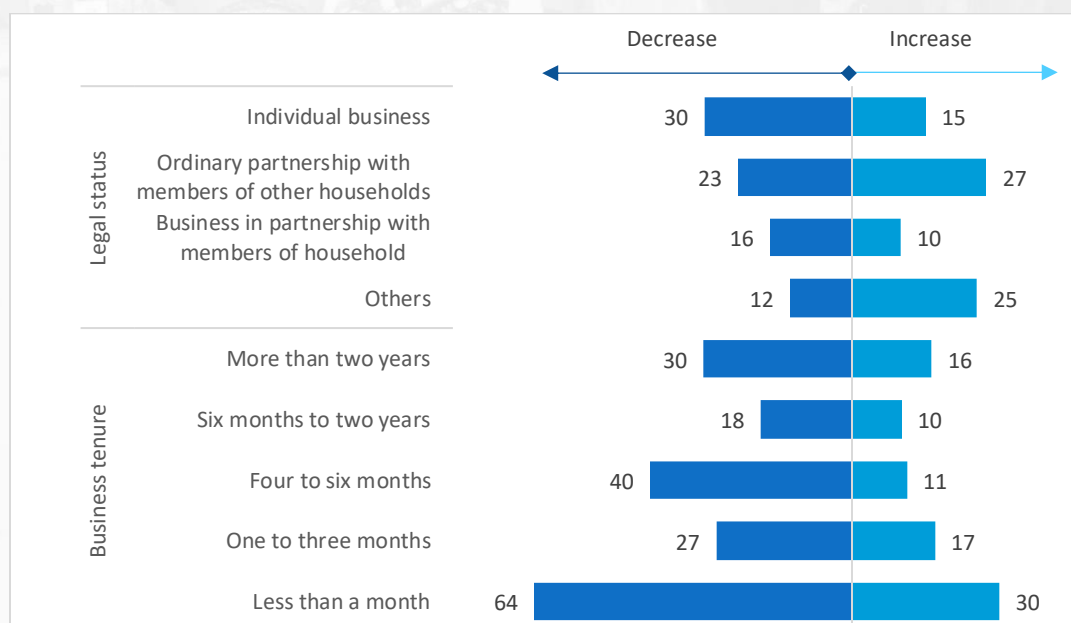
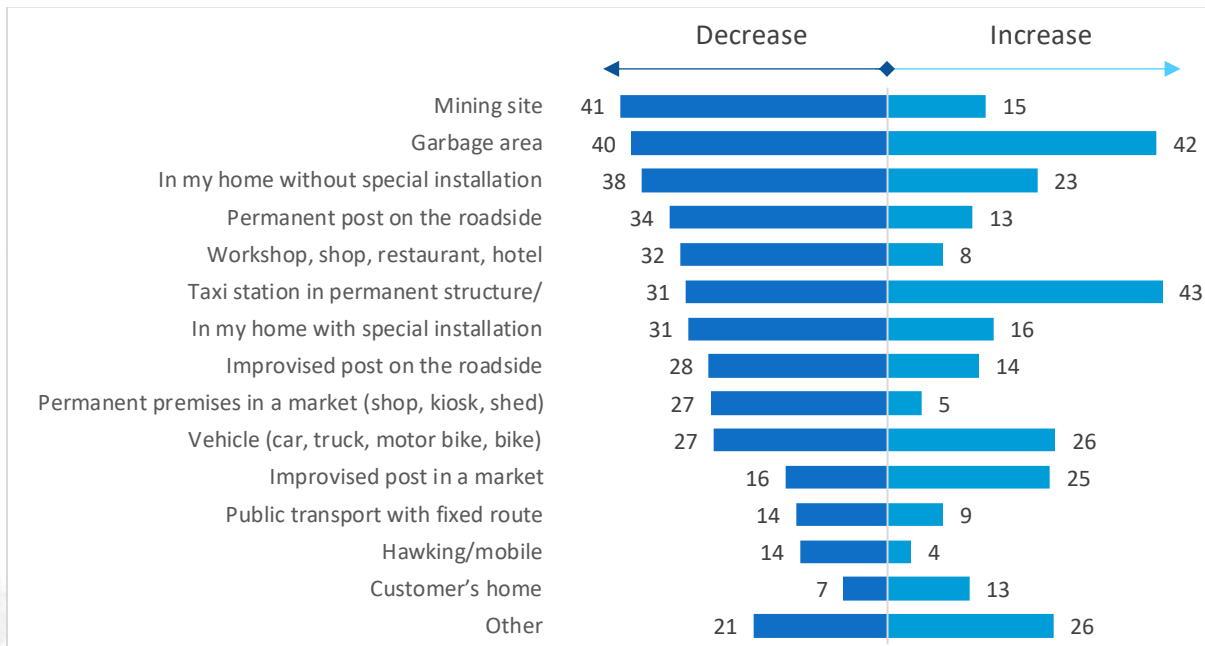


Figure 37 illustrates the average decrease and increase in sales by business premise. The highest average decrease is recorded for businesses having mining sites as premise (41%), followed by garbage areas (40%) and in my home without special installation (38%). On the other hand, the highest average increase in sales is found in case of businesses having a premise taxi station in permanent structure (43%), followed by garage areas (42%).

Figure 37: Average change in sales by business premise

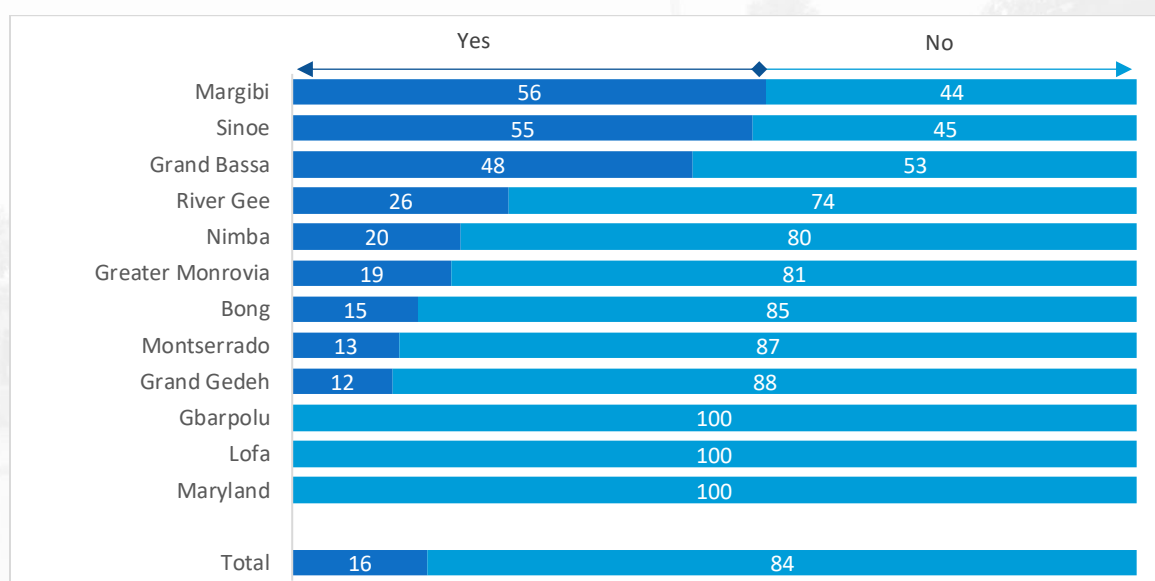


## 5.5 Market trends

At a national level, this assessment reveals that 16% of informal businesses sell foreign imported goods (Figure 38). This confirms previous findings that trade in the informal sector is primarily between households or individuals.

Figure 38 also shows that the top 3 counties that sell imported products are coastal counties; namely, Margibi, (56% of businesses), Sinoe (55%), and Grand Bassa (48%).

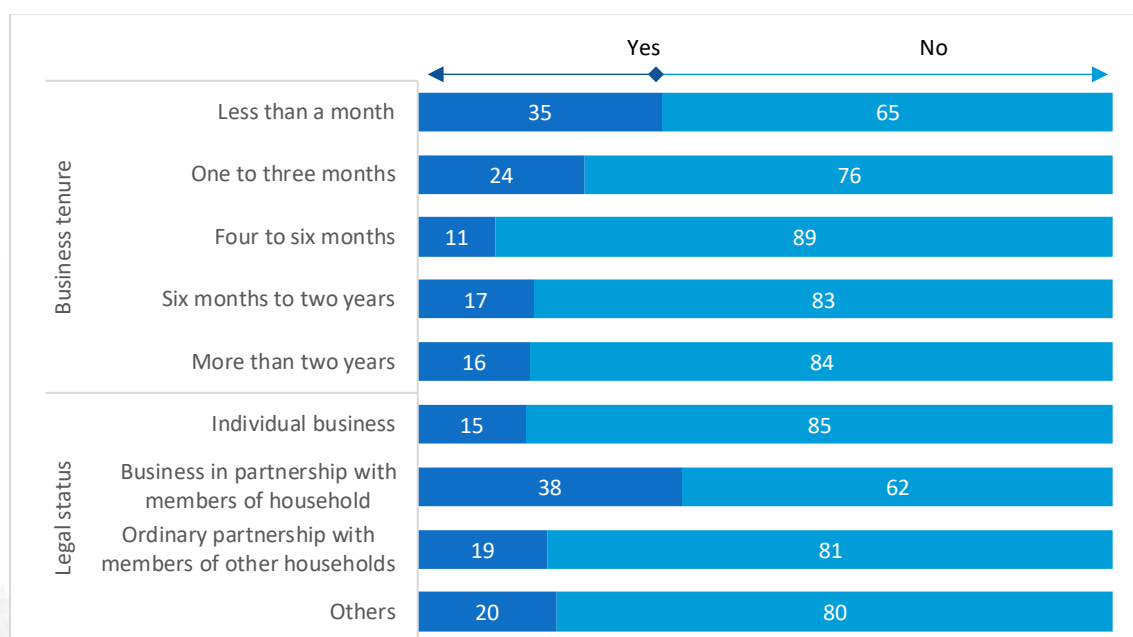
Figure 38: Sell foreign imported goods by county



Upon analysing the sale of imported goods by businesses' tenure, it is apparent that younger businesses have the highest likelihood of selling foreign imported goods (Figure 39). Accordingly, 35% of informal enterprises that have been operating for less than one month sell foreign products. As for those that have been operating between one and three months, 24% sell products imported from abroad, in comparison to 17% for businesses that have been operating for six months to two years and 16% for those that have been operating for more than two years. Thus, the older the informal business, the less imported products it sells.

Regarding the type of informal enterprises that sell the most foreign products, Figure 39 indicates that businesses in partnership with the member of the same household are the ones that sell the most imported products, with 38% of them engaged in such business.

Figure 39: Sell foreign imported goods by business legal status and its tenure



To assess the competitiveness of informal businesses in their sector, the survey assessed the price of their products relative to their competitors. Two out of three (67%) informal businesses charge the same price as their competitors, as compared to 20% that charge a lower price and 14% that charge a higher price. However, there are differences between regions. In four of the regions surveyed, most informal businesses charge a lower price than their competitors. These include Sinoe (73% of the businesses), Maryland (67%), Grand Bassa (66%) and Margibi (50%). In Nimba and Bong, most informal businesses sell their products at a higher price than their competitors: 86% of businesses in Nimba and 76% in Bong. In the remaining 6 regions covered by the survey, most informal businesses charge the same price as their competitors.

For the informal businesses that charge higher prices than their competitors, the vast majority (96%) justify this practice by expensive raw materials and resources (Figure 41).



Figure 40: Selling price for the same good/service in comparison with competitors by county

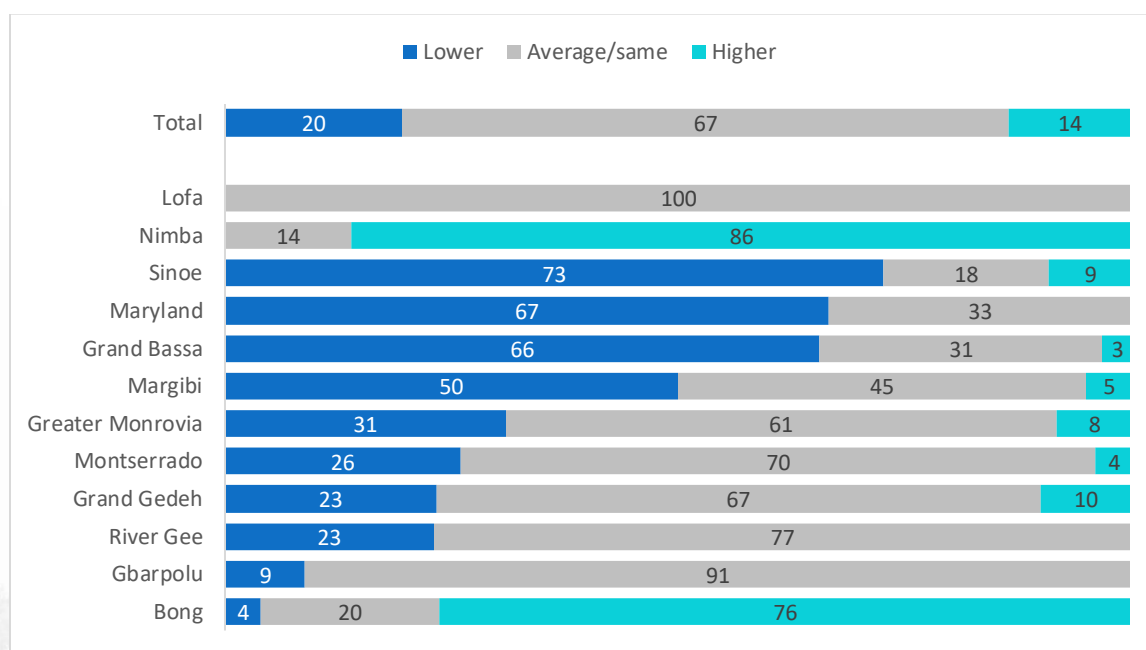
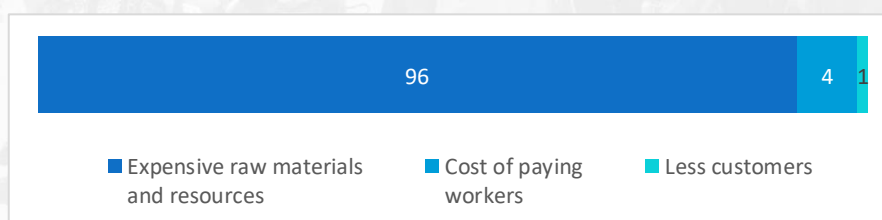


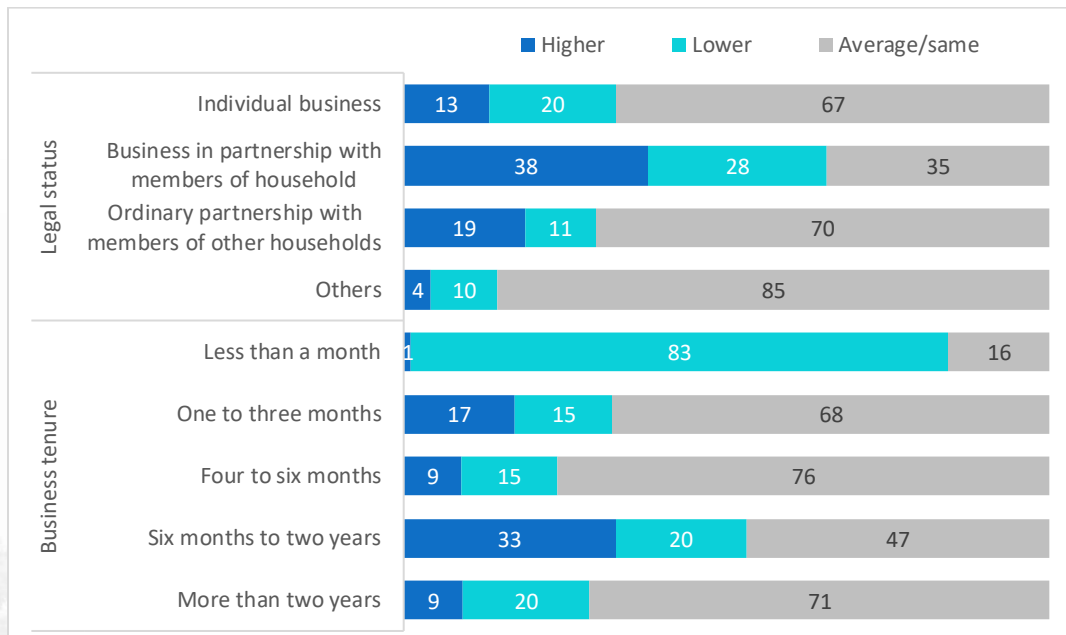
Figure 41: Reason why prices are higher



Apart from enterprises in partnership with members of the same household, most informal enterprises have a selling price identical to that of their competitors, with 67% of the individual enterprises have a price like that of their competitors (Figure 42). For businesses partnering with members of other households, 70% have the same or similar price as their competitors, as compared to 38% for businesses partnering with members of the same household.

Upon analysing the selling prices of informal businesses in relation to their age or the start date of operation, it is found that those that have just arrived on the market and are less than one month old, mostly charge lower prices than their competitors. 83% of them have this strategy, which can be justified by the fact that they must offer competitive rates and establish a customer base for future sales, as compared to older businesses that already have a customer base.

Figure 42: Selling price for the same good/service in comparison with competitors by business legal status and its tenure



With the impact that the COVID-19 has had on informal businesses, one might expect a significant share to reach a point of selling their businesses. However, Figure 43 shows that only 6% of the informal businesses reached a point of selling their business in the aftermath of the COVID-19 outbreak. The counties mostly affected are Sinoe, Nimba, and Grand Gedeh, with one out of four businesses that reached a point of selling their business.

This impact remains the same regardless of the business’s legal status, as shown in Figure 44. However, when comparing by business tenure, it seems that informal businesses of one to three months were mostly affected, with 20% reaching a point of selling their business due to the pandemic.

Figure 43: Reached a point of selling the business by county

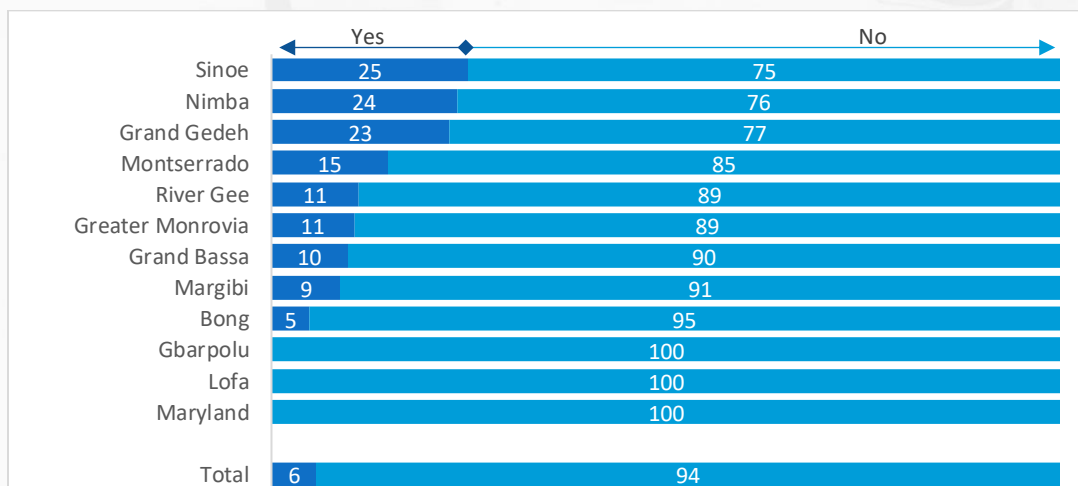
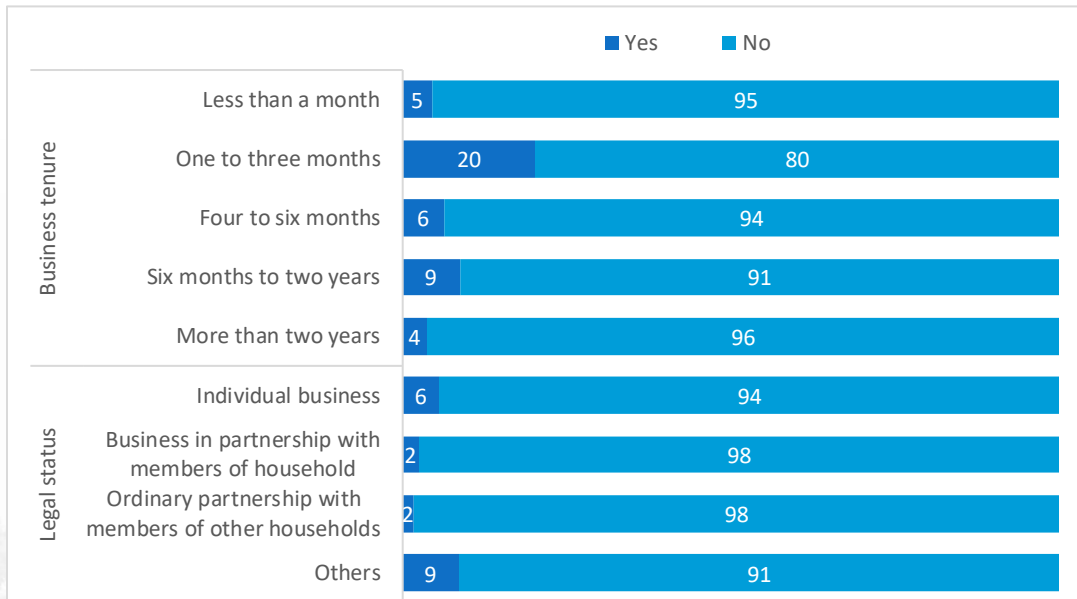


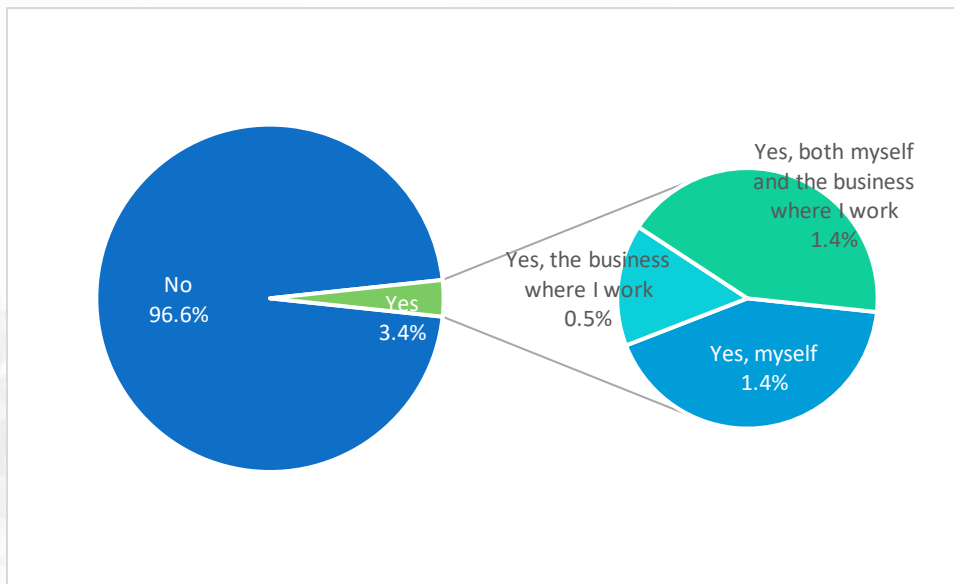
Figure 44: Reached a point of selling the business by legal status and its tenure



## 5.6 Coping strategies

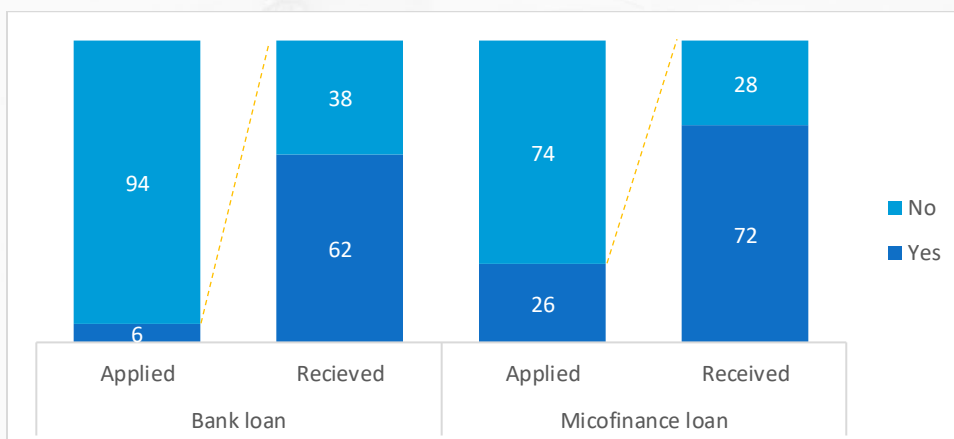
Belonging to associations can assist in creating a network to build resilience, accessing funding, customers, and certain suppliers. However, this assessment illustrates that only a minor 3% of informal businesses belong an association (Figure 45).

