







LESOTHO POVERTY ASSESSMENT:

Progress and challenges in reducing poverty







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Preface

I am pleased to present the Lesotho Poverty Assessment: Progress and challenges in reducing poverty report. The report was produced by a World Bank team and the Lesotho Bureau of Statistics (BOS). I wish to express my gratitude to BOS and particularly to thank the Director, Ms. Celina Molato for facilitating this work. I also wish to thank the Minister of Development Planning, Hon. Tlohelang Aumane, for his guidance during the preparation of this report as well as the Principal Secretary, Ministry of Development Planning, Ms. Nthoateng Lebona.

The report reveals that much has been done to improve the lives of Basotho. About 47,000 people were lifted out of poverty over a 15-year period between 2002 and 2017, when Lesotho's poverty rate fell by about 7 percentage points, from 56.6 percent to 49.7 percent. Despite this progress, this study finds that economic vulnerability is high, with more than 75 percent of the population either poor or vulnerable to poverty. It reveals the nature and face of poverty in Lesotho as mainly affecting people living in rural areas, with poverty levels being highest among female-headed households, the less educated, the unemployed, large families, and children.

The evidence in this report indicates that urban areas experienced greater poverty reduction following improvements in education and increases in incomes from well-paying jobs largely in the services sector. In rural areas, poverty stagnated due to slow growth in agricultural incomes, a fall in remittances and vulnerability of the rural population to weather shocks. Furthermore, the study shows that despite the growing urban-rural poverty divide, inequality fell as a result of

expansion of social protection and an increase in wage incomes among the poor. Overall, Lesotho invests about 4.5 percent of GDP annually on social assistance, and the programs reach a large share of the poor. However, although Lesotho is now more equal than its neighbors, with a Gini coefficient of 44.6, it remains one of the 20 percent most unequal countries.

In addition, with more than a quarter of Basotho, 27.3 percent, living on less than US\$1.90/day (in 2011 PPP terms) in 2017, a much higher number compared to other lower middle-income countries and among Southern African Customs Union (SACU) countries, much more needs to be done to keep more Basotho out of poverty. The report suggests that a combination of policies that improve human capital, address high unemployment, increase agricultural productivity, along with those that build resilience against economic and environmental shocks, would accelerate poverty reduction in Lesotho.

It is my hope that this evidence-based analysis will enhance policy making in Lesotho and boost the country's efforts to reduce poverty and inequality. This is in line with the World Bank's goals of reducing poverty and promoting share prosperity.

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Foreword

The Ministry of Development Planning through its Department, Bureau of Statistics (BOS) is charged with the responsibility of collection, analysis, dissemination and publication of quality official statistics. BOS is also mandated by the Statistics Act of 2001 to coordinate the entire National Statistics System (NSS). Hence from time to time, the BOS undertakes Household Budget Surveys, also known as income and expenditure surveys, to provide up to date information to all stakeholders.

BOS undertook the Household Budget Survey (HBS) as a detailed module of the Continuous Multi-Purpose Household Survey (CMS) in 2017/18. The main objectives of the CMS/HBS were to provide detailed household consumption and expenditure data required for (i) estimation and analysis of poverty and inequality, (ii) estimation of consumer price index weights and (iii) estimation of expenditure of private household accounts in the system of National Accounts (SNA). In addition, disaggregated data on gender and special groups (women, youth, and people living with disability) is required for monitoring and evaluation of development agendas such as the 2030 Agenda for Sustainable Development and the Africa Agenda 2063 in order to ensure the SDG motto of leaving no one behind.

These data requirements resulted in the collaboration between the World Bank and the Ministry whereby the former provided both technical and financial support for undertaking of the 2017/18 CMS/HBS. BOS and World Bank staff worked together to produce this poverty assessment report. The report documents Lesotho's progress and challenges in reducing poverty with a focus on the period between 2002 and 2017. The assessment is designed to support a dialogue by examining how the government can combat poverty and inequality while safeguarding the poor against economic and environmental vulnerabilities.

The report also presents the drivers of poverty in both urban and rural areas through detailed analyses of the labor market, vulnerabilities to environmental shocks and social protection. I therefore recommend all government Ministries, development partners, academia, researchers and civil society organisations to make use of this product in their individual and collective efforts to improve the livelihoods of Basotho.

I take this opportunity on behalf of The Government of Lesotho, to thank our development partners, particularly the World Bank, for their collaboration in this analysis of poverty and inequality in the country as well as for providing continued technical and financial support.

HONORABLE TLOHELANG AUMANE
MINISTER OF DEVELOPMENT PLANNING



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This report was prepared by Victor Sulla (EA1PV), Precious Zikhali (EA1PV) and Daniel Gerszon Mahler (EA1PV). The analyses were conducted in close collaboration with the Lesotho Bureau of Statistics. The team would particularly like to thank Ms. Celina Molato (Director) and Ms. Lerato Makana (Head of National Accounts and Enterprise Surveys Division), who were instrumental in supporting and facilitating the work. The report benefited greatly from discussions with government officials, development partners, and practitioners outside the government. The team especially gained from guidance by Hon. Tlohelang Aumane (Minister of Development Planning) and Ms. Nthoateng Lebona (Principal Secretary, Ministry of Development Planning).

The report was undertaken under the guidance and leadership of Marie Francoise Marie-Nelly (Country Director, AFCS1), Paul Noumba Um (former Country Director, AFCS1), Janet K. Entwistle (Country Representative), Edouard Al-Dahdah (Senior Public Sector Specialist, EA1G2), Emmanuel Noubissie Ngankam (Country Program Coordinator), Aleksandra Posarac (Program Leader), Erwin De Nys (Program Leader), Pierella Paci (Practice Manager, EA1PV), and Andrew Dabalen (Practice Manager, EA2PV). It benefitted from feedback from peer reviewers Ambar Narayan (Lead Economist, EPVGE), Javier E. Baez (Senior Economist, EM1PV) and Nistha Sinha (Senior Economist, EMNPV).

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Relebohile Mohlakoana and Seitebatso Tsemane ably provided logistical assistance in the preparation of this report. Communications support was provided by Elita Banda and Zandile Ratshitanga. Last but not least, the team would like to thank everyone at the Lesotho Bureau of Statistics and the World Bank who contributed to making this a truly collaborative effort. Thank you.

Acronyms and abbreviations

CaLP Cash Learning Partnership
CCT Conditional cash transfer

CGP Child Grant Programs

CMS/HBS Continuous Multipurpose Household

Survey and Household Budget Survey

CPI Consumer Price Index

DMA Disaster Management Authority

ECCD Early Childhood Care and Development

FAO Food and Agricultural Organization

FDI Foreign Direct Investment

GDP Gross Domestic Product

GHI Global Hunger Index

GoL Government of Lesotho

HBS Household Budget Survey

HCI Human Capital Index

ICTs Information and Communication

Technologies

IFPRI International Food Policy Research

Institute

ILO International Labor Organization

IMF International Monetary Fund

IWM Integrated Watershed Management

Public Works

LCMPA Legal Capacity of Married Persons Act

LDHS Lesotho Demographic and Health Survey

LFP Labor force participation

LMICs Lower Middle-Income Countries

LNDC Lesotho National Development

Corporation

LSL Lesotho Maloti

LVAC Lesotho Vulnerability Assessment

Committee

MUAC Middle upper-arm circumference

NHSP National Health Strategic Plan

NISSA National Information System for Social

Assistance

NMDS National Manpower Development

Secretariat

NSDP National Strategic Development Plan

OAP Old Age Pension

ODA Official Development Assistance

ODI Overseas Development Institute

OPM Oxford Policy Management

OVC Orphans and Vulnerable Children

PAP Public Assistance Program

PPP Purchasing Power Parity

SACU Southern African Customs Union

SADC Southern African Development

Community

SADP Smallholder Agriculture Development

Project

SDGs Sustainable Development Goals

SMEs Small and Medium Enterprises

SSA Sub-Saharan Africa

TFP Total Factor Productivity

UNICEF United Nations Children's Fund

WFP World Food Programme



Executive summary

Poverty has fallen over the past 15 years but stagnated in rural areas, adding to an already large urban-rural divide

Lesotho's poverty rate fell from 56.6 percent in 2002 to 49.7 percent in 2017. Lesotho's poverty rate, measured at the national poverty line of Lesotho Maloti (LSL) 648.88 (2017 prices) per adult equivalent per month, fell about 7 percentage points over a 15-year period (Figure 1). This translates to about 47,000 Basotho escaping poverty during this period. In 2017, 27.3 percent of Basotho were poor at the international poverty line of US\$1.90/day (in 2011 PPP terms).

Although this is low when compared with other countries in Sub-Saharan Africa, it is high among other lower middle-income countries and among Southern African Customs Union (SACU) countries. Within SACU, only Eswatini had a comparable international poverty rate. The corresponding rates were 18.9 percent for South Africa, 16.1 percent for Botswana and 13.4 for Namibia (Figure 2).

Figure 1: National poverty rate, 2002-2017

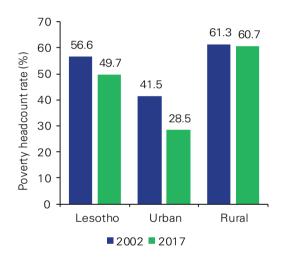
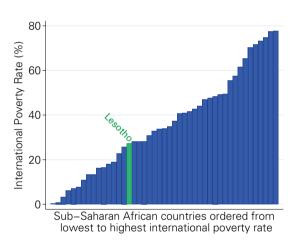


Figure 2: Regional comparison of poverty



Source: The 2017/18 Continuous Multipurpose Survey and Household Budget Survey (CMS/HBS), the 2002/03 Household Budget Survey (HBS) and PovcalNet.

Urban areas recorded strong poverty reduction, while rural areas' poverty levels stagnated, adding to an already large urban-rural divide. The urban poverty rate decreased from 41.5 percent to 28.5 percent. In rural areas, muted consumption growth was accompanied by stagnation in poverty rates, which decreased marginally from 61.3 percent to 60.7 percent. This has resulted in a widening gap between rural and urban poverty. Poverty fell in four out of six regions. The two regions that experienced a poverty increase are both in rural areas – Rural Mountains and Rural Senqu River Valley. In 2017, 67.8 percent of Basotho living in Rural Mountains were poor, an increase of

10.9 percentage points from 56.9 percent in 2002. Due to increased urbanization, the number of rural poor decreased from 864,000 to 801,000, while the number of urban poor increased from 180,000 to 196,000. This is equivalent to the share of urban poor increasing from 17 percent to 20 percent, suggesting that poverty will continue to be a rural phenomenon in the near term. A profile of Lesotho's poor shows that poverty levels are highest among female-headed households, especially those headed by single women, the less educated, the unemployed and the caretakers of large families and children.

The modest decline in the national poverty rate masks a notable decline in extreme poverty and inequality. Extreme poverty, measured based on a food basket required to achieve the minimum daily calorie requirement of 2,700 kilocalories (kcal) per adult equivalent per day, declined from 34.1 percent to 24.1 percent. It halved in urban areas, going from 22.2 percent to 11.2 percent, and declined in rural areas from 37.7 percent to 30.8 percent. The poverty gap declined

from 29.0 percent to 21.9 percent, with a decline of 8.3 in urban areas and 4.3 in rural areas. This occurred because consumption growth between 2002 and 2017 was inclusive for the very poorest segments of the population, leading to a reduction in the Gini coefficient of more than 7 points. Although Lesotho is now more equal than its neighbors, with a Gini coefficient of 44.6, it remains one of the 20 percent most unequal countries in the world (Figure 4).

Figure 3: Poverty rate by constituency

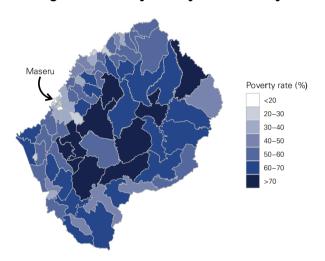
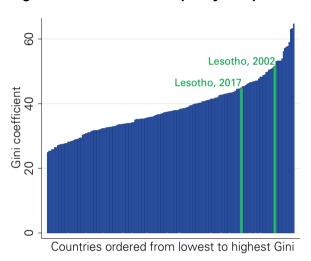


Figure 4: International inequality comparison



Source: Calculations based on the 2016 Population and Housing Census, the 2017/18 CMS/HBS, the 2002/03 HBS and PovcalNet.

Non-monetary indicators show some progress in reducing poverty, but significant gaps remain, especially in rural areas. Access to basic public services has improved, but it remains unevenly distributed across regions, with the spatial pattern of access closely following the urban-rural divide. Rural regions tend to have smaller shares of people with access to basic services. Furthermore, access to basic services is unevenly distributed between the poor and non-poor. The gaps manifest in a high incidence of multidimensional poverty which, like monetary poverty, is higher in rural areas. The poor are simultaneously deprived in multiple dimensions, and this reinforces and perpetuates poverty, particularly in rural areas.

The persistence of poverty in Lesotho is strong despite solid economic growth in the past 15 years. Lesotho's per capita real gross domestic product (GDP) grew at an average annual rate of 2.7 percent in 2000–2017, faster than the country's regional

peers. The services sector has been the most resilient contributor to economic growth. The contribution of agriculture, the sector that supports most of the poor, remained volatile. The volatility is due in part to climate variability. The textile industry, another important sector for the livelihoods of the poor, has recently stagnated. Furthermore, the economic growth of the past decade had little impact on job creation, and high unemployment rates characterize Lesotho's labor markets. Since 2015, the economy has not grown in per capita terms due to challenges from political instability, environmental shocks and a prolonged period of slow growth in South Africa that diminished SACU revenues. South Africa's poor economic outlook in the near-to-medium term is expected to have a negative impact on Lesotho's growth trajectory. Lesotho, therefore, finds itself in need of new sources of sustainable and inclusive growth, with a dynamic private sector that creates jobs and helps the country seize opportunities in regional and global markets.

The reduction in urban poverty was driven by education and skills development and formal wage jobs

The role of secondary and higher education

Secondary and higher education are the main paths out of poverty. Globally, education and skills are reliable ways to escape poverty and this is even more so in the case in Lesotho. Among individuals living in households headed by someone who did not complete primary education, 61.3 percent were poor in 2017. This number fell to 24.4 percent when the household head had completed secondary education and 8.4 percent when the household head had a post-secondary education (Figure 5). More than two-thirds of the poor lived in households in which the household head had no education. Hence, a sustainable path out of poverty comes from obtaining secondary education.

From 2002 to 2017, urban areas saw larger increases than rural areas in individuals with secondary education or higher education. In 2017, more than half of adults in urban areas – 52 percent – had completed secondary education or more. This is up from 33 percent in 2002. Rural areas also saw an increase in the share of adults with secondary education or more, but the increase was smaller – from 9 percent to 19 percent. Increases in educational attainment can explain 2.3 percentage points of the reduction in poverty in urban areas, but they contributed to less than 1 percentage point of poverty reduction in rural areas.

Rural poverty was less impacted by increases in educational attainment due to poorer educational outcomes. Poor children, particularly in rural areas, face high repetition and dropout rates at the primary level. Those who make it to the end of primary school often face large impediments to transitioning to secondary education due to access issues and the high costs of secondary education. Access to post-primary education remains a challenge for children from poor families, particularly in the Rural Mountains and Rural Senqu River Valley regions.

Despite the contribution of education and skills to poverty reduction, Lesotho's human capital outcomes are low considering its spending. As a fraction of GDP, Lesotho spends more on education than most countries with similar levels of income. Free access to primary education was implemented in 2000, yet primary net enrollment has remained almost stagnant at around 80 percent since 2002. Among the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SEACMEQ) countries, Lesotho had the lowest net primary enrollment in 2017 at 81 percent, compared to 97 percent in Namibia. Public education spending in secondary and higher education favors the rich and is unequal.

Access to better paying, more stable and higher productivity jobs, supported poverty reduction

Education tends to lift people out of poverty because it gives individuals access to better jobs that provide a reliable source of income. The returns to education, especially post-secondary, are high, increasing the probability of being in the labor force and out of unemployment. In both 2002 and 2017, the labor force participation rate was highest among those with technical/vocational training or university or higher education.

Skilled non-agricultural jobs provided the main sources of income to lift urban households out of poverty. In urban areas, the poverty rate declined by 2.2 percentage points due to increases in formal wage income and 5.1 percentage points because of increases in self-employment income. Whether individuals are out of the labor market or in the labor market matters less for poverty than the type of jobs individuals hold. In particular, the duration of work contracts is strongly correlated with individuals' poverty status. Many enterprises operate only seasonally, and rural enterprises show this intermittent pattern more frequently than urban enterprises. Workers with seasonal contracts are the poorest - 61 percent were below the poverty line in 2017 - followed by those with casual contracts and temporary jobs. The poverty rate is lowest among those with permanent jobs. Less than 30 percent of individuals with permanent jobs were poor (Figure 6).

Figure 5: Poverty rate by educational attainment of household head

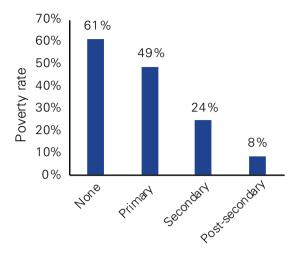
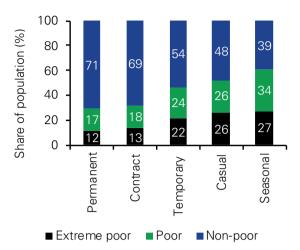


Figure 6: Poverty rate by type of job



Source: The 2017/18 CMS/HBS.

Despite the positive impact of higher income on poverty reduction, the economic growth of the past 15 years had limited impact on job creation. As a result, unemployment is high, estimated at 28.0 percent overall and 43.2 percent among youths aged 15 to 24. The unemployment challenge is exacerbated by a small private sector. Its competitiveness has been limited by skills mismatches and lack of entrepreneurship programs for growth-oriented businesses. In recent years, Lesotho's business climate has improved, but the regulations governing business and access to finance remain obstacles. The informal sector is large, with lack of access to credit and household savings acting as barriers to formality. The weak private sector gives the government a central role in providing formal employment. Although the public sector is one of the main drivers of growth, it does not employ many of the poor. In addition, the government's contribution to GDP is highly dependent on the cycle of fiscal policies.

Labor productivity is low in Lesotho, especially in rural areas and sectors with a high participation of the poor. In general, low labor productivity is associated with low wages. Low productivity is especially a challenge in sectors where informality is high, including agriculture, hunting and forestry, wholesale and retail trade, hotels and restaurants and community, social and personal activities. The large gap in poverty between

urban and rural areas and the relatively small difference in poverty rates among working and non-working individuals can be attributed to a larger share of the rural population being employed in low productivity subsistence agriculture and/or low-paying agricultural jobs. In contrast, urban areas are characterized by a larger share of the employed population in wage-earning jobs outside agriculture, including the well-paid public sector, where workers earn an average monthly salary about seven times higher than the minimum monthly wage of a skilled worker in the textile sector.

Employment outcomes are also characterized by uneven gender outcomes. Women tend to have both better education and health outcomes in Lesotho, but this has not translated into the labor market. Women have a high representation in government and the government has introduced policy and legislative changes supporting gender equality; even so, the effectiveness of these measures in bringing about positive changes in the lives of women has so far been limited. Deeply entrenched social norms and stereotypes negatively impacting women are dominant, and the new laws have been stymied by limited awareness, low capacity and inconsistency in application. Opportunities for women to participate on equal footing in the economic life of the country remain limited.

Rural poverty stagnated in part due to the vulnerability of the rural population to weather shocks and falling remittances

Vulnerability to weather shocks

Agriculture plays a major role in Basotho employment and livelihoods. About 71 percent of the population is involved in some form of agricultural activity. The sector is dominated by smallholder subsistence production with reliance on rainfed, low input/low output production methods characterized by limited use of irrigation, improved seed, fertilizers and pesticides. This contributes to low yields and subsequently to widespread poverty in rural areas. In Lesotho, 78 percent of those in the lowest quintile participate in agricultural activities, compared to 58 percent of the wealthiest quintile. The average farm size is 3.5 hectares (five hectares for non-poor households and two hectares for the poor households). Most farming households produce for their own consumption, and only 3 percent produce primarily for sale. Most farming households engage in several agricultural activities with very little specialization; livestock and cereal production are the most common. Livestock farming is the most prevalent agricultural activity in Lesotho, where threefourth of households raise animals.

Climate change and environmental shocks are among the key challenges in the agriculture sector, especially the prospect of frequent droughts and heavy seasonal floods. In rural areas, the higher prevalence of shocks with large impacts on welfare, exposes households to higher risk levels. When shocks occur, households have few coping mechanisms, particularly for shocks that affect many households in the same community or market at the same time. In many instances, most households do not take specific actions to manage the shocks, and poor households are less likely than others to act to manage shocks. As a result, consumption is often reduced in response to shocks, increasing poverty and leading to long-run consequences for children's human capital attainment. When households do employ coping strategies, most rely on help from family and friends.

Lesotho endured historically low rainfall in 2015-2016; without it, rural poverty would have been 6 percentage points lower, and the pace of national poverty reduction would have nearly doubled. In 2015-2016, Lesotho faced one of its greatest rainfall shortages in decades due to an El Niño. Rural areas responded to the shock by reducing consumption by an average of 23 percent. As a result, rural poverty was significantly higher than it would have been in the absence of the weather shock. It is estimated that rural poverty would have fallen to 54.6 percent with normal rainfall. Urban poverty, on the other hand, was less impacted by the rainfall shortage, and the poverty rate would only have declined 3 percentage points faster had no shock occurred. Aside from urban households relying less on agriculture, the Metolong dam, which was finished just before the drought, also helped supply critical water to Maseru and other urban areas. In total, poverty in Lesotho would have decreased twice as fast over the 15 years had the shock not occurred (Figure 7).

Except for pensions, existing social protection programs are limited in helping households mitigate the consumption impacts of shocks. Food social protection transfers reduced but did not eliminate the impact of rainfall shocks on beneficiaries. This was also true for those who received help from NGOs. Receipt of a pension eliminated a household's vulnerability to rainfall risk. On average, rural households receiving pension support are richer than other rural households. These resources combine with constant and sizeable pension income in reducing the impact of variable agricultural income on consumption.

Those with access to education and irrigation are less susceptible to risks. Consumption in households with no education drops 38 percent in the face of a bad shock, compared to 11 percent for households headed by someone with a secondary education or above. Having education makes households more resilient because they can diversify their sources of income in the face of deteriorating agricultural production conditions.

Figure 7: Poverty changes in absence of El Niño

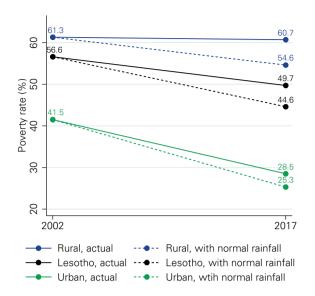
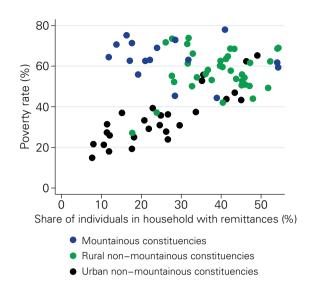


Figure 8: Relationship between poverty and remittances at the constituency level



Source: Calculations based on the 2016 Population and Housing Census, the 2017/18 CMS/HBS, and the 2002/03 HBS.

Falling remittances

Lesotho has long depended on remittances from mining jobs in South Africa, but employment in the industry has recently declined. The main reasons for decreasing remittances are mechanization and stagnation in South Africa's gold mining industry and the country's shift toward the use of local labor. Yet, close to 15 percent of Lesotho's population still works in South Africa. Their remittances remain important to the economy, representing 15 percent of GDP.

Rural poverty would have been nearly 10 percentage points lower had remittances not declined since 2002. The transfers are strongly progressive, with significant impacts on poverty and inequality. Poor households use the money to buy necessities and invest in human capital. Urban households are less reliant on remittances, and urban poverty would have been only 2.7 percentage points lower if remittances had remained at the 2002 levels.

Poor households, especially the less educated and rural residents, are particularly likely to be dependent upon remittances. Among the 30 constituencies most reliant on remittances from South Africa, 25 are rural and all have poverty rates above 40 percent (Figure 8). Yet, some of the very poorest constituencies in the mountainous areas rely relatively little on remittances.

Their geographical isolation makes it more challenging to work in South Africa. This has important implications for the well-being of Basotho living in these areas. Remittances serve as a buffer when shocks occur; without access to remittances, this region is likely to react stronger to shocks. The 2015-16 drought mostly impacted the lowlands and foothills. Had the drought been equally severe in the mountainous region, then this region would lag even more behind than is already the case.

Non-poor rural households are vulnerable to falling back into poverty. The high reliance of rural households on agricultural income and remittances makes their livelihoods volatile, and a shock increases the risk that rural households that have escaped poverty may fall back. For a quarter of Basotho, the predicted probability of being in poverty is sufficiently high to make them vulnerable to falling back into poverty. This means these households share characteristics with others that are poor and under different shock scenarios may find themselves characterized as poor. This is particularly true among rural households, where three of four non-poor households face high risks of falling into poverty. In contrast, only 30 percent of non-poor urban households are vulnerability to poverty.

The fall in inequality was associated with an expansion of social protection and wage income

The growth in urban areas combined with poverty stagnation in already-lagging rural areas would suggest increased inequality over the 15-year period. Yet Lesotho's Gini coefficient fell by 7 points from 2002 and 2017, supported by strong growth rates at the very bottom of the distribution in both urban and rural areas. Although this growth did not pull many rural households out of poverty, it did increase their welfare and reduce inequality.

Expansion of social protection contributed significantly to inequality reduction

The comprehensive social protection system contributed significantly to inequality reduction.

Overall, Lesotho invests about 4.5 percent of GDP

annually on social assistance, and the programs reach a large share of the poor. The Gini coefficient would be 7.8 percent higher without these programs (Figure 9), and the expansions of the programs that occurred between 2002 and 2017 led to a 2.6-point decline in the Gini coefficient. Cash transfers were particularly effective in reducing inequality. Social assistance is also important for reducing the poverty gap, suggesting that government programs helped boost the welfare of the poorest segments of the population. However, leakages persist, and the impact of social assistance on poverty could be strengthened by improved targeting efficiency. In the absence of a comprehensive national social security scheme, the burden to provide certain benefits falls fully on employers, resulting in low compliance and a small proportion of the population receiving benefits.

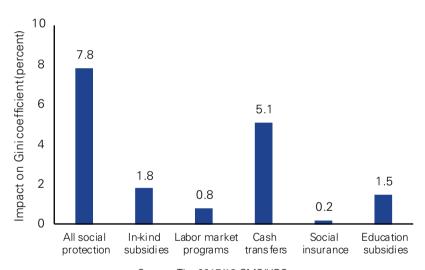


Figure 9: Impact of social protection programs on inequality

Source: The 2017/18 CMS/HBS.

Increased wage income also played a dominant role in inequality reduction

Increased wage income also played a dominant role in inequality reduction, while a fall in remittances and stagnation in agricultural incomes slowed inequality reduction. Increased wage income led to a 3.1-point decline in the Gini coefficient. The reduction in inequality would have been larger if remittances had not fallen and agricultural incomes had not been stagnant. The Gini coefficient would have been an estimated 3

points lower had rural households not suffered from poor rainfalls prior to the survey.

Although inequality fell significantly over the past 15 years, high levels of inequality remain due to the urban-rural divide, public-private wage gaps and discrepancies in educational outcomes. A higher education is a strong predictor of escaping poverty, but at the same time it is also an inequality generating factor. Not all individuals are able to complete quality primary education and proceed to secondary education, and

this discrepancy causes divergences in wage incomes later in life. In particular, those who manage to get a government job earn significantly higher salaries than those working in the private sector, adding to inequality. In general, more than half of the inequality in income can be attributed to differences in wage income.

Half of the current level of inequality in Lesotho can be attributed to factors beyond individuals' control, such as place of birth, basic educational attainment, health and environmental shocks. This is a relatively high number – higher than the 10 other countries in Sub-Saharan Africa with available estimates. This is closely linked to a low intergenerational mobility that continues to pose a challenge for reducing poverty and inequality. For example, parents' level of education generally predicts their children's level of education, and it remains difficult for people born in the bottom to climb to the top and vice versa. Inequality continues to manifest in disparities in access to basic public services across income groups as well as geographic locations. These disparities limit the ability of poor households to take advantage of economic opportunities.

Policies that improve human capital, address high unemployment, increase agricultural productivity, along with those that build resilience against economic and environmental shocks, would accelerate poverty reduction

Improving human capital

Given that universal and free primary education has largely been attained, it is important to boost learning in primary education, increase secondary enrollment and completion among the poor and improve the general efficiency of spending on education. Investmenting in Early Childhood Care and Development (ECCD) is a cost-effective strategy for reducing inequities and substantially improving long-term human development outcomes for adults. Children who benefit from quality ECCD perform better in primary school, repeat grades less and drop out less. Therefore, giving the poor the opportunity to access quality ECCD will improve not only the quality of education but also the cost efficiency of the system. To achieve quality in primary schools, it is important to improve the foundational skills of reading, writing and arithmetic. This will require improving teaching quality and teacher training. At the secondary level, expansion of the junior secondary school network is important for making these schools more accessible to the poor. In addition to putting in place the appropriate physical and soft infrastructure, increasing equity of access to junior secondary education requires that the financial cost of attending such schools be reduced as much as feasible.

Setting up a pro-poor health financing program could help improve the health system's equity outcomes. Such a program could focus on alleviating indirect expenses like transportation to and from seeking care. Special attention is needed to improve

health-care infrastructure and soft skills development in rural regions by making sure appropriate equipment, health staff, medicines and other inputs are available in facilities. Improving health outcomes in Lesotho should also involve investing in the first 1,000 days of life from conception. This should include well-coordinated multisectoral investments on nutrition-specific and sensitive interventions.

Addressing high unemployment

Strengthening the private sector through demandand supply-side reforms is key to creating jobs. On the demand side, policies aimed at easing the process of receiving business licenses, accessing finance and lowering regulatory compliance costs would improve the business environment. Pursuing deeper regional integration and trade dialogue with South Africa, the United States and the European Union would also be important for growing Lesotho's private sector. Adoption of digital technology should be further prioritized in Lesotho. On the supply side, targeted policies that boost entrepreneurship and promote skills development would increase the supply of skilled labor, boost labor productivity and reduce poverty.

It is important to improve migration governance by developing a national strategy with a capacity to prevent irregular migration, promote legal migration and mobility and ultimately enhance synergies between migration and development. The bilateral labor agreement between Lesotho and South Africa should be enhanced with the goal of facilitating labor mobility and improving migration data collection, management and analysis to support evidence-based policymaking. Furthermore, reducing remittance costs, possibly through financial inclusion and development, would be beneficial to the poor. Reducing barriers would encourage new entrants in the remittances market, and the competition would likely drive down the cost of sending money across borders.

Increasing productivity in agriculture

Improvements in agricultural productivity can be achieved through transitioning from subsistence to commercial agriculture, increased use of productivity-enhancing agricultural inputs and strengthening linkages between farmers and buyers. Commercialization can be prioritized largely in lowlands and foothills, while the highlands would benefit from resilient landscape, or afforestation, and farmermanaged natural regeneration to restore and replenish less fertile land. This entails diversification from cereals to higher-value crops, such as fruits and vegetables, that have the potential to increase incomes and create jobs. Cultivation of vegetables and fruit has good potential in Lesotho because of a favorable climate, strong local demand and opportunities for import substitution. Agricultural commercialization will involve building linkages between farmers and buyers and supporting local agro-dealers/extension services. Furthermore, it will be necessary to train agri-entrepreneurs in business skills, record keeping, marketing as well as on use of inputs and agronomic practices.

Investments in Climate Smart Agriculture (CSA) offers the potential to transform Lesotho's agriculture into a more productive, climate-resilient and low-emissions sector. The effective scaling up of CSA in Lesotho will require addressing several adoption barriers, including limited implementation capacity, insufficient access to inputs and credits and insufficient agricultural research. There is a need to strengthen research and establish partnerships with international research institutes to develop high-yielding, stresstolerant and climate-ready varieties. Agricultural extension services should be upgraded to catalyze the agricultural innovation process, improve the CSA knowledge system, facilitate access to information,

knowledge and expertise and provide technical advice to farmers. Critical areas that need capacity development include identifying funding gaps and needs, assessing public and private financing options, developing payment for ecosystem services programs, developing bankable investment plans, project pipelines and financing propositions and developing financially viable opportunities for effective private sector engagement.

Building resilience against shocks through responsive social protection

The most cost-effective way to reduce vulnerability to poverty is to reduce exposure to shocks. Sustainable interventions that are important for risk mitigation include land management practices, protection of forests and woodlands and improved management of water resources. Investments in irrigation and education both have the potential to do that. Irrigation reduces the impact of low rainfall on agricultural output, and education increases the ability of individuals to earn income in other, less-rainfall dependent sectors, either before or in response to the shock. It is also important to increase the ability of households to manage the risks that remain through better financial market development that can spread risk beyond the immediate social network and through social protection. Agricultural insurance could protect farmers against disasters by transferring their risks to the credit markets. It could also help in increasing farmers' agricultural productivity and access to financial services. The government could look at policy options to support the expansion of agricultural insurance.

Social protection policies are another way governments can help households manage risks.

This could be accomplished by providing households a dependable source of income that is not subject to risk and by scaling up benefits to provide more support in hard times. Being ready to scale up requires an early warning system that provides accurate information on when and where scale-up is required and triggers that can be used to develop clear transparent rules for scaling up support to households. It also requires prefinancing arrangements to finance the added benefits. Scaling up is easier for existing beneficiaries already in social protection systems, so it would necessitate having all potential beneficiaries in a national database.





