ZAMBIA POVERTY AND EQUITY ASSESSMENT

Turning Things Around After a Lost Decade

February 2025

WORLD BANK GROUP

ZAMBIA
Poverty and Equity Assessment

Turning Things Around After a Lost Decade

February 2025

WORLD BANK

Poverty and Equity Practice
East and Southern Africa Region
The World Bank Group

This report was prepared by the staff of the Poverty and Equity Practice of the World Bank. The findings, interpretations, and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the World Bank's Board of Executive Directors or the countries they represent.

Copy-editing and design: Katarina Zeravica
Photos: World Bank Zambia and stock images

CONTENTS

FIGURES

BOXES

ACRONYMS

CEM	Country Economic Memorandum
CPSD	Country Private Sector Diagnostic
GDP	Gross Domestic Product
GIC	Growth Incidence Curve
FDI	Foreign Direct Investment
FISP	Farmer Input Support Programme
FRA	Food Reserve Agency
HCI	Human Capital Index
HFPS	High-Frequency Phone Survey
ILO	International Labor Organization
LAC	Latin America and the Caribbean
LCMS	Living Conditions Monitoring Survey
LFS	Labor Force Survey
LMI	Lower Middle-Income
LSAI	Large-Scale Agricultural Investments
MODA	Multiple Overlapping Deprivations Analysis
MPM	Multidimensional Poverty Measure
NEET	Not in Employment, Education or Training
PIP	Poverty and Inequality Platform
PP	Percentage Points
PPP	Purchasing Power Parity
RIF	Recentered Influence Function
SCT	Social Cash Transfer
SEIA	Socio-Economic Impact Assessment Survey
SSA	Sub-Saharan Africa
WASH	Water, Sanitation, and Hygiene
WDI	World Development Indicators
ZamStats	Zambia Statistics Agency

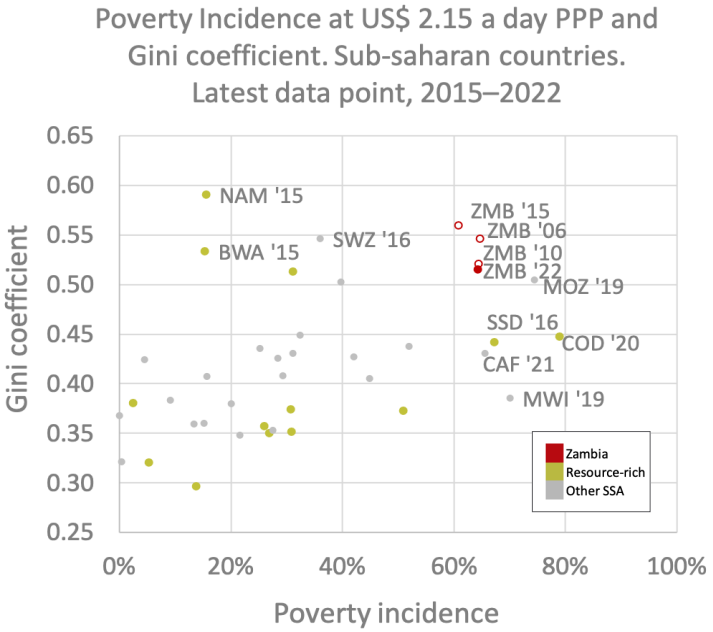
ACKNOWLEDGMENTS

The Zambia Poverty and Equity Assessment has been prepared by a team led by Maria Gabriela Farfan Betran (Senior Economist, EAEPV). The core team included Lina Cardona Sosa (Senior Economist, EAEPV), Christopher Alexander Hoy (Economist, EPVGE), Valentina Martinez Pabon (Young Professional, EAEPV), and Lyliana Gayoso (Consultant, EAEPV). This work was prepared under the guidance of Nathan M. Belete (Country Director, AECE1), Achim Fock (Country Manager, AEMZM), Aghassi Mkrtchyan (Program Leader, EAEDR), and Pierella Paci (Practice Manager, EAEPV). The team is grateful for the valuable comments provided by the peer reviewers William G. Battaile (Lead Country Economist, EAEDR), Soujanya Krishna Chodavarapu (Senior Private Sector Specialist, EAEF1), and Arden Finn (Senior Economist, EMNPV), and feedback received by the Zambia Country Team and by colleagues at UNZA, ZIPAR, IAPRI, and IDS during early consultation workshops. The team wants to acknowledge the support from the Zambia Statistics Agency in facilitating the data necessary for this report, and the collaboration with the Government of the Republic of Zambia and development partners. The report was edited and designed by Katarina Zeravica.

EXECUTIVE SUMMARY

Where we are

1. **Zambia is simultaneously amongst the poorest and the most unequal countries in the world**. In 2022, 64.3 percent of the population—about 12.6 million individuals—was living on less than US$2.15 a day.[1] This level is not only the 6th highest in the world but it is also misaligned with the country's Gross Domestic Product (GDP) per capita level. In four of the five poorer countries, GDP per capita is between one-quarter and one-half of Zambia's GDP per capita. The remaining country is South Sudan, which is immersed in a protracted fragility and conflict situation.[2] At the same time, consumption inequality is high, even when compared with the subgroup of highly unequal resource-rich countries. In 2022, the Gini index stood at 51.5—significantly above the World Bank's newly adopted high-inequality threshold of 40. This places Zambia as the country with the 4th highest inequality in the region and the 6th highest globally. Resource-rich countries with similar or higher inequality have substantially lower poverty levels.



Source: Poverty and Inequality Platform (PIP).
Notes: Resource-rich countries as defined in WB2024d. Other SSA countries are marked in grey.

[1] International poverty rate calculated with the official consumption aggregate (ZamStats, 2022). Due to changes in questionnaire design relative to 2015, the official 2022 estimates are based on a SWIFT model, drawing on a large subset of comparable variables across the two surveys. For more details, see Box 2.

[2] Ranking restricted to countries with data on or after 2015. The countries with a higher poverty rate include the Democratic Republic of Congo, Mozambique, Malawi, South Sudan, and Central African Republic. The countries with higher inequality include Namibia, Eswatini, and Botswana in Sub-Saharan Africa, and Colombian and Brazil in Latin America and the Caribbean.

2. **Poverty is becoming more entrenched over time.** Extreme poverty—measured by the share of households whose consumption is lower than the food poverty line—accounted for 77 percent of the poor in 2022, up from 71 percent in 2010.[3] At the same time, the incidence of overlapping deprivations is rising. In 2022, as many as 7 in 10 children suffer from at least two overlapping deprivations (multidimensionally poor), and 3 in 10 experienced at least four overlapping deprivations (extreme multidimensionally poor).[4] These rates are 4 and 3.5 percentage points higher than in 2015, respectively. Chronic malnutrition remains at unacceptably high levels, and indicative evidence suggests that it has increased in the recent past.[5] The under-five stunting rate—at 35 percent—is significantly above the Sub-Saharan Africa (SSA) and Lower Middle-Income (LMI) averages.[6]

3. **Vulnerability to poverty is prevalent and largely driven by structural factors**.[7] In 2015, 3 in 5 individuals were expected to be poor in the following two years. Just over 80 percent of the vulnerability is structural—i.e., households expected to be poor because their low endowments place them in a low-consumption trajectory. The remaining 20 percent is risk-driven—i.e., households likely to be poor because they are expected to face a negative shock they cannot cope with. High structural vulnerability is consistent with the country's substantial underinvestment in services and infrastructure. Based on the World Bank's Multidimensional Poverty Measure, in 2022 Zambia held the 11th highest deprivation rate in access to electricity, 14th in access to drinking water, and 24th in access to sanitation. Its performance is also poor in human capital dimensions (16th highest in education enrolment deprivation and 24th in education attainment deprivation).

How we got here

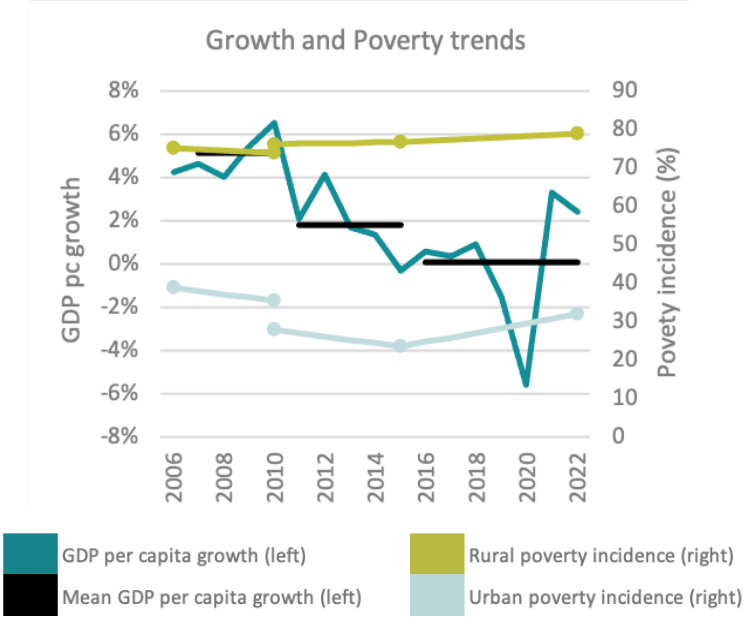
4. **The poverty-reducing impact of economic growth is among the lowest in a region that already lags significantly behind the rest of the world.** Previous episodes of positive economic growth resulted in disappointing poverty reduction and increasing inequality. Economic growth in the SSA region is less poverty-reducing than in the rest of the world. On average, a 1 percent increase in GDP per capita is associated with a 2.5 percent decline in poverty among countries outside SSA, in contrast to a 1 percent decline among countries in SSA.[8] In Zambia, the growth poverty elasticity was half the regional average during the latest period of positive economic growth from 2010–2015, and a 10th of the regional average during the high-growth period from 2006–2010. This is the result of weak urban-to-rural links, but also of limited urban poverty reduction. The pace of urban poverty reduction did not keep up with population growth, leading to an ever-growing number of urban poor. Meanwhile, the nearly 20-year period of positive economic growth has been systematically accompanied by increasing within-urban inequality.

5. **The incidence of rural poverty has failed to decline in over 15 years amidst systemic underinvestment, ineffective policies, and recurrent exposure to weather shocks.** Poverty is overwhelmingly rural—over 80 percent of the poor reside in rural areas. Yet the incidence of rural poverty has remained above 75 percent for over 15 years and has been on a slight upward trend since 2010. Most rural households are trapped in subsistence agriculture, largely due to protracted underinvestment, high vulnerability to climate shocks, and poor agricultural policies. Maize-centric policies and severe market distortions have hampered the development of the agricultural sector. The rural–urban divide in access to services remains staggering. Despite recent progress in water and sanitation, the rural–urban gap remains at 24.4 and 46 percentage points in 2022, respectively.

[3] Unless otherwise specified, poverty statistics throughout the document are based on the national poverty lines.
[4] UNICEF and ZamStats 2023. Child Poverty Report. The analysis measures seven dimensions: health, sanitation, education, nutrition, information, water, and housing.
[5] Zambia MCDP II Midline Survey Result. Mimeo.
[6] WB 2023. Human Capital Index brief.
[7] WB 2024. Towards a More Adaptive Social Protection System in Zambia. Diagnostics Study.
[8] Wu et al. 2024. The Growth Elasticity of Poverty. Is Africa Any Different? PRWP 10690.

Access to electricity remains dismal—5.7 percent of rural households in contrast to 74 percent of urban households report using electricity as the main source of energy for lighting. Rural access rates improve if solar and biofuel are added up, but the combined rural-urban gap remains substantial: 34 percent in rural areas compared to 80 percent in urban areas. The percentage of households living within 2 kilometers of food markets (inputs markets) falls from 85 percent (70 percent) among urban households to 47 percent (20.8 percent) among rural households.

6. **Urban poverty spiked in the context of weak macroeconomic performance and a succession of negative shocks.** In 2015, GDP per capita fell for the first time in close to 20 years, and growth remained close to zero until the COVID-19 pandemic occurred. The global pandemic hit an already struggling economy dealing with falling copper prices and weak fiscal discipline, which ultimately led to an external debt default in 2020. The public-investment growth-led model failed to deliver meaningful development outcomes, and in 2022 the country was reclassified as a low-income country. This macroeconomic volatility was reflected at the household level, particularly among urban households. While rural poverty remained high and stagnant, urban poverty spiked. Mean household consumption in urban areas fell by close to 25 percent between 2015 and 2022, and the incidence of urban poverty reached 32 percent of the population in 2022—8.5 percentage points higher than in 2015.



Source: Poverty trends based on the Living Conditions Monitoring Survey series. Period 2006–2010 from 2012 WB Poverty Assessment; Period 2010–2015 World Bank staff calculations based on adjustments to the poverty line; 2015–2022 ZamStats 2024. GDP per capita: WDI as of May 2024. Notes: Trends based on the national poverty line; GDP per capita in constant Local Currency Unit (LCU)

Pockets of hope

7. **Not all rural areas have experienced rising poverty.** Contrary to the mainstream, rural areas in the highly urbanized provinces of Lusaka and Copperbelt—which host 9 percent of the rural population—experienced a modest but steady decline in the incidence of poverty from 64 percent in 2010 to 58 percent in 2022. As a result, this subregion started this decade with a 14 percentage point lower poverty incidence than the rest and ended with a 23 percentage point lower poverty incidence. These areas benefited from larger and more pro-poor asset accumulation, particularly in phone ownership and sanitation. More importantly, this increase was associated with higher consumption growth—arguably due to their better connectivity and access to markets. While small-scale farmers are spread across all regions of the country, those small farmers near urban areas are far less

poor, better educated, and earn more income from their farming activities than the other small-scale farmers. Despite representing a smaller portion of the rural population, farmers near urban areas contribute to the majority of the country's maize production and are more likely to engage in agricultural practices involving a combination of maize and other crops, such as soybeans.

8. **Not all agricultural activities keep households in poverty.** First, roughly 40 percent of the rural non-poor receive most of their income from agriculture, and they earn nearly three times more than the poor who also depend mainly on agriculture. Behind this contrast are better endowments and different agricultural practices. Second, wage employment in agriculture—proxied by households whose main income source comes from wages and whose household head is employed in agriculture—seems to offer a promising option for poverty reduction. Proximity to wage employment opportunities also seems to mitigate the negative impact of recurrent exposure to droughts, one of the most damaging climate-driven shocks in the country. Third, there is an opportunity to escape poverty by climbing the farming ladder. Transitioning from small-scale farming to medium-scale farming signals better performance than abandoning agriculture altogether, as evidenced by the increased participation in medium-scale farming among the non-poor and increased participation of non-agricultural households among the poor. This, in turn, could underpin the poverty trajectories observed between the two poorest rural subregions over the period 2010–2022. The far north— comprising the Northern, Luapula, and Muchinga provinces—started with a higher poverty incidence and experienced a larger increase during 2010–2022 relative to the mainland—comprising the Eastern, Central, Southern, Western, and North-Western provinces. Both subregions had a similar composition in 2010, but by 2022, the share of non-agricultural households was 50 percent higher in the rural north than in the mainland, and the share of medium-scale farm households was 50 percent lower. Consolidating into larger and more productive farming is a desirable way to increase the sector's productivity and become a viable path out of poverty. However, it should be accompanied by adequate alternatives for those leaving the agricultural sector. The increasing poverty rate among non-agricultural households suggests that those options are yet to be available.

9. **Economic growth can be pro-poor in urban areas.** Lusaka's performance contrasts with the rest of the urban areas: poverty declined more in Lusaka during the latest growth period, and it increased less during the recent crises. In other words, Lusaka exhibits pro-poor growth. There is a notable difference in the skill profile between households who escaped poverty in Lusaka versus the rest. In Lusaka, consumption growth among the low-skilled accounts for about half of the decline in poverty, while poverty reduction outside Lusaka occurred exclusively among the high-skilled. At the same time, there was notable pro-poor asset accumulation in Lusaka since 2015—mostly driven by electricity, solar/biofuel, and phone ownership, which cushioned the fall in consumption. Asset accumulation was smaller in other areas, and these had a more subdued impact, signaling the importance of an enabling environment to ensure that assets translate into consumption growth.

What comes next?

10. **Current poverty levels are not the result of a transitory shock but rather a reflection of structural factors, underscoring the need to address foundational barriers.** The incidence of rural poverty has remained high and stagnant for over a decade. Labor market indicators suggest that urban poverty was likely increasing before the crisis, mainly outside Lusaka, and may not come down unless labor market opportunities improve. Unemployment was already rising—particularly among the lower-educated labor force; and the share of paid employees and formal employment was already falling—particularly among the secondary-educated workers. In contrast, labor market dynamics in Lusaka were more mixed before and after 2020, and more consistent with a one-off shock. Indicative evidence suggests that the poverty increase in urban areas would have been double at the peak of the crisis. Subjective poverty reports collected through the High-Frequency Phone Surveys and simulated poverty trends drawn from the labor market dynamics reported in the annual Labor Force Surveys convey a similar message: in the last two years, the incidence of poverty has recovered approximately half of the estimated increase between 2015 and 2020.

11. **Present growth projections will not deliver, as rates are too low to make a difference on poverty reduction.** The macroeconomic recovery was short-lived. After the rebound in 2021, GDP growth has steadily declined. GDP per capita grew by about 2.4 percent in 2022 and 2023 and became negative in 2024 due to the ongoing drought.[9] Under neutral growth assumptions, projected GDP growth would only result in a 2 percentage-point reduction in poverty incidence by 2026. This is only 40 percent of the increase observed over 2015–2022 and would leave the incidence of poverty above 2010 levels. Moreover, progress would be even less if the incidence of growth replicates the 2010–2015 period. Only if household per-capita growth were to double the projected GDP per capita growth among the lower deciles, the incidence of poverty would fall below 2010 levels, but still recover only two-thirds of the 2015–2022 increase.

12. **Growth needs to become more inclusive to make a dent on poverty and inequality.** Mining will continue to be a major driver of economic growth and fiscal revenue, and the opportunities under the new energy transition minerals agenda are promising. Nevertheless, in the past it has fallen short of delivering widespread and sustainable progress. Towards the end of the last mining-led growth period, GDP per capita grew at an annualized 5 percent but the incidence of poverty only fell by 0.43 percentage points a year. Most of the benefits accrued to the relatively small segment of skilled and formal sector workers in urban areas,[10] similar to what happened outside Lusaka in the most recent growth period. Better policies that spur structural transformation and more effective use of public resources are paramount to changing the past course.

BOX 1. LEARNING FROM OTHER MINING-BASED ECONOMIES. THE CASE OF PERU

Through high, sustained, and inclusive economic growth, Peru managed to decrease its poverty rate from 58 to 23 percent in one decade (2004–2014), making it one of the most prominent performers in Latin America over that period.[11] This happened in the context of favorable external conditions and successful macro-structural reforms, including institutional, trade liberalization, infrastructure and public services. The commodity price boom boosted investment in mining—including Foreign Direct Investment (FDI), which then spurred private investments in upstream sectors such as chemicals, metal products, land transport, and financial services. The country underwent a massive urbanization process and economic transformation, with growing agricultural productivity—due to better connectivity and increased industrialization—and expansion of urban informal service jobs. The stable macroeconomic environment propelled public investment in connecting infrastructure, education, health, and social programs, diversifying rural economies and supporting urbanization. Households' incomes at the bottom 40 percent grew 50 percent faster than the national average. Following this successful period, further progress had to tackle two main structural challenges—persistent spatial disparities and barriers to productivity growth—under less favorable exogenous conditions, calling for a new generation of micro-structural reforms (WB 2017). Limited progress in the second wave of reforms can be traced to the weak and declining capacity of public institutions (WB 2022).

13. **Climate shocks are here to stay, highlighting the necessity to solidify macroeconomic stability and enhance quality service delivery to boost resilience.** Macroeconomic vulnerabilities have repeatedly hindered economic development and handling them effectively is critical for sustained growth and poverty reduction. The ambitious debt-financed public investment policy of the 2010s did not deliver economic growth and crowded out social spending—while leading the country to an external debt crisis.[12] The government has embarked on an ambitious reform agenda to address these structural vulnerabilities, which underpinned the recent recovery.

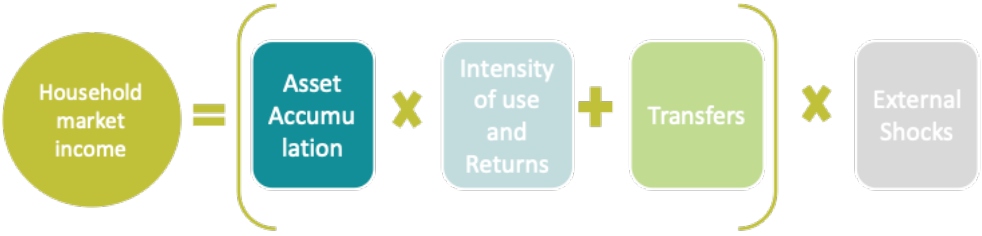
[9] GDP per capita estimates as published in the World Bank's Macro Poverty Outlook, Annual Meetings 2024 (October 2024).
[10] WB 2012. Poverty Assessment.
[11] Trend based on the national poverty line. At the international line of 2.15 PPP, the incidence goes from 16 to 5 over that period.
[12] WB 2024. Public Finance Review. Strengthening fiscal governance for transformative public sector investments.

Yet managing the risks of climate change may prove more challenging. The 2024 drought has not only had devastating impacts on food security—with roughly 30 percent of the population declared to be food insecure—but it has also brought growth to a halt. The country is expected to face a 700-megawatt deficit in power generation, leading to power rationing and import. The frequency and intensity of droughts are expected to increase, average temperatures to rise, and annual rainfall to fall.[13] Recurrent exposure to droughts can, in turn, be behind the high structural poverty rates in rural areas. A recent assessment of the correlation between ward-level poverty rates and exposure to droughts over a 25-year period found that each additional drought is associated with a 0.5 percentage point increase in the incidence of poverty, after controlling for various structural barriers and mitigating factors.[14]

Summary of recommendations

14. **Meaningful poverty reduction will not be achieved without high, sustained, and private-sector-led economic growth that generates quality jobs at scale.** The recent Country Economic Memorandum (CEM) and the upcoming Country Private Sector Diagnostic (CPSD) summarize the main constraints and policy priorities to unleash economic transformation. Agriculture holds great potential but is hindered by distorted and poorly implemented policies, increasing climate hazards, resource degradation, and overreliance on maize. Firm productivity suffers from limited access to finance, weak capacities and skills, inadequate access to electricity, and informality. An unreliable investment and business climate, and major infrastructure gaps hinder private investment. At the same time, growth must become more resilient to shocks and align with low-carbon development due to the significant threat climate change poses to vital sectors such as agriculture, water, energy, health, and infrastructure. The forthcoming Country Climate and Development Report (CCDR) will address how to achieve development goals while mitigating and adapting to climate change.

15. **At the same time, tackling structural barriers to inclusive growth demands policy adjustments and more efficient public investment.** There is a sharp contrast between the country's level of GDP per capita and the incidence of poverty, and both poverty and inequality have remained persistently high for over 15 years. This has been the result of substantial underinvestment, inadequate policy, and low-quality public-service provision. New findings highlight useful policy entry points while raising questions for further analysis. Not all rural areas are stuck with high poverty, and not all urban areas show non-inclusive growth. In addition to the well-known need to address asset and infrastructure gaps, the results suggest that combining asset accumulation with enabling factors, signaled by proximity to urban centers in rural areas and better labor market opportunities for low-skilled workers in Lusaka, is essential for inclusive growth. A focus on asset accumulation would be particularly beneficial for the far north region, which has nearly universal poverty rates and the largest deprivation rates. The rural mainland, on the other hand, could greatly benefit from improving market accessibility and transitioning towards the commercialization and diversification of crops. Following the Asset Framework (Figure 1), the policy entry points to improve the income-generating capacity of the poor will be structured around three areas: assets, use and returns of those assets, and combined transfers and external shocks.



Source: López-Calva and Rodríguez-Castelán (2016).

[13] Alfani et al. 2019; Petrie et al. 2018a; Hamududu and Ngoma 2019.
[14] Farfan et. Al 2023. Mimeo. The analysis also controls for severe droughts to focus on modest but repeated exposure.

16. **ASSETS AND SERVICES. Access gaps in all five dimensions of the Multidimensional Poverty Measure—electricity, drinking water, sanitation, education enrollment, and education attainment—remain too large.** Past progress in access to services has been largely concentrated on "low-cost" technologies, such as phone and mobile money. Further progress requires investments in critical infrastructure gaps, such as electricity and sanitation, which are shown to be a significant driver of consumption growth when combined with access to markets and employment opportunities. Rural areas are significantly more deprived than urban areas, but there are also prominent differences across rural areas, with the far north faring the worst, followed by the mainland, and then near-urban areas. Access to ***electricity*** among the urban poor remains just below 50 percent, and the access rate in rural areas is only 6 percent. It is critical to ensure the implementation of the government's electrification plan to achieve the country's goal of universal access to electricity by 2030, which combines grid and off-grid options to reach the most sparce populations. Tackling chronic malnutrition—which remains alarmingly high—requires simultaneous attention to health; water, sanitation, and hygiene (WASH); and food security (WB 2019). Yet ***WASH and health*** are systematically the two dimensions with the highest child deprivation rate in every single province in 2022. Lastly, it is imperative to address the ongoing ***education*** crises. Education plays a pivotal role in poverty reduction efforts as it strongly predicts both poverty status and employment prospects. But the incidence of learning poverty in the country is close to universal, and as many as 4 in 10 youth are not in education, employment, or training—about twice the regional average. Tackling this challenge requires both addressing foundational skills development and improving equitable access to quality and market-relevant skills development for youth, along with an improved business environment for the creation of quality jobs. A notable effort towards this goal is the recently launched "free education for all" policy, backed by noteworthy increases in the education budget despite the tight fiscal situation.