Figure 45: Belong to associations



Financial inclusion remains a challenge in the informal sector. Only 6% of the informal businesses have applied for a bank loan, while 26% have applied for a microfinance loan. Of those that applied for a bank loan, 62% have been successful in receiving it, in comparison to 72% who applied for a microfinance loan. Therefore, not only do informal businesses have a greater application rate for microfinance institutions, but they also have a greater propensity to receiving funding from microfinance institutions.

Figure 46: Share of businesses that applied for a loan and received it



Most informal businesses that received a bank loan reported that it either helped them in the financial difficulties (57% of businesses) or increased the volume of their sales (42%), although some have also indicated an improvement of the competition (14%). These results demonstrate the critical role that access to financial credit plays in crisis resilience, while also indicating that the first use of bank loans by informal businesses is on solving their financial difficulties.

The same trend is found at regional level, although some disparities exist. Figure 48 shows that, for most informal businesses in Greater Monrovia and the rest of Montserrado, the bank loan has mainly helped them in the financial difficulties, while in other counties it has resulted in an increase of their sales or production and an improvement of their competition.

Figure 47: Use of the funding received from banks

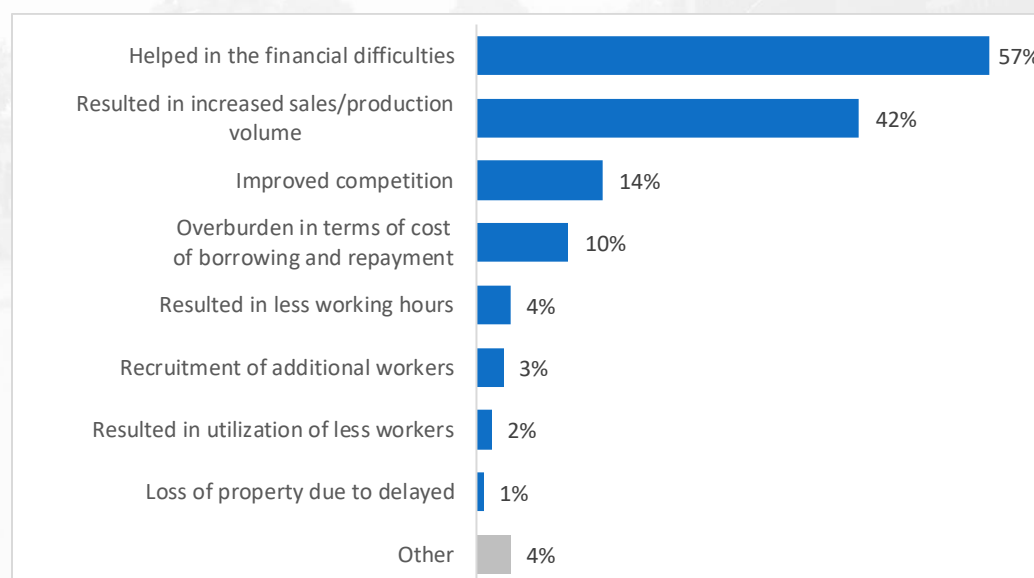
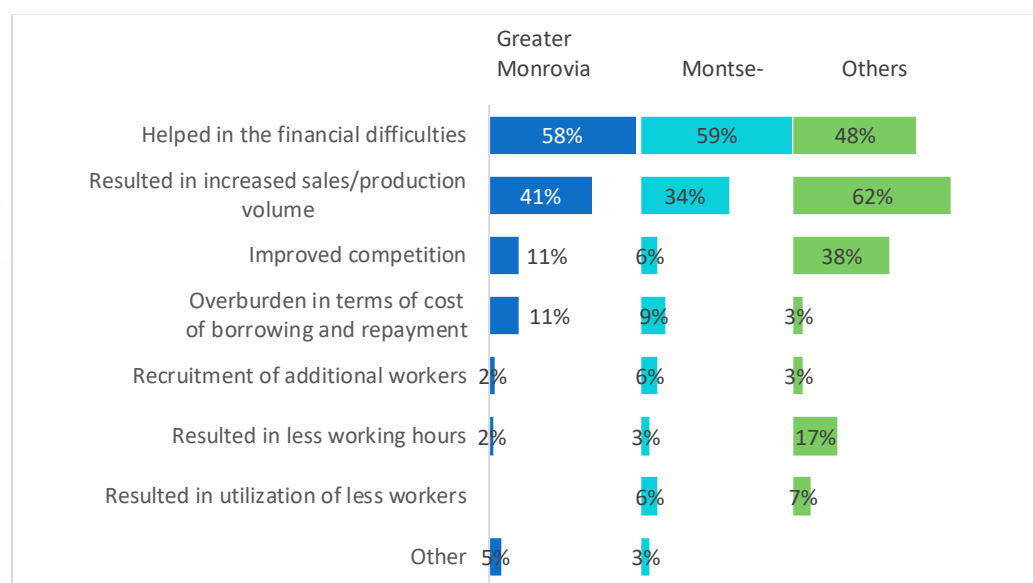


Figure 48: Use of the bank loan by county



Akin to bank loans, most informal businesses that received a microfinance loan used the funds to alleviate their financial difficulties, increase sales and improve their competitiveness (Figure 49). However, the share of informal businesses that used microfinance loans to increase their sales or production is slightly higher than those using it to solve financial problems (56% for the former compared to 51% for the later). This is contrasting with findings relating to bank loans, which indicated that the first use of the loan among informal businesses is to support the financial difficulties that the businesses have been facing.

This finding is particularly marked in the remaining Montserrado and other counties. In rest of Montserrado, the share of businesses for which the microfinance loan resulted to an increase of their sales is two times that of the businesses for which it has helped during financial difficulties (Figure 50). In other counties, it surpasses by 10 points of percentage the share of the businesses for which microfinance loans have helped during financial difficulties. The use of microfinance loans for enhancing competitiveness is more frequent in other counties, with 36% of businesses compared to 8% in Greater Monrovia and 13% in the remaining Montserrado.

Figure 49: Use of the microfinance loan

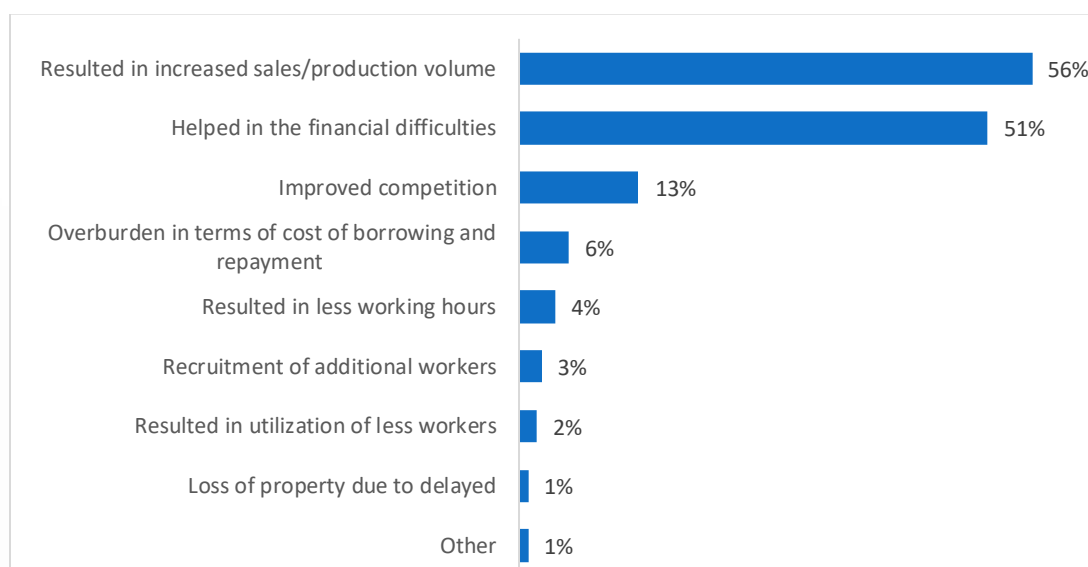
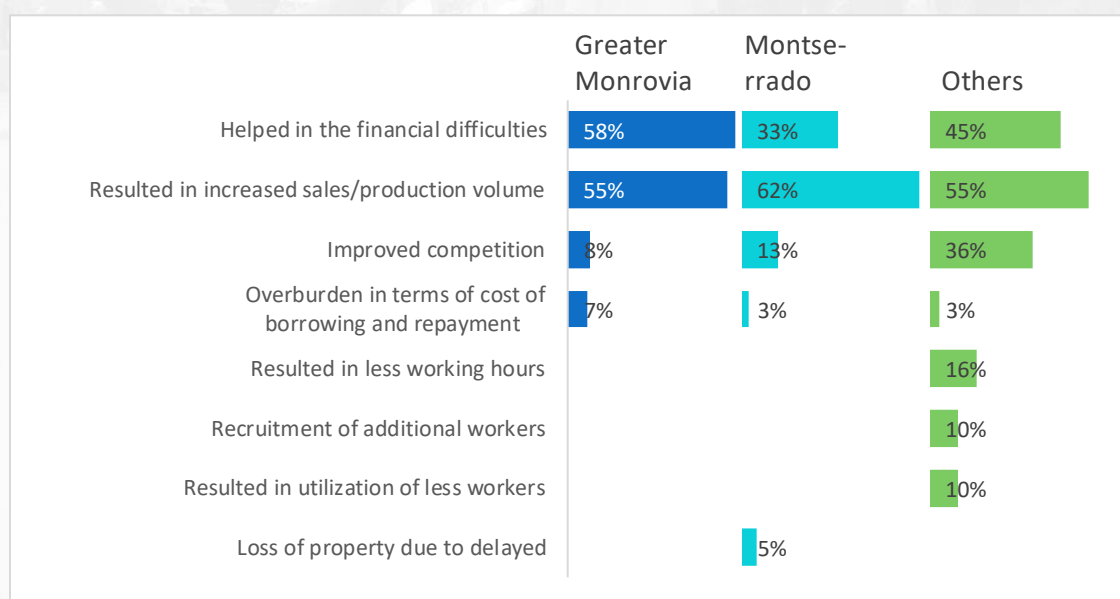
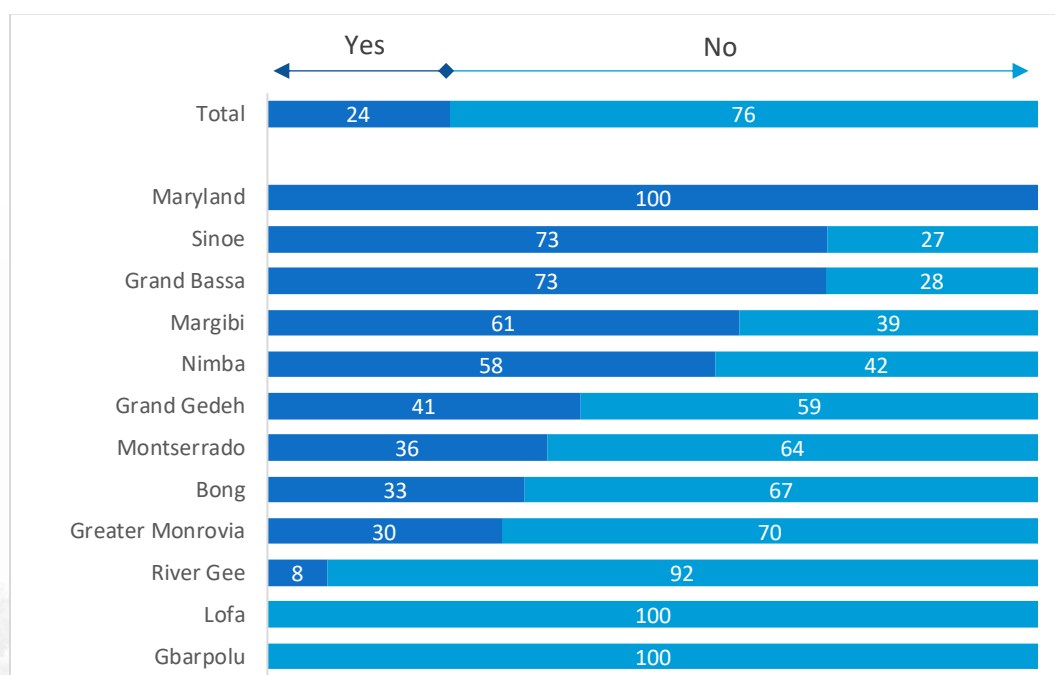


Figure 50: Use of the microfinance loan by county



While financial loans increase the adaptive capacity of businesses, as shown previously, there is a limited number of informal businesses that are aware of microfinance entities. Figure 51 shows that only one out four informal businesses are aware of a microfinance entity. All the businesses interviewed in Maryland seems to be well informed about the existence of microfinance entities in the county, while the opposite is observed in Lofa and Gbarpolu (Figure 51). In Greater Monrovia and other Montserrado which host most of the informal businesses, less than half are aware of microfinance entities, 30% and 36%, respectively.

Figure 51: Awareness of microfinance entity by location

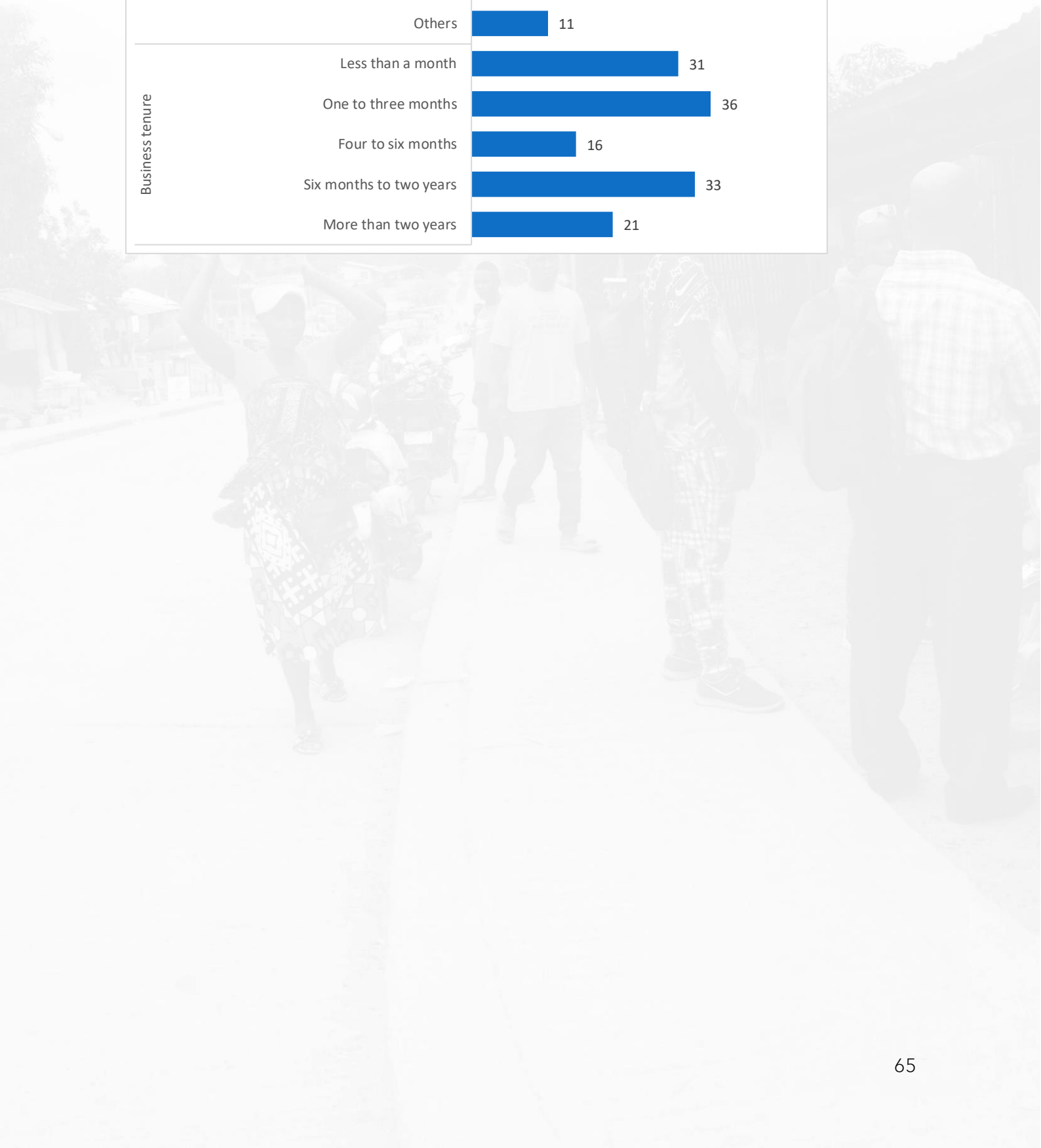
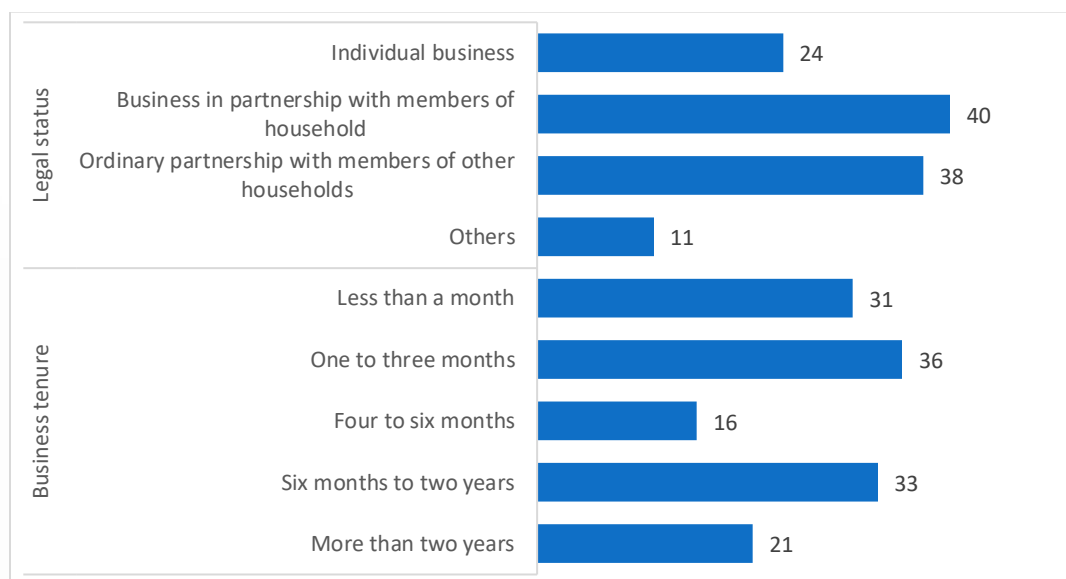


Microfinance awareness seems to be higher among collaborative businesses. As shown in Figure 52, the share of informal businesses that are aware of microfinance services is relatively higher among businesses in partnership with members of either the same household or other households. 38% of businesses in partnership with members of the same household are aware of a microfinance entity while the share is 40% for those in partnership with other households.

In contrast to the legal status of businesses, there is no clear correlation between the business tenure and its microfinance awareness. Businesses that are aware have mostly those with less than three months of operation and those that have six months to two years old (Figure 52).



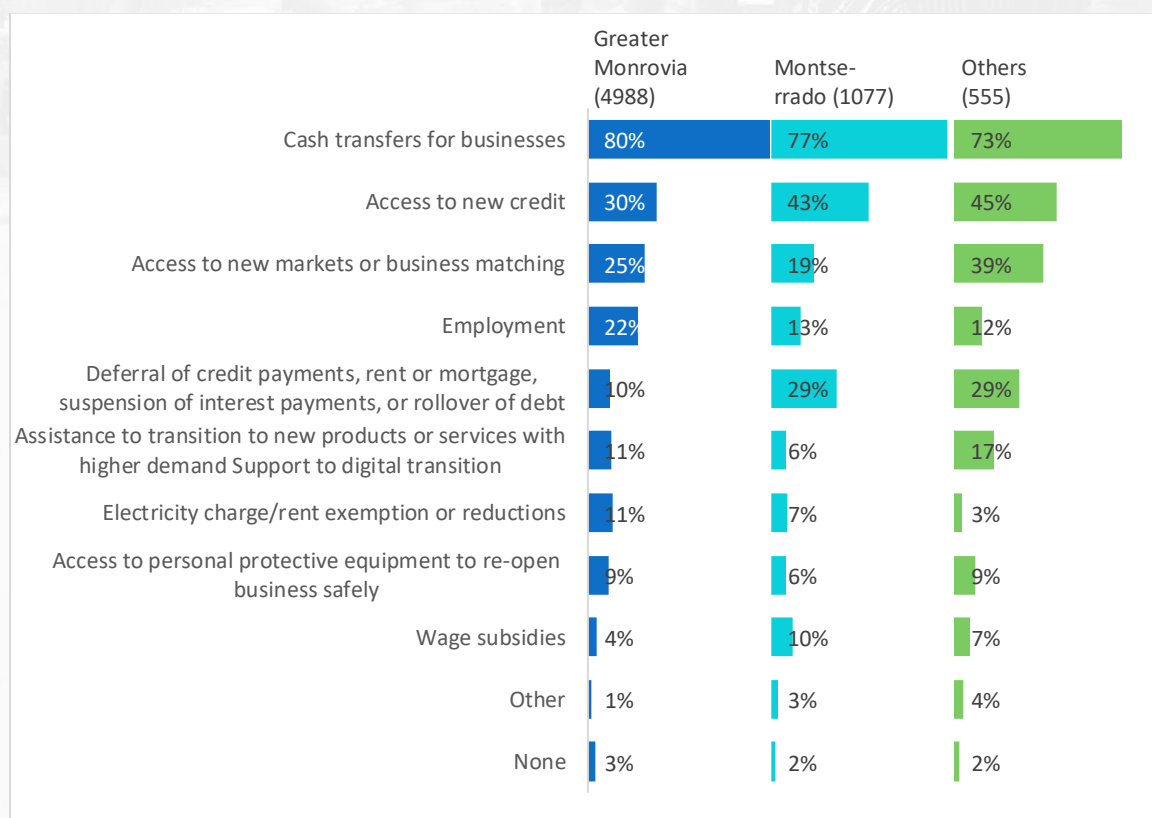
Figure 52: Awareness of microfinance entity by business legal status and its tenure



## 5.7 Recovery needs

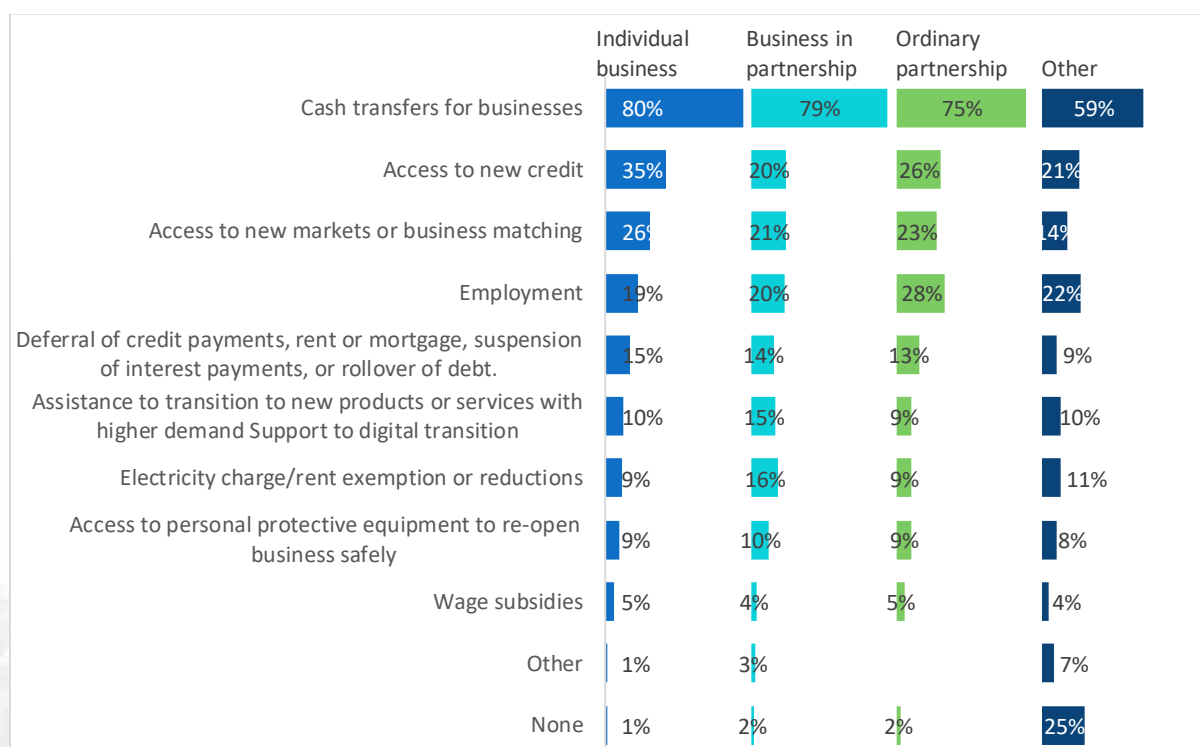
Across all counties, the top two priority needs of informal businesses are cash transfers for businesses and access to new credits (Figure 53). However, the share of businesses that need cash transfers is significantly larger than that of the businesses that need access to new credits. In Greater Monrovia, it is even more than two times that of the businesses that need access to new credit, at 80% as compared to 30%. Figure 53 also shows that informal businesses in Greater Monrovia have a great interest in access to new markets and employment opportunities, while those in other countries prefer the deferral of credit payments, rents or mortgages, in addition to access to new markets. 29% of businesses in counties other than Greater Monrovia also want a deferral of credit payments, rent or mortgage. Another need from businesses in other counties out of Montserrado is the assistance to transition to new products or services with higher demand or support to digital transition, with 17% of businesses in other counties expressing this need.

