

SIERRA LEONE

Economic Update

Enhancing Value Chains to Boost Food Security

October 2023



THE WORLD BANK



ACKNOWLEDGEMENTS

The Sierra Leone Economic Update 2023 was prepared by a joint World Bank team from the Macroeconomics, Trade & Investment, and the Agriculture and Food Global Practices. The first part of the report was prepared by Anna Twum (Economist, EAWM2) and Smriti Seth (Senior Economist, EAWM2). Excellent research assistance was provided by Hussein Sesay (Consultant, EAWM2). The global section draws from the World Bank's Global Economic Prospects analysis and projections and received inputs from Garima Vasishtha (Senior Economist, DECPG), Patrick Alexander Kirby (Senior Economist, DECPG), and Sergiy Kasyanenko (Economist, DECPG). The second part was prepared by Ashwini Rekha Sebastian (Senior Agricultural Economist, SAWA4), Kadir Osman Gyasi (Senior Agricultural Economist, SAWA4) and Steven Were Omamo (Consultant, SAWA4). The report benefitted from extensive comments and inputs from Aurélien Kruse (Lead Economist, EAWDR), Michael Saffa (Senior Economic, EAWM2) and Philip English (Consultant, EAWM2). The Update was prepared under the overall guidance of Pierre Laporte (Country Director, AFCW1), Abdu Muwonge (Country Manager, AWMSL), Sandeep Mahajan (Practice Manager, EAWM2) and Chakib Janane (Practice Manager, SAWA4). Naomi Mathenge (Senior Economist, EAEM1) and Zacharey Carmichael (Economist, SAGGL) served as peer reviewers and provided invaluable feedback.

SIERRA LEONE

Economic Update

Enhancing Value Chains to Boost Food Security

October 2023

Contents

Acronyms	iii
Executive Summary	v
PART 1	1
Global and Regional Trends	2
Recent Developments in Sierra Leone	4
Sierra Leone’s economic recovery has been disrupted by overlapping external and domestic shocks and slippages in fiscal management	4
Fiscal stresses have mounted on account of macroeconomic shocks and policy slippages	9
Risks to debt sustainability have intensified	15
The financial sector appears stable but with significant underlying risks	24
Near and Medium-term Economic Outlook	28
Risks to the outlook	31
Policy Priorities	32
PART 2	35
Food Security in Sierra Leone: Recent Trends and Current Conditions	37
Food Access	39
Food Availability	41
Food Utilization	45
Food System Stability	48
Challenges and Opportunities in the Food Systems of Sierra Leone	49
Competitiveness	51
Farm Productivity	52
Levels and Distributions of Net Returns	54
Recommendations to Strengthen the Agri Food sector to boost Food Security	55
Conclusions	58

Acronyms

ACF	Agriculture Credit Fund
B2G	Business-to-government
BSL	Bank of Sierra Leone
BPS	World Bank Group's Business Pulse Survey
CAC	Corporate Affairs Commission
CRB	Credit Reference Bureau
DSA	Debt Sustainability Analysis
ECOWAS	Economic Community of West African States
EDSA	Electricity Distribution and Supply Authority
EMDEs	Emerging Markets and Developing Economies
FDI	Foreign Direct Investment
Forex	Foreign Exchange
FSA	Financial Service Association
FSP	Financial Service Providers
G2B	Government-to-business
G2P	Government-to-person
GDP	Gross Domestic Product
GoSL	Government of Sierra Leone
ICT	Information and Communication Technology
LIC-DSF	Low Income Country Debt Sustainability Framework
MFI	Microfinance Institution
MPR	Monetary Policy Rate
MSE	Micro-and-small enterprises
MSME	Micro, small-and-medium enterprises
MTI	Ministry of Trade and Industry
NCRA	National Civil Registry Agency
NDA	Net Domestic Asset
NFA	Net Foreign Asset
NGO	Non-governmental organization
NPL	Nonperforming Loans
NSFI	National Strategy for Financial Inclusion
NIDS	National Innovation and Digital Strategy
OARG	Office of Administrator & Register General

PFM	Public Financial Management
PP	Percentage points
PPG	Public and Publicly Guaranteed
PV	Present Value
P2P	Peer-to-peer
P2P	Person-to-person
POS	Point-of-sale
SME	Small-and-medium enterprises
SSA	Sub Saharan Africa
USD	US dollars
WB-IMF	World Bank and the International Monetary Fund

Executive Summary

Sierra Leone's economy experienced overlapping setbacks during 2022, as external spillovers from the Russian invasion of Ukraine aggravated domestic macroeconomic vulnerabilities. This led to high levels of inflation, a substantially weaker currency, greater imbalances in public finances, and lower foreign exchange reserves. GDP growth slowed in 2022 (from 4.1 percent in 2021 to 3.5 percent) bringing the average GDP growth since the onset of the COVID-19 pandemic to only around half of the pre-pandemic trend. High global energy and fertilizer prices coupled with a weaker currency translated into accelerating inflation which rose from 12 percent in 2021 to 27 percent in 2022, and further to over 50 percent by August 2023, threatening the welfare of households and worsening food insecurity and poverty.

External shocks were compounded by domestic policy slippages, which magnified economic vulnerabilities and complicated macroeconomic management. The fiscal deficit increased from 7.3 percent of GDP in 2021 to 10.5 percent in 2022, driven by a combination of macroeconomic headwinds and policy slippages. The significant rise in the fiscal deficit was unexpected. The budget had forecast a modest decline in the deficit as the authorities sought to adjust after a surge in COVID-19 expenditures in 2020 and 2021. Instead, spending rose significantly in 2022, by over 3 percentage points of GDP. Half of this was due to capital expenditures (primarily on roads) not included in the budget. At the same time, the inflation-depreciation spiral affected the cost of some goods and services and contracts denominated in dollars, including on fuel subsidies to the state-owned electricity enterprise, the Electricity Distribution and Supply Authority (EDSA). Fiscal shortfalls, in turn, had ripple effects on the private sector, as the state continued to struggle to pay domestic suppliers; the authorities made limited progress in reducing domestic arrears, which stood at 4 percent of GDP at the end of the year.

The unbudgeted increase in the deficit was financed by increased central bank holdings of government securities, further fueling inflation and currency depreciation. The Leone depreciated against the dollar by over 40 percent over the course of 2022 – more than can be explained by external events and what most regional peers experienced. The Leone was redenominated in August 2022, with the elimination of three zeros and the issuance of new notes. Uncertainty and a shortage of new notes prompted a rush to foreign currencies, followed by further downward pressure on the Leone.

Risks to debt sustainability have intensified. Public debt increased significantly as a share of GDP, under the cumulative effects of the steep depreciation of the Leone and the increase in high-cost domestic borrowings to finance the fiscal deficit. The public debt-to-GDP ratio is estimated to have increased from 84.7 percent at the end of 2021 to 96.3 percent at the end of 2022. External debt, mainly owed to multilateral creditors, constitutes around two-thirds of the overall debt, but is highly concessional; its value as a share of GDP increased mechanically with the depreciation of the Leone, but interest payments remained modest. The remainder of public debt is domestic with short maturities and high interest, and its growth pushed up domestic interest payments from 2.6 percent of GDP in 2021 to 3.0 percent in 2022, thereby consuming almost one quarter of all domestic revenues. According to the joint WB-IMF Low Income Country Debt Sustainability Framework (LIC-DSF) in July 2022, Sierra Leone was already at high risk of debt distress – these risks have since intensified with mounting liquidity and solvency pressures.

Monetary policy was complicated by global inflation, currency redenomination, the depreciation of the Leone, and budgetary pressures. To address mounting inflation, the Bank of Sierra Leone tightened its monetary policy stance and cumulatively revised the benchmark interest rate by over 300 basis points (3 percentage points). However, monetary policy effectiveness was limited by underdeveloped financial markets and the need to finance the fiscal deficit, and further complicated by the redenomination of the Leone. While the BSL maintains a de-jure floating exchange rate regime, it intermittently intervenes to smoothen excessive fluctuations; over 2022 these interventions eroded reserves, which fell to nearly 4 months of import cover by end-2022, from above 5 months at end-2021.

The large fiscal deficit continues to hamper the potential for higher economic growth. The resulting increase in domestic borrowing, together with its impact on inflation, has contributed to higher domestic interest rates, and greater interest payments in the budget. The former raises the cost of borrowing for the private sector, while the latter reduces fiscal space for public investment. Furthermore, fiscal shortfalls

are leading to problems in paying domestic suppliers, hurting the capacity of the private sector to recover from the COVID-19 pandemic and grow. The rise in public debt can also undermine confidence within the private sector and among foreign investors. Following fiscal slippages in the first half of the year, the release of the supplementary budget in July 2023, and the government's updated macroeconomic framework under the ongoing IMF program, a wider-than-expected deficit of 6 percent of GDP is projected compared to 2.9 percent in the original budget (Nov 2022).

The economic growth model remains dependent on public spending and the mineral sector. GDP growth of 3.5 percent in 2022 and projected medium term growth of 3.7 percent will have limited impact on poverty reduction. Public spending rose by 20 percent in real terms in 2022 and was a major driver of overall economic growth. However, this cannot be sustained. In the private sector, mining expansion was welcome but exposes the economy to volatility in world prices, while generating relatively few jobs. The agriculture sector continued to show modest growth but is constrained by its focus on the domestic market; exports did not grow much. Moreover, a nascent recovery in manufacturing was disrupted by tightening financial conditions and a slowdown in private investment.

The outlook for the Sierra Leonean economy will be shaped by external developments which cannot be influenced but also by domestic factors that are under the control of policy makers. Elevated inflation from energy and food prices, and tight monetary policy in advanced economies, could further affect the global economy. Geopolitical uncertainties around Russia's invasion of Ukraine will determine the pace at which energy and agricultural prices and supply chains will normalize. In a baseline scenario, the economy is projected to grow at 3.7 percent on average during 2023–25, below its long-term trend. But this scenario is predicated on sound domestic policies, including a tight monetary stance to combat inflation, and an equally conservative fiscal policy to decrease debt pressures and rebuild fiscal space. In this case headline inflation could moderate gradually to 14 percent and the fiscal deficit decline to 4.3 percent of GDP by 2025. Risks to debt sustainability will remain elevated until fiscal balances improve further and the reliance on expensive

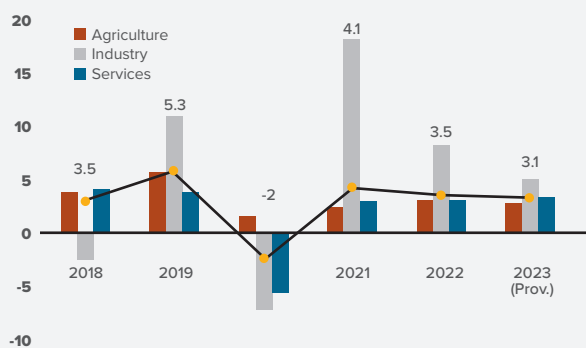
and short-term domestic borrowings is addressed through the lengthening of maturities and greater access to concessional borrowing.

The policy focus in Sierra Leone needs to be on restoring macro stability, while protecting vulnerable households and continuing long-term reforms to promote economic growth. The rise in the cost of living combined with relatively low growth and a weakening of macroeconomic fundamentals threatens to increase the level of poverty in a context of inadequate social safety nets. Renewing the commitment to fiscal consolidation will be crucial, including through tighter expenditure controls, and better budget preparation and implementation. These efforts, if coupled with improvements in domestic revenue mobilization aligned with the government’s medium-term revenue strategy, should create more fiscal space, while addressing developmental spending needs. The implementation of recent reforms should be prioritized, such as the Gender Empowerment Act, Land Acts, Employment Act, the Mines and Minerals Development Act and the National Payment Switch. Agricultural production and exports should be supported through a judicious balance of rationalized public spending and greater private sector participation as envisaged in the new MAF Policy Shift (see summary of special focus chapter below).

Overview of economic developments

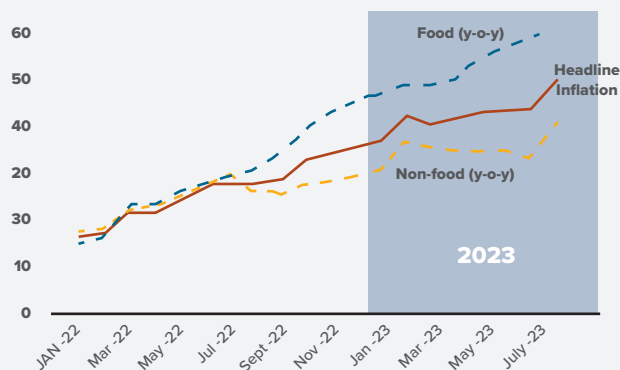
In 2022, Real GDP growth is estimated to have slowed slightly to 3.5 percent with the highest growth rate in the industrial sector...

Sectoral growth rates, y-o-y, percent



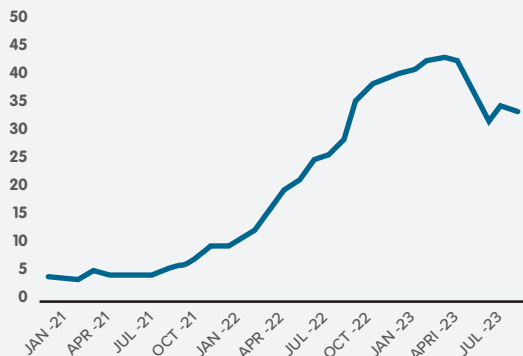
...inflation soared to 27 percent, with food inflation exceeding non-food inflation...

Inflation rate, y-o-y, percent



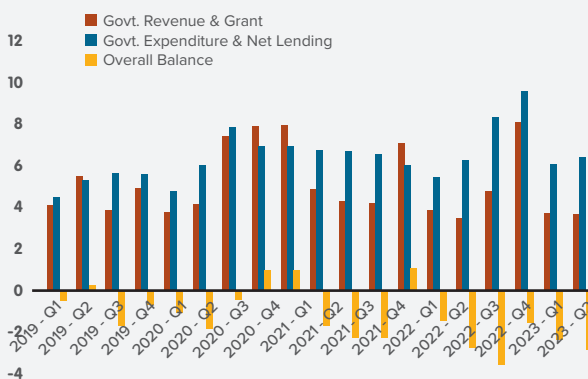
...and the exchange rate increased by 66% y-o-y as of December 2022 with pressures persisting into 2023.

Increase in Leone/USD, y-o-y, percent



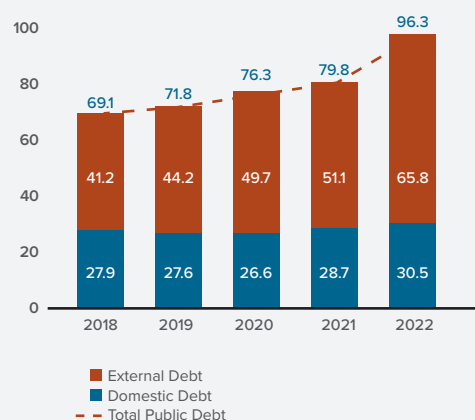
The fiscal space has narrowed with increases in capital expenditures and debt repayments...

Government fiscal balance, percent of GDP



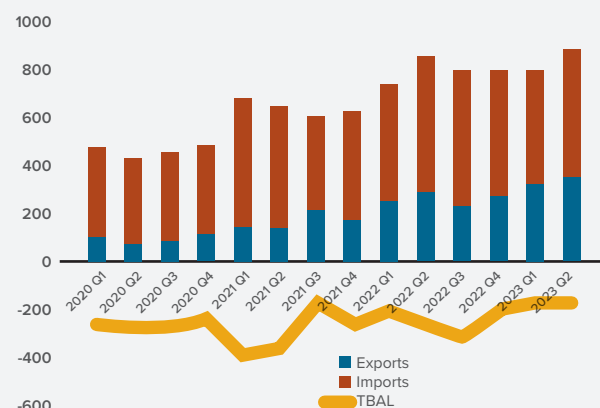
... and debt rose in 2022 as share of GDP.

Debt to GDP ratio, percent of GDP



The trade deficit narrowed due to an increase in receipts from major exports particularly from the mining sector

Trade balance, millions of USD



Boosting Food Security

Food insecurity has increased, with many households unable to meet their basic food and nutrition needs.

Chronic undernourishment has been a long-standing phenomenon, affecting some 25 percent of the population for many years prior to the pandemic. With a growing population, the number of undernourished people rose from 1.6 million in 2011 to over 2.0 million by 2019. Since the onset of COVID-19, acute food insecurity surged from negligible levels in 2018 to 19 percent of the population in 2021. By August 2022, 81 percent of households were unable to meet their basic food and nutrition needs. The average calorie and protein supply per person is below the African average and declining, especially in the case of protein supply.

Analysis of the rice, cocoa and horticulture sub-sectors reveals bottlenecks hampering domestic production that could otherwise have improved food security and boosted economic growth.

Rice yields are far below international levels, and also low by regional standards. Production is mainly rain-fed, exposing crops to climate shocks. Cocoa yields are more comparable to those of regional competitors, and production is somewhat less vulnerable to irregular rainfall. The average net return to farmers is 50 percent

higher than for rice production but current exports are a tiny fraction of those from Côte d'Ivoire or Ghana. Returns are higher still for horticulture, but the domestic market is small, and exporting is more difficult than for cocoa. Farmers in all value chains continue to suffer from poor access to inputs, advisory services, finance, and post-harvest technologies.

The authorities have acknowledged the limitations of past policies to support domestic food production and are working on more targeted initiatives to enhance value chains.

Agriculture is the country's most significant economic sector, accounting for 60 percent of employment and 50 percent of GDP. And yet it is not meeting the basic food needs of the population. A new strategy, thus, is sorely needed. The government recently announced the "Enhancing Private Sector Participation in Agriculture" scheme, commonly known as the MAF Policy Shift. This features a major scaling back of direct public spending on agriculture alongside an expanded role for the private sector. The traditional two-track approach to agriculture remains, with a focus on export-oriented cash crops alongside expanded food production. However, the details have yet to be developed.



As the government embarks on proactive measures to increase yields, strengthen food markets and improve calorie consumption, challenges remain. Uncertainty in global food markets suggests strong motivations to retain rice self-sufficiency as a policy and investment goal. However, the rising share of the urban population in Sierra Leone is driving demand for imports, while even rural areas are struggling to achieve self-sufficiency. Food security ultimately depends on household purchasing power. This can be enhanced by more successful export promotion of crops such as cocoa. It will also depend on modernization of agriculture and greater integration with the industrial sector. Some diversification within agriculture also appears warranted, with a more balanced approach between rice and other food crops. Furthermore, climate change poses a risk to future food security as rainfall and temperature patterns become more extreme and less predictable, while population growth increases pressure on land.

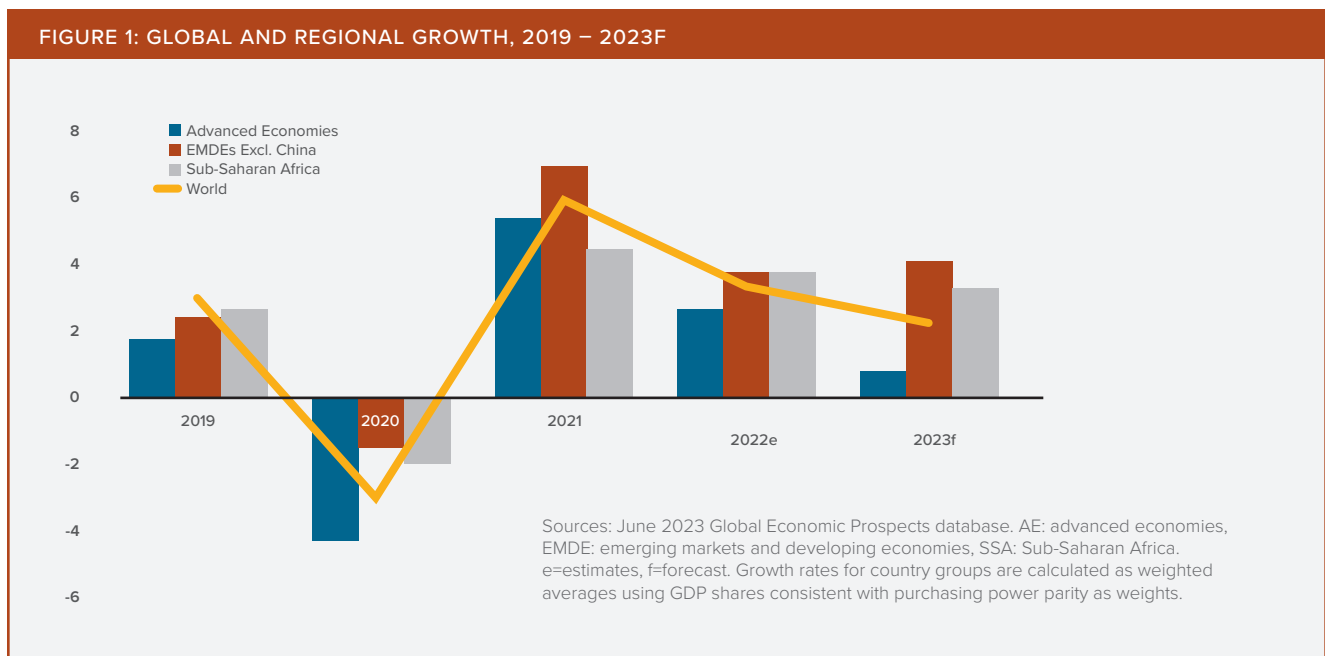
The private sector will be key to addressing identified challenges to build more accessible markets and resilient food systems. The incentive structure of the private sector could improve the search for higher returns, through the adoption of high-yielding varieties, the timely supply of inputs, and more efficient marketing. However, the capacity of the private sector is limited and there are gaps particularly in more isolated regions. Some key interventions will continue to require significant public sector input, such as research and extension, and rural roads. Meanwhile, the authorities will need to resist the temptation to interfere with the value chains that the private sector decides to emphasize: targeted and cost-effective incentives can be provided to steer investment toward policy priorities

1

Economic Developments and Outlook

Global and Regional Trends

Global and regional growth slowed in 2022 halting the post COVID-19 pandemic recovery. Global GDP growth for 2022 is estimated at 3.1 percent – 1 percentage point lower than earlier expectations at the start of 2022 (World Bank, 2023). Global growth was revised downward due to a confluence of factors, including inflationary headwinds that depressed consumption, and slower investment flows due to a worsening of financial conditions stemming from monetary tightening to contain inflationary pressures. Furthermore, fiscal space remained constrained for many governments after massive spending hikes to control the spread of COVID-19 and to cushion firms and households from the economic fallout of pandemic restrictions. As a result, governments, especially in Sub-Saharan Africa (SSA), have had less room to continue and scale up supportive policies. Growth estimates for SSA of around 3.7 percent are lower than initially projected (World Bank, 2023), and the region’s economic outlook faces numerous downside risks with a severe deepening of macro-fiscal vulnerabilities reflected in high and stubborn inflation, slower gains in currency values across the region following steep depreciation, and rising debt levels for many economies.



Inflation picked up considerably in 2022, across both advanced economies and emerging market and developing economies (EMDEs), with SSA especially hard-hit with high and persistent food and fuel inflation. Median global headline inflation reached 8.8 percent with estimated inflation of 9 percent in advanced economies and 10 percent in EMDEs. In SSA, end-of-year inflation averaged 8.7 percent and more than one

in four countries recorded average inflation of over 20 percent (World Bank, 2023). Prices were already rising towards the end of 2021 and picked up pace in the first quarter of 2022 due to both demand and supply factors exacerbated by the Russia's war on Ukraine. On the demand side, continued post-pandemic growth surges, combined with higher household spending supported by pandemic stimulus, drove up prices. Advanced economies also had to grapple with tight labor markets, which drove up wages and contributed to even higher production costs. Russia's invasion of Ukraine disrupted supply chains further, particularly for the energy and agricultural sectors, driving up the prices of oil, gas, wheat and fertilizer – key commodities for industry and household consumption. Prolonged drought conditions in some countries, especially in East Africa, combined with escalating violence and insecurity, further disrupted food supplies and contributed to deteriorating food security in the region, particularly in low-income countries. For SSA, steep currency depreciation in some countries further fueled inflation leading to a depreciation-inflation spiral that complicated the formulation and implementation of monetary policies.

To curb soaring inflation, central banks in advanced economies embarked on sharp monetary policy tightening, which slowed investments in developing economies. As global inflationary pressures intensified, central banks in advanced economies raised interest rates, reducing the amount of financing available on international credit markets. Higher interest rates in the US and the Eurozone increased the cost of credit, triggered declines in investment, and ultimately contributed to slower economic activity in lower-income economies. For many SSA countries, monetary tightening in advanced economies sharply amplified declines in the value of local currencies and constrained investment. The expected positive effect of depreciation on exports was more than offset by surging import costs of energy and food and the decline in foreign direct investment (FDI).

Commodity markets were volatile and lower global prices for non-energy commodities meant lower-than-expected export earnings for non-oil resource economies. Most of the increase in commodity

prices was driven by higher prices for oil and gas. For exporters of base metals and agricultural products, average prices declined in 2022 by 5.5 percent and 0.9 percent, respectively, and exporters of precious metals received 0.9 percent lower prices over the same period (World Bank, 2023). Furthermore, COVID-19 lockdowns in China during the first half of 2022, supply chain disruptions and a grim economic outlook, depressed demand and future expectations for these major metal and mineral commodities. As China continues to open up in 2023 and supply chains normalize, for the most part, stronger demand for non-energy commodities is expected.

Debt vulnerabilities intensified as financial market conditions worsened and local currencies suffered steep depreciations. Since 2020, many indebted countries saw an increase in debt stocks and payments in an environment of limited fiscal space and high borrowing costs. For SSA, public debt was already on the rise before the pandemic but borrowing rose sharply to cover the financing gap created by necessary but costly containment measures. In 2022, debt loads as well as the costs of servicing debt increased, as currencies lost value against a stronger dollar - the denomination of a large share of debt. SSA's debt-to-GDP ratio averaged 55 percent at the end of 2022, and a third of economies had debt levels above 70 percent of GDP, with average debt service costs as a share of revenue expected to rise above 20 percent by 2025.