17. **Achieving the necessary investment levels across these sectors requires enhancing the quality of public investment; a substantial scale-up of private sector investment; and strategic, needs-based prioritization.** Past public investment has failed to deliver development gains, widening fiscal deficits without a meaningful impact on economic growth or diversification. Improved Public Investment Management and state-owned enterprises are essential pieces to support economic transformation and ensure fiscal sustainability (WB 2024c). Equally important is enhancing the quality of public sector delivery, including through an adequate intergovernmental fiscal infrastructure and the capacity of local governments (WB 2024a). Simultaneously, attracting private-sector capital is critical; for instance, closing electricity gaps requires private-led off-grid solutions. Lastly, optimizing the impact of available resources requires strategic targeting that maximizes synergies across investments. For example, a Synthesis Report of the WASH poverty diagnostic initiative (WB 2017) calls for targeting WASH investments in areas where diarrhea risks and stunting are greatest, rather than trying to achieve universal coverage by reducing rural/urban or Socio-Economic Status gaps.

18. **USE AND RETURNS. Asset accumulation will not result in poverty reduction unless those assets can be productively used in income-generating activities.** Markets and services need to be leveraged for inclusion. Emerging messages are classified along two dimensions: geographic and sectoral.

    - **Proximity to markets and urbanization.** The difference in poverty trends between the near-urban areas and the rest of the rural areas is notable, underscoring the importance of access to markets and services. Similarly, the payoffs of making urban services and markets work for the poor is reflected in the widely different performance between urban Lusaka and other-urban areas. However, connective infrastructure is minimal and urbanization is not paying off. The level of urbanization is not commensurate with the level of GPD per capita. The last Urbanization Review already highlighted the importance of a more adequate business environment and improved market access—including forging a better alliance between rural and urban economies through connectivity infrastructure—for economic activity to take off. Similarly, it stressed the need to improve urban planning and service delivery—including a

structured urban informal upgrading program as 70 percent of urban residents live in informal settlements—to enhance labor productivity (WB 2022).

- **Agriculture is part of the solution.** In addition to its growth potential, agriculture can offer a pathway out of poverty. Medium-scale farming, which cultivates lands below 20 hectares, is shown to be a potential middle ground between small-scale farming and larger-scale farming, with positive impacts on productivity and income. Also promising is promoting wage employment in agriculture. Lifting restrictions in input and output markets, investing in infrastructure—including irrigation—and investing in knowledge and skills, are among the policy priorities highlighted in the CEM to increase the sector's productivity. At the same time, once structural transformation takes off, agriculture will not be the solution for the majority of households immersed in subsistence agriculture. Most households should sort into other, more productive sectors. Yet off-farm opportunities are very limited. Improving connectivity to urban areas and promoting secondary cities are therefore fundamental. Also critical is addressing private-sector barriers to job creation, such as improving the business environment and access to finance. In the short term, it is still critical to increase the agricultural productivity of small farmers, while improving the next generation's human capital to take advantage of better off-farm opportunities.

19. **A better understanding of the country's spatial dynamics—including the role of markets, services, and institutions—can help identify the critical constraints leading to territorial inequities and barriers.** This work has opened new questions for further assessments. Specifically, a deeper understanding of the connections between near-urban rural areas and urban centers is needed to provide more specific policy guidance. Unlocking the potential of urbanization is critical, as urban areas are where poverty reduction has taken place and where structural transformation should lead. Unpacking the drivers of performance in rural areas close to urban centers should inform policies that promote the development of secondary cities. A new Jobs Diagnostic could also shed light on how to promote economic diversification and inclusivity across the territory.

20. **TRANSFERS AND SHOCKS.** Given the prominence of extreme poverty, widespread subsistence agriculture, and the rising frequency of weather shocks, the social protection system is pivotal in addressing chronic poverty and building resilience. Emphasizing gender is crucial since female-headed households are more likely to be poor, have less access to services, and display significantly poorer labor market conditions. It is essential to maintain the coverage and transfer adequacy of the sector's foundational Social Cash Transfer (SCT) program, which has seen its caseload nearly double since 2000, reaching 1.3 million households in 2023—equivalent to about 34 percent of the population and 57 percent of the poor. At the same time, there is need to strengthen sustainable graduation pathways through the scale-up of complementary social and productive inclusion activities ("cash plus" approach). The prominent response to the 2024 drought showed the fundamental value of the social protection system in smoothing negative shocks, while pointing at areas of improvement of its shock-responsive capacity.[15]

21. **HARNESSING DATA.** Improving data production and mainstreaming data use to guide policymaking are essential. The implementation of basic statistical operations suffers from huge time lags, and the use of administrative records and big data for statistical purposes is very limited. Monitoring and evaluation systems are weak, and the implementation of impact evaluations, incidence analysis, etc., are largely ad hoc. Inadequate infrastructure, weak institutional capacity, and limited skills pose further barriers. The recognition given to National Data and Information Systems in the 8th National Development Plan should be complemented with the necessary investments.

[15] For a broader assessment of the country's risks to resilience—which are also relevant for poverty eradication—see WB 2024a and forthcoming CCDR.

CHAPTER 1

Setting the stage: Poverty and Inequality Dynamics

The incidence of poverty, measured with the national poverty line, reached 60 percent in 2022, 5.6 percentage points higher than in 2015. The increase took place in the context of weak macroeconomic performance and a succession of negative shocks—including the COVID-19 pandemic and an external debt default, which led to the downgrading of the country to a low-income status. Indicative evidence suggests that the rise in poverty would have been twice as high at the peak of the crisis. Before these shocks, limited growth combined with meager growth–poverty elasticity led the country to be among the poorest and most unequal in the world. Economic growth has only trickled down to urban areas, leaving rural areas with a stagnant poverty incidence above 75 percent for over 15 years. Behind this are staggering rural–urban gaps in assets and access to services, which are in turn reflected in very high levels of multidimensional poverty. Chronic malnutrition rates remain at alarmingly high levels, even among the urban population and those at the top of the distribution. Poverty is becoming more entrenched, with a rising share of extreme poverty over total poverty and increasing overlapping non-monetary deprivations. Vulnerability to poverty is, as a result, mostly structural. At the same time, recurrent exposure to shocks hinders economic growth and household welfare. Growth needs to accelerate and become more inclusive and resilient if it is to have an impact on poverty reduction.

Where we are

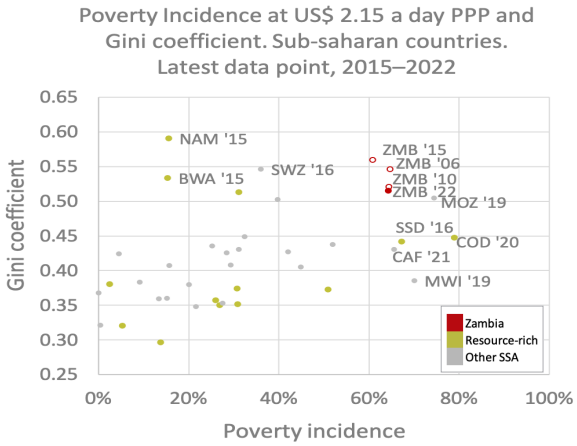
22. **The incidence of poverty measured with the national poverty line reached 60 percent in 2022, up from 54.4 in 2015.** Results from the most recent household survey show a 5.6 percentage point rise in the poverty incidence between 2015 and 2022, equivalent to an increase of about 3.3 million poor individuals.[16] The surge is more than double the progress achieved over 2010–2015, erasing past gains. At the same time, poverty is becoming more entrenched over time. Extreme poverty did not change during 2010–2015 (gains were entirely driven by a reduction in moderate poverty), and it explains over 90 percent of the increase observed over 2015–2022. The poverty gap—which measures the average consumption shortfall relative to the poverty line—and the severity of poverty—which captures the degree of inequality among the poor—increased by 3 percentage points (from 26 percent to 29 percent) and 2 percentage points (from 16 percent to 18 percent) in the most recent period, respectively. In both rural and urban areas, the incidence of poverty among female-headed households is about 6 percentage points higher than among male-headed households, up from 2 to 3 percentage points in 2010.

23. **Both poverty and inequality levels are among the highest in the world.** Zambia has consistently shown high levels of poverty and inequality relative to any comparators: structural peers, resource-rich countries, and neighbors. The incidence of poverty is inconsistent with the country's GDP per capita level. In 2015, the country held the 7th highest monetary poverty incidence in the world, and the 6th highest based on the most recent round of data. All the countries with higher poverty incidence have, however, less than half the level of GDP per capita than Zambia. Inequality, in turn, not only stands out within the region—which, together with Latin America and the Caribbean, is known to be the most unequal—but also among the subset of resource-rich countries. The Gini coefficient was the 4th highest and the 6th highest in the world in 2015 and 2022, respectively. Within the region, it is only surpassed by Eswatini, Botswana, and Namibia, all of which have substantially lower poverty levels.[17]

[16] For methodological details, see Box 2 and Annex 1.

[17] The 2015 ranking is based on countries with data in the period 2012–2018. The 2022 ranking is based on the period 2015–2022.

Figure 1. Zambia is simultaneously one of the poorest and most unequal countries in the world



Source: World Bank's Poverty and Inequality Platform (PIP). Notes: Resource-rich countries as defined in WB 2024d.

24. **The recent deterioration in household welfare took place in the context of weak macroeconomic performance and a succession of negative shocks.** The COVID-19 pandemic hit an already struggling economy dealing with the sharp contraction of copper prices amidst weak fiscal discipline and excessive borrowing, which ultimately led to a recession and an external debt default in 2020. Growth was stagnant leading up to the pandemic (annualized rate of 0.6 percent) and fell for two consecutive years in 2019–2020 (annualized rate of -3.6 percent). At the same time, three droughts affected the country over this period (2015, 2019, 2021). The country was reclassified from a low-middle-income to a low-income status country in 2022. A debt restructuring process and a series of economic reforms underpin the end-of-period recovery (annualized rate of 2.8 percent over 2021–2022).

Figure 2. Following a decade of positive but declining economic growth with falling poverty reduction, GDP per capita growth stalled, and poverty spiked.

Source: Poverty trends based on the Living Conditions Monitoring Survey series. Period 2006–2010 from 2012 WB Poverty Assessment; Period 2010–2015 World Bank staff calculations based on adjustments to the poverty line; 2015–2022 ZamStats 2024. GDP per capita: WDI as of May 2024. Notes: trends based on the national poverty line; GDP per capita in constant LCU.

Structural peers are based on Zambia CEM 2023 (Angola, Botswana, Tanzania, Zimbabwe). Resource-rich countries defined in WB 2024. Outside the region, Zambia's inequality is only lower than Brazil and Colombia. See detailed figures in Annex 7.

BOX 2. POVERTY METHODOLOGY

This study draws primarily from the three Living Conditions Monitoring Surveys (LCMSs) implemented by ZamStats in 2010, 2015, and 2022[18]. It is the first Poverty Assessment in over 12 years, and it therefore draws on the comparable trend from 2010–2022, which encompasses both a positive and a negative growth period.

The poverty trend is anchored in the methodology implemented in 2015. The 2010 consumption aggregate was re-estimated to make it comparable with 2015. In 2022, however, it was not possible to simply apply the 2015 methodology because significant changes in questionnaire design made the two rounds of data non-comparable. To overcome this challenge, the SWIFT methodology was applied instead. In both cases, the 2015 poverty line was re-expressed in 2010 and 2022 values, respectively. The comparable 2022 estimate was officially published by ZamStats in November 2023, and published on the WB's Poverty and Inequality Platform for the 2024 World Bank's Spring Meetings.

The SWIFT methodology relies on a subset of comparable variables to estimate household consumption. It uses a multiple imputation technique, resulting in 20 consumption vectors. The final poverty and inequality estimates are the average of the 20 predictions. While the use of predicted consumption increases the margin of error, the standard errors in the Zambia application remain very small because of the rich set of explanatory variables used in the model. It includes the comparable non-food component—which in 2015 accounted for 33.7 percent of total expenditures, a large set of food consumption dummies, and various household characteristics including demographics, assets, labor market status, and food security. A cross-validation method was implemented to avoid over-fitting the model.

All the statistics in Chapter 1, the poverty profile in Annex 2, and all poverty and inequality statistics rely on the multiple imputation results. Additional analyses, such as decompositions, are based on a single proxy consumption vector that was selected out of 700 predictions to maximize the official results from the 20 original vectors. See Annex 1 for more details.

The 2010–2015 trends published in this report differ from previous publications for the following reasons:

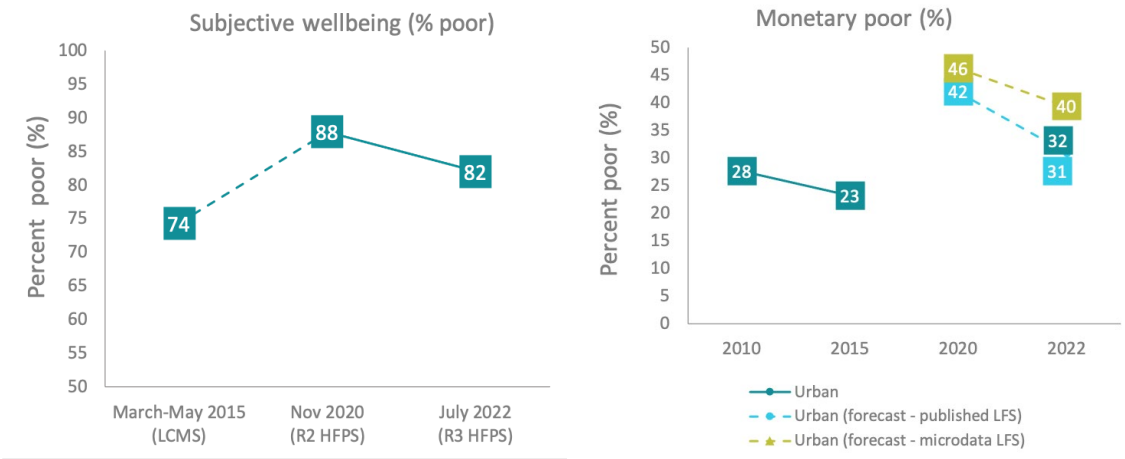
National poverty trend: past publications did not hold the value of the poverty line fixed in real terms.

International poverty trend: past publications did not account for the methodological changes implemented in 2015. The Poverty and Inequality Platform now has the updated 2010–2022 trend used in this report.

Source: Zambia Statistics Agency and World Bank, 2023. Estimating a consistent poverty and inequality trend in Zambia. Mimeo.

[18] https://www.zamstats.gov.zm/economic-statistics/

Figure 3. The increase in urban poverty is estimated to have been close to double at the peak of the multiple crises.



Source: Own calculations based on the High-Frequency Phone Surveys (left panel); Simulations based on labor income trends reported in the annual Labor Force Surveys (right panel).

25. **Indicative evidence suggests that the poverty increase in urban areas would have been twice as high in 2020—at the peak of the COVID-19 pandemic and the external default**.[19] Drawing on the information collected in rounds two and three of the High-Frequency Phone Surveys conducted to monitor the impacts of COVID-19, the share of urban households who reported being poor increased by 13.6 percentage points between 2015 and 2020 and went down by 6.2 percentage points between 2020 and 2022.[20] A similar result emerges if one draws on the urban labor income trend from the annual Labor Force Survey (LFS) to simulate poverty dynamics during these years.[21] The estimated poverty in 2020 (reported in Figure 3) is the result of assigning the 2017–2019 change in mean labor income to the 2015 household-per-capita consumption. Similarly, the 2022 estimate is the result of assigning the 2017–2022 change in income to 2015 consumption. One of the trends uses the mean income reported in the official LFS reports while the other uses the mean income obtained from the microdata. Households are assigned either the formal or informal mean income trend based on the formality status of the household head. Since poor households are most likely to rely on informal earnings, the poverty trend reflects the dynamics observed in informal earnings. Based on the within-period dynamics reported in LFS reports, the incidence of poverty was projected to increase by 18.6 percentage points in 2020 and decrease by 10.8 percentage points thereafter. Using the microdata, it was calculated that the 2020–2022 recovery is only 30 percent of the 2015–2020 increase, but 50 percent of the 2019–2020 increase.

[19] The focus was on urban only because evidence suggests that COVID-19 was primarily an urban phenomenon. Additionally, the high selectivity of the rural sample in the phone surveys does not allow estimating rural trends.

[20] To minimize the sample selection bias embedded in phone surveys, the urban sample was re-weighted using demographic characteristics from the 2015 LCMS and housing characteristics from the 2021 Socio-economic Impact Assessment (SEIA) survey. The SEIA is a nationally representative face-to-face survey conducted in April 2021 to monitor the COVID-19 impact. A comparison between these two surveys revealed that demographics had not changed over that period, but housing had improved. A SWIFT estimation using the re-weighted sample predicted urban poverty to be at 32.7 percent in 2022 (only 0.9 percentage points higher than official estimates).

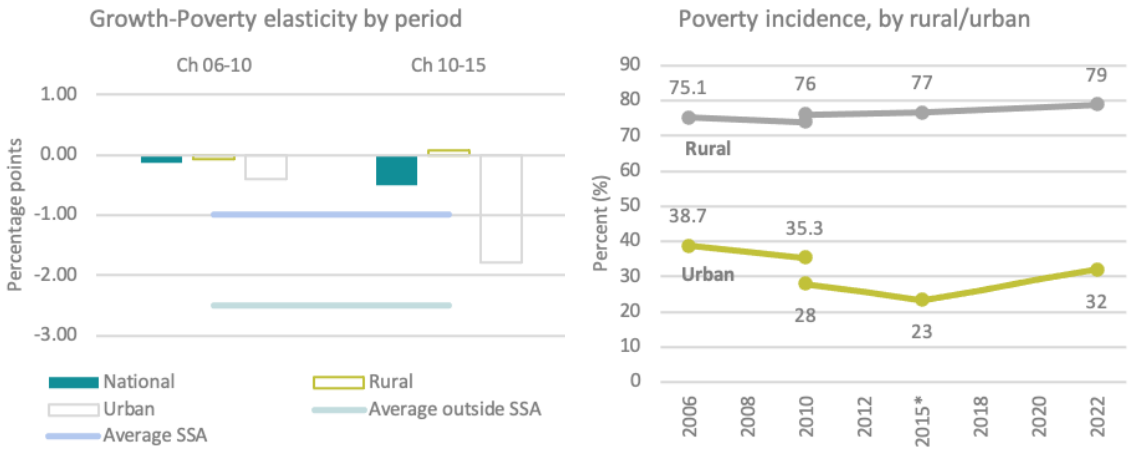
[21] Early estimates of the impact of COVID-19 on poverty incidence based on sectoral GDP growth also projected an increase in urban poverty, but of a significantly lower magnitude (2.6 percentage points) (Varghese et al. 2021). The significant increase in poverty recorded in 2022 suggests that GDP trends are not able to reflect the magnitude of household-level changes. While there is no quantification of the cushioning role of the SCT during COVID-19, it is expected to have been small at the time of the shock. The massive expansion in caseload happened after 2000 (616,464 in 2020; 1.3 million in 2023), and over 90 percent of the beneficiaries are rural. The program may have a role in explaining the recovery but more analysis should be done to evaluate it.

Stylized facts on poverty and inequality

26. **Past economic growth has failed to deliver significant poverty reduction, making Zambia one of the countries with the lowest growth–poverty elasticity in the region**. During the latest decade of positive economic growth (2006–2015), the pace of poverty reduction has been largely disappointing. GDP per capita grew by an annualized growth rate of 3.2 percent per year while the poverty incidence fell by an average of 0.47 percentage points per year. The number of poor, in turn, grew continuously over this period. Weak growth linkages were particularly salient during the first half (2006–2010) when mining-led growth delivered an annualized growth rate of 5 percent but poverty fell by about 0.7 percentage points a year. This resulted in a growth–poverty elasticity of -0.12, only a 10th of the regional average of -1. Links to poverty reduction increased during the services—mostly government-related and construction-led growth in the second half—but the elasticity remained at half the regional average. The regional average, in turn, is less than half the average elasticity outside SSA.

27. **National trends mask stark differences across rural and urban areas.** Rural areas have consistently hosted about 80 percent of the poor population and have been largely unaffected by economic growth. The incidence of poverty has been on a slight upward trend since 2010, reaching 78.8 percent in 2022. Furthermore, extreme poverty has been growing at a faster pace than total poverty, while the share of the population in moderate poverty has been declining. In contrast, urban poverty rates are significantly lower and track macroeconomic growth. The incidence of urban poverty declined by an average rate of 0.9 percentage points during the growth decade 2006–2015, increasing the rural/urban gap from two-fold to three-fold over that period. The recent spike in poverty in 2015–2022 is entirely driven by a sharp deterioration in urban living standards. The incidence of extreme poverty in urban areas rose by 5.6 percentage points and the incidence of moderate poverty by 3 percentage points, leading to a total increase of 8.5 percentage points.[22]

Figure 4. The impact of economic growth on poverty reduction is substantially lower than the regional average, partly because it does not trickle down to rural areas.

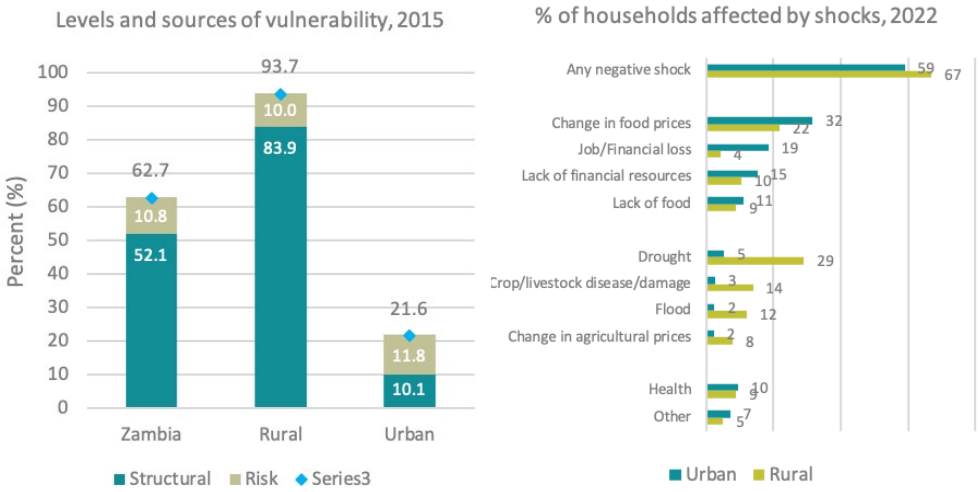


Source: For poverty trends see notes Figure 2. Average growth poverty elasticities taken from Wu et al. 2024.

[22] The increases in rural poverty are not statistically significant while the changes in urban poverty and national poverty are. Graphs are shown in Annex 7.

28. **The prevalence of vulnerability to poverty is high, mainly due to structural factors.** In 2015, 63 percent of the population was estimated to be vulnerable to poverty—8.5 percentage points higher than the poverty rate (WB 2024b).[23] More specifically, 3 in 5 individuals were expected to be poor in the following two years, either because their expected consumption levels were too low (structural vulnerability) or because they were expected to face a negative shock they could not cope with (risk-induced vulnerability).[24] Structural vulnerability accounts for nearly 83 percent of the estimated vulnerability at the national level, and it explains nearly all of the observed variation in the incidence of vulnerability across provinces. Risk-induced vulnerability, on the other hand, is estimated at around 10 percent in all provinces but explains close to 50 percent of the vulnerability in urban areas.

Figure 5. Vulnerability to poverty is high and mainly driven by structural factors, yet exposure to shocks is prevalent and can lead to increased impoverishment.



Source: Vulnerability analysis from WB 2024b. Shocks: Own calculations based on LCMS 2022

29. **Nonetheless, cushioning exposure to shocks is critical to prevent further impoverishment among the structurally poor, and it will become increasingly important to prevent further increases in poverty.** Even if structural factors are the primary driver of expected poverty, negative shocks have a detrimental impact on the poor and can push them further into poverty. In 2022, 60 percent of urban households and 67 percent of rural households reported to have experienced at least one negative shock in the past 12 months. This incidence is equally high among poor and non-poor in rural areas, but 8 percentage points higher among the urban poor relative to the urban non-poor. A cross-country analysis shows that idiosyncratic (i.e., household-specific) shocks are systematically more important than covariate (i.e., community-level) shocks in explaining the risk-induced component of vulnerability (WB 2024b).[25] In rural Zambia, however, the relevance of covariate risks is almost as high as idiosyncratic risks. Indeed, weather-related shocks and changes in food prices were the shocks with the highest incidence among rural households in 2022. Within-country and cross-country analysis also reveals that risk-induced vulnerability becomes more important as income grows. In fact, it explains half of the vulnerability rate in urban areas in Zambia. The most common shocks in urban areas in 2022 were price- and finance-related. Food prices during the 12 months before the interview (June 2021–May 2022) were 22 percent higher than the previous 12 months (June 2020–May 2021).

[23] For more details see Annex 3.
[24] Note that this concept defines vulnerability as "expected poverty", and the poverty incidence is the realization of one of many potential draws. As a result, a household could be defined as vulnerable but not poor (i.e., if in expectation its consumption is below the poverty line but at the time of the survey happens to have a good draw), and poor but not vulnerable (i.e., if its expected consumption is above the poverty line but at the time of the survey it happens to be a bad draw).
[25] For more details, see Annex 3.