Figure 53: Top priority needs by location



Regardless of the legal status of businesses, the top four priority needs remain cash transfers for the businesses, access to new credits, access to new markets or business matching, and employment opportunities (Figure 54).

Figure 54: Top priority needs by legal status



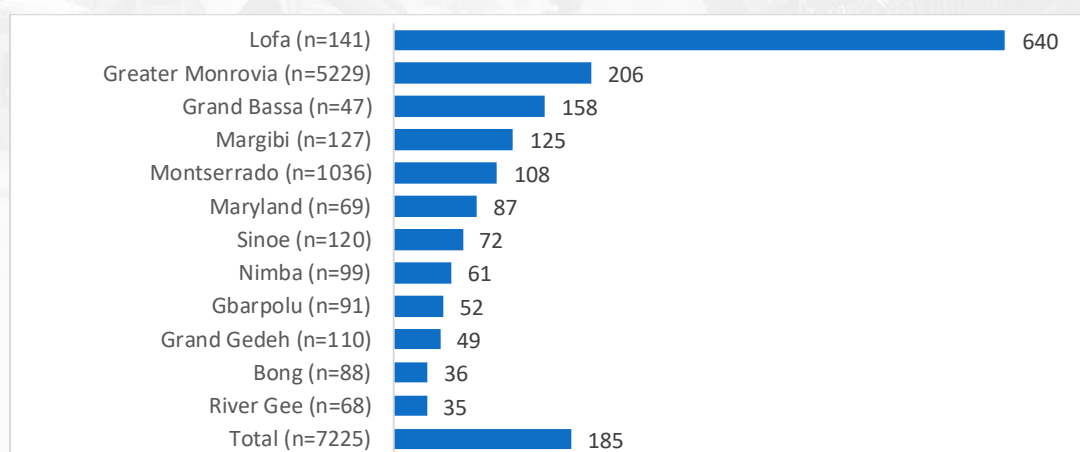
## 6 FINDINGS FOR HOUSEHOLDS

In this section of the report, data is analysed at the household level. Overall, there are 8,073 surveyed households.

### 6.1 Livelihoods

The average monthly income by location is plotted in Figure 55. As can be seen, the highest average monthly income is found to be for households locating in Lofa (USD 640), which is more than three times bigger than the second place held by households in Greater Monrovia (USD 206). The lowest average monthly income is found for households located in River Gee (USD 35). The average monthly average for the households in other locations ranges from USD 36 in Bong to USD 158. The overall average monthly income is USD 185.

Figure 55: Average monthly income by county



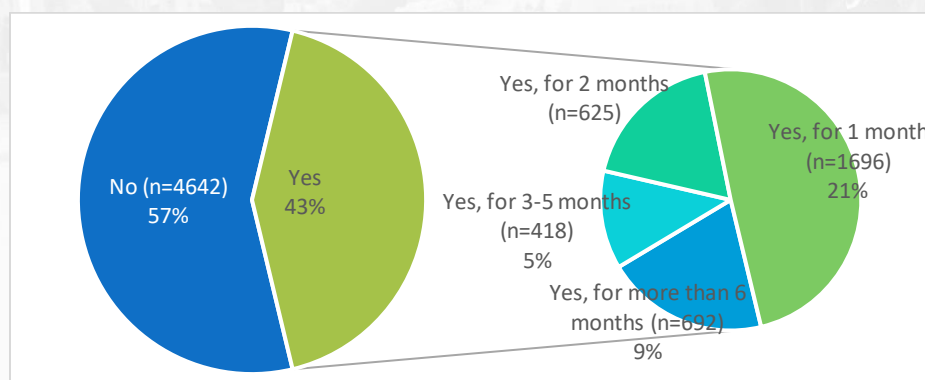
The average monthly income of the households is disaggregated by gender of the head and the household size. As illustrated in Figure 56, households headed by females earn less of an income than those headed by males. As such, the analysis depicts that the average monthly income of the female-headed households is around USD 30 (= USD 202 - USD 170) less than that of male-headed. Households with three to five members reflect higher average monthly income than two other categories showed in the graph.

Figure 56: Average monthly income by household size and gender of its head



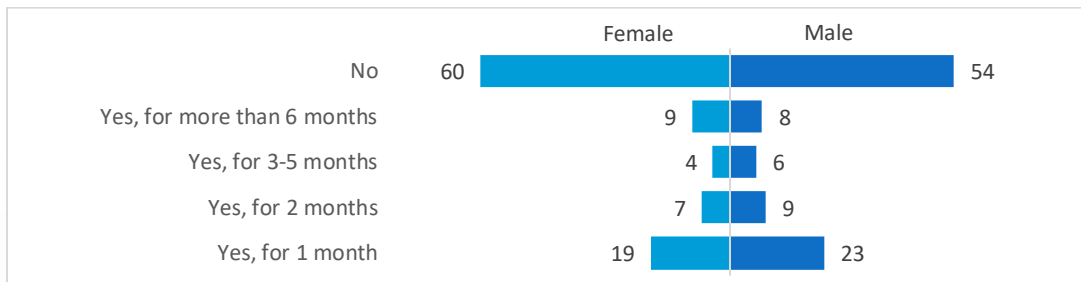
In Figure 57 shows the share of households having a sufficient source of income or savings to pay monthly expenses. The results demonstrate that most of the surveyed households do not have a sufficient such source (57%), while two out of five households said that do (43%). It is interesting analysing the distribution of those who said “yes”. One out of five surveyed household (21%) had sufficient source of income or saving to pay monthly expenses for only one month. One out of ten households have sufficient source for more than six months (9%).

Figure 57: Sufficient source of income or savings to pay for monthly expenses



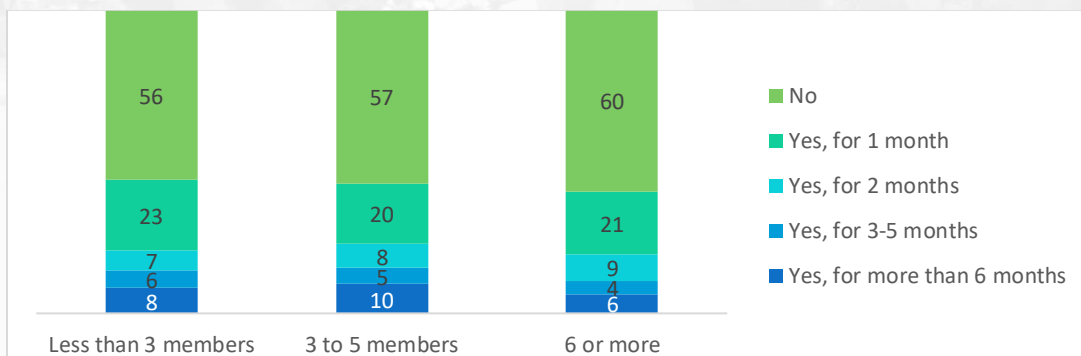
Regarding the disaggregation of household’s monthly income by the gender of the household head (see Figure 58), female-head households have a slightly bigger share of those who said that do not have sufficient source of income or savings to pay for monthly expenses (60%) than male-headed households (54%). This finding may be an additional factor as to why female-head households are more vulnerable than male-head households.

Figure 58: Sufficient source of income or savings to pay for monthly expenses by gender of the head



When comparing the distribution of the responses of sufficient source of income or savings for monthly expenses across household size, there are not many variations. A slight increase is noticed in the share of those who do not have a sufficient source as the family size increases (see Figure 59).

Figure 59: Sufficient source of income or savings to pay for monthly expenses by household size



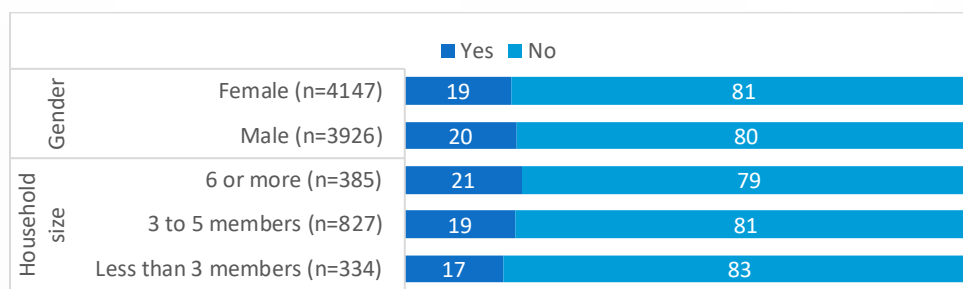
Households are asked whether they currently have any debt. This assessment found that there is no clear correlation between having debt and education levels. This information is plotted in Figure 60. Those with incomplete primary education reflect the lowest debt rate, while the highest is found for those with technical tertiary education.

Figure 60: Currently have any debt by education



The survey shows that there is no difference between female (19%) and male (20%) household heads, regarding the debt rate. Like the sufficient source, the positive correlation is found even here (see Figure 61). Thus, as the size of the household increases, so does the debt rate.

Figure 61: Household currently have any debt by household size and gender of the head



1546 surveyed households have access to a loan. Almost two out of five of the households with loans cannot afford the loan payment (38%), given the impacts of COVID-19. On the other hand, those who can afford them reported on the number of months required to pay it off (see Figure 62).

Figure 62: Given the impact of COVID-19, can your household service your loan payment?

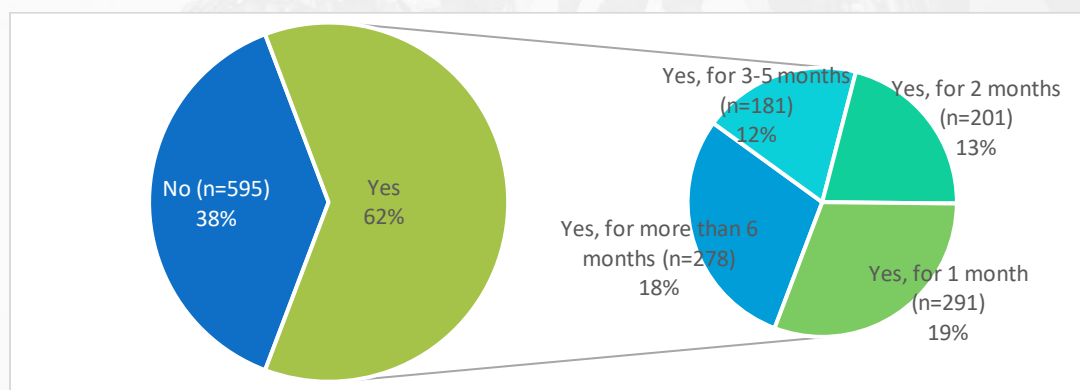
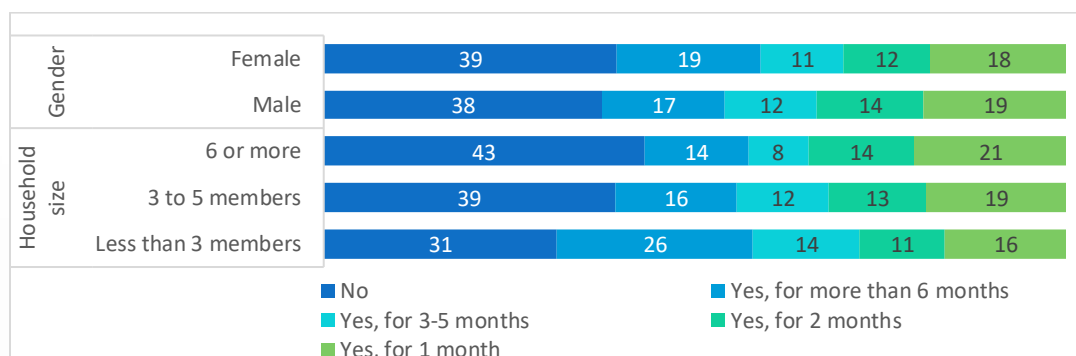


Figure 63 illustrates the distribution of loan payment by household size and gender of its head. The graph shows no significant gender difference, while is clear a positive trend of those who cannot afford the loan payment, as the household size increases. Hence, the share of those who cannot afford that payment increases from 31% for families with less than three members to 43% for families with six or more members.

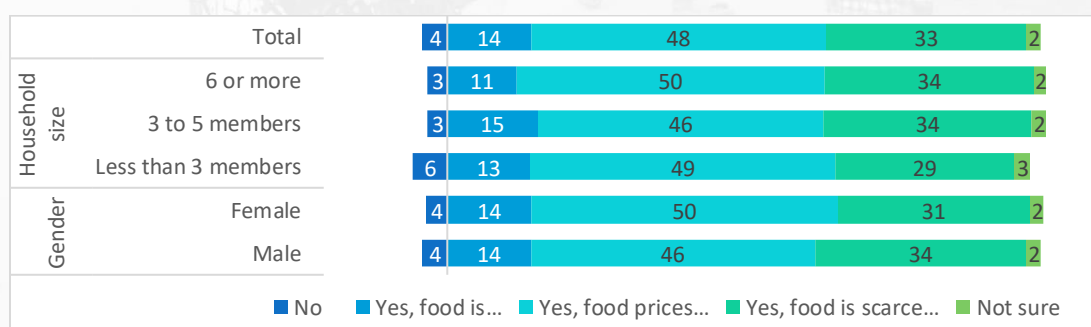
Figure 63: Given the impact of COVID-19, can your household service your loan payment? By household size and gender of its head



## 6.2 Basic services

The following paragraphs and graphs inform on the access to food and basic services. Only 4% of the surveyed households reported to not worry that their family would not have enough food (see Figure 64). Those who selected “yes”, have following up options such as “food is scarce now”, “food prices are going up”, “food is scarce, and prices are up”. Almost majority of the respondents have selected the second option, pointing out the increase of food prices.

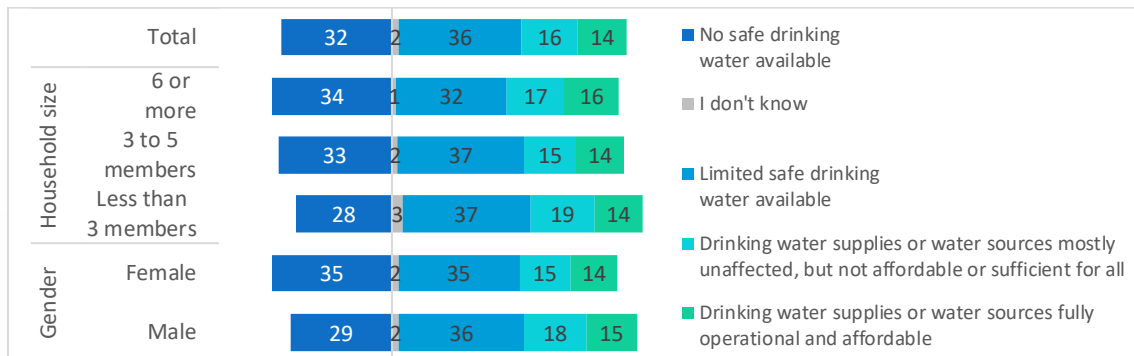
Figure 64: Did you worry or are you currently worried that your household would not have enough food? By household size and gender of its head



According to the survey, overall, one out of three surveyed households have no safe drinking water available (32%). One in three households have limited safe drinking water available (36%). Less than 15% of the households said that drinking water supplies or water sources are fully operational and affordable. Regarding the gender difference in accessing drinking water, it is found that the share of female-head of households that do not have safe drinking water available is bigger than households headed by males (6% = 35% - 29%). The positive trend of no safe drinking water available is present as moving from smaller (28%) to bigger families (34%) (see Figure 65).



Figure 65: The level of access to safe and affordable water as of March 2020 and as of June 2021 by household size and gender of its head



On health and hygiene, respondents were asked to report on the distance and travel time to the nearest health centre from their house. The respondent had to report the distance in km and travel time in minutes. Figure 66 illustrates this information by location. Overall, the nearest health centre is less than 5 km away from the household’s location and it takes around 20 minutes to get there (in average). Households located in Sinoe have reported that the nearest health centre is 9 km away from their home and it takes around 40 minutes to get there. Although the distance in km is not the highest among the locations, households located in Margibi and Maryland spend 50 minutes (in average) to get to the nearest health centre, being the most distanced (in minutes) across the other locations.

Figure 66: How far away is the nearest health centre? By household size and gender of its head

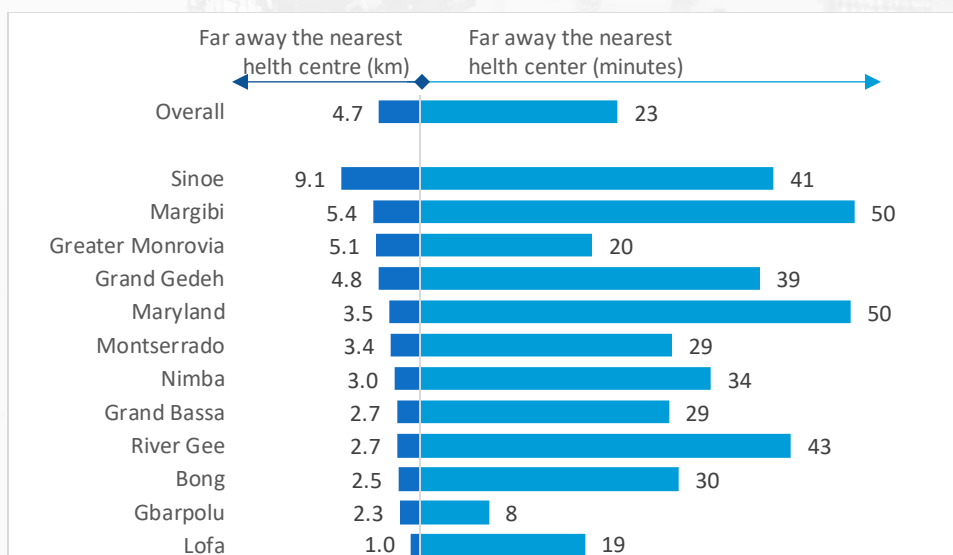
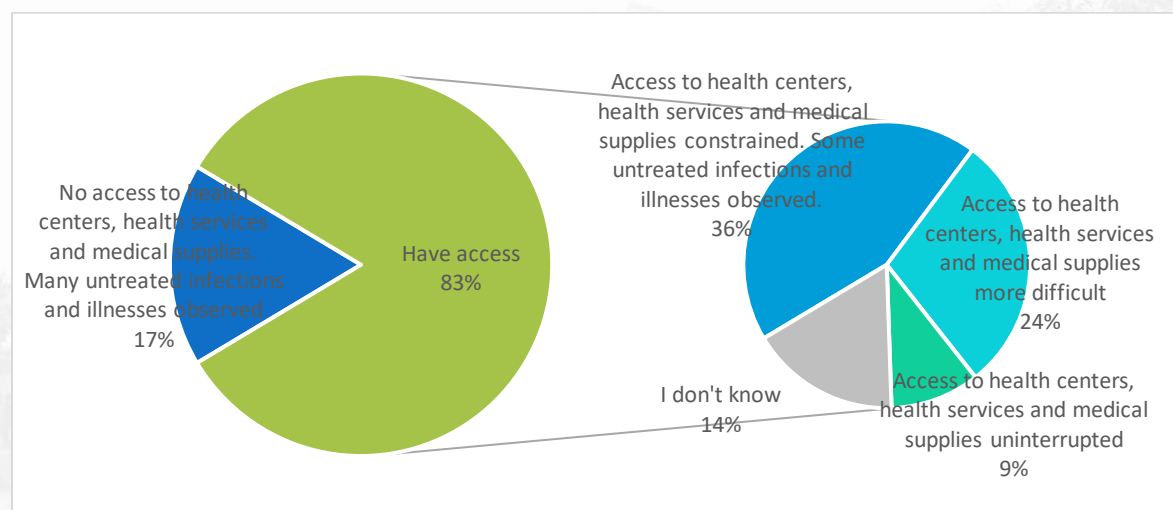


Figure 67 enables us to determine whether COVID-19 has an impact on the level of access to health service. Almost one out of five (17%) of the surveyed households indicated having no access to health centres, health services and medical supplies, with many untreated

infections and illnesses observed. More than one in three respondents (36%) said that access to health centres, health services and medical supplies constrained, characterized by some untreated infections and illnesses observed. Access to health centres, health services and medical supplies more difficult was selected by 24% of the respondents, while those who said that the service is uninterrupted were less than 10%.

Figure 67: How would you describe any changes in the level of access to health service since the outbreak of COVID-19?



### 6.3 Coping strategies

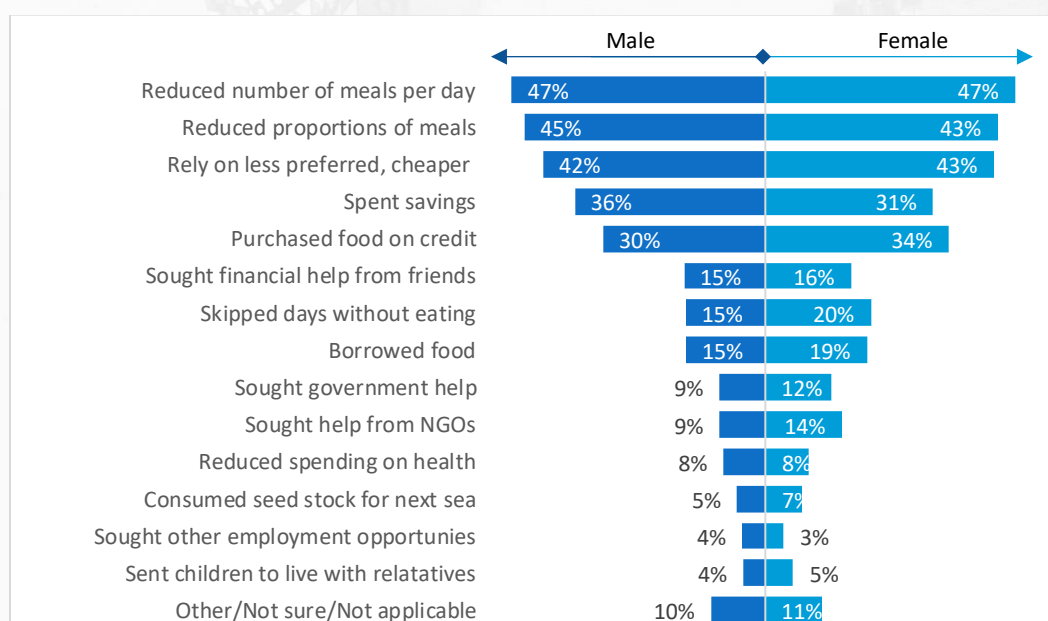
In this sub-section, the household's coping mechanisms are analysed. In Figure 68 is illustrated the answers that gave households whether they have done anything to compensate for a loss of income or in preparation for potential loss in income because of COVID-19. The graph informs about two locations and the overall. the most selected option was "reduced number of meals per day", selected by almost half of the respondents. The second most selected option is "reduced proportions of meals", and the third is "rely on less preferred, cheaper food". The results obtained for the overall sample is almost same as that of Greater Monrovia. The third most selected coping strategy for households living in Montserrado was "purchased food on credit" (42%), which is different from the results obtained by the overall sample and Greater Monrovia.