The macroeconomic and growth challenges in 2022 have contributed to a worrisome outlook for 2023, which continues to hold after the World Bank's midyear revisions to growth expectations. The global GDP growth rate is expected to decline further, and fiscal and monetary vulnerabilities are projected to intensify across all regions but more strongly for SSA and other EMDEs. Global growth is projected to decline to 2.1 percent in 2023 (World Bank, 2023), which is below the average for the decade preceding the pandemic (3.1 percent). The growth outlook for SSA in 2023 is moderate, with an expected GDP growth of 3.2 percent (revised downwards from 3.6 percent at the start of the year), and short of the average in the decade prior to the pandemic (3.5 percent).

Recent Developments in Sierra Leone

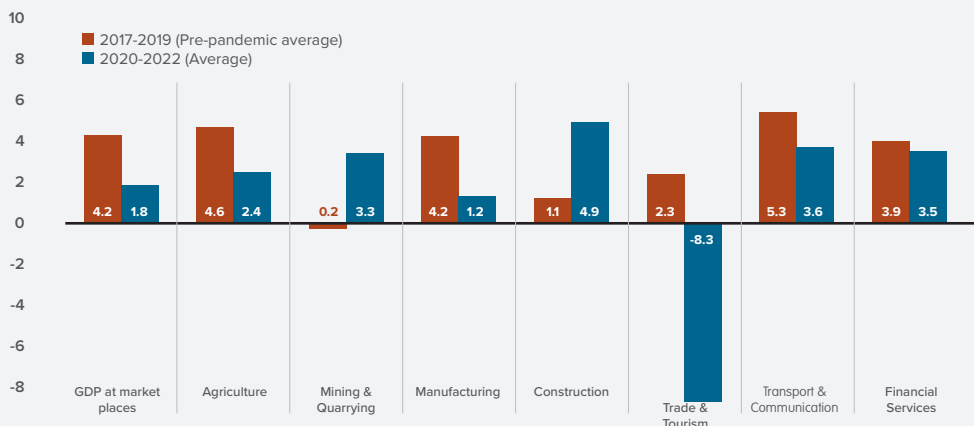
Sierra Leone's economy has faced significant disruptions due to both external and domestic factors, as well as policy slippages. The economy has experienced a series of overlapping shocks since the start of 2020: a health shock from the COVID-19 pandemic, supply-chain disruptions stemming from Russia's invasion of Ukraine, and the onset of a subsequent cost of living crisis aggravated by an inflation-depreciation spiral. The result has been slower economic growth against a backdrop of deteriorating macroeconomic fundamentals. In 2022, fiscal stresses have mounted on account of macroeconomic shocks and policy slippages, and for the third consecutive year, the fiscal position deteriorated markedly. However, despite weak macro-management, the government has maintained momentum on its long-term structural reform agenda – with several landmark reforms introduced during 2022 and the first half of 2023 (Box 1). The first half of 2023 shows an improvement in fiscal management, but budgetary performance is still below targets in the original budget signaling the need for even stronger commitment to reforms.

Sierra Leone's economic recovery has been disrupted by overlapping external and domestic shocks and slippages in fiscal management

GDP growth in 2022 is estimated to have slowed from 4.1 percent in 2021 to 3.5 percent in 2022. GDP growth since the onset of the COVID-19 pandemic (1.8 percent is still below pre-pandemic (2017-2019) levels of 4.2 percent (Figure 2). The economy in 2022 was buoyed by a continued yet timid recovery in agriculture, robust growth in mining output, and growth in trade, transport, and communication services. The resumption in key iron ore mining operations ramped-up output in 2022. On the demand side, growth – driven strongly by higher-than-expected public spending – was held back by low private consumption, in part due to inflationary pressures that squeezed household budgets, and the tightening of financial conditions that limited private domestic and foreign direct investment. Furthermore, a net-negative terms-of-trade shock led to higher import costs with limited offset from exports.

Most GDP growth drivers are still below pre-pandemic trends

FIGURE: 2 GROWTH TRENDS IN PRODUCTION ACCOUNTS (PERCENT)



Source: StatsSL and World Bank Staff Estimates.

The agricultural sector was a principal driver of growth in 2022 and remained relatively resilient despite disruptions to global fertilizer supply chains.

Agriculture grew by an estimated 3 percent compared to 2.5 percent in the previous year and contributed close to 40 percent (the highest share) of overall GDP growth (Figure 3). This reflected improved crop outturns coupled with modest gains from livestock and fisheries sectors. Favorable planting and harvest seasons, with adequate rainfall, increased output of most crops despite constraints to fertilizer supply chains stemming from. Government initiatives to privatize the agricultural input market and expand access to mechanization have also progressively contributed to improvements in yields. The government's quick response in controlling an Anthrax outbreak earlier in the year safeguarded the livestock sector, while increased private sector investments in fishing sustained a gradual pick up in output.

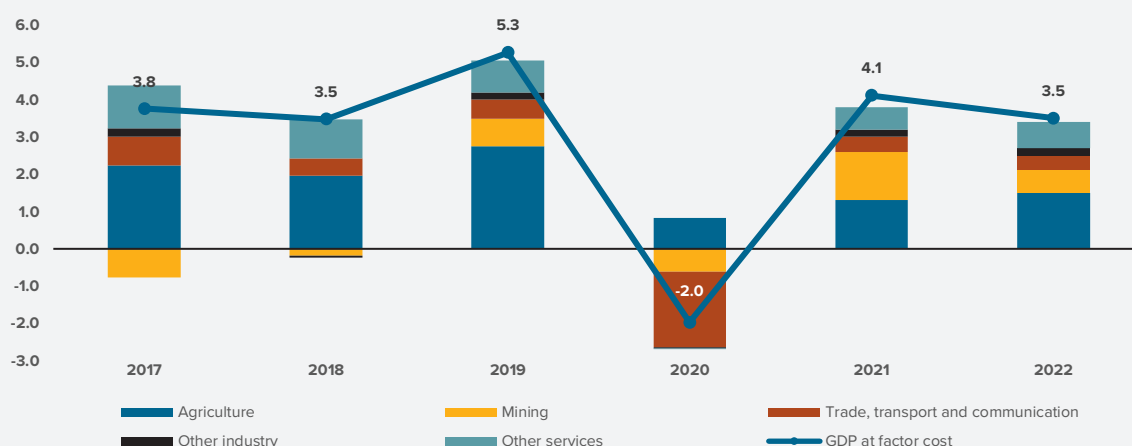
Industrial activity remained robust thanks to continued growth in mining and construction.

Overall industrial activity is estimated to have grown by 8.2 percent in 2022. However, this followed a 17.4 percent increase in 2021 as the sector rebounded from a substantial decline in 2020 (-7.2 percent). The mining sector contributed significantly to overall GDP growth (Figure 3), thanks to the resumption of iron-ore mining operations at Marampa mines after the resolution of

a long-standing tax dispute. For the first time since the onset of the Ebola epidemic, the two large iron ore mines, Marampa and Tonkolili have both been functional, driving a 35 percent increase in production. This is a significant development given that the overall mining sector makes up a little over 50 percent of the total industrial sector with more than half of the output coming from iron ore and diamond mining (the residual being from rutile, bauxite, and gold). Construction activity (5.2 percent growth in 2022) was buoyed by high public capital spending, especially on roads. A nascent recovery in manufacturing was disrupted by tightening financial conditions and a slowdown in private investment, and its growth increased only modestly from 4 percent in 2021 to 4.5 percent in 2022. Average growth since 2020 remained well below pre-pandemic levels (Figure 2). Firms, particularly small and medium enterprises (SMEs) and import reliant entities, were hurt by higher fuel prices and freight costs, which increased two- to four-fold (depending on the route) as well as by exchange rate volatility. Fuel shortages were frequent with long queues at gas pumps, and higher fuel prices increased production costs for manufacturers and transporters, while high global base metal prices increased costs for the construction sector. Furthermore, forex shortages pushed businesses to resort to the unofficial market for their essential foreign currency needs, leading to an escalation in business expenses.

In 2022, the agriculture sector was the largest contributor to growth and positive developments in the mining sector continued to boost output

FIGURE 3: REAL GDP BY CONTRIBUTIONS TO GROWTH, SUPPLY (PRODUCTION ACCOUNTS), 2019–2024
PERCENTAGE POINTS



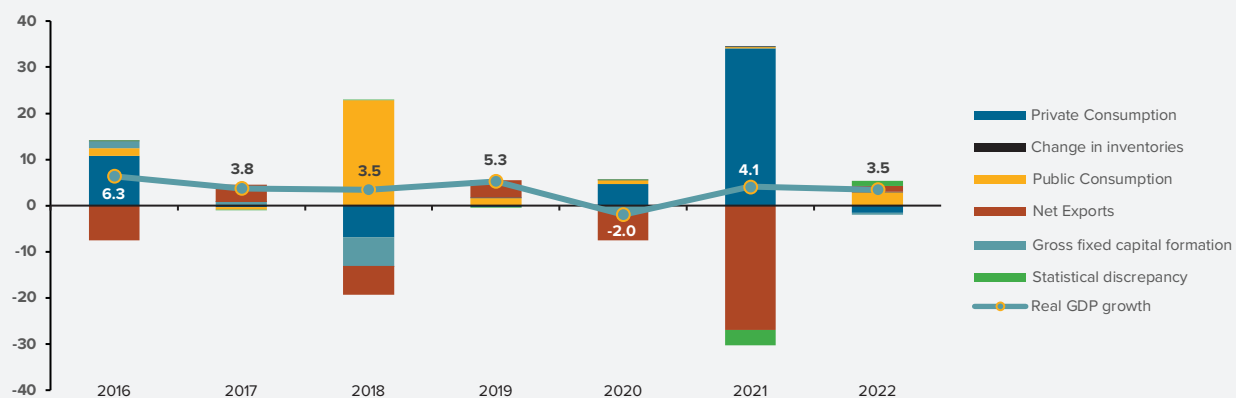
Source: StatsSL and World Bank Staff Estimates. Gaps between total GDP growth rate and the sum of sectoral contributions is equivalent to the contribution from "taxes less subsidies of products" per national accounting standards.

The services sector grew moderately by an estimated 3.3 percent during 2022 – 0.4 percentage points higher than the previous year, thanks to continued steady growth in communications and public administration. The services sector contributed slightly more to overall growth as the industrial sector (Figure 3). Prior to the pandemic, growth in services outpaced economy-wide growth. However, in 2020, the sector was hard hit by COVID-19 mobility restrictions and contracted by 5.5 percent. Recovery in 2021 was fairly robust (2.9 percent) and it extended to 2022. A look at services subsectors shows that wholesale and retail trade slowed to 2.1 percent (compared to 2.3 in 2021), while the transport sector grew by 4.3 percent (compared to 4.0 percent in 2021). Additionally, the communication sector (mostly comprised of telecom services) grew by 6 percent - 0.1 percentage points higher than the previous year. The COVID-19 boost to the communication sector from work-from-home mandates has not dissipated entirely – hybrid work has continued, and businesses have maintained digital and online work processes (like e-commerce and delivery services) even after the government fully relaxed restrictions. There have also been changes in the management and delivery of network, digital and data bandwidth services nationally, following the unbundling of government-owned Sierra Leone Cable (SALCAB) public administration. Notably, over the past years, the government has also been scaling up the National Fiber Optic Backbone Project and has increasingly strengthened and expanded bandwidth connections in primary and secondary cities. Overall, the public administration sector grew by 1.4 percent, up from 0.8 percent in 2021 partly reflecting the significantly larger fiscal deficit incurred in 2022.

On the demand side, household consumption was affected by high and broad-based inflation which eroded purchasing power. Private consumption fell by 2 percent in 2022, after a surge of 37 percent in 2021 and dragged down overall GDP growth for 2022 (Figure 4). High inflation and currency depreciation, together with broad economic uncertainty, eroded purchasing power and muted household spending. Financial market constraints, and a tightening of monetary policy also reduced the availability and uptake of credit needed to augment disposable incomes and drive-up demand. Government consumption (the largest driver of growth in 2022 at around 2.9 percentage points) grew by 14 percent (compared to 2021) on account of higher levels of spending on goods and services, investment projects, and contingencies (discussed in more detail in later sections).

Public consumption boosted GDP growth while investment, and private consumption and net exports kept it low

FIGURE 4: REAL GDP BY CONTRIBUTIONS TO GROWTH, DEMAND EXPENDITURE ACCOUNTS, 2019–2024
PERCENTAGE POINTS



Source: StatsSL and World Bank Staff Estimates

Private investments were subdued by the tightening in financing conditions and growing macroeconomic fragility. Domestic private investment was undermined by tight domestic financing conditions. Meanwhile, tighter global financing conditions and rising macroeconomic fragilities (particularly high inflation and exchange rate unpredictability) depressed FDI outside of the mining sector. Global and domestic economic turbulence reduced private investment appetite, and already elevated government domestic borrowing picked up pace in 2022, further crowding out financing for the private sector. Government investments, however, picked up due to higher levels of public spending especially on roads.

BOX 1:

Sierra Leone continues to pursue structural reforms

Mining and Minerals Development (MMDA) Act

The Sierra Leone Mining and Mineral Development Act passed in August 2022 is a significant milestone for the country's mining sector. The Act aims to promote transparency, accountability, and good governance in the mining industry. It provides a legal framework for the exploration, development, and extraction of minerals, as well

as the regulation of mining activities. It establishes a regulatory body, the National Minerals Agency, to oversee the industry's operations and enforce compliance with environmental and social standards. The agency will be tasked with promoting sustainable mining practices that minimize the negative impacts of mining on communities and the environment while maximizing the benefits to the country's economy.

Customary Land Rights Act (CLRA) and the National Land Commission Act (NLCA)

Sierra Leone took a significant step towards reforming its land management system by enacting two laws in September 2022: the Customary Land Rights Act (CLRA) and the National Land Commission Act (NLCA). The previous legal framework, which had been in place since the 1960s, relied on customary land practices and chiefdoms, leading to insecure land ownership and increased land disputes and unequal rights for women.

The CLRA addresses these challenges by reforming customary land practices governing nearly 85 percent of all land in Sierra Leone. It aims to promote equal rights and participation for men and women in land inheritance and decision-making, protect against involuntary displacement, and ensure co-management of protected, conserved and ecologically sensitive areas within customary lands. The NLCA introduces a new institutional framework for land management, decentralizing governance by establishing land commissions at national, district, chiefdom, town and village levels. The commissions will allow for the registration of customary land, establish a land registration and information system, support grievance redressal and promote gender equality. The laws mark a paradigm shift in Sierra Leone's land management framework.

Gender Equality and Women's Empowerment (GEWE) Act

In January 2023, Sierra Leone's Parliament passed a landmark legislation, the Gender Equality and Women's Empowerment (GEWE) Act, aimed at promoting gender equality and empowering women in the country. The new law promotes equal access to jobs, training, financial services,

and protection against sexual harassment and discrimination. The Act is expected to help address the historic gender imbalances in Sierra Leone, where women face limited access to land, education, health, and credit. However, while the initial legislation submitted to parliament mandated that at least one in three members of Parliament and Local Councils should be women, this provision is not in the final approved version of the act. Women currently hold less than 20 percent of elected positions, and Sierra Leone's gender equality index score for female representation in civil society organizations is far below that of other countries in the region.

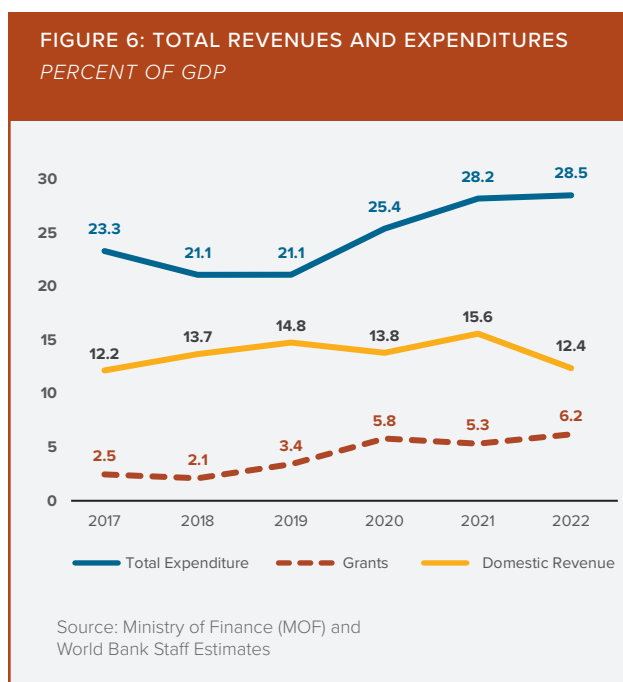
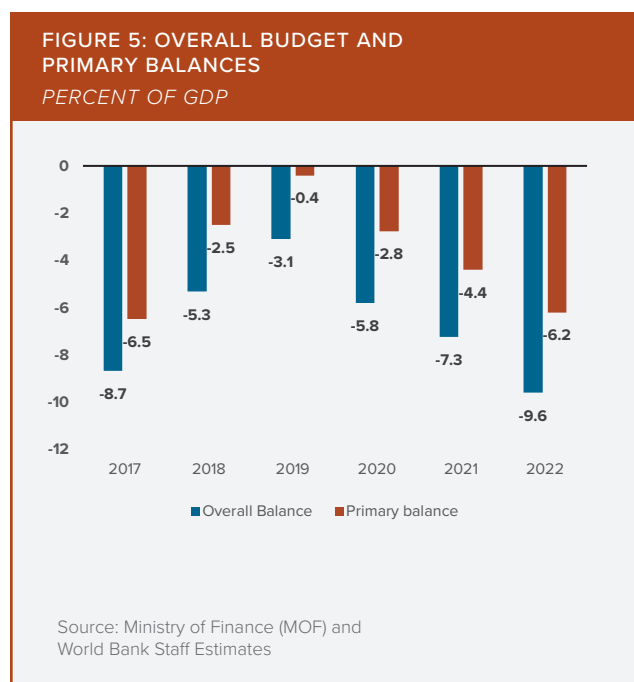
Basic and Senior Secondary Education Act

In April 2023, parliament enacted a new Basic and Senior Secondary Education Act to improve access to and inclusivity of the education system. Among other things, the act sets out the legal parameters that govern basic and secondary education and guides the implementation of effective education policies, services, and programs across the country. It will also support the implementation of the code of conduct for teachers, setting-out standards of professional behavior for teachers and allowing for a safe, conducive, inclusive, and positive learning environment. The Act also covers a wide range of regulations, such as ensuring the inclusion of children with physical or learning disability, banning discrimination, and the prohibition of corporal punishment together with legislation to protect students from violence and abuse.

Fiscal stresses have mounted on account of macroeconomic shocks and policy slippages

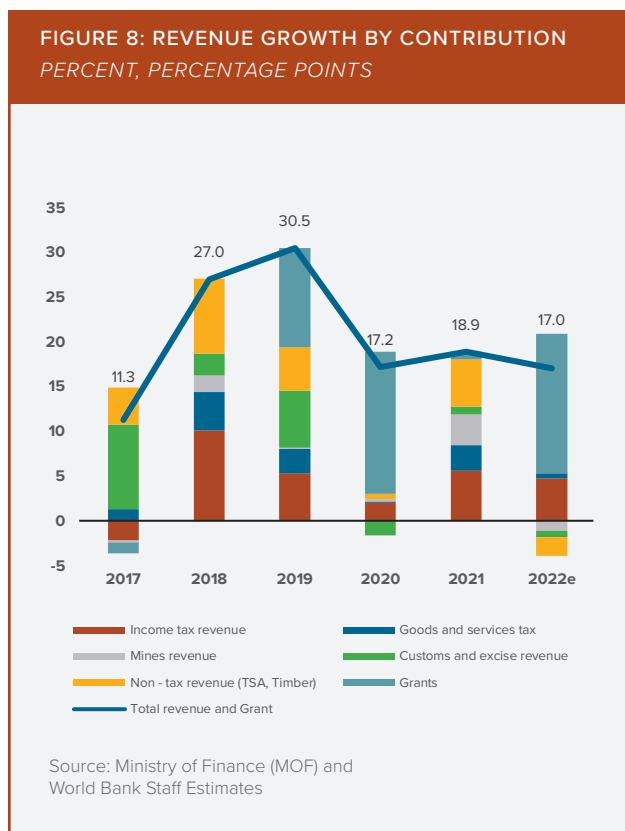
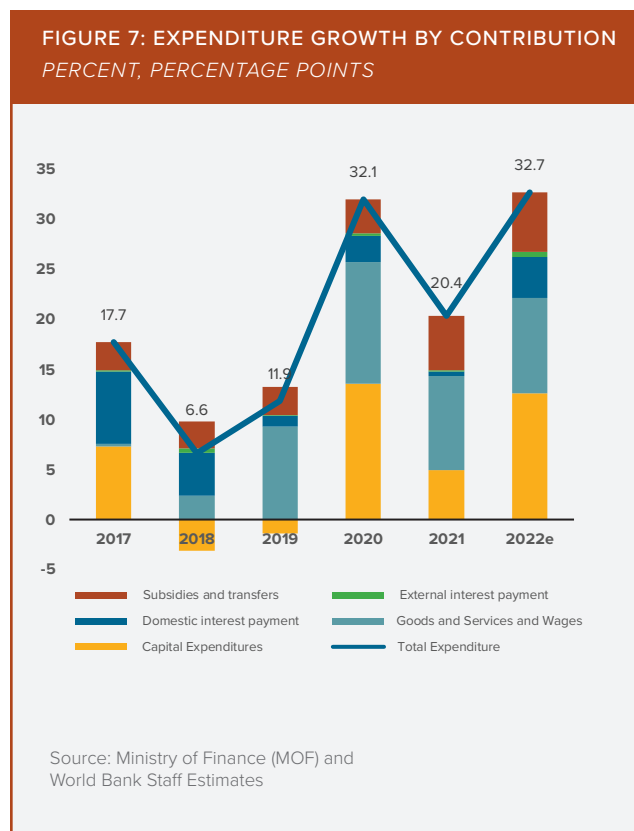
The fiscal position deteriorated in 2022, for the third consecutive year, even though the authorities had committed to fiscal consolidation. The estimated deficit rose to 9.6 percent of GDP in 2022 – 2 percentage points higher than in 2021, and 5.9 percentage points higher than the budget targets for the year.¹ The deficit also exceeded the estimates presented in November 2022 under the supplementary budget for the year by 5.5 percentage points. Much of the deterioration came from expenditure overruns of around 4.6 percent of GDP. Overruns stemmed primarily from unanticipated expenses on road infrastructure and defense, as well higher payments on foreign currency-indexed obligations for food purchases and electricity production. The deficit was also affected by a substantial drop in domestic revenues from the 2021 level (3.2 percentage points). The unanticipated higher deficit was mainly financed domestically. These developments compromised the authorities' plan to rebuild buffers starting in 2022 and return to the prudent path followed between 2017 and 2019, when both the overall and the primary balance were on a declining trajectory.

The fiscal position has deteriorated consistently over the last three years with significant policy slippages in 2022



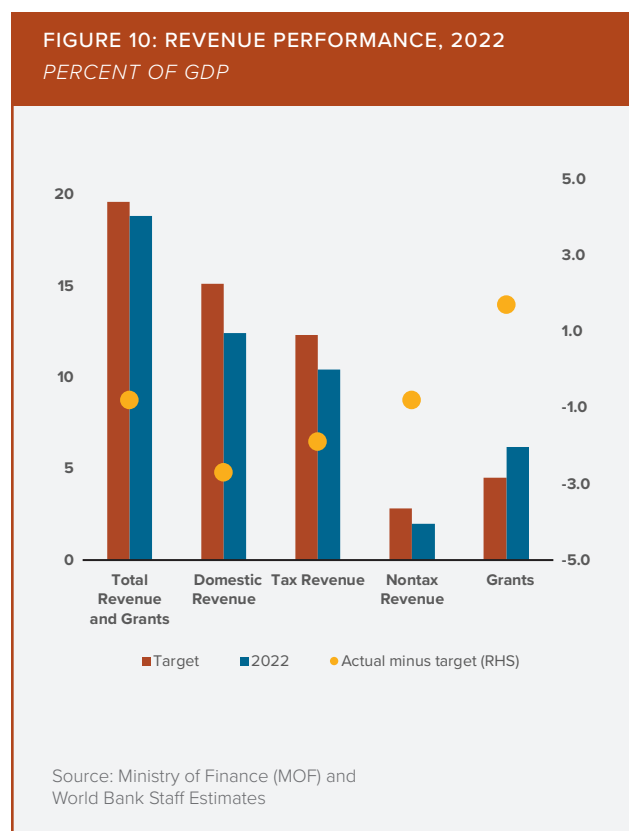
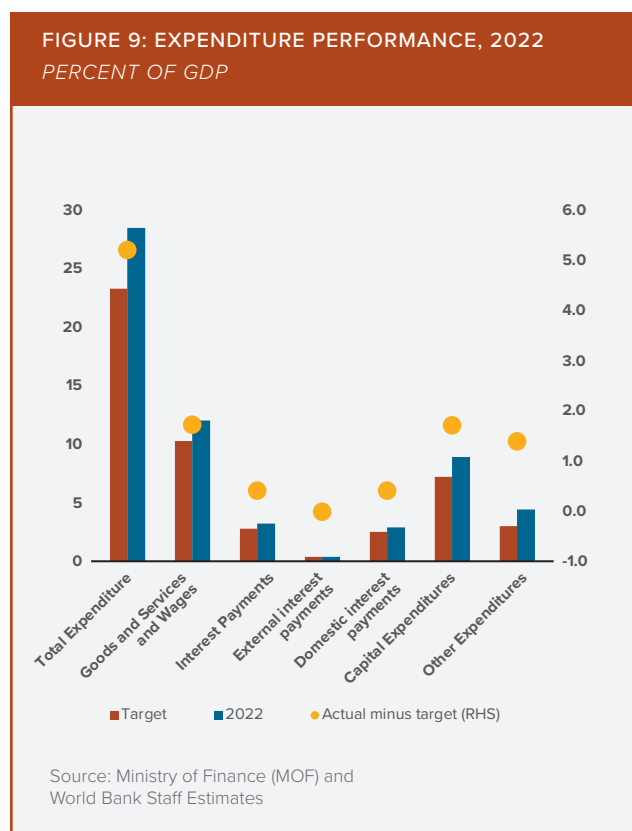
¹ Fiscal numbers are expressed as a share of non-iron ore GDP.