Unpacking recent trends

30. **The southern region accounts for the majority of the poor and experienced the largest poverty increase, with a notable deterioration in Central Province.** Eastern (16.3 percent), Southern (12.7 percent), and Central (12.9 percent) provinces account for about 40 percent of the poor. Eastern has consistently been the province that hosts the largest share of the poor. In contrast, the participation of Central has increased by close to 40 percent—from 9.5 percent in 2010—due to both its high population growth and the sharp increase in its poverty incidence. This, in turn, resulted in a re-ranking in the position of the three provinces adjacent to the central corridor which hold the lowest poverty rates outside the urban provinces of Lusaka and Copperbelt. In 2010, Central was leading with 54.3 percent and Southern and North Western were just over 66 percent. In 2022, Central had the highest rate among the three (67.5 percent), while North Western went down to 61.6 percent and Southern to 63.5 percent. The remaining five provinces have a poverty incidence clustered within 3 to 4 percentage points of 80 percent due to the relatively large increase in the poverty incidence in Northern and Muchinga.[26,27]

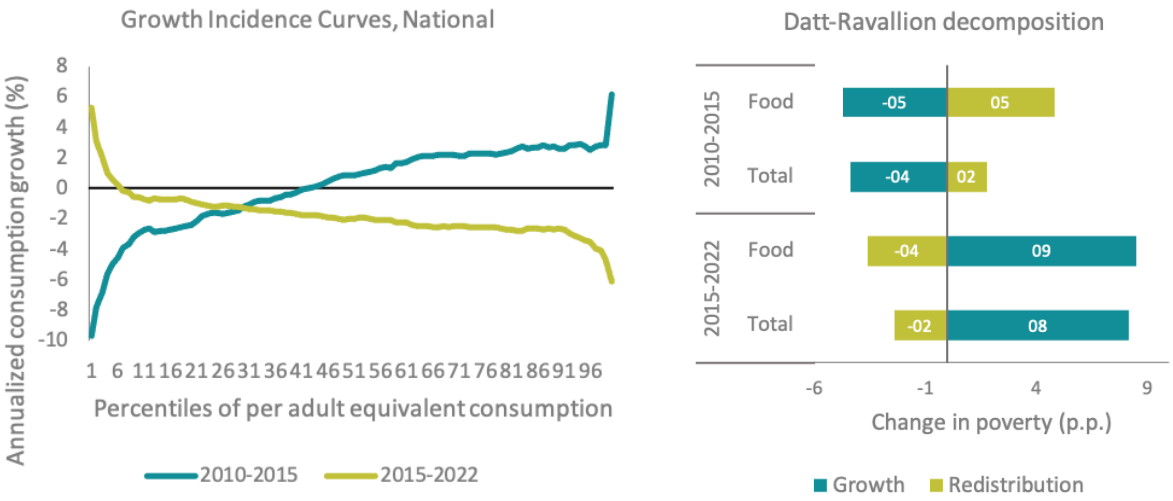
31. **Distributional changes hindered poverty reduction during the last growth period but cushioned the recent spike. Meanwhile, the prosperity gap increased to US$23 a day Purchasing Power Parity.** Between 2010 and 2015, the incidence of growth was highly unequal. Household per capita consumption among the poorest 20 percent of the population fell by 16 percent, while it increased by 18 percent among the richest 20 percent. A growth-inequality decomposition shows that poverty could have declined by 1.8 percentage points more—and extreme poverty by 4.8 percentage points more—had everyone experienced the same consumption growth. During the subsequent period, the shape reversed. Given the generalized fall in consumption, this effectively reduced the rise in poverty. These growth-inequality patterns also explain why Zambia has made no progress towards reducing the Prosperity Gap in the last 12 years. The Prosperity Gap is the new World Bank indicator of shared prosperity, which measures the average factor by which consumption needs to be multiplied to bring everyone to the global prosperity standard of US$25 per day in PPP terms. In Zambia, this number increased from US$21.22 to US$23.08 between 2010 and 2015, and it remained constant in the latest period. During the first subperiod, increasing inequality outweighed mean consumption growth. During the second subperiod, falling mean income and the decline in inequality balanced each other out.[28]

[26] Figures and more province-level statistics are shown in Annex 7.

[27] Interestingly, there is a notable correlation between the difference in the vulnerability rate and the poverty rate in 2015 on the one hand, and the change in the incidence of poverty between 2015 and 2022 on the other. The three provinces with the largest gap between vulnerability and poverty in 2015—Central, Southern, and Eastern—saw the largest increase in poverty by 2022. Conversely, the three provinces with the smallest gap experienced declines in the incidence of poverty. North Western and Muchinga, which fall in the middle, are the only two that did not follow this pattern. North Western is going through a very fast urbanization process (its urbanization rate nearly doubled from 22.6 percent in 2010 to 41.7 percent in 2022). See Figure A12 in Annex 7.

[28] See figures in Annex 7.

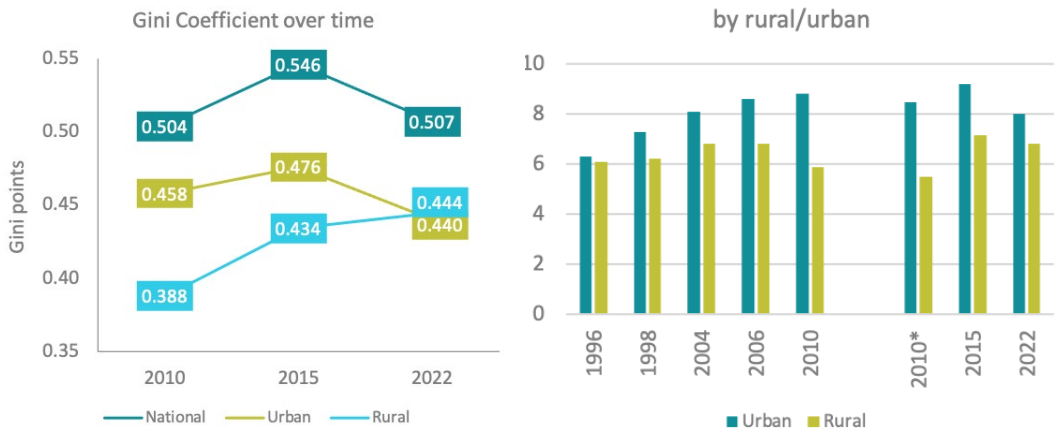
Figure 6. The incidence of growth switched from pro-rich in 2010–2015 to pro-poor in 2015–2022, but it was negative across nearly the full distribution during the second period.



Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Percentiles of per adult equivalent consumption.

32. **Strong negative consumption growth among the better-off drove total inequality and within-urban inequality down. Meanwhile, rural inequality is on the rise.** After increasing from 0.504 to 0.546 between 2010 and 2015, by 2022 the Gini coefficient returned to 2010 levels. However, the decline was the result of a stronger fall in consumption at the top of the distribution rather than stronger positive growth among the poorest. The decline was driven by urban areas, which experienced the first inequality reduction in over 25 years. The nearly 20-year period of positive economic growth has been systematically accompanied by increasing within-urban inequality. At the same time, rural areas not only host the majority of the poor, but they are also becoming more unequal over time. The Gini index grew by 5 points between 2010–2015 and by another point in the most recent period.[29]

Figure 7. Driven by negative consumption growth, within-urban inequality declined for the first time in over 20 years. At the same time, within-rural inequality is on an upward trend.



Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022.

[29] National and urban trends are robust to winsorizing the top 1 percent of the distribution, where the uncertainty about the imputed consumption is greatest. The trend between 2015 and 2022 in rural areas becomes flat.

Non-monetary poverty

33. **Multidimensional poverty is very high by international standards.** Based on the World Bank's Multidimensional Poverty Measure (MPM), Zambia holds the 11th highest MPM index in the region, driven by both monetary and non-monetary dimensions. Among non-monetary dimensions, the highest deprivation incidences are found in infrastructure, where the country ranks 11th in electricity, 14th in drinking water, and 24th in sanitation. However, the performance on human capital is also bad: 16th highest deprivation in education enrollment and 24th in education attainment. At 0.4, the Human Capital Index (HCI) is right at the SSA average, but well below the LMI average of 0.48. Among the six dimensions comprising the index, stunting and test scores are below the region's average. The incidence of learning poverty and learning deprivation are close to universal (at 99 percent and 98 percent, respectively), significantly above the SSA average.[30]

34. **Progress in access to services has been limited, and the rural/urban divide remains significant.** Between 2010 and 2022, access to improved drinking water increased by 12 percentage points among rural households, surpassing 60 percent in 2022. A similar absolute improvement was observed in access to improved sanitation, though from a significantly lower starting point. The rural/urban gap in these two dimensions were therefore reduced, but it remains high at 24 percentage points for water and 46 percentage points for sanitation. In contrast, the rural/urban gap in access to electricity has increased.[31] There was a substantial 21 percentage point increase in the share of urban households reporting the use of electricity for lighting, reaching 74 percent in 2022. This rise was stronger among the urban poor, closing the gap relative to the urban non-poor. The comparable share among rural households, however, remained flat and negligible below 6 percent. Rural households have benefited from the expansion of other renewable sources, such as solar and biofuel. But still only about 1 in 4 rural households report those as the main source of lighting. The two services with the highest incidence in rural areas are mobile money (51 percent) and phone (68 percent), but access to these services in urban areas is 31 and 26 percentage points higher, respectively.[32] Similarly, market access remains concentrated along the central corridor. The percentage of households living within 2 kilometers of food markets (inputs markets) falls from 85 percent (70 percent) among urban households to 47 percent (20.8 percent) among rural households.[33]

[30] The MPM ranking was performed based on the most recent round of data published for the 2024 Annual Meetings (October 2024). There is no information to disaggregate learning poverty or deprivation by gender. School deprivation is slightly worse among boys (16.8 percent compared to 13 percent).

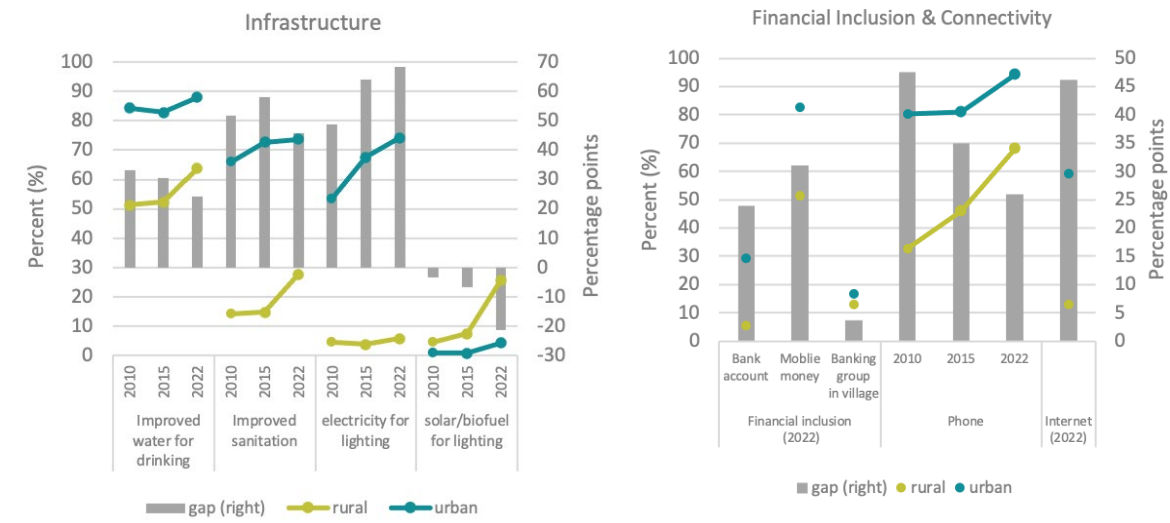
[31] Unless otherwise specified, access to electricity is captured with the question "main source of energy for lighting" available in the housing module, whose first answer category is "electricity". This most likely captures grid connections. When relevant, the report also includes the answer category "solar/biofuel" to account for off-grid options.

[32] There has been rapid adoption of mobile money over this period throughout urban Zambia. Between 2015 and 2022, the number of mobile money accounts increased exponentially from approximately 250,000 to 11 million (IMF 2024). Likewise, during this period, the number of annual transactions went from over 62 million to 1,581 million (Bank of Zambia 2024). Interestingly, mobile money appears to serve as a substitute for having a bank account, as poor households in the LCMS report not needing a bank account.

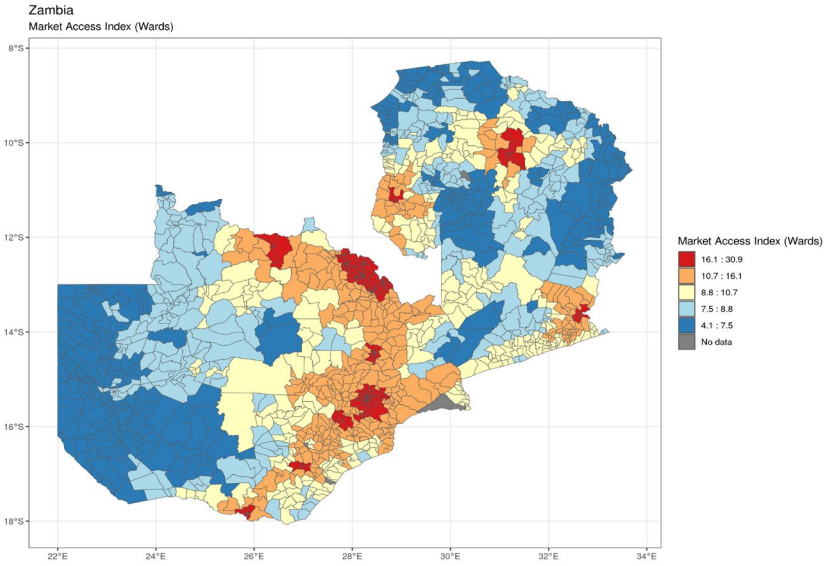
[33] Annex 8 presents statistics by gender of the household head. Female-headed households tend to have lower access to services, though they are located closer to food and input markets. Particularly large are the differences in access to electricity in urban areas (68.6 versus 77.9 percent among female- and male-headed households, respectively), and phone ownership in rural areas (64.3 versus 79 percent among female- and male-headed households, respectively).

Figure 8. Structural underinvestment in rural areas is reflected in significant rural/urban gaps in access to services.

Evolution in access to services and rural/urban gaps



Market Access Index



Source: Top panel: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Bottom panel: https://wbg-poverty-gp.shinyapps.io/zamPTI/. Notes: Phone includes mobile and landline. The Market Access Index measures how far a given ward is from other major markets (or major cities) with higher numbers indicating easier access to major markets. The index is constructed based on the methodology explained in Jedwab and Storeygard (2022) for every 11 kilometer x 11 kilometer cell defined over the entire area of Zambia, with travel time computed based on the friction map from Weiss et al. (2018) and then aggregated to the ward level using grid-level population from WorldPop as a weight. Sources: Jedwab and Storeygard (2022); Weiss et al. (2018); city population data from https://www.citypopulation.de/.

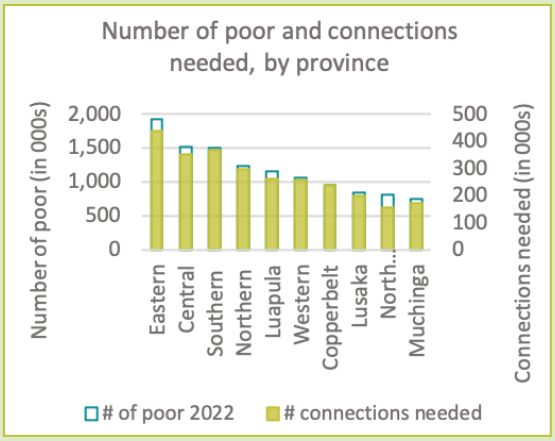
BOX 3. ENERGY POVERTY

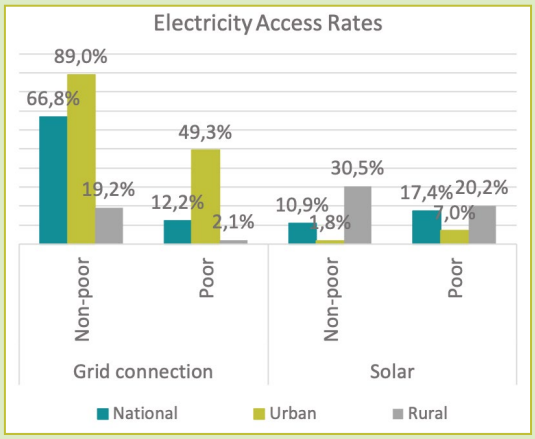
Access to modern energy services is a key driver of human and economic development (OECD/IEA, 2017; Alam et al. 2018; Sarkodie and Adams, 2020). However, in Zambia, access to modern and reliable energy sources—a concept often used in the literature to measure energy poverty in developing countries—remains low.

As of 2022, only 34 percent of the population had access to grid electricity.[34] Furthermore, the access and quality of electricity service is unevenly distributed. Only 12 percent of the poor have access to grid electricity, compared with 66 percent of the non-poor. This is largely determined by the urban/rural location of the household. The urban poor are more than twice more likely to have a grid connection relative to the rural non-poor. Similar gaps are observed in terms of quality. Non-poor households experience an average of 15 hours of grid electricity per day, while the average among poor households is only 5 hours. Interestingly, there is a notable correlation between the number of poor individuals in each province and the number of electrical connections needed – consistent with an average household size of 4.3.

Access to off-grid technologies in rural areas is central to reducing energy poverty levels in the country, and also associated with climate, gender, and health benefits. Over the past decade, access to solar has expanded, benefiting both poor and non-poor households. In 2022, 17 percent of poor households and 10 percent of non-poor households report access to solar, largely explained by access in rural areas.

To promote access to energy services and advance toward the Sustainable Development Goal of universal electricity access by 2030, the Government of Zambia, with support from the World Bank, developed a Least Cost Geospatial Electrification Plan. The plan includes various electrification strategies to account for the potentially high cost of electrification expansion in sparsely populated rural areas. The strategies are: (a) grid densification in areas already connected, (b) grid extension in unconnected high demand density areas, (c) installation of renewable powered isolated electricity systems (mini grids) in remote localities, and (d) distribution of solar home systems to the most remote households.



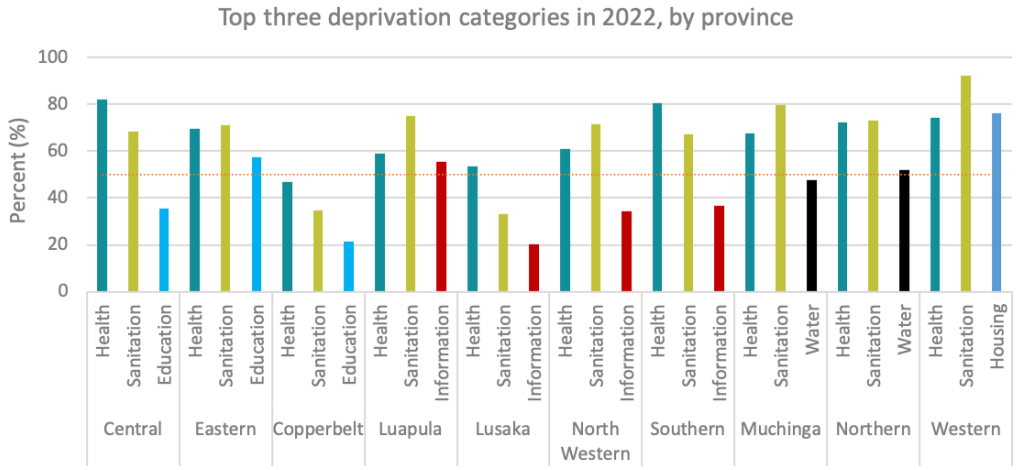


Source: World Bank staff calculations using the LCMS from 2010, 2015, 2022, and 2022 Population Census.

[34] This box uses information from a new Electricity Module implemented for the first time in 2022. The trends shown in the rest of the report draw on the question on "main source of energy for lighting" in the housing module, which is available in all three rounds of the LCMS survey.

35. **Deprivations are often overlapping and can have long-lasting consequences on human capital accumulation**. Based on UNICEF's Multiple Overlapping Deprivations Analysis (MODA), as many as 70.6 percent of children suffer from at least two overlapping deprivations (multidimensionally poor), and close to 30 percent suffer from at least four overlapping deprivations (extreme multidimensionally poor) in 2022. Consistent with monetary poverty, the incidence of poverty is twice as high in rural areas relative to urban areas (86.8 percent versus 41.8 percent), but it is in urban areas where poverty increased over 2015–2022, largely driven by an increase in health deprivations (i.e., children not consulting a medical professional while sick).[35] Fifty-three percent of children in Lusaka and 47 percent of children in Copperbelt are found to be deprived in this dimension. When broken down by province and dimension, Health and Sanitation are consistently the two dimensions with the largest deprivation incidence in all provinces. The dimension that takes third place is Education in three provinces (over 50 percent in Eastern), Information in four provinces (over 50 percent in Luapula), Water in two of the far north provinces (50 percent in Northern), and Housing in one province (75 percent in Western). In addition to living in rural areas, other risk factors include having an uneducated household head, a female household head, and four or more children. These risk factors tend to be mutually reinforcing. For example, the gap between female- and male-headed households is larger in rural than in urban areas, and larger for uneducated than educated females.

Figure 9. Health and Sanitation are consistently the two highest deprivations across all provinces.



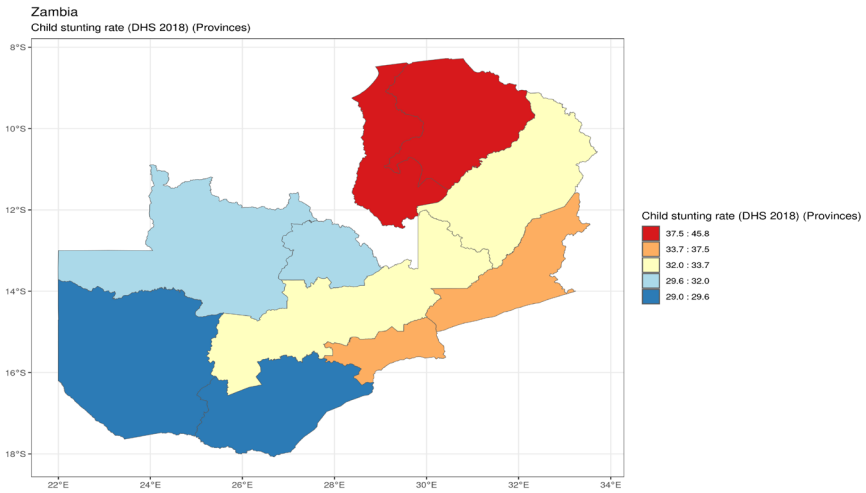
Source: Child Poverty Report, ZamStats and UNICEF, forthcoming. Notes: MODA methodology based on LCMS 2015 and 2022. Health includes consultation with a medical professional while sick. Sanitation includes access to improved sanitation and garbage disposal. Education includes compulsory school attendance, grade-for-age, and primary school attainment. Information includes the availability of information devices (at least one of the following: TV, radio, computer, phone, mobile phone). Water includes improved drinking water source and distance to water source. Housing includes overcrowding and floor materials. Nutrition includes wasting, stunting, and dietary diversity.

[35] Child-poverty has a significant overlap with monetary poverty in rural areas: 75 percent of rural children are both monetary and non-monetary poor (6 percent are neither). In urban areas, 24 percent of children are poor in both dimensions, 12 percent only monetary poor, 17 percent only non-monetary poor, and 47 percent neither. Child poverty is slightly lower among girls (70.3 versus 71.0 suffer from two or more dimensions; 27.9 versus 30.0 suffer from four or more deprivations).

36. **Progress with chronic malnutrition has stalled and remains at unacceptably high levels, contributing to the intergenerational transmission of poverty**. After a 10-year downward trajectory, the three-year average of the prevalence of undernourishment stagnated since 2017–2019 and the number of people undernourished started to increase (FAOSTAT)[36]. The under-five stunting rate declined from 45 percent in 2007 to 35 percent in 2018, but it remains unacceptably high and significantly above the average among SSA and LMI countries (HCI brief). Furthermore, evidence suggests that stunting has increased in the recent past.[37] Among the three main determinants of nutrition, differences in access to adequate food and care between rural and urban areas or between the top and bottom quintiles are small (less than 5 percentage points) (WB 2019). In contrast, the gaps in access to adequate WASH and adequate health are over 20 percentage points between rural and urban areas, and 35 to 40 percentage points between the bottom and top quintiles. Nevertheless, stunting is neither exclusive to rural areas nor poor households. The incidence of stunting in urban areas is above 30 percent and about 25 percent among children in the top quintile (WB 2019).

Figure 10. Child stunting varies by province but remains high throughout. In the better-off provinces, 3 in 10 children are stunted due to poor access to health, WASH, and nutrition.

Child Stunting Rate by province



Source: DHS 2018.