Figure 68: Household coping strategies by location



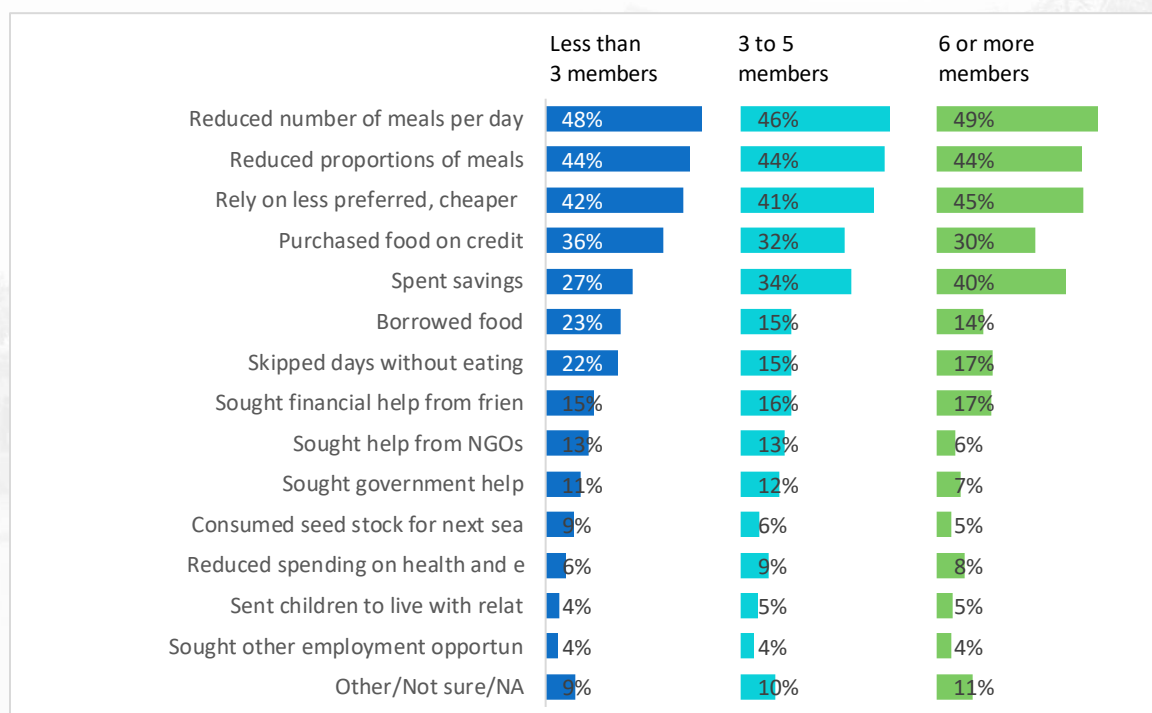
There is no significant gender difference in households' coping strategies. Such information is illustrated in Figure 69. As with the previews graph, "reduced number of meals per day", "reduced proportions of meals", and "rely on less preferred, cheaper food" remain the most prevalent strategies used to compensate for a loss of income or in preparation for potential loss of income. The biggest difference between the genders is found in "spending savings" to compensate for a loss of income or in preparation for potential loss of income, which is bigger for households headed by males (36%) than females (31%).

Figure 69: Household coping strategies by gender of the head



In addition to the disaggregation of the coping strategies by location and gender of the head, below is reported the crosstabulation of coping strategies and household size, which is plotted in Figure 70. As can be seen, the same pattern is shown in the three categories concerning household size. Hence, one can conclude that there is no significant change regarding family sizes when it comes to the used coping strategies to compensate for a loss of income or in preparation for potential loss of income.

Figure 70: Household coping strategies by household size



## 6.4 Recovery needs

An additional aspect of this assessment concerns recovery needs. Before presenting the results on recovery needs, we present a graph below on concerns over families' livelihood conditions for the next three months. Figure 71 illustrates the distribution of the answers by household size and the gender of the household head. Overall, over four out of five households are very concerned about the livelihood conditions. Over 10% of the respondents indicated that they are relatively concerned. Furthermore, the graph shows no significant difference between the two genders, nor across household sizes.

Three out of four households said that cash transfer would be the most helpful for their families in the face of COVID-19, making it the most needed assistance. In the second place is listed cash for work, which represent 65% of the respondents. The other needs are much less needed than the two above-mentioned. These figures are not different between Greater Monrovia and Montserrado (see Figure 72).

Figure 71: Concerned over livelihood conditions by household size and gender of the head

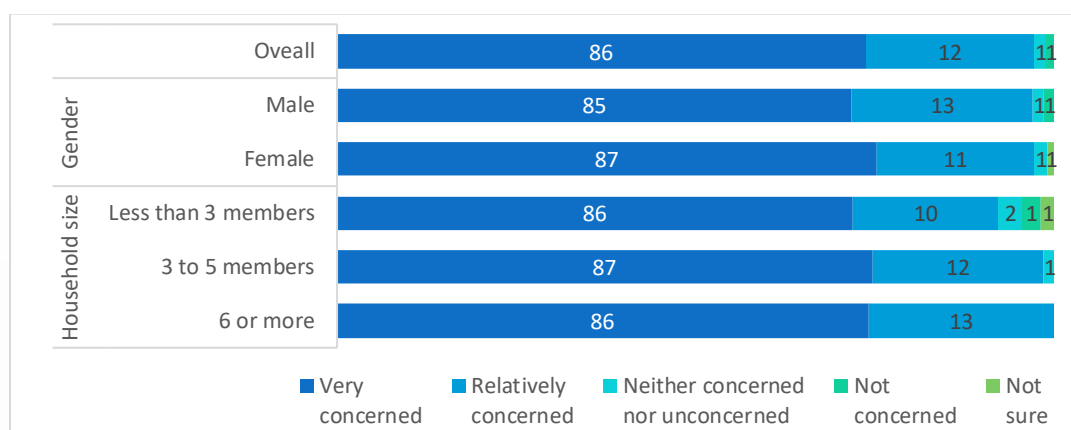
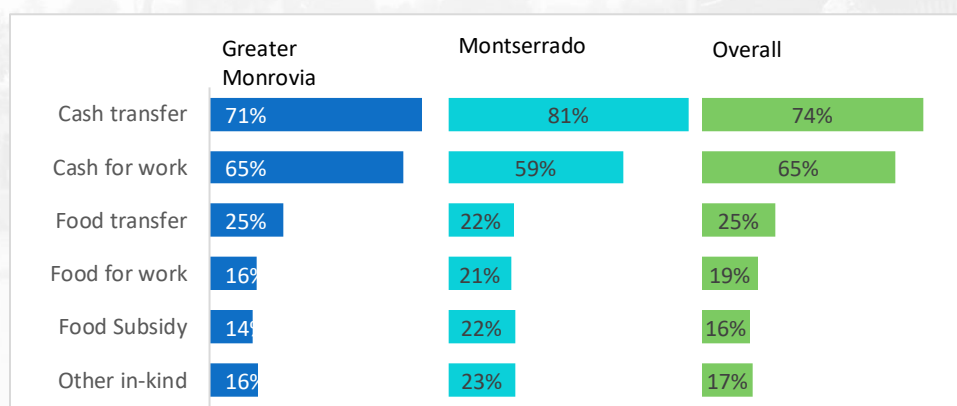
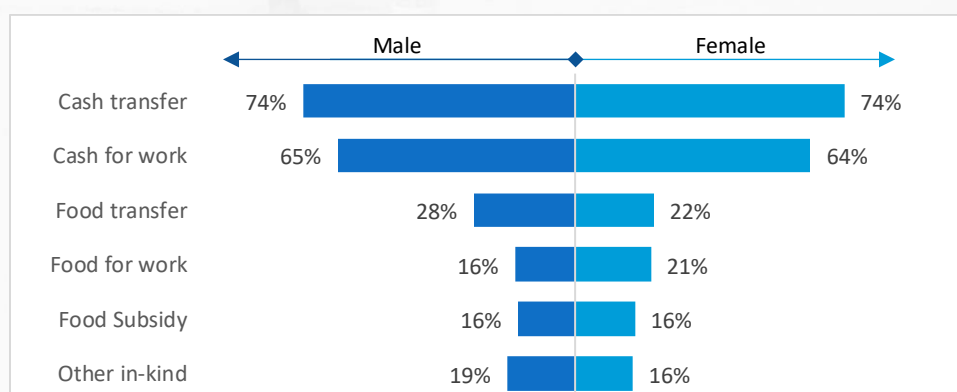


Figure 72: Type of assistance needed by location



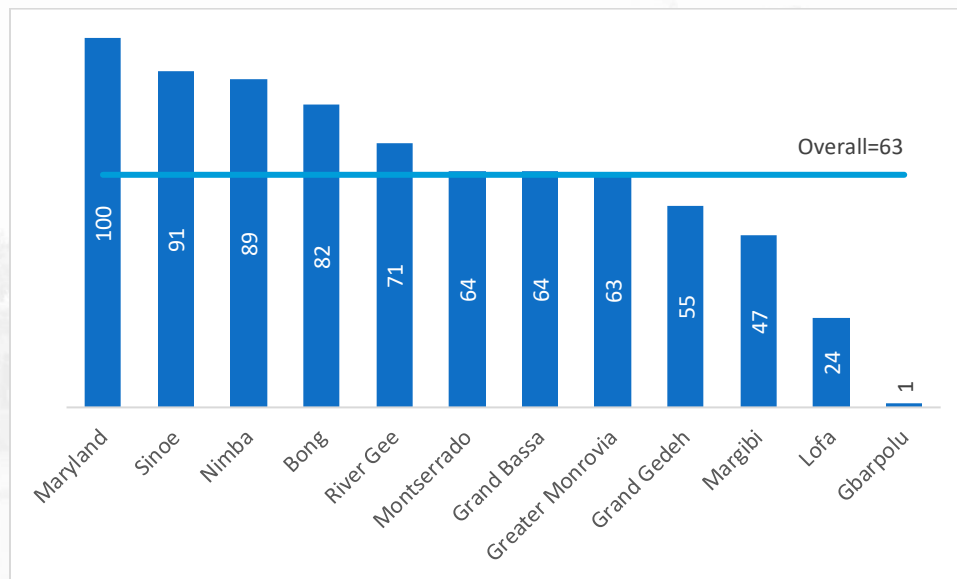
The type of assistance needed is disaggregated by gender of the household head, as shown in Figure 73. No significant changes are noticed between the two genders. As such, irrespective of gender, results remain the same.

Figure 73: Type of assistance needed by gender of the head and household size



Respondents were asked to report on whether any of their household members are currently looking for a job. Figure 74 illustrates the share of those who said “yes” across the assessed locations. All households in Maryland have at least one member looking for a new job. Around nine out of ten households in Sinoe and Nimba have at least one member that is looking for a job, which is far above the overall average figure (63%). Hence, overall, two out of three households have members that are looking for a job. At this level are anchored families located in Montserrado (64%), Grand Bassa (64%) and Greater Monrovia (63%).

Figure 74: Looking for a job by location



## 7 MULTIDIMENSIONAL VULNERABILITY INDEX

### 7.1 Methodology

In this analysis, the empirical calculation of the MVI is based on the multidimensional approach developed by Alkire and Foster<sup>1</sup>. The rationale for choosing this methodology is that it is intuitive and easy to understand for policymakers. It emphasizes the joint deprivations faced by individuals, households, or businesses regarding the indicators that compose the MVI. The MVI is an adjusted headcount ratio index designed to measure vulnerability, and can be broken down into **incidence**, **intensity**, and **dimensional composition**.

The **incidence** of vulnerability (**H**, for Headcount ratio) is the proportion of individuals (within a given population) who are identified as vulnerable based on the multiple deprivations they experience. The **intensity** of vulnerability (**A**, for Average deprivation share) is the average proportion of deprivations vulnerable individuals experience. It measures how vulnerable individuals are, on average. The MVI is the product of both **H** and **A**.

$$MVI = H \times A$$

In practice, we consider a sample of  $N$  units (units refer to either households or businesses) and  $D \geq 2$  indicators. Indicators related to the same area of deprivation are grouped into dimensions. For example, the nutrition's dimension for households is identified in the data with two indicators. Let  $Y$  be the  $N \times D$  matrix whose entry  $y_{ij}$  denotes the level of indicator  $j$  for unit  $i$ . The  $1 \times D$  vector  $z = (z_1, \dots, z_D)$  contains the deprivations cut-offs of  $D$  indicators, which is used to determine if a unit is deprived in each of the indicators  $D$ . Let us assume that, for an indicator  $j$  and unit  $i$ , the deprivation occurs when  $y_{ij}$  falls strictly below the respective cut-offs, that is  $y_{ij} < z_j$ . The  $1 \times D$  vector  $w = (w_1, \dots, w_D)$ , with  $w_j$  being between 0 and 1, and  $w_j$  add up to 1.

Let  $g^0$  be the  $N \times D$  deprivation matrix whose entries are given by  $g_{ij}^0 = w_j$  if an indicator entry  $y_{ij}$  falls strictly below the respective cut-offs  $z_j$ . The row sum of  $g^0$  represents the number of weighted deprivations faced by unit  $i$ , that is  $c_i = \sum_{j=1}^D g_{ij}^0$ .

Here,  $k$  is defined as the vulnerability cut-off, which represents the extent of weighted deprivations a unit must exceed to be considered vulnerable. Knowing the cut-off  $k$ , we can define the vulnerability identification function  $\rho_k(y_i, z)$  which equals 1 if the weighted deprivation rate exceeds the cut-off  $k$  and 0 otherwise. Therefore, the headcount ratio **H** or incidence of vulnerability can be calculated as follows:

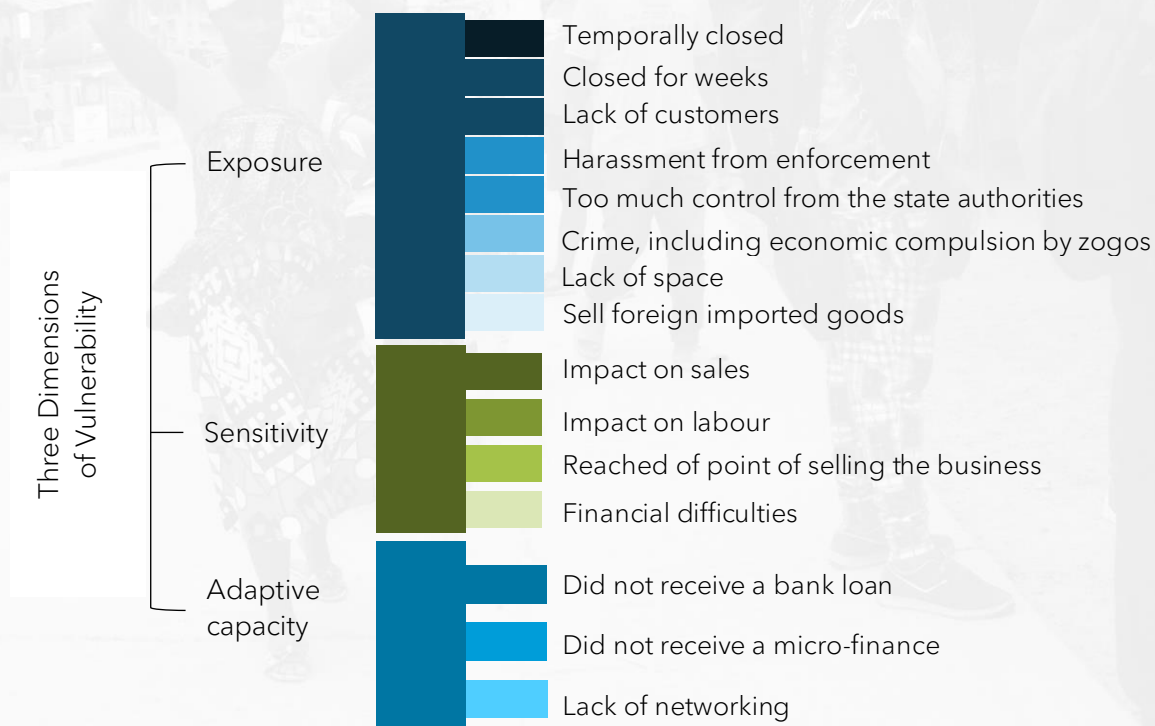
$$H = \frac{\sum_{i=1}^N \rho_k(y_i, z)}{N}$$

As explained above, the intensity **A** is the average proportion of deprivations vulnerable units experience.

The MVI can also be calculated using its dimensional composition, by breaking it down by each of its indicators. The figure used in this regard is the **censored headcount ratio,  $h_j$** , which is the percentage of individuals identified as vulnerable and deprived in each component indicator ( $j$ ). The MVI is constructed by summing the weighted censored headcount ratio  $h_j$  of each indicator  $D$ :

$$MVI = \sum_{j=1}^d w_j h_j$$

The selection of dimensions and indicators for informal businesses MVI followed the conceptualization of vulnerability as a combination of: exposure, sensitivity, and adaptive capacity <sup>ii, iii, iv, v, vi, vii, viii</sup>.



Source: Surge Data Hub, UNDP

Figure 75: Composition of the MVI - Dimensions and indicators

This conceptualization is useful for the analysis of businesses’ exposure to shocks, as well as the way in which they are impacted by, and respond to, these shocks. Thus, the measurement highlights both the degree to which businesses are affected by the shock, as well as their ability to respond and adapt to it.



For these reasons, the three dimensions of the MVI were defined as:

- **Exposure:** reflects the extent to which a firm is subject to, or in contact with, the shock;
- **Sensitivity:** is the degree to which a firm is impacted by a shock or a range of different shocks; and,
- **Adaptive capacity:** refers to the ability that a firm has to respond to the disturbances and to recover from a shock.

Subsequently, indicators were chosen from the variables available in the dataset that corresponded with these definitions, and thus could fit into one of these dimensions. It is worth noting, however, that the questionnaire of the assessment was not designed in order to conduct the MVI analysis, but rather, the MVI was decided to be constructed after conducting the assessment, in order to count with a specialized tool that could contribute toward highlighting the main areas of vulnerability, as well as the main groups of businesses that are the most vulnerable to shocks, such as the one produced by the COVID-19 pandemic. Therefore, the aggregation of the different variables into indicators, and indicators into dimensions of the MVI, was subject to certain limitations.

Table 7. Dimensions and indicators of the MVI

Dimension	Indicator	Deprived if ...	Weight
<b>Exposure</b>	Temporally closed since the COVID-19 outbreak	If selected "Yes"	1/24
	Closed for weeks	If the number of weeks closed (E3) is above the median	1/24
	Lack of customers	If selected	1/24
	Harassment from enforcement	If selected	1/24
	Too much control from the state authorities	If selected	1/24
	Crime, including economic compulsion by zogos	If selected	1/24
	Lack of space	If selected	1/24
	Sell foreign imported goods	If selected "Yes"	1/24
<b>Sensitivity</b>	Impact on sales	If decreased [Can be associated to the approximate change in sales (Above the median)]	1/12
	Impact on labour	If stop working for more than a month	1/12
	Reached of point of selling the business	If selected "Yes"	1/12
	Financial difficulties	If selected	1/12
<b>Adaptive capacity</b>	Applied for bank loan in the past 12 months and not successful in receiving it	If G1=Yes and G2=No	1/9

Applied for microfinance loan in the past 12 months and not successful in receiving it	If G6=Yes and G8=No	1/9
Networking, cooperation, and access to information	If D9=No	1/9

The sample profile of the data that is included in the MVI analysis is 6620 businesses. Below are shown some descriptive statistics of the selected indicators (for more refer to **Tables for the multidimensional vulnerability analysis** in the ANNEX).

Table 8. Descriptive statistics of the selected indicators for the MVI

Indicator	Obs	Mean	Std. Dev.	Min	Max
<b>Exposure</b>					
Business is closed temporarily	6620	0.073	0.26	0	1
Business closed for weeks	6620	0.788	0.408	0	1
Lack of customers	6620	0.15	0.357	0	1
Harassment from enforcement	6620	0.024	0.152	0	1
Too much control from the state authorities	6620	0.026	0.159	0	1
Crime, including economic compulsion by zogos	6620	0.009	0.092	0	1
Lack of space	6620	0.022	0.146	0	1
Sell foreign imported goods	6620	0.182	0.386	0	1
<b>Sensitivity</b>					
Impact on sales	6620	0.136	0.343	0	1
Impact on labour	6620	0.342	0.474	0	1
Reached of point of selling the business	6620	0.079	0.27	0	1
Financial difficulties	6620	0.726	0.446	0	1
<b>Adaptive capacity</b>					
Did not receive a bank loan	6620	0.964	0.185	0	1
Did not receive a micro-finance	6620	0.992	0.092	0	1
Lack of networking	6620	0.974	0.159	0	1

## 7.2 Business vulnerability

The overall level of vulnerability experienced by informal businesses due to the COVID-19 pandemic is relatively high. As shown in Table 3 below, **the majority of informal businesses are deprived in at least 40% of the weighted indicators of vulnerability** considered in this analysis. Moreover, the incidence of vulnerability for the cutoff of 50% of deprivations (half of all weighted indicators) remains relatively high. In fact, half of businesses are still vulnerable to at least 50% of the weighted indicators. For the cut-off of 50%, the percentage of 53% represents the intensity, which indicates that these vulnerable respondents are deprived on average in almost 8 of the 15 indicators included in constructing the index. As a result, the MVI score of 0.263 indicates that, due to the COVID-19 pandemic, households

which are vulnerable experience 26% of all the potential deprivations they could experience. However, the level of incidence of vulnerability greatly jumps when moving from a threshold of 50% to 60% of deprivations. As shown in Table 9, the incidence of vulnerability decreased by almost 100%, shifting from 49% on cutoff 50% to only 1% on cutoff 60%, meaning that informal businesses are deprived in a maximum of 50% of the weighted indicators. As a result, the cutoff 50% seems a reasonable threshold to use when disaggregating the findings at granular level. However, dominance analyses were performed on all the cutoff to validate the findings with the cutoff of 50%.

Table 9. Incidence, Intensity, and MVI for all cut-offs

% of deprivations	Incidence	Intensity	MVI
10%	100%	49%	0.485
20%	100%	49%	0.485
30%	100%	49%	0.484
33%	98%	49%	0.48
40%	94%	49%	0.462
<b>50%</b>	<b>49%</b>	<b>53%</b>	<b>0.263</b>
60%	1%	64%	0.009
70%	0%	72%	0

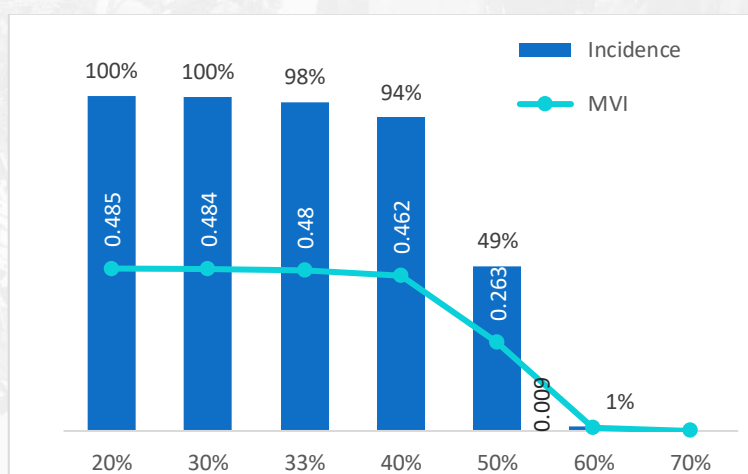


Figure 76: Composition of the MVI - Dimensions and indicators

Figure 77 illustrates the censored headcount ratios for each indicator composing the MVI. The censored headcount ratio of an indicator represents the percentage of businesses experiencing a deprivation in that individual indicator, while also being identified as vulnerable by the overall MVI. This is relevant as it allows to see which limitations or deprivations are most prevalent among the vulnerable businesses.

Across all indicators, the one with the highest headcount ratio are all within the adaptive capacity's dimension. An average of 50% of the informal businesses that were found to be vulnerable were deprived in adaptive capacities following the COVID-19 shock. This is characterized by lack of networking, poor access to bank and microfinance loan while facing

business closure (42% of vulnerable businesses under the exposure dimension) and financial difficulties (41% of vulnerable businesses under the sensitivity dimension). Informal businesses were also relatively sensible to the impact on sales and impact on their employees. As seen in the sensitivity dimension, 20% of the vulnerable businesses have experienced a decrease of their sale above the median, while 21% were forced to make their employees redundant. Under the exposure dimension, informal businesses that were vulnerable to the shock are those of which business nature was constrained, forcing them to close due to lockdowns.

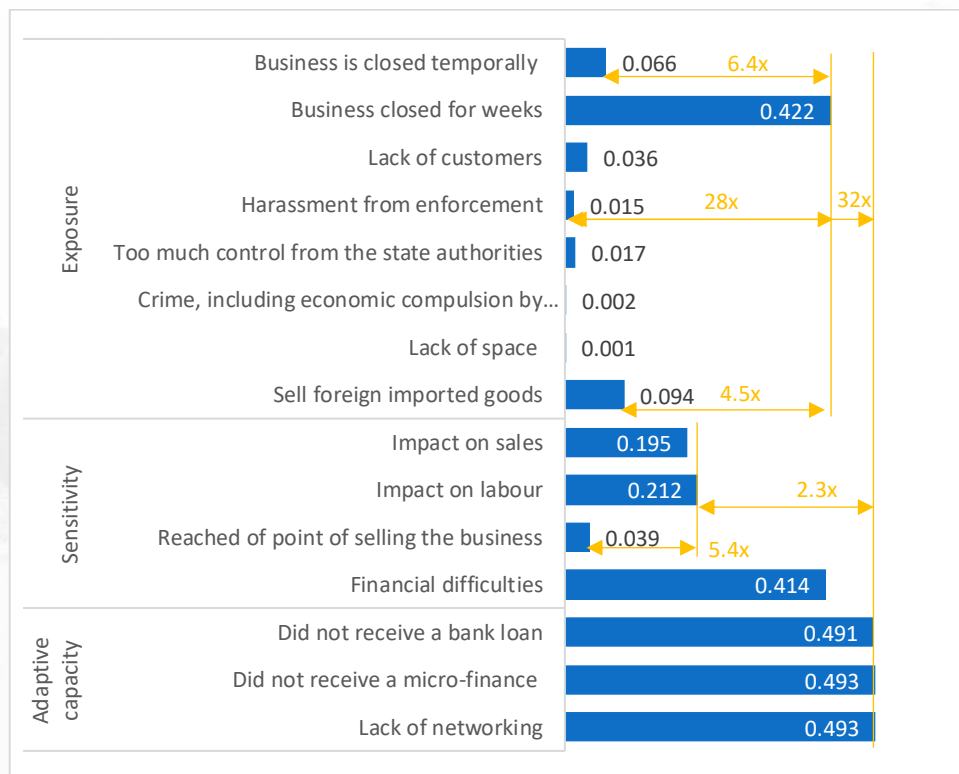


Figure 77: Censored headcount ratios

### 7.3 Vulnerability by business characteristics

The left side of Figure 78 shows the incidence of vulnerability and the MVI score for all assessed counties. The levels of vulnerability do not show significant variations across Greater Monrovia, Montserrado, and other counties although the share of businesses that are vulnerable is slightly lower in other parts of Montserrado (45% compared to 50% in Greater Monrovia). Moreover, across all counties, both the level of incidence and the MVI follow the same trend. Considering the MVI is the product of the incidence times the intensity, this means that there is not much variation on the intensity of vulnerability by county, that is, vulnerable businesses in all counties experience the same number of deprivations.