In 2022, goods and services, capital spending, subsidies, and domestic interest payments drove up expenditures, while revenues grew slower on account of lower timber, excise, and mining revenue



Expenditure overruns were the main contributor to fiscal slippages in 2022. Total expenditures are estimated to have reached 28.5 percent of GDP – 0.9 percentage points higher than in 2021, 5.2 percentage points higher than targeted at the start of the year (Figure 10). Macroeconomic shocks – higher global commodity prices such as fuel, and the sharp depreciation of the currency – along with marked policy slippages, contributed to expenditure overruns. Expenditure on goods, services and wages (4.3 percent of GDP) exceeded initial budget targets by around 1.7 percent of GDP, while subsidies and transfers (4.3 percent of GDP) exceeded targets by 1.6 percent of GDP. Meanwhile, higher subsidies mostly reflected transfers to EDSA (state-owned distribution company) to help it honor its contract with the independent power producer Karpower. The contract is indexed to global fuel prices and hence, despite de jure liberalized retail fuel prices (see Box 3), the budget is exposed to fiscal risks from fuel price fluctuations. Capital expenditure overruns of around 2 percentage points were notable, reflecting the government’s decision to expedite road construction, which required the clearance of unpaid checks to suppliers. In 2022, capital expenditures totaled 8.9 percent of GDP. Defense and security spending also rose following violent riots in August 2022. In turn, the widening of the deficit necessitated increased domestic financing, resulting in higher domestic interest payments (3.2 percent of GDP in 2022, 0.4 percentage points over the year’s target).

Actual domestic revenues were below planned, while expenditures exceeded budget targets



Domestic revenues also suffered a setback in 2022. Revenues as a share of GDP declined by 2.1 percentage points compared to 2021. This was partly the result of lower non-tax revenues (after a one-time increase in 2021 linked to a mining tax settlement)² and a ban on timber exports.³ Tax revenues as a share of GDP also fell significantly, by 2 percentage points of GDP, despite stricter enforcement in corporate income tax collection (contributing a 0.3 percentage point increase from 2021).

Despite higher prices, goods and services taxes declined to 2.3 percent of GDP from 2.8 percent of GDP in 2021. Retailers protested the blanket roll-out of Electronic Cash Registers (ECRs), after its launch in February 2022, citing a high burden of taxation and compliance. Excise collections fell by 0.4 percentage points of GDP, after the government lowered petroleum excise to mitigate the impact of the pass-through of global fuel prices.

² In 2021, a tax dispute between the government and SL Mining Company (Marampa mines) was resolved and led to a one-time settlement of mining royalties worth US\$20 million, equivalent to 0.5 percent of the country's (2021) GDP.

³ CITES is the Convention on International Trade in Endangered Species of Wild Fauna and Flora

TABLE 1: FISCAL OPERATIONS OF CENTRAL GOVERNMENT (PERCENT OF GDP)

	2017	2018	2019	2020	2021	2022
Total Revenue and Grants	14.6	15.8	18.0	19.6	20.9	18.8
Domestic Revenue	12.2	13.7	14.8	13.8	15.6	12.4
Tax Revenue	10.8	11.5	12.1	11.3	12.4	10.4
Nontax Revenue	1.4	2.2	2.6	2.5	3.2	2.0
Grants	2.5	2.1	3.4	5.8	5.3	6.2
Total Expenditure	23.3	21.1	21.1	25.4	28.2	28.5
Goods and Services and Wages	10.8	9.6	10.2	11.7	12.7	12.0
Interest Payments	2.2	2.8	2.7	3.0	2.9	3.2
External interest payments	0.2	0.3	0.3	0.3	0.3	0.4
Domestic interest payments	1.9	2.5	2.4	2.7	2.6	2.9
Capital Expenditures	8.3	6.4	5.4	7.6	8.0	8.9
Other Expenditures	2.0	2.3	2.7	3.0	4.7	5.4
Primary balance	-6.5	-2.5	-0.4	-2.8	-4.4	-6.2
Overall Balance	-8.7	-5.3	-3.1	-5.8	-7.3	-9.6

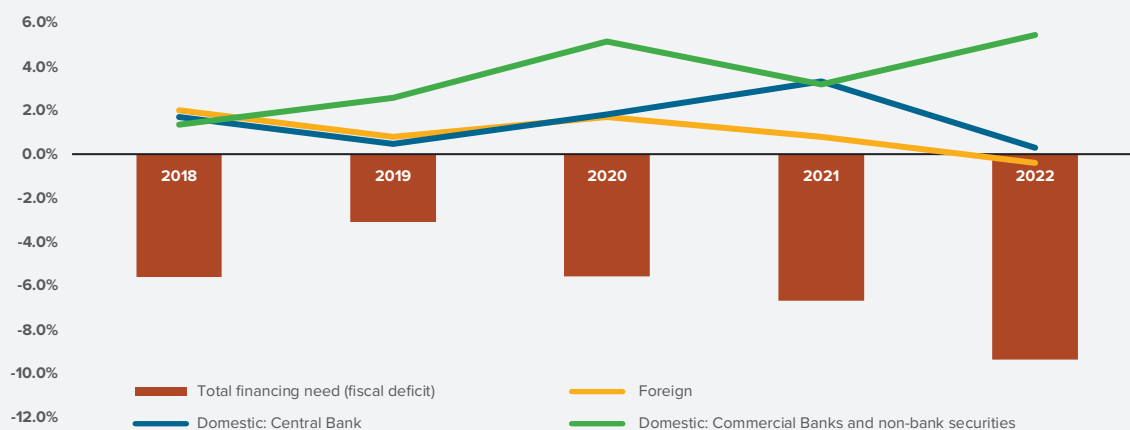
Source: Ministry of Finance (MOF) and World Bank Staff Estimates.

Notes: Numbers might not up exactly due to rounding.

As the fiscal deficit widened, the government had to rely on domestic sources of financing, including from the central bank (Figure 11). Over the years, the government has remained committed to zero non-concessional external financing. Given limited external concessional sources (most comes from the World Bank and the IMF) and a widening deficit, the government has increasingly financed its expenditures domestically. The “excess” deficit has been financed with central bank interventions in the secondary market, creating liquidity for commercial banks to increase purchases in the primary market. This has in turn fueled inflation and currency depreciation. In 2022, net domestic financing increased by 1.0 percentage points to 7.5 percent of GDP. Historically, commercial banks, through the purchase of government treasuries, have provided short-term but expensive credit. In addition, since the pandemic, there has been a surge in central bank financing of government securities: between 2021 and 2022, central bank financing increased from 3.2 percent of GDP to 5.4 percent of GDP.

Domestic financing through the central bank has increased in recent years to cover increasing financing needs

FIGURE 11: FINANCING SOURCES FOR THE FISCAL DEFICIT
PERCENT OF GDP



Source: Ministry of Finance (MOF) and World Bank Staff Estimates. Other financing sources are under the category float.

Following substantial slippages in 2022, there were improvements in fiscal management in the first half of 2023 even with revisions pointing to with a higher-than expected deficit for the year. As part of the government's commitment to enhancing fiscal oversight and managing budgetary overruns, the government put in place a range of corrective actions around expenditure management. They included the introduction of statutory approval for overseas travel, bolstering enforcing regular meetings of the cash and debt management committee (CDMC), and limiting ministerial allocation to ensure they adhere to a strategy for clearing arrears. To further control spending, a freeze on public sector recruitment was implemented until July 2023. Additionally, there is a temporary halt on the procurement of furniture and fittings, and a contract management committee has been tasked to prevent unreasonable contract price variations for goods, works, and services. The overall budget deficit, including grants, is projected to widen to 6 percent of GDP from 2.9 percent of GDP in the original budget reflecting increased spending on wages, goods and services and capital expenditures on roads, energy and water infrastructure alongside weaker revenue collections on account of slower economic activity and weak tax compliance.

There were some notable expenditure overruns in the first half of 2023, though smaller compared to previous quarters. Influenced by a combination of both macroeconomic factors and policy deviations these overruns included: (i) higher than expected subsidies and transfers stemming from an increase in the government's obligations denominated in dollars for electricity purchase contracts; (ii) growing interest expenditures resulting from greater reliance on costly domestic borrowings for financing, and (iii) increases in domestically-funded capital expenditure covering, in part, the construction of roads as the government continued to prioritize the development of seven "critical" roads identified in late 2022. Domestic revenues were largely in line with expectations, collections exceeded targets on account of continued stricter tax enforcement, resulting in improved compliance in areas such as income taxes and GST, the implementation of the automatic pricing formula for fuels, and higher mineral royalties. Grants fell short by 0.2 percentage points.

Revenue mobilization was prioritized with three notable policy developments in the first half of 2023. The passing of the new Finance Act, the Duty and Tax

Waiver Act and cabinet approval of the Medium-term Revenue Strategy are critical to advancing the government's goal of increasing tax revenue by 1.8 percentage points of GDP by 2024 (see Box 2). These legislative reforms and initiatives come alongside continued efforts to rollout digital IDs, introduce excise stamps and fuel-marking technology, integrate electronic cash registers with large companies, and improve compliance among major taxpayers. These measures are projected to contribute an additional 0.4 percent of GDP in tax revenues.

BOX 2:

Bold reforms and strategies to strengthen domestic revenue mobilization

Finance Act, 2023: The act introduced several policy measures, expected to raise revenue collections by a cumulative 1.6 percent of GDP. The measures include: a 3 percent minimum alternative on taxes for all eligible companies; a 2 percent tourism levy; a 15 percent goods and sales tax on digital services; and the reintroduction of taxes on fee-based financial services, amongst others. This is a critical step in the government's fiscal consolidation efforts following worrisome slippages in 2022, which contributed to delays in the 6th review of the IMF ECF program. In 2022, the fiscal deficit stood at over 10 percent of GDP (compared to a budgeted target of 4.8 percent). On the spending side, no new measures were announced, but expenditures are expected to be curtailed from 31 percent of GDP in 2022 to 25 percent of GDP in 2023, reflecting lower projected capital expenditure.

Duty and Tax Waiver Act, 2023. The Act comes on the heels of the 2022 Duty and Tax Waiver Policy -which clarifies the conditions under which tax and import duty waivers are granted to individuals and firms. Over 2015-19, tax waivers and exemptions amounted to 1.6 percent of GDP on average (with exemptions on duties amounting to 0.7 percent of GDP and waivers on GST 0.9 percent of GDP). The act should result in a reduction in the number and value of duty and tax waivers offered and ensure that waivers are granted only in clearly defined cases.

The Medium-term Revenue Strategy (MTRS).

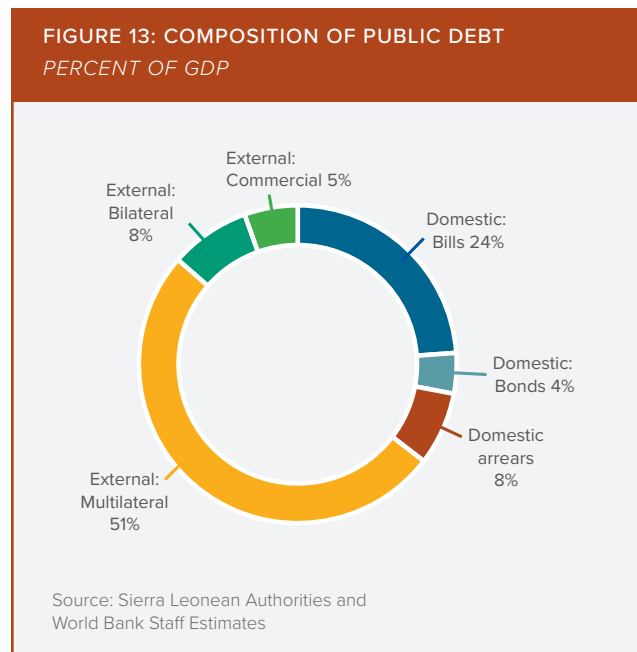
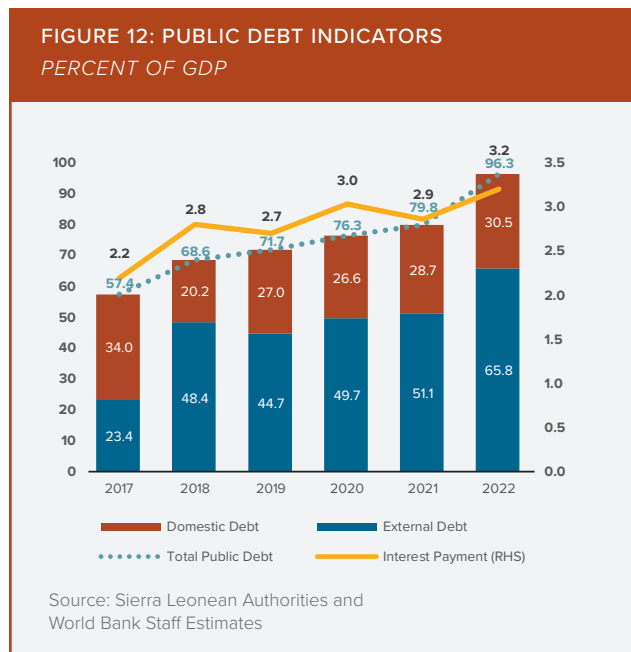
The strategy lays out policy and administrative measures to improve domestic revenue collection over the medium term. Over the past 5 years, domestic revenue (tax and non-tax) as a share of GDP has averaged 13.8 percent, lower than the average for Sub-Saharan Africa (18 percent of GDP). The MTRS is a renewed and encouraging attempt to energize tax policy reform towards more efficient and progressive domestic revenue mobilization. To implement the policy, the government will establish a quarterly high-level steering committee chaired by the Minister of Finance with representation from the National Revenue Authority, Development Partners, CSOs and other relevant government agencies and stakeholders. Four areas of support are required to ensure successful MTRS implementation. The first area covers support for an excise tax diagnostic to streamline policies and optimize collections. The second is on capacity building to enhance fiscal management of tax expenditures. A third covers a comprehensive diagnostic of customs governance and field operations, and a fourth is around efforts to facilitate change management to ensure sustainable use of the ITAS and ASYCUDA World systems.

Risks to debt sustainability have intensified

Public debt has increased sharply both in absolute terms and as a share of GDP because of the cumulative effects of fiscal slippages, the steep depreciation of the Leone, and increased reliance on high-cost domestic borrowing. The public debt-to-GDP ratio is estimated to have increased from 84.7 percent at the end of 2021 to around 96.3 percent at the end of 2022. As the debt stock and associated debt payments rise, both liquidity and solvency risks have risen – with the most significant risk stemming from large debt service obligations. According to the joint WB-IMF Low Income Country Debt Sustainability Framework (LIC-DSF), Sierra Leone has been at high risk of debt distress since 2018 when public debt was under 70 percent of GDP. The most recent debt sustainability analysis (DSA) published in June 2023, concludes that Sierra Leone's public debt remains sustainable, but the risks associated with external and overall debt distress have significantly increased.⁴ Risks are elevated primarily due to the substantial fiscal overruns last year, coupled with a sharp depreciation of the Leone, resulting in a worsening of both solvency and liquidity measures.

Total debt is composed primarily of external concessional debt, but with an increasing contribution from expensive domestic debt. Public and publicly guaranteed (PPG) external debt has risen from 49.7 percent of GDP in 2020 to 65.8 percent of GDP by end-2022, largely due to sharp depreciation of the Leone. In 2022, public external debt (65.8 percent of GDP) comprised mostly obligations to multilateral creditors, with the IMF and World Bank accounting for about 26 percent (17 percent of total public debt) and 24 percent (16 percent of total public debt), respectively. Other multilateral creditors accounted for less than 5 percent each, while official bilateral creditors accounted for around 12.2 percent of the total PPG external debt.

Public debt is on the rise



⁴ This analysis is based on the WB-IMF Low-Income Country Debt Sustainability Framework (LIC-DSF). This framework analyzes four PPG external debt ratios against empirically estimated thresholds. If any one of the indicators breach their thresholds under baseline assumptions, then the country's is assessed to be at high risk of debt distress. In the case of Sierra Leone, since one of the external debt indicators (debt service to revenue) breaches its threshold under the baseline, the country is assessed to be at high risk of external debt distress. However, all the external debt indicators are on a declining trend over the medium- to long-term, debt is assessed to be sustainable.

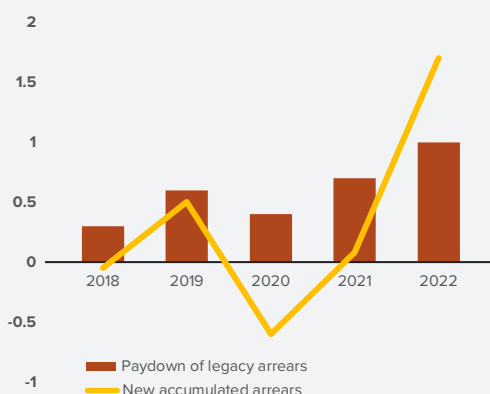
Among the bilateral creditors, the Kuwait Fund, China and South Korea were the largest creditors, accounting for about 74 percent of total PPG external debt owed bilaterally.⁵ Domestic debt has been increasing, from 27 percent of GDP pre-COVID (average between 2017 and 2019) to 30.4 percent of GDP at end-2022. Commercial banks hold approximately 59 percent of the domestic debt, primarily in the form of 364-day T-Bills, while the remaining portion is divided across debt to the Bank of Sierra Leone (BSL) and non-bank entities, and domestic arrears owed to suppliers. The domestic debt market in Sierra Leone is underdeveloped, with a low Average Time to Maturity (ATM) and high interest rate costs, resulting in an expensive domestic debt portfolio. Moreover, high sovereign exposure to commercial banks could negatively impact financial stability if unexpected future economic shocks occur. The stock of domestic legacy arrears (for suppliers of goods and services) amounted to 4.8 percent of GDP at end 2022 and “crystallized checks” (unverified arrears) stood at 2.2 percent of GDP, bringing the total stock of (verified and unverified) arrears to nearly 7 percent of GDP (See Box 3). Despite strong growth in exports, external accounts still reflect a chronic trade deficit

BOX 3:

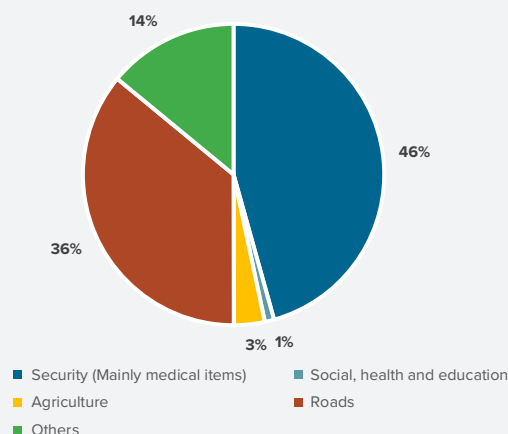
Arrears accumulation

The accumulation of arrears to domestic suppliers remains a significant concern for debt sustainability. In 2019, the total of confirmed outstanding payments -arrears- was estimated at 8.7 percent GDP. To address this, the authorities designed a comprehensive strategy for clearing these existing arrears and for preventing future pileups. When the pandemic struck, the repayment of these arrears took center stage, primarily to bolster the liquidity of domestic suppliers. As a result of this focused approach, nearly 2.6 percent of GDP, was repaid in 2020. Continuing with this momentum, 2021 saw a further reduction in the existing arrears, with payments amounting to 1.6 percent of the GDP. This continued clearing of domestic arrears significantly cushioned businesses from the economic shocks of the pandemic. By end-December 2022, the stock of legacy arrears was estimated at 4.8 percent of GDP down from 5.7 percent of GDP in December 2021. In 2022, the government accumulated new arrears amounting to around 1.7 percent of GDP.

ACCUMULATION AND PAYDOWN OF ARREARS



SECTORAL COMPOSITION OF NON-CHEQUE ARREARS END-JUNE STOCK



⁵ Sierra Leone also has legacy pre-HIPC arrears to external commercial creditors, which accounted for around 8 percent of the PPG external debt or approximately US\$168 million by the end of 2021.

Despite the government's commitment to repay arrears under its Arrears Clearance Strategy over 2020-2025, implementation has been challenging and with a tight fiscal space the government is faced with a tradeoff between clearing arrears and channeling spending to new projects. Arrears not only affect suppliers themselves, but they can also lead to banking sector risks and a decline in the quality of banks' assets. The authorities continue to prioritize arrears clearance, however, to ensure fiscal sustainability, preventing the accumulation of new arrears through improved budget management is critical.

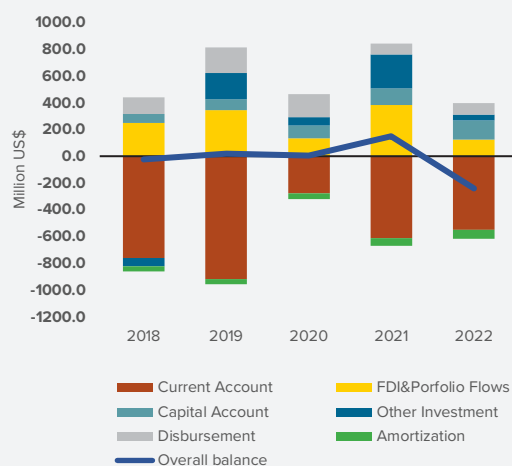
Despite strong growth in exports, external accounts still reflect a chronic trade deficit

In 2022, the estimated current account deficit narrowed from 8.7 percent of GDP in 2021 to 8.5 percent.

Earnings from merchandise exports increased in 2022 by 16 percent (mainly due to increases in iron ore trade and the improvement in terms-of-trade from local currency depreciation). Merchandise imports growth was lower at 7 percent. Forex reserves fell to around 4 months of imports by end-2022 (from close to 5.5 months in the first quarter of 2021) as capital inflows declined, debt obligations increased, and forex demands for imports rose (Figure 15), and the central bank periodically intervened to protect the Leone. Given that the current account deficit is primarily financed by FDI and external financing, a slow-down in capital inflows due to global macro and financial market instability has elevated financing needs.

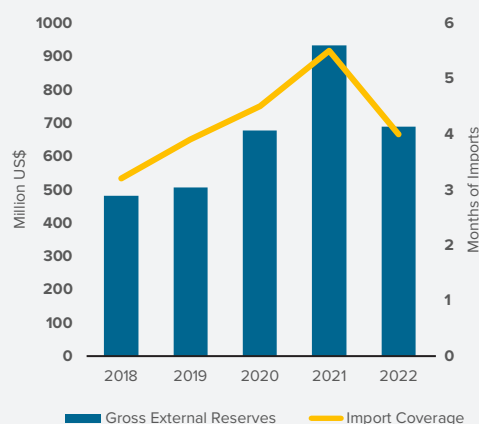
The current account deficit has narrowed but a slowdown in capital inflows has elevated financing needs

FIGURE 14: CURRENT ACCOUNT AND SOURCE OF FINANCING
MILLIONS US\$



Source: Sierra Leone authorities, IMF and World Bank Staff Estimates

FIGURE 15: RESERVE COVERAGE
MILLIONS US\$, IMPORT MONTHS (RHS)

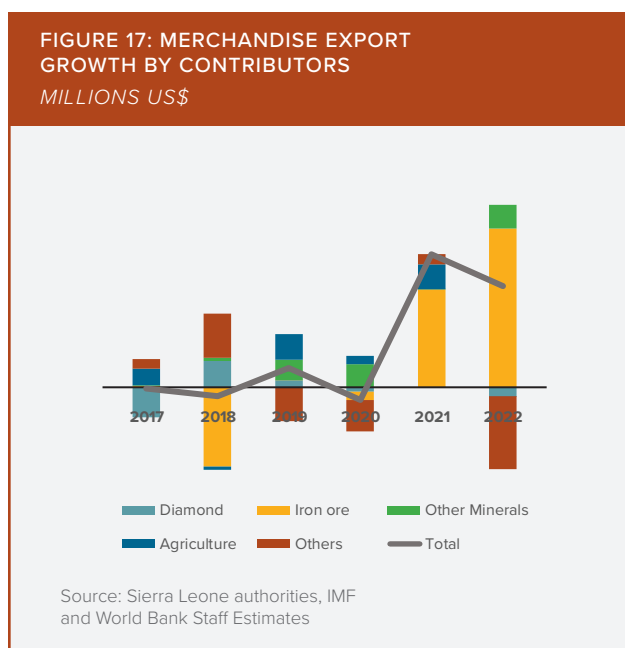
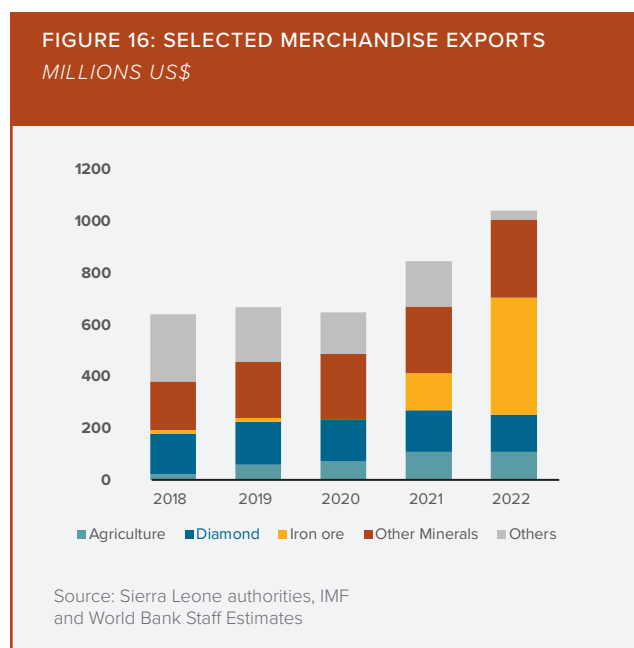


Source: Sierra Leone authorities, IMF and World Bank Staff Estimates

Total merchandise exports grew by 16 percent and increased to 31.4 percent of GDP in 2022, from 25 percent of GDP in 2021, thanks to higher export volumes for iron. Iron ore export values (in USD) increased almost fourfold between 2021 and 2022 (from 3.5 percent of GDP to 12 percent of GDP) as recently re-opened iron ore mines (Tonkolilli and Marampa) ramped up production. Combined, metal and mineral exports (including diamond and rutile), made up 86 percent of overall exports (26 percent of GDP in 2022 – double the share in 2021) and contributed more than one-third to overall export growth. Iron ore, rutile and diamond production is expected to increase in 2023 as mining companies in all three sectors move forward with investments to expand capacity and improve efficiency. Unfortunately, agriculture exports showed no growth and other exports declined, increasing the country’s dependence on volatile minerals.