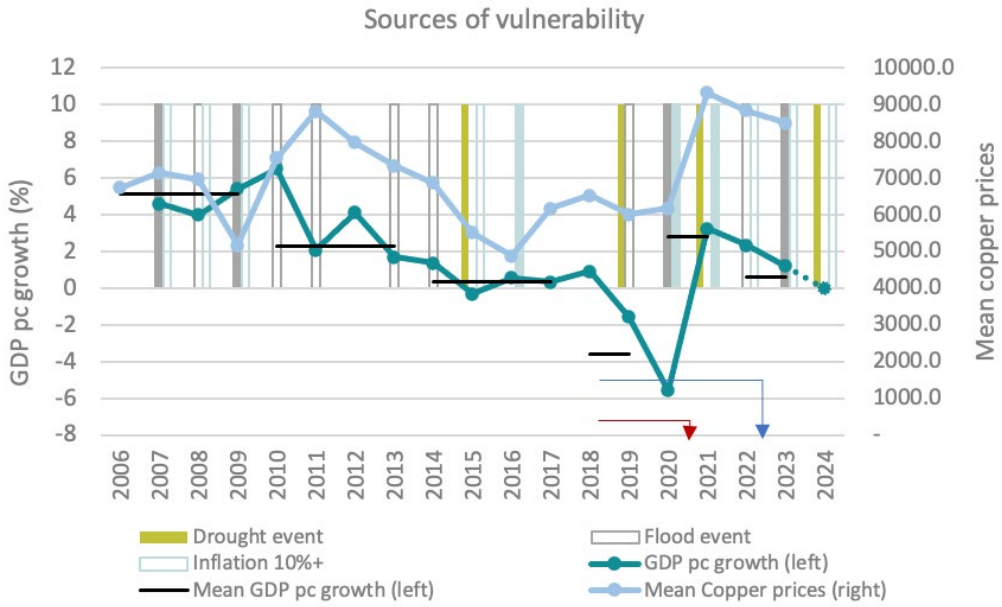
37. **Limited infrastructure—compounded with recurrent exposure to shocks—translates into widespread and increasing food insecurity**. The country ranks amongst the lowest in the Global Food Security Index (102 in 113 countries) and the International Food Policy Research Institute Hunger Index (116 in 118 countries). The three-year average of the prevalence of severe food insecurity has been on an upward trend since 2014–2016 (going from 22 percent in 2014–2016 to 32 percent in 2020–2022). Most recently, this year's severe drought due to the ongoing effects of El Niño was declared a national disaster. The 2023–2024 period marks the driest agricultural season in more than 40 years, threatening food production and electricity supply. The drought has impacted 84 out of the 116 districts—mostly in the Southern, Eastern, and Western regions. A hotspot analysis carried out by the World Food Program estimates that 6.05 million people—roughly 30 percent of the population—across 79 districts are food insecure.

[36] https://www.fao.org/faostat/en/#home
[37] Zambia MCDP II Midline Survey Result. Mimeo.

Looking ahead

38. The population is frequently exposed to several external and internal vulnerabilities that hinder poverty reduction. On the macroeconomic front, economic activity is closely tied to the minerals sector, and the collapse in copper prices in the 2010s has been a major driver of the macro imbalances that eventually resulted in the 2020 external default. On climate, the country is exposed to frequent droughts and floods, with major detrimental consequences on the economy and the population. Floods occur more frequently than droughts, but the impact of droughts is far-reaching. Up until the 2024 drought, each drought has affected, on average, close to 1.4 million individuals (EM-DAT)[38]. Current estimates for the 2024 drought project it will impact 5 million individuals. The 1991/92 drought is estimated to have reduced GDP by 7.5 percent (Thurlow et al. 2012). The 2015/2016 El Niño dry spell was found to reduce maize yields and per capita incomes by 20 percent and 37 percent, respectively (Alfani et al. 2019). The frequency and intensity of droughts are expected to increase (Alfani et al. 2019), average temperatures to rise, and annual rainfall to fall (Petrie et al. 2018a; Hamududu and Ngoma, 2019). High vulnerability is paired with low readiness as evidenced by Zambia's ranking in the 2020 Notre Dame-Global Adaptation (NG-GAIN) Index (132 overall, 130 on vulnerability, 141 on readiness—out of 186 countries).

Figure 11. Poor resilience against economic- and weather-related vulnerabilities hampers economic growth and poverty reduction.

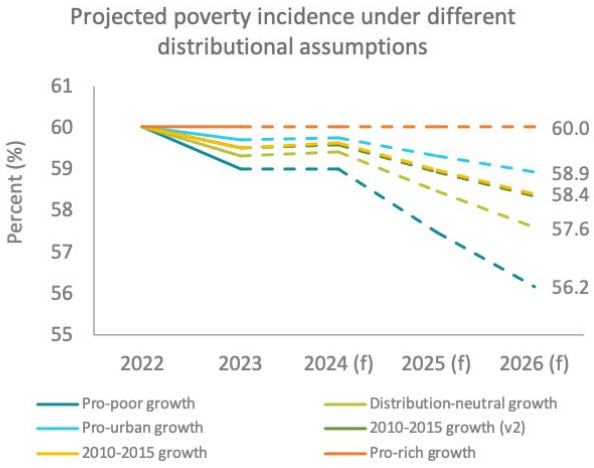


Source: Droughts and Floods from EM-DAT project (2015 drought and 2023 flood manually added based on literature review); Inflation FAO stats; GDP from WDI; Copper prices from Saint Louis FED. Solid bars mark floods that have affected more than 500,000 people based on EM-DAT estimates. Solid bars mark years where inflation was at least 15 percent.

[38] EM-DAT The International Disaster Database https://www.emdat.be/

39. Growth needs to accelerate and become more inclusive to speed up poverty reduction. The recent recovery was short-lived. Following the rebound in 2021, GDP growth has progressively declined. GDP per capita grew by about 2.4 percent in 2022 and 2023, and plummeted to -0.4 in 2024 due to the drought.[39] Assuming a low pass-through of 0.7, projecting household per capita consumption based on GDP per capita over the period 2022–2024 would result in only a 2.4-percentage-point reduction in the poverty incidence by 2026. This is only 40 percent of the increase observed over 2015–2022 and would leave the incidence of poverty above 2010 levels. In the past, however, the growth-incidence curve has not been neutral. If consumption growth among households in the 3rd and 4th quintiles is 70 percent of the average growth—as happened over 2010–2015—the incidence of poverty would decline by only 1.6 percentage points. This scenario, in turn, would increase the Poverty Gap due to the negative growth among the bottom 40. If economic growth is assumed to benefit only urban households, the decline would go down to 1 percentage point. Only if household consumption growth were to double the projected GDP per capita growth among the lower deciles, the incidence of poverty would end below 2010 levels, but still recover only two thirds of the 2015–2022 increase.

Figure 12. Current growth projections are expected to deliver limited poverty reduction.



Source: World Bank staff calculations using the LCMS 2022 and GDP per capita projections published in the Macro Poverty Outlook, April 2024.

Notes: All scenarios assume a low pass-through from GDP per capita growth to household consumption (0.7), referred to as "adjusted GDP growth". The distribution-neutral scenario assumes that the consumption of all households grows at the adjusted GDP per capita growth projected over 2022–2026 (annualized rate of 1.3). The pro-rich scenario assumes that only households in the top 20 percent of the distribution grow at the adjusted GDP per capita growth. The pro-urban scenario assumes that only urban households see consumption growing at the adjusted GDP per capita growth. The 2010–2015 scenario assumes that the bottom 40 percent of the distribution experience negative consumption growth (minus the adjusted GDP per capita rate), the consumption of the middle 40 percent (percentiles 41 to 80) grows at 0.7 of the adjusted GDP per capita growth, and the top 20 percent grow 1.5 times the adjusted GDP per capita growth. The pro-poor scenario assumes that the bottom 40 percent grow 2 times, the middle 40 1.5 times, and the top 20 0.7 times the adjusted GDP per capita growth.

[39] GDP projections as published in the World Bank's Macro Poverty Outlook reports for the Annual Meetings (October 2024).

CHAPTER 2

What are the pathways out of poverty in rural areas?

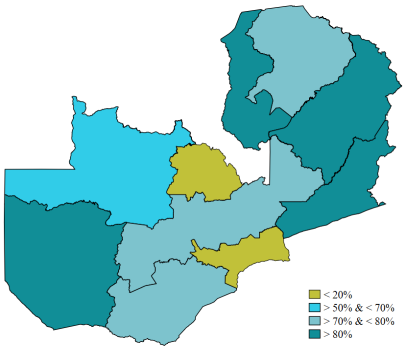
Over the last decade, rural poverty did not uniformly increase across the country. Rural areas near urban centers exhibit a downward poverty trend, while others, particularly in the far north, saw a general increase in poverty. The distribution of assets and geographical segregation play a crucial role in this disparity, as seen, for example, in the disproportionate increase in electricity access among rural households near urban centers. While investing in asset accumulation is important, ensuring that these assets generate returns is equally vital, which is not always the case when increasing access to solar systems or phones in otherwise isolated areas. While moving out of subsistence agriculture is imperative to escaping poverty, agriculture offers hope. First, the non-poor rely less on agriculture, but still about 40 percent of them depend mainly on agricultural income. They earn significantly more due to higher endowments, scale of production, and use of productivity enhancers. Second, transitioning from small- to medium-scale farming appears to be more successful than transitioning to the non-agricultural activities observed in rural areas. Third, wage employment in agriculture offers a promising pathway out of poverty. At the same time, agriculture will not offer a pathway for all. The increasing poverty incidence among those relying on non-agricultural income signals that off-farm opportunities have yet to improve.

(a) Is rising poverty a universal phenomenon? Rural areas near urban centers have seen a decline in poverty over time, driven by both pro-poor asset accumulation and increased returns facilitated by connectivity and market access.

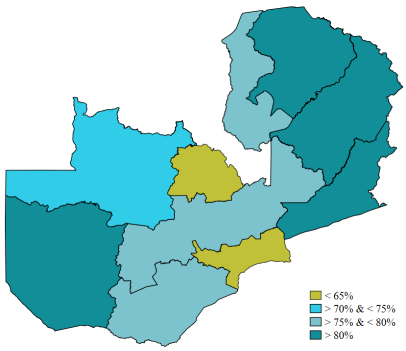
40. **Poverty is overwhelmingly a rural phenomenon.** While 60 percent of the Zambian population lives in rural areas, they account for nearly 80 percent of the poor and 84 percent of the extreme poor. Around 9 million people in rural Zambia live below the national poverty line of K518.20 per month (roughly US$20), and 7.6 million live below the food poverty line of K367.40 a month (roughly US$14).

Figure 13. Rurality and poverty are almost indistinguishable in Zambia.

Panel (a) Share of rural population (%)



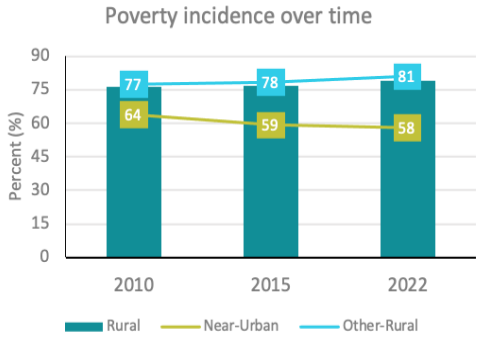
Panel (b) Incidence of rural poverty (%)



Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Poverty headcount is measured at the national poverty line.

41. **But not all rural regions have experienced rising poverty rates.** Rural areas in the highly urbanized provinces of Lusaka and Copperbelt (referred to as near-urban rural) not only stood out with the lowest poverty rates (58 percent) and the lowest number of poor in the country (600,000 people), but they also experienced a decline in poverty incidence from 64 to 58 percent between 2010 and 2022. In contrast, rural areas farther from main urban centers (referred to as other-rural) displayed an astounding poverty rate of 81 percent in 2022, encompassing most of the rural poor, and totaling 8.6 million individuals. This group has slightly deteriorated over time, with poverty levels rising from 77 percent in 2010 to 81 percent in 2022, resulting in an increase of 3 million people in poverty. As a result, the gap between the two regions has doubled, increasing from 14 percentage points in 2010 to 23 percentage points in 2022.[40] Similar messages emerge when analyzing extreme poverty.

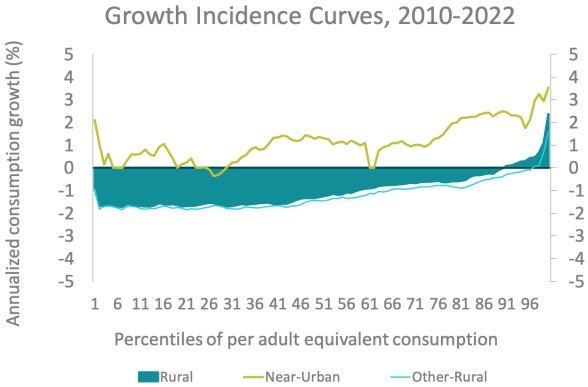
Figure 14. Two distinct subregions in rural areas show opposite poverty trends: a decline near urban centers and an increase elsewhere, causing them to diverge over time.



Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Poverty headcount is measured at the national poverty line. Near-urban include rural areas in the Lusaka and Copperbelt provinces. Other-rural includes rural areas in all other provinces.

42. **Rural areas' heterogeneity is clearly reflected in the distinct consumption patterns of the subregions.** In near-urban rural areas, consumption growth was positive across almost the entire distribution. However, the benefits were limited to the better-off or top 5 percent of households in other-rural areas. The remaining 95 percent of the population in other-rural areas saw consumption fall, and the fall was more significant among the poorest.

Figure 15. Economic growth has impacted consumption differently in rural areas. Consumption has increased near urban centers but decreased elsewhere.



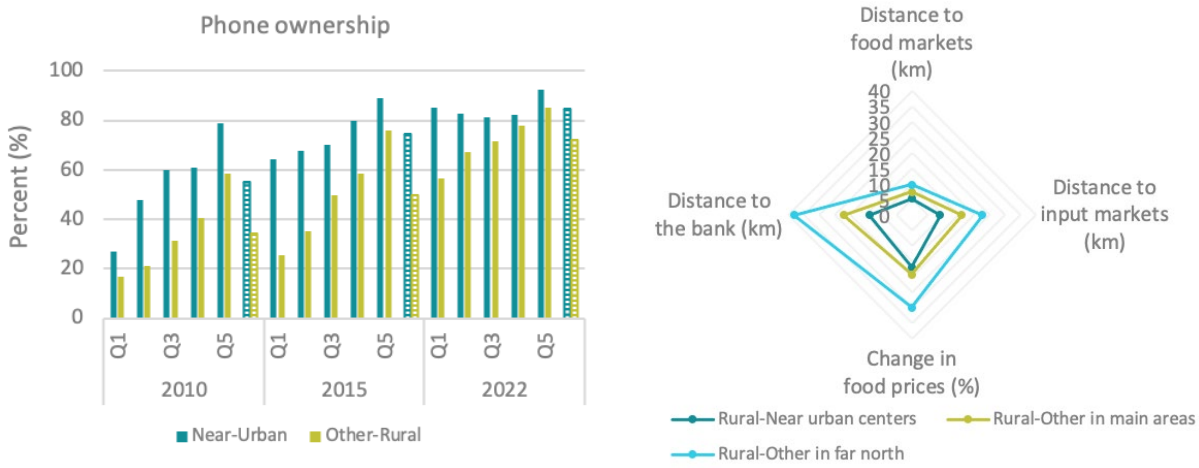
Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: The graphs represent the Growth Incidence Curves (GIC) of rural areas. Near-urban include rural areas in the Lusaka and Copperbelt provinces. Other-rural includes rural areas in all other provinces. Percentiles of per adult equivalent consumption are based on the rural/subregion sample.

[40]Changes across time are not statistically significant, but the difference between subregions is statistically significant. Inequality trends are the same across the two subregions. See Annex 7 for more details.

43. **The two subregions show significant disparities in access to assets, essential services, and markets.** In 2022, a larger proportion of households near urban centers had access to services such as phone ownership, improved water, sanitation, electricity, and education compared to households elsewhere in rural areas. The gap between the two subgroups of households also widens for the most crucial services such as electricity, sanitation, and education. The accessibility rates for both subregions (near-urban versus other-rural) are as follows: Phone ownership (85 versus 72 percent), improved water (71 versus 61 percent), sanitation (49 versus 26 percent), electricity (15 versus 5 percent), and households with members completing secondary education or more (48 versus 34 percent). Within other-rural, there are also marked differences. Rural households in the far north (Northern, Luapula, and Muchinga) are situated at least twice as far from markets (including those for food and inputs) and banks compared to rural households near urban centers. For example, households in the far north have to travel an average of 38 kilometers to reach a bank, 23 kilometers to reach an input market, and 10 kilometers to reach a food market.

44. **Rural areas near urban centers not only have improved service accessibility but also exhibit less inequality among households.** The growth in access to services and assets has been pro-poor near urban centers. However, progress has been more mixed and unequal in other-rural areas. Between 2010 and 2022, the accessibility gap between the richest and poorest households in near-urban areas declined or disappeared. It declined by 10 percentage points for water and education and disappeared for phone ownership. In other-rural areas, although the gap in phone access between the poorest and richest households decreased, it remains close to 30 percentage points. Meanwhile, access to other assets and services increases unequally in favor of richer households, setting other-rural areas farther apart from those near-urban centers.

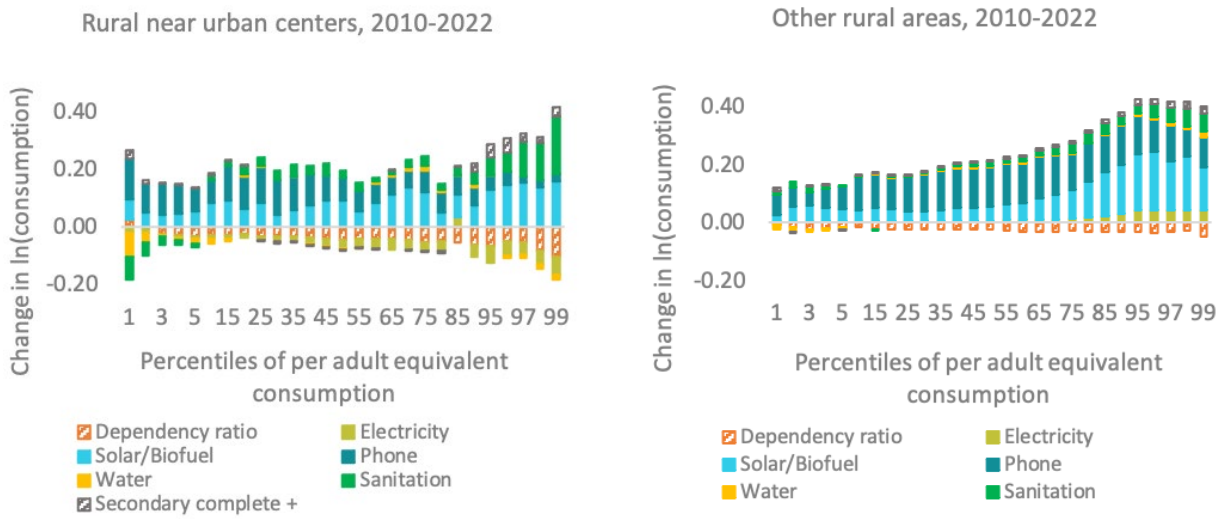
Figure 16. Accessibility to assets and services in near-urban areas has improved in a pro-poor manner. However, aside from phone access, gains in the other-rural areas are slower and more significant in wealthier quintiles.



Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Near-urban areas include rural areas in the Lusaka and Copperbelt provinces. Other-rural includes rural areas in all other provinces. Other-rural is further split into far north and main rural. Far north includes Northern, Luapula, and Muchinga provinces. Main rural include Eastern, Central, Southern, Western, and North-Western provinces. Quintiles of per adult equivalent consumption are based on the rural/subregion sample. Trends in other assets can be found in Annex 7.

45. **Asset accumulation has been a significant driver of consumption growth, particularly in near-urban rural areas from 2010 to 2022.** The increased access to solar and biofuel energy for lighting, phone ownership, sanitation, and education has led to higher household consumption. The substantial increase in solar and biofuel energy is the primary driver, showing that investing in renewable energy sources brings positive returns to households. However, increases in the dependency ratio have a negative impact on consumption, reducing it. The incidence of consumption growth varies by region. In near-urban areas, there is a more uniform asset accumulation, leading to quasi-uniform consumption growth. In other-rural areas, consumption growth slightly increases along the distribution.[41]

Figure 17. Asset accumulation leads to increased consumption growth. While asset accumulation is more uniform in near-urban areas, it increases with the distribution in other-rural areas.

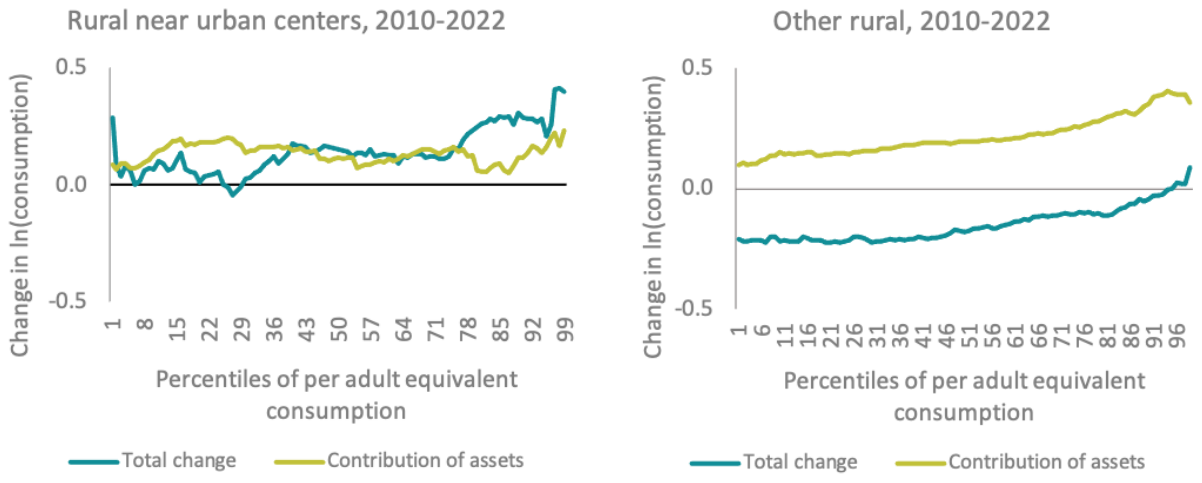


Source: World Bank staff calculations using the LCMS from 2010 and 2022. Notes: Near-urban areas include rural areas in the Lusaka and Copperbelt provinces. Other-rural includes rural areas in all other provinces. Percentiles of per adult equivalent consumption are based on the rural/subregion sample. The figure presents the contribution of each asset to changes in household consumption for the 5th to 95th quantiles (see Annex 4 for details).

46. **Nonetheless, asset accumulation needs the right enabling environment to deliver positive consumption growth.** In other-rural areas, consumption growth has been negative despite progress in asset accumulation. In contrast, in near-urban areas the use and return of assets is associated with positive consumption growth. In fact, asset accumulation seems to explain nearly all consumption growth around the middle of the distribution. This suggests that access to services alone, such as solar/biofuel energy and phones, has limited effects on poverty in isolated areas if it does not lead to economic returns. Potential enabling factors include access to markets or banks.

[41] The decrease in access to electricity, particularly in near-urban areas, is associated with declines in household consumption. This decline in electricity access in rural areas between 2010 and 2022 might be related to significant increases in connection tariffs. ZESCO's charges for wiring houses in low-density areas had increased from K769 to K3,126 according to their Notice to Proceed dated May 1st, 2019.

Figure 18. Increased access to assets and services needs to be accompanied by the right enabling environment to be associated with poverty reduction.



Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Near-urban centers include rural areas in the Lusaka and Copperbelt provinces. Other-rural includes rural areas in all other provinces. Percentiles of per adult equivalent consumption are based on the rural/subregion sample. Results obtained from the application of the RIF model to estimate the contribution of assets and their returns to changes in household consumption (see Annex 4 for details).

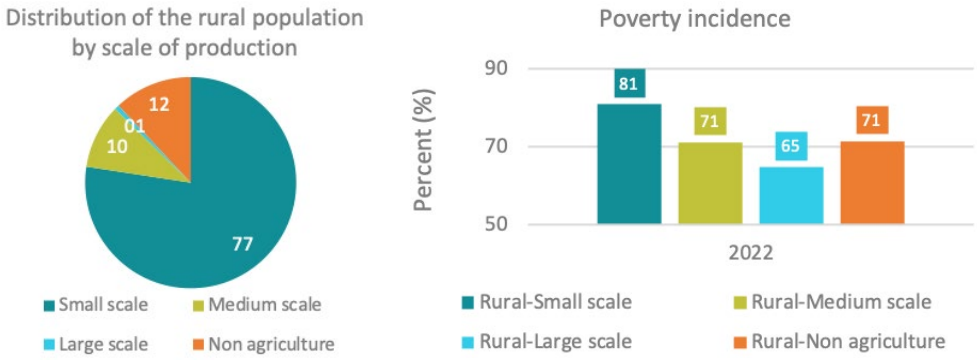
47. **The economic dynamics in rural areas near urban centers differ from those in urban areas or cities due to varying concentrations of economic activities.** In both near-urban areas and urban centers, the primary source of income comes from non-farm businesses, as reported by 53 percent of households in near-urban areas and 58 percent in urban centers. However, the second main source of income in near-urban areas is agriculture, while among urban households it is wage income—each reported by about by one-third of the households (Figure A25 in Annex 7). Furthermore, households relying mainly on wages and non-farm mixed income in near-urban areas are significantly more likely to work in the agricultural sector (43 and 78 percent, respectively, using 2015 data), whereas those in urban centers mainly work in services and industry (Figure A26 in Annex 7). These differences lead to distinct economic dynamics and trends between rural areas near urban centers and urban areas, as will be evident in the next chapter (see Table A13 in Annex 7 for additional details).

(b) Are rural households trapped in small-scale agriculture? Small-scale agriculture keeps households at subsistence levels.

48. **Most rural households are engaged in small-scale agricultural activities, with most of these households living in poverty.** There has been a noticeable decline in the share of small-scale farming households, particularly between 2015 and 2022 across all country regions (Figure A15 in Annex 7). This trend highlights a shift in the agricultural landscape, yet small-scale farmers continue to represent most rural households in the country and have the highest poverty rates. As of 2022, nearly 80 percent of rural households were involved in small-scale farming (on plots smaller than 5 hectares), and 81 percent of these households were classified as poor. Medium-scale (5 to 20 hectares) and large-scale (more than 20 hectares) agricultural households comprise 10 percent of the total agricultural households, with lower poverty rates of 71 percent and 65 percent, respectively. Nonetheless, there are noticeable differences across subregions. Small-scale farmers near urban areas have more than 20 percentage points lower poverty incidence and

display better living conditions than those in other rural regions. They are three times more likely to have electricity access (10 percent versus 3 percent) and twice as likely to have improved sanitation facilities (45 percent versus 23 percent). Additionally, a larger share of small farmers near urban areas receive their main income from non-farm activities (56 percent) than do small farmers in the rest of the rural region (38 percent). On average, small-scale farmers near urban areas produce more maize (1300 kilograms per harvest) than small farmers in the rest of the rural region (1000 kilograms per harvest) (refer to table A12 in Annex 7).