The right side of the figure shows the contribution<sup>4</sup> of each county to the overall MVI in comparison to their respective population share. This comparison is important because the contribution of a county is the product of multiplying its population share by its MVI. Therefore, the counties whose contribution exceeds their population share have a disproportionately high vulnerability towards COVID-19, and vice versa. Figure 78 shows that Greater Monrovia's contribution to the overall vulnerability slightly exceeds its population share (77% vs 75%), implying that informal businesses in Greater Monrovia bear a disproportional level of vulnerability as compared to businesses in other counties.

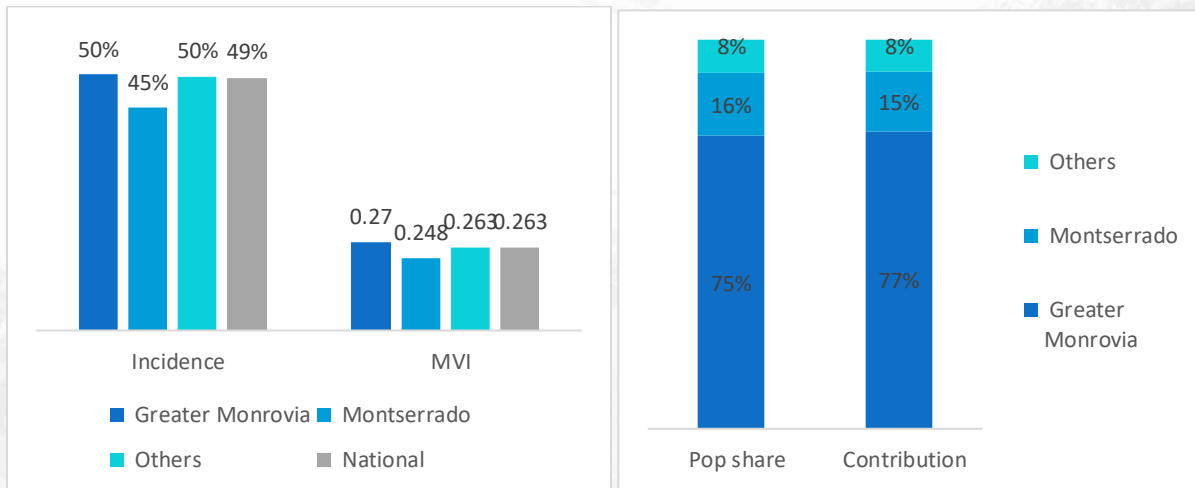


Figure 78: Incidence, MVI, and Contribution by county for cut-off=50 %

Upon assessing the level of vulnerability for informal businesses by business tenure, some disparities were found (Figure 79). Businesses with more than two years of activity experienced the high rate of vulnerability, with 53% of them being vulnerable to the pandemic (corresponding to a MVI score of 0.28). The least vulnerable to the pandemic were informal businesses operating for less than a month, with a prevalence of 15% and a MVI score of 0.08. The findings also indicates that there is no significant variation in vulnerability between businesses that age ranges between one month and two years.

Informal businesses operating for more than two years not only showed the highest level of vulnerability but they also bear a disproportionate share of vulnerability, as can be seen in their contribution to the overall MVI, which is 5 percentage points higher than their population share (65% vs 60%).

<sup>4</sup> The calculation of sub-group contribution to MVI is made possible by the property of population subgroup decomposability of the approach from Alkire et al. (2015). The subgroup contribution formula is  $D^l = v^l * \frac{MVI^l}{MVI}$ , where  $v^l$  is the population share of subgroup  $l$  and  $MVI^l$  is the multidimensional vulnerability of subgroup  $l$ . Whenever the contribution to vulnerability of a region or some other group greatly exceeds its population share, this suggests that there is a seriously unequal distribution of vulnerability in the country, with some regions or groups bearing a disproportionate share of poverty.

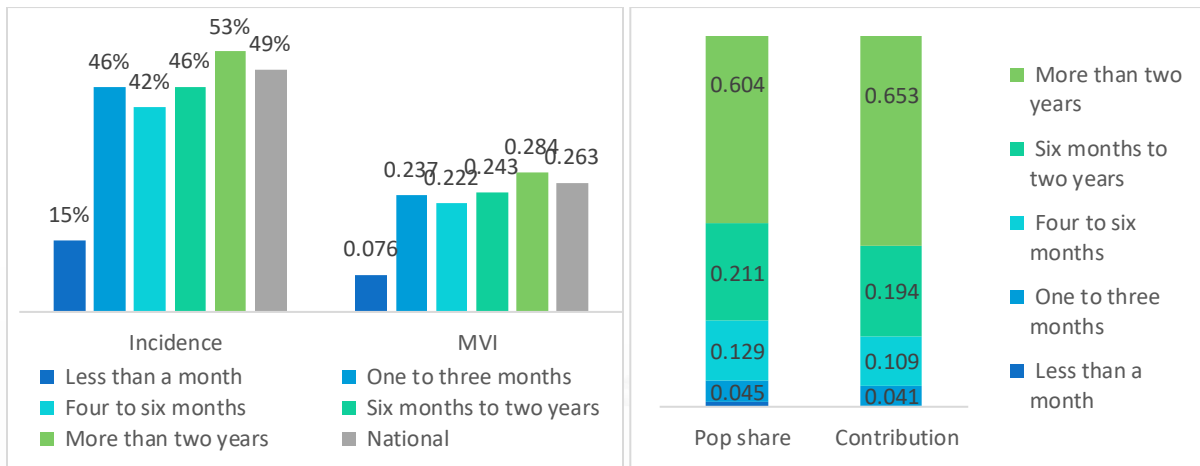


Figure 79: Incidence, MVI, and Contribution by business tenure for cut-off=50 %

The levels of vulnerability were also assessed by the legal status of businesses. Analysis uncovers that individual businesses were more vulnerable to the pandemic as compared to those in partnership. However, findings show that businesses in partnership with members of the same household experience a relatively high rate of vulnerability, as compared to those in partnership with members of other households. These findings are illustrated by the left-side of Figure 80 which shows that the vulnerability score of individual businesses is almost two times that of businesses in partnership with members of other households as well as other type of businesses (0.27 vs 0.15). Similarly, the vulnerability score of businesses in partnership with members of the same household is more than 2/3 higher than the vulnerability score of those in partnership with members of other households (0.22 vs 0.15).

Furthermore, Figure 80 indicates that the contribution of individual businesses to the overall vulnerability slightly exceeds their population share (94% vs 91%), implying that individual businesses share a disproportional level of vulnerability as compared to other types of informal businesses in Liberia.

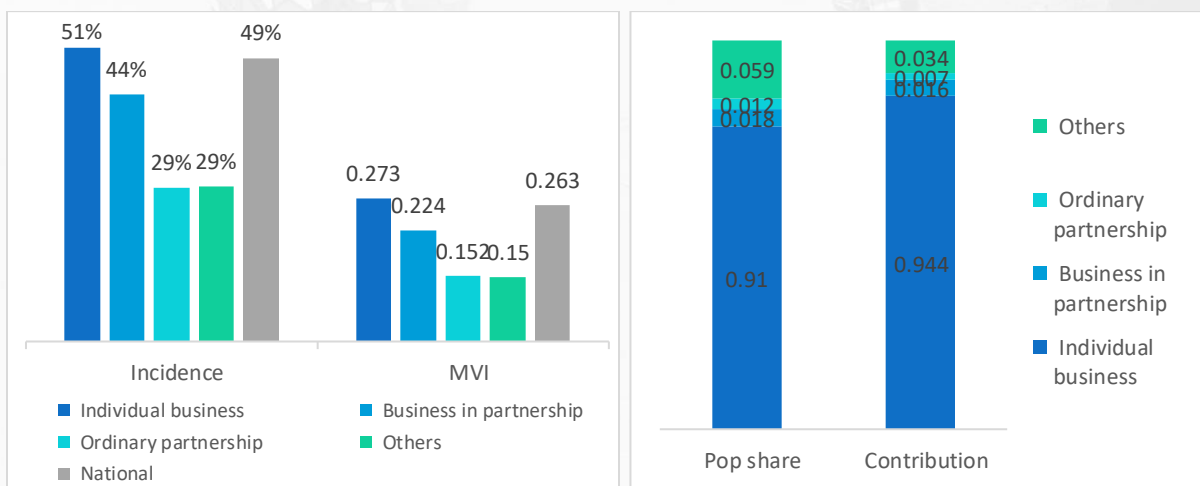


Figure 80: Incidence, MVI, and Contribution by legal status for cut-off=50 %

## 7.4 Dominance analysis

The previous findings are based on one subjective cutoff; that is, 50% of the weighted indicators of vulnerability. But what if we consider all the cutoffs for a robustness check? This process of comparing the vulnerability levels for all cutoffs is called 'dominance analysis'.

The dominance approach provides a framework for testing whether unambiguous comparisons of vulnerability have been made across a class or an entire range of vulnerability measures at different cut-offs. If it is claimed that an unambiguous comparison has been made between two groups under a given cut-off, then such an order will be valid if other cut-offs are applied. This is an important assumption to test. If the vulnerability comparisons differ significantly depending on the choice of cut-off, their credibility may be questioned. On the other hand, if the conclusions are the same regardless of the cut-off, this may mitigate disagreements about the MVI calculation, and validate its results for policy recommendation.

Following Alkire et al. (2015), we consider that a distribution  $x$  first-order stochastically dominates distribution  $y$ , which is written  $x$  FSD  $y$ , if and only if  $F_x(b) \leq F_y(b) \leq$  for all  $b$  and  $F_x(b) < F_y(b) \leq$  for some  $b$ . In other words, the cumulative distribution function (CDF) of  $x$  lies to the right of the CDF of  $y$ . In the case of vulnerability analysis, the value of a CDF corresponding to a certain level of cutoff ( $k$ ) is the proportion of the population with achievements below that cut-off, representing here the headcount ratio or incidence of vulnerability. Thus, first-order stochastic dominance is equivalent to the condition when the headcount ratio in distribution  $x$  is either equal to or lower than that in distribution  $y$  for all vulnerability cutoffs. The second-order stochastic dominance is equivalent to comparing the area underneath the CDFs for every cutoff. Since the MVI curves are obtained by calculating the areas under the distribution function of headcount ratios, the second-order stochastic dominance is obtained by comparing the distribution functions of the MVI scores.

Both first and second order dominance by county confirm that there is no significant difference between Greater Monrovia, Montserrado, and other counties (Figure 81). Similarly, across all cutoffs, both the first and second dominance analysis confirm that businesses that were operating for more than two years were the highest vulnerable to the pandemic followed by while those with four to six months and six to two years (Figure 82). In addition, the least vulnerable across all cutoffs are informal businesses with less than a month of operation.

Regarding the dominance analysis by legal status, it shows that the dominance is lost for only other types of businesses after the cutoff of 40% (Figure 83). However, the second-order dominance highlights that individual businesses are the most vulnerable regardless of the cutoff.

Based on these findings, it can be asserted that the results obtained previously with the 50% cutoff are robust to any change in the threshold. Therefore, they can be used for policy recommendations.

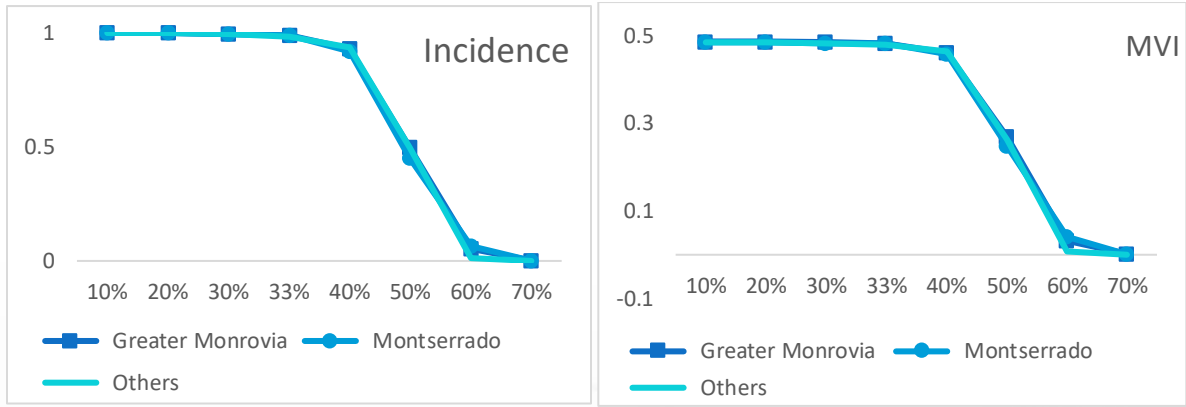


Figure 81: First and second dominance by country

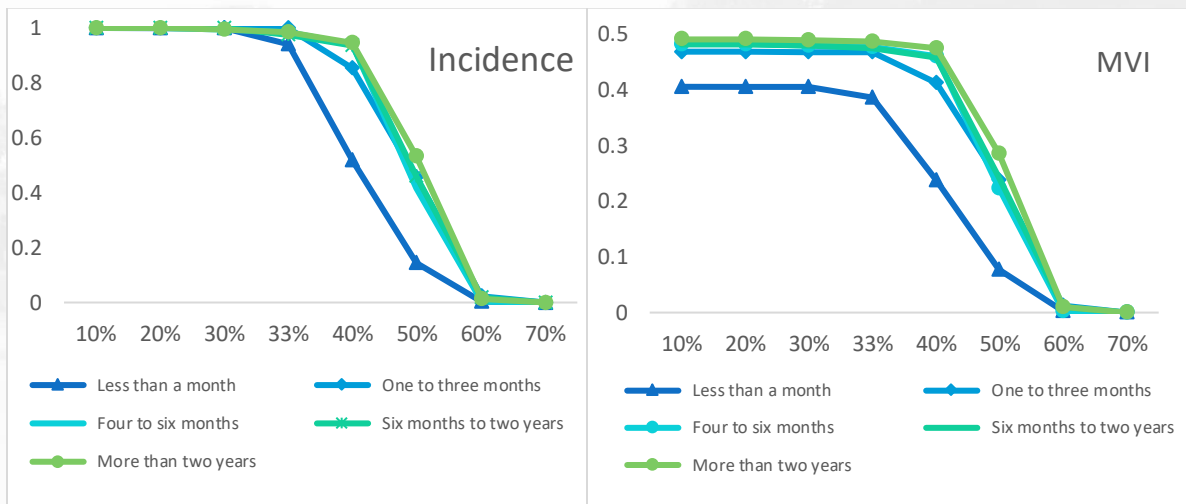


Figure 82: First and second dominance by business tenure

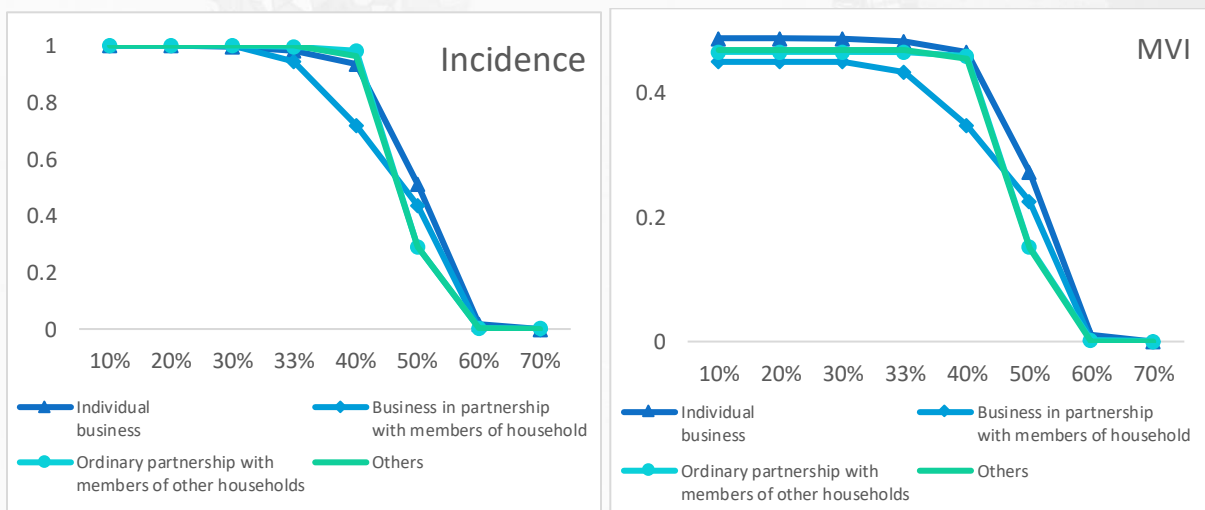


Figure 83: First and second dominance by legal status



## 7.5 Decomposition of MVI by business characteristics

The below illustrates the decomposition of the MVI by business characteristics, including county, business tenure, and business legal status. Such decomposition of the MVI business characteristics has a major advantage in steering the design of policies to target both the groups and indicators that contribute most to the vulnerability of businesses.

The censored headcount ratios in Figure 84 illustrate that there are no significant differences in the vulnerability of the informal businesses across the counties in Liberia. These findings indicate that location does not signify variations in the vulnerability of informal businesses. Therefore, one can say that the location where businesses operate does not influence business vulnerability. Hence, informal business vulnerability is not affected by the business location, implying that business location may not be considered as a key factor in the policy formation process.

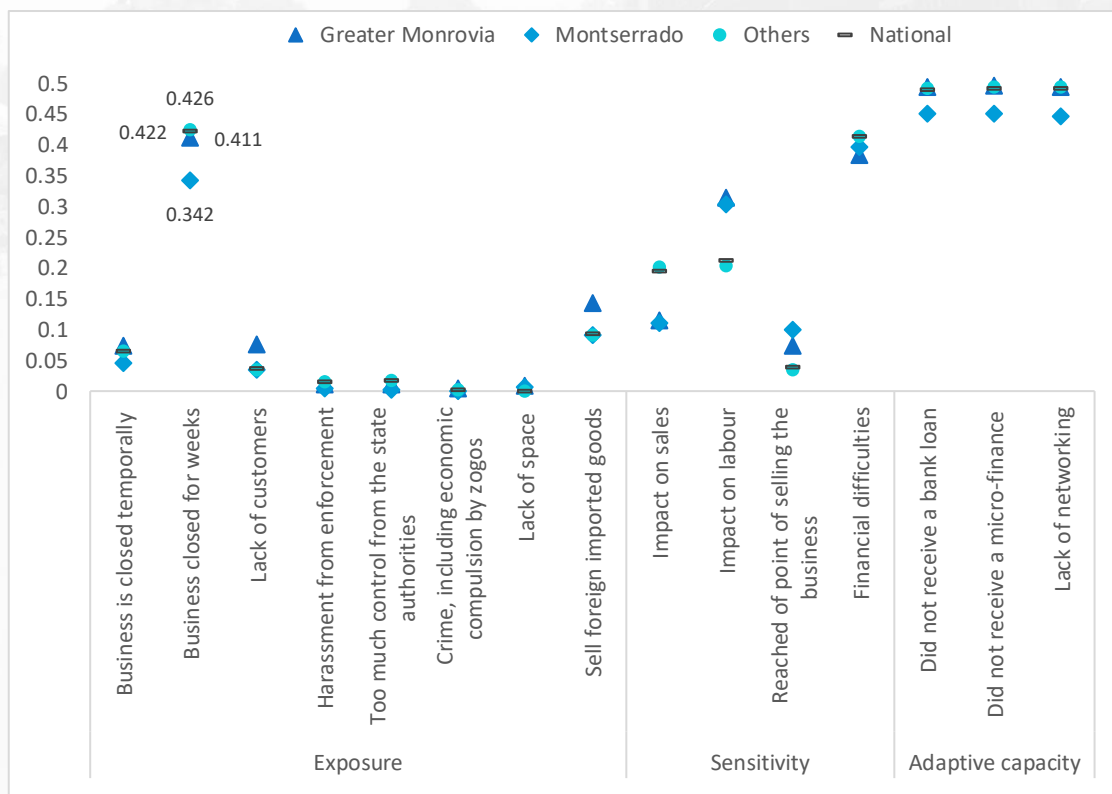


Figure 84: Censored headcount ratios by county

Censored headcount ratios by business tenure are illustrated in Figure 85. As illustrated within the graph, it seems that informal businesses which have operated for less than a month in the market manifest the lowest vulnerability, as compared to the other business tenure categories, for all indicators across the three dimensions of the informal business vulnerability. Businesses with more than two years of operating in the market reflect the highest censored ratios is some indicators, such as Business closed for weeks (48.5%), Lack of customers, Too much control from the state authorities, Sell foreign imported goods, Impact on sales (24.6%), and Financial difficulties (42.9%). Showing these differences, one

can say that business tenure should be considered while designing policies to reduce the informal business vulnerability.

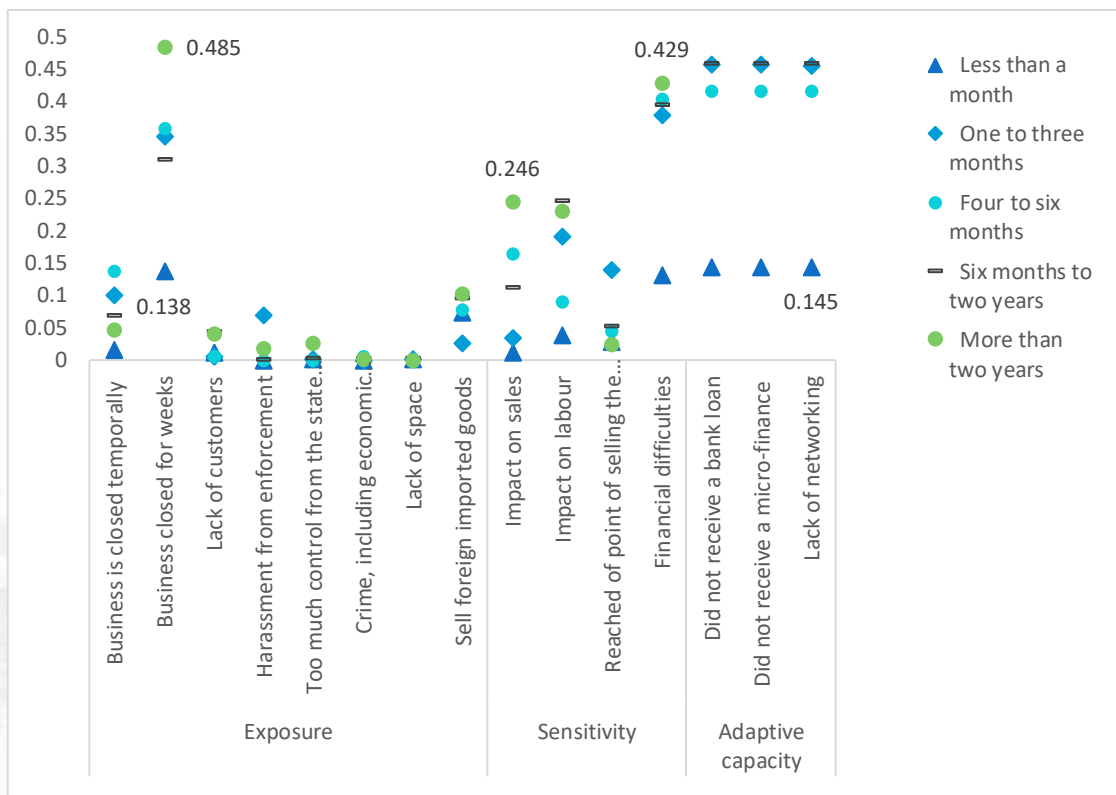


Figure 85: Censored headcount ratios by business tenure

Another important factor that emerged upon analyzing the decomposition of the MVI's results concerns the legal status of businesses (see Figure 86). Noteworthy results are found regarding this decomposition. The most vulnerable legal status varies from dimension to dimension of the business' vulnerability across the indicators. Hence, it seems that individual businesses contribute most to the MVI for some indicators, which are Business is closed temporarily (7.1%), Business closed for weeks (43.5%), Impact on sales (21.2%), Financial difficulties (43.9%), while for some other indicators Business in partnership reflect the highest censored ratios, such are Harassment from enforcement (16.6%), Sell foreign imported goods (12.8%) and the three indicators concerning adaptive capacity (43.6%).