Net inflows into the capital and financial account declined on account of lower FDI, contributing to a decline in reserves. Capital account inflows increased by 2 percent to US\$107 million in 2022, mainly thanks to an increase in project support grants from development partners (from US\$89.8 million to US\$105.3 million). However, this was not enough to offset the slowdown in foreign direct investments. Net financial account inflows plummeted, as FDI decreased by 7.8 percentage points to 1.3 percent of GDP (US\$52 million). As a result, the combination of adverse BOP dynamics and drawdowns to support fuel and food imports and for currency stabilization, external reserves declined to US\$668 million (4 months of imports cover) from US\$932 million (5.5 months of imports cover).

Iron ore exports boosted overall merchandise export growth



The trade deficit has narrowed during the first half of 2023. The trade deficit narrowed to US\$308 million (8.7 percent of GDP) in the first half of 2023 compared to US\$418 million (14.1 percent of GDP) during 2022H1 as export growth outpaced imports. Goods shipments grew by 19 percent (y-o-y) during the first half of 2023, driven largely by iron ore exports (59 percent of total export volume). The goods import bill fell marginally by 0.5 percent during the same period due to lower import demand for vegetable oil (palm oil exports dropped by 71 percent), and election-related uncertainties which stalled business operations and investment decisions in Q2. However, despite this improvement in the trade balance, gross international reserves decline as capital inflows remain inadequate. Reserves have declined to about US\$476 million or nearly 3 months of imports (as of August 18, 2023), down by 22 percent since end-2022.

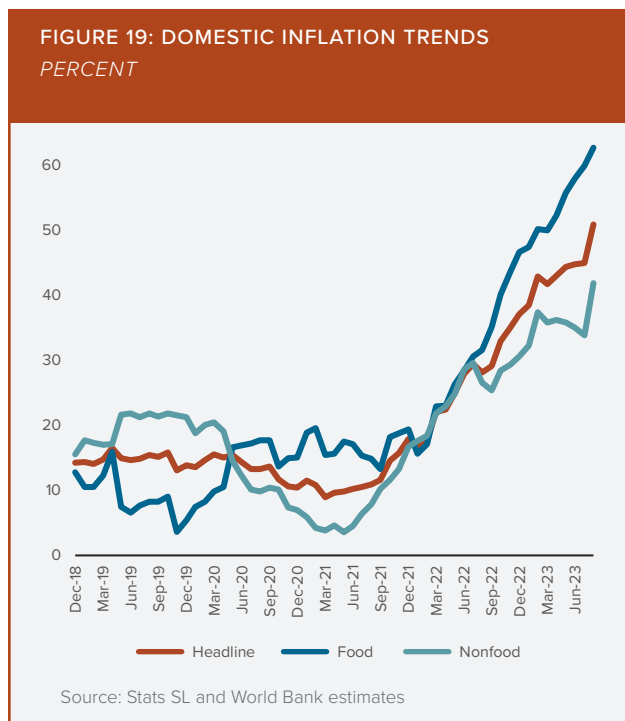
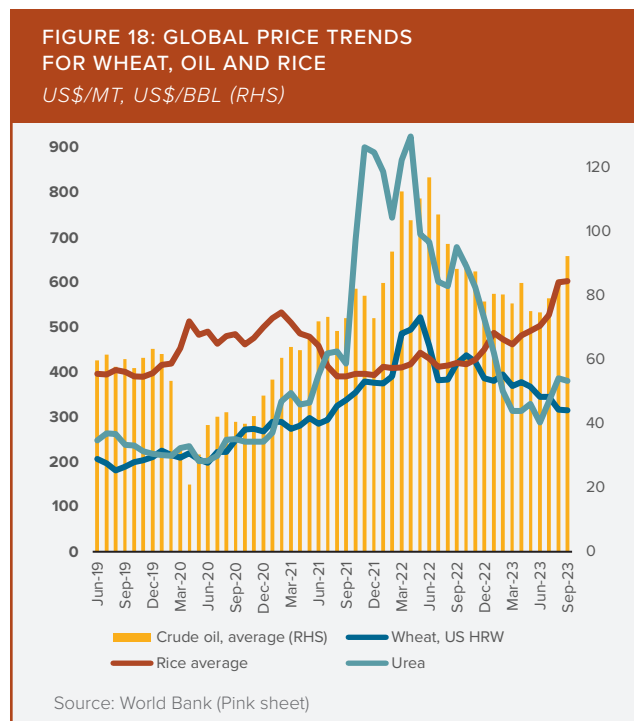
Inflationary pressures mounted and the currency depreciated through the year, with limited relief from a tighter monetary policy stance

Headline inflation averaged 27 percent in 2022, with increasing momentum throughout the year, due to a combination of supply and demand factors. In comparison, inflation averaged 12 percent in 2021. Headline inflation started to pick up in October 2021, as pent-up consumer demand amidst supply chain disruptions placed upward pressure on prices. In early 2022, supply shocks precipitated by the war in Ukraine contributed to a spike in energy and fertilizer prices. In the later part of the year, as global food and fuel prices cooled off, high domestic inflation persisted largely due to a sharp depreciation of the Leone and increased central bank financing for a larger-than-expected fiscal deficit. Consequently, higher prices have squeezed household budgets and eroded purchasing power.

Food and energy inflation were the primary drivers of price increases. Food inflation reached a decade-high average of 30.1 percent in 2022, up from 17 percent in 2021, while non-food inflation was 25.4 percent in 2022, up from 7 percent in 2021. Prices for imported staples like rice, oil, and cereals rose. Energy inflation doubled from 17 percent in 2021 to 35 percent in 2022. With the removal of the government’s ad hoc fuel pricing system, in line with the 2018 fuel price liberalization policy, global prices for crude oil were fully passed on to consumers through a formulaic retail pump price adjustments system (Box 4).

Food inflation eroded households’ purchasing power and aggravated poverty and food insecurity. World Bank estimates (2022) using simulations on Household Survey data found that a food price shock of 5 percent leads to an average loss of purchasing power of 1.8 percent and a 1.4 percentage point increase in the national incidence of poverty. However, doubling food inflation from 5 to 10 percent results in a proportional loss of purchasing power (3.6 percent), but a non-linear increase in poverty rates (2.6 percentage points from the baseline), reflecting differences in the distance between the poverty line and consumption expenditures. **Part 2 of this report dives into the state of food insecurity in Sierra Leone.**

Headline inflation has risen due to a surge in global commodity prices



Inflationary pressures have continued to intensify in 2023. Since the start of the year to August, headline inflation has averaged 44 percent gaining pace after a few months of respite. Food inflation rose to 63 percent (y-o-y), while non-food inflation increased to 42 percent. These inflationary pressures have persisted amidst a combination of global and domestic price shocks (food and fuel accounts for over 60 percent of total imports), a depreciating currency, and domestic policy slippages. The August increase in fuel pump prices by 40 percent to NLe30/liter also contributed to both food and non-food price pressures, through an increase in transportation costs. Despite efforts by the Central Bank to control inflation- policy rates have increased by 500bps percent to 19.25 percent since the start of 2022, inflationary and exchange rates pressures have persisted as these efforts have been limited by shallow financial markets, fiscal dominance, and a widening monetary base (the monetary base grew by an average of 38 percent (y-o-y) during the first half of 2023). Despite consecutive increases of the monetary policy rate by the Central Bank, domestic prices continue to be affected by currency depreciation, which has aggravated imported inflation.

BOX 4:

Behind the pump: Sierra Leone's automated fuel pricing mechanism

Until 2018, Sierra Leone used an ad hoc pricing system to set the price of fuel products. The government did not fully pass-through increases in international fuel prices to domestic retail prices, with adverse consequences for fuel tax revenues. In 2007, the government implemented a fuel subsidy program which was later refined into a two-tier system in 2012. The two-tier system included subsidies for fuel consumption for transport and home use but removed the subsidy on fuel purchased by businesses.

Fuel price liberalization was announced in 2017 and implemented in July 2018. The adoption of an automatic fuel pricing mechanism incorporates a price smoothing mechanism to ensure pass-through over the medium term and avoid sharp fluctuations in domestic prices. The implementation of the pricing formula is overseen by the Petroleum Directorate, the agency tasked with regulating the country's petroleum sector. The formula is designed to incorporate a comprehensive range of factors, including the prevailing global crude oil price, refining and

transportation costs, and various government taxes and levies. This approach is intended to ensure that the final retail price of petroleum products accurately reflects the true production and distribution expenses, while also allowing for some degree of price stability for consumers.

The policy, however, has not been implemented consistently. Since the launch of the fuel pricing system, the Government has routinely suspended the implementation of the full pass-through fuel pricing formula and regularly revises excise rates on petroleum to mitigate the inflationary impact of fuel price revisions on consumers – which results in foregone tax revenues with consequences for fiscal sustainability. In February 2021, adjustments were suspended to cushion the impact of COVID-19 on the population but were reinstated 6 months later given significant revenue losses. Adjustments were then suspended again in the first half of 2023.

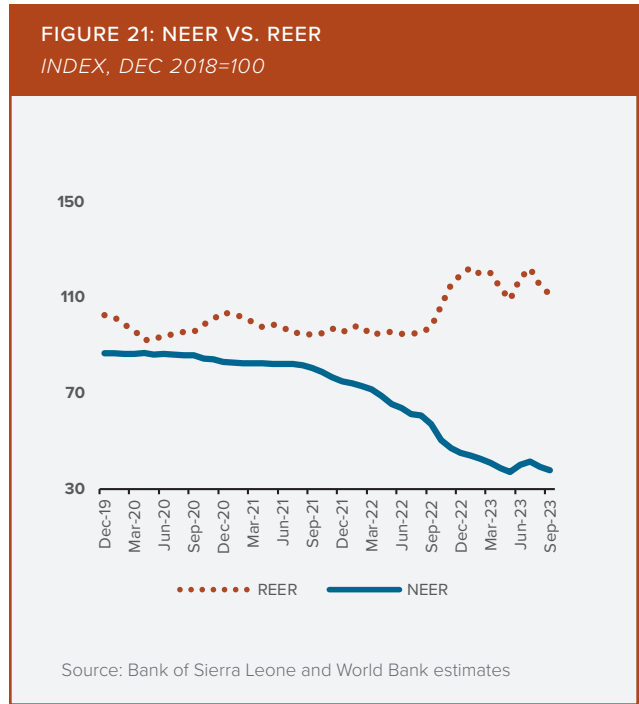
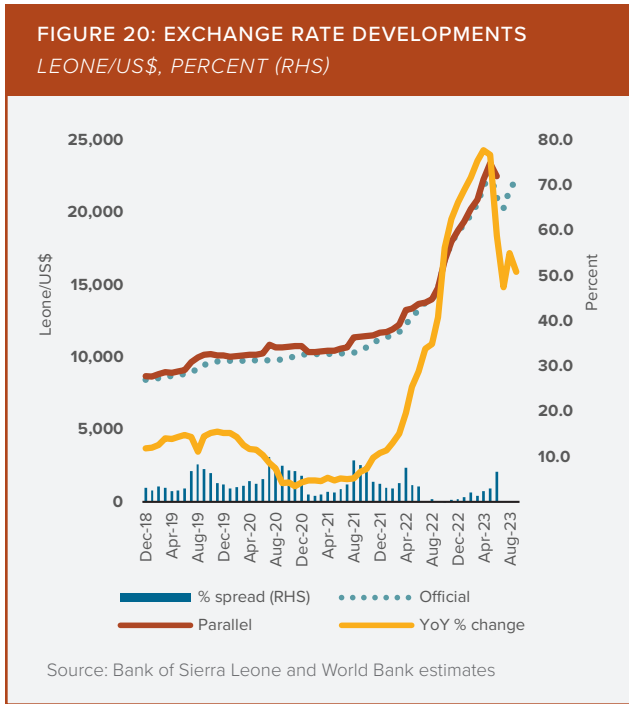
Monetary policy has been tightened but its impacts were undermined by global inflationary pressures, currency redenomination, the depreciation of the Leone, and budgetary pressures. To address mounting inflationary pressures, the BSL tightened its monetary policy stance. Since January 2022, the BSL cumulatively revised the benchmark interest rate by over 350 basis points to 18.5 percent effective April 2023. Other policy interventions included an increase in the standing lending facility rate and standing deposit facility rate by 125 basis points, bringing these rates to 21.75 percent and 12.75 percent respectively, since the start of 2022. During the year, BSL also used different monetary policy instruments to manage the inflationary spillovers from two interrelated developments – redenomination and currency depreciation. This included (i) setting up special forex facilities for fuel (US\$36 million) and food (US\$50 million) to enable easier access to foreign exchange for imports of essential commodities; and (ii) resuming wholesale foreign exchange auctions to increase the availability of foreign exchange and support importers (US\$24 million).

The Leone was redenominated in July 2022, with three zeroes dropped from its nominal value, following which the country experienced stresses in the forex market. In principle, redenomination is expected to be money-supply neutral, with only a nominal change in the value of the currency. However, shortages in the availability of new notes after the redenomination caused a loss of confidence in the Leone and citizens rushed to exchange Leones for USDs. Indeed, exchange rate depreciation (that begun in the second half of 2021) accelerated further following the launch of the new currency. The spread between the official and parallel market rate also increased. Policy measures introduced by BSL to respond to currency

market stress (associated with the redenomination), while also managing rising inflation, had unintended consequences and mixed results. For instance, (i) initial restrictions on cash withdrawals caused a further loss of confidence in the Leone; and later (ii) a relaunch of wholesale forex auctions rapidly depleted reserves, while providing little support to the currency (Box 4). Currency disruption abated towards the end of the year, as the supply of new notes normalized and the BSL extended the timeline for phasing out the old currency notes.

Overall, the currency depreciated by more than 40 percent since the start of 2022 and continued to depreciate halfway into 2023. As exchange rate depreciation intensified between July and September 2022, the BSL reversed its earlier restrictions on cash withdrawals in a bid to restore confidence in the Leone, reduce demand for forex and discourage parallel market activity. The BSL maintains a floating exchange rate regime but intermittently intervenes to respond to fluctuations and pressures. The Leone continued to depreciate during 2023 and declined in value against the USD by over 15 percent in the first quarter. The currency continued to be under pressure since early last year on account of (i) a terms-of-trade shock due to a rise in prices for imported food and fuel, (ii) disruptions in the availability of Leones following redenomination, and (iii) expansionary fiscal policies. The persistent depreciation of the Leone further fueled inflation and intensified risks to fiscal and debt sustainability. The Leone appreciated sharply in June ending the downward spiral. Given that the appreciation happened in an election month it is unclear if that will be sustained in the coming months.

The pace of depreciation against the dollar continued to rise in 2022 with a decline in June 2023



Monetary policy effectiveness remains weak. The country’s financial system remains underdeveloped, with commercial banks accounting for the bulk of assets, and financial markets in their nascent stage. Fiscal dominance characterizes the macro-financial landscape, with bank credit catering primarily to the public sector. In designing its policies, the BSL implicitly balances several goals, including ensuring price stability, meeting fiscal financing needs, achieving foreign exchange reserves targets, mitigating exchange rate volatility, and increvasing private sector credit. Pursuing multiple goals, particularly when they are at odds, complicates policy design. Moreover, domestic price and exchange rate dynamics are vulnerable to exogenous shocks (as seen from the impact of the pandemic and the war in Ukraine); and the transmission of policy via the monetary policy rate (MPR) is limited by the low share of domestic credit extended to the private sector (because interest rates therefore have a limited impact on household and firm spending).

BOX 5:

Costly change: Sierra Leone's currency redenomination

In August 2021, the Bank of Sierra Leone (BSL) announced its intention to redenominate the Leone. This reform removed three zeros from the currency and introduced a higher denomination, the Le. 20 note. The government proceeded with the launch of the redenominated notes on July 1, 2022. The decision to redenominate the currency was taken in the context of ongoing efforts to improve monetary policy and macroeconomic stability, as well as to address issues related to currency management and financial inclusion.

The evidence on currency redenomination is mixed, with both potential benefits and drawbacks to consider. On the one hand, redenomination can simplify transactions and reduce the costs of handling large amounts of currency. On the other hand, it can be expensive to implement, disrupt trade and financial flows, and may not address underlying economic problems. Overall, the success of currency redenomination depends on a range of factors, including the specific context and goals of the reform, as well as broader economic and political conditions.

Sierra Leone's currency redenomination announcement led to uncertainty and speculation, causing a downward pressure on the exchange rate and higher import costs. This highlighted the importance of adequate preparation, logistics, and communication. After the announcement

of redenomination, citizens hurried to exchange leones for USDs, exacerbating the depreciation of the exchange rate since the second half of 2021, and widening the spread between official and parallel market rates. The BSL's policy measures to manage inflation and currency market stress included limiting cash withdrawals and later reintroducing a couple of wholesale forex auctions. However, these measures produced unintended consequences and mixed results, including contributing to depleting reserves.

In March 2023, the BSL announced a second extension of the transition period for the redenomination of the Leone currency. The initial launch of the new currency was accompanied by a three-month transition period from July to September 2022. However, due to challenges in supplying an adequate number of new notes and uncertainty surrounding the availability of the new tender, the government decided to extend the transition period until the end of March 2023. This extension was accompanied by a depreciation of the currency against the dollar. Consequently, until the end of the year, the old Leone will continue to be accepted as valid legal tender, and banks will remain open to exchanging the old notes for the newly redenominated currency.

The financial sector appears stable but with significant underlying risks

Money aggregates picked up in 2022 and in the first four months of 2023 despite the tightening of monetary policy.

Broad money (M3) growth accelerated to 41 percent at the end December 2022, from 22.1 percent at the end of the previous year, on account of an increase in net domestic assets in the form of higher credit to the government, which almost doubled from 19.6 percent at the end of 2021 to 34.2 percent at the end of 2022. Meanwhile, growth in credit to the private sector slowed down in 2022 to 11 percent – almost a third of the growth rate in 2021 – as banks substantially increased holdings of government securities. Monetary Survey data for April revealed an expansion in monetary aggregates. Base money experienced a substantial growth of 45.6 percent (year-on-year) compared to 25.6 percent in December 2022. Additionally, growth in broad money saw a slight increase of 1 percentage point to reach 42 percent (year-on-year) in April, representing a growth of 10.7 percent since December 2022. This expansion in monetary aggregates was primarily driven by the growth in the Net Domestic Assets (NDA) of the Central Bank, which outweighed the decline in Net Foreign Assets (NFA). NDA witnessed a significant increase of 26 percent since December 2022, largely due to the banking sector's increased holdings of government securities. Furthermore, the private sector credit has shown notable improvement in 2023, with a growth rate of 22 percent (year-on-year) recorded in April 2023, compared to 12 percent in December 2022.

Sierra Leone's banks meet prudential standards, but there are vulnerabilities and risks.

The banking system appears to be in good financial standing, with high levels of capitalization, profitability, and liquidity, largely due to a concentration of assets in short-term government securities (Table 2). However, there are weaknesses, namely high levels of non-performing loans (NPLs decreased by 3 percentage points to 12.1 percent of total gross loans in 2022 but they remain

above the prudential limit of 10 percent), weak banking sector regulation and supervision, and continuing macroeconomic risks. The capital adequacy ratio (CAR-regulatory capital-to-risk-weighted-assets) remains well above the 15 percent statutory minimum, but it decreased by 6 percentage points to 35.2 percent in 2022 reflecting the increased purchases of government securities (Table 5). Banks' average return on assets (6.5 percent) and equity (28.2) improved significantly and profitability in 2022 exceeded pre-pandemic averages (Table 5).

FIGURE 22: KEY MONETARY AGGREGATE 2018-2022
YOY% CHANGE

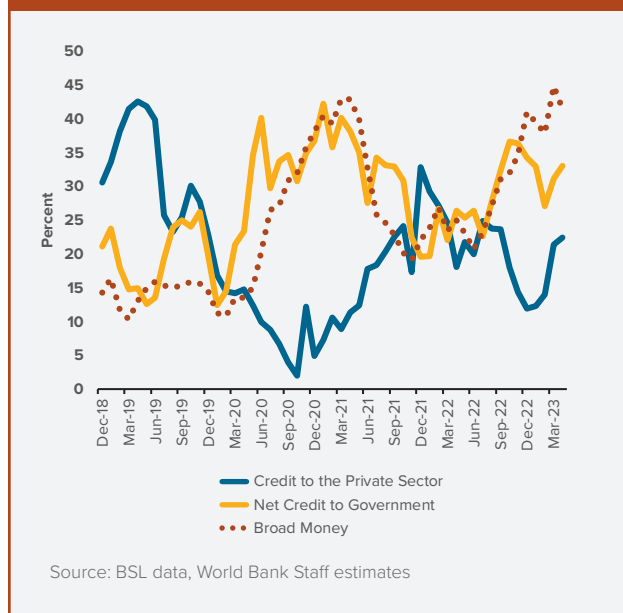


FIGURE 23: KEY MARKET INTEREST RATES, 2019-2022

PERCENT

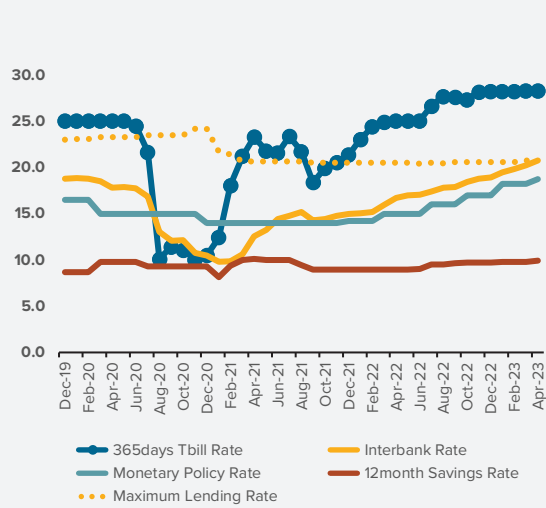
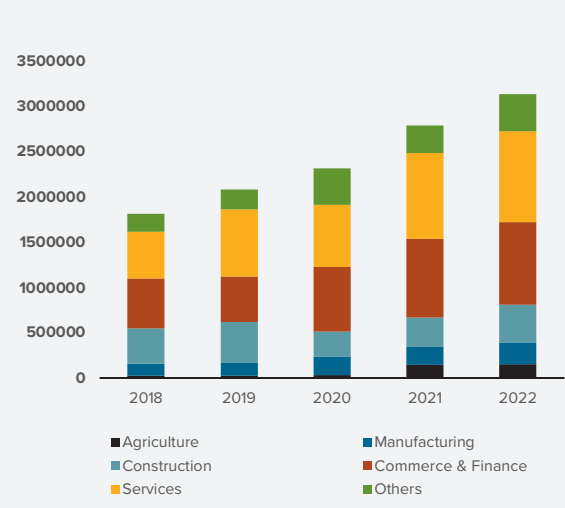


FIGURE 24: COMPOSITION OF PRIVATE CREDIT, 2018-22

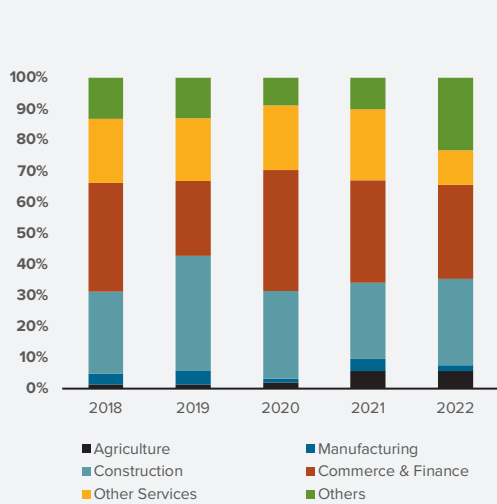
MILLIONS LEONES



Source: BSL data, World Bank Staff estimates

FIGURE 25: SECTORAL DISTRIBUTION OF NPLS, 2018-22

PERCENT



Source: BSL data, World Bank Staff estimates

Sierra Leone's financial sector is inefficient and shallow, with private credit to GDP declining in recent years. Banks dominate the financial sector, and there are few non-bank credit institutions that play a minimal role. Sierra Leone lags behind its peer countries – its financial sector is the least efficient and costliest among peer countries, with the highest bank lending/deposit spread among IDA countries. Despite significant holdings of T-bills, overhead costs for the banking sector are much higher than in regional peers. The high costs of intermediation are usually passed on to customers, making the country's financial system inefficient. The banks' primary source of funding comes from deposits, limiting their potential for long-term lending. The banking sector's asset structure reflects the dominance of T-bill holdings, followed by deposits in and loans to foreign financial institutions, and lending to the private sector.