Chapter I.1: Incidence, nature and evolution of poverty in Lesotho

The proportion of the population living below the national poverty line decreased from 56.6 percent in 2002 to 49.7 percent in 2017. Urban areas experienced a 13 percentage point reduction in poverty from 41.5 percent to 28.5 percent, while poverty stagnated in rural areas, decreasing marginally from 61.3 percent to 60.7 percent. As a result, the gap between rural and urban poverty further widened. Consistent with this, non-monetary poverty indicators suggest that progress has been made but gaps still exist, especially in rural areas. Poverty levels are consistently highest among female-headed household, the less educated, the unemployed, large families and children. Despite progress in reducing poverty, high levels of economic vulnerability persist. More than a quarter of the country's population (27.7 percent) is vulnerable to falling into poverty. Only 22.6 percent of households are not vulnerable to poverty, and they are concentrated in urban areas, where half of all households have sustainably escaped poverty.

A. Nationally, poverty has been significantly reduced but rural areas still lag behind

Overall consumption growth between 2002 and 2017 was not broad-based: in rural areas, it was muted. Table 1 shows that at national level, mean household consumption per adult equivalent, the welfare indicator used in this Poverty Assessment (see Box 1), increased by 4.5 percent in real terms between 2002 and 2017. However, not all areas experienced growth in

consumption: while consumption grew by 5.3 percent in urban areas, rural households registered a decline of 7.3 percent. The largest contraction (34.8 percent) was recorded in Rural Senqu River Valley, followed by Rural Mountains at 28 percent and Rural Foothills at 9.2 percent. This could be due to the influence of the 2015-2016 El Nino drought that, among other challenges, resulted in crop failures and acute food security, particularly in rural areas where subsistence farming is the main source of livelihood.

Table 1: Mean household consumption per adult equivalent (real, January 2017 prices)

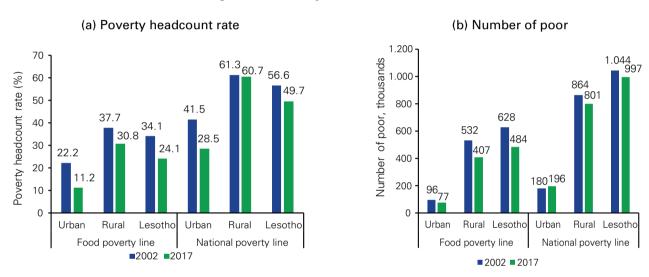
	2002	2017	Percentage change
Urban	1,253.9	1,320.9	5.3
Rural	759.7	704.3	-7.3
Region			
Maseru Urban	1,547.4	1,422.1	-8.1
Other Urban	1,073.3	1,245.3	16.0
Rural Lowlands	713.7	795.1	11.4
Rural Foothills	716.2	650.3	-9.2
Rural Mountains	838.4	603.4	-28.0
Rural Senqu River Valley	929.2	605.8	-34.8
Lesotho	875.8	915.0	4.5

Source: Calculations based on the 2002/03 Household Budget Survey (HBS) and the 2017/18 Continuous Multipurpose Household Survey and Household Budget Survey (CMS/HBS).

Household consumption growth meant solid poverty reduction in urban areas, but poverty levels remained high in rural areas. In urban areas, the headcount poverty rate decreased strongly from 41.5 to 28.5 percent, a 13 percentage point reduction (Figure 10). In rural areas, poverty nearly stagnated, decreasing marginally from 61.3 to 60.7 percent. The relatively larger decline in urban areas resulted in a widening of the gap between rural and urban poverty. At the national level, the share of the population living below the national poverty line fell from 56.6 percent in 2002 to 49.7 percent in 2017, a statistically significant decline of about 7 percentage points.

The strong poverty reduction in urban areas did not translate into an equally strong reduction in the absolute number of poor. This suggests that poverty reduction in urban areas is barely keeping up with demographic shifts. Comparing the absolute number of poor in 2002 and in 2017 reveals an increase in the number of poor by about 16,000 in urban areas (Figure 10). In rural areas, the absolute number of poor fell by 63,000, and this drove the 47,000 reduction in number of poor at the national level.

Figure 10: Poverty incidence, 2002-2017



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

¹ The report uses the food poverty line (FPL) and the upper bound poverty line (UBPL), considered the absolute national poverty line, to measure poverty in Lesotho. The focus is on these two poverty lines because the lower bound poverty line (LBPL) was not computed in 2002/03, making it impossible to conduct a trend analysis. In 2017, 44.7 percent of the population lived below the LBPL and poverty rates were 24.0 percent in urban areas and 55.5 percent in rural areas.

Box 1: Consumption aggregation and poverty measurement in Lesotho

The main data sources for this Poverty Assessment are the 2002/03 Household Budget Survey (HBS), the 2017/18 Continuous Multipurpose Household Survey and the Household Budget Survey (CMS/HBS). In this report, 2002 refers to the 2002/03 survey year and 2017 to the 2017/18 survey year. These surveys collect detailed information on household spending and consumption as well as other indicators of wellbeing, including income, education, health, access to basic services and ownership of assets and employment.

A consumption-based welfare indicator is used to measure poverty, referred to in this report as the consumption aggregate. The aggregate is constructed following guidelines provided in Deaton and Zaidi (2002). All food expenditures and self-produced food items valued at local market prices are included in the aggregate. Consumption of non-food items includes expenditures on personal care and hygiene items, clothing, utilities, transportation and other items. Notably, the following non-food items were excluded from the consumption aggregate: expenditures on durable goods, actual and imputed housing rents, expenditures on ceremonies such as weddings and funerals and hospitalization costs. Consumption from durable goods is excluded because the CMS/HBS does not estimate an asset's annual flow of value; including the value of these lumpy purchases would distort the consumption aggregate. This approach is consistent with the way the consumption aggregate was constructed in previous poverty analyses. Imputed rents for homeowners and actual rents for rent payers were also excluded to create comparable statistics.

Two adjustments are made to the consumption aggregate. The first is for household size and composition by dividing the consumption aggregate by the officially used per adult equivalent scales, which are based on calorie requirements that vary by age and sex. The second is the use of spatial and temporal deflators to account for price variation across time and space. In the CMS/HBS, deflators were used to convert households' nominal consumption during different survey quarters and in different locations (urban/rural). These adjustments ensure the consumption aggregate is comparable across space and time. The consumption aggregates used in this Poverty Assessment are the official ones used by the Bureau of Statistics.

Lesotho uses the cost-of-basic-needs (CBN) method to determine its consumption-based poverty line. It is based on a food basket required to achieve the minimum daily calorie requirement—2,700 kilocalories (kcal) per adult equivalent per day—and adjusted upward to include non-food consumption. The food poverty line (FPL), considered the extreme poverty line, is defined as the level of consumption per adult equivalent that individuals need to purchase enough food for an adequate diet. It is determined in two stages. First, a food reference basket is constructed using households from the second to fifth deciles of consumption per adult equivalent as a reference population. Second, the basket is costed to determine the level of the FPL.

The estimation of the absolute poverty lines—the lower bound poverty line (LBPL) and the upper bound poverty lines (UBPL)—builds on the FPL by including an allowance for non-food consumption following the upper- and lower-bound methods of Ravallion (1998). The share of food in total consumption expenditures is computed for lower- and upper-bound reference groups and then respective non-food expenditures are added by dividing the food poverty line by the respective food shares to estimate the total lower- or upper-bound poverty line. The reference group for constructing the LBPL are households with total expenditures close to the FPL. These households sacrifice some of their basic food requirements to meet their non-food needs. The UBPL, on the other hand, uses households with food expenditure close to the food poverty line as the reference group. These households can purchase both adequate food and non-food items at the UBPL.

Table 2 presents the estimated poverty lines for 2002/03 and 2017/18.

Table 2: The poverty lines per adult equivalent per month, in LSL, current survey period prices

Poverty Line	2002/03	2017/18
Food poverty line	84.41	352.39
Lower-bound poverty line	Not estimated	572.41
Upper-bound poverty line	149.91	648.88

Source: Lesotho Bureau of Statistics (forthcomina).

Not only do Basotho living in rural areas face higher risks of being in poverty, but their poverty also tends to be more intense and severe than their counterparts in urban areas. The national poverty line indicates the depth and severity of poverty has been falling faster in urban than in rural areas (Table 3). The poverty gap narrowed by 8.3 percentage points in urban areas and 4.3 percentage points in rural areas.² Overall, the declining trend indicates that the minimum cost of eliminating poverty – i.e., closing the gap – fell during this period. Similarly, severity of poverty eased in both urban and rural areas, with a higher reduction

in urban areas (6.1 percentage points) than rural areas (5.2 percentage points).³ The food or extreme poverty line⁴ shows that rural areas experienced a faster decline than urban areas in both the depth and severity of poverty. Rural areas recorded a faster decline in the food (extreme) poverty rate than in the national poverty rate, meaning that consumption growth in rural areas was able to pull a substantial number of people out of extreme poverty and bring them closer to the national poverty line. Overall, both the depth and severity of poverty presented in Table 3 confirm that rural poverty is much higher than urban poverty.

Table 3: Depth and severity of poverty (percent and percentage points), 2002-2017

	Poverty gap			Squared poverty gap			
	2002	2002 2017 Change (2017-2002)		2002 2017		Change (2017-2002)	
Food poverty line							
Urban	9.1	3.2	-5.8	5.0	1.4	-3.6	
Rural	17.5	10.6	-7.0	10.7	5.0	-5.7	
Lesotho	15.5	8.1	-7.5	9.4	3.8	-5.6	
National poverty line							
Urban	19.2	10.8	-8.3	11.6	5.6	-6.1	
Rural	32.0	27.7	-4.3	20.9	15.7	-5.2	
Lesotho	29.0	21.9	-7.1	18.7	12.2	-6.5	

Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

² The poverty gap provides information on the portion of the poverty line that people require, on average, to escape poverty. It is expressed here as a percentage of the poverty line.

³ The severity of poverty is measured by the squared poverty gap, a weighted sum of poverty gaps that gives more weight to those individuals or households who fall well below the poverty line.

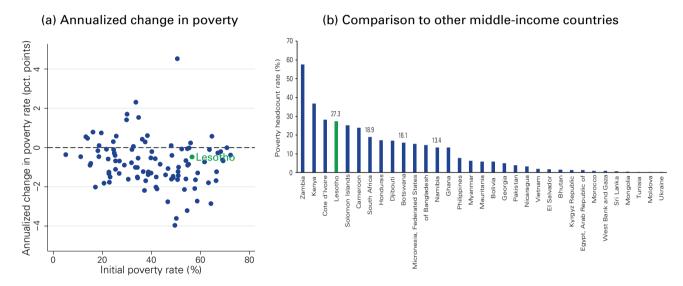
⁴ Note that the national food poverty line is interchangeably referred to as the national extreme poverty line.

Despite the progress, poverty levels are relatively high for the country's income level

Lesotho's poverty levels are relatively high for a lower middle-income country. Compared to other countries with similar consumption levels and initial poverty rates of about 20 percent, the pace of Lesotho's poverty reduction in the past 15 years could be considered moderate and slower than expected. As a result, poverty levels remain relatively high for the country's income levels. In 2017, about 27.3 percent

of Basotho were poor at the international US\$1.90 per person per day poverty line (in 2011 PPP terms). Poverty rates remain higher in Lesotho than several other lower middle-income countries (Figure 11). Among countries in the Southern African Customs Union (SACU), Lesotho's poverty rate is comparable only to that of Eswatini. The international poverty rates were 18.9 percent for South Africa, 16.1 percent for Botswana and 13.4 for Namibia.

Figure 11: International poverty rates (US\$1.90 in 2011 PPP terms per person per day), comparison to other lower middle-income countries



Source: For Lesotho: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS. For the rest of the countries: PovcalNet.

Note: Values are the most recent available over the past five years (2013 to 2017).

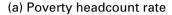


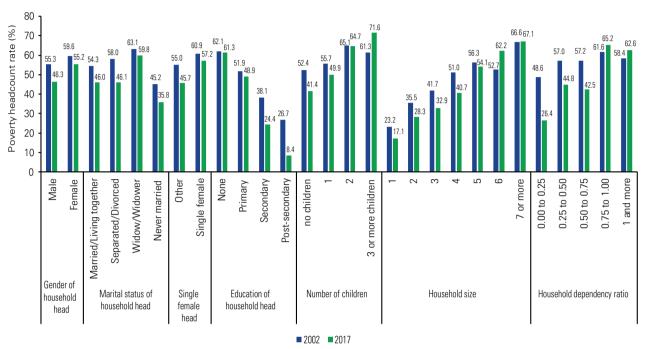
B. Who are the poor and where do they live?

Who are the poor?

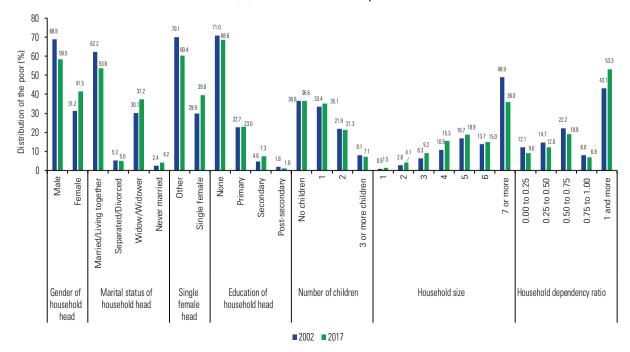
This section presents a profile of the poor in terms of the demographic characteristics of households and individuals at the national poverty line. Figure 12 shows the poverty headcount rate as well as the distribution of the poor by each characteristic.

Figure 12: Poverty by household characteristics, 2002-2017





(b) Distribution of the poor



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Individuals living in female-headed households are more likely to be poor than those living in male-headed households. In 2017, the poverty rates were 55.2 percent for female-headed households and 46.3 percent for male-headed households. Between 2002 and 2017, the rate for male-headed households fell 9.0 percentage points, compared to 4.4 percentage points for female-headed households. As a result, the gap widened between individuals in female- and male-headed households. However, 58.5 percent of the poor lived in male-headed households in 2017.

Living in a household headed by a single female is associated with an increased likelihood of being poor. In 2017, the poverty rate among individuals living in a household headed by a single female was 57.2 percent, 11.4 percentage points higher than the rate for individuals living in households headed by either a single male or married head. The gap between the poverty rates for these two groups widened between 2002 and 2017.

Widows and widowers exhibit the highest rates of poverty. In 2017, 59.8 percent of people living in a household headed by a widow or widower were poor, compared to 35.8 percent of those living in households with heads who never married. Since 2002, households headed by a widow or widower had the smallest decline in poverty. Individuals living in households with a divorced head had almost the same poverty rate (46.1 percent) as those living in households headed by someone married or living with a partner (46.0 percent). The distribution of the poor by the head's marital status shows that most of the poor (53.6 percent) lived in households with heads that were either married or living with a partner. These individuals made up the highest share in total population (57.9 percent) in 2017.

Educational attainment strongly correlates with poverty in Lesotho. In 2017, 61.3 percent of individuals living in a household headed by someone with no formal education were poor, down slightly from 62.1 percent in 2002. This was about seven times the poverty rate among individuals living in a household in which the head had completed tertiary education. In households with a head with no formal education, 68.6 percent were poor. At 55.6 percent, most Basotho lived in

households with a head who had no formal education in 2017. In general, poverty rates decline with education levels. Further, the pace of poverty reduction increases with education levels, highlighting the role of education as a socioeconomic equalizer.

Basotho living in households with children are more likely to be poor than those living in households without children. In 2017, the poverty headcount rate was 30.2 percentage points higher for individuals living in households with at least three children than for individuals living in households with no children. The gap between these two groups widened considerably from 8.9 percentage points in 2002 to 30.2 percentage points in 2017.

The incidence of poverty is higher in larger families.

In 2017, the poverty headcount rate among individuals living in one-person households was 17.1 percent, compared to 67.1 percent for individuals living in households with at least seven members. The latter made up the largest share of Lesotho's households (26.6 percent). Despite a decline in their share of total population, individuals living in households with at least six household members registered an increase in poverty levels since 2002. Overall, adding members to a household progressively increases the probability of being poor. However, concluding that poverty increases with household size should be done with caution, taking into consideration economies of size in household consumption.

Poverty increases with household dependency ratios. In Lesotho, 42.3 percent of the population lived in households with a dependency ratio higher than 1 in 2017. Individuals living in households with a dependency ratio of less than 0.25 had the lowest poverty rate (26.4 percent), while individuals living in households with a dependency ratio between 0.75 and 1 had a headcount rate of 65.2 percent. Between 2002 and 2017, poverty reduction was highest among individuals living in households with the lowest dependency ratios, while dependency ratios above 0.75 were associated with increasing poverty levels.

The poor tend to live in households that are larger and have more children. In 2017, an average poor

The dependency ratio is the number of dependents younger than 15 or older than 64 divided by the number of household members of working age. A low dependency ratio means the household has an adequate number of members of working age to support the dependents that in the household.

person lived in a household that had about 1.5 more members than non-poor households (Table 4). The larger household sizes for the poor are mainly driven by children. As a result, dependency ratios are far higher for poor households. Nationally, an average poor person lived in a household with 2.8 dependents for every working-age adult, compared to 2.0 for the non-poor. This means the strain on household resources is significantly higher for poor households. Trends were similar in both urban and rural areas.

Table 4: Number of children, household size and dependency ratios

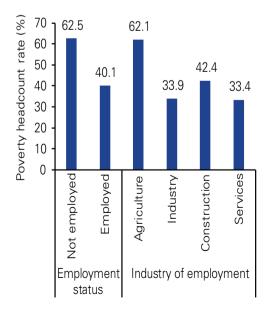
	Urban		Rural		Lesotho						
	Non-poor	Poor	Non-poor	Poor	Non-poor	Poor					
2002											
Number of children, 0-6 years	0.6	0.7	1.0	1.1	0.9	1.0					
Number of children, 0-14 years	1.6	2.2	2.3	2.6	2.1	2.5					
Household size	5.1	6.1	5.9	6.7	5.6	6.6					
Dependency ratio	2.0	2.3	2.6	2.6	2.4	2.6					
2017											
Number of children, 0-6 years	0.6	0.9	0.7	1.0	0.7	1.0					
Number of children, 0-14 years	1.3	2.3	1.6	2.5	1.4	2.5					
Household size	4.0	5.5	5.0	6.1	4.5	6.0					
Dependency ratio	1.9	2.8	2.2	2.8	2.0	2.8					

Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Employment is associated with lower poverty rates, but poverty rates are relatively high even among the employed. In 2017, the poverty rate was 40.1 percent among individuals living in households headed by an employed person, 22.4 percentage points lower than the rate (62.5 percent) for households with

unemployed heads (Figure 13). Considering the industry of employment, individuals living in households with a head employed in the agriculture sector had the highest poverty rate (62.1 percent). It was 33.9 percent for industry and 33.4 percent for services. This highlights the heightened poverty risk for agricultural households.

Figure 13: Poverty by employment status of head of household, 2017



Source: Calculations based on the 2017/18 CMS/HBS.

Children are particularly prone to poverty. In 2017, children aged 6-14 had a poverty rate of 60.9 percent, a 2.2 percentage point increase from 58.8 percent in 2002 (Figure 14). The age cohort made up the largest share of Lesotho's poor both in 2002 and 2017. The 15-19 age cohort registered a poverty rate of 55.0 percent.

Children aged 0-5 had a headcount rate of 53.2 percent. These data cause concern because child poverty has life-long implications. Poverty is also high among the elderly: 52.0 percent of those aged above 65 lived below the poverty line in 2017.

70 100% **65**+ 90% Poverty headcount rate (%) 60 60-64 80% **55-59** 50 Distribution of the poor (%) **50-54** 70% 40 **45-49** 60% **40-44** 30 50% 35-39 20 40% ■ 30-34 ■ 25-29 30% 10 20-24 20% 0 ■ 15-19 6-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 55-59 60-64 50-54 0-5 65+ 10% **6**-14 0% ■ 0-5 ■2002 ■2017 2002 2017

Figure 14: Poverty incidence by age group, 2002-2017

Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

The gender age pyramid shows a population that is young and with higher poverty rates than adults. (Figure 15). Individuals aged 0-14 made up around a

third of the population in both 2002 and 2017. At 21.3 percent in 2017, children aged 6-14 accounted for the highest share of total population.

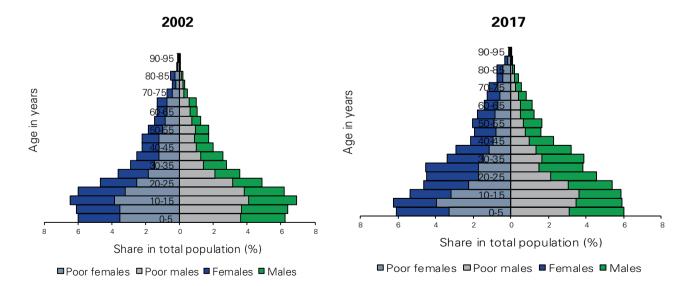


Figure 15: Age-gender pyramid and poverty, 2002-2017

 $Source: \textit{Calculations based on the 2002/03 HBS} \ \textit{and the 2017/18 CMS/HBS}.$

Where do the poor live?

Most Basotho poor live in rural areas. The rural share of the population fell 10.7 percentage points from 76.5 in 2002 to 65.8 percent in 2017, but the rural share of poverty decreased only 2.4 percentage points from 82.2 to 80.4 percent (Figure 16a). This reflects the stronger

poverty reduction in urban areas than in rural areas. As Figure 16b shows, urban areas have higher consumption than rural areas. The data suggest that improvements in rural areas and/or increasing mobility to urban areas are central to future poverty reduction.

(a) Distribution of the poor (b) Welfare distribution, 2017 100% 90% 00 . **I**National poverty line 80% 70% 65.8 76.5 60% 80.4 82.8 Density 0005 50% 40% 30% 20% 34.2 23.5 10% 19.6 17.2 0% 2002 2002 2017 2017 0 1000 2000 3000 4000 5000 Distribution of the Poor | Distribution of Population Monthly expenditure (per adult equivalent) Urban population Rural population ■ Urban ■ Rural

Figure 16: Distribution of the poor and population, urban-rural, 2002-2017

Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

The nation's decline in poverty was not equally distributed across the six regions. Poverty fell in four out of the six regions (see Box 2 for details on how these regions are defined). The two that experienced increases in poverty are both rural areas – Rural Mountains and Rural Senqu River Valley (Figure 17). In 2017, 67.8 percent of Basotho living in the Rural

Mountains region were poor at the national poverty line, a 10.9 percentage point increase from 56.9 percent in 2002. In the Rural Senqu River Valley, 67.9 percent of the population was poor in 2017, up from 55.5 percent in 2002. Although still disappointingly high, the poverty rate was lowest in Maseru Urban at 24.7 percent.

80 70 Poverty headcount rate (%) 60 50 40 30 20 10 0 Rural Maseru Sengu Maseru Rural Rural Sengu Lowlands Foothills Mountains Urban Urban Urban Lowlands Foothills Mountains Urban River River Valley Valley Food poverty line National poverty line **2002** 17.6 25.0 38.2 33.7 34.2 33.7 46.3 62.4 56.9 55.5 43.8 66.8 ■2017 9.7 12.4 25.8 33.1 37.2 35.2 24.7 31.4 54.4 63.6 67.8 67.9

Figure 17: Poverty incidence by region, 2002-2017

Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Not only did poverty rise in the Rural Mountains and Rural Senqu River Valley regions, the situation of the poor in these regions also worsened between 2002 and 2017. Table 5 shows that the two regions lagged the rest of the country in terms of reducing the

depth and severity of poverty, with the depth of poverty based on the national poverty line actually increasing in both regions. The poor in Maseru Urban had the least depth and severity of poverty in the country.

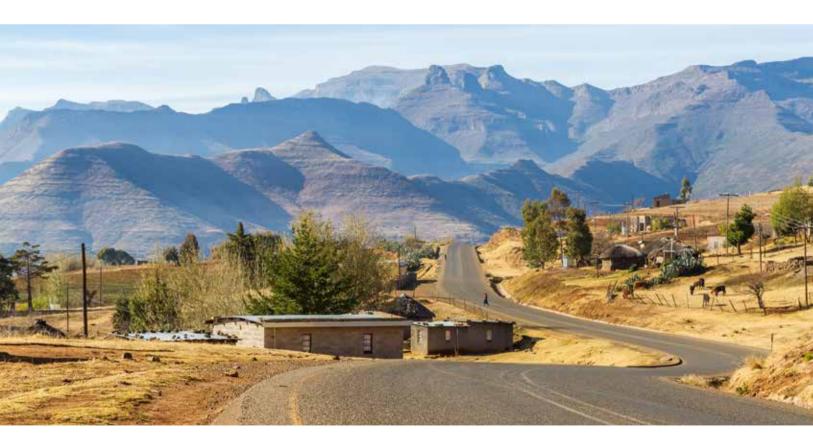


Table 5: Depth and severity of poverty by region (percent and percentage points), 2002-2017

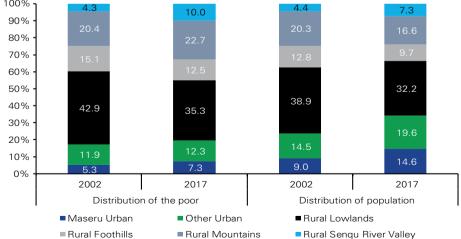
	Poverty gap			Squared poverty gap			
	2002	2017	Change (2017- 2002)	2002	2017	Change (2017- 2002)	
		Food	l poverty line				
Maseru Urban	6.8	2.5	-4.4	3.7	1.0	-2.7	
Other Urban	10.4	3.8	-6.6	5.8	1.8	-4.1	
Rural Lowlands	17.7	8.4	-9.3	10.7	3.9	-6.9	
Rural Foothills	20.0	10.8	-9.3	12.2	5.3	-6.9	
Rural Mountains	15.8	13.3	-2.5	9.8	6.3	-3.5	
Rural Senqu River Valley	16.8	13.5	-3.3	10.2	6.8	-3.4	
		Natior	al poverty line				
Maseru Urban	15.0	9.5	-5.5	8.9	4.7	-4.2	
Other Urban	21.7	11.9	-9.9	13.3	6.2	-7.1	
Rural Lowlands	32.5	23.7	-8.8	21.2	13.1	-8.1	
Rural Foothills	36.0	29.1	-6.9	23.8	16.5	-7.3	
Rural Mountains	29.1	32.4	3.3	19.0	18.9	0.0	
Rural Senqu River Valley	29.3	32.3	3.0	19.5	19.0	-0.5	

Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Rural Lowlands accounts for the highest share of the poor. The region's poverty rates were 42.9 percent in 2002 and 35.3 percent in 2017 (Figure 18). This is partly due to the region's relatively high population share – 32.2 percent in 2017, down from 38.9 percent in 2002. The distribution of the poor did not change much between 2002 and 2017. Rural Lowlands consistently accounted for the biggest share of the country's poor, followed by Rural Mountains and then Rural Foothills.

100%

Figure 18: Distribution of the poor and population across regions



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Box 2: Regions and other geographical identifiers in Lesotho

This report's main geographical division uses the six regions of Lesotho – Maseru Urban, Other Urban, Rural Lowlands, Rural Foothills, Rural Mountains and Rural Senqu River Valley. The latter four contain the four different agro-ecological zones of Lesotho after parsing out urban areas. Peri-urban areas are kept in the rural regions. These six regions represent the lowest level at which the 2017/18 CMS/HBS survey is representative. The different characteristics of the six regions make them interesting units of analysis on such topics as infrastructure access, the impact of weather shocks and proximity to South Africa. These six regions have been used in prior surveys in Lesotho; for example, Housing and Population Censuses, Labor Force Surveys and the Demographic and Health Survey. Figure 19 maps each household interviewed in the 2017/18 CMS/HBS by region, as well as the location of the four agro-ecological zones.

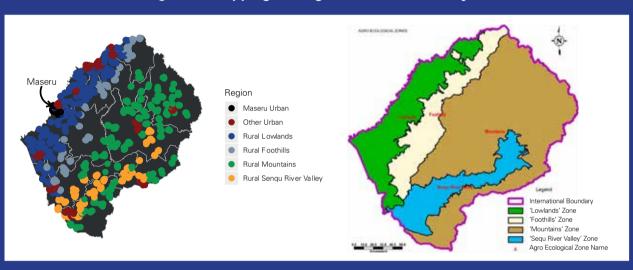


Figure 19: Mapping the regions used in the analysis

Source: Lesotho Ministry of Public Works and Transport (right figure).

Note: Each dot of the left figure represents the location of a household surveyed in the 2017/18 CMS/HBS.

Ten districts make up Lesotho's first administrative level. They are divided into 78 community councils. Lesotho also has 80 constituencies, used for electoral purposes. In addition to the six main regions, these subdivisions will be used in this report when more detailed geographical analyses are needed.

A national poverty map demonstrates heterogeneity across space, with the country's 10 districts having pockets of both wealth and extreme poverty. For instance, seven of the 10 constituencies with the lowest poverty rates were in the Maseru district, which also had two of the poorest 10 constituencies. Figure 20 reveals a very interesting pattern of poverty in Lesotho: in 2017, peripheral areas were associated with reduced

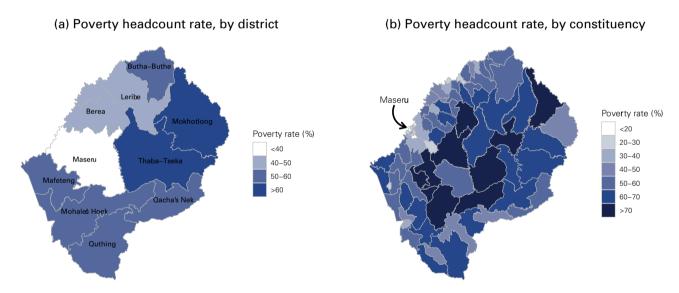
poverty rates at the constituency level. This means areas closer to the border with South Africa tended to exhibit lower poverty rates. This could be capturing accessibility to economic opportunities in South Africa as well as accessibility to better-developed markets. Such access is likely to be associated with higher flows of remittances from Basotho living and/or working in South Africa.

Table 6: Top 10 and bottom 10 constituencies by poverty incidence, 2017

		Poverty			Poverty headcount
Constituency	District	headcount rate (%)	Constituency	District	rate (%)
	Top 10			Bottom 10	
Hloahloeng	Mohale's Hoek	78.3	Maseru	Maseru	15.0
Semena	Thaba-Tseka	75.6	Khubetsoana	Berea	18.2
Maliepetsane	Mafeteng	73.8	Abia	Maseru	19.3
Ketane	Mohale's Hoek	73.4	Mabote	Berea	21.5
Senqu	Mokhotlong	73.2	Stadium Area	Maseru	22.1
Thaba-moea	Thaba-Tseka	72.2	Hlotse	Leribe	23.9
Mosalemane	Berea	71.8	Lithoteng	Maseru	25.4
Thaba-putsoa	Maseru	71.0	Thetsane	Maseru	26.2
Makhaleng	Maseru	70.9	Maama	Maseru	27.2
Mashai	Thaba-Tseka	69.7	Lithabaneng	Maseru	27.5

Source: Calculations based on the 2016 Population and Housing Census and the 2017/18 CMS/HBS.

Figure 20: Poverty maps for Lesotho, 2017



Source: Calculations based on the 2016 Population and Housing Census and the 2017/18 CMS/HBS.

Box 3: Small area estimation of poverty in Lesotho

Unmasking poverty's heterogeneities and patterns across Lesotho's subnational levels requires a methodology that maps poverty across space—small area estimation. It relies on the detailed analysis of two main data sources: a household survey and a population census.

In Lesotho, these are found in the 2017/18 Continuous Multipurpose Household and Household Budget Survey (CMS/HBS) and the 2016 Population and Housing Census. The CMS/HBS contains detailed modules on consumption expenditures. Due to the relatively small sample size, however, the available information only covers six regions in the country. By contrast, census data are available for all households and provide exact information on the distribution of demographic or other characteristics at highly disaggregated levels, such as districts and constituencies. However, it does not include the detailed information on consumption or income required to produce reliable indicators of the level and distribution of welfare.

To overcome these shortcomings, the Elbers, Lanjouw and Leite (2008) methodology combines the strengths of both sources of information. First, the household survey is employed to develop an imputation model for the welfare measure in question – in this case, consumption expenditure per adult equivalent – that relies exclusively on characteristics common to survey and census. This model is then applied to the census data to obtain an imputed value of consumption expenditure for each household, allowing poverty rates to be computed.

The local estimates of poverty that result from repeated application of this process are thus imputation-based and susceptible to errors. Nevertheless, the methodology has been empirically validated (Elbers, Lanjouw and Leite, 2008) and implemented in several developing countries. The acquired experience shows that the resulting estimates are reliable and precise enough to be useful for the purposes of policy design (Bedi, Coudouel and Simmler, 2007).

Poverty estimates were calculated for all 80 constituencies in Lesotho.

C. High levels of economic vulnerability persist

What household and individual characteristics are associated with a reduced likelihood of falling back into poverty? To answer these questions, this section identifies households not vulnerable to poverty – a group that has successfully escaped poverty – and explores the characteristics that make them different from those vulnerable to falling into poverty. In this way, the section examines the extent to which the observed poverty reduction in the past 15 years is a sign of persistent progress. It considers the vulnerability of currently

non-poor individuals to falling back into poverty due, for example, to environmental shocks, price shocks, unemployment or other adverse events. Box 4 provides details on the methods used to identify households vulnerable to poverty in Lesotho. Data on welfare self-perceptions support the results in identifying the vulnerable: non-vulnerable households broadly perceive that they do not belong to the poorest segments of society (Figure 22a).⁶ In addition to the direct benefit of no longer being vulnerable to falling into poverty, such households tend to have advantageous impacts on a country's tax base, savings, governance and more.