Figure 19. Small-scale agriculture is associated with high poverty rates.

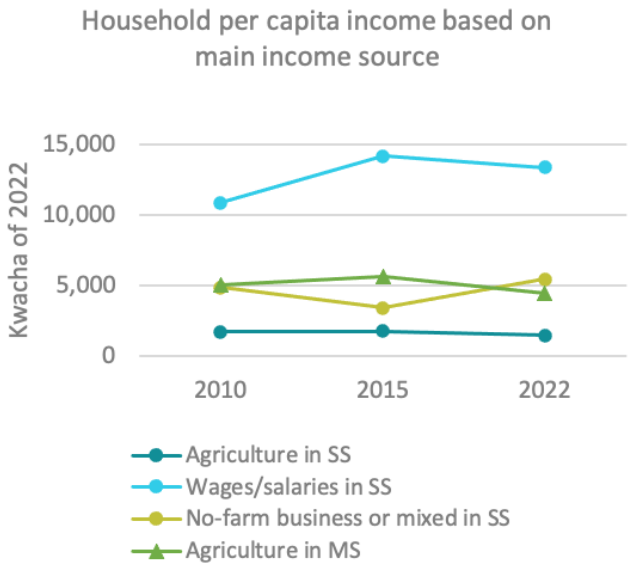


Source: World Bank staff calculations using the LCMS from 2022. Notes: Small-scale, medium-scale, large-scale, and non-agricultural households are the four sampling strata in rural areas. Small-scale agricultural production includes rural households with less than 5 hectares under crop, less than 5 exotic dairy cows, no beef cattle, no exotic pigs, no broilers, and no layers. Medium-scale agricultural production includes rural households with 5 to 20 hectares under crop, 5 to 20 exotic dairy cows, up to 50 beef cattle, up to 10 exotic pigs, up to 6,000 broilers, or up to 1,000 layers. Large-scale agricultural production includes rural households with over 20 hectares under-crop, 20 exotic dairy cows, 50 beef cattle, 10 exotic pigs, over 6,000 broilers, or over 1,000 layers. Non-agricultural includes rural households without area under crop and no livestock or poultry. The survey is not designed to be representative of large-scale agricultural households —they interview everyone they find. Poverty headcount is measured at the national poverty line.

49. **Households engaged in small-scale agriculture reported lower incomes than households in non-farm businesses, wage employment, or medium-scale agriculture.** Most households in rural Zambia rely on agriculture as their main source of income.[42] However, small-scale agricultural activities yield the lowest income. The income from small-scale farming has remained low and stagnant for nearly a decade. It amounts to about one-third of the earnings from non-farming activities or one-ninth of the earnings from wage employment. This pattern is consistent across all rural areas, including those near urban areas, in the far north, and the main rural areas. Additionally, the income from small-scale agricultural activities is significantly lower than that from medium-scale agricultural activities.

[42] The employment sector is defined based on International Labour Organization (ILO) recommendations. Agriculture would, therefore, comprise a larger share of households if it included those who work in agriculture for their own consumption but are considered out of the labor force. See Box 3.

Figure 20. Despite being the main source of livelihood in rural areas, small-scale agriculture is often the lowest paid.



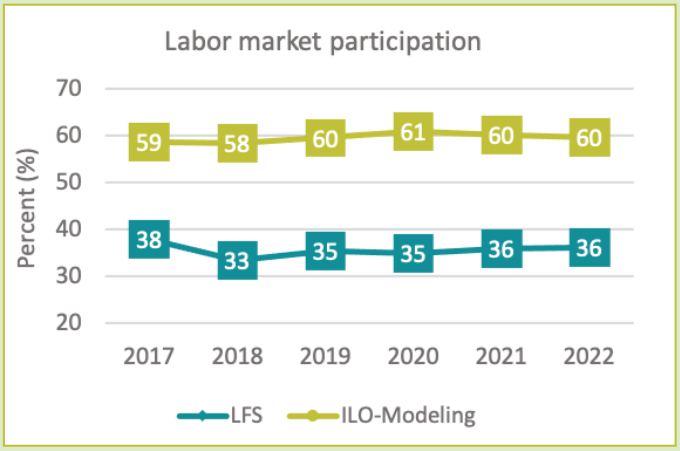
Source: World Bank staff calculations. Income figures from LCMS from 2010, 2015, and 2022.
Notes: The main source of income is the one which accounts for more than 50 percent of total household income. The analysis is robust to increasing this threshold. Mean per capita income includes all sources (agriculture, wages, non-farm, and non-labor income) among households classified into one of the three groups based on the main source of income. SS= small-scale and MS= medium-scale. Income winsorized at the top 1 percent. Income in Kwacha of 2022.

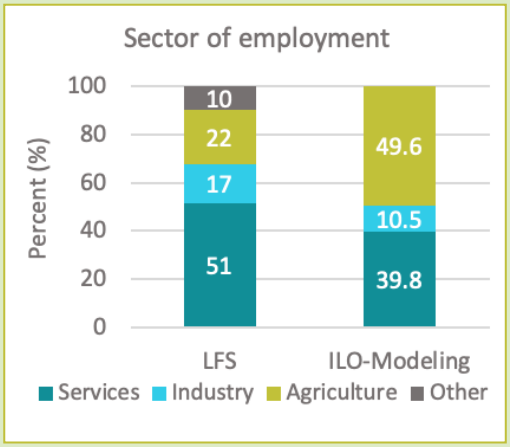
BOX 4. WORK OR EMPLOYMENT IN THE AGRICULTURAL SECTOR?

The agriculture sector is undoubtedly central to the livelihoods of most of the population, but differentiating whether the link is through work or employment is important to understanding the channels. The International Labor Organization (ILO) recommends narrowing the definition of ***employment*** to activities that produce goods or provide services for pay or profit. Meanwhile, ***work*** is defined as any activity individuals perform to produce goods or provide services for others or their own use.

This definition significantly impacts the quantification of households' reliance and participation in agriculture, where many workers are involved in production for their own consumption. Zambia's most recent household surveys (LFS series since 2017 and LCSM 2022) have adopted the ILO recommendation to measure employment. These data are therefore most suitable to analyze labor market activities that generate cash income, which in turn allow for acquiring non-food items such as education and health. If one is interested in understanding the activities that support consumption regardless of whether these generate payment, then the concept of work—which corresponds to the old definition of employment—is most suitable. In order to ensure consistency with historical data and enable long-term analysis, ILO continues to report employment figures based on the old definition, which did not limit employment to activities "for pay or profit" through modeling.

The magnitude of subsistence agriculture is apparent, which in turn has a significant impact on the rates of labor market participation. Close to 50 percent of the labor force would be classified as working in agriculture under the old definition, while only 22 percent are employed in agriculture based on the new definition. Consequently, the labor market participation rate falls from 60 percent under the ILO modeling to 36 percent in the 2022 LFS data. The difference between the data sources may be more significant when focusing on rural areas, where agriculture is the main livelihood source.

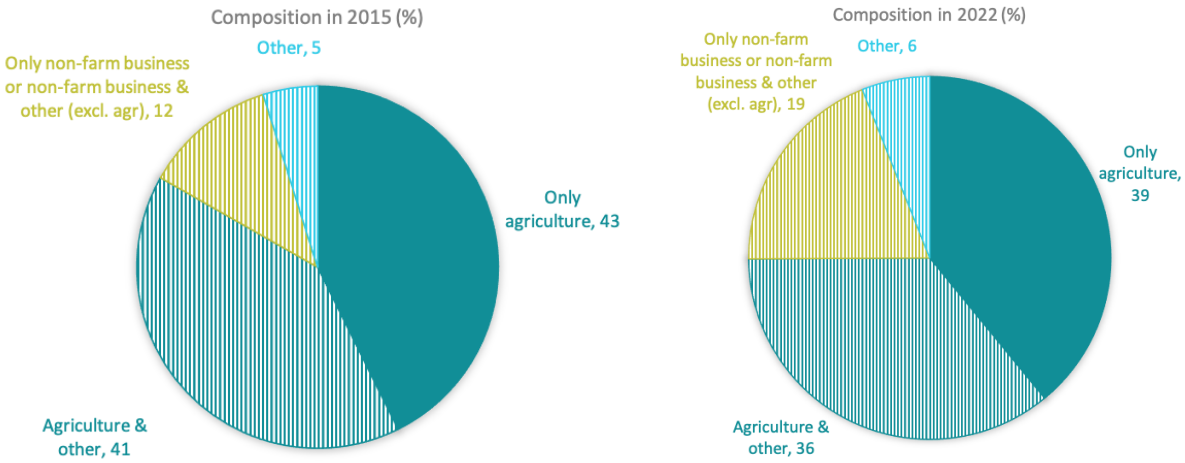




Source: World Bank staff calculations using the LFS from 2017 to 2022 and WDI.

50. **While agriculture remains the primary income source for most households, non-farm income has grown, albeit at a modest pace, despite its higher earning potential.** Between 2010 and 2022, the percentage of households receiving income from agricultural activities declined from 86 percent to 75 percent (Figure 21). Within this group, fewer households now combine agriculture with other activities, with a growing proportion engaged solely in farming, especially among poor households (Figure A27). In contrast, the share of households earning from non-farm activities increased significantly from 6 percent in 2010 to 19 percent in 2022. However, overall participation in non-farm businesses remains relatively low, despite their earnings being, on average, five times higher than those from agricultural activities (Figure A28).

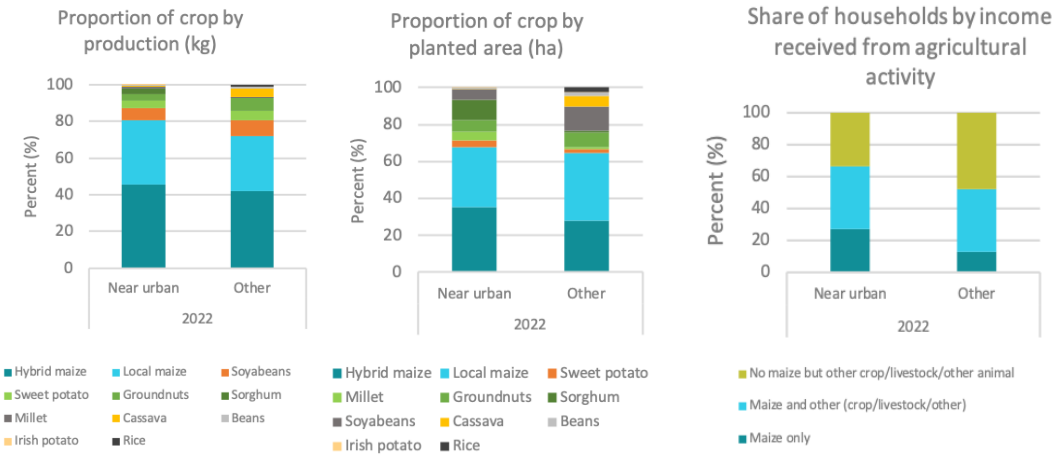
Figure 21. Agriculture remains the main income source, while non-farm earnings grow slowly.



Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: The shares are calculated based on positive reports to any income source, regardless of the amount. The shares are calculated for households with positive income, which has decreased substantially in 2022.

51. **The low returns in agriculture are likely due to the heavy reliance on maize.** Maize is the most significant crop in terms of both production and area planted for these households (Figure 22). Interestingly, the concentration of maize (either kilogram or hectare) is slightly higher in near-urban areas than in other parts of the country. This difference is magnified when looking at the share of households receiving income from maize, suggesting that maize is more profitable in near-urban areas. On average, maize-producing households in near-urban areas produced between 2,000–3,000 kilogram in the last agricultural season, while maize-producing households in other-rural produced on average between 1,500–1,800 kilogram. Conditioned on receiving positive income from maize, the average household produced around 3,000 kilogram in both locations. However, crop yields in the country have been declining since 2014, and agricultural productivity has decreased by approximately 50 percent in the last two decades. Major constraints identified include weather shocks, an excessive focus on maize, and ineffective agricultural policies (WB 2023a).

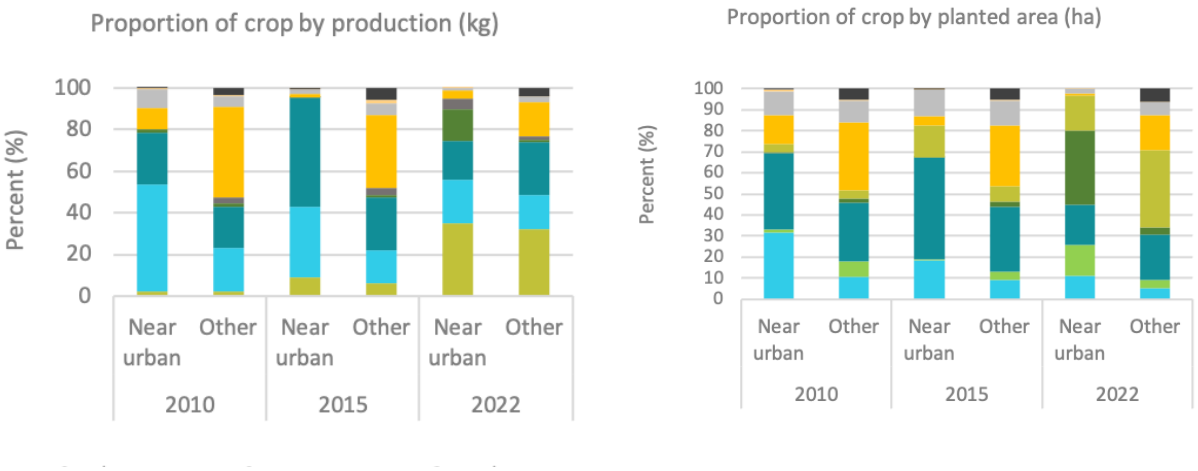
Figure 22. Maize is the primary crop planted and harvested and provides income to more than half of households in agriculture.



Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Sample excludes households classified as non-agricultural.

52. **While maize has historically been the main crop planted and harvested across the country, 20–25 percent of the total volume of agricultural production is comprised of groundnuts, sweet potatoes, soybeans, and cassava.** Cassava's contribution to total production has decreased between 2010 and 2022, but soybean production has significantly increased over the same period (Figure 23). While the increase has been generalized across all rural areas, farmers near urban areas are more likely to combine the production of maize with soybeans, whose kilogram production is reaching similar numbers to maize (refer to Table A16 in Annex 7). Groundnuts and sweet potatoes are also planted in combination with maize, but the volume is half or less of the soybeans. Sorghum has also noticeably increased over time, particularly in near-urban areas.

Figure 23. Sweet potatoes, groundnuts, and cassava have been important crops in agricultural production, alongside maize. Over time, soybean production has become increasingly important.



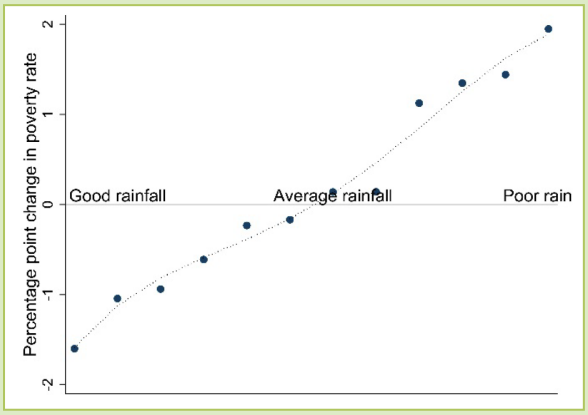
Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Sample excludes households classified as non-agricultural.

BOX 5. DROUGHTS: DRYING UP OPPORTUNITIES FOR POVERTY ALLEVIATION

Zambia has a long history of drought exposure and the situation is only expected to worsen. Since 1985, the most severe occurrences took place in 1991/1992, 2001/2002, 2015/2016, and 2023/2024. The 2024 drought affected 84 out of the 116 districts, leading the government to declare a national disaster. Additionally, the projected increase in average temperatures by 1.9 to 2.3 degrees Celsius (°C) and the anticipated reduction in annual rainfall by up to 3 percent by 2100 are expected to worsen the frequency and intensity of droughts in the country (Alfani et al. 2019; Petrie et al. 2018; Hamududu and Ngoma 2019).

Exposure to droughts in Zambia has had significant social and economic implications, particularly on poverty and food security. The impact of drought on local economies results from entitlement failures triggered by crop loss. A lack of rain leads to failed production, affecting the labor market and commodity prices. Food consumption is more severely impacted than non-food consumption. A recently estimated damage function for five main agroecological zones in Africa found that poverty in Zambia could increase by up to 2 percentage points under the worst weather conditions observed over the period 2000/2001–2019/2020 (Gascoigne et al. 2024). The 1991/1992 drought was estimated to result in a 7.5 percentage point increase in the poverty incidence (Thurlow et al. 2012).

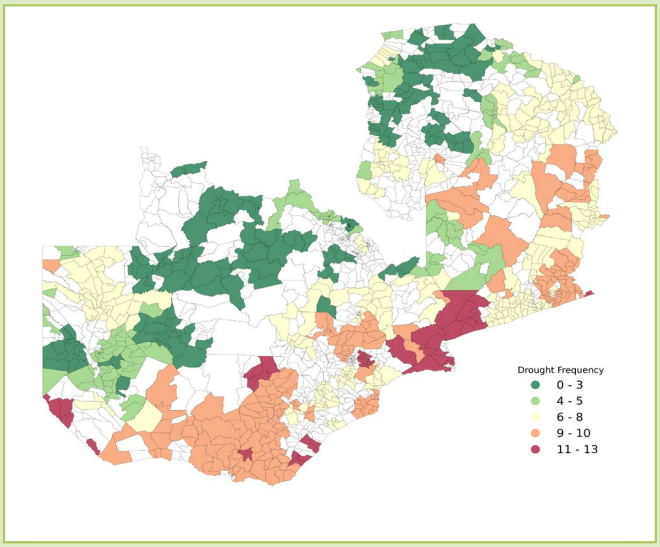
Periods of poor rains, relative to the historical average, are predicted to increase poverty.



Source: Gascoigne et al. (2024). Notes: Zambia Cumulative Distribution Function. Each point shows the poverty rate that would occur were the weather conditions of past years experienced again now, everything else equal. Underlying model estimated at the regional level.

The frequency of drought exposure is also systematically associated with higher poverty incidence. The negative welfare impact of major droughts is relatively well-known, but recurrent exposure to more modest droughts could arguably become a structural barrier to poverty reduction. A ward-level analysis of the correlation between the incidence of poverty and a 25-year-long drought series—controlling for various confounders, including exposure to severe droughts—finds that each additional drought is associated with an increase of about 0.5 percentage points in poverty incidence (Farfan et al. 2024, see Annex 6 for details). This relationship is stronger for the first few droughts and those that occurred in the recent past, but the association remains statistically significant even in the distant past—highlighting the enduring impact of recurrent exposure to droughts on poverty levels.

Drought frequency over 1998-2009



Source: Farfan et al. (2024). Notes: Drought events are calculated based on FAO Agricultural Stress Index data. A ward is allocated a value of 1 if ASI is over 10 percent (i.e., at least 10 percent of cropland area was affected by severe drought in the season). Severe drought is defined as having a Vegetation Health Index (VHI) below 40. For more details see Annex 6.

The ward-level analysis suggests that access to finance and alternative sources of income are important mediators on the impact of droughts on poverty. The adoption of smart agricultural practices, livelihood diversification, and natural capital have been found to be important mitigating factors.[44] Having alternative sources of income—proxied by the presence of mopane trees and the vicinity to large-scale farms as a source of wage employment—mitigates the impact. Cattle are a source of wealth, but they do not provide a smoothing mechanism for consumption because they are either directly affected by the drought or are not available due to commercialization restrictions. Access to finance becomes increasingly important as the frequency of drought exposure increases. The last two points suggest informal ways to smooth consumption work when shocks are sporadic, but systems/institutions are needed when shocks become recurrent.

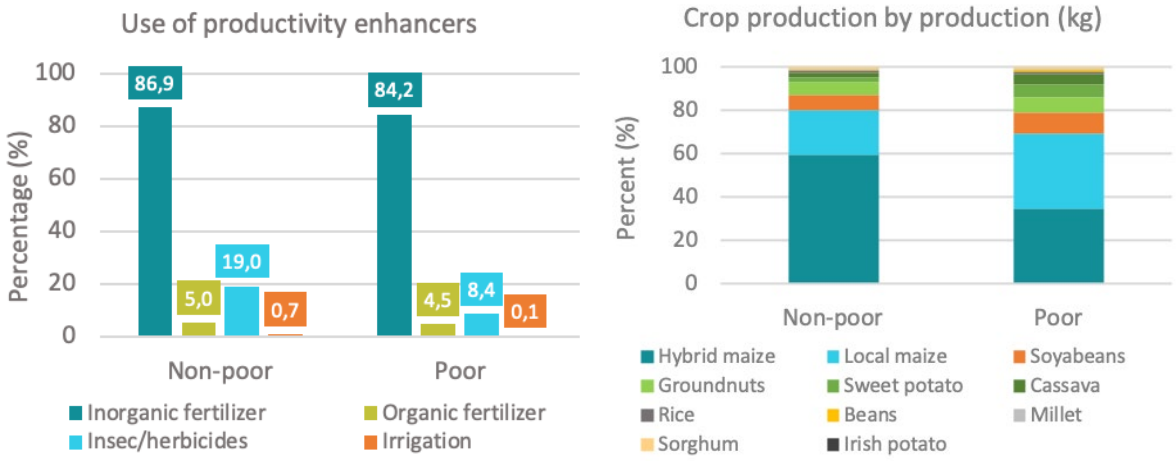
As we look ahead to the mid-century, the impacts of climate change are expected to have increasingly negative effects on the country. A recent study by Ngoma et al. (2021) predicts a 3–4 percentage point reduction in rainfall by 2050, particularly in the southern and western regions. Additionally, temperatures are projected to rise by 1.82°C, surpassing the 1.50°C threshold. This climate change is poised to negatively impact crop production, notably maize and wheat, which are vital for Zambia's food security. The Southern region, accounting for 19 percent of maize production, will be significantly affected. Conversely, the Northern and Eastern regions are expected to experience the least impact on crop yields, including cotton, root crops, and tobacco. Addressing this, there's a pressing need for drought and heat-tolerant crops, enhanced investment in small-scale irrigation, and crop diversification in less affected areas, like the North. Supporting small-scale farmers through research and extension services focused on resilient crops is also critical.

[44] Ngoma et al. (2023) and Amondo et al. (2019) document the role of minimum tillage, inorganic fertilizer, hybrid maize seed, and drought-tolerant maize varieties. Alfani et al. (2019), Arslan et al. (2017), and Chinabayashi et al. (2020) document the role of livestock, agroforestry, and off-farm employment. Makhado et al. (2012) document the role of Mopane trees.

(c) Is there hope within the agricultural sector? Transitioning from small-scale to medium-scale farming signals better performance than abandoning the agricultural sector, while wage employment in agriculture offers a competitive alternative to non-farm options.

53. **Not all agricultural households live in poverty, especially those diversifying their activities.** Twenty percent of households in agriculture are well-off or non-poor and produce various crops, usually at a medium or large scale. They grow hybrid maize, groundnuts, and sweet potatoes, and raise livestock such as cattle, chickens, and goats. They use fertilizers, insecticides, herbicides, and irrigation systems more frequently.[45] Regarding assets and endowments, they are more likely to have access to energy and higher levels of education (54 percent of non-poor households have members with complete secondary education compared to only 30 percent of the poor), and as such they are more engaged in wage employment (24 percent) than poor households (4 percent) and earn up to five times more in any economic activity (see Annex 7 for more characteristics and production systems of the non-poor).

Figure 24. Non-poor households use more fertilizers, herbicides, and irrigation systems and are more likely to plant hybrid maize and groundnuts than poor farmers.



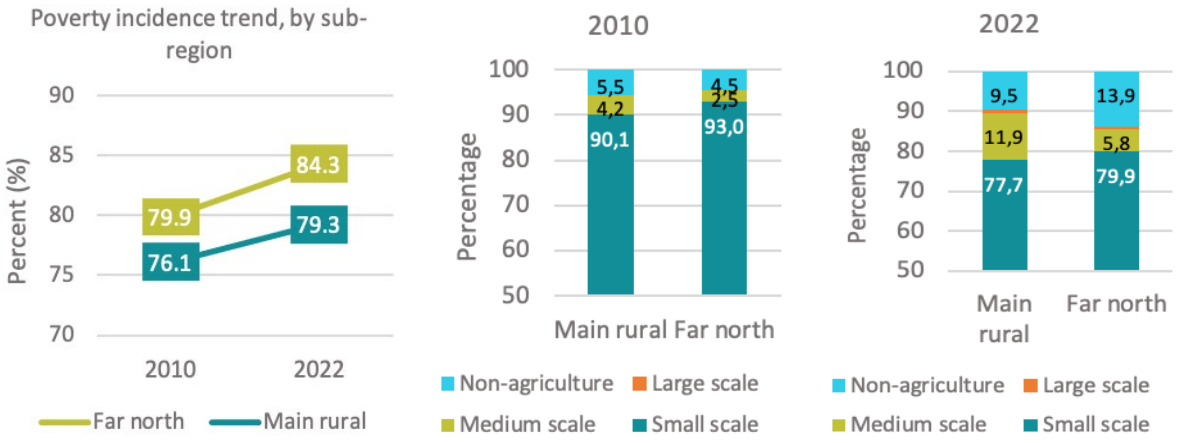
Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: The sample excludes households classified as non-agricultural.