BOX 6:

Facilitating enhanced interoperability within the financial sector

In April 2023, the Bank of Sierra Leone launched the National Payment Switch. The National Payment Switch is a centralized unit which enables electronic transactions between various financial institutions, merchants, and consumers. So far, six commercial banks have already been integrated into the national payment switch. The switch, which will be operationalized in three phases, will be owned and managed by the Bank of Sierra Leone. The first phase of the National Payment Switch involves ATMs and Point of Sales Devices (POS). The second phase incorporates mobile money operators and other fintech operators

into the platform while Phase three will focus on international transactions. Since the launch of Phase I, there have been no notable reports of glitches or difficulties in implementation. The National Switch has been supported by the World Bank Financial Inclusion I Project (for \$12mn). This reform should increase the share of the adult population with an account in a financial institution (currently 14 percent compared to 40 percent for SSA) and/or a mobile money account (19 percent compared to 33 percent for SSA) (FINDEX, 2021).

Sierra Leone's banking sector is largely liquid, but there are large variations in capital positions among banks. Most banks reported profits in 2022, but a few have continued to incur losses since 2020. The governance of state-owned banks has improved, but weaknesses have been identified in critical benchmarks related to financial sustainability and risk management. Additionally, Sierra Leone lacks effective supervision and regulatory governance, particularly for sectors at high risk of abuse for money laundering and terrorism financing. The IMF and the World Bank have been working with the BSL to strengthen financial sector policies, develop action plans for reforms, and build capacity to monitor and safeguard financial stability.

TABLE 2: SELECTED FINANCIAL SOUNDNESS INDICATORS, 2017–22
PERCENT UNLESS OTHERWISE STATED

	2017	2018	2019	2020	2021	2022
Capital adequacy/1	34.2	38.4	41.7	40.1	41.3	35.2
Asset quality						
Nonperforming loans to total gross loans	14.6	12.7	16.8	12.7	15.2	12.1
Nonperforming loans (net of provisions) to capital	12.1	9.9	7.2	4.3	4.7	2.4
Earnings and profitability						
Return on assets	5.3	6.1	6.1	6.1	5.4	6.5
Return on equity	25.6	27.3	26.1	25.7	23.9	28.2

	2017	2018	2019	2020	2021	2022
Liquidity						
Ratio of net loans to total deposits	19.2	27.2	25	21.8	20.8	
Liquid assets to total assets	66.9	67.9	68.4	73.4	73.7	78.3
Share of foreign currency in total deposits	37.1	38.3	37	37.5	38.1	
Net open position in foreign exchange to capital	-14.4	-12.8	-1.8	-12.2	-10.6	-0.2
Memo: Le billion						
Total Assets	7433	8549	9498	13076	15805	23221
Cash	408	482	433	433	686	1317
Total Deposit	5275	6111	6759	9407	11592	16935
Gross Loans	1497	1773	2055	2267	2713	3026

Source: Bank of Sierra Leone data, World Bank staff estimates.
Note 1: Capital requirement over risk-weighted assets (solvency ratio)

Near & Medium-term Economic Outlook

In the near and medium-term, economic growth is expected to remain below pre-pandemic levels, as the economy recovers only gradually from consecutive shocks and macro stability is restored. Economic growth is projected to moderate to 3.1 percent in 2023 and 3.6 percent on average between 2023-2025, still below the pre-pandemic average of 4.2 percent. Growth in 2023 is expected to be supported by (i) efforts to restore macro stability and contain inflation through fiscal discipline and prudent monetary policy; (ii) continued expansion of iron-ore mining operations; and (iii) some modest easing of inflationary pressures and an improvement in purchasing power of households. However, private investments will remain muted as global financial conditions continue to depress FDI. Public investments are also expected to be limited in 2023 (before recovering in 2024-2025) as the government undertakes aggressive fiscal consolidation to control spending and ensure fiscal and debt sustainability. The external position remains uncertain and heavily dependent on the course of ongoing global headwinds. Low growth forecasts for advanced economies compound what is already a pessimistic outlook for export and FDI-led growth. Global prices for iron ore, cocoa and diamonds are expected to trend downwards; and even with projected higher prices for timber, government timber bans will limit earnings in the sector (World Bank, 2022 Commodity Markets Outlook). As global fuel and food prices remain elevated in 2023, a high import bill with weak growth in exports will extend the net-negative terms of trade shock and compound difficulties in financing a wide current account deficit.

Agriculture and mining will buoy economic recovery in the medium-term. Even as high prices and supply chain challenges for fertilizer persist, agricultural GDP is expected to grow by 3.3 percent in 2023 and by 3.8 percent over the medium term on the back of agricultural reforms and continued partnerships to strengthen value chains in key sectors. One such partnership was signed in the first half of 2023 with FAO and Vietnam to enhance the rice value chain, by attracting \$5 million in investments to improving production technologies. The mining sector will continue to face muted global prices for metals and precious minerals (below levels in 2019) which could depress revenues for iron ore, rutile, and diamonds even as capacity has been progressively ramped up since 2021. However, the ongoing series of expansions in mining is expected to contribute to a boost in export volumes over the medium term as metal and mineral prices stabilize. Marampa iron ore mines reopened in 2021 under a 15-year mining license and began an expansion project to boost output to 7 tons per year by 2023. Additionally, the Tonga Diamond project began sales of rough diamonds in May 2022 and is expected to produce 260,000 carats annually. The outlook for the industrial sector is promising with a projected medium-term growth rate of 6.5 percent between 2023 and 2025. This outlook is supported by the government's commitment to boosting manufacturing as evident in the government's plans to build the 1,600-hectare Koya Industrial Zone (SIZ-Koya).

Domestic inflation will remain elevated even as inflationary pressures ease globally. In the medium-term inflation will recede while staying in the double digits, as global prices stabilize, and the country adopts a more prudent fiscal policy. Trends in global commodity prices will remain a key factor influencing domestic headline inflation, which is projected to decrease to 14.3 percent in the medium term by 2025. According to 2023 commodity price forecasts, global energy, food, and fertilizer inflation are expected to decrease by 11 percent, 6 percent and 12 percent respectively. Nevertheless, 2023 domestic prices are projected to remain above the levels observed in 2020.

Fiscal discipline from improved revenue mobilization and substantial spending rationalization would support macro-stability in the medium-term. Successive shocks and spending slippages have narrowed the government's fiscal space, necessitating drastic corrective measures. Revenue measures anchored in the MTRS will focus on policy and administrative measures such as: streamlining tax exemptions, introducing a minimum alternative corporate income tax, ramping up the automation of tax filing and intensifying large taxpayer audits (see Box 6). On the expenditure side, the government plans to reestablish budget credibility by (i) improving budget monitoring and controls for wages, energy subsidies and capital spending, and (ii) limiting the accumulation of arrears and adopting a revised arrears clearance strategy. In the medium term, the share of wages is expected to decline to the government's target of 6-6.5 percent of GDP with the development and implementation of a medium-term wage bill management strategy and establishment of a Wages and Salaries Compensation Commission. On energy subsidies, the government is working with EDSA to improve revenue mobilization and reduce technical and commercial losses. Many of these corrective measures are urgent and will be needed to reduce the fiscal deficit by 3.6 percentage points to 6 percent in 2023 and to 4.3 percent by 2025.

Risks to debt sustainability will remain elevated until fiscal balances improve further and the reliance on expensive and short-term domestic borrowings can be addressed through the lengthening of maturities and greater access to concessional borrowings.

During 2023, public debt is projected to decline slightly to 88 percent of GDP. By 2025, debt should moderate to 77.3 percent of GDP, which will still be higher than at the end of 2019, and higher than the government's 2025 target of 70 percent. The government's Medium Term Debt Strategy 2023-2025 and the Fiscal Strategy Statement 2023-2025 propose improvements in domestic revenue mobilization and expenditure management, which could effectively lower the government's borrowing needs, and reduced reliance on short-term and expensive domestic borrowings by lengthening maturities and developing the domestic debt market.

The external position is projected to remain negative in the near and medium term. Muted growth in advanced economies will hamper export prospects for major commodities (iron, rutile, diamonds) and non-traditional exports such as tourism and manufacturing. With a growing energy and food import bill due to high global prices exacerbated by the depreciation of the Leone, the current account deficit should average around 6.5 percent of GDP between 2023 and 2025 as external inflows like FDI remain low and external debt obligations substantial. Based on macroeconomic trends and the government's large external financing needs, reserves will most likely remain low at around 4 months of exports cover, leaving the external position at risk of unexpected shocks.

Poverty alleviation efforts will be challenging as the government addresses reversals in education, health, and general welfare, stemming from domestic and global macroeconomic shocks. The poverty rate using the standard international poverty line (US\$2.15 per person/day at 2017 PPP) is projected to decline slowly, from 23.9 percent in 2018 to 24.6 by 2025. Economic growth is strongly tied to exports, which are dominated by minerals. However, the mining sector has limited spillover effects on households. Poverty reduction requires increased agricultural productivity and the creation of good jobs outside agriculture for the low-skilled labor force.

TABLE 3: ECONOMIC OUTLOOK FOR SIERRA LEONE⁶

	2020	2021	2022	2023 f	2024 f	2025 f
Real GDP growth, at constant market prices	-2.0	4.1	3.6	3.1	3.7	4.3
Private Consumption	5.4	36.7	-1.5	6.2	6.0	5.8
Government Consumption	2.7	0.6	13.7	5.5	5.2	7.4
Gross Fixed Capital Investment	-9.6	-30.0	-3.3	2.2	8.6	5.2
Exports, Goods and Services	-9.8	1.9	5.0	15.0	18.0	12.0
Imports, Goods and Services	7.5	46.6	-0.3	11.9	12.0	9.9
Real GDP growth, at constant factor prices	-2.0	4.0	3.6	3.1	3.7	4.3
Agriculture	1.6	2.5	3.0	2.7	3.2	3.3
Industry	-7.1	17.4	8.2	5.0	6.0	6.6
Services	-5.8	2.8	3.3	3.2	3.7	5.0
Inflation (Consumer Price Index)	13.5	11.9	27.0	35.0	19.8	14.3
Current Account Balance (% of GDP)	-6.8	-8.7	-8.5	-7.2	-6.6	-5.9
Net Foreign Direct Investment Inflow (% of GDP)	3.3	8.5	8.5	6.4	5.6	4.1
Fiscal Balance (% of GDP)	-6.7	-7.6	-9.6	-5.8	-3.8	-3.9
Debt (% of GDP)	78.0	84.7	96.3	88.0	79.0	77.3
Primary Balance (% of GDP)	-3.7	-4.2	-6.2	-1.4	1.7	1.7
International poverty rate (\$2.15 in 2017 PPP)^{a,b}	26.4	25.9	25.4	25.0	24.5	23.9
Lower middle-income poverty rate (\$3.65 in 2017 PPP)^{a,b}	64.6	64.2	63.7	63.4	63.9	62.4
Upper middle-income poverty rate (\$6.85 in 2017 PPP)^{a,b}	90.1	89.9	89.7	89.6	89.4	89.1

Source: World Bank, Poverty & Equity and Macroeconomics, Trade & Investment Global Practices. Emissions data sourced from CAIT and OECD.

Notes: e = estimate, f = forecast. Poverty data are expressed in 2017 PPP, versus 2011 PPP in previous editions - resulting in major changes. See pip.worldbank.org

(a) Calculations based on 2016-GLSS-VII. Actual data: 2016. Nowcast: 2017-2021. Forecasts are from 2022 to 2024.

(b) Projection using neutral distribution (2016) with pass-through = 0.87 (Med (0.87)) based on GDP per capita in constant LCU.

⁶ Table estimates and projections from World Bank Staff are based on data and analysis as of September 20, 2023

Risks to the Outlook

The outlook for the Sierra Leonean economy is intertwined with both external and domestic developments. Elevated inflation from energy and food prices, and continued tight monetary policy in advanced economies, could further affect the global economy and weigh on domestic growth. Geopolitical uncertainties around the war in Ukraine will determine the pace at which energy and agricultural prices and supply chains normalize. On the domestic front, the degree of political stability and the reform appetite and effectiveness of the government's economic agenda will affect domestic macroeconomic stability and resilience in the face of global uncertainties. To weather external uncertainties, the government would need to build up larger fiscal and financing buffers to cushion the economy. However, this could prove challenging with the current domestic macroeconomic situation. The interplay of these factors will determine the trajectory of economic growth in the short and medium term.

Higher inflation and currency pressures from a deterioration of global macroeconomic stability could undermine fiscal consolidation efforts. An uptick in global energy and food prices would pass through to higher domestic prices, while a concurrent depreciation of the Leone would compound the effect on prices. In this scenario, the government's fiscal strategy could be compromised as (i) recurrent expenditures on goods and services increase along with prices; (ii) pressure to implement subsidies and raise social transfers increases due to the worsening cost of living; and (iii) financing buffers are depleted to stabilize the currency and provide businesses with much needed foreign exchange liquidity. Subdued economic activity from macroeconomic instability would constrain the amount

of revenue mobilized to finance spending which would increase the government's reliance on external and domestic debt to finance a wider fiscal deficit.

Following the August 2022 riots, social stability remains precarious and could be at even greater risk as the cost-of-living crises continues. Widespread anger over soaring inflation led to a deadly riot in Freetown. Violence did not escalate further, but as real incomes are eroded by inflation, dissatisfaction with the economy could result in more protests. With stretched resources for law enforcement, there is a chance that future protests could lead to unrest, which would negatively impact welfare and the business and investment environment and most likely require increased contingency spending on security.

Climatic and health risks will continue to pose a significant threat to the economy. Sierra Leone is increasingly vulnerable to climatic shocks from extreme and unpredictable weather conditions. Rising temperatures and erratic rainfall have proved challenging for the agriculture sector through disruptions to planting and harvest seasons. Predominantly unplanned cities, particularly Freetown, have experienced severe and deadly flooding and landslides. In 2022, hundreds of people lost their lives and property. In addition, the country's health system is fragile, with limited resources and infrastructure, making it ill-prepared to cope with a resurgence of the COVID-19 pandemic or another wave of Ebola outbreaks. Both health crises highlighted vulnerabilities in the health system and the scope of the economic losses that can come from a collapse in the health system.

Policy Priorities

Sierra Leone is faced with a challenging macroeconomic environment, and medium-term policy priorities should focus on restoring macro stability while protecting vulnerable households and maintaining focus on long-term reforms. Fiscal pressures have progressively intensified, debt levels have increased, and inflation has soared, driven by global supply shocks and a deterioration in the terms of trade. The rapid rise in the cost of living combined with weak growth and deterioration of macroeconomic fundamentals threaten to increase the level of poverty within a context of inadequate social safety nets.

Enforcing fiscal discipline and renewing the commitment to consolidation will be crucial in ensuring fiscal and debt sustainability. In the near term, a focus on more effective expenditure controls and a stronger budget preparation and implementation process will introduce spending discipline and avoid misallocation of resources. Implementing a medium-term wage bill management strategy and operationalizing the Wages and Salaries Compensation Commission will help bring down wages to the government's target of 6 percent of GDP. To control subsidies, actions will be needed to improve EDSA's revenue mobilization and addressing technical and commercial losses. These efforts need to be coupled with improving domestic revenue mobilization, aligned with the medium-term revenue strategy to help create more fiscal space, while managing developmental spending needs.

Active debt management can support debt sustainability and reduce vulnerabilities. In the near term, continued reliance on concessional sources of financing can help contain the servicing burden. Containing short-term high interest domestic debt will

play an important role in addressing emerging liquidity constraints and reduce the crowding out of private sector financing. A balanced mix of domestic and external borrowing can mitigate the risks related to interest costs and exchange rate volatility. The capacity of debt management staff should be strengthened to improve debt recording and reporting. In the medium to long-term, efforts to deepen domestic debt markets by introducing medium to long-term bonds to extend the yield curve can help lower domestic costs of borrowing, while containing the exposure of public debt to currency fluctuations.

Strengthening cash management, along with preparing and adhering to a credible and effective arrears clearance strategy, can help avoid recurrent accumulation of arrears. Linking quarterly budget allocations to revenue performance and improving fiduciary management in ministries, departments, and agencies (MDAs) by deploying budget officers and internal audit staff can strengthen cash management and help prevent accumulation of new arrears. Timely and regular meetings of the cash and debt management committee can support this objective. The recently upgraded Integrated Financial Management Information System (IFMIS) can be used to improve commitment controls, strengthen cash and debt management, and enhance oversight of local councils to minimize fiscal risks.

Providing well-targeted crisis support to vulnerable households, affected by higher food and fuel prices, has emerged as a priority. Expanding social safety nets and increasing cash transfers to cover more households affected by recent shocks could provide a significant buffer to vulnerable households. The social

safety nets program should be strengthened through better targeting of beneficiaries and linkage to productive activities (farming and fishing) and social programs (school feeding and maternal health).

Monetary policy will need a multipronged approach to controlling inflation. Monetary policy will play an important role in preventing a currency-inflation spiral fueled by self-fulfilling expectations. Restoring confidence in the Leone will be important both to support the value of the currency, and to ensure the success of the redenomination exercise. The monetary policy rate should continue to be set at levels that contribute to lowering inflation. The use of wholesale currency auctions to support the currency should only be used in exceptional circumstances and be well communicated to avoid recurrent use of buffer reserves to prop up the currency. The BSL should limit the use of secondary market purchases to support government issuance and consider introducing its own short-term liquidity management operation, ideally with a standardized tenor, along with strengthened coordination with the Ministry of Finance on cash management. Over the medium term, a deeper financial market will allow for better monetary policy transmission.

Continued reform momentum will be crucial to address the country's structural constraints and pave the way for long-term development. Despite the challenging macro environment, the government must move forward with its structural reform agenda on improving natural resource management, strengthening public sector governance, and enhancing inclusiveness. Implementation of recently initiated reforms should be prioritized, such as the Gender Empowerment Act, Land Acts, Employment Act, the Mines and Minerals Development Act and the National Switch. Addressing gaps in public sector governance and accountability is important to retain and bolster confidence – requiring continued implementation of reforms to strengthen the autonomy and effectiveness of the Auditor General's office.

2

**Special focus:
Enhancing Value
Chains to Boost
Food Security**

Enhancing Value Chains to Boost Food Security

Food insecurity is increasing in Sierra Leone. The average calorie and protein supply per person is below the African average and declining, especially in the case of protein supply. Since the onset of COVID-19, the prevalence of insufficient food consumption has increased and is projected to affect 55 percent of the population by 2023. This chapter examines different dimensions of food security in Sierra Leone – identifying significant inadequacies. Recognizing the complex nature of tackling food insecurity, the discussion in this section focuses on a subset of solutions centered around improving agricultural value chains. By examining challenges and opportunities in three of Sierra Leone’s agricultural value chains – rice, cocoa, and horticulture – that together have the potential to improve diets, livelihoods, and job creation across the country, this chapter identifies priority policy reforms and investments. They entail enhancing productivity and competitiveness and strengthening markets, aiming not only for greater production – a long-standing policy objective – but also for greater diversification of the agricultural sector and expanded livelihood and income opportunities in rural areas.

Food Security in Sierra Leone: Recent Trends and Current Conditions

Economic shocks have intensified food insecurity in Sierra Leone. The deterioration in economic conditions in Sierra Leone has further aggravated the structural constraints on food security.⁷ Vulnerable groups in both rural and urban areas have been severely impacted.⁸ In January 2023, 788,000 individuals (9.3 percent of Sierra Leone's population) were facing crisis or emergency (IPC3+)⁹ level food insecurity (Figure 26). While this number is below the all-time high of 1.5 million in March 2021, it is growing and was expected to increase to 1.1 million (13 percent of the population) by August 2023. Currently, the number of people projected to be facing emergency (IPC4) level food insecurity increased from zero in January to over 21,500 by August 2023.¹⁰ Some 4.5 million people (55 percent of the population) have insufficient food consumption, 3.9 million people (48 percent of the population) have crisis or above crisis-level food-based coping strategies, and 3.22 million people (38 percent of the population) face challenges accessing markets.¹¹ While the rate of chronic undernourishment is relatively stable (with a slight upward trend), rapid population growth means that the size of the problem is steadily increasing in absolute terms.

Over the years, the rates of food and nutrition insecurity in Sierra Leone have been some of the most severe in West and Central Africa (AFW), as well as globally.¹² The numbers of people experiencing IPC3+ conditions have increased eight-fold since 2016; an alarming trend. Additionally, the number of people on the cusp of crisis increased by nearly five-fold over the same period. The rate of increase in both categories has outpaced AFW and global trends nearly every year since 2016. While COVID-19 and the global impacts driven by the Russian invasion of Ukraine have been more recent contributing factors, these trends well preceded the global crises.¹³ Between 2017 and 2020, the number of people unable to afford a healthy diet grew by 29 percent to over 862,000.

7 Résultats de l'analyse de l'insécurité alimentaire et nutritionnelle aiguë courante en octobre-décembre 2022 et projetée en juin-août 2023. https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/ch/Resultats_Analyses_Nov2022_fichedecommunication.pdf

8 WFP Sierra Leone Food Security Monitoring System October 2022. UN. World Food Programme, Sierra Leone

9 The Integrated Food Security Phase Classification (IPC) is a common global scale for classifying the severity and magnitude of food insecurity and malnutrition. There are 5 food insecurity severity phases: 1 = Minimal/None; 2 = Stressed; 3 = Crisis; 4 = Emergency; and 5 = Catastrophe/Famine. <https://www.ipcinfo.org/ipcinfo-website/ipc-overview-and-classification-system/en/>

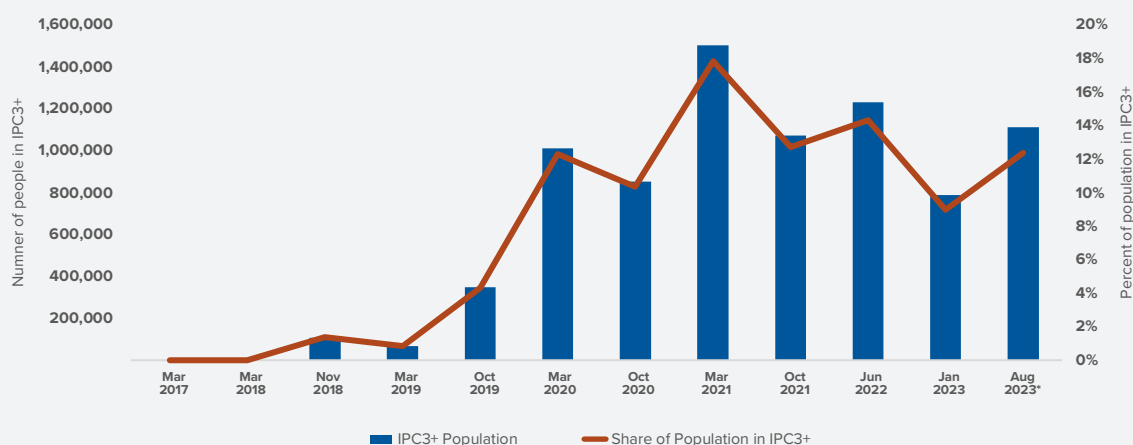
10 Résultats de l'analyse de l'insécurité alimentaire et nutritionnelle aiguë courante en octobre-décembre 2022 et projetée en juin-août 2023. https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/ch/Resultats_Analyses_Nov2022_fichedecommunication.pdf

11 Résultats de l'analyse de l'insécurité alimentaire et nutritionnelle aiguë courante en octobre-décembre 2022 et projetée en juin-août 2023. <https://www.ipcinfo.org/ch/en/>

12 FSIN and Global Network Against Food Crises. 2023. GRFC 2023. Rome. <https://www.fsinplatform.org/sites/default/files/resources/files/GRFC2023-compressed.pdf>

13 The Sierra Leone population analyzed in the reports has remained relatively stable (with ~90% of the population being covered in nearly every update), these trends are fairly comparable from year to year and underscore the criticality of the situation

FIGURE 26: ACUTE FOOD INSECURITY IN SIERRA LEONE- 2017-2023



Source: IPC/Cadre Harmonisé reports for West Africa¹⁴ *forecast

BOX 7:

Food Security Terms and Definitions¹⁵

Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. There are four dimensions: availability, access, utilization, and stability.

Availability entails having enough food supply of appropriate quality. **Access** goes beyond supply and looks at economic and physical access to food and covers incomes, markets and prices that determine the ability of households to acquire adequate and nutritious foods. **Utilization** involves adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met. **Stability** entails sustained availability and access to adequate and nutritious food.

Acute food insecurity is when a person’s inability to consume adequate food puts their lives or livelihoods in immediate danger.

Chronic food insecurity occurs when people are unable to meet their minimum food requirements over a sustained period.

Undernutrition denotes insufficient intake of energy and nutrients to meet an individual’s needs to maintain good health. Often, undernutrition is used synonymously with malnutrition. There are 4 broad sub-forms of undernutrition: **stunting** (being too short for one’s age), **wasting** (being dangerously thin for one’s height), **underweight** (low weight-for-age in children), and deficiencies in vitamins and minerals. Stunting results from chronic undernutrition, which retards linear

14 Résultats de l’analyse de l’insécurité alimentaire et nutritionnelle aiguë courante en octobre-décembre 2022 et projetée en juin-août 2023. <https://www.ipcinfo.org/ch/en/>
 15 https://www.fao.org/fileadmin/templates/faotaly/documents/pdf/pdf_Food_Security_Concept_Note.pdf

growth. Wasting results from inadequate nutrition over a shorter period. Being underweight is due to both stunting and wasting.