The 2017/18 CMS/HBS asked households to place themselves on a six-step ladder, where the first step indicated the poorest people and the sixth step indicated the richest people. This question can assess whether households categorized as not being vulnerable to poverty actually feel they have escaped the bottom of the distribution. The poor and vulnerable for the most part think they are on the second step, while the non-vulnerable mostly believe they are on the third step. Hence, the non-vulnerable do believe they belong to the middle of the distribution (Figure 22a).

Box 4: Methods to find the households vulnerable to poverty

The academic literature includes several methods to separate households vulnerable to poverty from the ones not vulnerable to poverty. For example, Lopez-Calva and Ortiz-Juarez (2014) use two-period panel data to predict the probability of households falling into poverty between the first and second round. They regress several sociodemographic characteristics and the occurrence of shocks on a binary indicator of whether households fall into poverty. This method is not feasible for countries where panel data is unavailable, which includes Lesotho. An alternative approach used by Chaudhuri et al. (2002) predicts both the mean consumption level and the variance of consumption for each household using only a cross-section of data. Combined with an assumption about normality, the predicted variance can be used to assess each household's consumption level under different shocks and the probability the household falls below the poverty line. The probability of being poor declines with consumption, so this method can be used to identify a line above which households are no longer deemed vulnerable to poverty.

Günther and Harttgen (2008) propose using multilevel models to study economic vulnerability. They extend the method by Chaudhuri et al. by allowing for groups of households to have different relationships between the outcome and explanatory variables. Notably, Günther and Harttgen allow for certain explanatory variables – in the present case, sociodemographic variables and shock variables – to have different impacts on welfare based on the households' community. This method is relevant if communities respond to shocks differently based on location. The model also allows the breakdown of shocks by whether they are idiosyncratic or covariant.

In this Poverty Assessment, the Günther and Harttgen method is used to derive a probability of being poor for each household. Lesotho's constituencies are used as the community-level variable to measure how households might differ in how they transform sociodemographic variables and shocks into welfare. The household variables in the model, inspired by Günther and Harttgen, include the number of children and the head's age, educational attainment, industry, sector of work and main source of income. In addition, community level variables are included, such as the constituency's access to improved water, electricity, improved sanitation and house ownership. Finally, the model incorporates household and community level exposures to shocks.

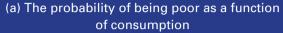
By running the above-described model and using the same variables to predict the squared residuals, an assumption about normality leads to predictions about the likelihood each household will be poor in the next year. Figure 21a shows the resulting predictions as well as the fitted line from them as a function of monthly consumption for urban and rural households separately. Often the predicted probabilities of being poor are used to create a vulnerability line above which households are considered non-vulnerable to poverty. This approach works well if the predictions decline sharply in consumption and if predictions do not vary much by other factors than consumption. The latter is not the case for Lesotho. For a given consumption level, rural households are predicted to be much more likely to be poor. This suggest they are exposed to more risk and that creating a fixed monetary threshold above which households are considered non-vulnerable would classify too many rural households and too few urban households as non-vulnerable.

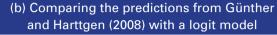
Instead, a probability threshold above which households are considered unlikely to be poor is set. Günther and Harttgen (2008) suggest using 29 percent, which is equivalent to considering households as vulnerable if they have a 50 percent or higher probability of falling below the poverty line at least once in the next two years.

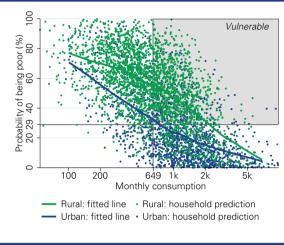
Using this 29 percent threshold, the number of vulnerable households is likely an upper bound. If more relevant variables had been available, the predictions would have been better, and the fitted line would have been steeper. Likewise, if the presence of shocks was larger in this cross-section than can be expected in the future – likely due to the presence of the El Niño prior to the fieldwork – then it is plausible that the number of vulnerable is overestimated. To the extent the current model overfits the data, on the other hand, the 29 percent threshold could downward bias the true number of vulnerable.

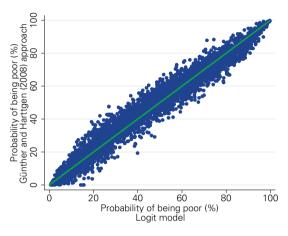
A simple logit model predicting poverty status was used as a robustness check. This approach gave very similar predicted probabilities of being poor (Figure 21b). The finding bolsters confidence that using a mixed model and predicting the variance separately while assuming normality is robust to a simpler approach.

Figure 21: Identifying the vulnerable in Lesotho









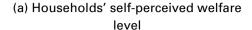
Source: Calculations based on the 2017/18 CMS/HBS.

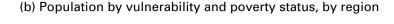
Note: The left figure shows the predicted probability of being poor as a function of monthly consumption, adjusted by the adult equivalence scale and expressed in 2017 prices. Households to the left of the vertical line at 649 are poor. Households above the horizontal line of 29 and to the right of the vertical line are not poor but considered at risk of falling into poverty. The right figure shows the predicted probabilities of being poor using the Günther and Harttgen (2008) approach and a logit model. The fact that the two predictions cluster around the green 45-degree line suggests that the main methodology is robust to a simpler approach.

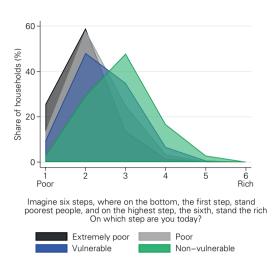
Despite progress in reducing poverty, more than 75 percent of Lesotho's population is either poor or vulnerable to poverty. Figure 22b shows that 27.7 percent of the population was identified as vulnerable to falling into poverty in 2017. Combining this with the population share that is either poor or extremely poor means that 77.4 percent of the population was either poor or vulnerable in 2017. In rural areas, 31.1 percent of the population was vulnerable to poverty. This is in addition to the 60.7 percent of the rural population that is already in poverty. By comparison, 21.3 percent of the urban population was vulnerable to poverty.

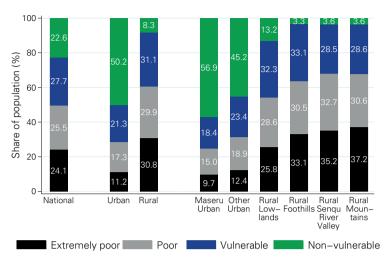
Nearly all individuals in Rural Mountains, Rural Foothills and Rural Senqu River Valley are poor or vulnerable to poverty. More than half of the population in Maseru is not vulnerable to poverty (56.9 percent), and the figure is nearly half in other urban areas (45.2 percent). In rural areas, nearly all non-poor households resemble poor households. Less than 5 percent is not vulnerable to poverty in the Rural Mountains, Rural Foothills and Rural Senqu River Valley. In these areas, most of the households that have successfully escaped poverty in the past two decades exhibit characteristics similar to those that have not. As a result, those out of poverty are at risk of falling back into it.

Figure 22: The geographical location and perceptions of the vulnerable, 2017









Source: Calculations based on the 2017/18 CMS/HBS.

Non-vulnerable households do not necessarily **belong to the middle class.** Predictions of households successfully escaping poverty do not necessarily mean that their income levels are far above the poverty line. Some households may have stable incomes that are just above the poverty line. A daily consumption of about \$10 per person per day (2011 PPPs) - equivalent to a monthly consumption per adult equivalent higher than 2000 Maloti - has been used to define middle-class line in prior contexts. With this line, only 30 percent of the non-vulnerable belong to the middle class. The rest still have low incomes but are not very likely to fall back into poverty. In contrast, 6 percent of the vulnerable belong to the middle class. These households currently have relatively high consumption levels but are vulnerable to shocks and thus at risk of falling back into poverty.

Smaller households are less likely to be vulnerable.

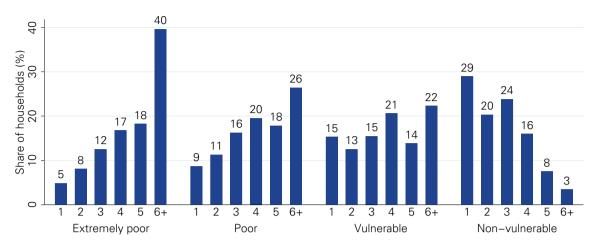
Figure 23a shows the household size by economic status – extremely poor, poor, vulnerable or non-vulnerable. For the non-vulnerable, nearly a third of households are one-person households, and only 11 percent of households have five or more members. By comparison, 22 percent

of vulnerable households have six or more members, while only 15 percent are one-person households. Hence, large households are less likely to permanently escape poverty.

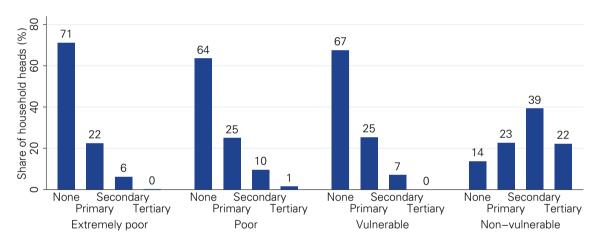
The likelihood of not being vulnerable increases with education levels: 60 percent of household heads among the non-vulnerable have secondary or higher educational attainment. Poor households, on the other hand, have similar educational attainment to the economically vulnerable. More than two-thirds of vulnerable household heads have not completed primary school (Figure 23b). Only 7 percent of household heads among the economically vulnerable have obtained a secondary education or more. In contrast, 60 percent of household heads among the non-vulnerable have secondary education degrees or more, and one in five have post-secondary education. The data suggest secondary education offers a sustainable path out of poverty. Schooling tends to lift people out of poverty and vulnerability because educated individuals have access to better jobs that can generate a stable income.

Figure 23: Sociodemographic characteristics by vulnerability and poverty status, 2017

(a) Household size by vulnerability and poverty status



(b) Educational attainment of household heads by vulnerability and poverty status



Source: Calculations based on the 2017/18 CMS/HBS.

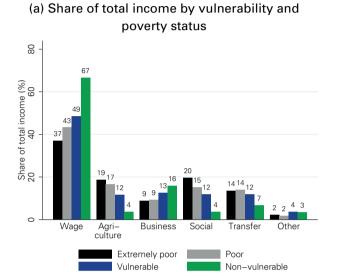
Non-vulnerable households derive their income from wages and non-agricultural businesses. Two-thirds of the income of non-vulnerable households comes from formal wages, compared to less than half for vulnerable households (Figure 24a). Non-vulnerable households are almost entirely independent of agricultural income and social assistance – both only constitute 4 percent of their total income. For the vulnerable, these two components are a quarter of their income. This discrepancy suggests that relatively few households manage to permanently escape poverty through agriculture. Non-vulnerable households, in turn, are more likely to rely on self-employment income, which makes up 16 percent of their total income.

various wage jobs, non-vulnerable households are most likely to hold private sector wage jobs or government jobs. Various kinds of wage jobs exist, and it is important to understand which of them are particularly associated with not being vulnerable to poverty. Figure 24b shows that 18 percent of non-vulnerable household heads have a government job. By contrast, less than 5 percent of the economically vulnerable and the poor work for the government. Non-vulnerable household heads are also much more likely to work in the private sector. Nearly a third of those in non-vulnerable households have private sector wage jobs, while less than 15 percent of the vulnerable have such jobs, suggesting these types of

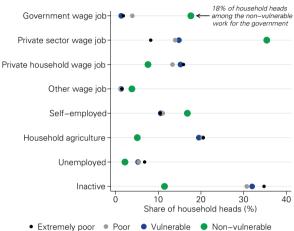
jobs are likely to shift households permanently out of poverty. Among the non-vulnerable, 20 percent are self-employed, compared to 10 percent for the vulnerable. Household heads among the non-vulnerable are also

much less likely to be inactive. Only 11 percent of the non-vulnerable household heads are inactive, compared to a third of the vulnerable.

Figure 24: Income and job characteristics by poverty and vulnerability status, 2017



(b) Type of employment by vulnerability and poverty status



Source: Calculations based on the 2017/18 CMS/HBS.

D. Lesotho has made progress in reducing multidimensional poverty, but gaps still exist, especially in rural areas

This section complements the preceding analyses by exploring levels and trends in selected non-monetary dimensions of poverty and well-being. The choice of non-income indicators is guided by the availability of data and relevance to Lesotho. These indicators include housing conditions, improved drinking water, sanitation facilities, electricity, education and health services, asset ownership and food security.

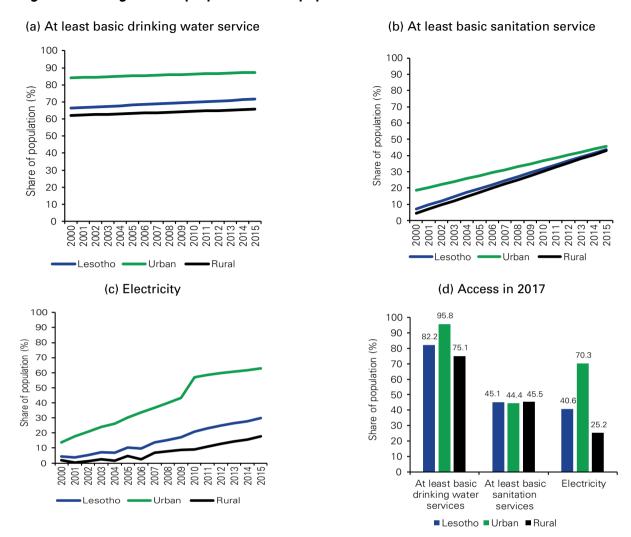
Access to basic services has increased, but rural regions lag behind

Despite strides in broadening access to improved water and sanitation services in the past 15 years, rural areas lag in terms of coverage. Figure 25a shows

that the portion of people with at least basic water services⁷ increased by 5.2 percentage points from 66.4 percent in 2000 to 71.6 percent in 2015. The coverage rate was 87.4 percent in urban areas, compared to 65.7 percent in rural areas. The gap between urban and rural areas remained constant at around 22 percentage points. Household survey data for 2017 indicate that 82.2 percent of the population lived in households with access to a source of improved drinking water within a 30-minute roundtrip from the dwelling unit. The coverage rates were 95.8 percent in urban areas and 75.1 percent in rural areas. According to NSDP-II, several factors contributed to the lag in rural areas—reduced investments, climate change and declining yields or drying-up of water sources.

⁷ This indicator encompasses both people using basic water services and those using safely managed water services. Basic drinking water service is defined as drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip. Improved water sources include piped water, boreholes or tubewells, protected dug wells, protected springs and packaged or delivered water.

Figure 25: Changes in the proportion of the population with access to selected basic services



Source: World Development Indicators for 2000-2015 and the 2017/18 CMS/HBS for 2017.

Access to sanitation services has increased rapidly since 2000. Figure 25b reports data on the proportion of people using at least basic sanitation services—i.e., improved sanitation facilities not shared with other households.⁸ Starting from a low of 7.2 percent nationally in 2002, the percentage of the population with access to improved sanitation services registered a 36.6 percentage point increase to 43.8 percent in 2015. Although still lagging, rural areas experienced an increase of 38.6 points from 4.5 percent to 43.1 percent,

compared to an increase of 27.2 points to 45.7 percent in urban areas. Household survey data for 2017 indicate 45.1 percent of the population lived in households with access to an improved sanitation facility not shared with other households. The corresponding coverage rates were 44.4 percent in urban areas and 45.5 percent in rural areas. The NSDP-II recognizes the importance of a "programmatic approach aimed at increasing access to water and improved sanitation and hygiene" in the country's agenda to reduce poverty.

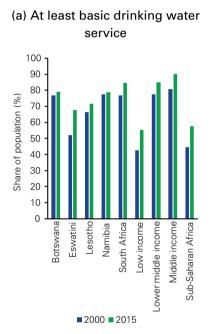
⁸ This indicator encompasses both people using basic sanitation services and those using safely managed sanitation services. Improved sanitation facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, compositing toilets or pit latrines with slabs.

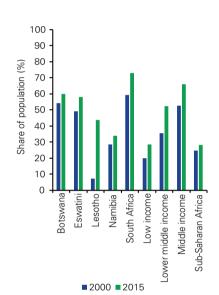
Expanding access to electricity among the population has been slow. Between 2000 and 2015, Lesotho achieved a 25.7 percentage point increase from 4.3 percent to 30.0 percent in national electricity access rates. Most of the expansion occurred in urban areas, where the proportion of the population with access to electricity increased from 13.6 percent to 69.6 percent. In rural areas, the share rose from 2.0 percent to 20.0

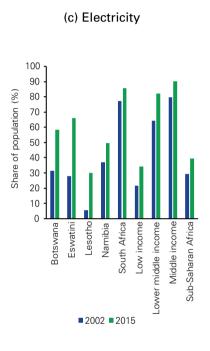
percent. Recent household survey data indicate that 40.6 percent of the population lived in households with access to electricity in 2017. In urban areas, this figure was 70.3 percent, compared with 25.2 percent in rural areas. Access to electricity remains concentrated in urban areas, and it has been identified by NSDP-II as a constraint to improving Lesotho's investment climate as well as livelihoods of the population.

Figure 26: Changes in the proportion of the population with access to selected basic services, comparison to other countries

(b) At least basic sanitation service







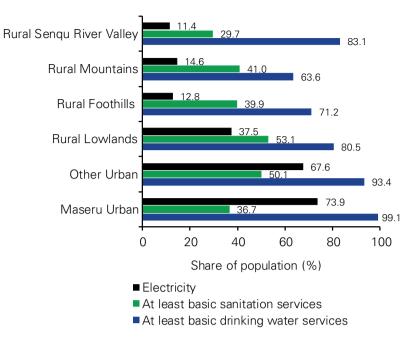
Source: World Development Indicators.

Lesotho lags other lower middle-income countries in providing basic services. Figure 26 compares Lesotho's coverage rates in water, sanitation and electricity to those in other SACU countries and regions. Lesotho falls behind an average lower middle-income country for all three indicators and lags all other SACU countries with regard to electricity and improved drinking water services. For access to improved sanitation services, Lesotho is ahead of only Namibia.

The spatial pattern of access to basic public services is stark and closely follows the urban-rural divide. Rural regions tend to have lower proportions of people with access to basic services (Figure 27). Rural Mountains had the lowest share with access to basic drinking water

services in 2017, while Rural Senqu River Valley had the lowest share with basic sanitation services and access to electricity. These two regions also had the highest national poverty rates in 2017. Interestingly, Maseru Urban, with the highest access rates for improved drinking water services and electricity, had the second lowest share of population with at least basic sanitation services. This underscores the general challenge facing the country regarding expanding access to improved sanitation facilities and suggests that the relatively low monetary poverty rates in Maseru Urban do not correlate perfectly with improving non-monetary dimensions of poverty. Overall, increasing access to basic services in rural regions should be a priority for the government.

Figure 27: Proportion of the population with access to selected basic services, by region, 2017

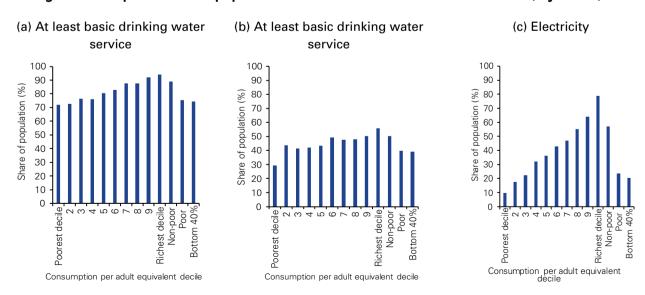


Source: Calculations based on the 2017/18 CMS/HBS.

Access to basic public services correlate negatively with poverty levels, with lowest access among the poorest segments of the population. In 2017, 72.1 percent of the poorest 10 percent of the country's population had access to an improved water source – 22.1 percentage points lower than the proportion among the richest 10 percent (Figure 28). Similarly, at 29.2 percent, access to improved sanitation facilities was lowest among the poorest 10 percent of the

population. For the top 10 percent, 55.7 percent had access to improved sanitation facilities. The access gap between the poor and rich is widest for electricity: only 9.9 of the poorest 10 percent had access to electricity in 2017, compared to 78.8 percent among the richest 10 percent. Among the poor in 2017, access was 75.5 percent for improved drinking water sources, 39.9 percent for improved sanitation facilities and 23.7 percent for electricity.

Figure 28: Proportion of the population with access to selected basic services, by decile, 2017



Source: Calculations based on the 2017/18 CMS/HBS.

Housing conditions and asset holdings have improved

In 2017, 72.0 percent of peopled lived in a house with an improved roof, up marginally from 70.0 percent in 2002. Urban households are more likely than rural residents to live in houses with an improved roof (Figure 29a). As expected, the likelihood of living in a house

with an improved roof increases with income levels. In 2017, 94.1 percent of people in the richest decile lived in houses with an improved roof, 46.5 percentage points higher than the proportion among the poorest 10 percent (Figure 29b).

(a) By geographic location (b) By decile Bottom 40% Rural Sengu River Valley Poor 28.0 32.2 Rural Mountains Non-poor Richest decile Rural Foothills Rural Lowlands 8 Other Urban 7 6 Maseru Urhan 97.9 5 Rural 4 Urban 3 2 72.0 70.2 Lesotho 63.2 Poorest decile 20 40 60 80 100 20 40 60 100 Share of population (%) Share of pooualtion (%) **2017 2002 2017 2002**

Figure 29: Access to an improved roof, 2002-2017

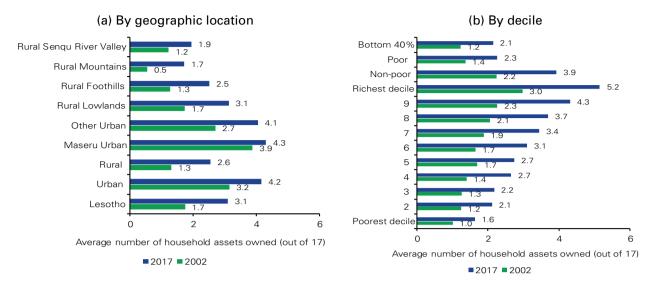
Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

The growth in household consumption between 2002 and 2017 was accompanied by improvements in asset holdings. Insofar as they capture material deprivation, ownership of physical assets is frequently used to examine households' welfare status (Box 5). In 2002, an average Basotho household owned around two of 17 asset types. In 2017, this had increased to

around three. Consistent with patterns for monetary poverty, asset holdings are on average higher in urban than in rural regions (Figure 30a). As expected, asset holdings tend to be higher among richer households (Figure 30b). In 2017, the richest decile had an average of around five out of 17 asset types, close to three times the ownership rate for the poorest decile.

⁹ An improved roof is defined to include: corrugated iron, wood, cement fiber, ceramic tiles, cement and roofing shingles. Traditional thatched roofs are not considered improved because they harbor pests and disease and require significant maintenance.

Figure 30: Changes in household asset holdings, 2002-2017



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Box 5: Construction of an asset index

The index is constructed by counting the number of assets types a household owns from a specified set of durable assets (excluding a car/truck). For this analysis, a set of 17 assets was identified as being common in the 2002 and 2017 datasets. The list includes: radio, telephone (either landline or cellular), television, tractor, electric/gas/coal stove, scotch cart, computer/laptop, bicycle, motorcycle/scooter, generator, refrigerator, fan, air conditioner, water heater, washing machine, video player and camera/video camera.

For each durable asset, a dummy variable was created, valued at one if a household owns at least one of that asset and zero otherwise. The total asset ownership index for each household was computed by adding up the dummy variables. Given that the set being analyzed includes 17 items, the index ranges from zero (none of the items) to 17 (at least one of each item). A household owning five out of the 17 items, for example, gets a score of 5.

The poor experience multiple deprivations

Lack of access to basic services is associated with high poverty rates. Figure 31 reveals wide gaps between poverty rates among individuals with and without access to basic services. In 2017, for instance, 45.7 percent of people who had access to an improved drinking water source were poor, 22.7 percentage points below the poverty rate of 68.3 percent among

people who had no access. The gap was widest for electricity: the group with access had a poverty rate of 29.1 percent, while the group without access was at 63.7 percent. These patterns underscore poverty as a barrier to access to basic services and a contributor to and/or a result of resource inequality. In addition, the patterns highlight the need for the government to address the constraints, for example, of affordability or infrastructure, which limit access by the poor.

80 69.2 68.3 70 63.7 60 Povetry headcount rate (%) 54.4 50 45.7 44 0 42.1 40 29 1 30 20 10 0 Electricity Electricity Improved Improved Improved roof Improved Improved Improved roof drinking water sanitation facility drinking water sanitation facility source source

Figure 31: Poverty rate by access to basic services, 2017

Source: Calculations based on the 2017/18 CMS/HBS.

The monetary poor are simultaneously deprived in multiple dimensions. Figure 32a illustrates the multiplicity of deprivations facing Lesotho's poor. At least 24 percent of the monetarily poor, measured at the national poverty line, were affected by one of the four deprivations tracked in Figure 32. For example, 24.5 percent of the poor had no access to improved water, while 60.1 percent had no access to improved sanitation facilities. It was 76.3 percent for electricity and 39.0

Access

percent for an improved roof. Considering the whole population shows that 16.2 percent of the population were simultaneously deprived in improved sanitation, electricity and improved roof in 2017. Almost 10 percent of the population did not have access to an improved drinking water source, sanitation and electricity. On average, deprivation levels tend to be higher in rural areas than at the national level (Figure 32b).

No access

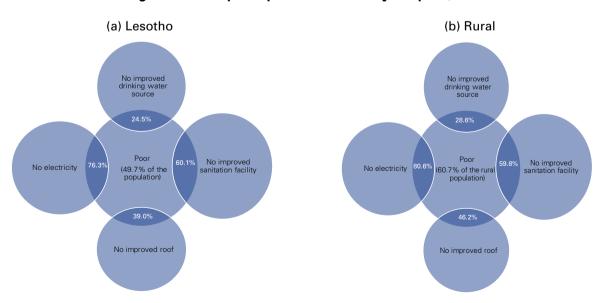


Figure 32: Multiple deprivations faced by the poor, 2017

Source: Calculations based on the 2017/18 MS/HBS.

Food insecurity is prevalent

Hunger is a serious problem in Lesotho. The 2018 Global Hunger Index (GHI) gives the country a score of 23.7, ranking 78th among 119 qualifying countries. ¹⁰ Encouragingly, the country's GHI score has been generally trending downwards (Figure 33). Comparison to other SACU countries indicates the country performed slightly better than Botswana and Namibia in 2018. All SACU countries except for South Africa suffered from serious hunger problems in 2018, with South Africa's situation was classified as moderate.

Lesotho's GHI score is driven by relatively high stunting rates – about 33 percent in 2014 – among children of up to 5 years of age. This underscores the importance of addressing nutrition in the early stages of a child's life to achieve sustainable human and economic growth in Lesotho. According to the 2016 Cost of Hunger Study for Lesotho, the country lost about 7.1 percent of total GDP because of child undernourishment. The money is lost through increased healthcare spending, additional burdens on the education system and lower productivity in the workforce.

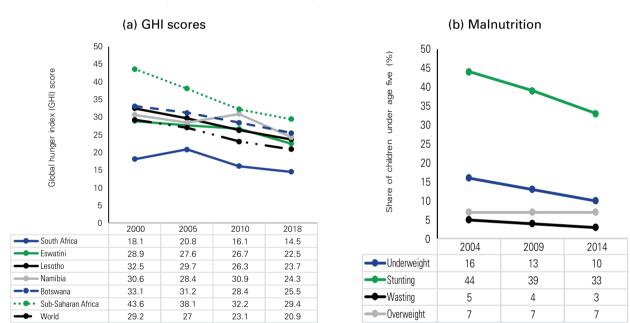


Figure 33: Food insecurity and malnutrition, 2000-2018

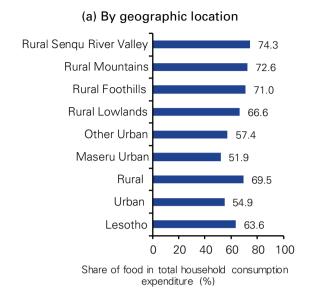
Source: For GHI scores: von Grebmer et al. (2018). For malnutrition: Lesotho Ministry of Health and ICF International (2016).

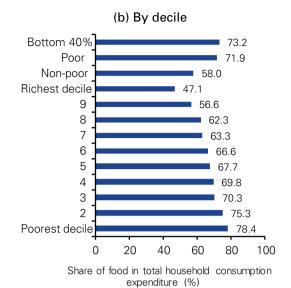
Household spending on food accounts for a high share of total spending, highlighting the challenge of food insecurity in the country. The average share of food spending in total household consumption expenditure was 63.6 percent in 2017, rising to as high as 78.4 percent among households in the poorest decile

(Figure 34). In general, Lesotho faces considerable challenges in addressing food security for poor and vulnerable households, the majority of which are women and children (World Bank 2019f). This challenge is compounded by a high HIV/AIDS rate, which has had a significant negative impact on agricultural productivity.

¹⁰ The GHI is produced annually by the International Food Policy Research Institute to measure and track hunger across countries and regions. The GHI is a multidimensional tool that combines three equally weighted indicators: 1) the prevalence of undernourishment; 2) the prevalence of underweight children age 5 and below; and 3) the mortality rate of children under age 5. The index is used to rank countries on a 100-point severity scale, with zero indicating "no hunger" and 100 being the worst. Values less than 10 indicate "low hunger," values between 10.0 and 19.9 reflect "moderate hunger," values between 20 and 34.9 indicate "serious hunger," values between 35.0 and 49.9 are for "alarming hunger" and values exceeding 50 point to "extremely alarming" hunger problems (von Grebmer al. 2018).

Figure 34: Share of food in total household consumption expenditure, 2017





Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Box 6: Fill the Nutrient Gap Lesotho

The results of the *Fill the Nutrient Gap* (FNG) Lesotho analysis, launched in August 2019, highlight the triple burden of micronutrient deficiencies, undernutrition and overweight/obesity and discusses its social and economic determinants and implications. The key findings from the analysis are:

- 1. Despite the improvement Lesotho has made in the health sector, malnutrition remains widespread. Over a third of children under age 5 are stunted and unlikely to reach their full mental and physical potential. In addition, the rising overweight and obesity rates of adults contribute significantly to the country's public health problems. The malnutrition burden is a challenge throughout all wealth quintiles and geographic districts. Child undernutrition cost Lesotho an estimated \$200 million annually, equivalent to 7 percent of its GDP, and exacerbates the impact of HIV.
- 2. **Economic access is low.** More than half of Basotho households (56 percent) would not be able to afford a diet that meets their nutrient requirements, if they made the optimal dietary choices, and the proportion rises to more than 70 percent in the mountainous regions (Mokhotlong, Thaba-Tseka and Qacha's Nek).
- 3. Low dietary diversity indicates supply- and demand-side issues. About 80 percent of dietary energy comes from such staple foods as maize and starchy roots, with a small proportion from fresh fruit, vegetables and animal source foods. The limited consumption of fresh foods rich in essential nutrients is both an issue of supply (production, availability) and demand (affordability, choices). On the supply side, staples dominate production, with more than 85 percent of total agricultural output focused on cereals (primarily maize) and potatoes. Livestock is typically considered an asset used for income generation but rarely for consumption, and recent economic growth has not led to notable increases of availability of animal-sourced foods, vegetables or fruits. On the demand side, the finding that all wealth quintiles consume mainly staples low in essential nutrients suggests factors beyond affordability issues, and people are not choosing enough nutritious foods. Agricultural productivity, already low, is expected to decrease further as climate conditions worsen, and this will have adverse impacts on crop yields, further impacting availability.

- 4. Lesotho's private sector has yet to reach its full potential. Lesotho depends on South Africa to supply its internal market. The agricultural value chain is dominated by government initiatives, and participation of micro, small and medium agricultural enterprises along the chain is limited. Access to credit for agriculture, and subsequent growth and investment, is very low, making it difficult for farmers to increase their own production beyond subsistence farming. No agricultural insurance is available for farmers to take risks, make investments and diversify beyond staple food production.
- 5. Adolescent girls and breastfeeding women are at higher risk of micronutrient deficiencies. The cost of the diet analysis, part of the FNG assessment, identified the most challenging nutrients in meeting the needs of these target groups: iron, calcium, folic acid and vitamin C. Micronutrient deficiencies among these groups have adverse consequences on their health and the health of their (future) children; for example, high anemia rates in children aged 6-8 months indicate low iron stores from mothers. This is compounded by sub-optimal breastfeeding and complementary feeding practices.
- 6. **Rural and remote areas bear the brunt of food insecurity and the subsequent malnutrition burdens.** This is in part due to nutritious diets' higher costs and worsened by seasonality and limited access to markets. Dietary diversity is low everywhere, but particularly in the more remote areas of mountainous regions and the Rural Sengu River Valley.
- 7. Reliance on social safety nets is relatively high because of limited economic opportunities, but access to social safety nets has not been able to ensure food security. As reported in the 2016 Lesotho Vulnerability Assessment and Analysis Report (LVAC), many rural households face survival and livelihood deficits, indicating that social safety nets only partly meet needs, an issue that may be related to targeting and the extent of assistance provided.
- 8. The primary school feeding program has universal coverage, and it provides a strategic entry point for improving nutrition during a critical stage of life by ensuring that meals meet children's nutritional needs. The program has two added benefits: it offers an opportunity to explore how school meals can be used as a platform to reach adolescent girls with nutrition interventions, and it can stimulate production of diverse foods by ensuring steady demand.
- 9. No single intervention will eliminate malnutrition in Lesotho, and action is required from all sectors to prevent malnutrition. Priority sectors include health, education, agriculture (both small and commercial scale) and social protection. Identified interventions include universal coverage of iron and folic acid supplements for adolescent girls and women of reproductive age, improvement of infant and young child feeding practices, support for fresh school meal and investment and improvement in poultry and vegetable value chains.