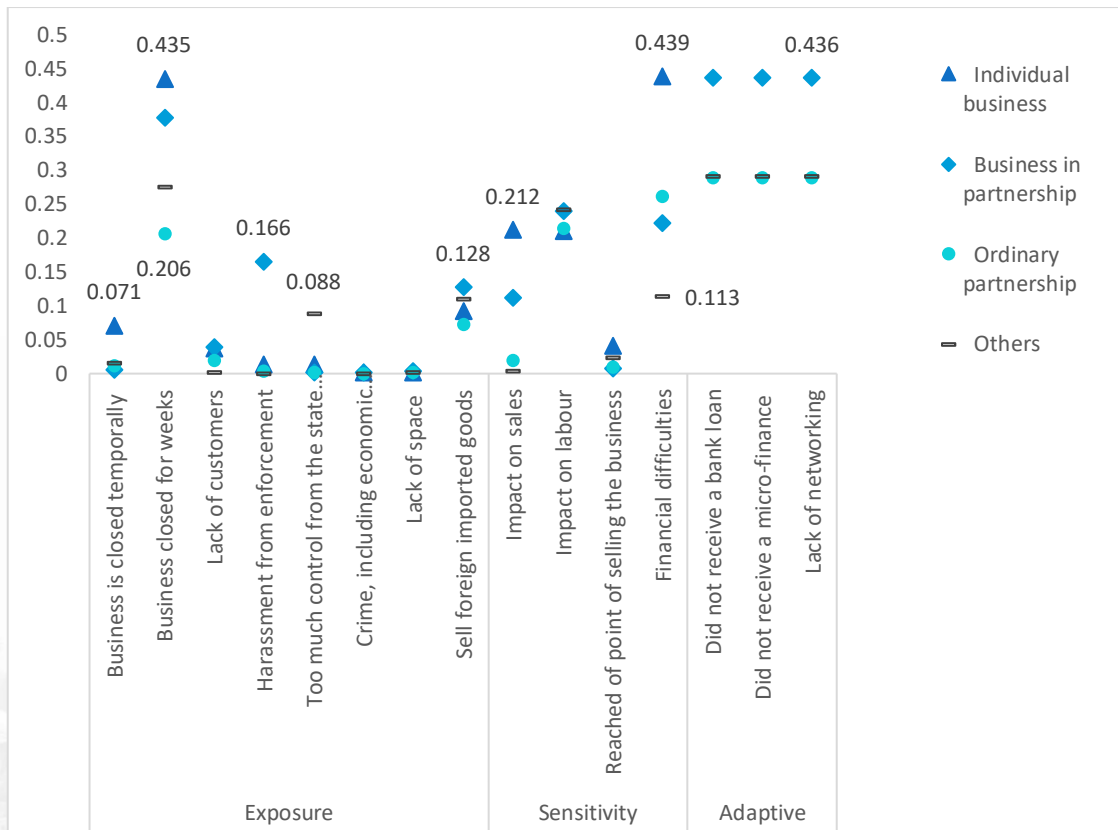


Figure 86: Censored headcount ratios by legal status

## 8 CONCLUSIONS AND RECOMMENDATIONS

The economic and social shocks resulting from the COVID-19 pandemic continues to be a universal phenomenon that permeates throughout all sectors of society. It is pertinent to acknowledge the two overarching and opposing views regarding the impacts of COVID-19 and crises more broadly, on the informal sector. The first considers the sector as an economic safety net, while the second suggests that informal economy workers are subject to increased detriment due to unstable incomes, and the absence of social protection schemes.

This Digital Socio-Economic Impact Assessment has generated comprehensive and informative findings on the socioeconomic impacts of COVID-19 on informal workers across the country and their families, as well as informal businesses and the sector as a whole. Results indicate that the pandemic has had a substantial negative effect on the informal sector, which indeed remains disproportionately impacted by the COVID-19 pandemic.

Devoid of formal social protection schemes, recognition, social security mechanisms, and benefits from institutional sources, informal sector workers have been further pushed into a precarious position. Given the exacerbation of pre-existing vulnerabilities and development-related problems, this report underscores the urgent and critical need for economic recovery programming and social protection schemes, in light of this enduring crisis.

The findings of this Assessment and the accompanying Multidimensional Vulnerability Index chapter point to a number of areas that could result in evidence-based policies and tangible outcomes to alleviate challenges faced by the informal sector in the face of the pandemic and future crises. Some recommendations in light of these findings are listed herewith:

- Short- to medium-term support should be provided to vulnerable informal sector workers; particularly, those impacted by containment measures that have prevented the ability to work and operate from their usual sites. Immediate responses in the informal sector should target cash transfers and the provision of food and subsistence goods.
- Given the lack of understanding on registration-related regulations and the social protection benefits available to registered businesses, a strategic communications plan targeting informal sector workers is recommended to encourage registration, thereby enabling wider access to social protection benefits.
- The reduction or omission of business registration application fees is highly recommended, in addition to the simplification of the application process.
- It is recommended that the Government works with local authorities to identify and establish a database of informal businesses and business owners.
- It is recommended that policymakers consider the legal status of the businesses while designing the policy instruments, with the aim to reduce businesses' vulnerabilities.
- We recommend the enhancement of national entrepreneurial culture through the promotion of programs that prioritize informal sector businesses as preferred suppliers.
- The provision of business education and skills workshops to informal sector workers to enable an understanding of how to rebuild and achieve regrowth in the aftermath of crises.

- Strengthen social protection schemes geared toward informal sector workers and enhance access to goods and services pertaining to health and education. In particular, this crisis places emphasis on the need to augment public health capabilities for the informal sector,
- Empower microcredit institutions and extend financial services to informal sector workers following their registrations, providing modest credit facilities at lower interest rates.
- Provide access to financial new loan schemes and added social protection mechanisms, during, and in the aftermath of crisis events.
- Ensure that any new social protection schemes avoid complex administrative processes and logistics and consider the digital divide when disseminating information or processing applications on an online basis.
- Encourage, and provide assistance toward, the digitalization of the informal sector to enable the ability of digital technology to collect data, establish trends and make better business decisions.
- Given that informal sector workers were directed to relocate during the pandemic, formalized and new collective spaces for the operation of informal businesses is recommended, where possible.
- Strategies for the strengthening of regulatory infrastructure is necessitated for longer-term economic stability and financial sustainability for informal sector workers.

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## ANNEX

### Questionnaire

Digital Socio-Economic Impact Assessment

Informal Sector Questionnaire

August 2021



This survey is initiated by the United Nations Development Programme (UNDP) in Liberia and the Government of Liberia with the objective to support the government of Liberia in designing and implementing effective and targeted measures to alleviate the negative impacts of the COVID-19 pandemic on households, individuals/small business livelihoods in the informal sector in Liberia. It is expected that this exercise will provide most recent baseline data on informal sector, and contribute to highlight the importance and use of sound data on informal sector and informal employment including individual workers and SMES in support of evidence-based policy and programming, support the process of improving statistics about informality in the country and create a network of national stakeholders advocating for and contributing to improving measurement of the informal economy. Ultimately, the result will bring to light insights on the location, operating amenities, reasons for engaging in the activity and its competitive environment, COVID-19 impact and coping strategies and recovery needs

The information collected through this survey will be treated with the strictest confidence and will not be used for any other purposes without your consent. All the information you will provide will be anonymized and no individual data will be disclosed.

Your ongoing participation would assist the government and donor associations in monitoring any changes in the socio-economic impacts of COVID-19 and aid the design of updated measures to face the negative impacts of the pandemic.

**LEGEND:**

Questions marked with \* indicate the question is mandatory

*Text appearing in italic* indicate question instructions

Enumerator Details	
Enumerator	<b>Enter your enumerator code</b> <i>Response should be a four-digit integer composed of the team number (2 digits) and enumerator number (2 digits)</i> (integer)

housenumber*	<b>This is household number ____ that you are interviewing</b> (integer) <i>Enter the number of households that you will have interviewed including the current one</i>
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Screening module	
Consent*	<b>Please confirm that you are aged above 15 years and are willing to participate in this survey willing to undertake this survey</b> 1. Yes 2. No
no_consent*	<b>If no, please indicate why you cannot participate in this survey</b>
	consent = 2

Continue Survey	
consent = 1	
MODULE A	ID AND LOCATION
A2*	County (select one) <i>Refer to county list in Annex</i>
A3*	Usual Place of Residence /City/Town (select one) <i>Refer to residence list in Annex</i>
house code	Household Code <i>Concatenate the enumerator code, residence ID and household number</i> (calculate)
A8*	In what kind of building does the respondent live (to be completed by the interviewer/enumerator) (select one)
	1. Single family house 2. Multi-family house (shared kitchens or living spaces) 3. Apartment building / block 4. Improvised housing unit 5. Other 999. Not Sure
A9*	How many members are there in your household? (Integer)

MODULE B DEMOGRAPHIC INFORMATION			
<i>Please answer for each member of the household, starting with the head of the household, then for the rest of the household members from the oldest in age to the youngest</i>			
		Member 1(Head of household)	Member 2 ..... .....

B0	Name (Text)				
B1*	Age: (Integer)				
B2*	Gender (select one)	<ol style="list-style-type: none"> <li>1. Female</li> <li>2. Male</li> </ol>			
B3*	[Member X] is (select one)	<ol style="list-style-type: none"> <li>1. Liberian (not internally displaced)</li> <li>2. Liberian (internally displaced)</li> <li>3. Refugee, please indicate nationality___</li> <li>4. Immigrant, please indicate nationality___</li> <li>5. Asylum seeker, please indicate nationality___</li> </ol>			
B4*	Does [Member X] belong to any of the following vulnerable groups? (Select all that apply)	<ol style="list-style-type: none"> <li>1. Pregnant or lactating women</li> <li>2. Vision impairment</li> <li>3. Deaf or hard of hearing</li> <li>4. Mental health condition</li> <li>5. Intellectual disability</li> <li>6. Acquired Brain Injury</li> <li>7. Autism Spectrum disorder</li> <li>8. Physical Disability</li> <li>9. Chronically ill</li> <li>10. Unaccompanied separated minors and</li> <li>11. Elderly (60+)</li> <li>12. None of the above</li> </ol>			
B5*	Highest Education level of [Member X] (select one)	<ol style="list-style-type: none"> <li>1. None</li> <li>2. Incomplete primary</li> <li>3. Complete primary</li> <li>4. Incomplete secondary</li> <li>5. Complete secondary</li> <li>6. Technical tertiary</li> <li>7. Higher (University)</li> </ol>			
B6a	Was [Member X] attending school in January 2020? <i>Attending: going to school at least 4 days a week for the month (or most recent term time month) preceding the event</i> (select one)	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>			
B6b	Was [Member X] attending school in January 2021? <i>Attending: going to school at least 4 days a week for the month (or most recent term time month) preceding the event</i> (select one)	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>			

B6c	If [Member X] have stopped attending school, why?	<ol style="list-style-type: none"> <li>1. Schools closed definitely because of COVID</li> <li>2. Schools are open but lack teachers</li> <li>3. Lack transportation to schools</li> <li>4. Cannot afford school fees</li> <li>5. Parents prefer that children stay home</li> <li>6. Children want to stay home</li> <li>7. Children had to work to support household income</li> <li>8. Other, specify _____</li> <li>8. Not sure</li> </ol>			
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MODULE C EMPLOYMENT STATUS OF RESPONDENTS					
		Only give responses for members who are 15 and more years old. Main job only.	Member 1	Member 2	....
C0*	ID of the member (calculate)	<i>Concatenate the household code and number of household member</i>			
C1*	Employment Status of respondent during the last month (select one)	<ol style="list-style-type: none"> <li>1. Employee with a written contract for long-term employment</li> <li>2. Employee with a written contract for short-term</li> <li>3. Employer</li> <li>4. Self-employed in agriculture</li> <li>5. Self-employed in non-agriculture</li> <li>6. Unpaid worker/family member</li> <li>7. Casual/Irregular/Day paid worker in agriculture</li> <li>8. Casual/Irregular/Day paid worker in non-agriculture</li> <li>9. Domestic worker in a private household</li> <li>10. Member of a production cooperative</li> <li>11. Paid apprentices</li> <li>12. Unpaid apprentices</li> <li>13. Unemployed looking for a job</li> <li>14. Unemployed not looking for a job</li> <li>15. Others, specify</li> <li>16. N/A (, student, retired etc)</li> </ol>			
		Continue with section C only if C1 is not equal to 13 or 14 or 16			
C2*	Which of the following best describes the type of business /service that you are engaged with? (select all that apply)	<ol style="list-style-type: none"> <li>1. Agriculture / sale of crops, Livestock / sale of animals and forestry</li> <li>2. Worker in a private company</li> <li>3. Worker in a public institution</li> <li>4. Wheelbarrow peddlers</li> <li>5. Scratch card vendors</li> <li>6. Street fish seller</li> <li>7. Vegetable and fruit peddlers</li> <li>8. Petty traders in electronics, clothes, household materials</li> <li>9. Roadside barbers and hairdressers</li> <li>10. Roadside food sellers (lapper-be-door)</li> <li>11. Waiter market with assorted items</li> <li>12. PWDs including those involved in informal businesses</li> <li>13. Catering food and drinks in a mini shop/bar</li> <li>14. Domestic work</li> <li>15. Transportation (taxi, etc.)</li> </ol>			

		16. Tourism related (guides, etc.) 17. Financial sector (micro-finance related, etc.) 18. Factory worker 19. Construction sector 20. Other			
C2b*	Specify other type of business/ service that you are engaged with C2=20 (text)				
C3*	Have you been employed on the basis of? (select one) C1=1 or C1=2	1. Yes, a written contract 2. Yes, an oral agreement 3. No contract/ agreement			
C3b*	If you are employed on the basis of contract or agreement, what is the duration of the contract or agreement? (select one)	1. Daily contracts/ agreements 2. Less than 1 month 3. 1 to 2 months 4. 3 to 6 months 5. 7 to 12 months 4. More than 12 months/ unlimited	C3=1 or C3=2		
C4*	Is the establishment where you work formally registered with or licensed by a national authority? (select one)	1. Yes, registered business 2. Freelancing/independent/consultant registered 3. No, unregistered business			
C5	If your/ the business in which you work is registered which of the following documents does your business have C4=1 (select multiple)	1. Certificate issued by Ministry of Commerce only 2. LRA Tax Clearance certificate only 3. Article of incorporation 999. Don't know			
C6*	How many employees, including you, did the establishment where you work have in July 2021? (integer)				
C8*	Does your business/ where you are working pay social contributions (pension fund and unemployment fund)? (select one)	1. Yes 2. No			
C9*	Do you benefit from or pay annual leave or compensation for unused leave? (select one)	1. Yes 2. No			
C10*	Would you benefit from paid sick leave in case of illness? (select one)	1. Yes 2. No			

C11*	What best describe the place where your business/you work is located in? (select one)	<ol style="list-style-type: none"> <li>1. Within the household premises</li> <li>2. Fixed building or structure other than own household</li> <li>3. Without a fixed or definite location</li> </ol>			
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**MODULE D STATUS AND ORGANIZATION OF BUSINESS/SERVICE**
*(to be repeated for each member determined to be in informal businesses)*
**(if C4 = 3) OR (if C2 <>(1,2, 3) and C3 = (2,3) and C6 < 5 and (C8 = 2 or C9 = 2 or C10 = 2 ))**

D0*	ID of the member (calculate)		= {C0}
D1*	What is the legal status of your business or the business where you are working? (select one)	<ol style="list-style-type: none"> <li>1. Individual business</li> <li>2. business in partnership with members of household</li> <li>3. Ordinary partnership with members of other households</li> <li>4. Other</li> </ol>	
D1b*	Please specify other legal status of the business (text)		D1 = 6
D1c	For how long, has the business been operating?	<ol style="list-style-type: none"> <li>1. Less than a month</li> <li>2. One to three months</li> <li>3. Four to six months</li> <li>4. Six months to two years</li> <li>5. More than two years</li> </ol>	
D1d	Was the business temporarily created to sell Christmas and the new year celebrations' products?	<ol style="list-style-type: none"> <li>1. Yes, the business will be closed after Christmas and new year celebrations</li> <li>2. No, business will be permanent</li> </ol>	D1c=1, 2
D2*	What type of premises is your business located in? (select one)	<ol style="list-style-type: none"> <li>1. Permanent premises in a market (shop, kiosk, shed)</li> <li>2. Workshop, shop, restaurant, hotel</li> <li>3. Taxi station in permanent structure/</li> <li>4. Public transport with fixed route</li> <li>5. Mining site</li> <li>6. Hawking/mobile</li> <li>7. Improvised post on the roadside</li> <li>8. Permanent post on the roadside</li> <li>9. Vehicle (car, truck, motor bike, bike)</li> <li>10. Customer's home</li> <li>11. In my home without special installation</li> <li>12. In my home with special installation</li> <li>13. Improvised post in a market</li> <li>14. Garbage area</li> <li>15. Other (specify) _____</li> </ol>	
D3a*	What was the starting value of your business in USD? (Integer)	999 - Don't Know/ prefer not to answer	
D3b*	What is the current value of your business in USD? (Integer)	999 - Don't Know/ prefer not to answer	

D3c*	What has been the average daily profit of your business in USD over the last month? (Integer)	999 - Don't Know/ prefer not to answer	
D4*	Does your enterprise/business where you work have a specific name? (select one)	1. Yes 2. No	
D5*	If yes, indicate the name (text)		D4=1
D6*	Do you or your business/enterprise where you work have a mobile phone number that is registered with any of the mobile money companies (select one)	1. Yes 2. No 999. Don't know	
D7*	If yes, please provide the main number that is registered with any of the mobile money companies (Integer)		D6=1
D8*	Do you have a bank account in the name of the business or in your own name? (select one)	1. Yes, in the name of the business 2. Yes, in my own name 3. Both in the name of my business and in my own name 4. No bank account	
D9*	Are you or is the business where you work a member of any professional organization for the main business activity (for example petty traders union)? (select one)	1. Yes, myself 2. Yes, the business where I work 3. Yes, both myself and the business where I work 4. No	
D10*	If Yes, please specify the name of this professional organization (text)		D9=1 OR D9=2 OR D9=3
D11*	As your/ the business in which you work is not registered, please tell us about the reasons for non-registration (select all that apply) (select multiple)	In the process of being registered See no need to register Do not know if registration is required for this type of business/or if needed to register/have no contact with local authorities Too many requirements to register Must pay too much plus process is too long Not good for business Others	C3=3
D12*	If you were to register your business, what do you think is the advantage (or benefit) for registration? (select all that apply) (select multiple)	No advantage Access to loans or financial services May be eligibility for other supports Increase chance of selling Could access other better business locations Publicity, business will be known Business could be protected legally	C3=3

**MODULE E SALES AND PRODUCTION**
*(to be repeated for each member determined to be in informal businesses)*
*(if C4 = 3) OR (if C2 <>(1,2, 3) and C3 = (2,3) and C6 < 5 and (C8 = 2 or C9 = 2 or C10 = 2))*

E0*	ID of the member (calculate)		={C0}
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E1*	Currently, is your business or the business where you are working open, temporarily closed, or permanently closed? (select one)	<ol style="list-style-type: none"> <li>1. Permanently closed</li> <li>2. Temporarily closed</li> <li>3. Operating partially</li> <li>4. Operating normally</li> </ol>	
E2*	Did your business or the business where you are working close temporarily since the COVID-19 outbreak? (select one)	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	E1=3 or E1=4
E3*	For how many weeks has this business been closed (or was closed) due to the COVID-19 outbreak? (integer)	_____ (# of weeks the firm was closed)	E1=1 or E1=2 or E2=1
E4*	Comparing your sales (the business where you are working) for 2021 with 2020, what has been the change in sales? (select one)	<ol style="list-style-type: none"> <li>1. Increased</li> <li>2. Decreased</li> <li>3. No change</li> </ol>	
E5*	On average, what has been the approximate percentage increase in sales comparing your sales (the business where you are working) for 2021 with 2020? (integer) E4 = 1		
E6*	On average, what has been the approximate percentage decrease in sales comparing your sales (the business where you are working) for 2021 with 2020? (integer) E4 = 2		
E7*	What was the average monthly sales for your business in 2021? (integer)	_____ (USD) 999 - Not applicable/ Don't know	
E8*	Who is your main customer? (To whom do you mainly sell?) (select one)	<ol style="list-style-type: none"> <li>1. Public or para-public sector</li> <li>2. Big enterprise</li> <li>3. Small enterprise</li> <li>4. Household/individual</li> <li>5. Direct exportation</li> <li>6. Other, specify</li> </ol>	
E8b*	Please specify other main customer (to whom you mainly sell) (text)		E8=6
E9*	Which of the following is your main suppliers? (select one)	<ol style="list-style-type: none"> <li>1. Cross border/cross county traders (sell pay)</li> <li>2. Individual/household traders</li> <li>3. Small business</li> <li>4. Big private business</li> <li>5. Public and Semi Private Sector</li> <li>6. Other, specify</li> </ol>	
E9b*	Please specify other main supplier (text)		E9=6
E10*	Who are your main competitors? (select multiple)	<ol style="list-style-type: none"> <li>1. No competitors</li> <li>2. Households/individuals</li> <li>3. Small private enterprises</li> <li>4. Big private enterprises</li> <li>5. Public and Semin Private sector</li> </ol>	



		6. 6. Other, specify	
E10b*	Please specify your other main competitors (text)		E10=6
E11*	Do you sell foreign imported goods (select one)	1. Yes 2. No	
E12*	How do you compare your selling price (charge) for the same good or service in comparison with your competitors? (select one)	1. Higher 2. Lower 3. Average/same 999. Not applicable	
E13*	Why are your prices higher? (select one)	1. Expensive raw materials and resources 2. Cost of paying workers 3. Less customers 4. The cost of rent is high	E12 = 1  Not (selected E13 =2 and C1 = 5)

**MODULE F LABOR**
*(to be repeated for each member determined to be in informal businesses)*
*(if C4 = 3) OR (if C2 <>(1,2, 3) and C3 = (2,3) and C6 < 5 and (C8 = 2 or C9 = 2 or C10 = 2 ))*

F0*	ID of the member (calculate)		
F1*	Since the outbreak of COVID-19 in March 2020, at any point, did you stop working (or lose your job) for one or more days, due to the COVID-19 outbreak? (select one)	1. Yes, less than 1 week 2. Yes, more than 1 week but less than 1 month 3. Yes, more than 1 month 4. No	
F2*	Since the outbreak of COVID-19, at any point, have you had to let go of workers due to the COVID-19 outbreak? (select one)	1. Yes 2. No	C1=6 or C1=7
F2b*	Since the outbreak of COVID-19, how many workers have you had to let go due to the COVID-19 outbreak? (integer)	3. _____ (indicate number) 4. Not Applicable	F2=1
F3*	If you or the business where you are working are planning to hire workers on pay basis, who will you prefer to hire? (select one)	1. Former worker who was laid off/lost job 2. A new worker, with experience 3. A new worker, regardless of experience 4. Relative, regardless of experience 5. Relative, with experience 6. An Apprentice 7. Other	
F6*	Are you a street peddler currently?	1. Yes 2. No	
F7*	Were you a street peddler before COVID-19?	1. Yes 2. No	

F8*	If you are currently a street peddler, for how long have you been street peddling? (integer)	Please indicate number of months	F6=1
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**MODULE G FINANCIAL ASPECTS**
*(to be repeated for each member determined to be in informal businesses)*
*(if C4 = 3) OR (if C2 <>(1,2, 3) and C3 = (2,3) and C6 < 5 and (C8 = 2 or C9 = 2 or C10 = 2 ))*

C0*	ID of the member		
G1*	Have you applied for a loan for your business from a bank in the last 12 months? (select one)	1. Yes 2. No	
G2*	Were you successful in receiving the loan from the bank? G1=1 (select one)	1. Yes 2. No	
G3*	If yes, what was the impact on your business? G2=1 (select multiple)	1. Resulted in less working hours 2. Resulted in increased sales/production volume 3. Resulted in utilization of less workers 4. Helped in the financial difficulties 5. Improved competition 6. Recruitment of additional workers 7. Overburden in terms of cost of borrowing and repayment 8. Loss of property due to delayed /Non-repayment 9. Other, please specify	
G3b*	Please specify other impact of the loan on your business G3=9 (text)		
G4*	Are you aware of any microfinance entity (other than banks) such as VSLA, SUSU, etc. (select one)	1. Yes 2. No	
G5*	If yes, please indicate which entities are aware of (select one)	1. VSLA 2. SUSU 3. Other, please specify	G4=1
G5b*	Please specify other microfinance entities you are aware of (text)		G5=3
G6*	Did you apply for a loan for your business from these other institutions in the last 12 months? (select one)	1. Yes 2. No	G4=1
G7*	If yes, which one? (select one)	1. VSLA 2. SUSU 3. Other, please specify	G6=1
G8*	Did you get that loan? (select one)	1. Yes 2. No	G6=1
G10*	If yes, what is the impact on your business? (select multiple)  <i>Select all that apply</i>	1. Resulted in less working hours 2. Resulted in increased sales/production volume 3. Resulted in utilization of less workers 4. Helped in the financial difficulties 5. Improved competition 6. Recruitment of additional workers	G8=1