Prevalence of Undernourishment (PoU) is a national-level model-based indicator used to understand access to food in terms of dietary energy inadequacy. It measures the percentage of the population whose dietary energy intake is below the Minimum Dietary Energy Requirement (MDER), which is the cut-off threshold caloric intake an individual would have to consume to attain a minimum acceptable weight for height.

Daily per capita supply of calories is measured in kilocalories per person per day. This indicates the calories available to households but does not necessarily indicate the number of calories actually consumed.

Per capita protein supply from all foods per day measures the quantity that is available for consumption at the end of the supply chain. It does not account for consumer waste, so the quantity that is actually consumed may be lower than this value.

Average dietary energy supply adequacy. The indicator expresses the Dietary Energy Supply (DES) as a percentage of the Average Dietary Energy Requirement (ADER). **Average protein supply adequacy** is a comparable measure for protein supply.

Inequality in per capita calorie intake measured as the coefficient of variation (CV) of energy intake. It represents the spread of intakes around the mean. Higher CV values represent larger levels of dietary inequality. It is measured on a scale from zero to one, where higher CV values represent larger levels of dietary inequality. A CV value of 0.5 is considered high.

Sierra Leone has faced persistent challenges along all the four dimensions of food security: *access, availability, utilization, and system stability.* The physical availability of food is determined by the level of food production, stock levels, and net trade, whereas economic and physical access to food is related to incomes, expenditure, markets, and prices. Food utilization reflects how the human body makes the most of nutrients and is associated with feeding practices, food preparation, diversity of diet, and intra-household distribution of food. Stability of the other three dimensions over time is linked to factors such as adverse weather conditions, global crisis, or economic factors leading to unemployment or rising food prices that might impact food security status.¹⁶

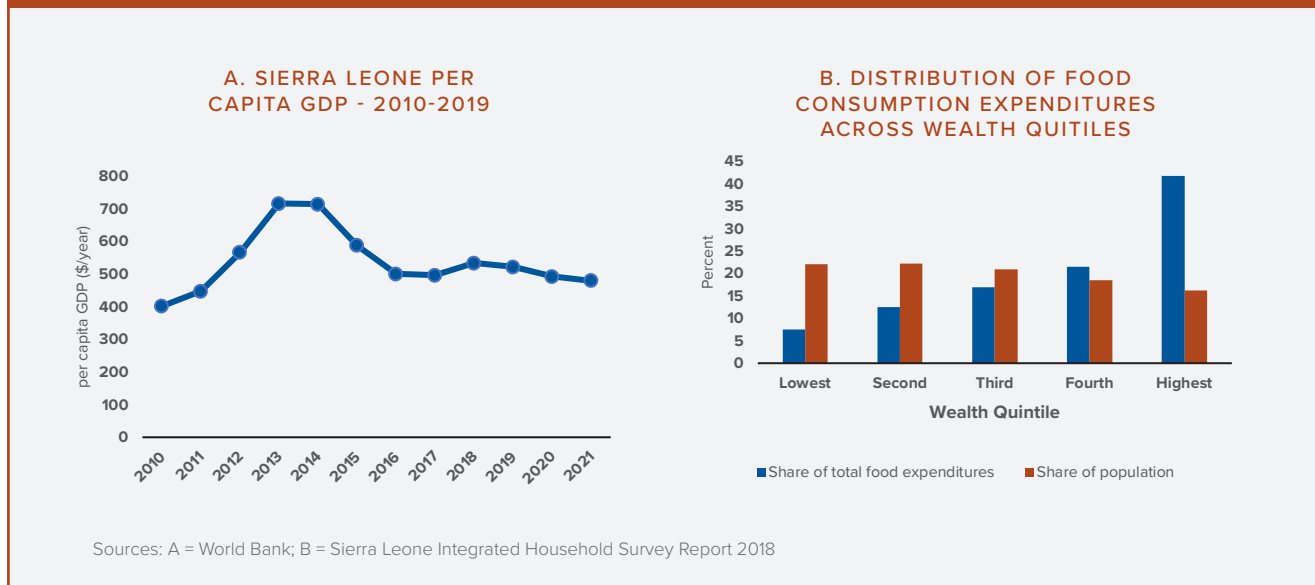
Food Access

Income levels and market systems are the primary determinants of access to food for most households.¹⁷ In 2022, 87 percent of Sierra Leoneans devoted 65 percent of their overall expenditures to food [WFP, 2022]. Therefore, macroeconomic shocks that squeeze household incomes have adverse implications for their ability to purchase food. Overall access to food has been eroded as a result of falling incomes in recent years. Per capita GDP fell sharply following the Ebola crisis of 2014-15 and has stagnated since then (Figure 27, panel A). Access to food is also highly unequal. In 2018, the poorest 20 percent of households accounted for just 8 percent of total food consumption expenditures compared to 45 percent for the richest quintile (Figure 27, panel B).

16 FAO (Food and Agriculture Organization). 2008. "An Introduction to the Basic Concepts of Food Security." Food Security Information for Action Practical Guides, EC-FAO Food Security Programme, FAO, Rome.

17 World Food Programme, Sierra Leone Market Outlook Bulletin, Vol 1/2022, Jan 1 – 30 March 2022.

FIGURE 27: SIERRA LEONE PER CAPITA GDP 2010-2021, AND INCOME DISTRIBUTION OF HOUSEHOLD FOOD EXPENDITURES 2018

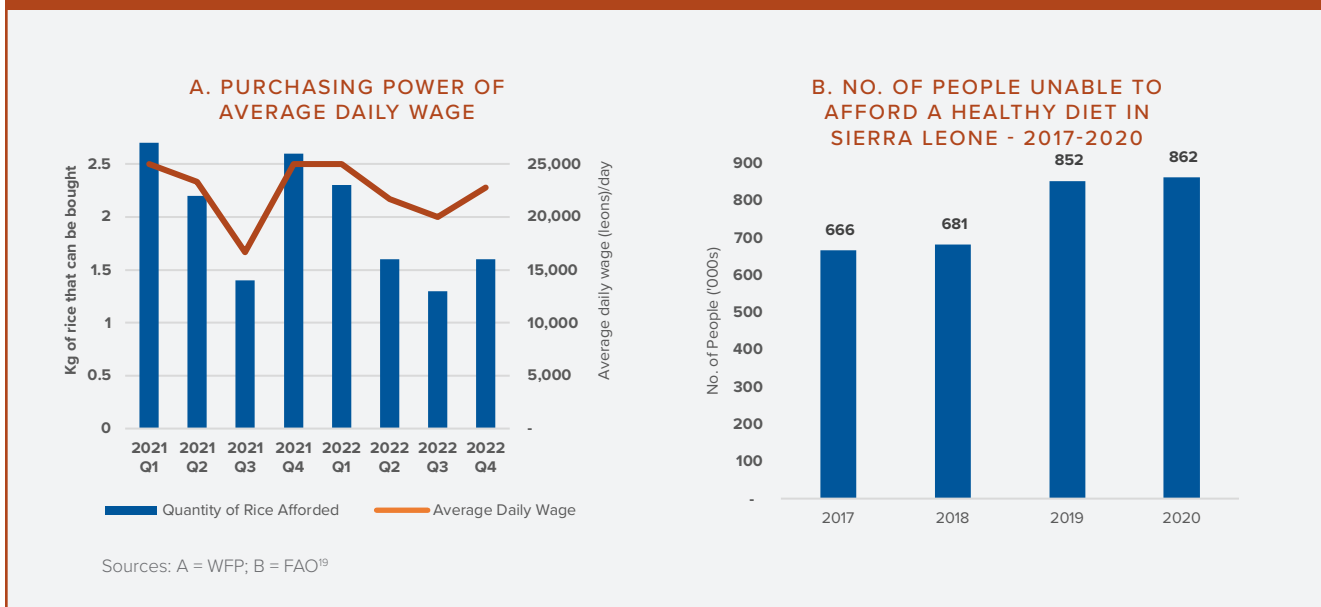


Recent developments in international markets, and the rise in domestic food inflation have accentuated challenges to food access. Global commodity price inflation (for food, fuel, fertilizer) has been driven by a combination of high freight charges due to COVID-related supply chain disruptions, and the negative supply shock created by the war in Ukraine. Food price inflation for December 2022 was 47 percent, up by 30 percentage points from the start of the year. In 2022, there was an almost 45 percent increase in the price of rice, with a slight difference between the price increases of local (47 percent) and imported (42 percent) rice. Between January 2021 and December 2022, the amount of rice that could be afforded with the average daily wage fell by 40 percent (Figure 28, panel A). The price of cassava, another staple product, rose by over 27 percent during the course of 2022.

Sustained access to agricultural produce is also hindered by poor rural infrastructure. Poor rural infrastructure raises the costs of inputs and food purchases and impedes access to urban markets. Inadequate on-farm storage capacity and poor access to appropriate post-harvest management technologies and practices lead to high wastage and spoilage. Rainfed production systems are vulnerable to adverse weather events that lower crop and livestock yields, reducing the level of access to food even for households that engage in subsistence agriculture. The structure and functioning of agricultural markets determine food access. For example, the locally produced rice that reaches consumers through a high-cost traditional value chain also usually contains impurities such as sand and broken and colored grains due to the mixing of varieties. The end-product is usually so costly due to the complex value chains at play, and of such poor quality, that it cannot compete with imported rice in terms of price or consumer preferences for whiteness, grain uniformity, softness, and aroma – and ends up being traded mostly in local rural markets.¹⁸

18 WFP = World Food Programme, Sierra Leone Market Outlook Bulletin, Vol 1/2022, Jan 1 – 30 March 2022; FAO = State of Food Security and Nutrition in the World, 2022

FIGURE 28: PURCHASING POWER OF WAGES AND AFFORDABILITY OF A HEALTHY DIET

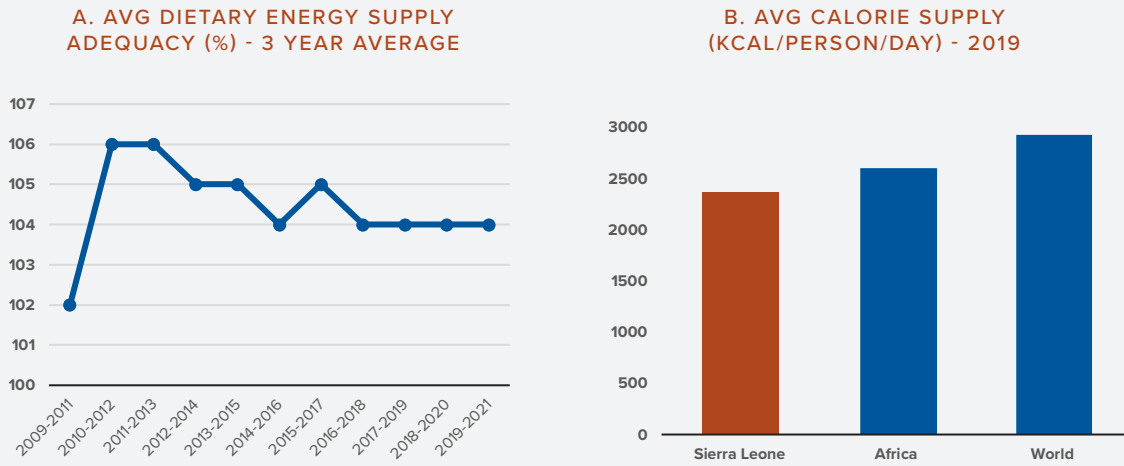


Food Availability

Despite having just enough calories to meet the aggregate needs of the population, albeit with a downward trend, Sierra Leone lags Africa and the world in terms of average calorie supply, indicating a break between food availability and access (Figure 29, panels A and B). The country relies on imports to meet over 60 percent of the domestic requirements of the main staple food (rice), which often exposes it to major external shocks. Mounting problems on the production side (including low and declining productivity as a result of low input use exacerbated by rising input prices) along with the surge in prices of imported food greatly affect the overall domestic food output and food availability. Alongside the high prevalence of undernutrition, the technically “adequate” calorie supply points to inadequate food access (see prior section). Sierra Leone also exhibits high and persistent inequality in per capita calorie intake, with a coefficient of variation of energy intake of 0.33 in 2020, only slightly down from 0.35 in 2000. Furthermore, from a level of supply well below Africa and global averages, the level of dietary protein is also trending downward (Figure 30).

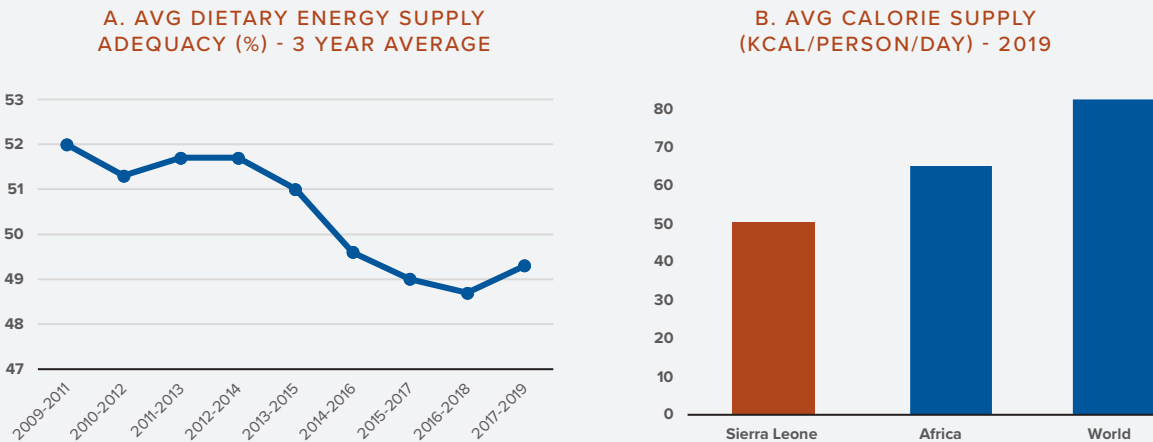
19 WFP = World Food Programme, Sierra Leone Market Outlook Bulletin, Vol 1/2022, Jan 1 – 30 March 2022; FAO = State of Food Security and Nutrition in the World, 2022

FIGURE 29: AVERAGE DIETARY ENERGY IN SIERRA LEONE, AFRICA, AND THE WORLD – 2009-2019



Sources: A = FAOSTAT; B = State of Food Security and Nutrition in the World, 2022

FIGURE 30: AVERAGE PROTEIN SUPPLY IN SIERRA LEONE, AFRICA, AND THE WORLD – 2019-2021



Sources: A = FAOSTAT; B = State of Food Security and Nutrition in the World, 2022

Sierra Leone’s food supply is dominated by cereals and other starchy staples.

Rice is the dominant cereal and the main staple food; cassava is a substitute. In 2019, these two crops made up 81 percent of total food production; just 7 percent of total production was in fresh vegetables, 3 percent in palm oil, and 2 percent in citrus fruits.²⁰ Foods with higher nutritional content – e.g., fruits and vegetables and animal products – have very low availability and thus also low shares in diets. In 2020, more than 5.24 million people (61 percent of the population) had poor to borderline dietary diversity.²¹

Sierra Leone does not produce enough food to meet domestic requirements, although its per capita food production compares favorably with that in other West African countries for many items.

The four panels in Figure 31 capture trends in per capita production for some of Sierra Leone’s major foods between 2010 and 2020. Per capita production of rice has fallen from 2010 levels but is well above that of other countries in the region, all of which have much lower per capita rice consumption (Figure 31, Panel A).²² In 2015, per capita production of cassava also compared favorably with that in neighboring West African countries but plunged thereafter to one of the lowest levels in the region by 2020 (Figure 31, Panel B). Per capita production of palm kernels grew slightly over the period and was similar to that in Nigeria and Liberia, but well below that in neighboring Ghana and Cote d’Ivoire (Figure 31, Panel C). Per capita production of eggs was flat over the period, similar to levels in Ghana and Liberia but well below those in Nigeria and Cote d’Ivoire (Figure 31, Panel D).

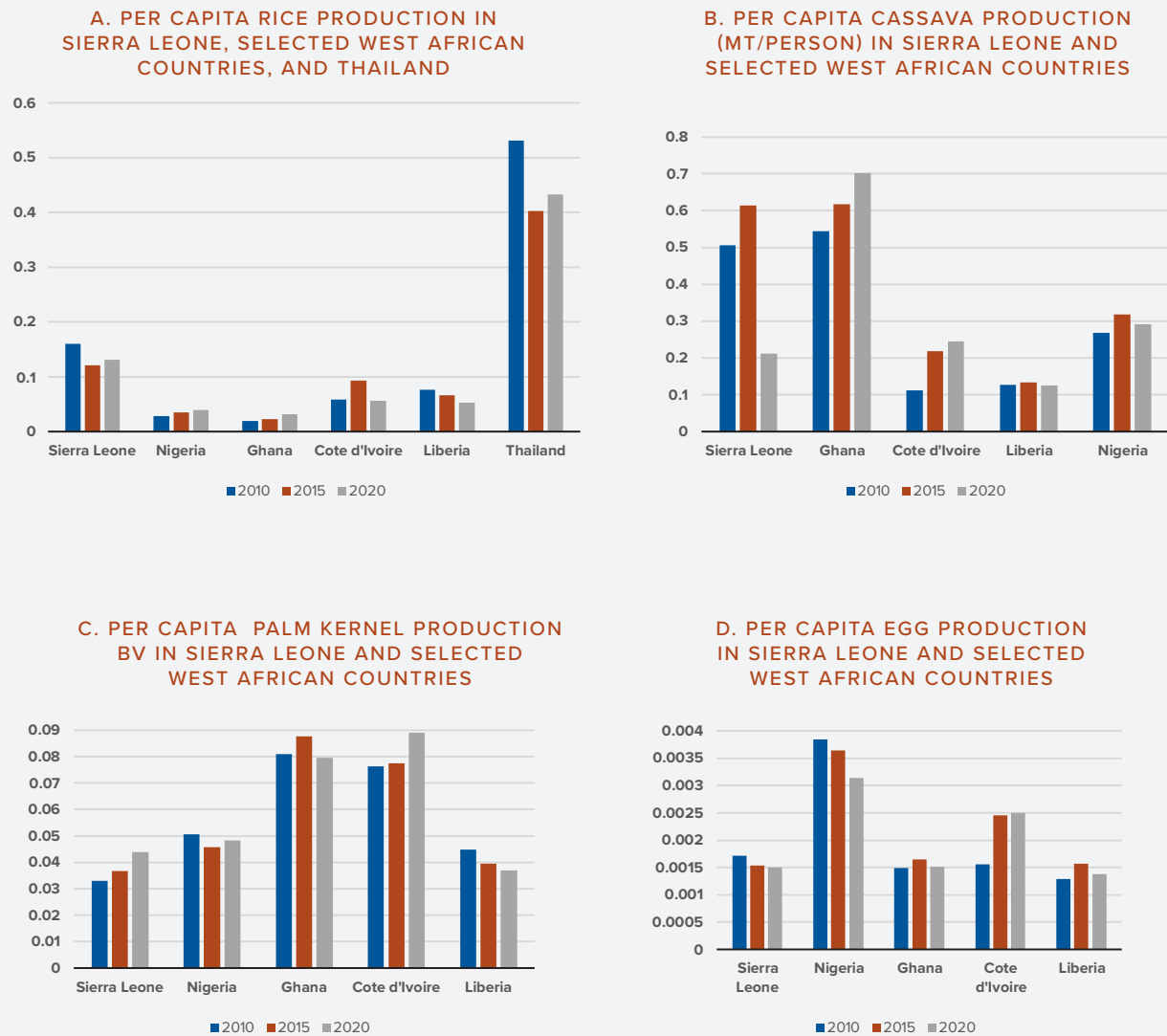


20 FAOSTAT, 2022

21 The State of Food Security in Sierra Leone 2020 - Comprehensive Food Security and Vulnerability Analysis. UN World Food Programme and Government of Sierra Leone. Dietary diversity is measured using the Food Consumption Score (FCS), which considers the frequency of food consumption and the nutritional importance of the foods consumed by a household. It is calculated by inspecting the frequency of food consumption from the different food groups over a 7-day reference period.

22 Per capita rice consumption (kg/person/year): Sierra Leone = 185; Nigeria = 32; Ghana = 35; Liberia = 133; Cote d’Ivoire = 61; Thailand = 173. Source: FAOSTAT

FIGURE 31: PER CAPITA FOOD PRODUCTION IN SIERRA LEONE AND SELECTED COUNTRIES IN WEST AFRICA AND ASIA – 2010, 2015, 2020



Source: Data for all charts from FAOSTAT

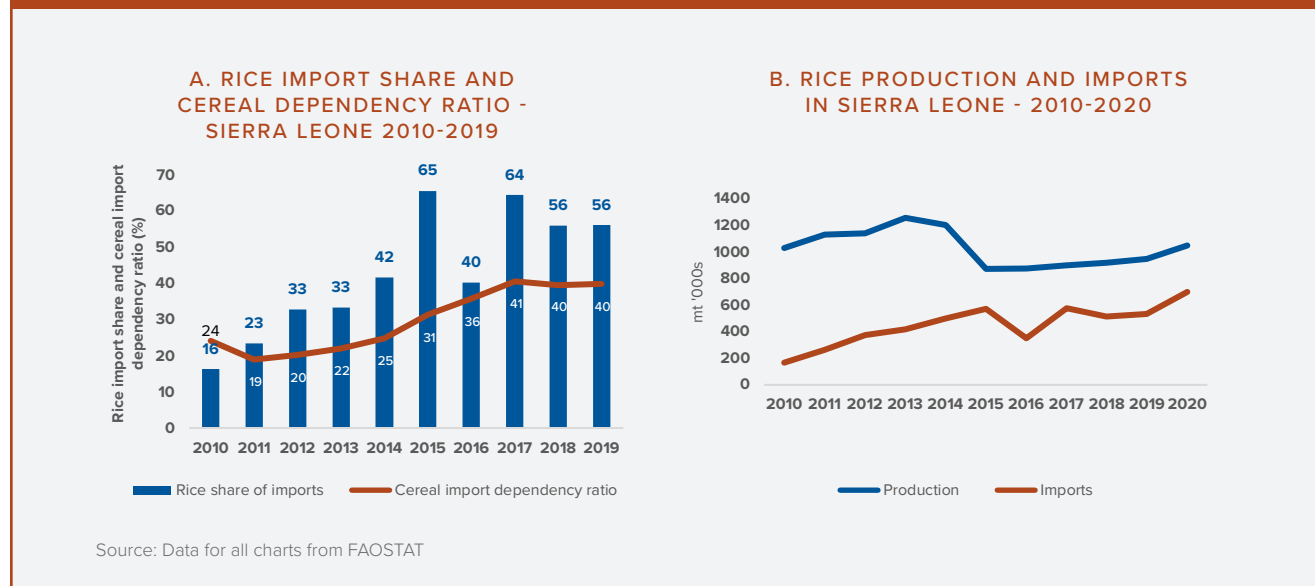
Despite higher overall production than other regional economies, Sierra Leone has become increasingly dependent on imports, especially for rice, its major food staple (Figure 32, panel A).²³ A higher import bill with little attention to increasing domestic productivity and developing the rice value chain can drive food insecurity. Domestic demand for rice now exceeds supply by over 600,000 MT/year, requiring imports averaging US\$200 million/year (i.e. 400,000 MT) and growing at 5 percent per year.²⁴ Rice production fell sharply after 2014 due to the Ebola epidemic and has not returned to pre-Ebola levels (Figure 32, panel B). This is on account of increasing structural constraints to productivity growth including weak research and extension capacities to develop and disseminate yield enhancing technologies, declining soil fertility

23 The cereal imports dependency ratio tells how much of the available domestic food supply of cereals has been imported and how much comes from the country's own production. It is computed as (cereal imports - cereal exports)/(cereal production + cereal imports - cereal exports)*100.

24 FAOSTAT

and low access and utilization of external inputs, among others. Even with significant levels of imports, per capita availability of rice in Sierra Leone remains very low compared to countries with similarly high levels of per capita rice consumption – such as Thailand and other countries in Asia.²⁵

FIGURE 32: FOOD IMPORTS AND CEREAL AND RICE IMPORT DEPENDENCE IN SIERRA LEONE – 2010-2020



Food Utilization

Food utilization is poor, as reflected in indicators of child health. Child nutrition is a powerful indicator of two vital aspects of food utilization: the nutritional quality of food within households and the bioavailability of nutrients in those foods.²⁶ Over 300,000 children under five are stunted, 100,000 are wasted, and 30,000 are at immediate risk of death due to inadequate nutrition. In 2020, Sierra Leone’s stunting rate was below the averages for West Africa and all of Africa, but significantly above the global average (Figure 33, panel A). Sierra Leone’s wasting rate in 2020 was lower than all three (Figure 33, panel B). Based on Global Acute Malnutrition (GAM) rates calculated from data on middle upper arm circumference measurements (MUAC) for children aged between 6 and 59 months, the national prevalence of acute malnutrition for children stood at 5 percent in 2022, almost double the 2.7 percent recorded in 2021. Local averages from 13 of Sierra Leone’s 16 districts also showed sharp increases, pointing to a nationwide deterioration in children’s diets.²⁷

Utilization is strongly influenced by nutrition knowledge and feeding practices.²⁸ Sub-optimal infant and young child feeding practices are prevalent across Sierra Leone. 70 percent of young children have monotonous diets characterized by high consumption of starchy staples like rice and cassava. On average, young children are fed

25 The top 10 rice consuming countries are all in Asia: Laos, Bangladesh, Cambodia, Vietnam, Indonesia, Myanmar, Sierra Leone, Philippines, Thailand, Sri Lanka. Average per capita rice production in these countries is more than thrice Sierra Leone’s.