Source: Lesotho Food and Nutrition Coordinating Office, WFP, IFAD, UNICEF, FAO. 2019. "Fill the Nutrient Gap Lesotho. Summary Report." https://www.wfp.org/fillthenutrientgap.

Note: The FNG analysis was conducted by the Food and Nutrition Coordinating Office (FNCO) and the World Food Programme (WFP), with the International Fund for Agricultural Development (IFAD), the United Nations Children's Fund (UNICEF) and the United Nation's Food and Agriculture Organization (FAO). To learn more about the FNG concept and methodology, see Bose et al. (2019).

Box 7: Estimating a multidimensional poverty index (MPI) for Lesotho

The Alkire-Foster (AF) method is used to estimate an MPI for Lesotho (L-MPI). The approach complements monetary poverty measures by identifying and counting the number of overlapping deprivations experienced simultaneously by individuals or households. It is built on three premises: selection of poverty dimensions and indicators; identification of the poor based on set criteria (which involves setting cutoffs or poverty lines to determine poverty/deprivation status); and aggregation of information through a poverty index.

Each dimension and each indicator within a dimension are equally weighted. Any person who fails to meet the deprivation cutoff is identified as deprived in that indicator. A person is identified as multidimensionally poor if they are deprived in at least one-third of the weighted MPI indicators. In other words, a person is multidimensionally poor if the person's weighted deprivation score is equal to or higher than the poverty cutoff of 33.3 percent. Following the AF methodology, the MPI is calculated by multiplying the incidence of poverty (H) and the average intensity of poverty (A). More specifically, H is the proportion of the population that is multidimensionally poor, while A is the average proportion of dimensions in which poor people are deprived. So, MPI = H x A, reflecting both the share of people in poverty and the degree to which they are deprived. A detailed explanation of the method is presented in Alkire and Santos (2014).

The choice of dimensions and indicators for estimating the MPI was guided by the 2018 Global MPI and its dimensions and indicators, the country context and data availability. The 2018 Global MPI is an international measure published in 2018 by Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Program (UNDP). Like the Global MPI, the L–MPI consists of three dimensions and 10 indicators. The two, however, differ in terms of the indicators used under the health dimension, owing to unavailability of nutrition and child mortality indicators in the 2017/18 CMS/HBS dataset. Two alternative indicators are used under the health dimension. The first is the distance to the nearest health facility. The second draws from the Fill the Nutrient Gap (FNG) report, launched in August 2019, and compares household per capita spending on food to the per capita value of a nutritious diet reported in the FNG report. Table 7 describes the dimensions and indicators used. Equal weights across dimensions is assumed, along with equal weights across indicators within each indicator. The data source for the analysis is the 2017/18 CMS/HBS.

Table 7: L-MPI: Dimensions, indicators, deprivation cut-offs and weights

Dimension	Indicator	Deprived if	Weight
	Access to a health facility	Household is located more than five kilometers from the nearest health facility.	1/6
Health	Nutrient gap	Household per capita spending on food is less than the per capita value of a nutritious diet as reported in the FNG.	1/6
Faluration	Years of schooling	No household member aged 10 years or older has completed six years of school.	1/6
Education	School attendance	Any school-aged child is not attending school up to the age of completing class 8.	1/6

Dimension	Indicator	Deprived if	Weight
	Cooking fuel	Household cooks with dung, wood, charcoal or coal.	1/18
	Sanitation	Household's sanitation facility is not improved (according to SDG guidelines) or it is improved but shared with other households.	1/18
Living	Drinking water	Household does not have access to improved drinking water (according to SDG guidelines) or safe drinking water is at least a 30-minute roundtrip walk from home.	1/18
standards	Electricity	Household has no electricity.	1/18
	Housing	At least one of the three housing materials for roof, walls and floor are inadequate; the floor is of natural materials and/or the roof and/or walls are of natural or rudimentary materials.	1/18
	Assets	Household does not own more than one of these assets: radio, TV, telephone, computer, animal cart, bicycle, motorbike or refrigerator and does not own a car or truck.	1/18

Source: Authors' presentation.

One attraction of the MPI estimated here is that it is decomposable by space and population attributes. This makes it a powerful tool for not only identifying the poor and where they live but also for guiding targeted policy interventions to what contributes to poverty in those areas, allowing resources to be channeled properly.

Nationally, the deprivations are highest in the nutrient gap, followed by electricity. Table 8 reports the people who are deprived in each of the 10 indicators. These "raw" headcounts consider all deprivations and not just those among the poor. In urban areas, the deprivations are highest for improved sanitation, followed by the nutrient gap. In rural areas, on the other hand,

the deprivations are highest in cooking fuel, followed by electricity and then the nutrient gap. This suggests that attention to nutrition and electricity will be required more widely than just among the poor. Consistent with the spatial patterns of monetary poverty, deprivations tend to be highest in Rural Mountains and Rural Senqu River Valley.

Table 8: Raw headcount rates, 2017

		National	Urban	Rural	Maseru Urban	Other Urban	Rural Lowlands	Rural Foothills	Rural Mountains	Rural Senqu River Valley
	Access to a health	00.0	0.0	45.5	0.0	10.0	00.4	F0.0	F0.0	01.0
Health	care facility	32.8	8.2	45.5	2.0	12.9	33.4	50.3	59.3	61.2
	Nutrient gap	64.5	50.6	71.8	51.9	49.6	67.3	71.8	78.3	76.6
Education	Years of schooling	7.5	4.0	9.3	3.6	4.2	5.4	13.6	13.2	12.0
Ladcation	School attendance	3.0	0.5	4.3	0.1	0.7	1.2	5.4	9.4	5.5
	Cooking fuel	54.7	13.0	76.4	6.2	18.1	61.1	88.8	92.2	91.3
	Sanitation	54.9	55.6	54.5	63.3	49.9	46.9	60.1	59.0	70.3
Living standards	Drinking water	17.8	4.2	24.9	0.9	6.6	19.5	28.8	36.4	16.9
	Electricity	59.4	29.7	74.8	26.1	32.4	62.5	87.2	85.4	88.6
	Housing	43.8	14.0	59.3	7.5	18.8	36.2	69.3	88.3	82.0
	Assets	33.4	16.7	42.1	14.4	18.4	30.6	40.0	61.1	52.6

Source: Calculations based on the 2017/18 CMS/HBS.

About half of Lesotho's population was identified as multidimensionally poor in 2017. In 2017, 51.6 percent of the population was deprived in at least one-third of the weighted indicators in Table 7. At 69.5 percent, the incidence of multidimensional poverty in rural areas was 51.8 percentage points higher than urban area's 17.7 percent. Although the multidimensional poverty headcount rate is significantly lower in urban

areas, Table 9 shows the intensity of multidimensional poverty is high in both urban and rural areas. An average multidimensionally poor person is deprived in 41.8 percent of the weighted indicators in urban areas and 49.8 percent in rural areas. This implies that the extent of multidimensional poverty is very high for the few multidimensionally poor individuals in urban areas.

Table 9: The incidence and intensity of multidimensional poverty in Lesotho

	Multidimensional poverty headcount rate (%)	Intensity (%)	MPI
Lesotho	51.6	48.8	0.252
Urban	17.7	41.8	0.074
Rural	69.5	49.8	0.346
Maseru Urban	11.8	39.8	0.047
Other Urban	22.2	42.8	0.095
Rural Lowlands	53.3	44.1	0.235
Rural Foothills	77.1	51.9	0.400
Rural Mountains	88.5	54.4	0.481
Rural Senqu River Valley	87.2	52.1	0.454

Source: Calculations based on the 2017/18 CMS/HBS.

There is a clear spatial dimension to multidimensional poverty in Lesotho. Rural Mountains had the highest multidimensional poverty headcount rate in 2017 at 88.5 percent, followed by Rural Senqu River Valley at 87.2 percent (Table 9). This is consistent with the regional poverty story revealed by the monetary indicators of poverty. Maseru Urban had the lowest incidence and intensity of multidimensional poverty. Even so, the intensity of multidimensional poverty was high at 39.8 percent. This is of policy relevance because it supports

caution around formulating policies or interventions based only on the poverty headcount rate. In this case, the multidimensional poverty headcount rate hides the situation of the multidimensionally poor. The result, coupled with the finding that Maseru Urban had the lowest monetary poverty in 2017, suggests better performing provinces do have pockets of intense multidimensional poverty. Even so, rural regions contributed most to multidimensional poverty levels in 2017 (Figure 35).

2.8% • Maseru Urban • Other Urban • Rural Lowlands

31.4%

15.1%

Figure 35: Contribution of weighted indicators to the MPI, geographic locations, 2017

Source: Calculations based on the 2017/18 CMS/HBS.

Rural

The nutrient gap slows progress toward reducing multidimensional poverty. Figure 36 shows what each indicator contributed to multidimensional poverty in 2017. The nutrient gap was the most important factor in multidimensional poverty (29.7 percent of estimated

89.9%

MPI). This was followed by deprivation in access to a health facility at 19.2 percent. This underscores the importance of nutrition and equitable access to quality healthcare facilities in reducing multidimensional poverty in Lesotho.

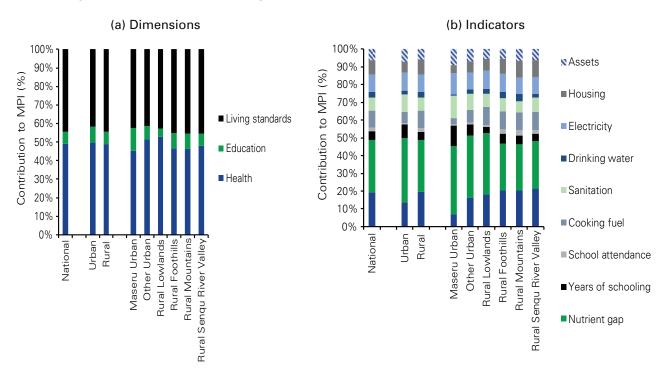
Rural Foothills

Rural Mountains

Rural Sengu River Valley



Figure 36: Contribution of weighted indicators to the MPI, dimensions and indicators



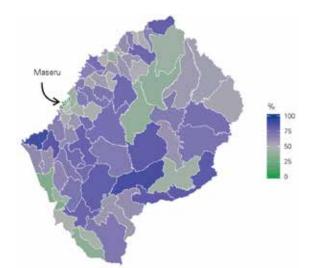
Source: Calculations based on the 2017/18 CMS/HBS.

Maps further support the spatial dimension of poverty and deprivation in Lesotho. The rural areas, particularly in the mountainous regions, are more likely to suffer deprivations and subsequently poverty (Figure 37). Maseru and the lowlands tend to have the

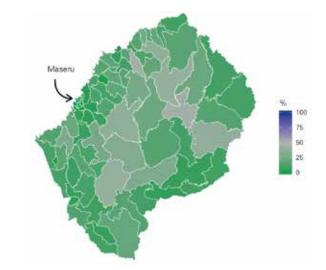
least deprivation rates. Deprivation levels vary greatly by indicator, with the vast majority having access to improved water, but only 36 percent having access to electricity and 20 percent having access to internet (Population and Housing Census 2016).

Figure 37: Share of consistencies deprived in selected indicators

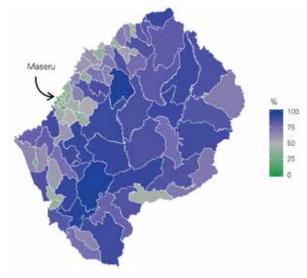
(a) Share without access to improved sanitation facilities



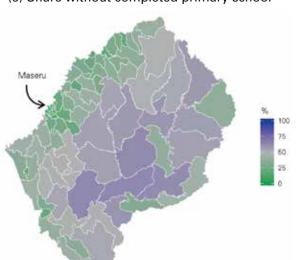
(b) Share without access to improved water sources

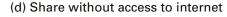


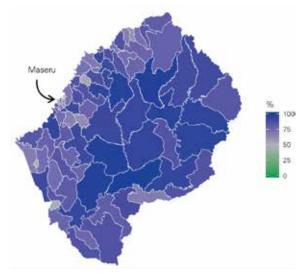
(c) Share without access to electricity



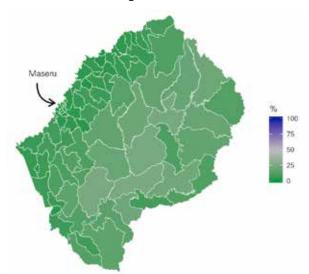
(e) Share without completed primary school







(f) Share not knowing how to read and write



Source: Calculations based on the 2016 PHC.

In sum, this chapter documents the progress Lesotho has made and the challenges it still faces in reducing poverty. It shows that despite progress in reducing both monetary and non-monetary dimensions of poverty in the past 15 years, poverty is persistent and deeply entrenched in Lesotho, especially in rural areas. This suggests that improvements in rural areas is central to future poverty reduction.

Chapter I.2: The nature and evolution of inequality in Lesotho

Historically, inequality has been very high in Lesotho. Yet, consumption of the bottom 40 percent of the population grew by 2.2 percent annually between 2002 and 2017—much faster than the top 60 percent of the population, which rose only by 0.1 percent annually. This boost in shared prosperity caused a decline in inequality. Although Lesotho is now more equal than its neighbors, with a Gini coefficient of 44.6, it remains an unequal country. In addition to high inequality of outcomes, Lesotho faces high inequality of opportunity. Factors such as place of birth, parents' education, health shocks and environmental shocks contribute to half of the current level of inequality in Lesotho. Relatively low intergenerational mobility exacerbates high inequality in Lesotho.

A. The bottom of the population grew the fastest

The fastest consumption growth has been experienced at the very bottom of the population.

Nationally, the poorest 10 percent of Basotho had annualized growth rates above 4 percent between 2002 and 2017 (Figure 38a). In contrast, households around the median managed annualized consumption growth rates of only around 1 percent, while the top 10 percent experienced a reduction in their consumption levels. This suggest that the distribution of welfare became more equal during this period.

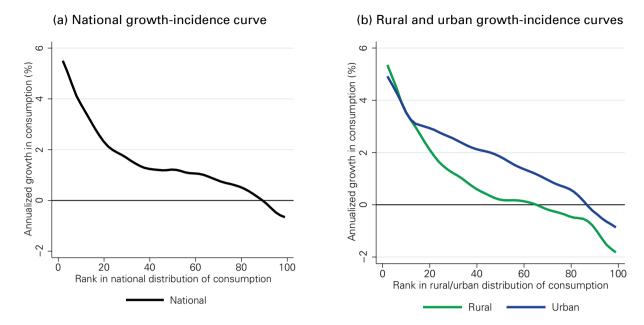
Consumption growth was more favorable among the urban population. While the bottom 10 percent grew equally quickly in both urban and rural areas, the distribution's middle in urban areas had much stronger growth rates than the middle in rural areas. Median consumption in rural areas did not change between

2002 and 2017, while it grew nearly 2 percent annually in urban areas (Figure 38b). This gap clearly shows the growing urban-rural divide. The 40 percent wealthiest rural households saw a decline in their consumption between 2002 and 2017. Part of this decline was due to the drought experienced in 2017, which impacted rural households most severely.

The bottom 20 percent more than doubled their share of total consumption. In 2002, the bottom quintile was responsible for 2.4 percent of total consumption—well below the 20 percent that would indicate an equal distribution. By 2017, this share had more than doubled to 5.4 percent (Figure 39a). At the same time, the share of the total consumption value held by the top quintile fell from nearly 60 percent to 45 percent. A typical individual in the top quintile had 14 times the consumption of a typical individual in the bottom quintile in 2002; by 2017, this ratio was eight, a massive reduction over 15 years.

¹¹ A simple way to determine whether the welfare distribution has gotten fairer in recent decades is to look at how fast each part of the distribution grew. This can be accomplished with growth incidence curves, which show how fast each part of the distribution grew between two points in time. Growth incidence curves come in two types: Non-anonymized curves track the growth in consumption of specific households over time. This type requires panel data and cannot be conducted for Lesotho. Anonymized curves rank all households according to their consumption levels at two points in time and observe how much household consumption at the xth percentile of the distribution grew.

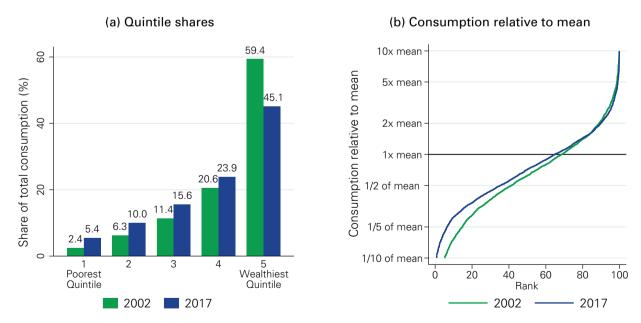
Figure 38: Consumption growth-incidence curves, 2002-2017



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Note: The left figure ranks households according to their consumption and shows the annualized growth rates in consumption at each part of the distribution. The right figure replicates this for urban and rural households, separately.

Figure 39: Quintile shares and consumption relative to mean, 2002–2017



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Note: The left figure shows each quintile's share of total consumption. The right figure ranks households according to their consumption level and plots each household's consumption relative to mean consumption.

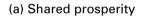
Fewer households have consumption levels far below the national average. In 2002, 15 percent of the population had consumption less than a fifth of the mean; in 2017, only 6 percent did – a significant decline (Figure 39b). In contrast, about 35 percent of the population exceeded mean consumption in both 2002 and 2017, suggesting little change in relative consumption at the top of the distribution.

Consumption growth at the bottom boosted shared prosperity between 2002 and 2017. The World Bank aims to boost the growth of the poorest 40 percent in all countries. In Lesotho, the annualized growth rate of the bottom 40 percent – also called shared prosperity – was 2.2 percent between 2002 and 2017 (Figure 40a). This is much faster than the mean growth of 0.3 percent. The difference between the growth of the bottom 40 percent and the mean is called the shared prosperity premium.

If positive over a specified time period, it indicates the distribution is becoming more equal; if negative, less equal. Lesotho's shared prosperity premium was 1.9 percentage points between 2002 and 2017.

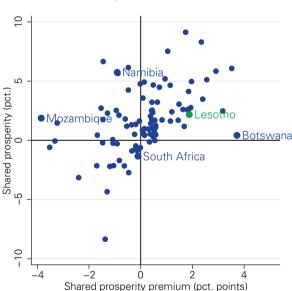
Lesotho is alone among its Southern Africa neighbors with healthy positive readings on both shared prosperity and the shared prosperity premium. The Global Database on Shared Prosperity (World Bank 2019a) contains estimates of shared prosperity in 93 countries. Lesotho is one of only 14 with both shared prosperity and shared prosperity premiums above 1.5 (Figure 40b). It is also the only country among its neighbors in this group. In Namibia, consumption grew slower for the bottom 40 percent than the mean. In Botswana, the consumption of the bottom 40 percent hardly grew but it still did better than the mean, which saw consumption fall.

Figure 40: Shared prosperity in Lesotho, comparison to other countries



Shared prosperity (pct.) Countries ordered by shared prosperity

(b) Shared prosperity and shared prosperity premium



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS and the Global Database on Shared Prosperity (World Bank 2019a).

Note: The left figure ranks countries according to their shared prosperity estimates. The right figure plots shared prosperity and shared prosperity premiums.

B. Inequality fell but Lesotho remains an unequal country

As a result of faster growth at the bottom of the consumption distribution, Lesotho saw a decline in its Gini coefficient of consumption per adult equivalent. In 2002, Lesotho was one of the few countries in the world with a Gini coefficient above 50. Since then, the pro-poor growth has induced a fall in inequality, and the coefficient stood at 44.6 in 2017 (Figure 41).

All regions experienced substantial declines in inequality levels between 2002 and 2017. In Maseru Urban, for example, the Gini coefficient fell from 52.4 to 40.9. In 2002, some regions had higher inequality levels than the country as a whole; in 2017, all regions had substantially lower inequality than the country as a whole. This implies that today's gaps are more a result of inequality between regions – for example, between urban and rural areas. Hence, the decline in the national Gini coefficient cannot be attributed to convergence in income levels across regions. In fact, the widening urban-rural divide that was apparent in the growth incidence curves has offset some of the decline in the inequality.

90 25 53.1 52.6 50.7 49 9 50 **Bini** coefficient 46 41.8 4 40.9 40.5 35 Rural LesothoMaseru Other Rural Rural Rural Urban Low-Foot-Moun-Sengu lands River hills tains Valley ■ 2002 ▼ 2017

Figure 41: Gini coefficient 2002 and 2017, national and by region

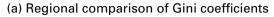
Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

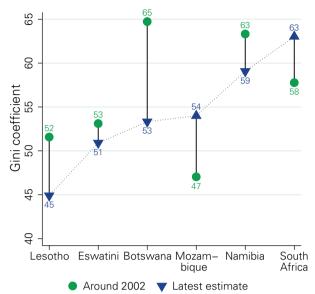
Note: The figure shows the Gini coefficient nationally and across regions in 2002 and in 2017.

Lesotho is now the least unequal country among its neighbors but remains to one of the 20 percent most unequal countries in the world. The Southern Africa region is the world's most unequal, with Gini coefficients above 50 in Eswatini, Botswana, Mozambique and Namibia – and astonishingly above 60 in South Africa. Lesotho is the only country in the Southern African region with a Gini coefficient well below 50 (Figure

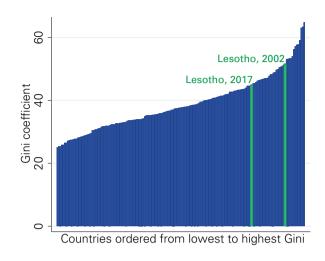
42a). This is a change from the early 2000s, when inequality in Lesotho was more on par the rest of the region. Despite this progress, Lesotho remains among the 20 percent most unequal countries worldwide. This means more than 80 percent of countries for which we have household surveys have lower rates of inequality (Figure 42b).

Figure 42: Regional and global inequality comparisons





(b) Global comparison of Gini coefficients



Source: PovcalNet and the 2017/18 CMS/HBS.

Note: The left figure ranks neighboring countries according to their latest Gini estimate, while also showing the Gini coefficients for a survey around 2002. The right figure ranks all countries according to their Gini coefficient as measured in the latest available poverty survey.

C. Inequality of asset ownership and income fell as well

The robustness of the inequality decline in consumption can be assessed by looking at inequalities in income and assets. aggregates that show each household's total monthly net income broken down into six components have been constructed for both the 2002 and 2017 surveys. The components are formal wage income, agricultural income, self-employment income, social assistance, remittances/transfers and other income. Agricultural and self-employment income are net of operating costs and include the market value of own-produced consumption. In addition, asset ownership indices were calculated based on the total number of 16 assets the households own. Ownership of these 16 assets were comparable across the two surveys.

The growth-incidence curve for assets supports the pattern observed with consumption: the distribution's bottom has grown the fastest. The bottom 30 percent had no assets in 2002, so it is not possible to compute the growth in their asset ownership. Among those whose asset growth can be computed, the poorest individuals had the largest gains. Median households tripled their number of assets between 2002 and 2017, but the number of assets of the wealthiest households increased by less than 50 percent (Figure 43a).

Incomes also grew most at the bottom of the distribution. The bottom 20 percents' incomes grew many times faster than the top half (Figure 43b). In contrast to the growth-incidence curve of consumption, however, all households increased their income – all by at least 5 percent annually. Why the discrepancy? The inflation used for the income aggregate (the growth in the consumer price index) is different from the inflation used for the consumption aggregate (the growth in the poverty line). The two measures increased at very different rates over the 2002-2017 period.

Income inequalities are driven by large wage discrepancies. Income inequality can be broken down by how much each income component added to total income inequality. Doing so reveals that nearly two-thirds of all income inequality can be attributed to differences in formal wage income in 2017 (Figure 44). This is partly driven by the high public-private wage gaps. Self-employment income contributed 30 percent to income inequality, while remittances, social protection and agricultural income were all pro-poor and thus hardly contributing to inequalities.

The fact that consumption, income and assets are measured at the household level may mask important gender inequalities. Although women in

Lesotho tend to have both better education and health outcomes, this need not be translated through the labor market. There is relatively high representation of women in government and the government has introduced policy and legislative changes supporting gender equality; however, the effectiveness of these measures in bringing about positive changes in the lives of women has been limited. Deeply entrenched social norms and stereotypes that negatively impact women are dominant and reinforced by the limited awareness of new laws, low capacity and inconsistency in application. As a result, the opportunities for women to participate on equal footing in the economic life of the country remain limited. For more information, see Box 8.

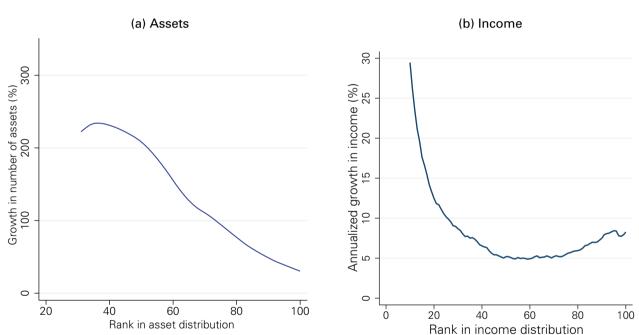


Figure 43: Growth-incidence curves in assets and income

Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Note: The left figure shows the growth in number of assets while the right figure shows the annualized growth in income by percentile. Growth in assets is not defined below the 30th percentile because 30 percent of individuals in 2002 lived in households with no assets.

Self-employment income self-englished social protection of the income se

Figure 44: Share of income inequality due to different components

Source: Calculations based on the 2017/18 CMS/HBS.

Box 8: Gender equality in Lesotho

Lesotho's Constitution provides for equality and justice to males and females and provides for fair wages and equal remuneration for work of equal value. The current law on land matters is gender neutral in its provisions. The Legal Capacity of Married Persons Act (LCMPA), along with other progressive legislation, laid the groundwork for a gender responsive legal framework that protects women's rights. Vested with full legal capacity and liberated from male guardianship, adult Basotho women are now in theory better equipped to play more productive and active roles as economic and social agents. However, there is anecdotal evidence that the implementation of the LCMPA has been problematic, perhaps because it came from a top-down political act in a cultural context still widely seen as patriarchal.

Females outperform males in terms of education levels in Lesotho, but earnings are systematically lower. The 2017/18 CMS/HBS data suggest that net enrollment in primary school (grades 1 to 7) for girls was 92.4 percent in 2017, while boys were at 88.4 percent. Net enrollment in secondary school was 51.9 percent for girls and 31 percent for boys. The female-to-male completion ratio in primary school was 127 percent in 2014. However, some schools have reintroduced fees to cope with insufficient funding, leading to disparities in enrollment rates between poor and rich wealth quintiles, especially for boys. Female represent 54 percent of the literate population in Lesotho. Females averaged 5.9 years of schooling in 2018, compared to 4.9 years for males. Access to the internet was 57 percent for females and 43.4 for males.

Poverty among rural women in Lesotho intersects with other severe disadvantages they face in high rates of HIV/AIDS, maternal mortality and gender-based violence (GBV). While Lesotho has the second highest prevalence of HIV/AIDs globally, adolescent girls and young women between the ages of 15 to 24 are three times more likely to be infected than males of the same age group.¹² In fact, 49 percent of the poorest women and 52 percent of

all women aged 15-49 believed a woman is not justified in refusing to have sex with her husband if she knows he has sex with other women (World Bank 2016b). Moreover, women also take on the full-time responsibilities of staying home to care for HIV-ailing elders. The high birth rate among young women is particularly critical because this group also experiences the highest maternal mortality rate.¹³ Moreover, 86 percent of women have experienced a form of GBV at least once in their lifetime, and research indicates that GBV is likely common but goes unreported. These are among the leading factors in the exclusion of women from the labor market and their low rates of participation in the economy.¹⁴

While Lesotho continues to have one of the highest rates of maternal mortality in the world, significant progress has been made over the past decade with the opening of the Queen Mamohato Hospital in 2015. Access to delivery care has also been improving. The DHS 2014 shows sustained improvement in maternity care. The proportion of women with babies delivered by a health professional (nurse or doctor) rose from 61.5 percent in 2009 to 77.9 percent in 2014. The proportion of women who delivered in a health facility increased from 58.7 percent in 2009 to 76.5 percent in 2014. The proportion of women who received antenatal care from a health professional improved from 91.8 percent 2009 to 95.2 percent in 2014.

Attempts to bolster the status of women have had limited impacts. Lesotho has a relatively high representation of women in government, ¹⁵ and the government has introduced policy and legislative changes that support ending violence against women, income equality and more generally the equal status of women. ¹⁶ The effectiveness of these measures in bringing about positive changes in the lives of women has been limited. Deeply entrenched social norms and stereotypes negatively impacting women are dominant and reinforced by limited awareness of new laws, low capacity and inconsistency in application. As a result, the opportunities for women to participate on equal footing in the economic life of the country remain limited. For instance, the government introduced *The Land Act 2010* to improve gender equality in land allocation and inheritance. Among other measures, it introduced provisions for inheritance of property by widows, joint titling of property and equal inheritance rights for both married and unmarried women. However, customary law prevails where women are regarded as minors, ¹⁷ leading to many restrictions on their ability to access and make decisions around land and contributing to their inability to access to credit and loans. ¹⁸

¹² Latest data available is from 2016. Gender Data Portal, World Bank.

¹³ In fact, among young women (aged 20-24), 14 percent gave birth by age 18. There are also high rates of adolescent fertility at 89 births per 1,000 in women between ages 15-19.

¹⁴ This is also visible in a women's unemployment rate of 32.1 percent, far exceeding the 21.3 percent for men. (World Bank 2016b).

¹⁵ Representation of women in Lesotho's government is high compared to other Sub-Sharan countries. In 2016, the proportion of seats held by women in national parliaments was 25 percent, and the proportion of women in ministerial level positions was 18.2 percent (World Bank Gender Data Portal).

¹⁶ See UN Women Lesotho Country page.

¹⁷ In 2006, the Legal Capacity of Married Persons Act repealed customary laws that give husbands legal authority over wives and/or their property.

¹⁸ In fact, land is linked to key development challenges in Lesotho, i.e. HIV, malnutrition and violence against women. The UN HRC and UN Women find that in the context of HIV, women's rights to inheritance and property are "... a crucial factor in reducing women's vulnerability to violence and HIV, as well as empowering women to cope with the social and economic impact of the epidemic at the household level." Evidence also suggests that countries where women lack landownership rights have 60 percent more malnourished children and the lack of access to credit correlates with 85 percent more malnourished children (United Nations 2013).

D. Inequality of opportunity is high

Nearly half of all inequality is due to individuals' region of birth, human capital achievements during childhood, serious health problems and environmental shocks. Nearly half of all inequality – 46 percent – can be attributed to relatively small number of factors beyond individuals' control (see Box 9 for more details on how this is measured). This remarkably high number is higher than the 10 other countries in Sub-Saharan Africa with available estimates (Beegle et al. 2016).

Figure 45a illustrates the inequality of opportunity, showing everyone's predicted consumption based on factors beyond individual control, ordered by these predictions. If these factors did not matter, all households would have the same predicted consumption – i.e., there would be no gradient. To the contrary, some individuals can expect to have five times the consumption of others based solely on where they grew up and other factors outside of their control.

Box 9: Inequality of opportunity and intergenerational mobility

Inequality of opportunity

Inequality could stem from the fact that individuals in wealthier households induce more effort or because they had access to human, social, and financial capital that gave them a head start in life. The latter part is often considered more problematic because it is beyond individuals' control. It is frequently dubbed inequality of opportunity, and it can be expressed as a fraction of total inequality (Roemer, 1998). The higher this fraction, the more inequality is driven by sources beyond individual control.

The share of inequality attributable to inherited opportunities can be estimated using machine-learning methods. Such methods use a range of variables that plausibly lie beyond individual control to predict individuals' consumption. Examples of these variables include the districts where individuals grew up, human capital acquired during childhood, serious health problems and environmental shocks. The more these variables are able to predict consumption levels, the more inequality of opportunity is present. ¹⁹ In this report, a method called conditional inference random forests is used to make such predictions (Brunori et al, 2018).

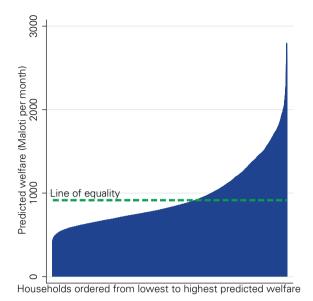
Intergenerational mobility

To put the unfair inequalities in a global context, Lesotho can be compared to other countries on intergenerational mobility. Narayan et al. (2018) contains estimates of absolute and relative mobility in education for more than 140 countries, looking at individuals born in the 1980s or later who have completed their schooling. One measure of absolute mobility in education is the share of individuals who have strictly more education than their parents. A measure of relative mobility in education is (one minus) the rank correlation between parents and children's education levels in a cohort. The higher the correlation, the more parents' rank in society predicts their children's rank and the lower the relative mobility. When relative mobility is higher, some children are, on expectation, off to a disadvantaged start even before they are born.

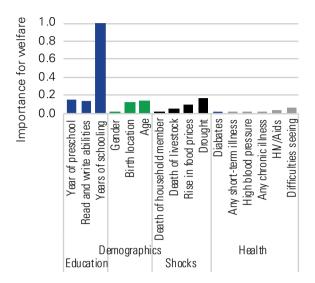
¹⁹ Health shocks and environmental shocks are not necessarily fully beyond individuals' control because behavior and actions can lower the risk of certain shocks and mitigate the consequences when they occur. This could mean that the share of inequality due to factors beyond individual control is overestimated. However, this is unlikely to be the case in practice because many other factors beyond individual control are not included in the analysis due to a lack of data – such as the quality of the education received.