		7. Overburden in terms of cost of borrowing and repayment 8. Loss of property due to delayed /non-repayment 9. Other, please specify	
G10b*	Please specify other impact of the loan on your business (text)		G10=9
G11*	Which of the following is the top most serious problem you have faced in your business since the Covid19 outbreak? (select one)	1. Lack of customers 2. Financial difficulties 3. Lack of space 4. Harassment from Law enforcement officers 5. Too much control from the state authorities 6. Managerial difficulties 7. Crime, including economic compulsion by zogos 8. Other	
G11b*	Please specify other problem faced in your business during COVID-19 G11=8 (text)		
G12*	Since COVID-19, have ever reached the point of selling off your business just to survive (select one)	1. Yes 2. No	
G13*	If you were to sell this business including its premise how much do you think you could get for it? (select one)	1. Less than US\$100 2. US\$100-500 3. US\$501-1000 4. US\$1001-2500 5. More than US\$ 2501 6. Don't know	
G14*	Have you or your business ever received or sent mobile money in the past 6 months on the mobile money number (select one)	1. Yes 2. No 3. Don't know	
G15*	What are your top three priority needs for the business? (select multiple)  <i>Select top three</i>	1. Cash transfers for businesses 2. Deferral of credit payments, rent or mortgage, suspension of interest payments, or rollover of debt. 3. Access to new credit 4. Electricity charge/rent exemptions or reductions 5. Wage subsidies 6. Access to personal protective equipment to re-open business safely 7. Access to new markets or business matching 8. Assistance to transition to new products or services with higher demand Support to digital transition 9. Assistance to transition to formal activities (including registration) 10. Employment 11. Other, specify _____ 12. None	

Now, we are going to ask you general questions about your household.			
H1*	What is the approximate total monthly income (from employment or own business) of your household in the last three months? (integer)	Indicate number in USD _____	
H2*	Does your household have a sufficient source of income or savings to pay for your monthly expenses (rent, utilities, and food)? (select one)	1. Yes, for more than 6 months 2. Yes, for 3-5 months 3. Yes, for 2 months 4. Yes, for 1 month 5. No	
H3*	Does your household currently have any debt? (select one)	1. Yes 2. No	
H4*	Given the impact of COVID-19, can your household service your loan payment? (select one)	1. Yes, for more than 6 months 2. Yes, for 3-5 months 3. Yes, for 2 months 4. Yes, for 1 month 5. No	H3=1
H5*	Do you (or your household) have any of these items? (select multiple) <i>Select all that apply</i>	1. Colour TV 2. Car/van for private use 3. Personal Computer/Laptop 4. Smartphone/Tablet 5. Broadband internet connection 6. Mobile internet connection 7. Mobile phone or landline 8. Washing machine 9. None of the above	

**MODULE I ACCESS TO FOOD AND BASIC SERVICES (Only the main respondent)**
**11. Food\***

(select one)	Did you worry or are you currently worried that your household would not have enough food? Please consider the impact of food scarcity and prices only, independently of any changes in your household income.	1. No 2. Yes, food is scarce now 3. Yes, food prices are going up 4. Yes, food is scarce, and prices are up 999. Not sure	
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**12. Water and Sanitation\***

		a) As of July 2020,	b) As of July 2021 (current)
(select one)	How would you describe the level of access of your household to safe and affordable water as of March 2020 and as of June 2021 (current)	1. No safe drinking water available 2. Limited safe drinking water available 3. Drinking water supplies or water sources mostly unaffected, but not affordable or sufficient for all	1. No safe drinking water available 2. Limited safe drinking water available 3. Drinking water supplies or water sources mostly unaffected, but not

		4. Drinking water supplies or water sources fully operational and affordable 5. Don't know	affordable or sufficient for all 4. Drinking water supplies or water sources fully operational and affordable 5. Don't know
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13. HEALTH AND HYGIENE*		
(integer)	How far away is the nearest health centre from your household?	a) _____ [ <i>Enter the number km #</i> ] b) _____ [ <i>Enter time distance in minutes</i> ]
(select one)	c) How would you describe any changes in the level of access to health services since the outbreak of COVID-19?	1. No access to health centers, health services and medical supplies. Many untreated infections and illnesses observed 2. Access to health centers, health services and medical supplies constrained. Some untreated infections and illnesses observed. 3. Access to health centers, health services and medical supplies more difficult 4. Access to health centers, health services and medical supplies uninterrupted 999 Don't know

**MODULE J COPING STRATEGIES AND SUPPORTS**

J1*	Since the outbreak of COVID-19, has the household done anything to compensate for a loss of income or in preparation for potential loss of income? (select multiple)  <i>Select up to five</i>	1. Rely on less preferred, cheaper food 2. Borrowed food 3. Purchased food on credit 4. Consumed seed stock for next season 5. Reduced proportions of meals 6. Reduced number of meals per day 7. Skipped days without eating 8. Some HH members migrated 9. Sold durable household goods 10. Sent children to live with relatives 11. Reduced spending on health and education 12. Spent savings 13. Sold assets (land, house, Livestock, jewelry, phone) 14. Sought financial help from friends/family/employer 15. Borrowed from banks 16. Sought government help 17. Sought help from NGOs 18. Sought other employment opportunity 19. Other, specify 20. Not sure 21. N/A
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**MODULE K PROBLEMS, PROSPECTS AND RECOVERY NEEDS**

K1*	Overall, are you concerned over you and your family's livelihood conditions for the next three months? (select one)	1. Very concerned 2. Relatively concerned 3. Neither concerned nor unconcerned 4. Not concerned 999 Not sure	
K2*	What type of assistance, if any, would be the most helpful for your household in the face of COVID-19? (select multiple) <i>Select top three</i>	1. Food for work 2. Cash for work 3. Cash transfer 4. Food transfer 5. Food Subsidy 6. Other in-kind 7. Other, specify _____ 8. No need for assistance	
K3*	Is any of your household members currently looking for a job? (select one)	1 Yes 2. No	
K4*	If yes, what kind of support would be most useful to them? (select multiple) <i>Select up to three</i>	1. Get training for new skills 2. Channels or platforms in learning about new opening positions 3. Unemployment benefit 4. Deferment of loan repayment 5. Deferment of tax payment 6. Rent support from Government 7. Obtain a long-term concessional loan 8. Others, specify	K3=1
K5*	If you were to receive assistance, what would you use it for: (select multiple)	1. Pay off debt or loan interest 2. Buy food for family 3. Increase the size of business 4. Relocate to a better location 5. Take care of hospital /medical expenses 6. Pay school fees 7. Pay house rent due 8. Start/venture into a different kind of business 9. Start/continue with a construction project 10. Not yet decided	

**END**

Repeat*	Would you be willing to participate in this survey again? (select one)	1. Yes 2. No	
A1	Do you have any of the following identity documents? (check all that apply as available that the respondent has):	1. National ID 2. Voter ID 3. Passport 4. Work ID 5. Driving License 6. Birth Certificate 7. Marriage Certificate 8. No Identity/ prefers not to say	
A4	Do you have any of the following telephone contacts? (Select all that apply)	1. Own MTN 2. Own Orange 3. Preferred Relative MTN 4. Preferred Relative Orange 5. None of the above	
A4a	Please enter own MTN telephone contact (Integer)		A4 =1

A4b	Please enter own Orange telephone contact (Integer)		A4 = 2
A4c	Please enter preferred relative MTN telephone contact (Integer)		A4 = 3
A4d	Please enter preferred relative Orange telephone contact (Integer)		A4 = 4
A7	Photo of Respondent (image)		
A5*	GPS (geopoint)	Latitude:____ Longitude:____ Accuracy:_____	

Thank you for your cooperation and assistance.



## County

Admin level	Admin code	County
county	LR01	Bomi
county	LR02	Bong
county	LR03	Gbarpolu
county	LR04	Grand Bassa
county	LR05	Grand Cape Mount
county	LR06	Grand Gedeh
county	LR07	Grand Kru
county	LR08	Lofa
county	LR09	Margibi
county	LR10	Maryland
county	LR11	Montserrado
county	LR12	Nimba
county	LR13	River Gee
county	LR14	Rivercess
county	LR15	Sinoe

## Residence

Admin level	Admin Code	Residence	County Code	Admin level	Admin Code	Residence	County Code
residence	LR0101	Dowein	LR01	residence	LR0901	Firestone	LR09
residence	LR0102	Klay	LR01	residence	LR0902	Gibi	LR09
residence	LR0103	Senjeh	LR01	residence	LR0903	Kakata	LR09
residence	LR0104	Suehn Mecca	LR01	residence	LR0904	Mambah Kaba	LR09
residence	LR0201	Boinsen	LR02	residence	LR1001	Gwelekpoken	LR10
residence	LR0202	Fuamah	LR02	residence	LR1002	Harper	LR10
residence	LR0203	Jorquelleh	LR02	residence	LR1003	Karluway #1	LR10
residence	LR0204	Kokoyah	LR02	residence	LR1004	Karluway #2	LR10
residence	LR0205	Kpaai	LR02	residence	LR1005	Nyorken	LR10
residence	LR0206	Panta	LR02	residence	LR1006	Pleebo/Sodoken	LR10
residence	LR0207	Salala	LR02	residence	LR1007	Whojah	LR10
residence	LR0208	Sanoyeah	LR02	residence	LR1101	Careysburg	LR11
residence	LR0209	Suakoko	LR02	residence	LR1102	Commonwealth 1	LR11
residence	LR0210	Tukpahblee	LR02	residence	LR1103	Greater Monrovia	LR11
residence	LR0211	Yeallequelleh	LR02	residence	LR1104	St. Paul River	LR11
residence	LR0212	Zota	LR02	residence	LR1105	Todee	LR11
residence	LR0301	Belleh	LR03	residence	LR1201	Boe & Quilla	LR12
residence	LR0302	Bokomu	LR03	residence	LR1202	Buu-Yao	LR12
residence	LR0303	Bopolu	LR03	residence	LR1203	Doe	LR12
residence	LR0304	Gbarma	LR03	residence	LR1204	Garr-Bain	LR12
residence	LR0305	Gounwolaila	LR03	residence	LR1205	Gbehlay-Geh	LR12



residence	LR0306	Kongba	LR03	residence	LR1206	Gbi & Doru	LR12
residence	LR0401	Commonwealth 2	LR04	residence	LR1207	Gbor	LR12
residence	LR0402	District #1	LR04	residence	LR1208	Kparblee	LR12
residence	LR0403	District #2	LR04	residence	LR1209	Leewehpea-Mahn	LR12
residence	LR0404	District #3	LR04	residence	LR1210	Meinpea-Mahn	LR12
residence	LR0405	District #4	LR04	residence	LR1211	Sanniquellie Mahn	LR12
residence	LR0406	Neekreen	LR04	residence	LR1212	Twan River	LR12
residence	LR0407	Owensgrove	LR04	residence	LR1213	Wee-Gbehyi-Mahn	LR12
residence	LR0408	St. John River City	LR04	residence	LR1214	Yarmein	LR12
residence	LR0501	Commonwealth	LR05	residence	LR1215	Yarpea Mahn	LR12
residence	LR0502	Garwula	LR05	residence	LR1216	Yarwein Mehnsnonoh	LR12
residence	LR0503	Golakonneh	LR05	residence	LR1217	Zoe-Gbao	LR12
residence	LR0504	Porkpa	LR05	residence	LR1301	Chedepo	LR13
residence	LR0505	Tewor	LR05	residence	LR1302	Gbeapo	LR13
residence	LR0601	B'hai	LR06	residence	LR1303	Glaro	LR13
residence	LR0602	Cavala	LR06	residence	LR1304	Karforh	LR13
residence	LR0603	Gbao	LR06	residence	LR1305	Nanee	LR13
residence	LR0604	Gboe-Ploe	LR06	residence	LR1306	Nyenawliken	LR13
residence	LR0605	Glio-Twarbo	LR06	residence	LR1307	Nyenebo	LR13
residence	LR0606	Konobo	LR06	residence	LR1308	Potupo	LR13
residence	LR0607	Putu	LR06	residence	LR1309	Sarbo	LR13
residence	LR0608	Tchien	LR06	residence	LR1310	Tuobo	LR13
residence	LR0701	Barclayville	LR07	residence	LR1401	Beawor	LR14
residence	LR0702	Bleebo	LR07	residence	LR1402	Central Rivercess	LR14
residence	LR0703	Bolloh	LR07	residence	LR1403	Doedain	LR14
residence	LR0704	Buah	LR07	residence	LR1404	Fen River	LR14
residence	LR0705	Dorbor	LR07	residence	LR1405	Jo River	LR14
residence	LR0706	Dweh	LR07	residence	LR1406	Norwein	LR14
residence	LR0707	Felo-Jekwi	LR07	residence	LR1407	Sam Gbalor	LR14
residence	LR0708	Fenetoe	LR07	residence	LR1408	Zarflahn	LR14
residence	LR0709	Forpoh	LR07	residence	LR1501	Bodae	LR15
residence	LR0710	Garraway	LR07	residence	LR1502	Bokon	LR15
residence	LR0711	Gee	LR07	residence	LR1503	Butaw	LR15
residence	LR0712	Grand Wedabo	Cess LR07	residence	LR1504	Dugbe River	LR15
residence	LR0713	Kpi	LR07	residence	LR1505	Greenville	LR15
residence	LR0714	Lower Jloh	LR07	residence	LR1506	Jaedae	LR15
residence	LR0715	Nrokwia-Wesldow	LR07	residence	LR1507	Jeadepo	LR15
residence	LR0716	Trenbo	LR07	residence	LR1508	Juarzon	LR15
residence	LR0717	Upper Jloh	LR07	residence	LR1509	Kpayan	LR15
residence	LR0718	Wlogba	LR07	residence	LR1510	Kulu Shaw Boe	LR15
residence	LR0801	Foya	LR08	residence	LR1511	Plahn Nyarn	LR15
residence	LR0802	Kolahun	LR08	residence	LR1512	Pynes Town	LR15

residence LR0803	Quardu Boundi	LR08	residence LR1513	Sanquin Dist #1	LR15
residence LR0804	Salayea	LR08	residence LR1515	Sanquin Dist #2	LR15
residence LR0805	Vahun	LR08	residence LR1514	Sanquin Dist #3	LR15
residence LR0806	Voinjama	LR08	residence LR1516	Seekon	LR15
residence LR0807	Zorzor	LR08	residence LR1517	Wedjah	LR15



## Sample design

Table 10: Sample design

County	Min sample size	Number surveyed	RR	RR*	Weight	Adjusted Weight
Bong	43	87	2.023	1	130.06	130.06
Gbarpolu	11	105	9.545	1	508.43	508.43
Grand Bassa	43	40	0.930	0.93	130.06	139.82
Grand Gedeh	45	70	1.556	1	124.28	124.28
Greater Monrovia	4627	5039	1.089	1	1.21	1.21
Lofa	55	3	0.055	0.05	101.69	1864.25
Margibi	56	103	1.839	1	99.87	99.87
Maryland	41	9	0.220	0.22	136.41	621.42
Montserrado	1095	1114	1.017	1	5.11	5.11
Nimba	74	106	1.432	1	75.58	75.58
River Gee	7	41	5.857	1	798.96	798.96
Sinoe	47	12	0.255	0.26	118.99	466.06
<b>Total</b>	<b>6144</b>	<b>6729</b>				

## Statistics

Table 11: Reasons not registered

Variable	Mean	Std. Err.	[95% conf. interval]
Do not know if registration is required for the business	0.479	0.21	0.018 0.941
In the process of being registered	0.183	0.076	0.015 0.351
Have to pay too much plus process is too long	0.183	0.041	0.093 0.273
Not good for business	0.121	0.084	-0.064 0.306
Too many requirements to register	0.112	0.019	0.07 0.154
See no need to register	0.099	0.053	-0.018 0.215
Other	0.058	0.027	-0.002 0.118

Table 12: Bank account and business premise

What type of premises is the business where member i works located in?	Does member i have a bank account in his/ her name of the business or in his/ h				Total
	Yes, in the name of the business	Yes, in my own name	Both in the name of the business and in my own name	No bank account	
Permanent premises in a market (shop, kiosk, shed)	2.82	3.846	1.977	91.357	100
Workshop, shop, restaurant, hotel	5.256	3.097	0.05	91.597	100
Taxi station in permanent structure/	0.154	1.62	0	98.226	100
Public transport with fixed route	7.208	0.317	4.867	87.608	100
Mining site	0.053	1.087	0	98.86	100
Hawking/mobile	5.526	4.674	9.587	80.213	100
Improvised post on the roadside	0.129	0.712	0.9	98.259	100
Permanent post on the roadside	0.502	0.349	1.543	97.606	100
Vehicle (car, truck, motor bike, bike)	0.091	1.002	0	98.907	100
Customer's home	0.031	3.114	0.092	96.764	100
In my home without special installation	0.141	9.287	0.915	89.657	100
In my home with special installation	0.025	2.627	0.04	97.307	100
Improvised post in a market	0	0.376	0.162	99.462	100
Garbage area	0	0.522	0	99.478	100
Other	0.8	11.019	0.007	88.174	100
Total	1.194	3.321	1.165	94.32	100
Pearson Chi <sup>2</sup>	1.22				
Prob.	0.3136				

Table 13: Main customers by business premise

What type of premises is the business where member i works located in?	Who is the main customer for the business where member i works? (To whom do the						Total
	Public or para-public sector	Big enterprise	Small enterprise	Household/individual	Direct exportation	Other	
Permanent premises in a market (shop, kiosk, shed)	38.601	0.826	4.096	55.325	0.296	0.855	100
Workshop, shop, restaurant, hotel	24.733	0.183	9.332	64.137	0.017	1.598	100
Taxi station in permanent structure/	2.854	0.154	13.114	83.878	0	0	100
Public transport with fixed route	32.109	0.27	51.815	15.68	0	0.127	100
Mining site	13.687	0.371	32.544	45.525	4.917	2.956	100
Hawking/mobile	74.422	2.063	4.295	19.22	0	0	100
Improvised post on the roadside	40.531	0.141	13.436	43.607	1.035	1.25	100
Permanent post on the roadside	10.512	0.042	3.893	85.436	0.021	0.095	100
Vehicle (car, truck, motor bike, bike)	54.295	0.091	2.026	35.051	7.672	0.865	100
Customer's home	28.77	0.26	1.171	69.026	0	0.773	100
In my home without special installation	15.484	0.097	5.072	76.835	0.114	2.398	100
In my home with special installation	15.773	1.938	4.143	77.547	0.021	0.578	100
Improvised post in a market	58.667	0.052	0.901	35.373	0.136	4.871	100
Garbage area	2.187	0.099	0.522	95.924	1.267	0	100
Other	31.367	0.144	1.852	41.361	0.029	25.246	100
Total	25.304	0.574	5.549	64.829	0.288	3.455	100
Pearson Chi <sup>2</sup>	1.71						
Prob.	0.1513						

Table 14: Main customer by business premise

What type of premises is the business where member i works located in?	Who is the main customer for the business where member i works? (To whom do the						Total
	Public or para-public sector	Big enterprise	Small enterprise	Household/in individual	Direct exportation	Other	
Permanent premises in a market (shop, kiosk, shed)	38.601	0.826	4.096	55.325	0.296	0.855	100
Workshop, shop, restaurant, hotel	24.733	0.183	9.332	64.137	0.017	1.598	100

Taxi station in permanent structure/	2.854	0.154	13.114	83.878	0	0	100
Public transport with fixed route	32.109	0.27	51.815	15.68	0	0.127	100
Mining site	13.687	0.371	32.544	45.525	4.917	2.956	100
#SPILL!	74.422	2.063	4.295	19.22	0	0	100
Improvised post on the roadside	40.531	0.141	13.436	43.607	1.035	1.25	100
Permanent post on the roadside	10.512	0.042	3.893	85.436	0.021	0.095	100
Vehicle (car, truck, motor bike, bike)	54.295	0.091	2.026	35.051	7.672	0.865	100
Customer's home	28.77	0.26	1.171	69.026	0	0.773	100
In my home without special installation	15.484	0.097	5.072	76.835	0.114	2.398	100
In my home with special installation	15.773	1.938	4.143	77.547	0.021	0.578	100
Improvised post in a market	58.667	0.052	0.901	35.373	0.136	4.871	100
Garbage area	2.187	0.099	0.522	95.924	1.267	0	100
Other	31.367	0.144	1.852	41.361	0.029	25.246	100
Total	25.304	0.574	5.549	64.829	0.288	3.455	100
Pearson Chi <sup>2</sup>	1.71						
Prob.	0.1513						

Table 15: Main supplier by business premise

What type of premises is the business where member i works located in?	Which of the following is the main supplier for the business where member i work?							Total
	Cross border/cross county traders	Individual/household traders	Small business	Big private business	Public and Semi Private Sector	Other		
Permanent premises in a market (shop, kiosk, shed)	9.78	56.868	12.268	9.224	10.036	1.823	100	
Workshop, shop, restaurant, hotel	0.199	65.75	24.84	5.562	0.718	2.931	100	
Taxi station in permanent structure/	0.154	73.926	22.564	0.617	2.738	0	100	
Public transport with fixed route	0.65	41.955	12.54	42.477	2.045	0.333	100	
Mining site	27.926	25.108	36.639	0.543	0.875	8.908	100	
Hawking/mobile	5.654	63.105	9.114	14.054	8.04	0.032	100	
Improvised post on the roadside	5.011	49.818	7.32	26.16	10.131	1.56	100	
Permanent post on the roadside	2.691	82.51	6.207	6.688	1.427	0.477	100	
Vehicle (car, truck, motor bike, bike)	0.728	40.947	2.846	41.114	13.705	0.66	100	
Customer's home	0.283	84.247	3.374	6.98	4.244	0.872	100	
In my home without special installation	10.737	63.72	15.438	4.877	1.745	3.483	100	

In my home with special installation	0.268	76.819	20.87	0.758	0.198	1.088	100
Improvised post in a market	3.317	40.996	38.84	10.673	1.219	4.955	100
Garbage area	0.298	41.242	53.738	1.143	1.044	2.535	100
Other	8.591	25.548	19.336	7.156	4.921	34.449	100
Total	4.966	63.449	14.429	8.169	3.947	5.04	100
Pearson Chi <sup>2</sup>	1.78						
Prob.	0.176						

Table 16: Currently Street peddler by business premise

What type of premises is the business where member i works located in?	Is member i currently a street peddler?		
	Yes	No	Total
Permanent premises in a market (shop, kiosk, shed)	44.585	55.415	100
Workshop, shop, restaurant, hotel	10.834	89.166	100
Taxi station in permanent structure/	6.326	93.674	100
Public transport with fixed route	25.403	74.597	100
Mining site	43.169	56.831	100
Hawking/mobile	95.568	4.432	100
Improvised post on the roadside	33.968	66.032	100
Permanent post on the roadside	4.388	95.612	100
Vehicle (car, truck, motor bike, bike)	72.014	27.986	100
Customer's home	47.894	52.106	100
In my home without special installation	21.554	78.446	100
In my home with special installation	20.043	79.957	100
Improvised post in a market	14.297	85.703	100
Garbage area	53.888	46.112	100
Other	17.556	82.444	100
Total	23.816	76.184	100
Pearson Chi <sup>2</sup>	2.12		
Prob.	0.1212		

Table 17: Was street peddler before COVID-19?