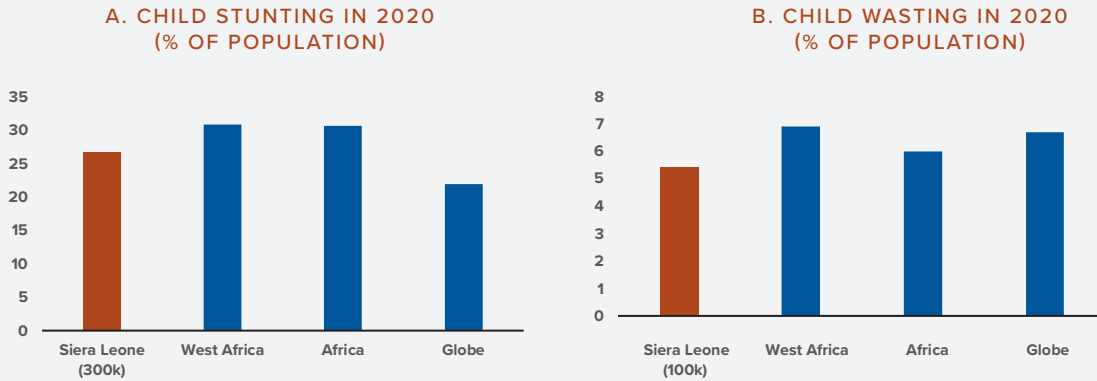
26 https://www.fao.org/fileadmin/templates/faoitally/documents/pdf/pdf_Food_Security_Concept_Note.pdf

27 WFP Sierra Leone Food Security Monitoring System – October 2022. The Global Acute Malnutrition (GAM) is a measure of acute malnutrition in refugee children aged between 6 and 59 months. GAM provides information on the percentage of all children in this age range in a refugee population who are classified with low weight-for-height and/or oedema. It is obtained by combining the number of children in this age range who have moderate acute malnutrition and severe acute malnutrition. GAM is also often referred to as wasting. GAM indicates short term (recent) nutritional history in children aged between 6 and 59 months. The measure is important because acute malnutrition increases the risk of illness and death, and children of this age are particularly vulnerable to it. GAM is also considered an indicator of the overall food and nutrition situation of the general population.

28 https://www.fao.org/fileadmin/templates/faoitally/documents/pdf/pdf_Food_Security_Concept_Note.pdf

meals with only two out of the six food groups; consumption of nutritious items like legumes, nuts, pulses, dairy products, fruits and vegetables is low. Cultural beliefs, taboos, and practices limit the provision and consumption of nutritious foods that can improve the dietary intake of young children.²⁹

FIGURE 33: 2020 STUNTING AND WASTING RATES IN SIERRA LEONE, WEST AFRICA, AFRICA, AND THE GLOBE



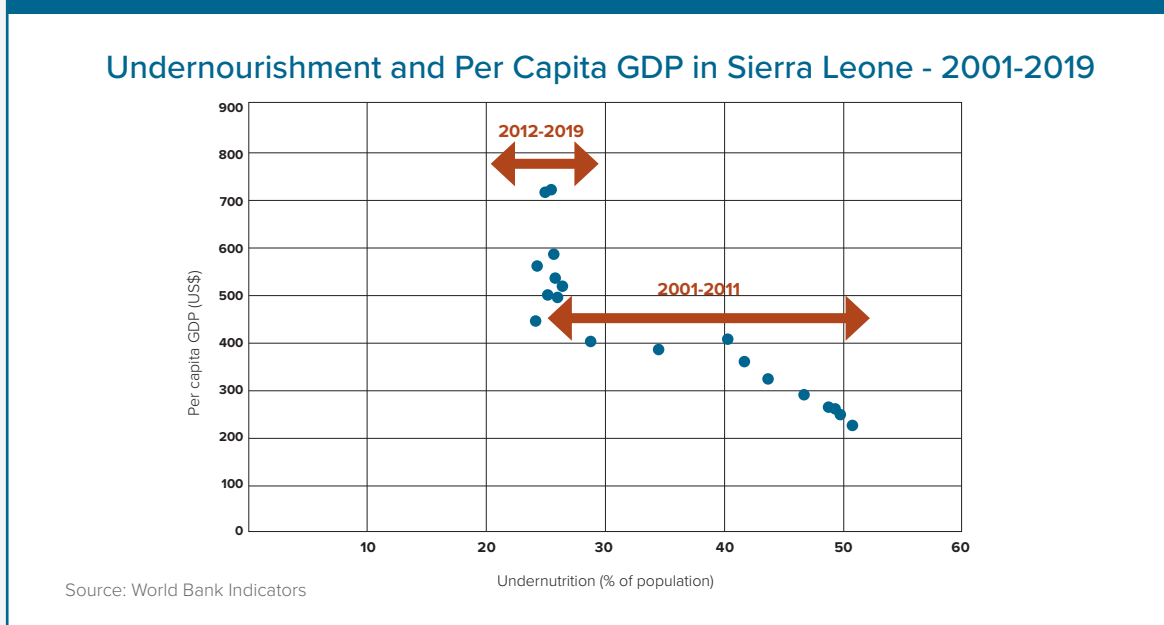
Source: State of Food Security and Nutrition in the World 2022

29 UNICEF Sierra Leone. <https://www.unicef.org/sierraleone/nutrition>

Food security and economic growth

The positive relationship between economic growth and food security is supported by historical data. Between 2001 and 2019, the rate of undernutrition, a proxy for food insecurity, fell from 50.7 percent to 26.2 percent of the population while per capita GDP rose from US\$ 229 to US\$ 522 (Figure 34, panel B). The relationship was most clear between 2001 and 2011 when per capita GDP was especially low and undernutrition especially high. Thereafter, per capita GDP stagnated (except for a temporary bump in 2013 and 2014), and the undernutrition rate was flat, never falling below 25 percent.

FIGURE 34: THE RELATIONSHIP BETWEEN FOOD INSECURITY AND GROWTH IN SIERRA LEONE



However, the relationship goes both ways: high and persistent undernutrition can be very costly to economic growth and productivity. The 21-country Cost of Hunger in Africa (COHA) study undertaken by the African Union Commission, the UN Economic Commission for Africa, and the UN World Food Programme highlights the significant negative effects of undernourished children on health, school performance, labor productivity, and GDP.³⁰ Across the 21 countries: (i) 8 to 44 percent of all child mortality is associated with undernutrition; (ii) up to 18 percent of all school repetitions are associated with stunting; (iii) stunted children may achieve 0.2 to 3.6 years less in school education; (iv) child mortality associated with undernutrition reduces national workforces by up to 14 percent; and (v) 40 to 67 percent of the working age population suffered from stunting as children.

30 https://au.int/sites/default/files/documents/41660-doc-COHA_CONTINENTAL_REPORTEnglish2021.pdf. The COHA study model is used to estimate the additional cases of morbidity, mortality, school repetitions, and dropouts and reduced physical capacity associated with a person's undernutrition status before the age of five. To estimate these social impacts for a single year, the model focuses on the current population, identifies the percentage of that population who were undernourished before the age of five, and then estimates the associated negative impacts experienced by the population in the current year. Using this information and the data provided by the National Implementation Teams (NIT) of respective Member States, that completed the study, the model estimates the associated economic losses incurred by the economy in health, education and potential productivity in a single year. Countries covered were Burkina Faso, Chad, DRC, Egypt, Eswatini, Ethiopia, Gambia (The), Ghana, Guinea Bissau, Kenya, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sudan, Uganda and Zimbabwe

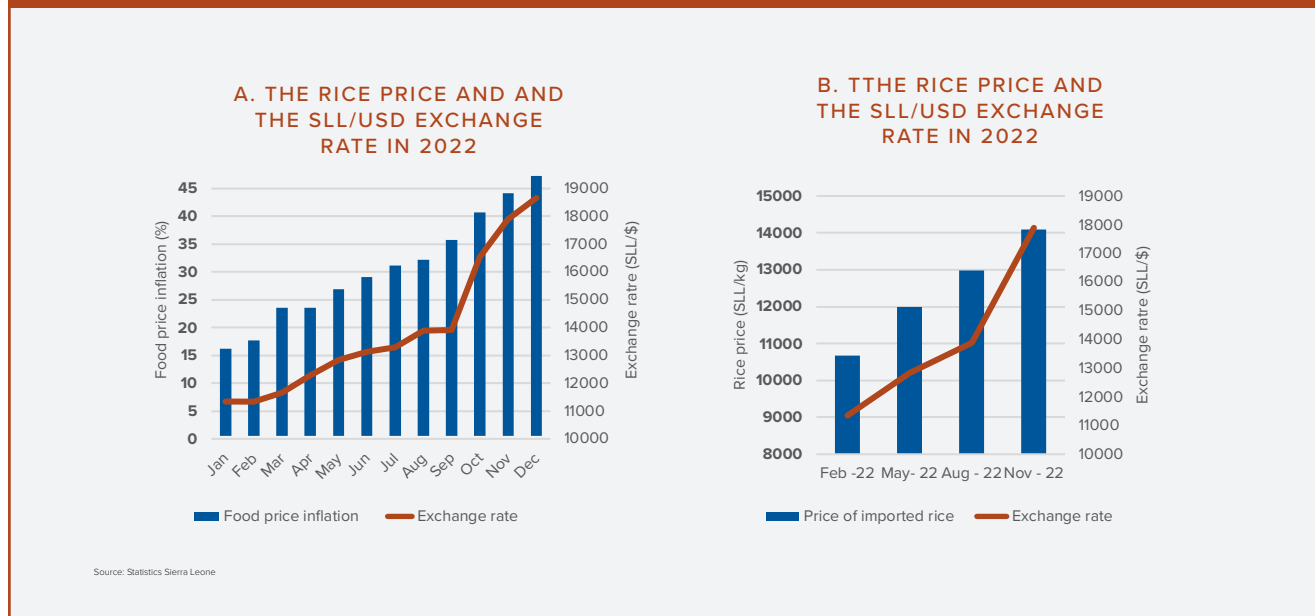
Food System Stability

The stability of Sierra Leone’s food system is chiefly defined by its exposure to climate and economic shocks.

Sierra Leone is the world’s third most exposed country to negative economic impacts of climate change.³¹ This is due to the country’s low capacity to combat the effects of climate change, and its high exposure to extreme weather events, notably because of the large number of Sierra Leoneans whose livelihoods depend on rainfed agriculture.³² Global shocks including logistical disruptions threaten the stability of food security, exacerbating the vulnerability of the population due to the country’s high dependency on food imports.

Sierra Leone’s high degree of macroeconomic instability make the country highly vulnerable to disruptions in global commodity and financial markets.³³ While inflationary pressures are easing, prices are likely to remain high because of weak macroeconomic fundamentals- primarily exchange rate volatility.³⁴ After rising during the months immediately following the war in Ukraine, FAO’s index for internationally traded food commodities has fallen back to its pre-invasion level – a level, nevertheless, well above those in pre-COVID years. However, imported commodity price pressures persist. Sierra Leone’s food import dependence means that domestic food prices are highly sensitive to exchange rate effects. The Leone depreciation against the U.S. dollar, steep increases in international prices, and higher transportation costs all drive up the prices of imported foods. When the Leone depreciated by over 40 percent against the US dollar in 2022, food price inflation tripled, and the price of imported rice rose by 32 percent (Figure 35).

FIGURE 35: LEONE/USD EXCHANGE RATE, FOOD PRICE INFLATION, AND THE RICE PRICE IN 2022



31 Maplecroft. 2014. 31% of global economic output forecast to face climate change risks by 2025: Climate Change and Environmental Risk Atlas 2014. Available online: <https://www.maplecroft.com/insights/analysis/global-economic-output-forecast-faces-high-or-extreme-climate-change-risks-by-2025/>

32 World Bank West Africa Food Systems Resilience Program Phase 2. Report No: PAD4940

33 World Food Programme, Sierra Leone Market Outlook Bulletin, Vol 1/2022, Jan 1 – 30 March 2022

34 World Bank June 2022 Global Economic Prospects Report.

Challenges and Opportunities in the Food Systems of Sierra Leone

Sierra Leone is endowed with abundant rainfall (2,500-5,000 mm/year) and has tremendous agricultural diversity and growing potential in its upland and lowland ecologies.³⁵ Conditions are suitable for the cultivation of a wide range of crops and livestock, but this potential has not been fully exploited. The smallholder producers who dominate the sector are exposed to climate and market shocks. They also have limited access to land, improved inputs, storage and handling technologies, transport and processing infrastructure and services, extension and advisory services, fixed and working capital, and markets.³⁶ Notwithstanding these challenges, and despite several major shocks, the agrifood sector has remained relatively resilient. Its growth averaged 4.3 percent from 2015 to 2019, 1.6 percent in 2020, and rebounded to 3.7 percent in 2021.³⁷ But this level of sectoral growth has been insufficient to boost output and incomes at rates required to significantly reduce poverty and food insecurity.

Given agriculture's large share in GDP, enhanced performance of the agricultural sector and the underlying food system is fundamental to increasing food security (via both supply and income channels). Sierra Leone's food system performs poorly in multiple areas. Table 6 shows Africa-wide and "low-hunger" country food system performance levels for indicators that span the four basic components: *domestic production and imports* of appropriate quality that define food availability; *markets and trade* that define food access; *consumption* that defines food utilization; and *governance and institutions* that frame food system stability. The indicators also serve as proxies for major food system features. The performance gaps are especially large for indicators representing production (cereal yield), market access (road network density), and consumption (dietary energy from staples and income poverty rate). These areas should therefore feature prominently in policy action and investment toward food security.

35 World Bank West Africa Food Systems Resilience Program Phase 2. Report No: PAD4940

36 Ibid

37 World Bank Overview for Sierra Leone. <https://www.worldbank.org/en/country/sierraleone/overview#1>

TABLE 4: PERFORMANCE OF SIERRA LEONE'S FOOD SYSTEM RELATIVE TO BENCHMARKS

Agrifood system Segment	Indicator	Proxy for	Unit of Measure	Africa-wide Average ³⁸	Low-Hunger Average	Sierra Leone	% Gap to Africa Average	% Gap to Low-Hunger Average
Production	Cereal yield ^{1/}	Productivity	kg per hectare	1,820	2,772	1,632	10%	41%
Markets and Trade	Food price inflation ^{2/}	Affordability	Percent (3-year average to 2020)	20.83	0.99	11.88	-43%	1,100%
	Road network density ^{1/, 3/, 4/}	Infrastructural stock	km/capita	2.44	3.04	1.39	43%	54%
	Logistics Performance Index ^{1/}	Quality of supply chain	Index score	2.52	2.57	2.08	17%	19%
Consumption	Dietary energy from staples ^{2/}	Consumption patterns; dietary diversity	share of dietary energy supply derived from cereals, roots and tubers (kcal/cap/day)	61	51	70	15%	37%
	Poverty rate ^{5/}	Purchasing power	% of population below \$1.90 poverty line	39.38	1.13	56.8	44%	4,927%
Governance and Institutions	INFORM Risk ^{6/}	Stability	Index Score	5.02	3.7	4.4	12%	49%

Data Sources: 1/ World Bank; 2/ FAOSTAT; 3/ Statistica; 4/ CIA; 5/ Our World in Data; 6/ Inter-Agency Standing Committee Reference Group on Risk, Early Warning and Preparedness and the European Commission. Unless indicated otherwise, all measures are for 2020, the final year before the outbreak of the COVID pandemic.

Specific opportunities and challenges for improving the agricultural sector and food system performance are captured through three important value chains – rice, cocoa, and horticulture. Rice dominates the sector; half of all households, three-quarters of rural households, and about two-thirds of poor households grow rice.³⁹ Not only is rice grown by farmers throughout the country, but the per capita consumption of 185 kg/year applies equally to poor and wealthy households in both rural and urban areas.⁴⁰ Increased productivity and production levels of rice could not only improve availability but also the access, utilization and stability dimensions through the effects of improved incomes therefrom. Before the civil war, cocoa was Sierra Leone's leading export. It remains one of the country's highest foreign exchange earners outside of the mining sector. In 2019, Sierra Leone exported cocoa valued at \$33.2 million, ranking 17th globally.⁴¹ However, with only 15,000 tons of exports, this is far behind Côte d'Ivoire at over 2 million tons. Cocoa cultivation is the main source of income for over 13,000 smallholder farming households

38 Strategic Priorities for Agrifood system Strengthening and Transformation. <https://newgrowthint.com/wp-content/uploads/2022/04/Strategic-Priorities-for-Food-System-Strengthening-and-Transformation-1.pdf>

39 Graham, E. G., Tchale, H., and Ndiame, M. 2020. An Optimal Rice Policy for Sierra Leone: Balancing Consumer and Producer Welfare. Washington DC: World Bank Policy Research Working Paper; No. 9369. <https://www.researchgate.net/publication/344085874>

40 WFP. 2022. Sierra Leone Market Outlook Bulletin Vol 1/2022. UN World Food Programme.

41 World Bank. 2020. Cocoa Cooperatives Put Business in the Hands of Sierra Leone's Farmers. World Bank Story Highlights. <https://www.worldbank.org/en/news/feature/2010/01/19/cocoa-cooperatives-put-business-in-the-86hands-of-sierra-leones-farmers>

(directly supporting 78,000 people) and thousands of jobs in small-scale processing and aggregation.⁴² Many challenges and opportunities facing the cocoa value chain are representative of those in other smaller value chains with unmet potential for expanded exports and rural income generation – e.g., coffee and cashew nuts. Third, agroecological endowments are suitable for a wide array of horticulture products in the country. Available data suggest that up to half of all smallholder farmers produce horticulture crops on plot sizes ranging from 0.1 ha (0.25 acres) to over 1 ha. Dark green leafy vegetables are key ingredients in household diets across the country and a source of income for farming households. Over 60 percent of households consume fruits and vegetables from their own production. Seasonal variations in the availability of these items have significant effects on household food availability, consumption and, ultimately, nutritional status.⁴³

Together, the three value chains – rice, cocoa and horticulture- support millions of livelihoods, jobs, and diets in rural and urban areas. They contribute directly to all four dimensions of food security – availability, access, utilization, and stability. Conditions in the three value chains capture major features of the country’s agrifood sector and reveal the requirements for policy reform and investment for enhanced agrifood sector performance and toward food security, growth, and poverty reduction. This section looks at three issues that matter in all three value chains and for the agrifood sector as a whole: (i) competitiveness; (ii) farm productivity; and (iii) levels and distributions of net returns. Boosting competitiveness, productivity, and net returns in the rice and horticulture value chains will increase food security through higher food output and availability for producing households, and greater surpluses for sale and income generation, thereby increasing access to food. Increased supplies of horticultural products would not only increase incomes but will also enhance availability and affordability of critical nutritious foods currently lacking in most Sierra Leonean diets. Greater competitiveness, productivity, and net returns in the cocoa value chain would increase incomes to farmers and other value participants, also increasing access to food.

42 Ibid

43 Bonuedi, I., Kornher, L. & Gerber, N. Agricultural seasonality, market access, and food security in Sierra Leone. *Food Sec.* 14, 471–494 (2022). <https://doi.org/10.1007/s12571-021-01242-z>

Competitiveness⁴⁴

Domestic rice producers compete with imported rice in Sierra Leone. The price of imported rice is driven up above global rates, once it enters the country, by several fees and taxes at the border, including inspection, transit fees, and a withholding income tax.⁴⁵ These fees and taxes are estimated to add up to US\$80-100 per MT to the border price.⁴⁶ This protection (despite recurrent tax exemptions on imports) has created a strong “price incentive” for farmers to produce rice in the country. The Nominal Rate of Protection (NRP) for rice is estimated at 37 percent (average during 2012-21). The NRP (expressed as a percentage) is the difference between the domestic price and international price at the farm gate or wholesale or retail levels. A positive NRP indicates that distortions from the policy environment and value chain market dynamics push prices above the reference price and provide price incentives to produce or commercialize the analyzed product. However, countering this price incentive, rice marketing costs are high, eroding profitability. Between 2012 and 2021, the Market Development Gap (MDG) for rice averaged -2 percent, indicating excess marketing costs linked to transport and commodity handling margins: the gap was even larger for cocoa and horticulture (Figure 36, panel B).⁴⁷

Competitiveness in the cocoa sector is weaker due to distortions from price incentives and very high local marketing costs. On average, between 2011 and 2020, the NRP for cocoa was -2 percent, reflecting an export-oriented policy regime that seeks to align Sierra Leone’s prices with those in international markets (Figure 36, panel A). The MDG for cocoa averaged -7 percent between 2011 and 2021 (Figure 36, panel B).

44 This section is based on a 2022 World Bank analysis of price incentives in the three value chains (see *World Bank, 2022. Sierra Leone: Priority Investments and Policy Reforms for Agricultural Transformation*). The results are broadly consistent with findings in other World Bank and partner reports (e.g., *World Bank, 2023. Sierra Leone: Pathways to a Transformation of the Agri-Food Sector*). But due to data quantity and quality limitations, the results must be viewed as indicative.

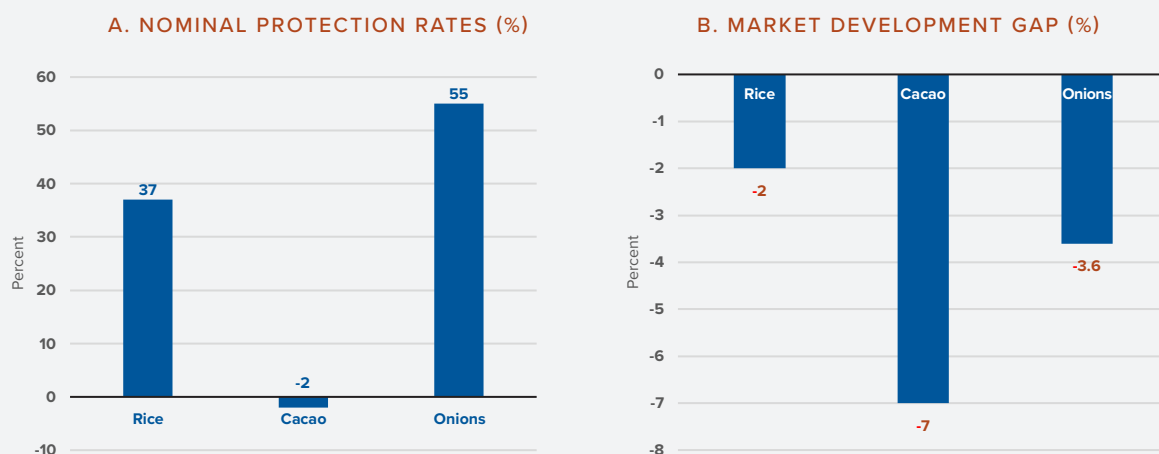
45 *Sierra Leone Constraints Analysis Report: A Diagnostic Study of the Sierra Leone Economy; Identifying Binding Constraints to Private Investments and Broad-based Growth*. Government of Sierra Leone.

46 Kagbo, R. B. 2022. Review of the Rice Value Chain in Sierra Leone. Report prepared for the International Finance Corporation

47 The MDG (expressed as a percentage) quantifies price disincentives stemming from value chain inefficiencies. A negative MDG indicates excessive market access costs facing farmers due to factors such as poor infrastructure, high processing costs due to obsolete technology, government taxes and fees, high profit margins captured by various marketing agents, illegal bribes, and other informal costs. All of these can impede the transmission of world prices to domestic markets, penalizing farmers.

Excess marketing costs are therefore significant for cocoa as farmers and traders face high transportation costs between farms and aggregation centers and export processing warehouses.⁴⁸

FIGURE 36: INDICATIVE NOMINAL PROTECTION RATES AND MARKET DEVELOPMENT GAPS FOR RICE, COCOA AND ONIONS – 2010-2021



Source: Based on data in World Bank, 2022. Sierra Leone: Priority Investments and Policy Reforms for Agricultural Transformation

Horticulture benefits from policy-related price incentives but still faces significant marketing costs. Between 2010 and 2020, the NRP for onions (representing horticulture) averaged 55 percent, reflecting an increase in import tariffs from 15 percent to 35 percent in 2018 (Figure 37, panel A). The MDG for onions averaged -3.6 percent between 2010 and 2021 (Figure 37, panel B). Excess marketing costs linked to transport and commodity handling margins are important impediments to competitiveness.⁴⁹

Farm Productivity

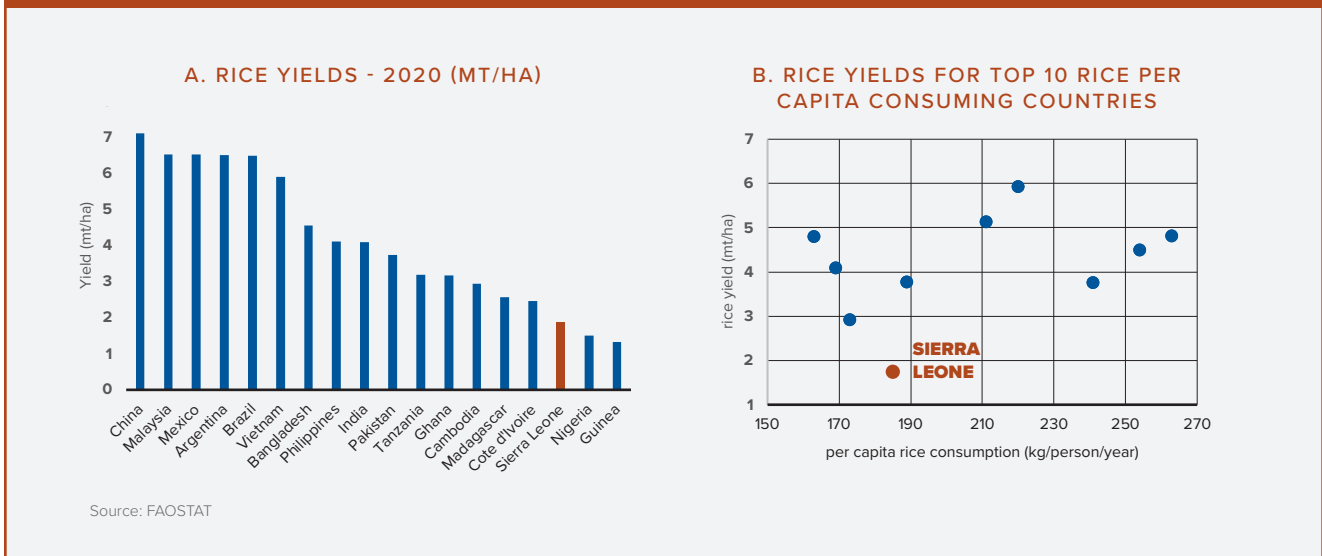
Average productivity, as reflected in rice yield, falls well below the averages of Ghana and Côte d'Ivoire and global peers (Figure 37, panel A) and especially far below those of other countries with high per capita rice consumption (Figure 37, panel B). Sierra Leone's hot and humid climate with distinct wet and dry seasons renders its largely rainfed rice production system highly vulnerable to yield-reducing climate shocks.⁵⁰ Low rice yields also reflect the fact that rice farmers suffer poor access to inputs, advisory services, finance, and post-harvest technologies.