Figure 45: Inequality of opportunity and its drivers

(a) Predicted welfare based on factors beyond individual control



(b) Relative importance of factors determining individuals' opportunities



Source: Calculations based on the 2017/18 CMS/HBS.

Note: The left figure shows individuals predicted consumption based on circumstances beyond individual control. The right figure shows the relative importance of the various factors beyond individuals' control in terms of how much they predict individuals' consumption level.

The importance is scaled by assigning the most important variable a value of 1.

Differences in educational achievement during childhood are the most important contributor to unequal opportunities. In this context, the number of years of schooling individuals receive prior to the start of high school is an important indicator. (Figure 45b). Furthermore, the number of years of preschool education predicts individuals' consumption and thus generates unfair inequities — as do individuals' birth location, age and recent exposure to drought. The fact that the number of years in preschool matters suggests inequality begins early in life, so a viable path to inequality reduction must ensure that all children complete basic education levels.

We can trace how early inequities occur by looking at intergenerational mobility, a concept related to inequality of opportunity. Two distinct concepts of intergenerational mobility exist: Absolute mobility measures whether children are doing better than their parents, while relative mobility measures the strength of the connection between parents' outcomes and children's outcomes. The latter is closely connected to the notion that all individuals ought to have equal opportunities, no matter their background.

In a global context, Lesotho is in the bottom quartile in terms of relative intergenerational mobility (see Box 9 for more details on how this is measured). ²⁰

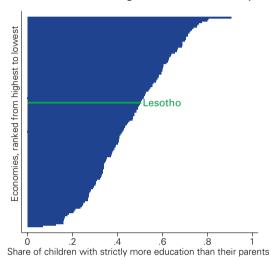
The correlation between parents' years of schooling and their children's years of schooling in Lesotho is 0.54, which is quite high when compared to other countries (Figure 46a). This means that parents' level of education to a large extent predicts their children's level of education, making it difficult for people born in

the bottom of the distribution to climb to the top. When it comes to absolute mobility, Lesotho looks somewhat better. Half of all Basotho have strictly more education than the average of their parents, and a much greater fraction have at least as much education as their parents (Figure 46b). As a result, many children surpass their parents' living standards, but this happens across the distribution, so most fail to bypass others within their generation along the way.

Figure 46: Intergenerational mobility in Lesotho

(a) Relative intergenerational mobility Lesotho Lesotho 1 - rank correlation between parent and child's level of schooling

(b) Absolute intergenerational mobility



Source: Narayan et al. (2018) and the 2017/18 CMS/HBS.

Note: The right figure ranks countries according to their level of absolute mobility; i.e., the share of individuals that have strictly more education than their parents. The left figure ranks countries according to their level of relative mobility, measured as (one minus) the rank correlation between parents and children's levels of education in a cohort.

²⁰ Estimating intergenerational mobility requires information from two generations. Ideally, this is obtained through long panels, or alternatively by respondents reporting the educational attainment for their parents. Neither is available for Lesotho. Instead, respondents that reside in the same household as their parents are relied upon. Narayan et al. (2018) show that using only co-residents yield similar estimates to relying on panels or retrospective questions.

Part II: Drivers and challenges of poverty reduction in Lesotho



Chapter II.1: Factors associated with poverty reduction

The service sector, productivity improvements and demographic changes contributed to economic growth between 2000 and 2017. Despite moderate growth rates, the fall in poverty was driven by reduced inequalities rather than growth. The poverty and inequality declines can be explained by expansion in social protection, improvements in formal wages associated with improved education levels and a demographic dividend. Poverty and inequality reduction slowed because of the negative impacts of weather shocks and falling remittances – both more pertinent to the rural population. Lesotho's growth and poverty reduction prospects are severely impaired by a number of vulnerabilities. Human capital and well-functioning labor markets are keys to further reductions in poverty and inequality.

A. Drivers of Lesotho's economic growth

Lesotho is a lower middle-income country with a moderate growth rate. Lesotho had a gross national income per capita of US\$1,380 in 2018. Government spending accounted for 50 percent of GDP. From 2000-2017, Lesotho's GDP grew at an average annual rate of

4 percent, and GDP per capita increased at an average annual rate of 2.7 percent. However, growth slowed to 1.5 percent in 2018. Although an average growth rate of 4 percent is relatively high compared to other countries in the region, the growth rate falls short of the National Strategic Development Plan (NSDP) target rate of 7 percent.

Figure 47: GDP and private consumption, 2002-2018

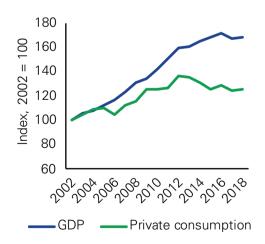
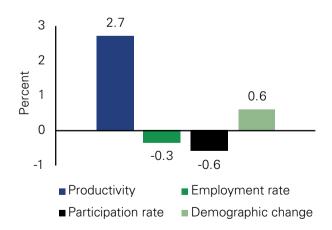


Figure 48: Growth decomposition, annualized, 2000-2017



Source: Authors' calculations based on WDI and IMF databases.

Note: Private consumption includes households final consumption expenditures and non-profit institutions serving households final consumption expenditures, converted to index with 2002 = 100.

Private consumption growth was significantly lower than GDP growth, suggesting a low GDP to poverty elasticity. As presented in Figure 47, private consumption increased by approximately 25 percent between 2002 and 2018, while GDP grew by 67 percent. Private consumption's much slower growth compared to other GDP components suggests a relatively slow speed of poverty reduction relative to GDP growth. Despite continuing economic growth, private consumption has fallen since 2012.

Structural transformation occurred in Lesotho, characterized by a rapid increase in value added and employment in the services sector and a decline in the

importance of agriculture. From the expenditure side, demographic changes and productivity improvements were the main contributors to GDP growth between 2000 and 2017, while stagnation in employment and labor force participation had negative impacts on growth (Figure 48). On the production side, the services sector has been the most significant contributor to growth. The contributions of the agriculture and mining sectors have been very volatile due to weather shocks and fluctuations in commodity prices. The services sector grew fast in Lesotho while value added in agriculture remained low (Figure 49 and Figure 50). This trend is especially pronounced since 2010.

Figure 49: Employment by major sector, 1990 - 2017

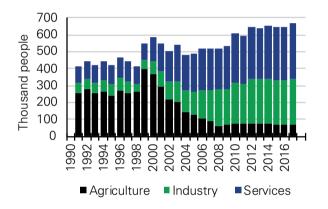
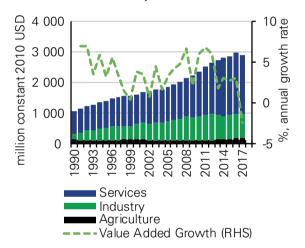


Figure 50: Growth and value added in Lesotho by sectors, 1990-2017



Source: Authors' calculations based on WDI and IMF databases.

Lesotho's modest economic growth is under threat because the country's macro-fiscal outlook is weak in the near-to-medium term (World Bank 2018e).

This stems largely from the country's exposure to the sluggish South African economy, climate-related shocks and rising public debt. Lesotho's economic performance is dependent on South Africa, and the country's poor near-to-medium term economic outlook is expected to have a negative impact on Lesotho's growth trajectory. This will restrict Lesotho's already limited fiscal space,

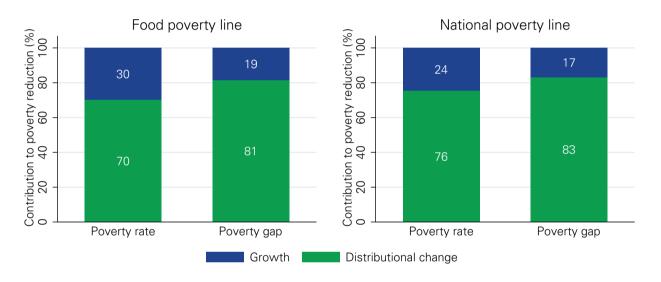
implying the government will find it hard to further stimulate growth. In addition, the majority of the rainfed dependent rural population has been exposed to droughts. SACU revenues have declined from 25 percent of GDP in FY2014/15 to 13.6 percent in FY2016/17—mostly due to South Africa's slower growth. For Lesotho, the decline in SACU revenues narrowed its fiscal space and led to a considerable decline in fiscal buffers. The country's fiscal deficit reached a record 9.5 percent of GDP in 2016 before receding to 3.5 percent in 2018.

B. Inequality drove the decline in poverty

About three-quarters of the poverty decline can be attributed to distributional changes, while growth can explain only a quarter of the decline in poverty. Figure 51 breaks down the change in the poverty rate between 2002 and 2017 by whether it was driven by growth in mean consumption per adult equivalent or by a more equitable distribution of consumption.²¹ Using the food poverty line, which captures extreme poverty, 70 percent of poverty reduction came from distributional changes rather than growth. The picture is reinforced

when using the poverty gap to make the decomposition, suggesting that the very bottom of the distribution saw significant gains in living standards between 2002 and 2017. Growth's relatively small role is surprising given Lesotho's high average growth rates from 2002 to 2017. One possible explanation for the small contribution is that growth only benefited the top of the distribution. However, this is not the case, given that consumption was more evenly distributed in 2017 than in 2002. Instead, only a relatively small share of real GDP growth per capita was passed through to consumption.

Figure 51: Decomposing changes in poverty into growth and distributional change



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Growth may have failed to reduce poverty significantly because it went to the wrong sectors. As shown in the previous subsection, final household consumption expenditures' share of total GDP decreased markedly between 2002 to 2017, suggesting that growth in household consumption may not have mirrored growth in GDP. The sector that saw the largest

increase in share of GDP was financial and insurance activities, which may not trickle down to the rural poor. In contrast, the sectors the poor tend to rely on, such as agriculture and textiles, saw stagnation or decline in their shares of total GDP. These observations points to challenges of converting income growth into sustainable poverty reduction. For sustained reductions in poverty,

²¹ There are several ways to decompose the changes in poverty and understand what drove its decline between 2002 and 2017. Since the decline was relatively modest for such a long time span—a decrease from 56.6 percent to 49.7 percent—it is also likely that some factors triggered increases in poverty. This chapter uses decomposition techniques to break down the changes in poverty. Many techniques describe what poverty would have been in the most recent data if one aspect from the earlier time had remained unchanged. Such a counterfactual scenario allows for an isolated assessment of how this one factor contributed to the changes in poverty. However, these techniques cannot identify the causal drivers of poverty, and they paint only a broad picture of the correlations involved. They serve to motivate a deeper dive into certain areas of Lesotho's economy. The first decomposition asks what poverty would look like with the new mean consumption level but the old distribution and vice-versa (Datt & Ravallion 1992). This methodology creates hypothetical scenarios of what poverty would have been had the distribution not changed or had the mean consumption level not changed.

it is vital that growth in GDP per capita translates into increased consumption. This also matters for future poverty reduction (Box 10).

The fact that inequality was behind a large part of poverty reduction means that fully understanding why poverty fell requires exploring what happened to inequality. To this end, it is important to look at how the components of household income changed

between 2002 and 2017. To consume, households need to engage in agriculture or enterprises, or receive income through transfers or wages. In other words, there is a close relationship between household income (including the value of consumption from own production) and aggregate consumption. Looking closer at the components of aggregate income can yield lessons on why poverty and inequality fell and suggest ways to spur further reductions.



Box 10: The role of inequality and growth in poverty trends towards 2030

Based on assumptions about growth in GDP per capita and the distributional nature of that growth, poverty in Lesotho can be projected to 2030. Poverty projections should always be analyzed with caution due to the many factors and uncertainties that shape the future. Yet, stylized scenarios about future developments may sometimes shed light on how poverty could evolve and the kinds of policies that could spur such developments.

If real increases in GDP per capita match the World Economic Outlook (WEO) forecasts of about 1 percent per year, Lesotho's poverty rate would decline to only 45 percent by 2030 (Figure 52a). This modest decrease would be insufficient to meet the first Sustainable Development Goal, which calls for halving the poverty rate by 2030. More optimistic scenarios are plausible if growth rates accelerate or inequities diminish.

Higher than expected growth rates could substantially reduce poverty. Policies to spur growth, such as reforms to make labor markets more efficient or increase educational achievements, could help accelerate poverty reduction. If the annual growth rate were 2 percentage points above the forecasts, suggesting annual growth rates around 3 percent, then poverty might decline to 38 percent by 2030 (Figure 52b).

Poverty could fall substantially if inequalities are reduced. The previous projections assumed growth would accrue to everyone equally. But suppose growth lowers the Gini coefficient by 2 percent annually, which is realistic in historical perspective (Lakner et al. 2019). Such a change could happen with targeted social-protection programs and policies to mitigate the consequences of shocks (particularly environmental ones) on vulnerable populations. Reducing the Gini coefficient by 2 percent a year through 2030 would bring the poverty rate down to 33 percent.

(a) Baseline scenario (b) Optimistic scenarios 9 9 55 55 Poverty rate (%) 40 45 50 Poverty rate (%) 40 45 50 45.3 35 33.4 유 + 2017 2020 2025 2030 ළ | 2017 2020 2025 2030 - 2% annual fall in Gini 2 pct. point higher annual growth

Figure 52: Poverty projections to 2030

Source: Calculations based on the 2017/18 CMS/HBS and the WEO, Spring 2019.

Note: The left figure shows poverty projections to 2030 if GDP/capita grows according to WEO forecasts and inequality remains unchanged. The right figure shows poverty projections to 2030 if GDP/capita exceeds WEO forecasts by 2 percentage points per year, or if the Gini coefficient decrease by 2 percent per year using a linear growth-incidence curve to change inequality. Both figures assume that 75 percent of growth is passed through to consumption, a figure close to the Sub-Saharan Africa average.

C. Increases in formal wage incomes and expansion of social protection reduced inequality and poverty

Increased wages and social assistance were the primary drivers of poverty reduction.²² Since 2002, the shares of formal wage income and social assistance have increased considerably at the bottom of the distribution. Wage income was only a quarter of total incomes in 2002, but it accounted for nearly half of all incomes in 2017. Likewise, social assistance, particularly at the bottom of the distribution, increased tremendously during this period. An increase in wage income led to a 3.3 percentage point decline in rural poverty and a 2.2 percentage point decline in urban poverty (Figure 53). The increase in wages in rural areas could be explained by the presence of local governments and NGOs. Increased wage income also led to a 3.1-point decline in the Gini coefficient. Social assistance drove down rural poverty by 4.3 percentage points and urban poverty by 1.3 percentage points. The relative importance of social assistance on poverty reduction was greater below the poverty gap, suggesting that social assistance had a larger impact on the very poorest. Indeed, social protection drove down the Gini coefficient by 2.6 points.

Remittances declined significantly between 2002 and 2017. Remittances and transfers have fallen nearly 50 percent since 2002, when many Basotho households depended on money from abroad. Since remittances tend to be pro-poor, this decline, all else equal, has been associated with increases in the Gini coefficient and

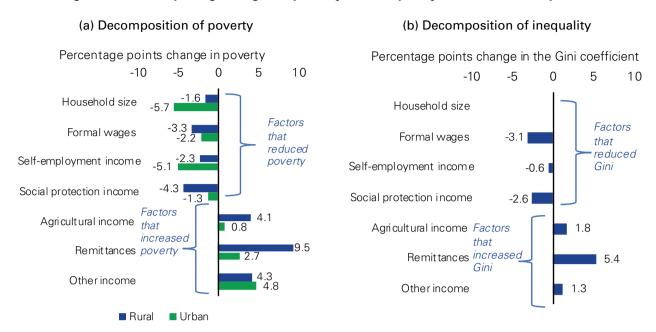
poverty. Rural poverty would be nearly 10 percentage points lower if remittances and transfers had remained at 2002 levels, while urban poverty would have been 2.7 percentage points lower.

Stalling agricultural incomes increased rural poverty and inequality. The increase in poverty rates in rural districts in recent years is due in part to weather related shocks, especially the 2015/16 El Niño that impacted agricultural households the most. Because of this shock, falling agricultural incomes led to a 4.1 percentage point increase in rural poverty. Combined with an increase in consumption in urban areas, which were already better off than the rural areas before the shock, the fall in agricultural incomes induced a 1.8-point increase in the Gini coefficient.

A demographic dividend associated with reductions in average household size and dependency ratios supported poverty reduction in Lesotho. The demographic dividend refers to the positive impact on economic growth and incomes per capita that results from changes in the population's age structure brought on by declining fertility rates. Demographic changes in Lesotho have a long-term economic impact on the economy (Box 11). Dependency ratios have fallen consistently since 1950, including a decline from 41.8 in 2002 to 40.3 in 2017. Over the same period, average household size fell from 6.2 to 5.3 people, resulting in 5.7 percentage point decline in urban poverty and a 1.6 percentage point decline in rural poverty (Figure 53a).

²² To decompose changes in poverty, Azevedo et al. (2013) developed a method of linking changes in income aggregates to changes in poverty. Intuitively, their method tries to estimate what poverty would have looked like in 2017 if an income component had not changed from 2002 and 2017. The method then utilizes the relationship between a household's income and consumption to estimate what poverty would be with this counterfactual income component. The difference between the counterfactual and actual poverty rates can be used to gauge each income component's impact on poverty. The method also indicates whether the changes in poverty are driven by changes in household size.

Figure 53: Decomposing changes in poverty and inequality into income components



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Note: There is also a residual effect, not displayed in the figure. It is related to the relationship between the consumption aggregate and the income aggregate.



Box 11: Demographic dividend opportunity for Lesotho

Changes in mortality and fertility rates decrease dependency ratios, resulting in a demographic dividend.

One of the main potential boons a country receives from a demographic transition is an increased supply of working-age people. In Lesotho and other SACU countries, mortality and fertility are decreasing, and dependency ratios are falling (Figure 54, Bruni et al. 2016). The surge in the working-age population is accompanied by a relative fall in the number of young dependents. Because of this transition, Lesotho enjoys a window of demographic opportunity in which the dependency ratio is historically low and the working-age population's proportion is historically high. Having a larger share of the population at work can potentially lead to increases in output per capita, thus the demographic dividend.

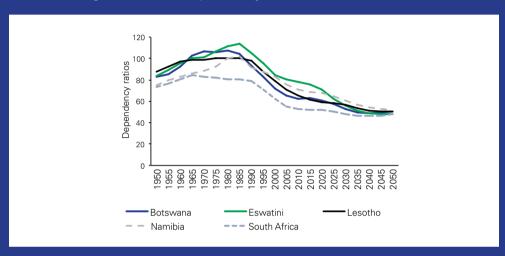


Figure 54: Total dependency ratios for SACU countries

Source: UNFP (https://population.un.org/wpp/Download/Standard/Population/).

Notes: Dependency ratios calculated as the population less than 15 or above 64, divided by population between 15 and 64.

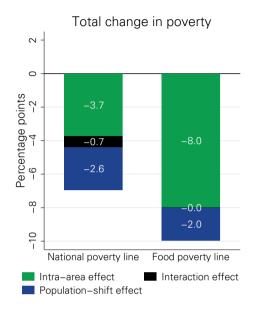
If employed in productive jobs, this large workforce will allow the country to reap the benefits of the demographic dividend. Between now and 2050, Lesotho's working-age population will increase by 36 percent. Currently, people between the ages of 13 and 25 are the largest population cohort. To generate a demographic dividend as they move into working age, these people will need labor-market relevant education and skills and the private sector will need the capacity to absorb them. In Lesotho, however, key skills remain in short supply and entrepreneurialism is still nascent. Demographic dividends increase labor supply depending on the ability of the economy to absorb extra workers. Decreases in fertility rates also result in healthier women and fewer economic pressures at home. This also allows parents to invest more resources per child, leading to better health and educational outcomes.

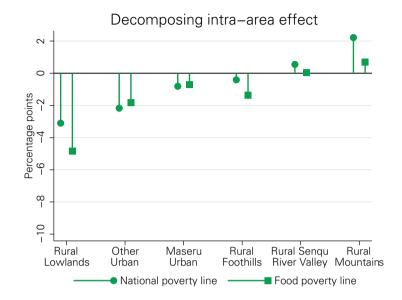
Improvements in the Rural Lowlands and urbanization contributed to a large decline in the national poverty rate. The kind of decline in poverty Lesotho experienced between 2002 and 2017 could occur because of urbanization – households moving to areas with lower poverty levels – or because certain areas decreased their poverty rates. Figure 55 presents the changes in poverty decomposed into these two channels, the former called the "population-shift effect"

and the latter the "intra-area effect." The population-shift effect drove the poverty rate down by 2.6 percentage points, mostly due to more households residing in urban centers. The intra-area effect drove poverty down by 3.7 percentage points – but it was behind a larger part of the decline in food poverty. Breaking it down by geographical areas shows that the largest impact came from the Rural Lowlands. Although its poverty rate did not decrease as fast as the urban areas, the Rural

Lowlands, larger population share meant a larger impact on poverty reduction. In contrast, the Rural Mountains' poverty rate increased by more than 2 percentage points. This suggests the urban-rural divide is a bit more complicated and rural areas differ markedly from each other.

Figure 55: Decomposing change in poverty into population-shift and intra-area effect, 2002-2017





Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

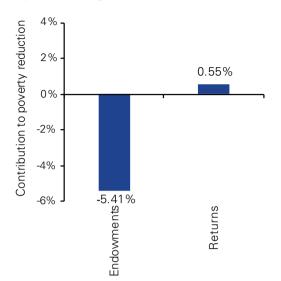
D. Increase in educational attainment drove down poverty

To better understand the factors associated with increasing incomes and declining poverty, it is important to analyze whether the changes were driven by gains in individuals' endowments (characteristics of the population) or improving returns to endowments. The former could occur if, for example, individuals obtained more education, while the latter could occur if the return to a secondary degree increased (in terms of reducing the probability of being poor). This aspect is analyzed using the Oaxaca-Blinder decomposition method (Blinder 1973; Oaxaca 1973). The decomposition shows whether changes in poverty were driven by increases in education levels (endowments) or by the returns to education (return to endowments). It similarly indicates whether poverty was driven by changes in the labor force status or by the returns to being employed. Finally, it breaks down changes in poverty by whether they are driven by changes in household characteristics and the return to these characteristics. Results are shown in Figure 56.

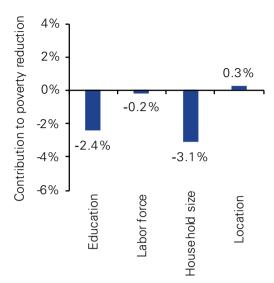
Changes in endowments drove down the poverty rate. Poverty fell by more than 5 percentage points due to changes in endowments, while returns to endowments moderated the reduction in poverty (Figure 56a). Taking a closer look at the endowments, increasing education levels led to a 2.4 percentage point decline in poverty. Both a reduction of individuals with no education and an increase of individuals with higher education played a role. Smaller households also contributed a significant decline in poverty. Changes in the composition of the labor force had nearly no impact on poverty reduction because the unemployment rate remained very high. Changes in the location of households – when accounting for all the other factors – also had little impact on poverty reduction.

Figure 56: Decomposing change in poverty into endowments and returns, 2002-2017

(a) Impact of changes in endowments and returns



(b) Breaking down the effects from endowments



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

E. Conclusion and policy discussion

This chapter used decomposition techniques to analyze the reduction in poverty between 2002 and 2017. It found that poverty reduction was driven by decreasing inequality, suggesting that understanding the drivers of poverty reduction requires understanding changes in inequality.

Declining poverty and inequality can be explained by the expansion of social protection, improvements in formal wages associated with higher education levels and a demographic dividend. Since wage income and social protection were particularly beneficial for the poorest households, they had large positive impacts on inequality. However, it is possible that the impact of social protection on poverty reduction could have been higher if poor rural households had been able to receive a greater share of benefits. The negative impact of environmental shocks in and the decline in remittances slowed poverty and inequality reduction. Overall, the analyses suggest further reductions in Lesotho's poverty and inequality are likely to come from improvements in human capital and a well-functioning labor market that creates decent jobs, especially for the poor.

Chapter II.2: The role of human capital on poverty reduction

Compared to other countries at the same level of income per capita, Lesotho spends a relatively large share of its public resources on education and health. Even so, education and health outcomes are relatively poor and inequitable, and this has adverse impacts on labor productivity. Despite universal access to primary education, primary enrollments have been stagnant in recent decades and poor learning outcomes remain a challenge. Children from poor households face disproportionately high repetition and dropout rates at the primary level, and access to post-primary education remains low. Like education, health outcomes are poor. Many individuals, especially among those from poorer quintiles, do not seek care when needed, the affordability of medical care being one of the main reasons. Health expenditures pose a disproportionately large burden for poorer households. Improving access to quality health care and financial protection for all households, particularly the poor, is therefore important for poverty reduction because it will equalize opportunities and enable the poor to participate in and benefit from economic growth.

A. Public spending on education and health is high but outcomes are relatively poor

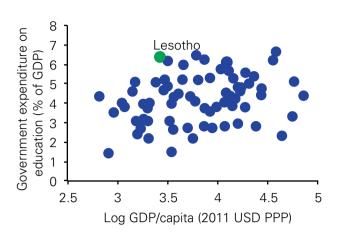
Lesotho allocates a relatively large amount of its public resources on education and health. Around 13.8 percent of the overall government budget in 2018, equivalent to about 6.3 percent of GDP, went to education. As shown in Figure 57, this spending level is high compared to other countries at the same level of income per capita. Lesotho has a higher public education expenditure-to-GDP ratio than South Africa. In Lesotho, seven years of primary education are free and compulsory. As a result, most of the education budget goes to primary education – 56.4 percent in fiscal year 2017/18. Next comes secondary education (28.5 percent), followed by tertiary education (5.4 percent), technical and vocational education and training (2.1 percent) and early childhood education (0.3 percent).

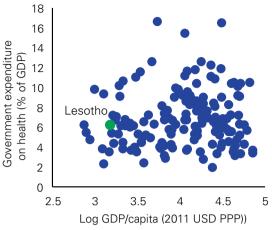
Like education, spending on health is relatively high.

Government health expenditures as a percentage of the national budget has hovered around 11-12 percent, below the Abuja Declaration commitment of 15 percent of the national budget. As a percentage of GDP, health spending was around 6.2 percent in 2016 (Figure 58). Every year, the health budget is mainly allocated to recurrent spending – from 77.7 percent in 2013/14 to 87.5 percent in 2017/18, with more than half going to general administration. Development expenditures remain low, limiting the expansion of the country's health infrastructure. This spending pattern fails to narrow the gap in health service delivery in remote areas, where long distances and poor transportation options often represent additional barriers for the poorest.

Figure 57: Government expenditures on education as percentage of GDP, 2018







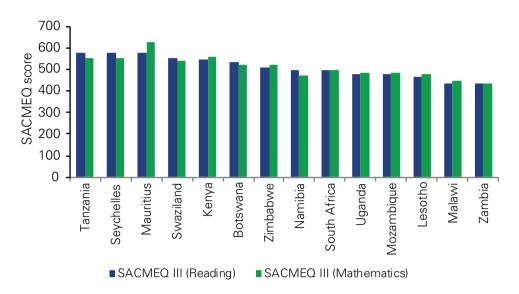
Source: World Development Indicators (WDI).

Despite progress, Lesotho faces high HIV/AIDS rates. The heavy burden of HIV/AIDS represents a development challenge in terms of both morbidity and mortality. According to the 2014 Lesotho Demographic and Health Survey (LDHS), the prevalence of HIV/ AIDS was 24.6 percent among people aged 15-49, and it accounted for 41.4 percent of all deaths, despite a decline in the incidence. Owing partly to the prevalence and burdens of HIV and AIDS, infants, children, and women are disproportionately affected by poor health outcomes, with their mortality rates among the highest in the world. Stunting rates are among the highest in the SACU region: Around 33 percent of children under age 5 were stunted in 2014. Linked to high HIV and AIDS prevalence is high incidence of tuberculosis. The 2016 Global Tuberculosis Report reports that Lesotho's tuberculosis incidence rate is the highest in the world at 788 cases per 100,000. In another link to the challenges of HIV and AIDS, life expectancy at birth in Lesotho was 50 years in 2014, 18 years lower than the average in lower middle-income countries and 10 years lower than the average for Sub-Saharan Africa (World Bank 2017).

Lesotho has stagnant primary net enrollment and poor education outcomes compared to other countries. As in the health domain, education outcomes are poor relative to spending. Among the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) countries, Lesotho had the lowest primary net enrollment rate in 2017 at 81 percent. Namibia, for example, was at 97 percent. In Lesotho, this net enrollment rate has remained almost stagnant at 80 percent since 2002, and the primary completion rate was only 65 percent in 2014.23 Lesotho had the third lowest score on reading and mathematics for Grade 6 students, just above Malawi and Zambia (Figure 59). The country scored 468 on the reading tests, compared to the average of 513 for the participating countries. In mathematics, Lesotho scored 477, with the SACMEQ average at 512.

²³ UNESCO Institute of Statistics.

Figure 59: SACMEQ III scores



Source: UNESCO Institute of Statistics.

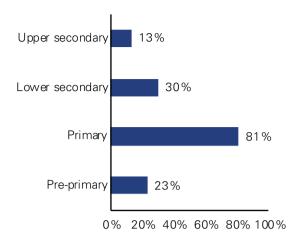
A national assessment of junior secondary learners carried out in 2018 also showed poor performance for Grade 9 (Form B) students in mathematics and science. The national mean scores were 76.7 for Sesotho, 51.6 for English, 32.4 for science and 26.3 for mathematics. There were considerable differences between subjects, indicating that students face challenges with mathematics and science. Their performances in languages, especially Sesotho, were much higher. Teachers were also assessed and found to perform poorly in literacy and numeracy.

Participation in pre-primary education in Lesotho remains very low. In 2017, the net enrollment rate in pre-school was only 23 percent (Figure 60). Nonetheless, participation in pre-primary education increased with age: 17 percent for boys and 18 percent for girls among children aged 3; for the children aged 5, the participation rate rose to 27 percent for girls and 26 percent for boys. In absolute terms, more girls than boys accessed school, but the difference was marginal.

Access to primary education has stagnated, but Lesotho has slowly increased secondary education coverage. The primary net enrollment increased from 59 percent in 1999 to 80 percent in 2000 - a result of the introduction of Free Primary Education in 2000.24 However, it has been stagnant around 80 percent in recent years. According to the 2016 Education Statistic Report, the primary gross enrollment rate is estimated at 116 percent, driven by a large share of overage pupils still in primary school because of high repetition rates. Based on the 2017/18 CMS/HBS, the proportion of overage pupils in Grade 1 was estimated at only 29 percent, and it increased by grade, reaching 59 percent in Grade 6 and 55 percent in Grade 7. In contrast, lower secondary net enrollment has slightly increased from 24 percent in 2010 to 30 percent in 2016 (Figure 61).

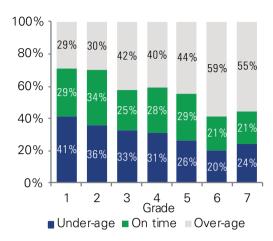
²⁴ UNESCO Institute of Statistics.

Figure 60: Net enrollment rates by level, 2016



Source: UNESCO Institute of Statistics

Figure 61: On-time, under-age and over-age in primary

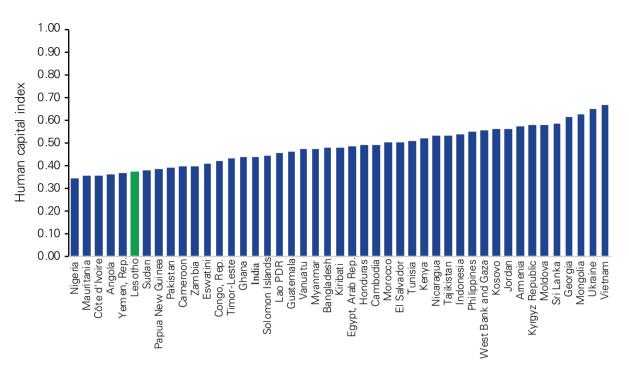


Source: Calculations based on the 2017/18 CMS/HBS.

Poor education and health outcomes contribute to Lesotho's low score in the World Bank's Human Capital Index (HCI). The index ranks Lesotho 143rd among 157 countries (Figure 62). Children born in Lesotho today will be 37 percent as productive when they grow up as they could be if they enjoyed complete education and full health. Lesotho is performing poorer than the average for its region and its income group.²⁵ Children could expect to complete 8.7 years of pre-primary to secondary school by age 18 in 2017. However, when years of schooling are adjusted for quality of learning, this was equivalent only to 5.5 years - a learning gap of 3.2 years. Poor planning and human resource management are some of the challenges in the education sector (World Bank 2019g). The lack of an established/official list of teachers in schools has meant that there is no way to determine the real staffing needs in the field. Unwarranted variations in student-teacher ratios for schools with similar enrollments are also closely linked to lack of a coherent and consistent policy for appointing additional teachers or reducing teacher numbers in schools when enrollment declines. The country could also benefit from more investments in teacher training on the new curriculum, strong coaching and supervision mechanisms for teachers at the school level and continuous learning assessments. In general, low levels of human capital have adverse impacts on labor productivity. Investing in education and health is therefore important for worker productivity (both in the government and the private sector), economic growth and poverty reduction in the long term.

²⁵ The average HCI for Sub-Saharan Africa is 0.4.

Figure 62: Human Capital Index, comparison to other lower middle-income countries



Source: World Bank (2018b).



Box 12: Human Capital Index (HCI) for Lesotho

The HCl measures the amount of human capital that children born today can expect to attain by age 18. HCl is made up of five indicators: the probability of survival to age 5, a child's expected years of schooling, harmonized test scores as a measure of quality of learning, adult survival rate (the fraction of 15-year-olds that will survive to age 60) and the proportion of children who are not stunted. It conveys the productivity of the next generation of workers compared to a benchmark of complete education and full health. It is constructed for 157 countries.