54. **Similarly, rural households that transition from small-scale to medium-scale farming are better off than those shifting to non-agricultural activities.** Between 2010 and 2022, there has been a general decline in the percentage of households engaged in small-scale agriculture, accompanied with a similar increase in those involved in medium-scale farming (6.3 percentage points) vis-à-vis those outside of agriculture (5.8 percentage points). However, over time, non-poor households are more likely to engage in medium-scale farming than non-agricultural activities, suggesting that well-paid non-agricultural activities in rural areas are scarce. Instead, they may be associated with low-skilled and low-paid work.

[45] Differences in scale of production and use of insect/herbicides between non-poor and poor households are statistically significant but differences in use of fertilizers and irrigation systems are not statistically significant.

55. **Additionally, rural areas in the far north have transitioned from small-scale agriculture to non-agricultural activities over the past decade. This shift is associated with a higher poverty rate than the average rural region, where medium-scale farming has expanded.** Except for rural areas near the urban centers of Lusaka and Copperbelt, rural poverty rates increased in the last decade. In the far north, where non-agricultural businesses grew more, poverty increased from 79 percent to 84 percent, while in the rural mainland, with more medium-scale farms, poverty increased less, from 76 percent to 79 percent. Furthermore, the poverty gap between both subregions widened as they followed different paths when replacing small-scale agriculture.

Figure 25. Shifting from small-scale to medium-scale farming is correlated with a smaller increase in the incidence of poverty.

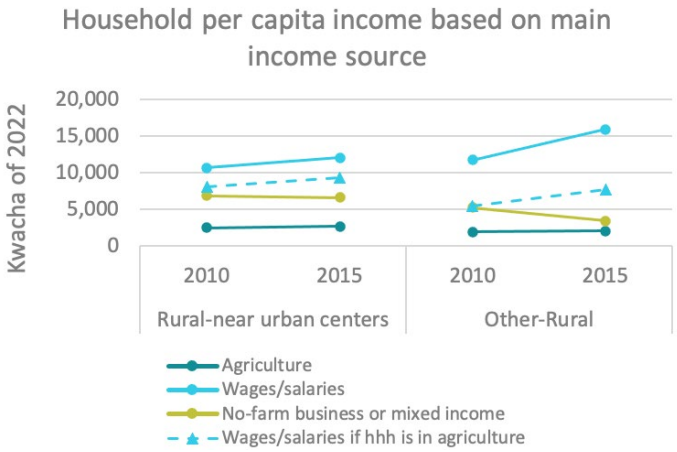


Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Poverty headcount is measured at the national poverty line.

56. **Wage employment in agriculture offers a promising option for poverty reduction.** Working for wages within the agricultural sector is comparable to being engaged in non-farm businesses. More specifically, households that receive most of their income from wages and have a household head in agriculture earn equal or more than households that receive most of their income from non-farm businesses. In 2015, it offered 1.5 to 2.5 times higher income than non-farm businesses in rural areas and was associated with slightly lower poverty rates (72 percent versus 74 percent observed in non-farm activities). Promoting commercial agriculture with wage opportunities could be particularly beneficial in rural areas, especially for female household heads who are mainly engaged in low-income practices.[46]

[46] The data does not allow estimating wage income by sector, so the sector of employment of the household head is used as a proxy. Sector of employment is not available in 2022, therefore this analysis only relies on 2010 and 2015 data.

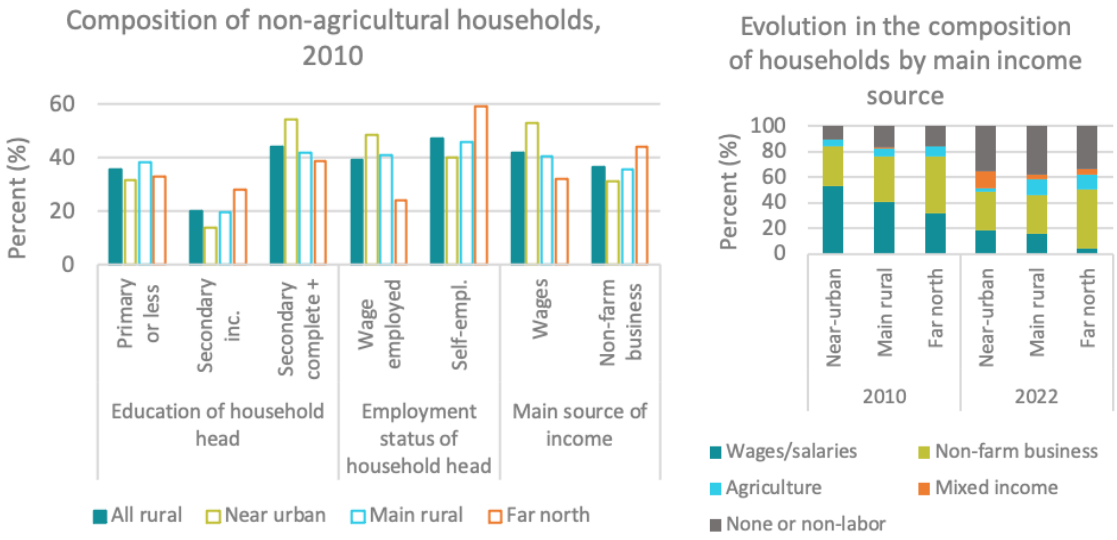
Figure 26. Wage employment in agriculture provides higher earnings compared to the average non-farm business.



Source: World Bank staff calculations. Income figures from LCMS from 2010, 2015, and 2022. Notes: The main source of income is that which accounts for more than 50 percent of total household income. The analysis is robust to increasing this threshold. Mean per capita income includes all sources (agriculture, wages, non-farm, and non-labor income) among households classified into one of the three groups based on the main source of income. Income was winsorized at the top 1 percent. Income in Kwacha of 2022.

57. **Non-agricultural households are increasingly comprised of low-skilled self-employed households, signaling the limited availability of quality off-farm employment.** Non-agricultural households in rural areas are of two contrasting types: those with high-skilled individuals in paid jobs, and those with low-skilled self-employed individuals in off-farm businesses. Wage-paid non-farm activities are mainly found near urban centers, whereas self-employment is more prominent in the far north, and the mainland is in-between. The trend, however, shows declining wage employment and increasing subsistence employment. This is why non-agricultural households in rural areas are not always better off than households engaged in medium-scale agriculture.

Figure 27. The composition of non-agricultural households is shifting towards increased reliance on self-employment and subsistence activities.



Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022.

BOX 6. IS AGRICULTURE BECOMING MORE URBANIZED?

Urban residents in Zambia have been increasingly acquiring medium-scale farms, particularly in the past decade. According to Jayne et al. (2016), medium-scale farmers now use more land for crops and pastures than small-scale farmers in most African countries, including Zambia. The rise in medium-scale farms is associated with urban residents purchasing larger plots of land over time. These urban landowners, typically individuals over 40 years old with above-average wealth, use savings from non-farm businesses to buy land. They are often wage employees, some of whom work for the government. Additionally, rural elites in Zambia have also expanded their ownership of medium-scale farms, although to a lesser extent than urban landholders. The government's negotiations with traditional authorities under the current customary land tenure system have facilitated private individuals' acquisition of land.

Agricultural Landholding Distribution Patterns

Agricultural landholding distribution patterns (Demograhpic and Health Surveys, various years)

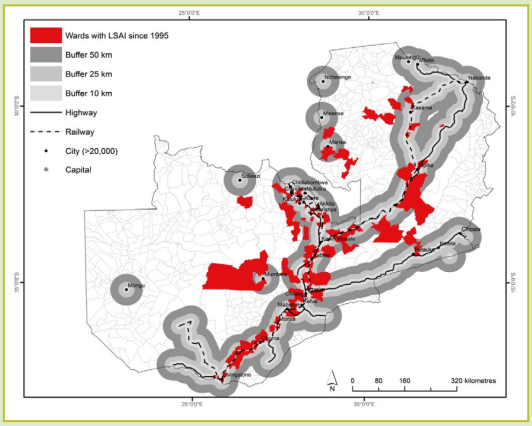
	Ghana		Kenya		Malawi*		Tanzania		Zambia*	
	2008	2014	2009	2014	2004	2010	2005	2010	2007	2014
n =households	11,777	11,835	9,057	36,430	13,664	24,825	9,735	9,623	7,164	15,920
% of urban HHs owing agricultural land	23.4	21.9	35.3	47.7	31.4	38.6	41.7	37.9	27.4	24.8
% of rural HHs owing agricultural land	66.7	58.7	78.1	79.2	86.6	87.4	92.3	87.4	88.3	88.1
% of HHs (nationally) owing agricultural land	46.0	38.5	67.0	66.0	77.4	79.3	79.0	74.5	67.2	61.7
% of national landholdings held by urban HHs	26.8	31.9	22.0	32.1	3.0	6.5	11.8	32.7	16.8	22.0
% of landholdings of 20 ha or more held by urban HH	36.9	42.7	34.3	41.2	1.2	7.6	17.2	78.9	21.7	29.3

*For Zambia, Malawi, and Kenya, landholdings over 95 hectares were reclassified as 95 hectares in the DHS data. For Ghana, landholdings over 38 hectares re represented in the DHS data as 38 hectares. These caps on the reported landholding size may result in underestimates of the land controlled by urban households.
Source : Demographic and Health Surveys

Source: Jayne et al. (2016)

The growth of urban landholders coincides with the concentration of large-scale agricultural investments (LSAI) along the central corridor. This corridor is a densely populated area with access to markets, transport, job agglomeration, and high crop potential (Merotto 2017). In fact, about 50 percent of the paid work in agriculture is concentrated in Lusaka, Copperbelt, and Central provinces. Within these three provinces, 27 to 34 percent of the wage employment in agriculture comes from urban households (see Figures in Annex 7).

Map of Large-Scale Agricultural Investments (LSAI)



Source: Lay et al. (2018)

It is essential to establish policies that actively support a business-friendly environment for private sector investment in land for productive purposes. This must be expanded to include poorer areas outside the main job centers in Lusaka and Copperbelt to create paid employment opportunities in agriculture and attract investment from wealthier urban landowners. This includes promoting exports and actively attracting FDI, which has experienced a decline across all sectors, dropping from around 6 percent of the GDP in 2014 to zero in 2022.

CHAPTER 3

Could growth in urban areas become more inclusive to accelerate poverty reduction?

Urban areas mask two contrasting realities. Urban Lusaka is an inclusive and resilient region with pro-poor growth, while other urban areas are less inclusive. During the latest positive growth period, Lusaka exhibited stronger poverty reduction as growth benefited the low-skilled population. In other urban areas, poverty changes were entirely driven by skilled households. During the subsequent period of negative consumption growth, Lusaka experienced a smaller increase in poverty. Strong pro-poor asset accumulation—especially electricity and phone ownership—helped cushion the shock. In contrast, the contribution of assets in other urban areas was limited. Poor labor market performance before the crisis suggests that urban poverty was already rising outside Lusaka, and that current poverty levels are the result of structural factors. Declining returns to secondary education, particularly larger outside Lusaka, further highlight the labor market downturn in these areas.

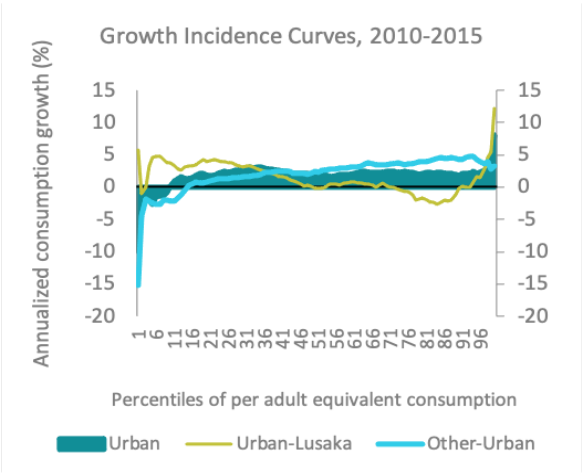
(a) Can urban growth be pro-poor? The lack of inclusive growth is driven by urban areas outside Lusaka.

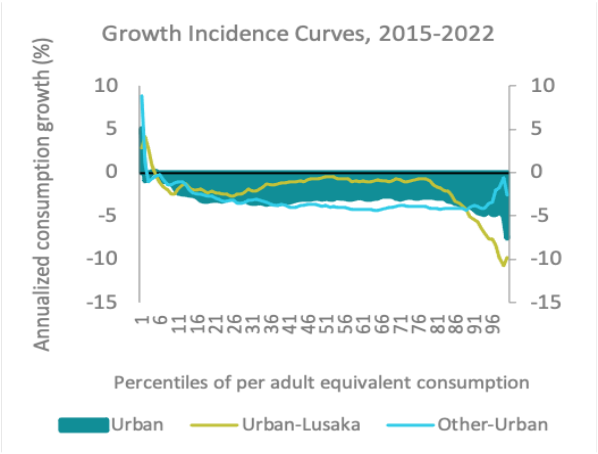
58. **The average urban trends mask two distinct realities: an inclusive and more resilient urban Lusaka versus a pro-rich and hard-hit rest of urban areas.** During the 2010–2015 growth period, the incidence of growth in urban Lusaka was pro-poor. Consumption grew on average 3.3 percent among the bottom 40 percent of the welfare distribution; 0.2 percent among the mid-40; and 0.5 percent among the top 20. In contrast, the respective growth rates in areas outside Lusaka (other-urban) were -0.1 percent, 3 percent, and 4.2 percent.[47] In the following subperiod (2015–2022), consumption growth was negative throughout almost the whole distribution. However, compared to the rest, the fall in Lusaka was smaller in the middle of the distribution and bigger at the top.

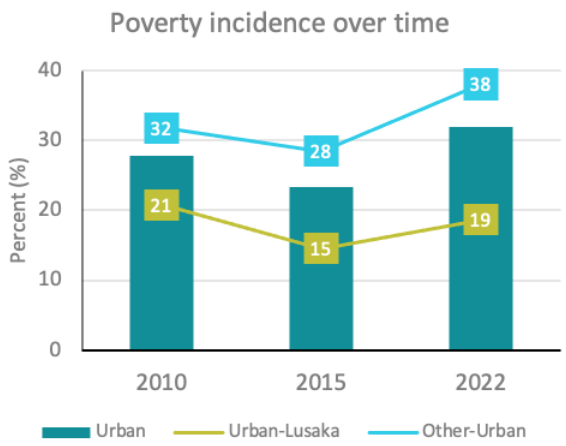
59. **Urban Lusaka experienced a greater poverty decline in 2010–2015 and a smaller increase in 2015–2022 than other urban areas. The recent decline in inequality, in turn, is exclusive to urban Lusaka.** As expected, the incidence of poverty is lower in urban Lusaka than in the rest of the country. But this difference almost doubled during the period of study. In 2010, the poverty incidence in other-urban was 11 percentage points higher. In 2022, the difference grew to 19 percentage points. During the latest subperiod, the incidence of poverty in other-urban increased by 9.6 percentage points, while in urban Lusaka it grew by 4.1 percentage points. Extreme poverty trends follow the same patterns. Altogether, between 2010 and 2022, the incidence of extreme poverty declined by 1.3 percentage points in urban Lusaka, while it increased by 5.5 percentage points in other-urban. The difference in the incidence of growth also manifests in different inequality trends. The Gini index fell by 10 points in urban Lusaka and remained constant in other-urban.[48]

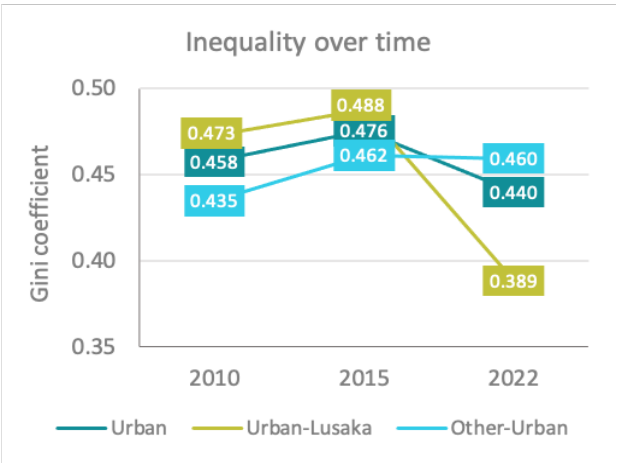
[47] Within other-urban, differences between Copperbelt and the rest of the urban areas will be highlighted when relevant.
[48] The drop in urban Lusaka is robust to winsorizing the top 1 percent of the distribution. In other urban areas, the Gini index falls by 1 point instead of remaining constant.

Figure 28. Consumption patterns reveal two contrasting urban realities: a more inclusive and resilient urban Lusaka, and a less inclusive rest of urban areas.









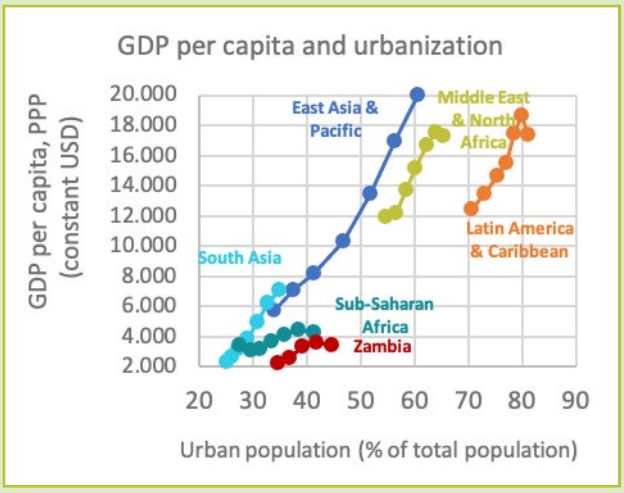
Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Poverty headcount measured at the national poverty line. Urban Lusaka includes urban areas in the Lusaka province. Other-urban includes urban areas in all other provinces. Percentiles of per adult equivalent consumption are based on the urban/subregion sample.

BOX 7. REVISITING URBANIZATION

Zambia's urban areas could be pivotal in reducing poverty due to their role as hubs of economic activity, including industry and wage employment. In fact, past poverty reduction has been exclusively concentrated in urban areas. However, Zambia's GDP per capita is well below the regional average given the level of urbanization suggesting that urbanization is not paying off (WB 2022).

The recent urbanization review (WB 2022) noted that urban growth was particularly notable on the outskirts of cities, where urbanization led to underserviced and tenure-insecure informal settlements, severe environmental degradation, increased disaster risk, and leapfrog development. This expansion, coupled with the predominance of urban employment in the informal sector and in low-productivity service jobs, limits the economic opportunities typically associated with the agglomeration of people and markets.

To enhance cities' contributions to poverty reduction and economic growth, the report identifies a number of reforms in land use planning, land management practices, and city financing to improve tenure security and address informality. Additionally, the report emphasizes promoting economic development by focusing on investments in basic public services and infrastructure in prioritized growth poles, anchored on each urban center's economic role, to foster economic transformation and enhance competitiveness (WB 2022).



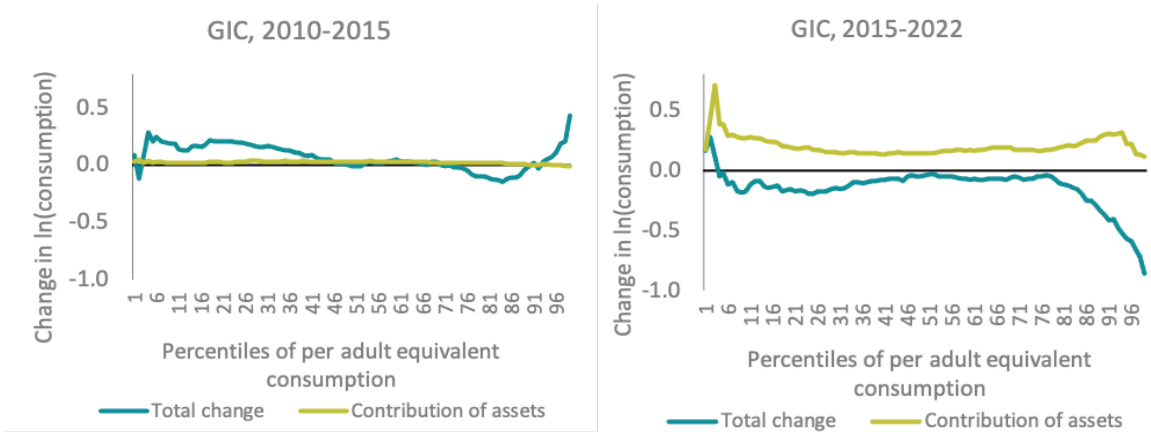
Source: WDI. Notes: GDP per capita and urban population trend from 1990 to 2000.

(b) How has asset accumulation shaped the incidence of growth? Asset accumulation is a positive driver of consumption growth, but it is not the whole story.

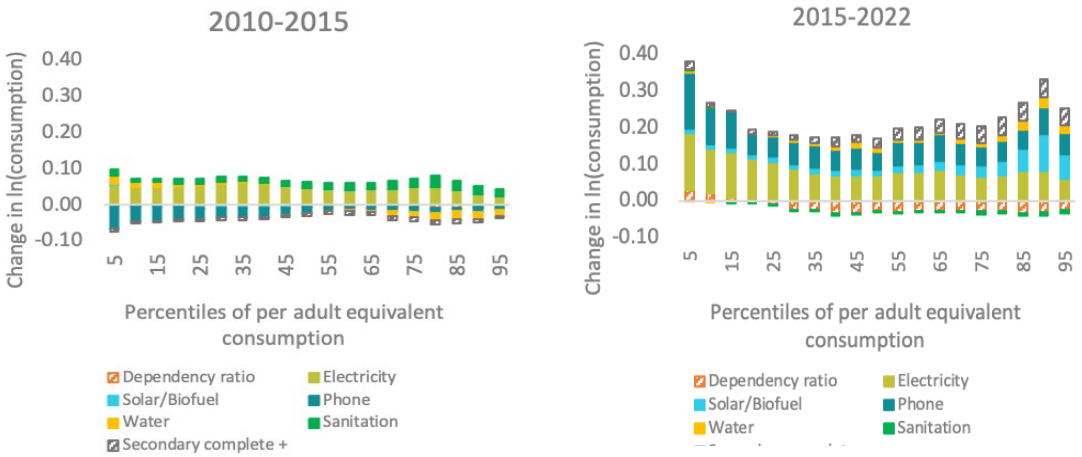
60. **Asset accumulation in urban Lusaka did not play any role during the positive growth period, but it provided a significant cushion to the generalized falling consumption in 2015–2022**. During the first subperiod of analysis, there were not significant changes in asset ownership. Access to electricity and sanitation increased across the distribution but this was counterbalanced by declining phone ownership.[49] The magnitude and the shape of the growth incidence curve were therefore determined by the returns to those assets. During the second subperiod, however, there were noticeable improvements that disproportionally benefited those at the bottom of the distribution. The gap in electricity use (phone ownership) between the bottom and top quintiles dropped from 55 percentage points (29 percentage points) in 2015 to 19 percentage points (6 percentage points) in 2022. These two assets explain most of the asset contribution to consumption growth over 2015–2022. The increase in maximum education attainment also contributed to positive consumption growth, especially among the top third of the distribution.

Figure 29. Urban Lusaka: The rapid expansion of electricity access and phone ownership between 2015–2022 was a major driver of the pro-poor changes in household consumption.

Growth Incidence Curve

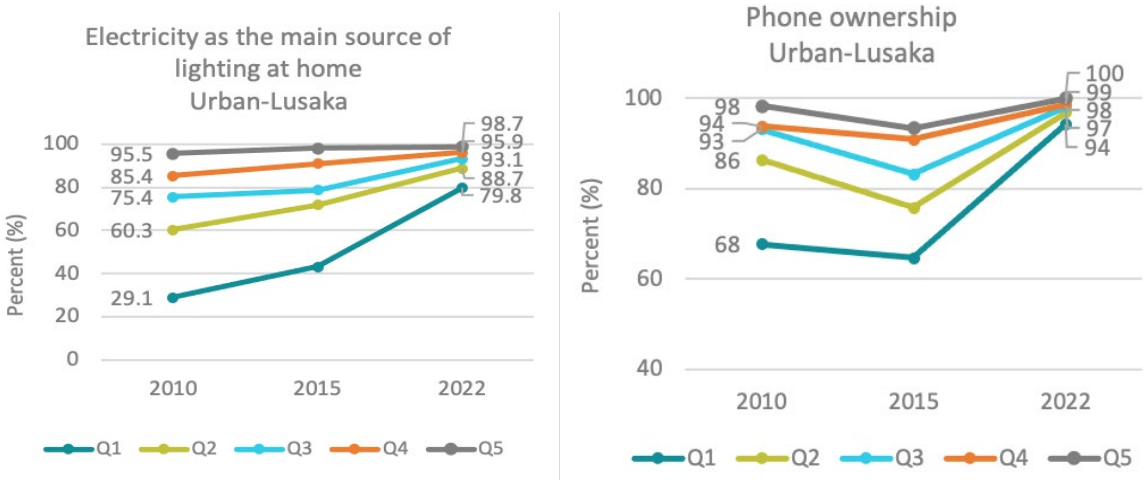


Decomposition of the contribution of assets to changes in household consumption



[49] Some deterioration was also recorded in access to improved water, but baseline levels are very high (above 90 percent).