Was member i a street peddler before COVID-19?	Freq.	Percent	Cumulative Freq.
Yes	20.48518	20.49	20.49
No	79.51482	79.51	100
Total	100	100	

Table 18: Top serious problems

Which of the following is the topmost serious problem member i has faced in the	Percent	Cumulative Freq.
Lack of customers	6.97	6.97
Financial difficulties	84.29	91.26
Lack of space	0.89	92.16

Harassment from Law enforcement officers	1.88	94.04
Too much control from the state authorities	2.71	96.75
Managerial difficulties	1.68	98.42
Crime, including economic compulsion by zogos	0.31	98.73
Other, please specify	1.27	100
Total	100	

Table 19: Top serious problems by business location

Which of the following is the topmost serious problem member i has faced?									
	Lack of customers	Financial difficulties	Lack of space	Harassment from Law enforcement officers	Too much control from the state authorities	Managerial difficulties	Crime, including economic compulsion by zogos	Other, please specify	Total
Bong	3.448	96.552	0	0	0	0	0	0	100
Gbarpolu	0	99.048	0	0	0.952	0	0	0	100
Grand Bassa	17.5	60	7.5	2.5	0	5	0	7.5	100
Grand Gedeh	13.559	69.492	3.39	3.39	6.78	0	1.695	1.695	100
Greater Monrovia	16.62	69.627	2.486	2.747	3.107	0.621	1.002	3.789	100
Lofa	33.333	66.667	0	0	0	0	0	0	100
Margibi	22.449	57.143	5.102	1.02	1.02	1.02	2.041	10.204	100
Maryland	0	50	0	25	25	0	0	0	100
Montserrado	10.306	81.708	1.021	1.114	0.557	1.764	0.279	3.25	100
Nimba	6.667	92.381	0	0	0	0	0.952	0	100
River Gee	2.564	87.179	0	0	5.128	5.128	0	0	100
Sinoe	27.273	45.455	0	18.182	0	9.091	0	0	100
Total	6.971	84.294	0.893	1.88	2.709	1.677	0.309	1.268	100
Pearson Chi <sup>2</sup>	0.98								
Prob.	0.4381								

Table 20: Top serious problems by legal status

Which of the following is the topmost serious problem member i has faced?									
What is the legal status of the business where member i works?	Lack of customers	Financial difficulties	Lack of space	Harassment from Law enforcement officers	Too much control from the state authorities	Managerial difficulties	Crime, including economic compulsion by zogos	Other, please specify	Total



Individual business	6.925	85.794	0.861	1.617	2.29	1.247	0.337	0.929	100
Business in partnership with members of household	26.506	41.78	5.239	17.104	4.878	0.212	0.085	4.195	100
Ordinary partnership with members of other households	10.936	75.296	0.387	0.838	0.451	1.161	0.064	10.866	100
Others, specify	0.821	76.303	0.148	1.414	8.911	8.819	0	3.585	100
Total	6.971	84.294	0.893	1.88	2.709	1.677	0.309	1.268	100
Pearson Chi <sup>2</sup>	1.03								
Prob.	0.3978								

Table 21: Closed because of COVID-19 by business premise

What type of premises is the business where member i works located in?	Did the business where member i works close temporarily due to the COVID-19 out		
	Yes	No	Total
Permanent premises in a market (shop, kiosk, shed)	45.142	54.858	100
Workshop, shop, restaurant, hotel	75.421	24.579	100
Taxi station in permanent structure/ Public transport with fixed route	13.791	86.209	100
Mining site	58.737	41.263	100
Hawking/mobile	90.414	9.586	100
Improvised post on the roadside	48.623	51.377	100
Permanent post on the roadside	13.191	86.809	100
Vehicle (car, truck, motor bike, bike)	48.351	51.649	100
Customer's home	46.236	53.764	100
In my home without special installation	31.385	68.615	100
In my home with special installation	17.232	82.768	100
Improvised post in a market	35.278	64.722	100
Garbage area	88.9	11.1	100
Other	17.705	82.295	100
Total	30.88	69.12	100
Pearson Chi <sup>2</sup>	2.22		
Prob.	0.0896		

Table 22: Stopped working by business premise

What type of premises is the business where member i works located in?	Since the outbreak of COVID-19 in March 2020, at any point, has member i stopped working				Total
	Yes, less than 1 week	Yes, more than 1 week but less than 1 month	Yes, more than 1 month	No	
Permanent premises in a market (shop, kiosk, shed)	4.865	16.348	37.173	41.615	100
Workshop, shop, restaurant, hotel	5.433	5.804	52.627	36.136	100

Taxi station in permanent structure/	1.929	7.136	3.587	87.349	100
Public transport with fixed route	4.994	9.56	20.409	65.038	100
Mining site	33.997	3.87	36.896	25.237	100
Hawking/mobile	2.192	34.225	60.15	3.433	100
Improvised post on the roadside	17.047	16.777	27.922	38.253	100
Permanent post on the roadside	1.106	9.662	13.869	75.364	100
Vehicle (car, truck, motor bike, bike)	31.788	20.451	19.844	27.918	100
Customer's home	3.509	11.529	24.139	60.823	100
In my home without special installation	15.682	3.858	15.7	64.761	100
In my home with special installation	0.683	3.082	21.991	74.245	100
Improvised post in a market	5.811	38.93	42.753	12.506	100
Garbage area	0	0.621	94.458	4.921	100
Other	5.114	13.823	27.613	53.45	100
Total	5.193	11.563	26.762	56.482	100
Pearson Chi <sup>2</sup>	1.44				
Prob.	0.2432				

Table 23: Let go employee by business premise

What type of premises is the business where member i works located in?	Since the outbreak of COVID-19, at any point, has member i had to let go		
	1	2	Total
Permanent premises in a market (shop, kiosk, shed)	11.806	88.194	100
Workshop, shop, restaurant, hotel	98.218	1.782	100
Taxi station in permanent structure/	0	100	100
Public transport with fixed route	0	100	100
Mining site	29.18	70.82	100
Hawking/mobile	0	100	100
Improvised post on the roadside	2.934	97.066	100
Permanent post on the roadside	34.671	65.329	100
Vehicle (car, truck, motor bike, bike)	0	100	100
Customer's home	0	100	100
In my home without special installation	8.866	91.134	100
In my home with special installation	48.726	51.274	100
Improvised post in a market	1.067	98.933	100
Garbage area	50	50	100
Other	7.33	92.67	100
Total	34.193	65.807	100
Pearson Chi <sup>2</sup>	1.64		
Prob.	0.2562		

Table 24: Prefer to hire a new worker by business premise

What type of premises is the business where member i works located in?	If member i, or the business where he/she is working, are planning to hire work							
	Former worker who was laid off/lost job	A new worker, with experience	A new worker, regardless of experience	Relative, regardless of experience	Relative, with experience	An Apprentice	Other	Total
Permanent premises in a market (shop, kiosk, shed)	20.761	16.933	10.037	13.108	19.94	2.926	16.295	100
Workshop, shop, restaurant, hotel	6.95	12.467	13.062	10.636	50.986	1.665	4.234	100
Taxi station in permanent structure/	1.234	12.034	68.912	1.466	2.276	0.617	13.461	100
Public transport with fixed route	24.52	55.668	7.589	7.182	2.727	0.523	1.791	100
Mining site	0.729	1.763	0.504	28.108	33.525	16.638	18.733	100
Hawking/mobile	68.781	14.664	9.222	0.758	1.104	0.484	4.988	100
Improvised post on the roadside	9.12	3.631	22.533	14.608	39.955	2.291	7.861	100
Permanent post on the roadside	3.193	1.014	9.932	68.478	12.724	2.685	1.974	100
Vehicle (car, truck, motor bike, bike)	16.361	10.419	7.672	2.322	35.051	14.16	14.016	100
Customer's home	3.479	9.691	29.1	21.612	25.093	2.762	8.263	100
In my home without special installation	2.503	14.901	11.722	49.619	3.594	1.16	16.502	100
In my home with special installation	4.337	2.544	8.86	53.148	21.46	0.754	8.897	100
Improvised post in a market	0.324	35.239	4.227	4.765	46.591	0.421	8.432	100
Garbage area	1.69	1.889	39.875	1.566	52.198	1.243	1.541	100
Other	3.289	3.642	5.29	12.923	35.175	12.023	27.658	100
Total	8.74	8.193	10.984	35.838	22.439	3.378	10.429	100
Pearson Chi <sup>2</sup>	1.87							
Prob.	0.1294							

Table 25: Average increase in sales by business premise

What type of premises is the business where member i works located in?	Comparing the sales for the business where member i works for 2021 with 2020			Total
	Increased	Decreased	No change	
Permanent premises in a market (shop, kiosk, shed)	5.296	69.217	25.487	100
Workshop, shop, restaurant, hotel	11.665	52.098	36.237	100
Taxi station in permanent structure/	2.584	14.85	82.566	100
Public transport with fixed route	11.922	40.924	47.154	100
Mining site	47.248	24.41	28.342	100
Hawking/mobile	13.16	82.239	4.601	100
Improvised post on the roadside	5.174	38.418	56.408	100

Permanent post on the roadside	33.636	44.773	21.591	100
Vehicle (car, truck, motor bike, bike)	30.384	49.393	20.223	100
Customer's home	9.997	20.181	69.821	100
In my home without special installation	24.345	41.852	33.803	100
In my home with special installation	38.212	37.749	24.039	100
Improvised post in a market	6.589	63.084	30.327	100
Garbage area	1.267	53.763	44.969	100
Other	1.346	12.966	85.688	100
Total	20.292	44.667	35.041	100
Pearson Chi <sup>2</sup>	2.76			
Prob.	0.0541			

Table 26: Selling price for the same good/service in comparison with competitors by legal status

What is the legal status of the business where member i works?	How does the business where member i works compare its selling price (charge)				
	Higher	Lower	Average/same	Not applicable	Total
Individual business	10.507	15.748	53.486	20.259	100
Business in partnership with members of household	29.706	21.66	27.078	21.556	100
Ordinary partnership with members of other households	14.306	8.303	53.531	23.861	100
Others	1.147	2.75	22.92	73.184	100
Total	10.349	14.994	51.185	23.471	100
Pearson Chi <sup>2</sup>	2.68				
Prob.	0.0725				

Table 27: Reason why prices are higher by legal status

What is the legal status of the business where member i works?	Why are the prices higher?				
	Expensive raw materials and resources	Cost of paying workers	Less customers	The cost of rent is high	Total
Individual business	98.373	0.704	0.751	0.171	100
Business in partnership with members of household	43.567	55.682	0.143	0.608	100
Ordinary partnership with members of other households	99.549	0	0	0.451	100
Others	100	0	0	0	100

Total	95.512	3.588	0.702	0.198	100
Pearson Chi <sup>2</sup>	0.69				
Prob.	0.4332				

Table 28: Reached a point of selling the business by legal status

What is the legal status of the business where member i works?	Since COVID-19, has member i ever reached the point of selling off the business		
	Yes	No	Total
Individual business	5.625	94.375	100
Business in partnership with members of household	2.484	97.516	100
Ordinary partnership with members of other households	1.66	98.34	100
Others, specify	8.569	91.431	100
Total	5.661	94.339	100
Pearson Chi <sup>2</sup>	0.2		
Prob.	0.7169		

Table 29: Reached a point of selling the business by business tenure

For how long, has the business been operating?	Since COVID-19, has member i ever reached the point of selling off the business		
	Yes	No	Total
Less than a month	4.511	95.489	100
One to three months	20.164	79.836	100
Four to six months	6.262	93.738	100
Six months to two years	8.69	91.31	100
More than two years	3.669	96.331	100
Total	5.661	94.339	100
Pearson Chi <sup>2</sup>	1.5		
Prob.	0.2488		

Table 30: Sufficient source of income or savings to pay by level of education

Highest education level	H2) Does your household have a sufficient source of income or savings to pay					Total
	Yes, for more than 6 months	Yes, for 3-5 months	Yes, for 2 months	Yes, for 1 month	No	
None	182	80	119	366	1274	2021
	9.01	3.96	5.89	18.11	63.04	100
Incomplete primary	71	37	54	171	532	865
	8.21	4.28	6.24	19.77	61.5	100
Complete primary	60	32	42	161	344	639
	9.39	5.01	6.57	25.2	53.83	100

Incomplete secondary	86	55	94	265	658	1158
	7.43	4.75	8.12	22.88	56.82	100
Complete secondary	183	123	192	483	1112	2093
	8.74	5.88	9.17	23.08	53.13	100
Technical tertiary	26	28	40	74	148	316
	8.23	8.86	12.66	23.42	46.84	100
Higher (University)	84	63	84	176	574	981
	8.56	6.42	8.56	17.94	58.51	100
Total	692	418	625	1696	4642	8073
	8.57	5.18	7.74	21.01	57.5	100

First row has frequencies and second row has row percentages

Table 31: Payment of the loan by level of education

Highest education level	H4) Given the impact of COVID-19, can your household service your loan payment?					Total
	Yes, for more than 6 months	Yes, for 3-5 months	Yes, for 2 months	Yes, for 1 month	No	
None	60	53	52	75	163	403
	14.89	13.15	12.9	18.61	40.45	100
Incomplete primary	26	13	18	34	56	147
	17.69	8.84	12.24	23.13	38.1	100
Complete primary	35	16	28	20	26	125
	28	12.8	22.4	16	20.8	100
Incomplete secondary	23	24	26	41	95	209
	11	11.48	12.44	19.62	45.45	100
Complete secondary	77	48	43	70	152	390
	19.74	12.31	11.03	17.95	38.97	100
Technical tertiary	20	6	11	19	16	72
	27.78	8.33	15.28	26.39	22.22	100
Higher (University)	37	21	23	32	87	200
	18.5	10.5	11.5	16	43.5	100
Total	278	181	201	291	595	1546
	17.98	11.71	13	18.82	38.49	100

First row has frequencies and second row has row percentages

Table 32: Worry that your household would not have enough food by education level

Highest education level	11) Did you worry or are you currently worried that your household would not have enough food?					Total
	No	Yes, food is scarce now	Yes, food prices are going up	Yes, food is scarce and prices are up	Not sure	
None	73	290	957	644	57	2021
	3.61	14.35	47.35	31.87	2.82	100
Incomplete primary	26	144	376	302	17	865
	3.01	16.65	43.47	34.91	1.97	100
Complete primary	12	67	293	260	7	639
	1.88	10.49	45.85	40.69	1.1	100
Incomplete secondary	43	146	557	388	24	1158
	3.71	12.61	48.1	33.51	2.07	100
Complete secondary	71	275	1028	671	48	2093
	3.39	13.14	49.12	32.06	2.29	100
Technical tertiary	16	37	147	104	12	316
	5.06	11.71	46.52	32.91	3.8	100
Higher (University)	62	135	500	263	21	981
	6.32	13.76	50.97	26.81	2.14	100
Total	303	1094	3858	2632	186	8073
	3.75	13.55	47.79	32.6	2.3	100

First row has frequencies and second row has row percentages

Table 33: Access to water in March 2020 by education level

Highest education level	12a) How would you describe the level of access of your household to safe and affordable water as of March 2020					Total
	No safe drinking water available	Limited safe drinking water available	Drinking water supplies or water sources mostly unaffected, but not affordable or sufficient for all	Drinking water supplies or water sources fully operational and affordable	I dont know	
None	713	735	266	265	42	2021
	35.28	36.37	13.16	13.11	2.08	100
Incomplete primary	333	273	129	117	13	865
	38.5	31.56	14.91	13.53	1.5	100
Complete primary	156	221	208	40	14	639
	24.41	34.59	32.55	6.26	2.19	100

Incomplete secondary	390	419	175	151	23	1158
	33.68	36.18	15.11	13.04	1.99	100
Complete secondary	677	740	326	319	31	2093
	32.35	35.36	15.58	15.24	1.48	100
Technical tertiary	56	123	65	59	13	316
	17.72	38.92	20.57	18.67	4.11	100
Higher (University)	260	367	141	198	15	981
	26.5	37.41	14.37	20.18	1.53	100
Total	2585	2878	1310	1149	151	8073
	32.02	35.65	16.23	14.23	1.87	100

First row has frequencies and second row has row percentages

Table 34: Access to water now by education level

Highest education level	I2b) How would you describe the level of access of your household to safe and affordable water as of now					
	No safe drinking water available	Limited safe drinking water available	Drinking water supplies or water sources mostly unaffected, but not affordable or sufficient for all	Drinking water supplies or water sources fully operational and affordable	I dont know	Total
None	629	803	259	276	54	2021
	31.12	39.73	12.82	13.66	2.67	100
Incomplete primary	303	291	140	116	15	865
	35.03	33.64	16.18	13.41	1.73	100
Complete primary	147	216	219	44	13	639
	23	33.8	34.27	6.89	2.03	100
Incomplete secondary	374	429	174	158	23	1158
	32.3	37.05	15.03	13.64	1.99	100
Complete secondary	616	794	322	323	38	2093
	29.43	37.94	15.38	15.43	1.82	100
Technical tertiary	56	117	67	60	16	316
	17.72	37.03	21.2	18.99	5.06	100
Higher (University)	235	387	150	195	14	981
	23.96	39.45	15.29	19.88	1.43	100
Total	2360	3037	1331	1172	173	8073
	29.23	37.62	16.49	14.52	2.14	100

First row has frequencies and second row has row percentages



Table 35: Concerned over livelihood conditions by education level

Highest education level	K1) Overall, are you concerned over you and your family's livelihood conditions					
	Very concerned	Relatively concerned	Neither concerned nor unconcerned	Not concerned	Not sure	Total
None	1718	267	20	9	7	2021
	85.01	13.21	0.99	0.45	0.35	100
Incomplete primary	738	99	13	9	6	865
	85.32	11.45	1.5	1.04	0.69	100
Complete primary	586	41	4	4	4	639
	91.71	6.42	0.63	0.63	0.63	100
Incomplete secondary	1028	121	4	2	3	1158
	88.77	10.45	0.35	0.17	0.26	100
Complete secondary	1799	258	14	12	10	2093
	85.95	12.33	0.67	0.57	0.48	100
Technical tertiary	249	51	8	4	4	316
	78.8	16.14	2.53	1.27	1.27	100
Higher (University)	857	107	5	7	5	981
	87.36	10.91	0.51	0.71	0.51	100
Total	6975	944	68	47	39	8073
	86.4	11.69	0.84	0.58	0.48	100

First row has frequencies and second row has row percentages

## Tables for the multidimensional vulnerability analysis

Table 36: First dominance by county - Incidence

Cut-off	Greater Monrovia	Montserrado	Others
10%	1	1	1
20%	1	1	1
30%	0.995	0.994	0.996
33%	0.99	0.988	0.981
40%	0.93	0.918	0.936
50%	0.497	0.452	0.495
60%	0.052	0.064	0.01
70%	0.002	0.001	0

Table 37: First dominance by business age - Incidence

Cut-off	Less than a month	One to three months	Four to six months	Six months to two years
10%	1	1	1	1
20%	0.999	1	1	1
30%	0.999	0.999	0.995	1
33%	0.939	0.999	0.983	0.976
40%	0.52	0.853	0.942	0.935
50%	0.145	0.457	0.417	0.459
60%	0.005	0.021	0.002	0.018
70%	0	0	0	0

Table 38: First dominance by legal status - Incidence

	Individual business	Business in partnership with members of household	Ordinary partnership with members of other households	Others
10%	1	1	1	1
20%	1	1	1	1
30%	0.996	1	1	0.999
33%	0.981	0.944	0.997	0.999
40%	0.937	0.72	0.983	0.964
50%	0.51	0.436	0.29	0.292
60%	0.015	0.003	0.005	0.001
70%	0	0	0.001	0

Table 39: Second dominance by county - MVI

	Greater Monrovia	Montserrado	Others
10%	0.487	0.485	0.485
20%	0.487	0.485	0.485
30%	0.486	0.484	0.484
33%	0.484	0.482	0.48
40%	0.462	0.457	0.463
50%	0.27	0.248	0.263
60%	0.033	0.041	0.007
70%	0.002	0.001	0

Table 40: Second dominance by business age - MVI

	Less than a month	One to three months	Four to six months	Six months to two years
10%	0.405	0.468	0.482	0.481
20%	0.404	0.468	0.482	0.481
30%	0.404	0.467	0.48	0.48
33%	0.386	0.467	0.477	0.473
40%	0.238	0.411	0.461	0.457
50%	0.076	0.237	0.222	0.243
60%	0.003	0.013	0.002	0.011
70%	0	0	0	0

Table 41: Second dominance by legal status - MVI

	Individual business	Business in partnership with members of household	Ordinary partnership with members of other households	Others
10%	0.487	0.449	0.465	0.468
20%	0.487	0.449	0.465	0.468
30%	0.486	0.449	0.465	0.468
33%	0.482	0.432	0.464	0.468
40%	0.465	0.347	0.459	0.455
50%	0.273	0.224	0.152	0.15
60%	0.01	0.002	0.003	0
70%	0	0	0.001	0

Table 42: Incidence, MVI, and Contribution by county for cut-off=50 %

	Incidence	MVI	Pop share	Contribution
Greater Monrovia	0.497	0.27	4%	4%
Montserrado	0.452	0.248	4%	3%
Others	0.495	0.263	93%	93%
National	0.493	0.263	.	.

Table 43: Incidence, MVI, and Contribution by Business age for cut-off=50 %

	Incidence	MVI	Pop share	Contribution
Less than a month	0.145	0.076	0.011	0.003
One to three months	0.457	0.237	0.045	0.041
Four to six months	0.417	0.222	0.129	0.109
Six months to two years	0.459	0.243	0.211	0.194
More than two years	0.531	0.284	0.604	0.653
National	0.493	0.263	.	.

Table 44: Incidence, MVI, and Contribution by legal status for cut-off=50 %

	Incidence	MVI	Pop share	Contribution
Individual business	0.51	0.273	0.91	0.944
Business in partnership	0.436	0.224	0.018	0.016
Ordinary partnership	0.29	0.152	0.012	0.007
Others	0.292	0.15	0.059	0.034

National	0.493	0.263	.	.
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Table 45: Uncensored and censored headcount ratios

Dimension	Indicator	Uncensored ratio	Censored ratio
Exposure	Business is closed temporally	0.068	0.066
	Business closed for weeks	0.815	0.422
	Lack of customers	0.07	0.036
	Harassment from enforcement	0.019	0.015
	Too much control from the state authorities	0.027	0.017
	Crime, including economic compulsion by zogos	0.003	0.002
	Lack of space	0.009	0.001
	Sell foreign imported goods	0.162	0.094
Sensitivity	Impact on sales	0.203	0.195
	Impact on labour	0.268	0.212
	Reached of point of selling the business	0.041	0.039
	Financial difficulties	0.843	0.414
Adaptive capacity	Did not receive a bank loan	0.961	0.491
	Did not receive a micro-finance	0.983	0.493
	Lack of networking	0.966	0.493

Table 46: Censored headcount ratios by county

Dimension	Indicator	Greater Monrovia	Montserrado	Others	National
Exposure	Business is closed temporally	0.073	0.045	0.066	0.066
	Business closed for weeks	0.411	0.342	0.426	0.422
	Lack of customers	0.076	0.034	0.034	0.036
	Harassment from enforcement	0.011	0.005	0.015	0.015
	Too much control from the state authorities	0.012	0.002	0.018	0.017
	Crime, including economic compulsion by zogos	0.004	0	0.002	0.002
	Lack of space	0.008	0.006	0.001	0.001
	Sell foreign imported goods	0.144	0.091	0.092	0.094
Sensitivity	Impact on sales	0.114	0.11	0.202	0.195
	Impact on labour	0.315	0.304	0.205	0.212
	Reached of point of selling the business	0.073	0.1	0.035	0.039
	Financial difficulties	0.383	0.397	0.415	0.414
Adaptive capacity	Did not receive a bank loan	0.494	0.45	0.493	0.491
	Did not receive a micro-finance	0.496	0.452	0.495	0.493
	Lack of networking	0.495	0.447	0.495	0.493

Table 47: Censored headcount ratios by business age

Dimension	Indicator	Less than 1 month	1 to 3 months	4 to 6 months	6 months to 2 years	More than 2 years
Exposure	Business is closed temporally	0.016	0.1	0.138	0.069	0.047
	Business closed for weeks	0.138	0.346	0.358	0.312	0.485

	Lack of customers	0.012	0.005	0.006	0.045	0.041
	Harassment from enforcement	0	0.069	0	0.001	0.019
	Too much control from the state authorities	0.001	0.001	0	0.004	0.027
	Crime, including economic compulsion by zogos	0	0	0.005	0.004	0.001
	Lack of space	0.001	0.001	0	0.004	0
	Sell foreign imported goods	0.073	0.026	0.078	0.096	0.103
<b>Sensitivity</b>	Impact on sales	0.013	0.035	0.164	0.114	0.246
	Impact on labour	0.038	0.192	0.09	0.247	0.231
	Reached of point of selling the business	0.029	0.141	0.046	0.054	0.025
	Financial difficulties	0.132	0.379	0.404	0.396	0.429
<b>Adaptive capacity</b>	Did not receive a bank loan	0.145	0.457	0.417	0.459	0.527
	Did not receive a micro-finance	0.145	0.457	0.417	0.459	0.531
	Lack of networking	0.145	0.456	0.417	0.459	0.53

Table 48: Censored headcount ratios by legal status

Dimension	Indicator	Individual business	Business in partnership	Ordinary partnership	Others
<b>Exposure</b>	Business is closed temporally	0.071	0.006	0.011	0.015
	Business closed for weeks	0.435	0.378	0.206	0.275
	Lack of customers	0.038	0.04	0.02	0.001
	Harassment from enforcement	0.013	0.166	0.004	0
	Too much control from the state authorities	0.013	0.002	0.002	0.088
	Crime, including economic compulsion by zogos	0.002	0.001	0	0
	Lack of space	0.001	0.004	0.001	0.001
	Sell foreign imported goods	0.093	0.128	0.073	0.11
	<b>Sensitivity</b>	Impact on sales	0.212	0.111	0.02
Impact on labour		0.21	0.24	0.215	0.242
Reached of point of selling the business		0.041	0.008	0.01	0.024
Financial difficulties		0.439	0.223	0.261	0.113
<b>Adaptive capacity</b>	Did not receive a bank loan	0.508	0.436	0.29	0.292
	Did not receive a micro-finance	0.51	0.436	0.29	0.292
	Lack of networking	0.51	0.436	0.29	0.292

## Other Contributing Partners and Assessment Working Group



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