48 World Bank. 2023. *Sierra Leone: Pathways to a Transformation of the Agri-Food Sector*

49 World Bank, 2022. Sierra Leone: Priority Investments and Policy Reforms for Agricultural Transformation. The onion value chain is highly informative of developments in the overall horticulture value chain. Most of the onions currently consumed in the country are imported. Between 2010 and 2020 the quantity and value of imported onion bulbs doubled. FAO data indicate that in 2020, US\$9.44 million was spent to import 27,053 MT of dry onions, making it the country's largest horticultural import. The government has declared its interest in reducing the country's dependency on onion imports.

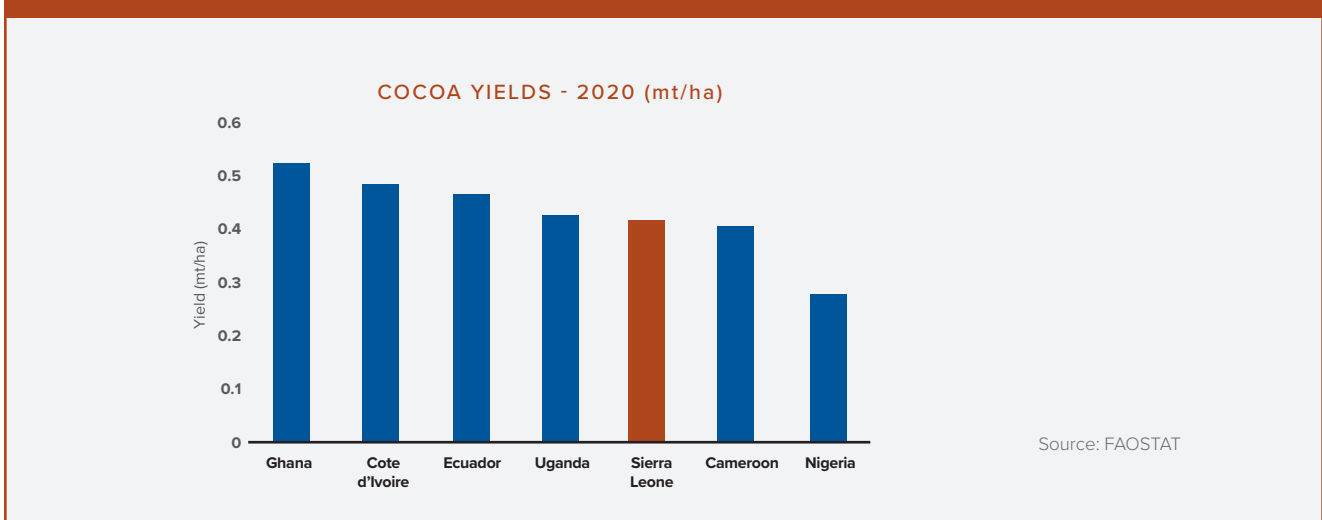
50 Tondel, F., C. D'Alessandro, I. Hathie and C. Blancher. 2020. Rice trade and value chain development in West Africa: an approach for more coherent policies. ECDPM Discussion Paper No. 283. Maastricht: European Center for Development Policy and Management

FIGURE 37: 2020 YIELDS OF RICE IN SIERRA LEONE AND OTHER TOP-10 RICE CONSUMING COUNTRIES⁵¹



Cocoa yields of 430 kg/ha do not compare favorably with those of major exporters (Figure 38). Yields of well over 2,000 kg/ha are achievable in experimental settings⁵², but 500 kg/ha would appear to be the benchmark in field settings. Yield growth is impacted by diseases and by the advanced age and poor condition of most cocoa trees.^{53, 54} Many plantations were abandoned during the civil war and now require renewal, replacement, and expansion. Most farmers lack the inputs, finance, and training required to replant or establish new plantations. With poor road infrastructure in the cocoa belt, farmers and traders incur high transportation costs across the value chain.⁵⁵

FIGURE 38: COCOA YIELDS IN SIERRA LEONE AND MAJOR COCOA EXPORTERS



51 The top 10 rice consuming countries are: Laos, Bangladesh, Cambodia, Vietnam, Indonesia, Myanmar, Sierra Leone, Philippines, Thailand, Sri Lanka

52 Goenaga, R., M. Gultinan, S. Maximova, E. Seguire, and H. Irizarry. 2015. Yield Performance and Bean Quality Traits of Cocoa Propagated by Grafting and Somatic Embryo-derived Cuttings. *HortScience* (3):358–362.

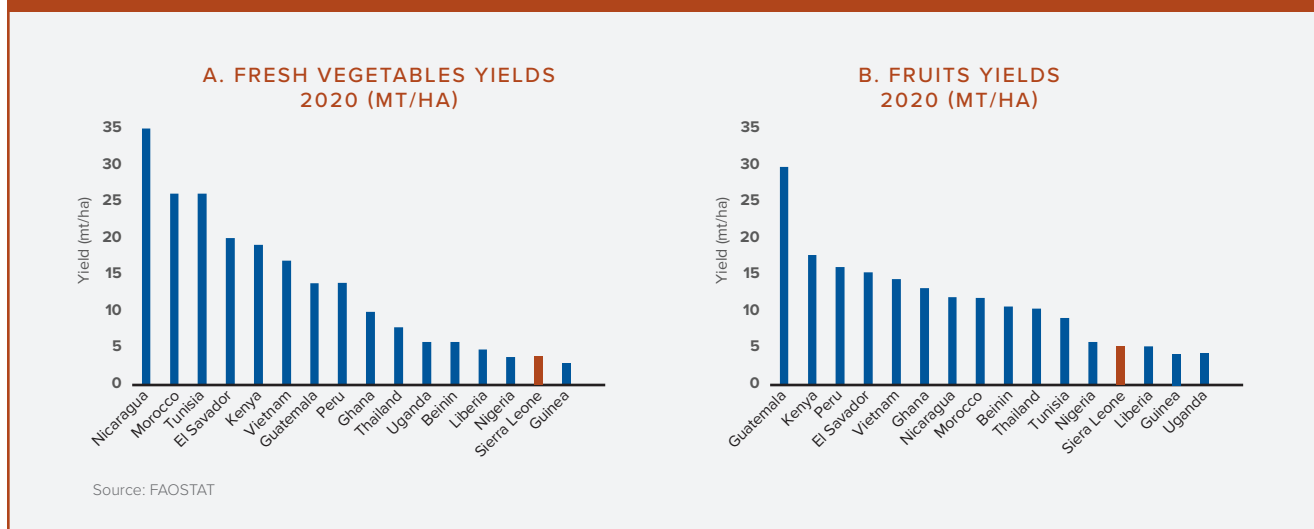
53 Ameyaw, G., H.K. Dzahini-Obiatey, and Owusu Domfeh. 2014. Perspectives on cocoa swollen shoot virus disease (CSSVD) management in Ghana, *Journal of Crop Protection*, November 2014, Vol. 65, pp. 64-70

54 WAC. 2022. *Minimizing the Risk of Spreading Cocoa Swollen Shoot Virus Disease*. World Agroforestry Center.

55 World Bank. 2023. *Sierra Leone: Pathways to a Transformation of the Agri-Food Sector*

Horticulture yields are more difficult to compare as the range of possible crops is wide. Average yields of both vegetables (4 mt/ha) and fruits (5.3 mt/ha) are not significantly different from those in Nigeria, Liberia, Guinea, and Uganda but are very low relative to those in Ghana, Kenya, and countries in Asia and Latin America (Figure 39). These low yields reflect the fact that Sierra Leone has yet to experience a major business-led demand-driven investment in the horticulture value chain.⁵⁶ The value chain is at a rudimentary state of development, with very few linkages between actors, high risks, limited diversification of products, and an overall low level of sophistication.⁵⁷

FIGURE 39: FRESH VEGETABLE AND FRUIT YIELDS IN SIERRA LEONE AND SELECTED COUNTRIES



Levels and Distributions of Net Returns

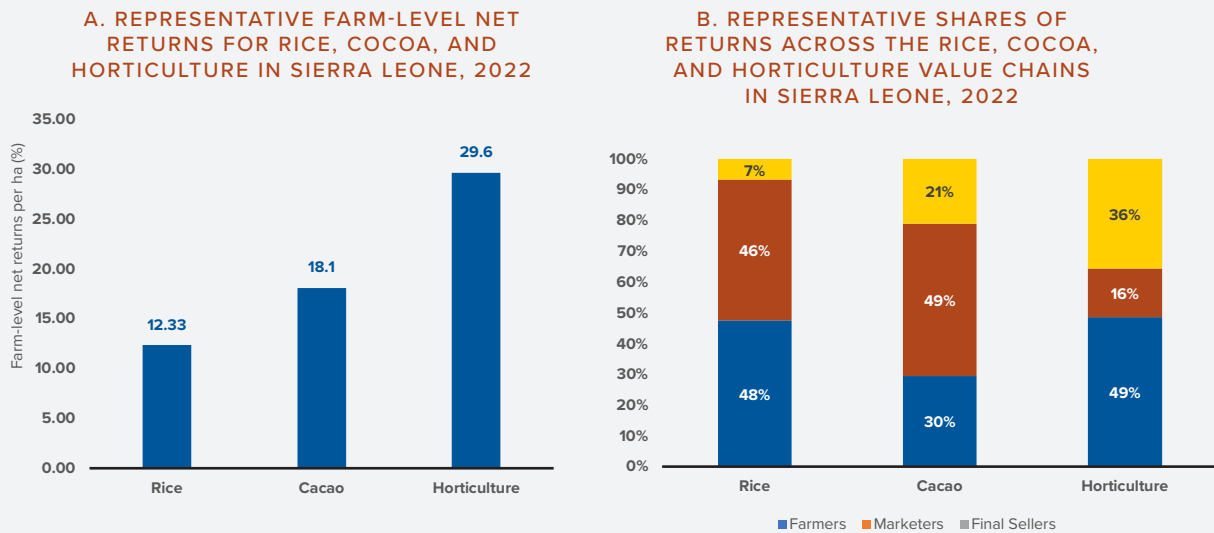
The three value chains generate positive net returns for farmers, with implications for equality of access to safe, nutritious and affordable diets. (Figure 40, panel A). The distribution of returns within the three value chains differs, reflecting: (i) for rice: high transport costs and spoilage rates for farmers and traders, and intense competition among retailers; (ii) for cocoa: inadequate farmer organization and high farm-to-market transport costs; and (iii) for horticulture: high commodity value at farm gate, but high risk and spoilage in the retail segment (Figure 40, panel B).⁵⁸ Net returns are highest for horticulture, but also more uncertain due to greater vulnerability to a wider range risks (e.g., pests and diseases). Cocoa’s relatively high returns are especially important given major opportunities in export markets. Rice has the lowest net returns.

⁵⁶ Low investment levels, lack of required policies and institutions, and other factors have constrained growth in horticulture subsector. The World Bank value chain study mentioned in footnote 51 goes into more depth.

⁵⁷ Ibid

⁵⁸ Ibid

FIGURE 40: REPRESENTATIVE FARMER PROFITABILITY AND DISTRIBUTION OF VALUE CHAIN RETURNS FOR RICE, COCOA, AND HORTICULTURE IN SIERRA LEONE



Source: Based on data in World Bank. 2023. Sierra Leone: Pathways to a Transformation of the Agri-Food Sector

Recommendations to Strengthen the Agri Food sector to boost Food Security

Food insecurity is widespread and growing in Sierra Leone. Structural weaknesses of the food system as well as global shocks have negatively impacted the livelihoods and incomes of farmers and exacerbated food security risks. To mitigate these challenges, the priority areas for attention include (i) prioritizing safety net measures, including support through food and emergency aid to enhance short-term food availability and access for the most food-insecure and vulnerable households (particularly women and children), and at the same time (ii), continuing to address structural challenges to improve agriculture productivity and competitiveness and enhance the livelihoods of smallholder farmers.

Sierra Leone’s agricultural policy has long harbored the twin objectives of export promotion and rice self-sufficiency – and recent policy shifts can bring about greater gains in productivity. Historically, Sierra Leone has had a two-track approach to agricultural development: (i) investing in export-oriented cash crops (cocoa, coffee, ginger, and palm oil) to generate foreign exchange; and (ii) investing in the production and marketing of rice, aiming to boost food security through rice self-sufficiency. However, the agrifood sector has yet to register a broad-based takeoff in productivity and incomes. The recently developed “Enhancing Private Sector Participation in Agriculture” scheme, commonly known as the “MAF Policy Shift”, captures the urgent need for reform and increased private participation in the sector. Not only does the MAF Policy Shift feature a major scaling back of direct public spending on agriculture (especially subsidies)⁵⁹ alongside an expanded role for the private sector, but it also includes new requirements in policy and program coherence and coordination. Meanwhile, uncertainty in global food markets suggests continued motivations to retain rice self-sufficiency as a policy goal. As the MAF Policy Shift unfolds, the challenge is to reconcile this long-standing objective with others that are vital to agrifood sector performance, and thereby to food security, growth, and poverty reduction. There is a tradeoff between food security and efficiency objectives.

59 Input subsidies went from SLL 31 bill in 2014 to SLL 78 bill in 2017 but dropped to 10.2 bill in 2018 and 12.6 bill in 2019. World Bank. Sierra Leone: Review of Public Policies and Expenditure Programs in the Agriculture Sector. 2022

The country annually imports about US\$500 million worth of a wide range of agricultural produce while exporting just US\$120 million worth of a small number of goods (total exports including agricultural produce). With continued rapid urbanization, ever greater shares of food consumption will be sourced from urban markets. Whether these urban markets are supplied by domestic farmers or imports is a major food security policy issue. Based on the experience of the last 15 years, the reality is that both will be needed, and policy efforts should balance both the needs to boost domestic production, streamline domestic markets and supply chains, but also to facilitate imports. Furthermore, even some domestic farmers will continue to supplement their own production with imported food. The overall recommendation is therefore for focused geographic and thematic investments that boost both productivity and purchasing power through: (i) competitive local production; and (ii) export promotion and diversification.

Trends and conditions in the rice, cocoa, and horticulture value chains help clarify strategic opportunities and the related policy and investment requirements. As detailed in the World Bank’s recently completed value chain report (*Sierra Leone: Pathways to a Transformation of the Agri-Food Sector*), the strategic opportunity for rice and other imported staples is competitive local production. For cocoa and other valuable exports (e.g., coffee and cashew nuts), competitive export promotion and diversification is the aim. For Sierra Leone’s wide range of horticulture products, both competitive local production and competitive export promotion and diversification are relevant (see the Annex for detailed recommendations). For all three classes of commodities, key strategic areas for policy and investment include:

- » **Inputs, mechanization, and advisory services** featuring development and dissemination of new varieties with higher yield potential and climate-resilience, improved crop and natural resource management, improved management of pests and diseases, expanded irrigation, and introduction of mechanical techniques that are compatible with local agronomic, socioeconomic (especially financial), environmental, and institutional conditions.

- » **Harvest and post-harvest management** centering on the role of the private sector, especially in transport, storage, processing, and contract farming. These demand-pull factors along with major improvements in rural infrastructure are central complements to supply-side interventions in varietal development and release, input provision, mechanization, and extension, aiming to limit physical defects, spoilage, and contamination.
- » **Output distribution and marketing** revolving around effective logistics and supply chain management, focusing on the highly constrained small-scale farmers and traders who dominate Sierra Leone’s value chains but face international competition. Deliberate action across public and private domains is required to boost the physical, organizational, financial, and technical capacities currently lacking for small-scale actors.

In the face of high and increasingly volatile prices in global markets, rice self-sufficiency may seem like an obvious policy objective, but reality is more complex.

Experience from Asia indicates that rice self-sufficiency is technically feasible, through trade barriers and domestic price controls backed by food reserve stock management. However, its achievement is costly, both fiscally and in forgone economic opportunities and only to the extent that competitiveness can be achieved in a short amount of time (a critical condition that is far from obvious).⁶⁰ Meanwhile, the final price of rice in the domestic market is a potent policy and political issue, subject to the so-called “food price dilemma.” Producers – most of whom are poor – want protection and higher prices; consumers – also largely poor and including most rice producers – want access to imports to lower food prices.⁶¹ These pressures persist. Attempts to shift this cost to consumers by raising rice prices increases poverty.

60 C. Peter Timmer, *The Changing Role of Rice in Asia’s Food Security*. ADB Sustainable Development Working Paper Series, No. 15, September 2010. <https://www.adb.org/sites/default/files/publication/28552/adb-wp15-rice-food-security.pdf>

61 Kagbo, R. B. 2022. *Review of the Rice Value Chain in Sierra Leone*. Report prepared for the International Finance Corporation.

If greater rice self-sufficiency is to be pursued, it must be driven by rapid and broad-based productivity growth in the rice value chain to boost its underlying competitiveness and climate resilience. Subsidy-based support for both rice producers and rice consumers is costly and unsustainable, leaving little space to address other objectives. And thus, policies and investments to increase farm productivity and marketing efficiency in other value chains have not been sustained. The traditional rice value chain may be sufficiently profitable to service its huge but low-quality, low-margin segment of the value chain, but it cannot compete in the more lucrative high-value import-dependent segment without significant investment in production and processing capacity.⁶² Domestic production largely meets rural consumption needs, while imports serve Freetown and the nearby hinterland. Transport costs reduce the competitiveness of domestic production in Freetown but also make imports less competitive in rural areas. The dual system likely will persist into the medium term. With focused geographic and thematic investments that boost productivity and underlying competitiveness of the domestic supplies, the balance could eventually shift. Meanwhile, the role of rice imports in promoting food security and overall stability cannot be ignored, pointing to the need to ensure sustained capacity to finance imports.

Several other factors matter for boosting food security that have not been explored in this chapter but require closer analysis, such as targeted resource transfers and price subsidies. The purchasing power and food security of vulnerable groups can be protected through targeted resource transfers. Price subsidies and resource transfers (in-kind or cash-based) that merely shift income from one group in society to another do not lead to structural transformation. They may, however, be needed to protect the nutrition of vulnerable groups (e.g., pregnant and lactating women, young children, and elderly and disabled people). Given the scale of needs alongside Sierra Leone's acute fiscal constraints, focusing narrowly on protecting these nutritionally vulnerable groups may be the only viable transfer-based intervention. But measures to address structural impediments to productivity growth (e.g., rehabilitating irrigation infrastructure and revitalizing research,

extension systems) and reducing non-competitive elements in rice importation are more efficient and effective in reducing food insecurity over the long run. Sierra Leone must strike a balance that prioritizes rapid and sustained productivity growth, focusing on small-scale farmers and traders. For these small-scale farmers and traders, profitable diversification of the agrifood system beyond rice is vital.

In Sierra Leone's small open economy, macroeconomic stability built on fiscal and monetary discipline is essential to both food security in the short- to medium-term and growth and poverty reduction over the long-term. Without a stable macroeconomic environment reflected in a stable real exchange rate and a low rate of inflation, vital investments to enhance productivity through increases in physical and human capital will not be forthcoming. Nor will the vibrant demand and expanded employment opportunities and livelihood options that underpin and sustain a dynamic market-driven rural economy and thereby spur broader structural transformation. The importance of this aspect of the food security policy agenda cannot be overstated.

Sierra Leone's fiscal constraints imply limited scope for public financing of market-oriented food security-enhancing investments; the private sector must be supported and empowered to undertake the required investments in Sierra Leone's agricultural sector. Missing, ambiguous, flawed, excessive, or poorly implemented policies and regulations that raise risks and impede private investment in rural and urban agribusinesses must be identified, assessed, and prioritized for removal or adjustment. The stability and predictability of agrifood policies and programmes must also be significantly enhanced. Coordination and coherence between agriculture, trade, and exchange rate policies must be strengthened.

⁶² World Bank. 2023. *Sierra Leone: Pathways to a Transformation of the Agri-Food Sector*.

Conclusions

Food insecurity and hunger are on the march again in Sierra Leone; the policy and investment response must be commensurately large and urgent. The negative impacts on growth and poverty reduction are potentially immense. There is an urgent need to meet immediate and short-term consumption needs of vulnerable groups and simultaneously address underlying drivers of household vulnerability to food insecurity. It is vital to support food production broadly – through on and off-farm interventions to boost productivity, market access, and ultimately farmer and other value chain actors' profitability – in the coming cropping seasons to improve food availability, while also promoting export crops to enhance food access, by generating much needed additional incomes.

The rapidly escalating food and nutrition security crisis in Sierra Leone is driven to a large part by food access. The recent riots of August 2022 are exemplary of the critical importance of food access as high food price inflation has substantially outpaced non-food inflation and has prevented affected families, particularly the poorest, from meeting their basic food intake needs. While bolstering agricultural livelihoods and productive capacities, it is necessary to strengthen access to food. For instance, growing the country's horticulture value chains can and should be accompanied by improved access to domestic and export markets, and enabling connections with school feeding programs. This could result in triple wins, namely: (i) increasing food availability through domestic production; (ii) improving access to food through increased incomes and purchasing power of farmers; (iii) enhancing food utilization by increasing access to fruits and vegetables which helps to combat malnutrition among children – the most vulnerable population.

In a largely agricultural economy like Sierra Leone's featuring limited structural transformation, food security is a determinant and reflection of rapid growth in the macro economy, of poverty reduction through rural economic growth, and of stability of the agrifood system. In principle, there would appear to be considerable overlap and complementarity between policies and investments to boost food security and those intended to spur growth and poverty reduction. But such overlap and complementarity are not automatic. Food security policy is equivalent to growth and poverty reduction policy only to the extent that it addresses structural impediments to agricultural productivity growth and competitiveness. And growth and poverty reduction policy in Sierra Leone is contiguous with food security policy only insofar as it improves the performance of the country's food system.

ANNEX: RECOMMENDATIONS FOR STRENGTHENING VALUE CHAINS
(SOURCE: SIERRA LEONE: PATHWAYS TO A TRANSFORMATION OF THE AGRIFOOD SECTOR. WORLD BANK 2023)

Recommendation	TEMPORAL PRIORITIZATION*			WHO DOES WHAT?	
	Short Term	Medium Term	Long Term	Public Sector	Private Sector
Rice					
1. Modernization of the seed system featuring public-private partnerships (SP1)	●			Investments and Institutional Strengthening	Investments
2. Strengthening irrigation and water resource management in targeted regions.	●			Investments	Investments
3. Enable and incentivize privatization of mechanization (SP1)		●		Incentives and Regulations	Investments
4. Support for expanded modern contract farming arrangements (SP2)		●		Incentives	Investments
5. Support for institutional food procurement from local producers (SP3)		●		Investments and Institutional Strengthening	
6. Incentivize importers to participate in the domestic rice value chain. (SP3)			●	Incentives	Investments
Cocoa					
7. Introduction of climate-resilient technologies (SP1)	●			Investments and knowledge	Investments
8. Rehabilitation of overage and disease-infested plantations (SP1)	●			Investments	
9. Support for cocoa research and seedling commercialization (SP1)		●		Investments, Institutional Strengthening, and knowledge	Investments and Knowledge
10. Support for increased traceability, compliance with international standards, and certification for niche market (SP1)		●		Investments, Incentives and Regulations	Investments, Technology, Knowledge
11. Strengthen rural infrastructure (SP1)			●	Investments	
12. Increase access to credit for cocoa farmers (SP1)		●		Incentives and Regulations	Investments
13. Develop a strategy and support implementation to access/expand access the domestic and the Africa Continental Free Trade Agreement (AfCFTA) market opportunities (SP2)	●			Knowledge	
14. Support for private investment in innovative processing technologies (SP2)			●		Investments
15. Strengthen Institutions for Cocoa Policy Implementation (SP3)		●		Institutional Strengthening and Regulations	

Recommendation	TEMPORAL PRIORITIZATION*			WHO DOES WHAT?		
	Short Term	Medium Term	Long Term	Public Sector	Private Sector	
Horticulture						
16.	Develop a long-term national horticulture strategy for competitive export promotion and diversification z(SP1)	●			Knowledge	
17.	Support for irrigation and related modern production infrastructure (SP1)		●		Investments	Investments
18.	Promotion of climate smart production practices aiming to meet minimum global quality standards (SP1)		●		Investments and Knowledge	Investments
19.	Support for marketing cooperatives (SP2)		●		Investments	Investments
20.	Support high-value horticulture domestic and regional market development, leveraging demand from the hospitality and tourism industries (SP2)			●	Incentives and Regulations	Investments
21.	Facilitating learning from more advanced countries about horticulture export promotion pathways (SP3)		●		Knowledge	
22.	Launching of a local horticulture knowledge management platform, including market intelligence services. (SP3)			●	Investments, Institutional Strengthening, and Incentives	Investments

Expected impact:

- Major
- Moderate
- Limited.

In approximate terms, short term is within the next 2 years, medium term is within the next 4 years, and long term is within the next 7 years. SP denotes strategic priority.