Evolution of access to services by quintile

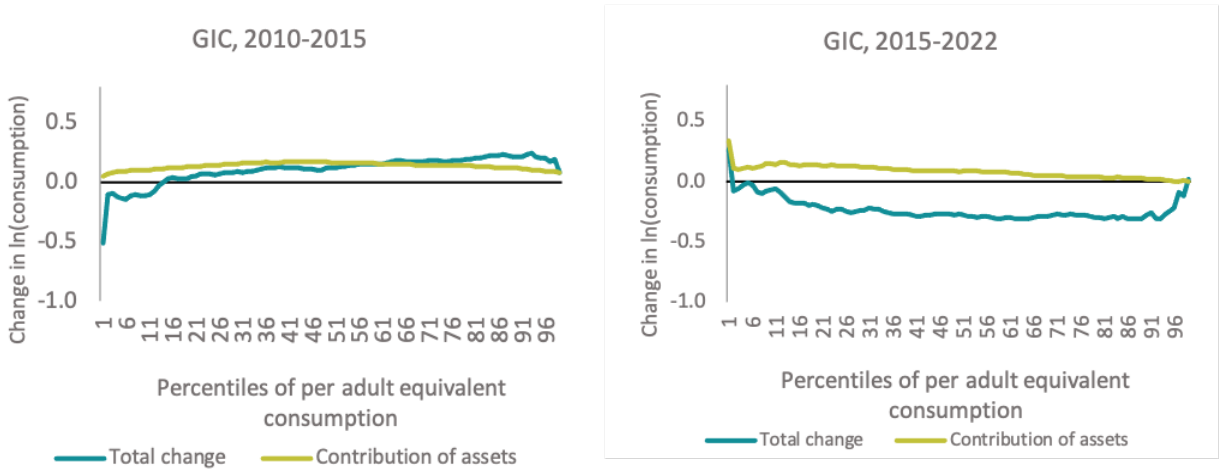


Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Urban-Lusaka includes urban areas in Lusaka Province. Percentiles of per adult equivalent consumption based on the urban/subregion sample. The figure presents the contribution of assets to changes in household consumption for the 5th to 95th quantiles. Results obtained from the application of the RIF model to estimate the contribution of assets and their returns to changes in household consumption (see Annex 4 for details).

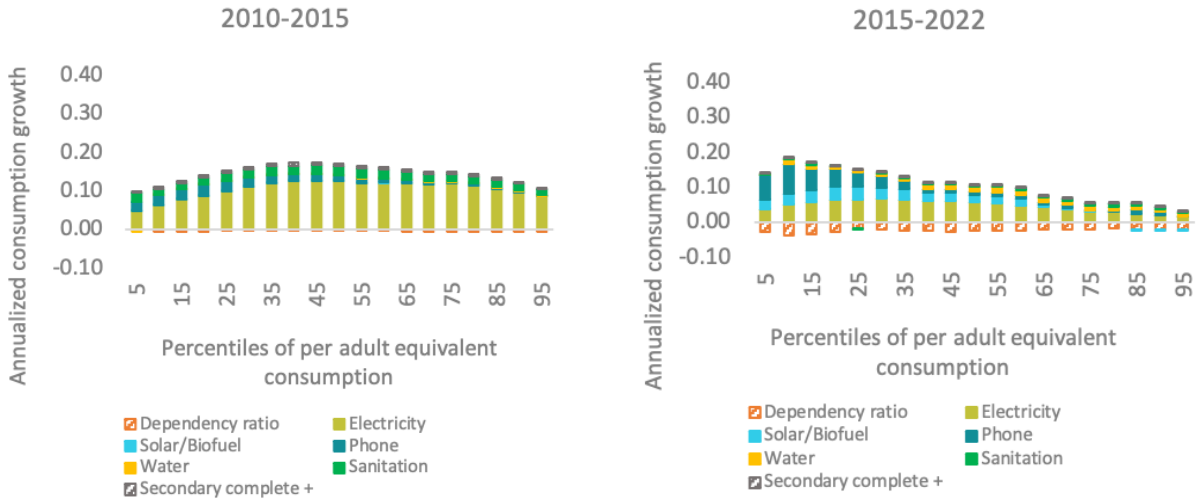
61. **Conversely, the contribution of asset accumulation to consumption growth in other urban areas helped balance the pro-rich growth during 2010–2015 but did little to cushion the fall during the second subperiod.** Except for the top quintile, urban households in other-urban hold significantly lower levels of assets, and by 2022, substantial gaps remain between poorer and richer households. However, progress in electricity use and phone ownership has been substantial during both subperiods. The incidence of these two assets among households in quintiles 1 to 4 experienced between 20 and 40 percentage point increases between 2010 and 2022. Improved access to electricity dominates the asset contribution to consumption growth over 2010–2015, and it is similar in order of magnitude to the total consumption growth change at the middle of the distribution. In the second subperiod, asset accumulation buffered a little bit of the shock in the lower quintile, and consumption growth is explained equally by electricity and phone ownership. For higher quintiles, however, the contribution of assets to consumption growth is minimal.

Figure 30. Urban Other: Electricity dominated the contribution of assets to consumption growth over the first subperiod. Asset accumulation played a limited role in the second subperiod.

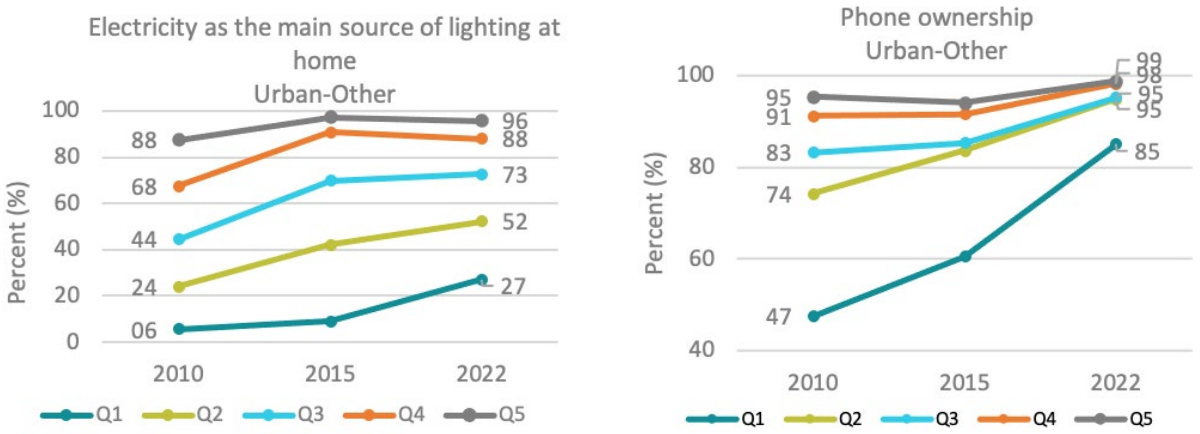
Growth Incidence Curve



Decomposition of the contribution of assets to changes in household consumption



Evolution of access to services by quintile

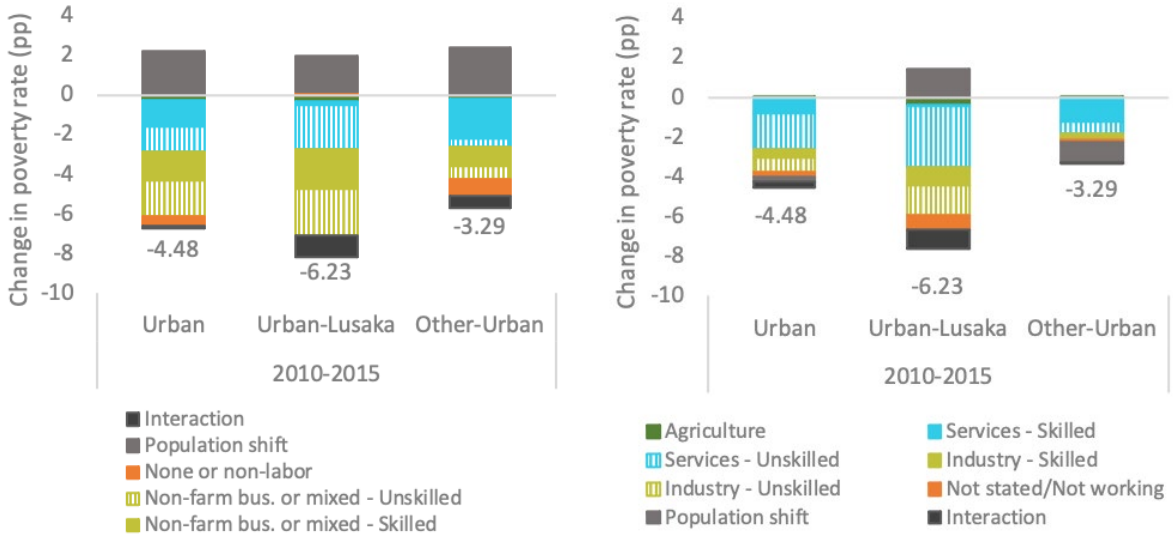


Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022. Notes: Other-urban includes urban areas in provinces different from Lusaka. Percentiles of per adult equivalent consumption based on the urban/subregion sample. The figure presents the contribution of assets to changes in household consumption for the 5th to 95th quantiles. Results obtained from the application of the RIF model to estimate the contribution of assets and their returns to changes in household consumption (see Annex 4 for details).

62. Urban Lusaka exhibited inclusive growth without asset accumulation because growth reached the low-skilled. A decomposition of poverty changes over time shows that during 2010–2015 there was a generalized decline in poverty across all groups of households based on their main income source or sector of employment. However, there was a noticeable difference between urban-Lusaka and other-urban in the extent to which poverty reduction reached low-skilled households.

When splitting the decomposition based on the main source of household income, Lusaka shows a fairly similar contribution from low-skilled households that perceive most income from wages, low-skilled households that obtain most income from non-farm business or mixed sources, and skilled households from both groups (roughly a third each). In other-urban, in contrast, the contribution to poverty reduction of skilled households is 2.7 times that of the low-skilled combined. Particularly visible is the flip in the wage group across the two regions. In other-urban, only skilled households earning from wages contributed to poverty reduction. A similar message arises if groups are split based on the household head's employment sector. In urban Lusaka, households with a low-skilled head employed in the services sector accounted for roughly 50 percent of the poverty reduction, and another 25 percent comprises households with a low-skilled head in the industry sector. In other-urban, the contribution of the low-skilled is minimal.

Figure 31. Poverty reduction among the low-skilled accounts for the more pro-poor consumption growth in urban Lusaka from 2010 to 2015 relative to other-urban areas.

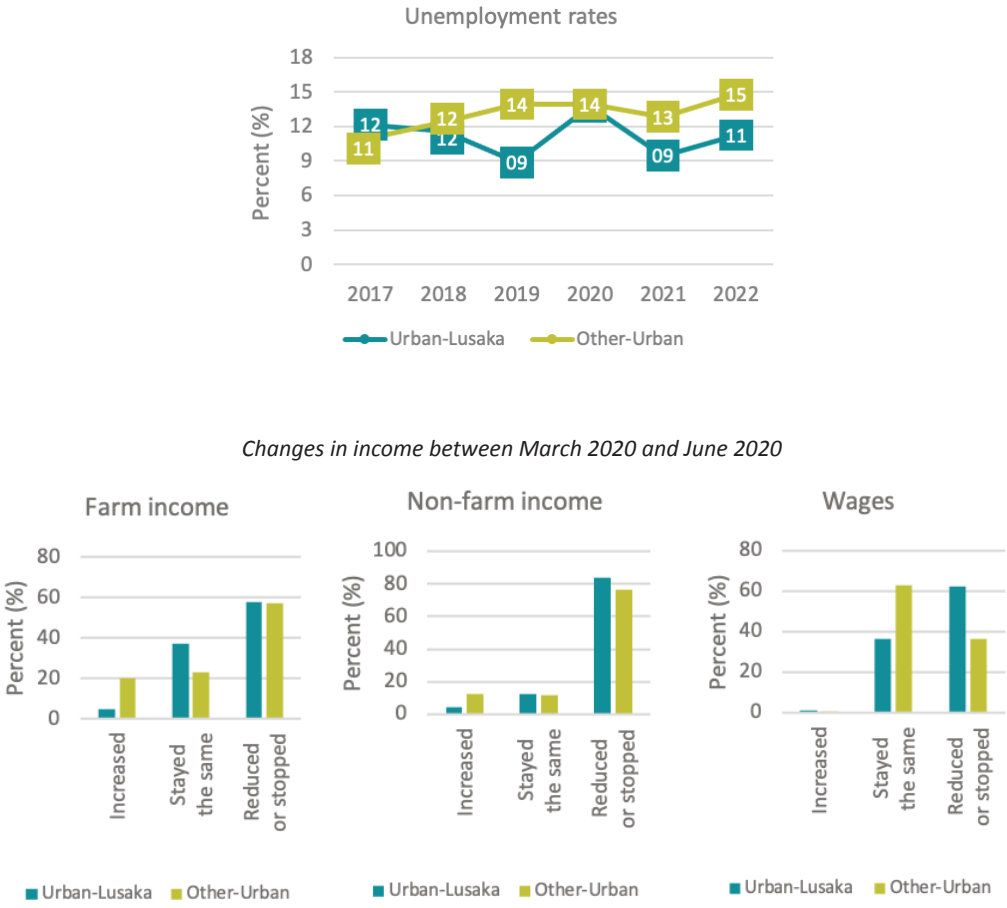


Source: World Bank staff calculations using the LCMS from 2010, 2015, and 2022.
Notes: Results obtained following the Ravallion and Huppi (1991) decomposition of changes in poverty over time into intra-group effects, a component due to population shifts across groups, and an interaction (see Appendix E for details). A positive (negative) value means poverty increase (reduction). Panel (a): "Agriculture" includes households receiving more than 50 percent of their income from agricultural activities. "Wages" includes households receiving more than 50 percent of their income from wages/salaries. "Non-farm business or mixed-income" includes households receiving more than 50 percent of their income from non-farm business activities or receiving different sources of income without a main income source. "None or non-labor" includes households receiving zero labor income or report receiving non-labor income only. "Skilled" includes households where the maximum education level reached by household members is secondary or more. "Low-skilled" includes households where the maximum education level reached by household members is primary or less. Panel (b): Households sector based on the household head sector of employment. Skill level is defined based on the maximum education level reached by the household head (see Annex 5 for details).

(c) Is the recent spike in poverty structural? Urban poverty was likely increasing before the crises due to long-standing poor labor market outcomes in other-urban.

63. **Unemployment was progressively deteriorating in other-urban before the 2019–2020 crises and continued to do so, while Lusaka experienced a spike in 2020**. The national urban unemployment trend—i.e., sharp increase in 2020, recovery in 2021, and rebound in 2022—reflects the dynamics observed in Lusaka. This result is consistent with the evidence from the High-Frequency Phone Survey implemented in June 2020 which suggests that the 2020 crisis was felt more strongly in Lusaka.[50] Households in urban Lusaka were more likely than households in other-urban areas to report that their income was reduced or stayed the same relative to March 2020. This difference is particularly large for wage income. In other-urban, however, unemployment was already on the rise. The unemployment rate increased from 11 percent in 2017 to 14 percent in 2019, and other than a small drop in 2021, it continued on a slight upward trend through 2022. All in all, the unemployment rate increased by 3.9 percentage points in other-urban and fell by 0.9 percentage points in Lusaka.[51]

Figure 32. Unemployment shows a slight upward trend in other-urban while it is more consistent with a one-off shock in urban-Lusaka.



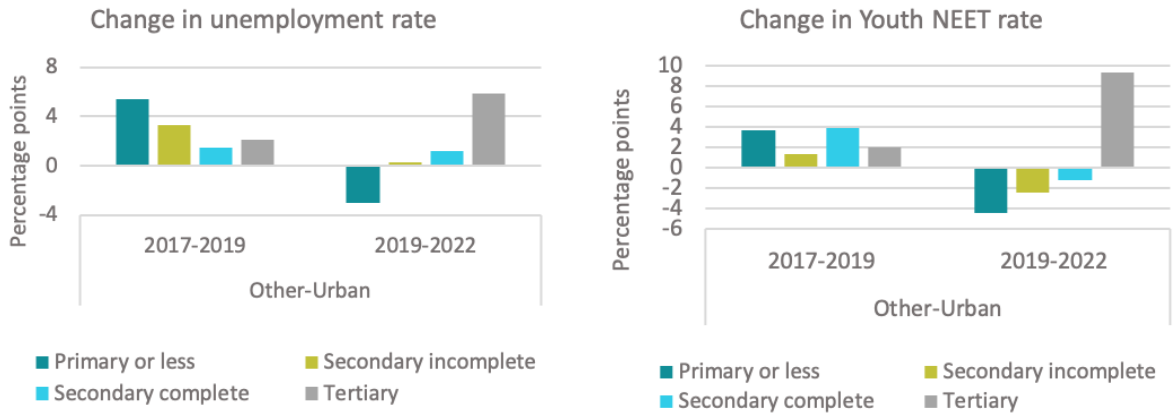
Source: LFS series (panel 1); High Frequency Phone Surveys (panel 2). Notes: Urban-Lusaka includes urban areas in the Lusaka province. Other-urban includes urban areas in all other provinces.

[50] Additional evidence from the COVID-19 shock on formal firms shows a decline in permanent employment of 10.8 percent between February and June 2020, with larger declines in Lusaka and no differences by firm size (Hoy et al. 2023).

[51] The unemployment rate among females is higher than among males in both urban-Lusaka and urban-other. However, the trends are similar. The gap increased a bit in 2020, but since then it has reduced.

64. **In other-urban, rising unemployment before the crisis was stronger among the low-educated, and was accompanied by a growing share of youth not in employment, education or training (NEET).** Before the crisis, unemployment was growing among all education categories, but more strongly among the lower-educated. It increased by 5.4 percentage points among those with primary education or less, in contrast to the 2.1 percentage point increase among those with tertiary education. Similarly, there was a generalized increase in the NEET rate, though more pronounced among those with primary or less and those with secondary complete. Since 2019, however, it is those with tertiary education who experienced a significant rise in unemployment and NEET rates.[52]

Figure 33. Other-urban: Poor labor market conditions were already hitting hard the low-educated before the pandemic.

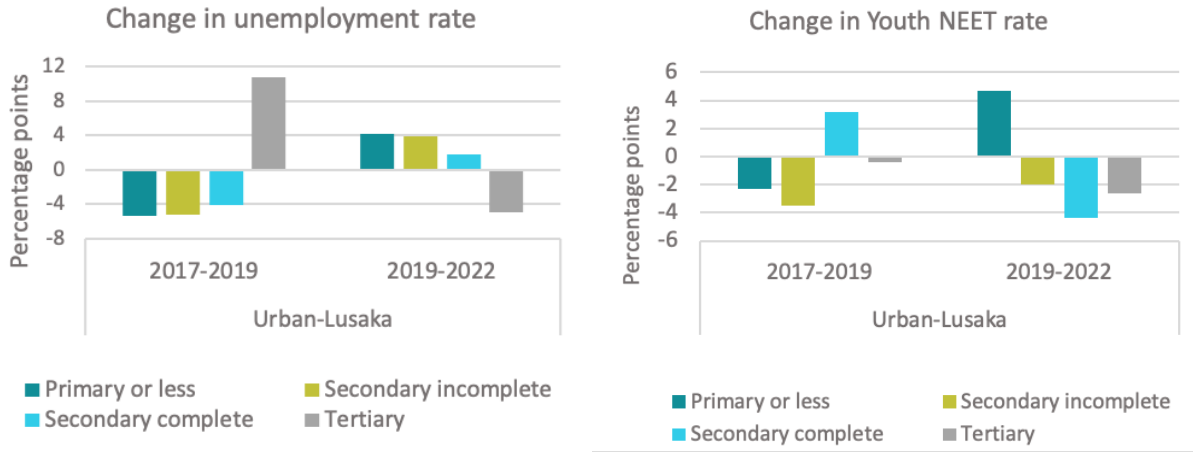


Source: World Bank staff calculations using the LFS from 2017 to 2022. Notes: Urban- other includes urban areas outside the Lusaka Province.

65. **In urban-Lusaka, the situation across education groups is more mixed.** Unemployment trends move relatively similarly across education groups except for those in tertiary education. The unemployment rate falls by 4 to 5 percentage points between 2017 and 2019, increases significantly in 2020, recovers in 2021, and deteriorates again in 2022. All in all, it increased slightly among the two lower-education groups and declined among the secondary complete. The share of NEET among the two lower-education groups was also falling before the crisis, but it then started to increase among those with primary education or less.

[52] The initial increase in the NEET rate was similar among females and males, but the subsequent decline was only observed among females.

Figure 34. Urban-Lusaka: Unemployment and youth NEET rates affect education groups broadly.

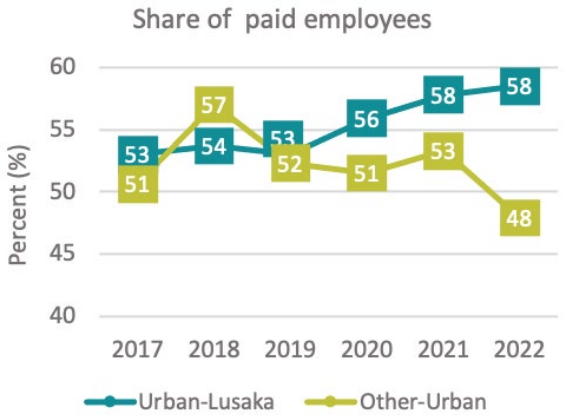


Source: World Bank staff calculations using the LFS from 2017 to 2022. Notes: Urban-Lusaka includes urban areas in Lusaka Province.

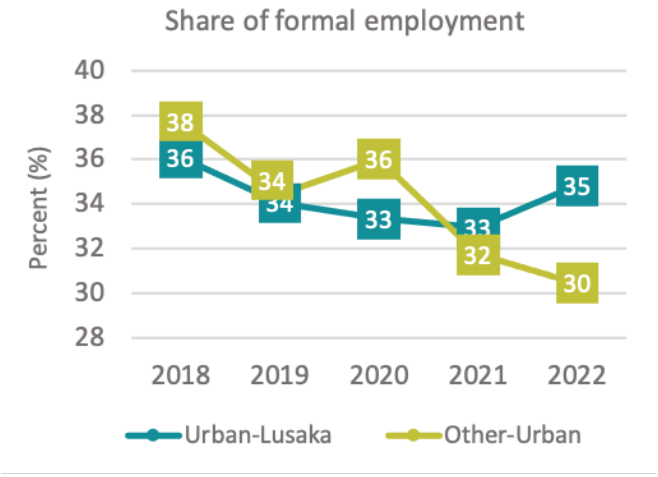
66. **Progressive labor market deterioration in other-urban is also evident in the quality of employment.** The share of paid employees has been declining from 57 percent in 2018 to 48 percent in 2022. The decline has affected all education levels, but it has been larger among those with secondary education. Over the same period, the percentage of workers in formal employment also fell from 38 percent to 31 percent. It declined by 2 percentage points among workers with primary education or less, 6 percentage points among those with secondary education, and 5 percentage points among those with tertiary.

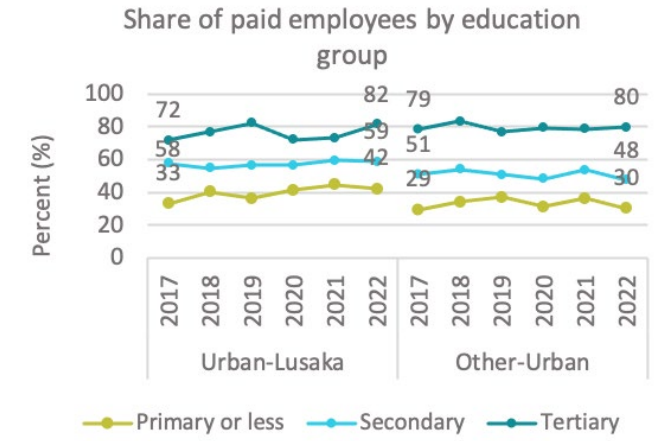
67. **Meanwhile, the situation in urban-Lusaka is more promising.** In contrast to other-urban areas, the share of workers as paid employees has been continuously rising. Paid employees accounted for 53 percent of workers in 2017 and went up to 58 percent in 2022. Furthermore, the increase is concentrated among those with lower education. The percentage of paid employees among workers with primary education or less increased from 33 percent in 2017 to 42 percent in 2022. Formal employment, on the other hand, declined through 2020 but it has recovered since. Between 2020–2022, the percentage of workers in formal employment increased by 3 percentage points among the low-educated and 6 percentage points among those with tertiary education.[53]

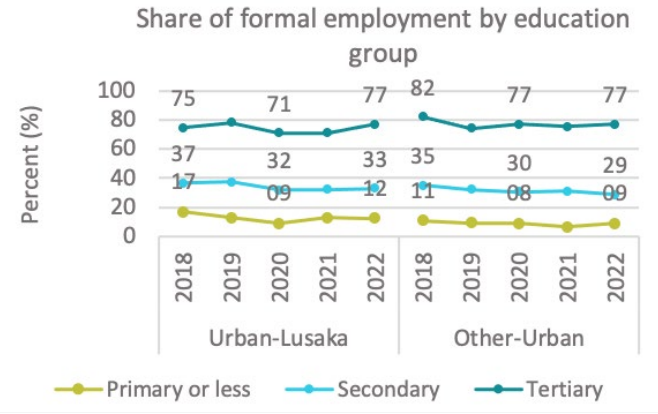
Figure 35. Employment conditions are deteriorating in other-urban, but are promising in urban-Lusaka, including for those with low levels of education.



[53] Another difference is that the share of public sector employment declined in other urban areas from 17 percent in 2017 to 14 percent in 2022, while it increased in Lusaka from 9 percent to 12 percent over the same period.







Source: World Bank staff calculations using the LFS from 2017 to 2022. Notes: Urban-Lusaka includes urban areas in the Lusaka province. Other-urban includes urban areas in all other provinces.