- Lesotho ranks 143 among 157 nations in the HCl index. Children born in Lesotho today will be 37 percent as productive when they grow up as they could be if they enjoyed complete education and full health.
- In Lesotho, 91 of 100 children born in Lesotho survive to age 5.
- Children who start school at age 4 can expect to complete 8.7 years of school by their 18th birthdays.
- Students in Lesotho score 393 on a scale where 625 represents advanced attainment and 300 represents minimum attainment.
- Factoring in what children actually learn, expected years of schooling is only 5.5 years.
- Across Lesotho, 50 percent of 15-year-olds will survive until age 60. This statistic is a proxy for the range
 of fatal and non-fatal health outcomes that children born today would experience as adults under current
 conditions
- In Lesotho, 33 of 100 children are stunted and at risk of cognitive and physical limitations that can last a lifetime.

Figure 63 presents ranking of countries on HCl components. It shows that Lesotho lags behind an average lower middle-income country as well an average Sub-Saharan African country with regard to most of the components.

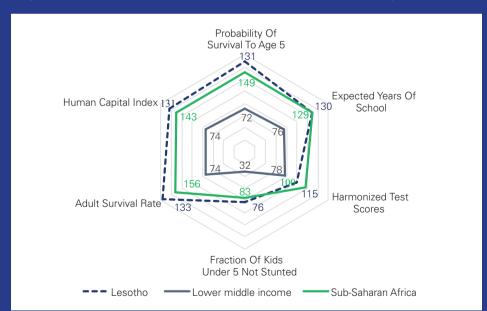


Figure 63: Human Capital Index components, cross-country comparison

Source: World Bank (2018b).

B. Poor education outcomes are associated with high poverty in Lesotho

Incomplete primary education remains a common characteristic of the poor. In Lesotho, 77 percent of household heads in the poorest quintile had not completed primary school in 2017, while 61 percent of those in the richest quintile had finished at least lower secondary school (Figure 64). Completing primary education seems to not make a significant difference between wealth quintiles.

Reaching secondary education significantly reduces the likelihood of being poor. Households headed by individuals with no education have a higher poverty rate than others: 56 percent of them are poor. The poverty incidence decreases but remains high for those headed by someone who has not completed (52 percent) or attained primary education (45 percent). Significant decreases in poverty rates are only observed starting from those who attained lower secondary and above: a reduction of 15 percentage points (Figure 65).

Figure 64: Education of household head by quintile, 2017

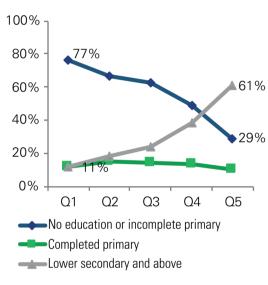
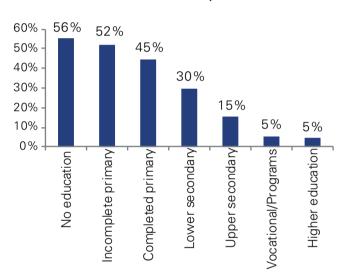


Figure 65: Poverty rate by educational attainment of household head. 2017



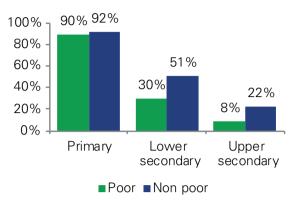
Source: Calculations based on the 2017/18 CMS/HBS.

Access to primary education is relatively equal across quintiles. Estimates from the 2017/18 CMS/HBS show that primary net attendance rates for poor children are less than only 2 percentage points lower than for non-poor children (Figure 66a). Across wealth quintiles, rates vary slightly from 89 percent to 92 percent (Figure 66b). This equitable access to primary education is the result of strong government efforts in expanding access to education in the past decade. This resulted in primary attendance rates from 81 percent for the poorest quintile in 2004/05 (Demographic and Health Survey 2004/05) to 89 percent in 2017/18.

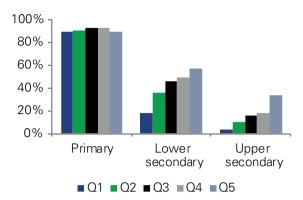
This relatively equal access to primary education masks other difficulties for poor children, mainly related to repetition of grades. At the first grade of primary education, most children enter school on time or under the official entry age, and disparities are almost marginal across different quintiles (Figure 66c). Onethird of children enter late at school, partly due to the cultural practice of herding among boys. Conversely, the percentage of overage children from the poorest quintile increases throughout the cycle, reaching 68 percent in Grade 7, compared to only 38 percent for the richest quintile (Figure 66d). Those figures suggest that children from poor households are more likely than those from wealthier households to repeat grades throughout the cycle. Administrative data at the national level clearly show that repetition rates increase throughout the cycle, standing at 8 percent in Grade 1 and reaching 12 percent at the highest grade of primary school (Figure 67).

Figure 66: Education outcomes by poverty status, 2017

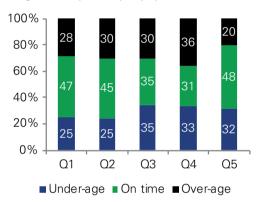
(a) Net attendance rates by education level and poverty status, 2017



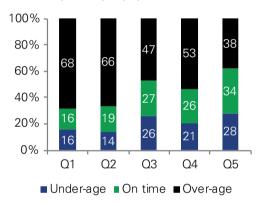
(b) Net attendance rates by education level and quintile, 2017



(c) On-time, under-age and over-age in the first grade of primary, by quintile, 2017

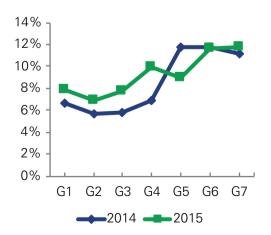


(d) On-time, under-age and over-age in the last grade of primary, by quintile, 2017



Source: Calculations based on the 2017/18 CMS/HBS.

Figure 67: Primary repetition rates by grade, 2014 and 2015



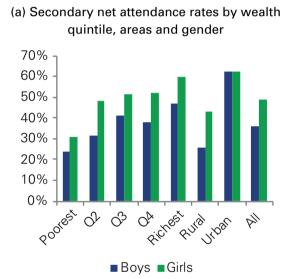
Source: Education Statistics Report (2016).

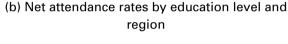
In addition to more frequent repetition of grades, children from poor households have lower test scores. According to the 2016 National Assessment of Educational Progress Survey Report, the performance of Grade 6 learners was very poor at 32 percent for literacy in English and 44 percent in numeracy. The results are more worrisome for children from poor households: the lowest quartile of Grade 6 learners averaged at 20 percent in literacy, which was 24 percentage points less than the richest quartile. The gap between the two extreme groups stands at 22 percentage points in numeracy. Analysis of the 2014 National Assessment also shows a wide gap between poor children residing in mountainous zone - for example, the district of Qacha's Nek (averaging 92 on learning scores) – and children who are relatively wealthy and residing in the Lowlands, with Leribe, Berea or Maseru scoring above 106 (Lesotho

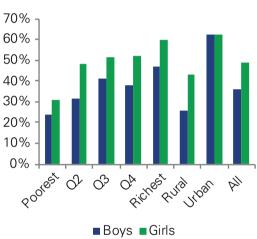
Diagnostic Study, 2016). Residing far from school is likely detrimental to student performance. Altogether, 21 percent of Grade 6 learners performed at such low levels that they could be regarded as functionally illiterate; another 42 percent can be classified as functionally innumerate (Spaull, 2012). Combining the household survey and SACMEQ data, Taylor and Spaull (2015) estimate functional literacy at 61 percent of the age cohort; only 9 percent have higher-order reading skills. Regarding numeracy, the situation is worse: 50 percent are functionally innumerate and only 2 percent have acquired higher-order numeracy skills. This weak performance came despite Lesotho having more educational resources than the SACMEQ average.

Access to post-primary education remains a challenge for children from poor families. The education gap is widest between rich and poor in secondary education. Secondary net attendance rates ranged from 18 percent in the poorest quintiles to 57 percent in the richest (Figure 68a). The gap increases in upper secondary, with a 30-percentage-point difference between the poorest and richest quintiles. The low enrollment rates in secondary schools reflects lack of secondary schools, especially in rural areas (344 secondary schools but 3,031 primary schools), inadequate teaching and, finally, the high cost of secondary education (World Bank 2019g).

Figure 68: Education outcomes by poverty status, gender and region, 2017







Source: Calculations based on the 2017/18 CMS/HBS.

Secondary education attendance is low, particularly for boys living in the poorest families and in rural areas. In primary education, girls and boys are at nearly the same levels of primary attendance by wealth quintiles or residence areas. However, 36 percent of boys attend secondary school, compared to 49 percent of girls. In rural areas, the gender gap is even higher – a difference of 18 percentage points between boys and girls. This difference is partly due to the cultural practice of herding among boys (World Bank 2019g). Furthermore, attendance for boys in the poorest wealth quintile is considerably lower than it is for boys in the richest, suggesting poverty remains correlated to low demand of education.

Students in Rural Mountains and Rural Senqu River Valley still have challenges in accessing schools.

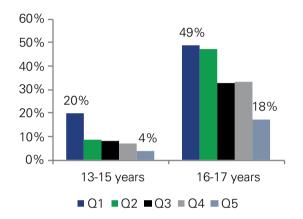
Though primary net attendance rates differ only slightly across regions, significant disparities arise in secondary attendance (Figure 68b). Students in Rural Mountains or in Rural Senqu River Valley have the lowest rates of secondary attendance, and Maseru Urban or Other Urban have the highest. An inadequate supply of secondary schools might explain the low attendance rates, particularly in rural areas. Children from Rural Mountains walk on average 43 minutes to the nearest secondary school, 20 minutes more than children living in Maseru Urban. Children from Rural Senqu River Valley walk on average 10 minutes more than children in the capital.

Boys, children from the Rural Mountains and poor households face the highest dropout rates. One-fifth of 13-15 year-old children in the poorest quintile dropped out of school, compared with only 4 percent in the richest quintile. Dropout rates reach almost 50 percent among 16-17-year-olds in the poorest quintile, 30 percentage points higher than households in the

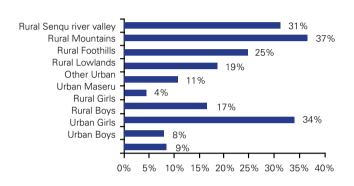
richest quintile (Figure 69a). About 34 percent of boys aged 13-17 years living in rural areas were no longer at school in 2017, compared to 17 percent for girls (Figure 69b). By region, almost 37 percent of 13-17-year-olds in Rural Mountains dropped out of school; the figure is less than one-fifth in urban areas.

Figure 69: School dropout rates, 2017

(a) Dropout rates by age group and quintile



(b) Dropout rates by gender and region, 13-17 years



Source: Calculations based on the 2017/18 CMS/HBS.

Poorer households are also less likely to receive healthcare. In rural areas, up to 35.2 percent of ill people did not receive medical care, compared with 31.4 percent in urban areas. Young people aged 15-19 years (44.0 percent) and 20-24 years (45.7 percent) receive medical care less frequently than other age groups, although there is not much difference between men (34.1 percent) and women (33.7 percent). The socioeconomic gradient is more concerning when looking at households' living standards. While 38.1 percent of ill people from extremely poor households

did not receive medical care; in non-poor households, it was 30.8 percent. The inter-quintile ratio for this variable is 0.79, highlighting a lower recourse to health care for people from the poorest quintile compared to those from the richest quintile.²⁶ The negative and significant value of the concentration index confirms that people from poorer households are disproportionately affected.²⁷ These findings are concerning given that acute health events are quite frequent in the population, with 24.5 percent of people in surveys reporting an acute illness or accident during the past four weeks.²⁸ The results

²⁶ For a given variable, the inter-quintile ratio (IQR) is defined as the average value for the richest 20 percent of the population divided by the average value for the poorest 20 percent. By definition, the IQR ignores what happens in the three other quintiles and, therefore, does not allow an assessment of a variable entire distribution.

²⁷ The concentration curve (CC) plots the cumulative percentage of the health variable (y-axis) against the cumulative percentage of the population ranked by living standards, beginning with the poorest and ending with the richest (x-axis) (O'Donnell et al., 2008). If the CC lies above (below) the 45-degree line running from the bottom left-hand corner to the top right-hand corner – known as the equality line – then the variable takes higher (lower) values among poorer people. The farther the curve is above (below) the equality line, the more concentrated the health variable is among the poor (rich). From the CC, it is possible to derive the concentration index (Cl), a synthetic measure of the magnitude of the socioeconomic inequality in a variable. The Cl is twice the area between the concentration curve and the line of equality. When there is no socioeconomic inequality, the Cl is zero. The Cl takes a negative value when the CC lies above the line of equality, indicating disproportionate concentration of the health variable among the poor, and a positive value when the CC lies below the line of equality (Kakwani 1977, 1980; Kakwani, Wagstaff, and van Doorslaer 1997; Wagstaff, van Doorslaer, and Paci 1989; O'Donnell et al., 2008). For both the Cl and the CC, the interpretation of the results in terms of pro-poor or pro-rich distribution of the variable of interest will depend on whether the variable represents a "good" or a "bad" (health) outcome.

²⁸ According to the 2017/18 CMS/HBS, the main health problems reported by these people are influenza/cold (42.7 percent), headache (10.2 percent), back/joint pain (8.9 percent), diarrhea/intestinal inflammation (6.3 percent) and mouth or dental problem (5.4 percent). Despite the negative effects of these health problems—overall, 65.2 percent of people who suffered from an illness or accident were unable to do their usual activities for at least one day—not all the affected population sought and received medical care.

highlight the necessity for policies aimed at improving accessibility to health care to account for local/regional disparities as well as the differences among socioeconomic groups.²⁹

C. Public spending on education and health is not fully pro-poor and affordability issues are large for poor households

Public expenditures on primary education are pro-poor, while outlays for secondary and higher education are biased toward the rich. Poor children account for the bulk of enrollments in public and church primary schools, which suggests they benefit more from public subsidies for primary education. Based on public expenditures on education in 2015/16 and data from the 2017/18 CMS/HBS, poorer children in the lowest quintile, measured by consumption per adult

equivalent, received 30 percent of public spending on primary education, while children in the richest quintile received 8 percent. The pattern, however, was reversed for secondary and higher education (Figure 70). At the secondary level, the poorest quintile received only 14 percent of total public spending, compared to 23 percent for the fourth quintile and 18 percent for the richest one. The difference widens with education levels.

Using concentration curves to break down inequality in the provision of public resources by education level shows that spending on primary education is pro-poor but spending on higher education is not (Figure 71).³⁰ The government spends LSL 100 per student in primary education, LSL 165 per student in secondary education and LSL 326 per student in tertiary education (World Bank 2019q).

Figure 70: Government spending going to each quintile, by level of education, 2015/16

Source: Calculations based on the 2017/18 CMS/HBS and public expenditure for 2015/16.

■ Second quintile

■ Richest quintile

Girls benefit more than boys from government spending on education. As illustrated in Figure 72, girls from the second quintile to the richest quintile receive greater benefit from government spending than boys. This can be attributed to girls' higher enrollment

■ Lowest quintile

■ Fourth quintile

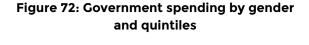
rates at each level of education. The trend differs only at the lowest quintile, where the benefit for girls and boys is almost the same. Overall, 56 percent of government expenditures on education benefits girls.

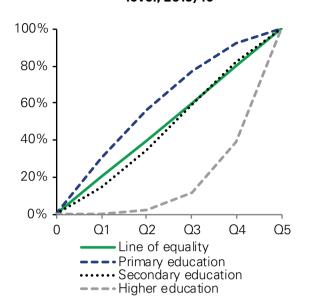
■ Third quintile

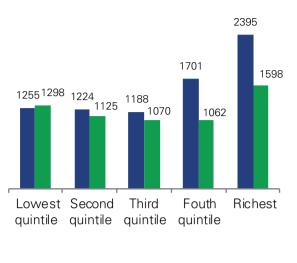
²⁹ These findings are consistent with results from the Lesotho Demographic and Health Survey (LDHS) 2014, which showed that the poor tend to have worse health outcomes than the non-poor.

³⁰ The concentration curve for primary education lies above the line of equality, meaning that the poor benefit more than the non-poor. Secondary and higher education show inequality.

Figure 71: Concentration curves by education level, 2015/16







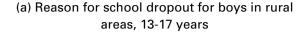
■ Subsidy to girls ■ Subsidy to boys

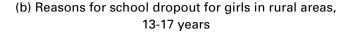
Source: Calculations based on the 2017/18 CMS/HBS and public expenditure for 2015/16.

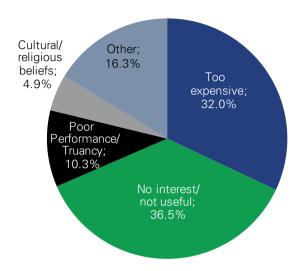
The cost of education is one of the main reasons for dropping out of school. As a consequence of government support for secondary and higher education not being pro-poor, many children cite the cost of education as the main reason for dropping out of school (Figure 73a and Figure 73b). Data from the 2017/18 CMS/HBS indicate that primary education accounts for 8.5 percent of total household expenditures for the poorest quintile and 5.6 percent for the richest quintile. For most children from poor households, however, secondary school is prohibitively expensive and less accessible. For a day scholar, annual costs range from about LSL 7,400 to LSL 9,100 (US\$522 to US\$642

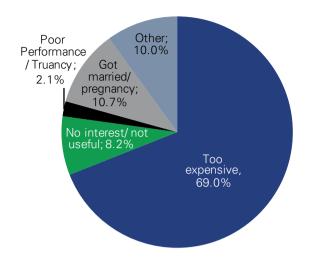
equivalent); for a boarder, they rise to around LSL 9,200 to LSL 12,700 (US\$649 to US\$896) (World Bank 2019g). According to the 2017/18 CMS/HBS, annual education spending per child amounted to LSL 3,200 for poor households (US\$225), and LSL 8,300 (US\$585) for non-poor households. For poor families, secondary education costs on average 33 percent of household expenditures, while it represents 10 percent of non-poor families' expenditures. These costs make it virtually impossible for most children from poor households to attend secondary education without scholarships or without mothers' working in factories (World Bank 2019g).

Figure 73: School dropout rates, 2017









Source: Calculations based on the 2017/18 CMS/HBS.

Costs are also a barrier for health care among poor households. Table 10 illustrate some direct medical costs and direct non-medical costs incurred by people who sought health care during the four weeks preceding the 2017/18 CMS/HBS. The mean expenditure on health care visits and medicines is very high for people from richer households (LSL 66.0 for the fourth quintile and LSL 78.5 for the fifth quintile respectively), compared to poorer households (LSL 21.0 for the first quintile and LSL 35.2 for the second quintile). Transport costs are a key reason why poorer households are unable to afford health care – for the poorest quintile, transportation costs

are more than a third of all health care related costs. Using a monthly reference period, Table 11 shows that in total, health expenditures represented more than 5 percent of total household expenditures for 10.1 percent of the households surveyed. Health expenditures reach at least 6.8 percent of total expenditures for 10 percent of households, 5.3 percent for 15 percent and 4.0 percent for 20 percent. Whatever the threshold used, the distribution of catastrophic health expenditures across socioeconomic group reveals a disproportionate incidence among poorer households.

Table 10: Mean expenditures on health care and average cost of transportation to health care (LSL)

		Health care visits and medicines	Transportation
Region	Urban Maseru	54.1	13.4
	Other Urban	75.6	20.2
	Rural Lowlands	49.0	19.5
	Rural Foothills	46.1	21.8
	Rural Mountains	25.6	19.4
	Rural Senqu River Valley	15.2	17.0

		Health care visits and medicines	Transportation
Consumption per adult	1	21.0	12.3
equivalent quintiles	2	35.2	15.7
	3	33.3	19.2
	4	66.0	20.8
	5	78.5	23.6
Poverty status	Extreme poor	21.5	12.3
	Poor	38.8	17.4
	Non-poor	63.9	21.8
Overall		48.3	18.6
CI (p-value)		0.273 (<0.0001)	0.126 (<0.0001)
IQR		3.74	1.92

Source: Calculations based on the 2017/18 CMS/HBS.

Table 11: Share of health expenditure in total household expenditures during the last month (percentage of households)

		Threshold			
		5%	10%	15%	20%
Region	Urban Maseru	7.8	4.7	2.6	1.5
	Other Urban	8.0	4.6	3.8	3.5
	Rural Lowlands	11.2	7.1	6.0	4.2
	Rural Foothills	13.2	11.4	8.8	7.9
	Rural Mountains	12.4	9.45	7.2	5.6
	Rural Senqu River Valley	9.2	7.3	5.4	2.9
Consumption per adult equivalent	1	15.3	11.3	9.2	7.1
quintiles	2	11.9	8.4	6.5	5.5
	3	12.7	7.7	6.5	4.7
	4	8.1	6.3	5.0	4.0
	5	6.1	3.4	1.8	0.9
Poverty status	Extreme poor	14.1	10.3	8.1	6.4
	Poor	13.2	8.6	7.0	5.5
	Non-poor	7.7	5.1	3.7	2.7
Overall		10.1	6.8	5.3	4.0
CI (p-value)		-0.207	-0.238	-0.281	-0.317
		(<0.0001)	(<0.0001)	(<0.0001)	(<0.0001)
IQR		0.40	0.30	0.20	0.13

Source: Calculations based on the 2017/18 CMS/HBS.

Note: The numbers represent the share of the subpopulation that had health expenditures in the past month exceeding 5 percent, 10 percent, 15 percent or 20 percent of their total expenditures.

Only 1.4 percent of surveyed people report affiliation with a health insurance scheme. This means that financial protection is critical to preventing or mitigating the risk of a health catastrophe or falling into poverty due to disproportionately high health care expenditures. Health insurance is one of the prepaid mechanisms that can protect households from financial hardship related to illness episodes. Most people who are insured are covered through a household member's insurance (42.3 percent) or through a private employer or NGO (39.9 percent). Only 17.8 percent are self-insured. People from the poorest households mainly benefit from a household member's insurance, while the richest households are covered through other types of insurance.

D. Education levels matter greatly for labor market outcomes

Human capital levels are closely associated with labor market status, and expanding secondary and post-secondary education offers clear gains in terms of wages. Those with no formal education had the lowest unemployment rates but also the lowest wages (Table 12). The poor cannot afford not working. Unemployment rates increases with levels of education, reaching nearly 22 percent for upper secondary. Wages also increase with levels of education for Basotho who are employed, suggesting clear pay gains in expanding secondary and post-secondary education across Lesotho. However, a lack of jobs, as evident in high unemployment rates as well as challenges in educational quality, might reduce the attractiveness of education for many individuals. Improving access and quality of education is therefore critical because it increases the likelihood of finding employment (World Bank 2019g).

Table 12: Employment, unemployment and yearly wage earnings, by educational attainment, 2017

	Employment to working-age population ratio	Unemployment rate (% of labor force)	Mean of yearly wage (LSL, 2017 prices)
No education	65.5	7.5	15,400
Incomplete primary	57.3	10.4	19,800
Completed primary	55.5	14.2	18,901
Lower secondary	50.3	14.5	22,675
Upper secondary	52.4	21.5	36,642
Vocational/programs	65.9	14.9	61,356
Higher education	69.3	12.2	80,320

Source: Calculations based on the 2017/18 CMS/HBS.

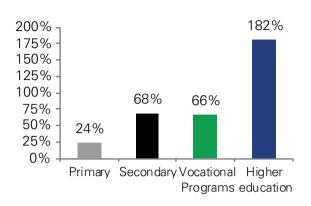
Note: Working-age population is 15 years old and above. Unemployment rates are defined using the ILO definition.

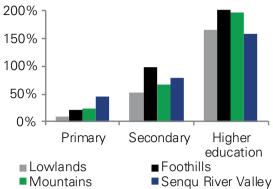
Access to quality education is central to accessing higher-paying jobs. Each additional year of education is associated with larger wage earnings, a return of 12 percent. A wage-worker with primary education earns 24 percent more than one with no education. It rises to 68 percent for secondary schooling, 66 percent for vocational training and 182 percent for higher education

(Figure 74). By region, the rate of return above no education for primary education is highest in the Rural Senqu River Valley, while secondary education pays off best in the Rural Foothills (Figure 75). In all regions, investing in higher education more than doubles wages compared to the pay of those with no education.

Figure 74: Rate of return by education level, 2017

Figure 75: Rate of return by education level and region, 2017





Source: Calculations based on the 2017/18 CMS/HBS.

Note: In both figures the reference category is no education.

E. Conclusion and policy discussion

Despite relatively high public spending on schooling, education outcomes are relatively poor and inequitable. Around 13.8 percent of the national budget was spent on education in 2017/18, or 6.3 percent of GDP. Primary education accounts for most of the education budget, due primarily to the goal of achieving universal primary education. However, primary enrollments have been stagnant in recent decades and poor performance in learning outcomes remain a challenge. Furthermore, the system is inequitable in terms of educational outcomes. Despite equal access at primary education, poor children, especially herd boys, face high repetition and dropout rates at the primary level. Access to postprimary education remains a challenge for children from poor families, boys and children in rural mountains and in Rural Sengu River Valley. Those who do remain until the end of primary school often face significant impediments in transitioning to secondary education due to access issues and the high costs of secondary education. As the same time, public education spending in secondary and higher education favors the rich. Yet, the educational level is closely associated with labor market status, and there are clear gains in terms of wages in expanding secondary education.

Given that universal and free primary education has largely been attained, it is important to boost learning in primary education overall and increase secondary enrollment and completion among the poor. Expansion of access to secondary education, combined with attention to educational quality at the

primary level, is important in this regard. To achieve quality secondary education, it is imperative to raise the quality of primary schools, particularly in the foundational skills of reading, writing and arithmetic. This will require improving teaching quality and teacher training. Improvements in primary and secondary education need to be complemented by increased investments in Early Childhood Care and Development (ECCD), a cost-effective strategy for reducing inequities and substantially improving long-term adult health outcomes. Children who benefit from quality ECCD perform better in primary school, repeat grades less often and drop out less frequently. Therefore, giving the poor the opportunity to access quality ECCD, will improve not only the quality of education but will also improve the cost efficiency of the system. Investing in ECCD would ensure accelerated flows through primary school, so more children enter junior secondary education with a solid knowledge base.

Expanding secondary education and making secondary schools more accessible to the poor is important for supporting reductions in poverty and inequality. Expansion of the junior secondary school network would help make these schools more accessible to the poor and enhance the equity of the educational system. In addition to putting in place the appropriate physical and soft infrastructure, increasing equity of access to secondary education requires that the financial cost of attending such schools be reduced as much as possible. Further details on policy recommendations emerging from the Public Expenditure Review (World Bank 2019g) are summarized in Box 13.

Box 13: Policy recommendations for the education sector

The Public Expenditure Review (World Bank 2019g) identified poor planning and resource management as the main causes of inadequate educational outcomes. The report makes two sets of policy recommendations:

Strengthen access to quality education in ECCD and primary schools:

- Expansion of ECCD programs to prepare students for primary education;
- Focus on improving quality of education in primary school by improving teacher management as well as increasing resources for learning materials;
- Focus on teacher management through a teacher management database which should be linked to the Education Management Information System;
- Ensure teacher lists are up-to date at the district and school level;
- · Revisit teachers' salaries, retirement, and qualifications;
- Invest in teacher training by focusing on coaching and improving supervision mechanisms;
- Train teachers on new curriculum;
- Prioritize systemic testing and collect information on cognitive development. This could be done through sample-based testing, as well as considering participation in other regional and international learning assessments, such as the Trends in International Mathematics and Science Study (TIMSS) Numeracy and the Progress in International Reading Literacy Study (PIRLS) Literacy Assessments.

Prioritize secondary school expansion:

- Junior secondary classes can be added to existing primary schools in mountainous and rural regions so that families do not have to pay for dormitories;
- In the host primary schools, the student-teacher ratio could be increased, and the school's facilities could be used in double shifts to diminish capital costs of construction;
- The unit cost of school construction could be reduced by opting for science kits instead of laboratories, and an in-classroom library corner instead of school libraries;
- Consider bursaries for students from poor households;
- Subsidize secondary schools heavily by abolishing school fees and textbook rentals fees;
- Expanding school feeding programs to secondary schools.

Health expenditures pose a disproportionately large burden for poorer households. Many individuals, especially those from poorer quintiles, did not get care when needed, the affordability of medical care being one of the main reasons. The disproportionately large burdens on poorer households point to the importance of improving awareness and prevention as well as access to health care and financial protection for all households – but particularly the poor.

Chapter II.3: Labor market challenges for poverty reduction in Lesotho

Lesotho's economy has been undergoing a structural transformation due to a growing services sector, improvements in the business climate and a more educated labor force. These changes, together with a demographic dividend, supported poverty reduction. Despite these improvements, labor market outcomes generally remain poor. The labor market is characterized by low employment rates and high levels of unemployment. Productivity is low owing to low skills, a large informal sector and reliance on subsistence agriculture. A high proportion of Basotho are employed outside of the country, mainly in South Africa. As a result, Lesotho remains dependent on remittances from South Africa, although these declined in the past 15 years. Creating an enabling environment for private sector job creation and improving agricultural productivity is critical for increasing incomes, reducing dependence on remittances and reducing poverty. Deepening regional integration is also important. On the supply side, targeted policies that boost entrepreneurship and promote development of skills will support improvements in labor productivity and poverty reduction. Adoption of Climate Smart Agriculture practices in Lesotho could increase productivity and incomes. It is essential to improve migration governance by developing a national strategy with a capacity to prevent irregular migration, promote legal migration and mobility and ultimately enhance synergies between migration and development.

A. Characteristics and challenges of Lesotho's labor markets

Lesotho's labor markets are characterized by declining labor force participation and high unemployment rates compared to the other Southern African countries. The challenges of poverty and inequality are partly due to the country's inability to generate enough jobs, with government playing an important role in providing formal employment. Employment is concentrated in a few economic activities, including the apparel industry and wholesaleretail trade services. The manufacturing industry provides an important source of income for the low-skilled and poor population (World Bank 2018a). Between 2002 and 2018, labor force participation steadily declined (Figure 76). An increase in manufacturing and services led to a growing demand for unskilled and low-paid workers; in turn, this led to a decline in unemployment rates (Figure 77). However, a recent slowdown caused unemployment to rise and, according to International Labor Organization (ILO) forecasts, over a quarter of Lesotho's working-age population was unemployed in 2018 (Figure 77).

Productivity is low in Lesotho, and growth has slowed substantially in recent years. Total factor productivity is low and has been stagnant for a long time (Figure 78). The marginal productivity of labor is relatively low and negatively affected by HIV/AIDS. Weak total factor productivity also appears to reflect inefficient inter-sectoral allocations, with labor concentrated in the economy's least productive sectors. In recent years, mining has become one of the economy's fastest growing sectors, but it has limited job-creation potential.

The public sector is one of the main growth-driving parts of the economy, but it does not employ many of the poor. The public sector's contribution to GDP is highly dependent on the cycle of fiscal policies (World Bank 2018a). In the past decade, Lesotho's public sector has been the largest in the Southern African region, making up 35 percent of GDP (Figure 79). Government spending is highly dependent on SACU revenues, and their volatility raises concerns about fiscal sustainability (World Bank 2018a). Most of the poor in Lesotho work in the private sector (Figure 80), which has had difficulties creating jobs and attracting skilled labor (World Bank 2018a).

Figure 76: Labor force participation rate in South African countries, 2002-2018

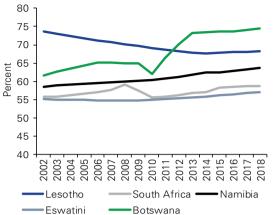
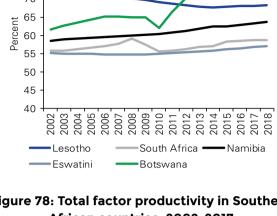


Figure 78: Total factor productivity in Southern African countries, 2002-2017



30 25 Percent 20 15 10 5

40

35

0

-Lesotho

-Eswatini

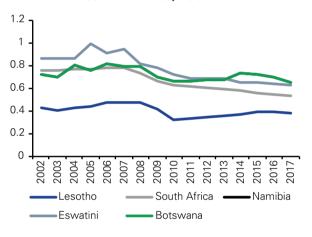
Figure 79: Government spending as percent of GDP. 2007-2016

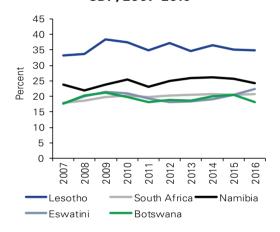
Botswana

South Africa — Namibia

Figure 77: Unemployment rate in Southern

African countries, 2002-2018





Source: ILO data; https://www.theglobaleconomy.com/download-data.php.

For TFP: https://www.rug.nl/ggdc/productivity/pwt/.

Lesotho went through a period of high economic growth, but with limited impact on employment. In recent years, Lesotho has mainly relied on public-sector expansion as its key source of growth. The government is already the formal economy's largest employer. It is unlikely that this sector will continue to expand enough to absorb the large future cohorts of workingage people, especially considering recent and expected declines in fiscal revenues. Mining is also one of the fastest-growing sectors of Lesotho's economy, but it is capital-intensive, with little impact on employment.

Box 14: Government prioritizes business development

The government's National Strategic Development Plan II identifies four priority sectors: (1) manufacturing (measures include strengthening the competitiveness of the garment industry and attracting investment in other industries), (2) commercial agriculture (including livestock, deciduous fruit and other high-value crops), (3) technology, and (4) tourism and creative industries.