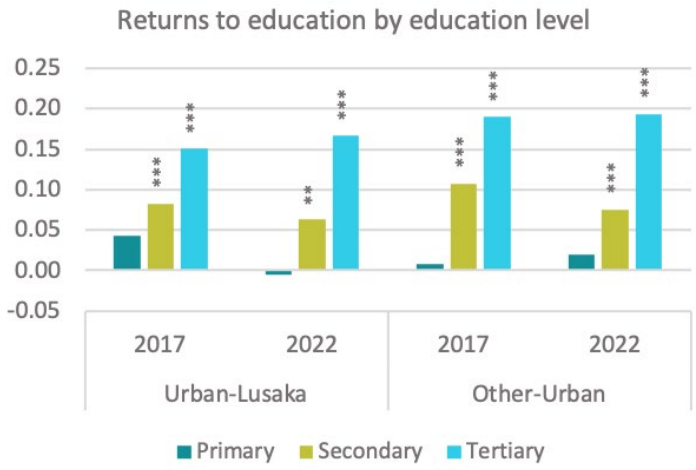
68. **Mean earnings were falling in both areas until 2020, but there are signs of recovery in urban-Lusaka.** Between 2017 and 2020, mean earnings fell by 35 percent in urban-Lusaka and 31 percent in urban-other. Since then, mean income in urban-Lusaka grew by 17 percent while in urban-other it continued to fall by 9 percent. Trends are similar across sectors, but interesting patterns arise by education level. In urban-Lusaka, the fall was the smallest among the low-educated and the recovery was the weakest among the tertiary educated. As a result, mean earnings among the low-educated declined by 13 percent, those with secondary education by 27 percent, and those with tertiary education by 32 percent. In other-urban, the secondary educated faired worst, followed by those with tertiary education. Like in Lusaka, workers with primary education or less experienced the smallest decline, partly due to the recovery since 2020.

Figure 36. Large declines in mean earnings have been observed in urban areas during the last years, but there are recent signs of recovery in urban-Lusaka.

Source: World Bank staff calculations using the LFS from 2017 to 2022. Notes: Urban-Lusaka includes urban areas in the Lusaka province. Other-urban includes urban areas in all other provinces. Earnings were winsorized at the top 1 percent. Earnings expressed in 2022 values using price index.

69. **There are worrying signs of declining returns to secondary education, especially in areas outside Lusaka, which are the ones experiencing a more pronounced impact of the labor market's downturn**. As expected, returns to tertiary education are the highest followed by secondary education.[54] Primary education, in turn, does not deliver any significant return. However, returns to secondary education are declining over time, particularly in other-urban. This is consistent with the low-quality and large investment needs in the education sectors (WB 2024a).

Figure 37. The deterioration in the returns to secondary education widens the existing gaps in returns between those with high and low education levels.



Source: World Bank staff calculations using the LFS from 2017 and 2022. Notes: Urban-Lusaka includes urban areas in Lusaka Province. Other-urban includes urban areas in all other provinces. Private returns at different schooling levels of education estimated for individuals older than 15 years of age following Montenegro and Patrinos (2014).

[54] Private returns per year of schooling are estimated for individuals older than 15 years of age following Montenegro and Patrinos (2014). Between 2017 and 2022, the rate of return to years of schooling decline from 12.3 to 11.3 percent in Lusaka and from 15.6 to 13.6 percent in other-urban areas. As reference, the average rate of return to years of schooling is at 10 percent for the world (Montenegro and Patrinos, 2014).


MANCHES

CHAPTER 4

Opportunities for Policy Action

70. **This report contributes to a better understanding of the poverty and inequality dynamics in Zambia.** It presents emerging messages that point to potential policy actions to overcome constraints and foster opportunities for growth and poverty reduction. At the same time, it also raises new questions for further exploration.

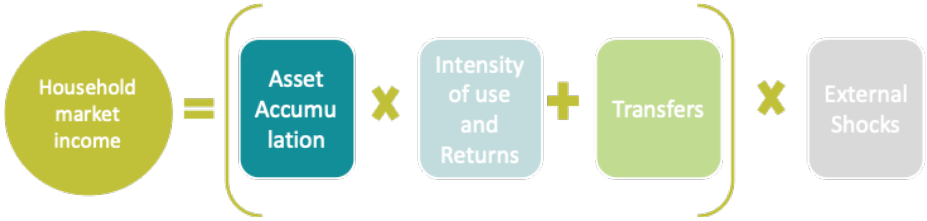
71. **High, sustained, and private-sector-led economic growth that creates high-quality jobs at scale are essential to achieving meaningful poverty reduction**. Economic growth needs to accelerate and be sustained over a long period to promote meaningful poverty reduction. The recently published CEM posed that the two pathways to support economic transformation and deliver sustained and inclusive growth are through improving agricultural productivity and raising firm and worker productivity (WB 2023a). Proposed policies include removing trade barriers and market distortions and re-directing investments in the agricultural sector, increasing access to finance, streamlining the regulatory and business environment, building human capital, and building institutional capacity. The CPSD under preparation will shed further light on how to unleash private sector development, both for job creation and to help finance major infrastructure investments. Priority areas include revising business regulation, investment and trade policies, access to capital and finance, and infrastructure deficiencies—notably energy, digital, and trade infrastructure. At the same time, growth needs to become more resilient to shocks and aligned with low-carbon development. Climate change poses a significant threat to Zambia's development trajectory, as it affects vital sectors including agriculture, water, energy, health, and infrastructure (WB 2024a). The forthcoming CCDR will examine the interplay between climate and development and offer suggestions on how to achieve the country's development goals in the context of climate change.

72. **At the same time, structural barriers must be addressed to make growth more inclusive.** Significant underinvestment, poor-quality public service provision, and inadequate policies have led to a poverty incidence that is not commensurate to the country's GDP per capita level, and both poverty and inequality have remained persistently high for too long. New findings from this study signal useful entry points for policy action while opening new questions for further analysis. Not all rural areas are stuck in high poverty, nor do all urban areas display non-inclusive growth. Results show the need to combine asset accumulation with the appropriate enabling factors for these assets to pay off. In rural areas this is proxied by proximity to urban centers. In Lusaka, this is proxied by better labor market opportunities for the low-skilled, which in turn depend on the quality of service provision for firms to grow.

73. **The main policy directions will be organized around the Asset Framework**, which poses that the income-generating capacity of the poor is a factor of the assets they own, the intensity with which they use them, and the returns that those assets generate, all, in turn, subject to the external shocks that households experience.[55]

[55] Lopez-Calva and Rodriguez-Castelan (2016). In the full framework Returns and Transfers are in real terms (i.e., divided by prices), which offer an additional channel through which policy and context affect household earnings.

Figure 38. Asset Framework



Source: López-Calva and Rodríguez-Castelán (2016).

74. **ASSETS AND SERVICES.** Past progress in access to services has been largely concentrated on 'low-cost' technologies, such as phone and mobile money. Further progress requires investments in critical infrastructure gaps, such as electricity and sanitation. Access gaps in all five dimensions of the Multidimensional Poverty Measure—electricity, drinking water, sanitation, education enrollment, and education attainment—remain too large.

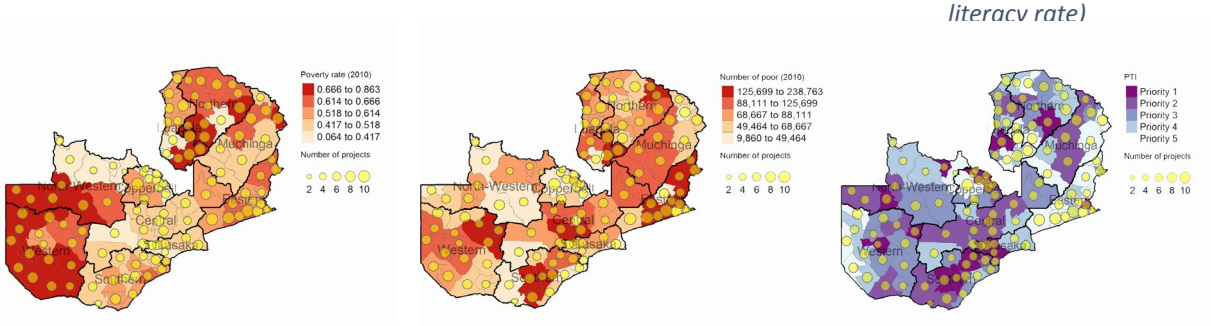
- **Close electricity gaps.** Increased access to energy (electricity in urban areas and solar/biofuel in rural areas) and phone ownership have been the most significant drivers of consumption growth, particularly when combined with better connectivity and access to markets. Notably, the number of poor households in each province almost perfectly coincides with the number of missing connections. Phone ownership gaps have been greatly reduced, but energy access gaps remain substantial. Access among the urban poor remains just below 50 percent, driven by low access outside Lusaka, and the average in rural areas stands at about 6 percent. It is critical to ensure the implementation of the government's electrification plan to achieve the country's goal of universal access to electricity by 2030. Rural areas would be mostly covered through mini-grids and solar home systems, for which it is crucial to scale up private sector participation in those markets and support households' adoption of those technologies.
- **Invest in WASH and health.** At 35 percent, chronic malnutrition remains alarmingly high. Stunting has been shown to impair cognitive development, lead to lower earnings and productivity, and worse health status in adulthood (Dewey and Begum 2011; Galasso et al. 2016). Tackling malnutrition requires simultaneous attention to health, WASH, and food security (WB 2019). WASH and health are systematically the two dimensions with the highest child deprivation rate in every single province. The lowest value in health is just under 50 percent in Copperbelt and the lowest in sanitation is just over 30 percent in Lusaka. Moving the needle requires prioritization of health and infrastructure investments by adopting a transparent and efficient needs-based resource allocation in the health sector, and by targeting areas and groups at high risk of diarrhea and stunting for WASH investments (WB 2017).
- **Address education crises.** Education plays a pivotal role in poverty reduction efforts as it strongly predicts both poverty status and employment prospects. Higher levels of education within a household are associated with higher household consumption, greater reliance on wage employment, and large-scale agricultural production. Likewise, individuals with more education are more likely to secure jobs in high-productivity and formal sectors and enjoy higher returns in the labor market. However, the country is immersed in an education crisis. Demand is growing, access and learning are worsening, and public financing has been declining until recently (WB 2024a). The incidence of learning poverty and of learning deprivation are close to universal, and as many as 4 in 10 youth are not in education, employment or training—about twice the regional average. Tackling this challenge requires both addressing foundational skills (through increased spending and improved allocation of resources), as well as improving equitable access to quality and market-relevant skills development for youth (including remediation of foundational skills, productivity enhancement programs, reactivating disengaged youths, and reconnecting young women and men with formal education) (WB 2024a). Regarding the former, the recently launched free education for all policy is a notable step in that direction,

together with the increased education expenses amidst fiscal consolidation efforts. A clear jobs and economic inclusion policy linking the jobs and economic diversification strategy to skills development and multisectoral economic inclusion programs is also needed (WB 2021).

75. **Achieving the necessary level of investment across these areas will require enhanced quality of public investment, a substantial scale-up of private sector investment, and strategic, needs-based prioritization.** Past public investment has failed to deliver development gains, widening fiscal deficits without a meaningful impact on economic growth or diversification. The recent Public Finance Review focuses on Public Investment Management and state-owned enterprises as essential pieces to support economic transformation and fiscal sustainability (WB 2024c). At the same time, attracting private-sector capital is paramount. Electricity gaps, for example, will only be closed with private-led off-grid models. The ongoing CPSD lays out the main barriers to scaling up private sector investment, and recommends strengthening of investment policies to attract Foreign Direct Investment. Lastly, optimizing the impact of available resources requires strategic targeting that maximizes synergies across investments, for which geographic targeting could be leveraged. For example, WB 2017 calls for targeting WASH investments in areas where diarrhea risks and stunting are greatest, rather than trying to achieve universal coverage by reducing rural/urban or socio-economic status gaps. An example of how a priority map changes based on alternative targeting criteria is shown in Figure 39 below.

Figure 39. Example of priority maps based on alternative criteria.

Criteria 1:	***Criteria 2:***	***Criteria 3:***
Target the ultra-poor who do not have the capability to respond to incentives because of limited bandwidth (priority ranking based on poverty rate)	*Create opportunities for as many poor people as possible (priority ranking based on number of poor)*	*Promote economic growth and overall economic transformation (priority ranking based on a composite index of market access, population density, and literacy rate)*



Source: Zambia Project Targeting Index (https://wbg-poverty-gp.shinyapps.io/zamPTI/).

76. **USE AND RETURNS.** Asset accumulation will not result in poverty reduction unless those assets can be productively used in income-generating activities. The results from this study show the importance of the enabling environment for households to escape poverty, and that markets need to be leveraged for inclusion. Emerging messages are classified along two dimensions: geographic and sectoral.

- **Proximity to markets and urbanization.** The difference in poverty trends between the near-urban areas and the rest of the rural areas is remarkable. Physical proximity to urban centers highlights the significance of access to markets and services, emphasizing the crucial role of connectivity. This includes not only traditional infrastructure such as roads but also the potential to leverage technology to overcome physical barriers. At the same time, urbanization is not paying off, as the level of urbanization is not commensurate with the level of GPD per capita. Yet urban areas, particularly Lusaka, are where poverty reduction has taken place, and where structural transformation should lead to. The mostly informal expansion, coupled with the predominance of informal and low-productivity employment, limited the economic

opportunities typically associated with the agglomeration of people and markets. As many as 7 in 10 urban residents reside in underserviced and tenure-insecure informal settlements (WB 2022). Redefining urban policy to ensure it delivers the expected economic benefits is paramount to achieving meaningful poverty reduction. This needs to be complemented with improvements to the business environment to support firm and employment growth in urban areas. The Urbanization Review highlighted the importance of improved market access and business environments—including forging a better alliance between rural and urban economies through connectivity infrastructure—as well as improving urban planning and service delivery—including a structured urban informal upgrading program for informal settlements. The payoffs of making urban services and markets work for the poor is reflected in the widely different performance from urban-Lusaka relative to the other-urban areas.

- **Agriculture is part of the solution.** In addition to growth potential, agriculture can offer a pathway out of poverty. Medium-scale farming, which cultivates lands below 20 hectares, is shown to be a potential middle ground between small-scale farming and larger-scale farming, with positive impacts on productivity and income. Also promising is promoting wage employment in agriculture. But agricultural policy—with 80 percent of the budget allocated to input subsidies programs (FISP) and the Food Reserve Agency (FRA)—has proven ineffective and inefficient (WB 2023a). Improving productivity requires moving investment towards better irrigation systems, diversification away from maize (towards more climate-resilient and income-generating crops such as groundnuts, sorghum, cowpeas, and soybeans), and training and education programs. The sector's competitiveness has also been severely hampered by inconsistent trade policies. At the same time, once structural transformation starts taking off, agriculture will not be the solution for the majority of households immersed in subsistence agriculture. Most households should sort into other, more productive sectors. Yet off-farm opportunities are very limited. Improving connectivity to urban areas and promoting secondary cities are therefore fundamental. Also critical is addressing private-sector barriers to job creation, such as improving the business environment and access to finance. In the meantime, improving the productivity of small-scale farmers is still critical to helping the poor while improving the human capital of the next generation and breaking the poverty cycle.

77. **A deeper understanding of the interconnections between the near-urban rural areas and urban centers is needed to derive more specific policy guidance**. The insights from this report led to new questions that need further analysis. What are the drivers behind the rural/urban proximity finding? What is the role of road infrastructure, prices, product specificity (e.g., perishables), product demand, access to finance, access to jobs, or others? What is the role of secondary cities? Altogether, this points to the relevance of better understanding the country's spatial development dynamics. A deep dive on Territorial Development could help identify the critical constraints on markets and institutions from which territorial inequities arise. A new Jobs Diagnostic could also shed light on how to promote economic diversification and inclusivity across the territory.

78. **TRANSFERS AND SHOCKS**. Given the high rates of extreme poverty, the prevalence of subsistence agriculture, and the increasing frequency of weather shocks, the social protection system has a pivotal role in addressing chronic poverty and building resilience to shocks. A strong gender focus is also warranted, as female-headed households are more likely to be poor, have less access to services, and display significantly poorer labor market conditions (e.g., are more likely to be unemployed and less likely to be in formal employment). As explained in the 2024 Systematic Country Diagnostic (WB 2024a), the priority of the sector is to sustain the coverage and adequacy of the SCT program as a foundational social assistance program while strengthening sustainable graduation pathways through a cash plus approach and a shock-responsive social protection system. The SCT reached over 1.3 million households in 2023—nearly doubling since 2000—equivalent to about 34 percent of the population and 57 percent of the poor. However, there is still a need to strengthen graduation pathways through the scale-up of complementary social and productive inclusion activities. The prominent response to the 2024 drought showed the fundamental value of the social protection system in smooth negative shocks, while pointing at areas of improvement of its shock-responsive capacity.

BOX 8. LEVERAGING FISCAL POLICY

The latest assessment of the redistributive impact of fiscal policy was done in 2015. The main message is that fiscal policy reduces inequality—mostly through in-kind public service expenditures, but that it also increases poverty in three ways: (i) low and poorly targeted direct transfers, (ii) energy subsidies that benefit the better off, and (iii) a tax load that is larger than the benefits from subsidies and transfers (de la Fuente et al. 2017). Since then, significant changes have taken place. The SCT was scaled up to more than 1.3 million households, and two of the most regressive subsidies (fuel and electricity) were eliminated. A new fiscal incidence analysis planned for next year will guide the next policy phase, including the implementation of the policy recommendations coming out of the CCDR. This is particularly important given the magnitude of the needs combined with the very limited fiscal space.

79. **HARNESSING DATA.** Improving data production and mainstreaming data use to guide policymaking are essential. The implementation of basic statistical operations suffers from huge time lags, and the use of administrative records and big data for statistical purposes is very limited. Monitoring and evaluation systems are weak, and the implementation of impact evaluations, incidence analyses etc., are largely ad hoc. Inadequate infrastructure, weak institutional capacity, and limited skills pose further barriers. The recognition given to National Data and Information Systems in the 8th National Development Plan should be complemented with the necessary investments.

REFERENCES

Alam, M. S., Miah, M. D., Hammoudeh, S., & Tiwari, A. K. (2018). The nexus between access to electricity and labour productivity in developing countries. Energy policy, 122, 715-726.

Alfani, F., Arslan, A., McCarthy, N., Cavatassi, R., & Sitko, N. J. (2019). Climate-change vulnerability in rural Zambia: the impact of an El Niño-induced shock on income and productivity.

Amondo, E., Simtowe, F., Rahut, D. B., & Erenstein, O. (2019). Productivity and production risk effects of adopting drought-tolerant maize varieties in Zambia. International Journal of Climate Change Strategies and Management, 11(4), 570-591.

Arslan, A., Cavatassi, R., Alfani, F., Mccarthy, N., Lipper, L., & Kokwe, M. (2018). Diversification under climate variability as part of a CSA strategy in rural Zambia. The Journal of Development Studies, 54(3), 457-480.

Bank of Zambia, Payment Systems Statistics, Mobile Banking: Volumes [ZMBFCMAANUM], retrieved from https://www.boz.zm/payment-systems-statistics.htm?trk=article-ssr-frontend-pulse_little-text-block, March 26, 2024.

Chonabayashi, S., Jithitikulchai, T., & Qu, Y. (2020). Does agricultural diversification build economic resilience to drought and flood? Evidence from poor households in Zambia. African Journal of Agricultural and Resource Economics, 15(311-2020-1781), 65-80.

De la Fuente, A., Rosales, M., & Jellema J. (2017). The impact of fiscal policy on inequality and poverty in Zambia. PRWP 8246.

Dewey, K. G., & Begum, K. (2011). Long-term consequences of stunting in early life. Maternal & child nutrition, 7, 5-18.

Farfan, G., Chingozha, T., & Gayoso, L. (2023). Examining the long-term relationship between drought frequency and poverty in Zambia. Mimeo.

Firpo, S., Fortin, N., and Lemieux, T. (2009). Unconditional Quantile Regressions. Econometrica, 77(3): 953–73.

Galasso, E., Wagstaff, A., Naudeau, S., & Shekar, M. (2016). The economic costs of stunting and how to reduce them. Policy Research Note World Bank, Washington, DC.

Gascoigne, J., Baquie, S., Vinha, K., Skoufias, E., Calcutt, E., Kshirsagar, V., Meenan, C., & Hill, R. (2024). The Welfare Cost of Drought in Sub-Saharan Africa. Policy Research Working Paper 10683. World Bank.

Hamududu, B. H., & Ngoma, H. (2019). Impacts of climate change on water availability in Zambia: Implications for irrigation development (No. 1879-2020-449).

Hoy, Christopher, Simbeye, Laban, Koivisto, Aliisa, Maboshe, Mashekwa, and Malik, Muhammad Abdullah Ali. (2023). How Have Formal Firms Recovered From the Pandemic? Insights From Survey and Tax Administrative Data in Zambia. Journal of African Economies.

International Monetary Fund, Use of Financial Services, Mobile Banking: Active Number of Mobile Money Accounts for Zambia [ZMBFCMAANUM], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/ZMBFCMAANUM, March 26, 2024.

Jayne, T.S., Chamberlin J., Traub, L., Sitko, N., Muyanga, M., Yeboah, F., Ward, A., Chapoto, A., Ayala, W., Nkonde, C., Kachule, R. (2016). Africa's changing farm size distribution patterns: the rise of medium-scale farms. Agricultural Economics. 47. Supplement 197-214.

Lay, J., Nolte, K., & Sipangule, K. (2018). Large-scale farms and smallholders: Evidence from Zambia (p. 310). Hamburg, Germany: German Institute of Global and Area Studies (GIGA).

López-Calva, L. F., & Rodríguez-Castelán, C. (2016). Pro-growth equity: A policy framework for the twin goals. World Bank Policy Research Working Paper, (7897).

Makhado, R., Potgieter, J. M., Wessels, D., Saidi, A., & Masehela, K. (2012). Use of mopane woodland resources and associated woodland management challenges in rural areas of South Africa. Ethnobotany Research and Application, 369-380.

Merotto, Dino. (2017). Jobs Diagnostic Zambia. World Bank, Jobs Series. Issue No. 7.

Montenegro, C. E., & Patrinos, H. A. (2014). Comparable Estimates of Returns to Schooling Around the World. Policy Research Working Paper;No. 7020.

Ngoma, H., Finn, A., & Kabisa, M. (2023). Climate Shocks, Vulnerability, Resilience and Livelihoods in Rural Zambia. Climate and Development. Vol.16 (6).

Ngoma, H., Lupiya, P., Kabisa M., Hartley F., 2021. Impacts of Climate Change on Agriculture and Household Welfare in Zambia: An Economy-wide Analysis. Climate Change (2021) 167:55.

OECD/IEA. (2017). Energy Access Outlook 2017 from Poverty to Prosperity, World Energy Outlook Special Report and Methodology for Energy Access Analysis. International Energy Agency.

Petrie, B., Rawlins, J., Perkins, D., Lumbroso, D., & Chapman, A. (2018). Climate change risk and vulnerability assessment in Luapula, Muchinga, Northern and Western Provinces of Zambia. OneWorld Sustainable Investments, Cape Town.

Ravallion, M., & Huppi, M. (1991). Measuring Changes in Poverty: A Methodological Case Study of Indonesia during an Adjustment Period. World Bank Economic Review 5(1): 57-82.

Sarkodie, S. A., & Adams, S. (2020). Electricity access, human development index, governance and income inequality in Sub-Saharan Africa. Energy Reports, 6, 455-466.

Thurlow, J., Zhu, T., & Diado, X. (2012). Current Climate Variability and Future Climate Change: estimated growth and poverty impacts for Zambia. Review of Development Economics, 16(3), 394-411.

UNICEF and ZamStats (2023). Child Poverty Report. Mimeo.

Varghese Paul, B., Finn, A., Chaudhary, S., Mayer Gukovas, R., & Sundaran, R. (2021). COVID-19, Poverty, and Social Safety Net Response in Zambia. PRWP 9571.

World Bank. (2012). Zambia Poverty Assessment. Stagnant Poverty and Inequality in a Natural Resource-Based Economy.

World Bank. (2017). Reducing Inequalities in Water Supply, Sanitation, and Hygiene in the Era of the Sustainable Development Goals. Synthesis Report of the WASH poverty diagnostic initiative.

World Bank (2019). All hands on deck. Reducing stunting through multisectoral efforts in Sub-Saharan Africa.

World Bank. (2021). Republic of Zambia. Social Protection and Jobs Public Expenditure Review.

World Bank. (2022). Zambia Urbanization Review: Leveraging cities and towns for Zambia's future.

World Bank. (2023a). Zambia Country Economic Memorandum: Unlocking productivity and economic transformation for better jobs.

World Bank. (2023b). Zambia: Human Capital Country Brief.

World Bank. (2024a). Republic of Zambia: Systematic Country Diagnostic.

World Bank. (2024b). Towards a More Adaptative Social Protection System in Zambia.

World Bank. (2024c). Zambia Public Finance Review: Strengthening fiscal governance for transformative public sector investments.

World Bank. (2024d). Tackling Inequality to Revitalize Growth and Reduce Poverty in Africa. Africa's Pulse, No. 29 (Spring 2024). World Bank, Washington, DC. doi: 10.1596/978-1-4648-2109-7. License: Creative Commons Attribution CC BY 3.0 IGO.

Wu, H., Bundervoet, T., Atamanov, A., & Paci, P. (2024). The Growth Elasticity of Poverty: Is Africa Any Different?. Policy Research Working Paper 10690. World Bank.

ZamStats 2023. 2022 Census of population and housing. Preliminary report.

ZamStats and World Bank (2024). Estimating a consistent Poverty and Inequality trend in Zambia. 2015-2022 Poverty and Inequality Trends Methodological Note. Mimeo.

Scan code to download the report

The World Bank
Evexia Commercial Complex Plot
#1014, 4th Floor, Church Road Lusaka
P.O. Box 35410
Lusaka, Zambia

Tel: (260-21) 137-3200
Fax: (260-21) 137-3248

www.worldbank.org/zambia
commszambia@worldbank.org