In 2017, Lesotho elected a four-party coalition government that prioritized measures to increase investment and create jobs. The second (2018/19) and third budget speeches (2019/20) prioritized actions to reduce unemployment, increase foreign and domestic investment, expand access to finance for domestic businesses, attract private property developers to increase the availability of industrial infrastructure and strengthen vocational institutions to improve skills availability.

The government is rolling out several initiatives to attract investment. The Ministry of Trade and Industry and the Lesotho National Development Corporation (the main parastatal in charge of the implementation of the country's industrial development policies) are incubating several new business ventures. They include (i) eight new firms in clothing and electrical components, with an estimated 8,000 jobs to be created in two years; (ii) fresh produce activity and an out-grower scheme aiming at 500 jobs in the Maseru area; and (iii) expansion of the area under deciduous fruit production from the current 34 hectares to 150 hectares in the next two years and 500 hectares in the medium term, with a total impact of 1,000 jobs. Apart from the large investments outlined above, the government is implementing financial and business support to help start-ups and other small businesses.

The apprenticeship strategy has been developed with the main objective to address the existing mismatches between skills provided by the training institutions and the needs of the industry. Through this strategy, an institutionalized program will be established to expose graduates of universities and higher learning institutions to industry and business practices.

Figure 80: Private/public sector source of household income by poverty status, 2017

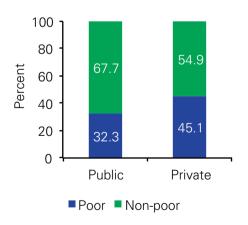
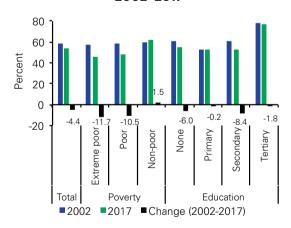


Figure 81: Labor force participation rate in Lesotho, 2002-2017



Source: Calculations based on the 2017/18 CMS/HBS.

Notes: The left figure refers to information about the main source of household income.

Returns to education (especially post-secondary) are high, increasing the probability of being in the labor force and finding a job. The higher the level of education, the higher the probability of being in the labor force. Both in 2002 and 2017, the labor force participation rate was highest among those with technical/vocational training or with university or higher education (Figure 81). It was lowest among youth below 25 years of age. In general, developing the skills demanded by industries and offering entrepreneurship programs for growthoriented businesses could improve the competitiveness of Lesotho's private sector and help address the skills mismatch challenge. For example, training in sewing machine repair as well as degrees in horticulture and ICT-related fields would help provide skills required on labor's demand side (World Bank 2018a).

Youth unemployment is high and is driven by skills mismatches and low wages. Even though multiple educational institutions offer courses related to textiles and apparel, the skills taught do not match those required by the industry. Universities and vocational schools offer courses in fashion and design; however, no institution offers training in sewing machine repair, a skill in high demand at the factories (World Bank 2018a). Graduates with tertiary qualifications will not accept the low wages offered for machine operators; instead, the jobs go to low-skilled workers with incomplete secondary education, no formal industry-specific training and a rudimentary command of English (making it difficult to advance to managerial positions) (World Bank 2018a). The broad unemployment rate, which includes those in the labor force who were discouraged and no longer searching for jobs, was highest among the very poor and youth below 25 years old in both 2002 and 2017.

Lesotho's business climate has improved in recent years, but access to finance remains an issue. Lesotho ranks 122 globally in the World Bank's Doing Business 2020 Report (World Bank 2020). Positive developments took place in recent years, including the opening of the One-Stop Business Facilitation Center and establishment of the Credit Bureau. Furthermore, the process of obtaining construction permits was streamlined by the introduction of electronic systems in August 2017. However, weak access to finance remains an obstacle for private sector development. The process of receiving business licenses and permits remains cumbersome and regulatory compliance costs are high. Access to finance is considered a major constraint to

firm operation by 35 percent of domestic firms (World Bank 2016a), and bank credit to the private sector is much lower than in comparable economies.

The informal sector is large, and lack of access to credit and household savings are barriers to formality. Most of the informal sector in Lesotho involves activities related to the agricultural sector as well as the textile and apparel industry (such as road freight and passenger transport, a small packaging industry. residential accommodation and catering services for employees, water, telecommunications and utilities services). Most farmers sell their produce in informal markets, although few supply institutional buyers (World Bank 2018a). As a result, a large share of workers holds informal jobs, characterized by low productivity with little access to technology and social protection benefits (World Bank 2019b). In both 2002 and 2017, more than 80 percent of household businesses in Lesotho were not registered (Figure 82). Informal businesses are less likely to require initial capital investments, suggesting that easier access to credit could encourage the start of formal activities (Figure 83).

Women tend to have the lowest paying jobs, participate less in the labor force and earn lower salaries. While a relatively larger share of women than men are educated, this advantage does not translate into enhanced economic power. Females are less likely to participate in the labor force and have a 22 percent higher probability of being unemployed. In addition, women's wages are lower, mainly due to gender difference in returns to primary and secondary education. The ratio of female-to-male labor force participation was estimated at 0.81 in 2017, compared to 0.84 for Sub-Saharan Africa as a whole (selected years for other countries). In addition, the ratio of the total female unemployment rate to the total male unemployment rate was 1.15 in 2017. Among employed women, the large majority is relegated to insecure and low-paying jobs in the informal sector, including subsistence agriculture in rural areas and domestic work or street vending in urban areas. Females have a higher employment share than males in the government sector (10 percent vs 6 percent), selfemployed (22 percent vs 14 percent) and household workers. Females have a higher share in employment in services and elementary occupations. On average, males tend to have higher earnings than females, controlling for other factors.

Figure 82: Share of registered and non-registered household businesses, 2002 and 2017

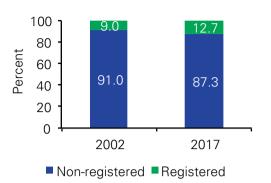
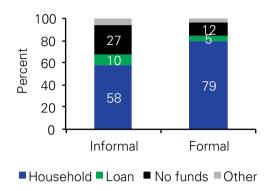


Figure 83: Source of funding for businesses by formal/informal, 2017



Source: Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

Subsistence agriculture is important for the livelihoods of most Basotho, but it is characterized by low productivity. More than half of Lesotho's population lives in rural areas (66 percent according to the 2016 census), and the majority of them engage in agriculture based on subsistence cultivation of cereal crops. This contributes to low incomes and widespread

poverty in rural areas. In addition, most of the horticultural output is owner-consumed or sold in informal domestic markets, despite having a high potential of becoming commercialized and a source of higher revenues (World Bank 2018a). In 2018, almost half of agricultural workers – and 16.2 percent of all workers – were in subsistence agriculture (Figure 85).

Figure 84: Trends of the GDP share of the services and agricultural sector, 2002-2017

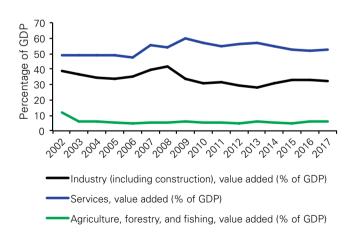
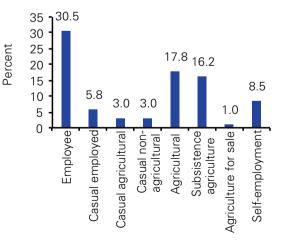


Figure 85: Share of workers by type of employment, 2017



Source: ILO. Calculations based on the 2002/03 HBS and the 2017/18 CMS/HBS.

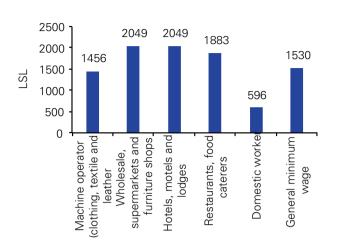
Note: The reference period is the past seven days.

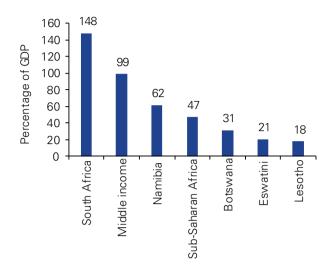
Source: World Development Indicators.

Source: ILO data

Figure 86: Minimum monthly wages for employees with more than 12 months of service with the main employer

Figure 87: Bank credit to the private sector is lower in Lesotho than in comparable countries





Source: Lesotho Government Gazette 2017.

Structural transformation is evident in Lesotho. The process has been characterized by the relative decline of agriculture and gains in industry and services (Figure 84). Despite the dominance of subsistence agriculture, there is evidence of agribusiness' rising importance. The evidence includes the value added from agrorelated industries, agricultural trade and distribution services as well as a shift from traditional exports to high-value agricultural products in international Source: IMF 2018a.

trade. Potentially, this can increase GDP and decrease poverty, but it could also mean more informal jobs for less educated individuals. In 2017, most firms (89) percent) were in services, and 71 percent were in retail and wholesale trade. Low entry barriers for capital and skill requirements and the lack of opportunities in other sectors might be behind the concentration of firms in commerce (World Bank 2018a).

Box 15: Labor laws and labor market institutions

Lesotho has been a member of the International Labor Organization (ILO) since 1966 and has ratified 23 international labor conventions. Lesotho's Labor Code Order of 1992 and its subsequent amendments are the principal laws governing the terms and conditions of employment, including worker health, safety and welfare.

Statutory minimum wages are fixed annually by the Ministry of Labor and Employment, based on recommendations from a tripartite Wages Advisory Board representing the government, employers and employees. Separate minimum wages exist for main industries. Sectoral minimum wages exist for clothing, textiles and leather, manufacturing, construction, wholesale and retail trade, hospitality, services, transport, small business and domestic workers.

The law permits union organization, freedom of association and the right to bargain collectively. Most unions focus on organizing apparel workers. The law provides for a limited right to strike. In the private sector, the law requires workers and employers to follow a series of procedures designed to resolve disputes before the Directorate of Dispute Prevention and Resolution, an independent government body, authorizes a strike. The law does not permit civil servants to strike, making all public sector strikes illegal. In practice, strikes are rare in Lesotho.

The Labor Code allows firms to hire non-citizens with a work permit. Permits are issued based on a quota formula by the Labor Commissioner, who must be satisfied that no qualified Lesotho citizens are available for the position.

B. Poor labor market outcomes are associated with high poverty

Poverty falls with employment, but work does not guarantee being out of poverty. Poverty among the employed fell the most in Lesotho. A large portion of Lesotho's population consists of working poor who earn very low wages. In 2017, 36 percent of employed were poor in Lesotho (Figure 88). This is associated with the type of employment. Agricultural

work does not guarantee lower poverty levels. In fact, poverty among those employed in agriculture basically stagnated between 2002 and 2017, leaving 56 percent of agriculture workers poor in 2017 (Figure 89). Basotho employed in services and industry have better employment outcomes and wages, with lower poverty rates and faster poverty reduction.

Figure 88: Poverty rates by employment status, 2002 and 2017

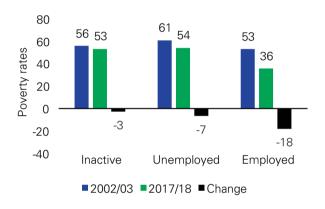
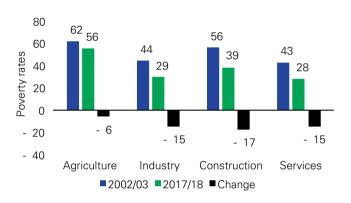


Figure 89: Poverty rates by employment sector. 2002 and 2017



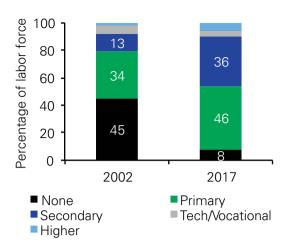
Source: Calculations based on the 2017/18 CMS/HBS.

Note: The industry sector refers to the household business.

Poor labor market outcomes contribute to Lesotho's persistently high poverty levels. As discussed earlier, the labor market is characterized by a low employment ratio, a high level of unemployment, a high share of employment outside of the country and generally low wages alongside a well-paid public sector. The portion of wage-earning workers increased more rapidly among poor households than among non-poor households, indicating that getting a wage-paying job might be instrumental in moving up the consumption ladder but may not always be enough to rise out of poverty. This stresses the need to increase labor productivity. The level of education emerges as a crucial factor, correlated with the type of employment.

Employment composition changed drastically between 2002 and 2017, coinciding with increases in education among the employed. The labor force was more educated in 2017 than in 2002. As presented in Figure 90, the share of people without education fell drastically – from approximately 45 percent in 2002 to 8 percent in 2017. The share of the population with secondary education increased from 13 percent to 36 percent, while the portion with tertiary education increased from 2 percent to 6 percent.

Figure 90: Labor force composition by education level, 2002-2017



Source: Calculations based on the 2002/03 HBS and 2017/18 CMS/HBS.

Education levels also play a role in securing employment outside agriculture and qualifying for permanent jobs. The employment sector and type of job held are closely related to education levels. Those who have primary levels of education dominate jobs in the agricultural sector (Figure 91). Clearly, more

educated people get more permanent or formal jobs (Figure 92), while temporary and seasonal jobs are dominated by the less educated and lower-paying jobs. The highest returns to education are for those who studied in technical schools or those who have post-secondary education.³¹

Figure 91: Education level by wage employment type, 2017

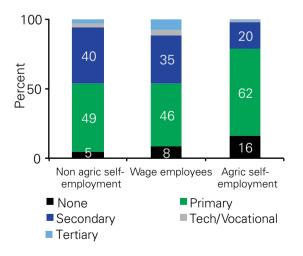
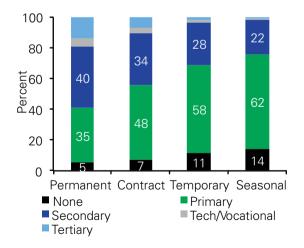


Figure 92: Education level by type of job, 2017



Source: Calculations based on the 2017/18 CMS/HBS.

³¹ The results are based on a Mincer regression (not included in the analysis but can be shared on request).

The size of the firms where individuals work also plays an important role in defining poverty levels.

Smaller enterprises make up the largest share of firms, and they are more likely to be informal, less productive, have little access to technology and not offer social protection (World Banks 2019b). The largest share of individuals who are self-employed or work in micro firms are poor, while the share of poor is very low among those working in large firms (Figure 93).

The duration of working contracts is strongly correlated with individuals' poverty status. Many enterprises operate only seasonally, and this intermittent pattern shows up more frequently in rural enterprises than urban ones (Christiaensen et al., 2018). Workers with seasonal contracts are the poorest, followed by those with casual contracts and temporary jobs. The share of poor is lowest among workers with permanent jobs (Figure 94).

Figure 93: Poverty status by firm size, 2017

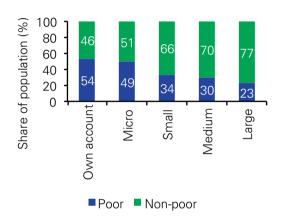
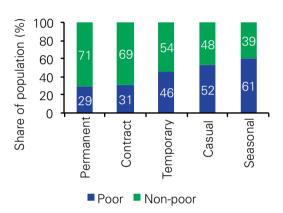


Figure 94: Poverty status by type of job, 2017



Source: Calculations based on the 2017/18 CMS/HBS.

Note: The industry sector refers to the household business.

Adoption of digital technology is lagging in Lesotho.

This is demonstrated by the country's low standing on the World Bank Digital Adoption Index, measuring the spread of technology among businesses, governments and citizens.³² Lesotho ranks among Africa's lowest performers in the United Nations' global e-Government Development Index (EDGI) – falling below the continental average and other Southern African Development Community (SADC) countries. Weak competition in the broadband market remains a challenge and contributes to low Internet use by businesses and consumers and relatively high prices for service. Digital skills constitute a clear bottleneck for Lesotho, making it an area where policy and institutional reforms are needed. Measures to improve digital skills need to be backed up by a strategic focus and relevant data. Upgrading the accessibility

and quality of Internet services should be an important priority for further development. More reliable internet will also help businesses connect to markets and improve productivity.

C. Low productivity in subsistence agriculture poses a challenge for poverty reduction

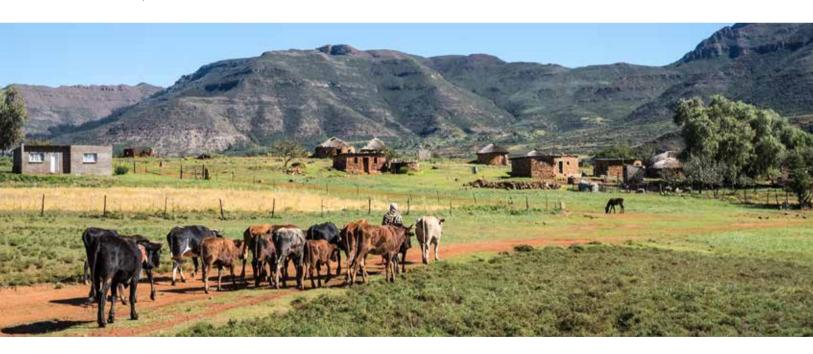
The majority of Lesotho's population lives in rural areas and depends directly or indirectly on agriculture as a means of livelihood. Nevertheless, agricultural productivity is low, and the value added is limited (World Bank 2019f). Most of those engaged in agriculture are smallholders with less than one hectare per family, and cereal yields are low. Low agricultural

³² The results presented here are based in the recent Lesotho Digital Economy Diagnostic report (World Bank 2019c). This report uses the Digital Economy for Africa (DE4A) methodology to conduct an examination of the five pillars of Lesotho's digital economy, focusing on digital infrastructure, digital government platforms, digital financial services, digital entrepreneurship and digital skills. The report is based on extensive desk research and interviews of a wide array of government entities and other stakeholders.

productivity and poverty are closely linked with food insecurity and malnutrition in Lesotho. About one-third of all children under age 5 are stunted. In the lowest income quintile, one-half of all children under age 5 are stunted, compared to 10 percent of children in the highest. Growth in the agricultural sector will be central for poverty reduction in Lesotho. Recognizing the sector's importance for "job creation and inclusive economic growth under a new growth path led by the private sector," the government selected agriculture as one of four productive sectors central to its new National Strategic Development Plan (NSDP) II for 2018/19–2022/23.³³

Current agricultural production in Lesotho focuses on extensive animal grazing and expansion of agricultural cropland to keep pace with the population demand for food. This is largely unsustainable and depletes the land resources needed for production over time. Adoption of Climate Smart Agriculture (CSA) principles in Lesotho should increase productivity and incomes, enhance food security and dietary diversity, reduce impacts of climate change on agricultural produce, and improve commercialization, employment opportunities and rural livelihoods (World Bank 2019e).

Low investment in agriculture has rendered the sector vulnerable to weather impacts and poorly equipped to adapt to climate change. The sector's low productivity is largely a result of underinvestment in infrastructure (including irrigation), low uptake of new technologies and inputs, poor-quality extension and advisory services and limited access to credit. Environmental challenges such as land and natural resource degradation, erosion and low soil fertility exacerbate the situation, leaving the sector vulnerable to risks. Frequent droughts and high rainfall variability from one season or year to another, including the El Niño Southern Oscillation (ENSO), have resulted in poor crop harvests and large livestock losses for rural farmers. Lesotho's agricultural system faces a growing number of climate-related vulnerabilities with droughts, floods, pests and extreme temperatures occurring more frequently. In response, the government is integrating climate change into the country's agriculture policy agenda.



³³ The three other productive sectors included in the draft NSDP II are manufacturing, tourism and creative industries, and technology and innovation. To strategically support agriculture's role in climate change mitigation and adaptation and in nutrition and food security, the government is developing an Integrated Program for Agriculture and Food System Development (a National Agriculture Investment Plan, NAIP), a Multi-Sectoral Nutrition Strategy and, with the support of the World Bank, a Climate Smart Agriculture Investment Plan (CSAIP). All of which will be ready for adoption in 2019.

Box 16: Lesotho Climate-Smart Agriculture Investment Plan (CSAIP)

Lesotho's CSAIP aims to identify climate-smart agriculture (CSA) investments that offer the greatest potential to transform the country's agriculture into a more productive, climate-resilient and low-emission sector (World Bank 2018c and World Bank 2019e). The CSAIP offers two complementary pathways for scaling up CSA in Lesotho.³⁴ Commercialization can be prioritized largely in lowlands and foothills, while the highlands would benefit from resilient landscape, or afforestation, and farmer-managed natural regeneration to restore and replenish less fertile land.

- a. Commercialization entails focusing on commodities for which Lesotho has a distinct comparative advantage, like horticulture, potatoes and aquaculture; developing the country's irrigation to its full potential; and forging linkages that connect smallholders to export and domestic markets. Commercialization can be prioritized largely in lowlands and foothills—the fertile and most productive parts of Lesotho that are suitable for orchards, vegetables, wheat, potatoes and peas. Commercialization will improve farmers' productivity, create more jobs and offer Lesotho the potential to export horticulture, potatoes and vegetables. Strong market-oriented agricultural policies should be developed, and Lesotho's agricultural value chains should be strengthened. The proper functioning of land markets will also be important.
- b. Resilient landscape combines modern scientific practices, such as improved crop varieties, crop rotation, relay cropping and intercropping practices. Application of manure and plant ash should conserve soil moisture and replenish soil fertility. Resilient landscape focuses on investing in sustainable landscape and integrated catchment management while strengthening local institutions. A resilient landscape should control land degradation and be tailored toward locally adapted technologies that the average smallholder farmer can practice. Resilient landscape can be emphasized largely in the highlands, a region suitable for potatoes, wheat, peas and orchards. The highlands would also benefit from afforestation and farmer-managed natural regeneration to restore and replenish less fertile land.

Effective scaling up of CSA in Lesotho will require addressing several adoption barriers, including limited implementation capacity, insufficient access to inputs and credits and insufficient agricultural research. Policy actions to support effective scaling up of CSA identified in the CSAIP include:

- Strengthening agricultural research and extension. There is a need to strengthen research and establish partnerships with international research institutes to develop high-yielding, stress-tolerant, climate-ready varieties. Agricultural extension services should be upgraded to catalyze the agricultural innovation process, improve the CSA knowledge system, facilitate access to information, knowledge and expertise, and provide technical advice to farmers.
- Building capacity to access climate finance. Lesotho faces a financing gap in the agriculture sector with
 low capacity to access climate finance. Critical areas that need capacity development include identifying
 funding gaps and needs, assessing public and private financing options, developing payment for ecosystem
 services programs, developing bankable investment plans, project pipeline and financing propositions, and
 developing financially viable opportunities for effective private sector engagement.

³⁴ Generally, CSA comprises three pillars: increasing productivity, enhancing resilience and adaptation and reducing greenhouse gas emissions from the agriculture sector. The Government of Lesotho is collaborating with the World Bank to integrate climate change into the country's agriculture policy agenda. The CSAIP builds on Lesotho's Second National Strategy Development Plan (NSDP II), and Lesotho's international climate commitments articulated in its Nationally Determined Contribution (NDC).

Smallholder agriculture plays a major role in the employment and livelihoods of Basotho. About 71 percent of the population is involved in some form of agricultural activity. Although farming is more widespread in rural areas, where 81 percent of the population is engaged in agriculture, it is also common in urban locations, where 50 percent of people grow crops or tend some livestock. Farming is often a dominant source of livelihood for the poor: 78 percent of those in the lowest quintile participate in agricultural activities,

compared to 58 percent of the wealthiest quintile (Figure 95). Although people with less education are more likely to farm, over a third of university graduates are involved in agriculture. This may indicate a lack of economic opportunities in other sectors of the economy. Residents of urban Maseru – the main business center of the country – are significantly less likely to engage in agriculture than those living in Rural Mountains, Rural Foothills and Rural Sengu River Valley.

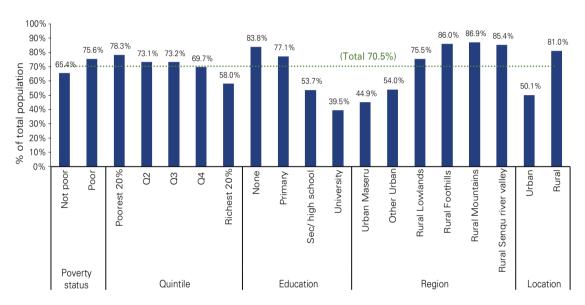


Figure 95: Share of population engaged in farming activities, 2017

Source: Calculations based on the 2017/18 CMS/HBS.

Low productivity and low earnings in subsistence agriculture have a strong association with poverty.

The large differential in poverty rates between urban and rural areas can be attributed to a larger share of the rural population being employed in subsistence agriculture and/or low-productivity/low-paying agricultural jobs. In contrast, urban areas are characterized by a larger share of the employed population in wage-earning jobs outside agriculture, including the well-paid public sector. These government workers earn an average monthly salary about seven times higher than the minimum monthly wage of a skilled worker in the textile sector.

Crop farming in Lesotho is mainly based on subsistence cultivation of cereals, an activity characterized by the low incomes that drive poverty in rural areas. The largest share of households produces only cereals (Figure 96); among them, poverty is widespread (Figure 97). Horticultural producers are less likely to be poor, and they are most likely to invest in agricultural inputs. Currently, most of the horticultural output is consumed within the household or sold in informal domestic markets. Transitioning to commercial cultivation of fruits and vegetables can significantly increase farm incomes (World Bank 2018a). However, the horticulture industry is currently facing skills constraints, poorly functioning land markets, poor linkages within supply chains and limited access to finance (World Bank 2018a).

Figure 96: Share of households by type of parcel cultivation, 2017

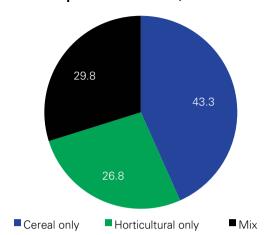
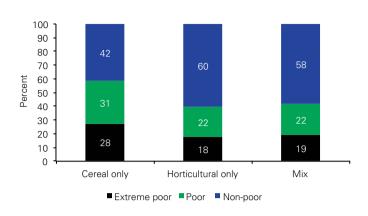


Figure 97: Poverty status by type of parcel cultivation, 2017



Most farming households engage in several agricultural activities with very little specialization. Among farming households, 55 percent are involved in more than one agricultural activity (Figure 98). Diversification across a variety of activities is reflective of the subsistence nature of agriculture in Lesotho: farmers produce the food they need for household

consumption. Lesotho's agriculture is subject to significant weather shocks, and diversification is also part of the risk mitigation strategy. Furthermore, smallholder farmers that live far from urban centers often encounter difficulties finding good markets for their output, so they produce different products in hopes that at least some could be sold.

Figure 98: Number of agricultural activities engaged in, 2017

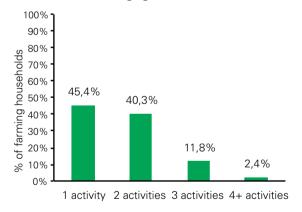
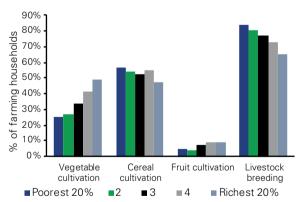


Figure 99: Most common agricultural activities, by quintile, 2017



Source: Calculations based on the 2017/18 CMS/HBS.

Livestock farming is the most prevalent agricultural activity in Lesotho, with over three-quarters of households raising animals (Figure 99). Furthermore, 53 percent of farming households are involved in cultivation of cereals, primarily maize. Lesotho does not have a competitive advantage in cultivating cereals because of its mountainous terrain, challenging agroclimatic conditions, poor soils and barriers to attaining the large economies of scale and high levels of mechanization required for commercial grain cultivation. Although horticulture crops are more suitable for Lesotho's agroclimatic conditions and farm structure, most households, particularly the poor, continue to grow maize - a staple food in local diets. Wealthier farming households are significantly more likely to grow vegetables and fruit. In the top quintile, 49 percent of households grow vegetables and 9 percent grow fruit, compared to 25 percent and 4 percent of households in the poorest quintile. By contrast, poor households are relatively more likely to raise livestock and grow cereals.

Lesotho's agriculture sector is dominated by smallholder subsistence farmers. Average field size is 3.5 hectares (five hectares among non-poor households) and two hectares among the poor). Most farming households produce for their own consumption and only 3 percent produce primarily for sale. As might be expected, there is a higher share of market-oriented farmers among the non-poor. Only 1 percent of farming households in the poorest quintile produce only or mainly for sale/barter, compared to 5.3 percent in the wealthiest quintile. Urban farmers are almost twice as likely as those that live in rural areas to produce for sale, indicating the importance of proximity to markets. Furthermore, farmers with more education are more likely than those with a low educational attainment to be market-oriented (Figure 100).

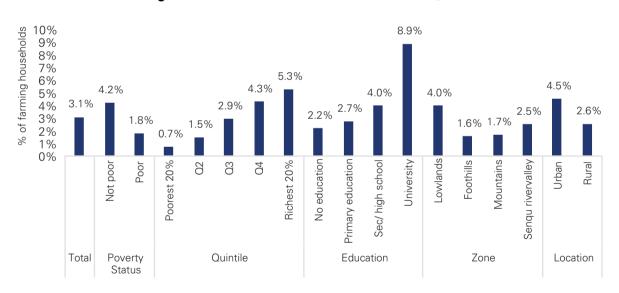


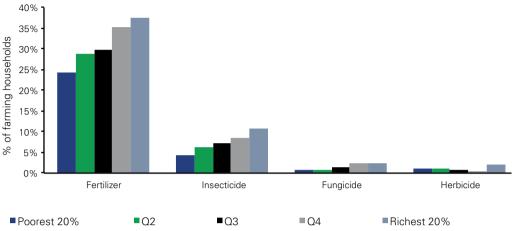
Figure 100: Share of market-oriented farmers, 2017

Source: Ca Iculations based on the 2017/18 CMS/HBS.

Crop farmers in Lesotho tend to rely on rainfed low input/low output production methods with limited use of irrigation, improved seed, fertilizers and pesticides. Less than 2 percent of Lesotho's arable land is irrigated, and reliance on rain-fed crop cultivation reduces the growing season and yields. In times of drought, an entire harvest could be lost. Furthermore, investment in equipment and inputs is low. Few farmers can afford the use of tractors and other machinery. About a third of farming households use

fertilizer, and pesticide application is even lower (Figure 101). Interviews with emerging commercial vegetable farmers reveal that there are significant knowledge gaps in variety selection, plant spacing, disease management and application of inputs. The extension services do not have the knowledge and resources needed to provide quality and timely advice to farmers. Few farmers do soil testing. As a result, even farmers who spend more on inputs do not necessarily record higher yields (World Bank 2019h).

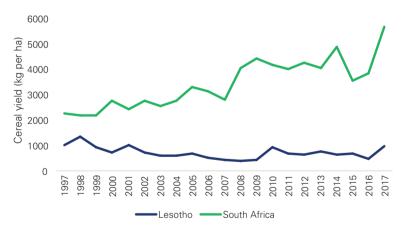
Figure 101: Share of farming households that use inputs in production, by quintile, 2017



Limited adoption of modern commercial agricultural practices and low investment in machinery and inputs contribute to low yields. Household survey data on yields is scarce, yet the available evidence suggests that yields are significantly below those expected for the varieties planted. Average cereal yields are below one ton per hectare, significantly lower than the regional yields and the SADC's target of at least two

tons per hectare. Cereal yields have declined since 1997 and the yield gap between Lesotho and neighbouring South Africa has widened. In 2017, Lesotho's cereal yields per hectare constituted only about 18 percent of South Africa's (Figure 102). Interviews with commercial vegetable farmers reveal that yields are typically about half of what they are expected to be and even lower for subsistence vegetable farmers (World Bank 2019h).

Figure 102: Cereal yields in Lesotho and South Africa, 1997-2017



Source. World Development Indicators.

Low productivity in agriculture contributes to low incomes and high poverty of farming households. Average sales of agricultural output are LSL 2,671 while average profits are LSL 1,806 per growing season (Figure 103). As might be expected, poor households have much lower sales and profits than the better off ones. Profits are nine times higher for male-headed

households than for female-headed households, which may indicate lack of access to inputs, credit and extension support for female-run farms. Sales and profits are significantly higher among better-educated households. The average profit (per season) of a household with primary education is LSL 111 vs. LSL 5,448 for households with university degrees.

8 000 6 000 Maloti (LSL) 4 000 2 000 None Primary Male Poor 02 03 04 University Richest 20% Sec/ high school Female Other Urban **Rural Lowlands** Not poor Poorest 20% Jıban Maseru Rural Foothills Rural Mountains Sengu river valley -2 000 Rural 3 Povertv Quintile Education Gender Total status Region _ocation ■Average sales ■Average profits

Figure 103: Average farm sales and profits per season

Average profits per season are over nine times higher in urban areas than in rural locations, indicating the importance of proximity to markets.

Agricultural activities are most profitable in Maseru but bring negative returns in Rural Mountains. Access to larger consumer markets and a greater number of formal buyers allows farmers to realize higher profits. Formal buyers, such as supermarkets and local grocery stores, tend to pay more for high quality produce than informal traders operating in rural markets. Selling to formal buyers requires meeting quantity, quality, packaging and delivery timing requirements that many poor farming households struggle to fulfill.

Access to credit could increase investments in inputs and support commercialization of agriculture.

It could also enable farm households to diversify into non-agricultural activities. About 45 percent of farming households took out loans, with little difference between the poor and the non-poor. Most of the loans were for personal use (e.g. household consumption, school fees, medical expenses, funerals or weddings) and only 5 percent of farming households took out loans for business uses, including purchasing farm inputs or equipment. Compared to other households, non-poor, urban (particularly in Maseru) and male-headed farming households were more likely to take out loans for business use (Figure 104). This pattern indicates the type of population groups most likely to engage in entrepreneurial activities.

11.4% 12% Percentage of farming households 10.0% 10% 7.7% 6.9% 8% 6.3% 5.1% 6% 4.3% 3.8% 3.6% 33% 4% 2.3% 2.1% 2% 0% Female Rural Mountains Rural Lowlands Male Foothills Vot poor Urban Maseru Other Urban Rural Senqu river valley Jrban Rural Rural F Gender of the Poverty Status Total Region Location household head

Figure 104: Share of farming households that took loans for business use, 2017

Most farming households who borrowed took out loans from their neighbors, friends and relatives (58 percent) and only 3.2 percent received credit from commercial banks (Figure 105). The average loan size provided by relatives was LSL 684, compared to over LSL 36,000 for loans granted by banks (Figure 106). High risks associated with the agricultural sector and lack of

collateral are among the factors that reduce farmers' access to formal financial institutions. Only 232 farmers have titles to their land, and most rural land transactions (buying or renting) take place informally (World Bank 2018a). Lack of land titles prevents farmers from using land as a collateral to obtain bank credit.

Figure 105: Source of loan for farming households that received a loan

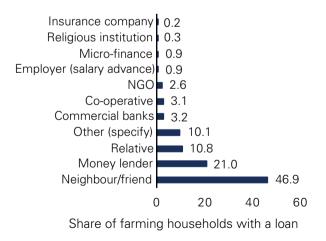
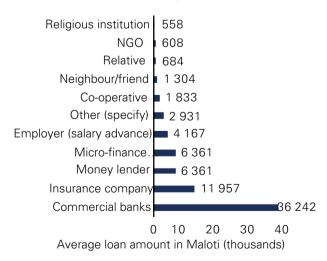


Figure 106: Average loan amount, by loan source



Source: Calculations based on the 2017/18 CMS/HBS.

D. Falling international migration and remittances slow poverty reduction

Migration continues to be a dominant strategy for maintaining households' livelihoods in Lesotho. Migration of skilled workers to South Africa is prevalent, generating a large influx of remittances. Dependency on remittances has decreased over time, but it still makes Lesotho's households dependent on the South African economy.³⁵ Remittances in Lesotho represent a coping strategy against poverty. Based on the 2017 Population Census, more than 328,000 Basotho were migrants in other countries, representing around 14.8 percent of the population. The top three destination countries of migrants from Lesotho are neighboring Southern African Development Community (SADC) countries: South Africa (95.3 percent), Mozambique (2.6 percent) and Botswana (1 percent). However, there are also Basotho in the United Kingdom, United States, the Netherlands, Malaysia, Australia and other countries. A second generation of the Basotho diaspora can be found in Australia, Europe and the United States. The 2017/18 CMS/HBS data show that 98.9 percent of respondents live in a household where a former household member has migrated to South Africa.

Both push factors and pull factors characterize **Lesotho's migration patterns.** These factors include high poverty levels in rural areas, lack of employment opportunities and basic services, intensified economic inequality between the rich and the poor, better opportunities and services in South Africa and porous borders between the two countries (IOM/Economist Intelligence Unit, 2018). According to the CMS/HBS 2018 survey, the main reasons cited for these movements include: for work (42 percent), to live with other relatives (19 percent), for school/training (15 percent), to look for paid jobs (4 percent) and other reasons (20 percent). Compared to households in the wealthiest quintile, a higher percentage of households in the poorest quintile cited former household members looking for a paid job as a reason for migrating. Richer households have a greater percentage of their former household members in countries other than South Africa.

Over the years, the context of labor migration to South Africa has changed dramatically. The changes have occurred in the terms of legislation and institutional frameworks, demographic profiles (the feminization of Basotho migrant workers), sectors of employment in South Africa, conditions of recruitment and social protection. While agreements between Lesotho and South Africa have been renegotiated over time, there seems to be a growing disconnect between objectives and outcomes, pointing to the inadequacy of current agreements and the need to rethink Lesotho's approach to bilateral labor agreements (Box 17).

³⁵ The decline is mainly due to a sharp decline in number of migrant mineworkers employed in South Africa – from around 90,000 in 1990 to 31,000 in 2012. The adoption of the Mining Charter in South Africa in 2003 confirmed the decision to phase out foreign labour in South African mines.

Box 17: History and features of Lesotho international migration

South Africa has historically been the top destination country for Lesotho migrants. This is attributed to geography, with Lesotho being surrounded by South Africa. For Lesotho's households, migration has historically been entrenched in decisions since the 19th century, led by male migration to South Africa's mining industry (UN-INSTRAW, 2006; Botea et al., 2018). This phenomenon continued during most of the 20th century; in the 1980s, up to 40 percent of Basotho men were employed in South Africa. But by the 1990s, Lesotho-South Africa migration patterns had dramatically changed. In 2002, only 12 percent of Lesotho's households had relatives in South Africa's mining industry, compared to 50 percent 20 years earlier (Boehm 2003).

Since then, a declining trend has been observed in Basotho male migration to South Africa because of increasing retrenchments from the mining industry in South Africa, a shift to more capital-intensive production, stagnant gold prices and pressures from the South African government to hire more locals (Motelle 2012). The halt in new hiring of Basotho men in South Africa mines threatened remittances inflows to Lesotho as a major source of household income. Therefore, households have developed new livelihood strategies that still involve migration. The decline coincided with growing female migrants from rural to urban Lesotho, employed mainly in the exportoriented garment industry, the largest formal employer in the country with employment at 90 percent female.

Since independence, Lesotho entered into the three labor agreements with South Africa – all different in nature and form.³⁶ The 1973 agreement provided a comprehensive framework regulating the recruitment and movement of Basotho workers into South Africa. It included the establishment of a Lesotho office in South Africa, plus guidelines on the movement of South African employers into Lesotho for recruitment as well as provisions regarding ports of entry, documentation, employment contracts and social benefits. The 2006 and 2013 agreements, in contrast, addressed priority areas for cooperation between the two governments but no longer regulated the above-mentioned areas. This is a significant difference that has bearing upon the objectives and implementation scope of the agreements.³⁷ The current Lesotho Special Permit expires December 31, 2019. There are more than 100,000 low-skilled labor migrants from Lesotho working in South Africa and an unknown number of irregular migrants are job-hunting or working in inhumane conditions in neighboring countries.

An increasing number of women are the main income providers for their households (Botea et al., 2018). However, the characteristics of Basotho migrant women differ from their male counterparts. Basotho women are less likely than men to engage in cross-border migration. Although the share of female Basotho migrants in South Africa doubled over 10 years, it was still only 8 percent in 2014. Basotho migrants are involved in various occupations in their destination countries. Considering both genders, the highest percentage of Basotho migrants work in domestic service (29.65 percent), followed by construction (12.85 percent), mining (11.20 percent), the informal sector (7.08 percent) and other sectors including retail, agriculture, government (39.22 percent). Female migrants are more likely to be employed in informal activities, such as domestic service (50 percent), trade and commercial agriculture (Crush et al., 2010). The feminization of migration has posed a new challenge in poverty reduction due to the multiple vulnerabilities of female migrants – their employment status, lack of contracts, lack of documentation, immigration status and issues of gender-based violence. These vulnerabilities often worsen during emergency periods, including prolonged dry spells (IOM, 2019).

^{36 (}i) Agreement between the Government of the Republic of South Africa and the Government of the Kingdom of Lesotho relating to the Establishment of an Office for a Lesotho government Labour Representative in the Republic of South Africa, Lesotho Citizens in the Republic of South Africa and the Movement of such Persons across the International border. Treaty Series No.1/1973 (1973); (ii) Memorandum of Understanding between the Government of the Kingdom of Lesotho through the Ministry of Employment and Labour and the Government of Republic of South Africa through Its Department of Labour on Cooperation in the field of Labour (2006); (iii) Memorandum of Understanding between the Government of the Kingdom of Lesotho through the Ministry of Employment and Labour and the Government of Republic of South Africa through Its Department of Labour on Cooperation in the field of Labour (2013).

³⁷ IOM Lesotho, Bilateral Labour Agreement Guidelines and Model Agreements for Lesotho (2017), page 8.

Migration to the mines and other areas in South Africa increases the vulnerability of migrants, their partners and other community members to HIV and tuberculosis infection. With the decline of 83,000 migrant mine workers employed in South Africa between 1987 and 2013, many Basotho households, particularly in rural Lesotho, have become more vulnerable (IOM, 2017). The availability of commercial sex at South African mines led to the rapid diffusion of HIV among the workforce in the 1990s. The burden of diseases and the weakening of household structures are two prominent social consequences of Basotho labour migration. Academic research and several reports have documented the scope and impact of occupational diseases among the Basotho workforce, particularly tuberculosis, silicosis, HIV/AIDS and various types of work-related disabilities (IOM, 2017). Stigma and non-disclosure of HIV status as well as failure to test for tuberculosis and seek treatment in time are challenges that lead to the spread of disease. Family wellbeing is negatively affected when migrants return home with illnesses and inadequate financial resources (IOM, 2018).

Guidelines regarding how mining companies compensate employees for occupational hazard were not fully followed. According to former mineworkers and other stakeholders, ex-mineworkers and their families in most cases were shortchanged by employers. The Government of Lesotho's current role in social protection for families of mineworkers and ex-mineworkers needs strengthening. The institutional arrangements for paying the benefits need simplification and rigorous monitoring (IOM, 2018).

Households mostly receive remittances through unofficial channels because of the high costs of sending and receiving money (World Bank 2018f). A large proportion of remittances is channeled through unregulated means, such as cash carried across borders by vehicle operators or delivered by the migrants themselves (Sekantsi, 2018). About 42 percent of remittance recipients surveyed indicated they had received remittances through these unofficial channels. This is attributed to the high costs of sending remittances. The lack of national identification documents for some migrants and their family members hinders access to banking and remittances transfer services not only in

Lesotho but also in South Africa (ACP-EU, 2012). The two main drawbacks associated with unofficial means of sending remittances are related to the risk of losing money and financial exclusion of households that would otherwise reap the benefits of financial inclusion. Although the South Africa-Lesotho corridor has been the least costly for sending remittances to Lesotho, lack of affordable remittance facilities in rural areas excludes Basotho migrants working on farms in Ceres, Eastern Cape Province of South Africa, from access to sending remittances back home (IOM / Migrant Workers Association, 2019).

Lesotho remains dependent on remittances. In 2018, remittances inflows were estimated at about US\$415 million, accounting for 14.7 percent of the country's GDP. Approximately 18.5 percent of the surveyed households acknowledged they had received international remittances during the 12 months prior to the 2017/18 CMS/HBS survey.³⁸ One percent of households received remittances from both household and non-household members, 13 percent received remittances from household members and 13 percent received remittances from non-household members.

Remittances to Lesotho have always been larger than Official Development Assistance (ODA) and Foreign Direct Investment (FDI) (Figure 107). Remittances reached a peak of US\$649 million in 2011 and then started declining due to a halt in employment of new Basotho workers in South African mines. In 2011, remittances were 2.5 times larger than the amount of ODA received in Lesotho, 10.6 times larger the amount of FDI and 1.9 times larger than the combined amount of ODA and FDI.

Rural households, particularly in the Senqu River Valley, are the most reliant on remittances. Constituencies closer to the border with South Africa are more reliant on remittances (Figure 108). In the southernmost areas, more than half of all individuals reside in households with a member working abroad. In the central mountainous regions, where access to South Africa is more difficult, less than 20 percent of individuals reside in households dependent on remittances. Households with low educational attainments are also more likely to be reliant on remittances.

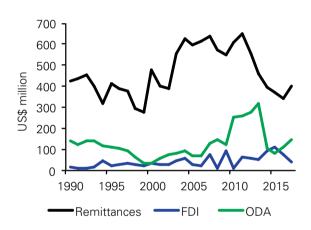
³⁸ The survey significantly underestimates the magnitude of remittances in Lesotho. This number and the subsequent analysis should be taken as lower bounds for the impacts of remittances.

Poorer constituencies are more reliant on remittances, with the mountainous constituencies being an exception. In general, the poorer the constituency, the more reliant households are on remittances (Figure 109). The exception is once more the mountainous constituencies, which do not rely much on remittances despite high poverty levels (Figure 110). This makes these households more dependent on agricultural income and more vulnerable to weather shocks.

Remittances are an important source of income, and poor households use the money to buy necessities and invest in human capital. The 2017/18 CMS/HBS

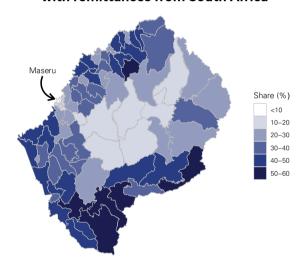
data show that households received an average of about LSL 5,661 per month in remittances. Figure 109 indicates the richest quintile received higher remittances than poorer ones. Among recipient households, 64 percent reside in rural areas and 36 percent live in urban areas. Urban dwellers tend to receive higher remittances than rural households. Remittance recipients mainly spend remittances on food and clothing followed by education.³⁹ Among non-household remittance recipients, poor households in the bottom quintile spend the greatest share of their remittances on education, followed by food and clothing. The richest quintile spend the highest proportion of their remittances on other expenses.

Figure 107: Trends in remittances, ODA and FDI



Source: World Development Indicators (WDI).

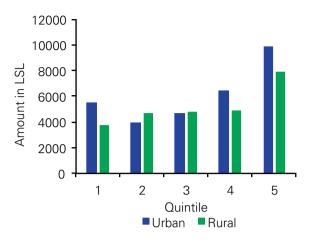
Figure 108: Share of individuals in household with remittances from South Africa



Source: Calculations based on the 2016 Population and Housing Census.

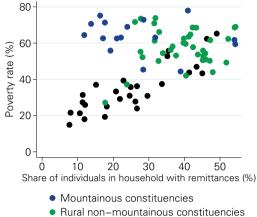
³⁹ Remittances may help improve economic growth, especially if used to finance children's education and develop human capital. Even when used for consumption, remittances generate multiplier effects, especially in countries with high unemployment. Whether remittances are used for consumption or human capital investments, they generate positive effects on the economy by stimulating demand for other goods and services.

Figure 109: Average remittances received in urban and rural areas, by quintile



Remittances incomes are strongly progressive in Lesotho, benefiting the poor population the most. Ranking households with and without remittances changes the distribution's shape (Figure 111). Taking

Figure 110: Share of individuals in household with remittances and poverty, by constituency



- Urban non-mountainous constituencies

Source: The 2016 Population and Housing Census and the 2017/18 CMS/HBS.

remittances from households receiving them would make them poor. The concentration curve indicates that remittances are strongly progressive – located well above the line of equality (Figure 112).

Figure 111: Share of population getting remittances by quintiles of consumption

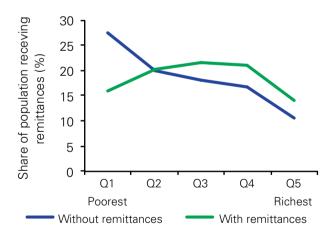
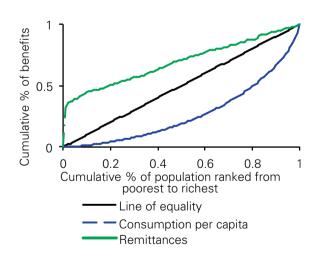


Figure 112: Remittances concentration curve



Source: Calculations based on the 2017/18 CMS/HBS. Consumption aggregate used for the deciles calculation is net of remittances.

Remittances contribute positively to poverty and inequality reduction. Households that received remittances would have been 13 percentage points poorer had they not received any remittances (Figure 113). The overall impact of remittances on poverty was smaller - 2 percentage points - because only 18 percent of the population received the transfers. Remittances also reduce inequality in remittancerecipient households. The Gini index would be higher by 2 points without remittances (Figure 114).

Figure 113: Impact of remittances on poverty

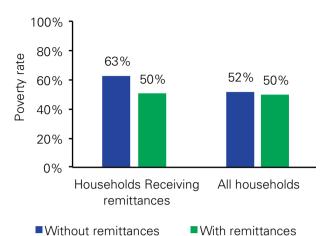
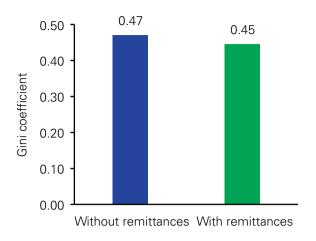


Figure 114: Impact of remittances on inequality



Note: Counterfactual analysis, re-estimation of the poverty and inequality indicators with and without remittances from abroad.

The impact of remittances on poverty would have been much larger if remittances had not decreased in recent decades. The decomposition analysis showed that the national poverty rate would have been nearly 5 percentage points lower had remittances remained at the 2002 level. Likewise, food or extreme poverty would have been down by 5 percentage points had the level of remittances not changed. The impact on inequality would have been muted because households in all parts of the distribution were reliant on remittances in 2002.

E. Conclusion and policy discussion

Strengthening the private sector through reforms to increase competitiveness and foster private investments is key to creating jobs, encouraging formal businesses and reducing poverty.

business licenses, accessing finance and lowering the costs of regulatory compliance would improve the business environment. In addition, supplier development programs would enhance the capacity of local small- and medium-sized enterprises (SMEs) to become subcontractors or suppliers to foreign direct investment (FDI) firms. The programs might help increase the size of firms in Lesotho and their productivity (World Bank 2018a).

- Access to finance is among the major constraints
 to local businesses. Enterprise Survey data show
 that 35 percent of domestic firms identify access to
 finance as a major or severe constraint to operations.
 Access to finance is impeded by a lack of legislation
 that could reduce the risk of lending to SMEs. At the
 same time, non-bank financial institutions are not
 well developed in Lesotho (World Bank 2018a).
- Pursuing deeper integration with South Africa, the United States and the European Union (EU) is important for growth of Lesotho's private sector. Lesotho's lower labor costs and more stable labor relations have already helped the country attract South African investment in the apparel industry. A targeted investment promotion campaign could help Lesotho attract more South African FDI into apparel-related activities as well as other labor-intensive industries. Given the large dependence on the U.S. market, negotiations with the U.S. government on the post-African Growth and Opportunity Act (AGOA) trade regime could give confidence to current investors and help avoid job losses. Furthermore, the Government of Lesotho may consider organizing an investment promotion campaign targeting the EU market to build on the Economic Partnership Agreement with the trade bloc. It will also be important to sign international investment and double taxation agreements to give greater confidence to potential investors.

- The services industry is growing but could be expanded to create jobs. Most jobs are concentrated in wholesale and retail trade. Agribusiness services could be developed for the growth of commercial agriculture. The services would include financing, certification, packaging, storage, distribution and branding; they could contribute more than primary production to GDP (World Bank 2018a).
- Policies aimed at creating jobs for the poor and increasing their incomes would reduce dependency on remittances and exposure to the South African economy's fluctuations.
 Remittances relieve poverty because they contribute a large share to household income among poor households, but the downside is dependency on the South African economy.
- Targeted policies that boost entrepreneurship and promote skills development will increase labor productivity and reduce poverty. High unemployment rates and high youth unemployment arise from skills mismatches. Training should concentrate on skills in high demand by firms, such as sewing machines repairs and ICTs. One way to do this is through introducing a Supplier Development Program aimed at enhancing the capacity of local SMEs to become subcontractors or suppliers for FDI firms. It will also be important to partner with the private sector to address skills constraints as well as raise awareness about the existing tax incentives for training.

Adopting Climate Smart Agriculture (CSA) principals in Lesotho should (i) increase productivity and incomes, (ii) enhance food security and dietary diversity, (iii) reduce impacts of climate change on agricultural produce and (iv) improve commercialization, employment opportunities and rural livelihoods. The Lesotho CSAIP aims to identify investments that offer the greatest potential to transform agriculture into a more productive, climate-resilient and low-emissions sector. The CSAIP offers two complementary pathways for scaling up CSA in Lesotho. Commercialization can be prioritized in lowlands and foothills, while the highlands would benefit from resilient landscape, or afforestation, and farmer-managed natural regeneration to restore and replenish less fertile land.

- Improvements in agricultural productivity can be achieved through transition from subsistence to commercial agriculture. This will involve significant public intervention and private investment. An important priority is improving the functioning of the land market by promoting land titling and creating a land registry. This will encourage new investment in commercial farming and enable farmers to use their land as collateral. Investment in irrigation infrastructure and rural roads will also be important. Furthermore, it will be necessary to provide training to agri-entrepreneurs on business skills, record keeping and marketing as well as on agronomic practices and climate smart agriculture (World Bank 2018a).
- Lesotho has considerable potential for increasing incomes and creating jobs through diversification from cereals to higher-value crops, such as fruit and vegetables. A favorable climate, strong local demand and opportunity for import substitution contribute to the good conditions for cultivation of fruits and vegitables. Vegetables are scale-neutral and can be profitably cultivated on plots of less than a hectare. Some commercial vegetable farmers that use irrigation and have greenhouses or shade nets report per hectare profits of above 1 million maloti per season. In addition, fruit and vegetable production is more labor-intensive than cereal farming and can create new jobs. Lastly, there is strong demand for fresh produce among formal buyers in Lesotho, and local farmers are cost competitive with imports (World Bank 2019h). Providing matching grants to agricultural entrepreneurs with strong potential and support to vertical and horizontal alliances (as envisaged by the second phase of the World Bank's SADP project) can further encourage investments in climate smart technologies and agricultural activities with higher value added.
- Commercialization of agriculture will also involve building linkages between farmers and buyers. This could be done through a Supplier Development Program with the goals of strengthening linkages with buyers, providing technical assistance to farmers and supporting local agro-dealers/extension services. The program will involve continuous monitoring of buyer demand, including such considerations as types of crops, volumes needed, quality (size, color, stage of ripening) and delivery timing requirements. Technical

assistance to farmers will include seed variety selection, cultivation practices, soil nutrient testing and amelioration, pest and disease management, water management, product standards and financial management. Working with the local agro-dealers and extension services to provide better support to farmers will also be useful.

It is essential to improve migration governance by developing a national strategy with a capacity to prevent irregular migration, promote legal migration and mobility, and ultimately enhance synergies between migration and development.

- It is important to manage irregular migration to South Africa by facilitating cross-border safety and legal migration. Creation of an institution for the Basotho diaspora has the potential to give migrants an opportunity to coordinate and run joint developmental programs. A bilateral labor agreement between Lesotho and South Africa would create greater labor mobility and ease credit constraints. Negotiations between the two countries are taking place.
- To reduce over-reliance on one country, Lesotho should look for alternative destination countries for Basotho migrant workers. New bilateral agreements, such as the ongoing efforts to have a Memorandum of Understanding (MoU) between Lesotho and Mauritius, should be encouraged. In February 2018, the two countries identified the most appropriate technical instruments in a Declaration of Intent and a MoU.
- Reduced costs would ease the sending and receiving remittances.⁴⁰ This can be achieved through financial-sector development, led by encouraging more entrants into the remittances market in Lesotho. Subsequent competition would likely drive down the cost of sending and receiving remittances. Strengthening awareness campaigns on remittances transfer services could also help. Information on the range of money transfer products, costs and requirements could be disseminated through public and private radio stations, national television, newspapers, magazines and the internet in both Sesotho and English (ACP-EU, 2012).

⁴⁰ Remittances are private not public funds and are not a panacea for the country's development needs. They can only be a complement. Given the high relative importance of remittances, there is a high risk of overdependence on them. All measures taken to leverage remittances need to be accompanied by measures creating a favorable economic, legal and political environment to foster human development.

Part III: Vulnerability to shocks and poverty reduction in Lesotho



Chapter III.1: Vulnerability to economic and environmental shocks

Households in Lesotho face significant environmental and economic shocks. The most commonly reported shocks over the period 2012–2017 were drought and high food prices. The higher prevalence of shocks with large impacts on welfare in rural areas results in poorer households being exposed to greater risk. In many instances, households do not have good coping mechanisms to manage shocks. When hard times hit, the most common coping strategy is relying on help from family and friends. Consumption is often reduced in response to experiencing this type of shock, with potential long-run consequences. Rainfall shortfalls have a significant impact on poverty, particularly for rural households. Had rainfall in 2015-2016 been at the historical average, rural poverty would have been 6 percentage points lower. Regular pension support helps pensioners mitigate the impact of weather shocks on consumption, suggesting the transfers are adequate. Other safety nets targeted at rural households mitigate the impact of rainfall, but the effect is marginal, leaving these beneficiaries very susceptible to weather risk. Irrigation mitigates the impact of rainfall shortfalls on nutritional outcomes.

A. Defining vulnerabilities in Lesotho

Households in Lesotho, like many others across Sub-Saharan Africa, face significant uncertainty with regards to future consumption. This uncertainty has many sources – for example, illness that affects the productive labor and income of a household, death of a family member, drought that reduces crop yields and incomes and price shocks that make basic food supplies more expensive for those with few resources.

This chapter develops an understanding of the sources of households' vulnerability in Lesotho and the strategies for coping with shocks. It examines the government programs, markets and informal networks households rely on to manage the consequences of unexpected shocks to consumption. The sources of

vulnerability not adequately covered by these programs are identified, providing guidance for public policy to strengthen households' resilience. To the extent the data allow, an assessment is also made of how households can reduce their exposure to important sources of risk.

Vulnerability to weather risk has historically been high among rural households in Lesotho. The predominant source of income for many households is rain-fed agriculture; much production is from maize, which makes livelihoods very susceptible to rainfall shortfalls at specific periods during the production cycle. Changes in livelihoods may make households more resilient: irrigation use in farming is increasing, the agricultural base is diversifying and households are transitioning to other income sources.

Box 18: Measuring vulnerability to shocks in Lesotho

Vulnerability to poverty can be described as the threat of future poverty (Calvo and Dercon, 2013). There are two components to vulnerability analysis (Hoddinott and Quisumbing 2003): first the likelihood of adverse events occurring and, second, the impact on wellbeing, should the shock materialize. Because vulnerability is about wellbeing in the future, it is important to consider both households' current welfare, which determines how well it can manage risks, and its exposure to risks in the future. The analysis in this paper incorporates (i) structural constraints that drive food insecurity and poverty and (ii) exposure to shocks that increase poverty and food insecurity and make currently food secure, non-poor households vulnerable to food insecurity in the future.

There are different conceptual frameworks for measuring vulnerability. The Household Economy Approach is "a livelihoods-based framework for analyzing the way people obtain access to the things they need to survive and prosper" (Bodreau et al. 2008). This approach underpins the livelihood baselines used in the Lesotho Vulnerability Assessment and Analysis Report (LVAC) to generate estimates of the numbers of people needing emergency assistance each year. Here, the approach set out in Hill and Porter (2017) is followed, with vulnerability to poverty assessed by the impact of shocks on consumption and the probability of shocks occurring from cross-sectional and historical data. This approach follows the vulnerability measures used in Pritchett et al. (2000), Chaudhuri (2003) and Calvo and Dercon (2013) and is distinct from other approaches that have assessed downturns in the wellbeing indicator (Kamanou and Morduch, 2002; Dutta et al., 2011) or vulnerability as welfare loss due to increased variance (Ligon and Schechter, 2003).

Between 2016 and 2018. households in Lesotho experienced both weather and food-price shocks. These types of events are often termed as covariate shocks and affect many households in one place at the same time. This chapter uses the variation in the severity of these shocks across time and in different parts of Lesotho to assess their impacts on welfare. The perfect dataset would include several years of observations for each household; even better, it would information on what could happen and how probable this is/was in differing states of the world. In the absence of panel data and such scenarios, information on the spatial and historic distribution of shocks is used to estimate how weather and price shocks affected consumption and nutrition outcomes during 2016-2018. Economists have recently incorporated rainfall data as exogenous sources of shocks in various empirical models to estimate ex-post impacts of weather (Dell, Jones, & Olken, 2014). Conditional on the probability of drought, the timing of the shock is exogenous. We control for the probability of drought by including measures of the mean and variance of the historic drought distribution in a given location and with district fixed effects.

Such shocks as death and non-contagious illness are not typically experienced by multiple households in the same location at the same time. They affect one or two individual households rather than whole communities. The frequency of these shocks is also usually constant across years. Events like these are termed idiosyncratic shocks.

B. Basotho face severe environmental and economic shocks

In terms of frequency, the most important sources of risk are environmental and macroeconomic shocks: drought and high food prices. This is true when looking at the past year and when looking at the past five years (2012-2017). Crop and livestock disease were also reported frequently (Figure 115). In addition to the presence of specific disease pathogens, this can reflect more challenging weather conditions.

The high frequency of weather and price shocks reflect abnormally bad weather conditions and high inflation during the survey period. Figure 116 shows that rainfall conditions have been quite bad in the past five years, with two years at or below the 20th percentile of rainfall during the peak December and January maize pollination season, a time when yields are most susceptible to rainfall losses. Since 2001, the worst year for recorded rainfall was 2015-2016, when Lesotho experienced one of the strongest El Niño's in recent history. In fact, 2016 was classified as a 1 in

30-year event. Rainfall was low, poorly distributed and late to arrive. Crop production was estimated to be 62 percent lower than the previous year and 51 percent below average (LVAC Report, 2016). The CPI reported very large price increases in the middle of 2016, partly because of harvest losses experienced both in Lesotho and regionally (Figure 117). Prices had come back down by the time households were interviewed, starting in January 2017, but the price spikes were within the reference period of one year for respondents. Together, this suggests that the economic environment was more

difficult than normal for most households during the period considered in the survey questions.

Data collected during the annual Lesotho vulnerability assessments confirm that 2016-2017 was a particularly bad period for households in Lesotho. Data collected on food security and nutrition outcomes confirms that a lot of households were predicted to be food insecure in 2016-2017, an expected result of the poor harvest in 2016 (Figure 118).

Figure 115: Frequency of shocks experienced by household (last five years and in the last year)

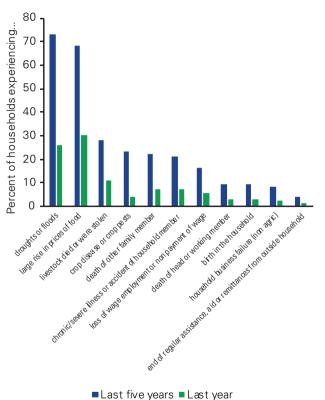
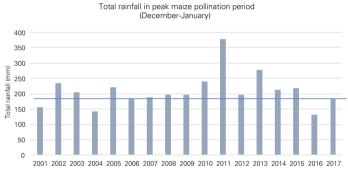


Figure 116: Rainfall was much lower during peak pollination in 2016

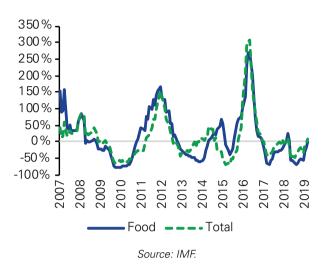


Source: Calculations based on the 2017/18 CMS/HBS.

Source: Calculations based on CHIRPS 2001-2017.

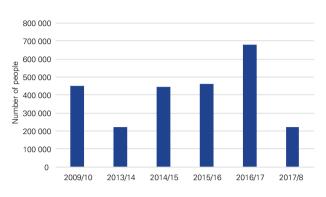
Note: Total rainfall in peak maize pollination period (December-January).

Figure 117: Inflation was high in 2016



Note: Percent change in CPI (compared to same month in previous year).

Figure 118: Food insecure population by year, rural Lesotho



Source: Lesotho Vulnerability Assessment Report 2017/18.

After drought and price shocks, ill-health and death were the most commonly reported shocks. Death of a household head or other working-age member was reported by 9 percent of households, and death of other family members by 22 percent of households. In addition, 21 percent of households were affected by a household members' chronic or severe illness or accident. Collectively, this is a large number of households. In the past five years, 16.3 percent of households experienced loss of wage employment and 8.4 percent experienced failure of a non-agricultural business. Other shocks – fire, being jailed or a household breakup – were also reported, but this category was less common.

The nature of shocks varies between rural and urban Lesotho, reflecting different risks to livelihoods. The risks vary considerably across rural and urban Africa (Christiaensen, Nikoloski and Hill, 2017). This is also the case in Lesotho (Figure 119). The differences reflect

differences in livelihoods. Owning land or engaging in agriculture makes households much more vulnerable to climate shocks and livestock-related shocks. Not surprisingly, rural households are more likely to report droughts and crop and livestock diseases. In the past five years, 81 percent of those who own land reported being negatively affected by drought, compared to 55 percent of those who do not. For livestock related shocks, the comparable figures are 36 percent and 10 percent. Urban households are more likely to report the loss of non-agricultural business or wage employment. In addition, urban households are more likely to report chronic or severe illness in the household, perhaps reflecting the fact that illnesses have a larger effect in the urban areas' more formalized labor markets. Loss of household members is reported as frequently in urban and rural areas. Similarly, large increases in food prices were reported as frequently by rural and urban households.

Figure 119: Percentage of households affected by risk by urban/rural

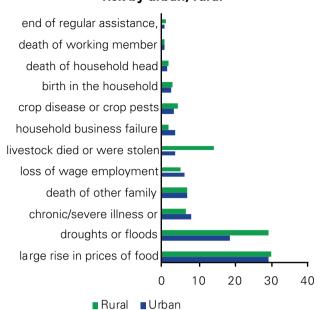
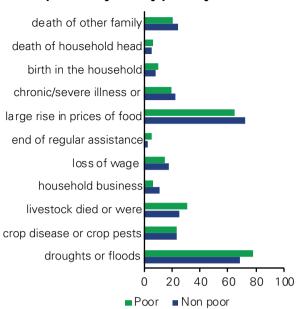


Figure 120: Percentage that occurred in the past five years by poverty status



A higher share of poor households suffers from droughts or floods. This may reflect the fact that rural households tend to be poorer. When considering shocks that occurred over the past five years, 78 percent of poor and 68 percent of non-poor reported suffering from drought or flood (the share is comparable when looking at shocks that occurred over the past year – 30 percent for poor and 22 percent for non-poor) (Figure 120). More than 80 percent (83 percent) of households headed by someone with no education report experiencing drought or flood, compared to just above half (54 percent) for households headed by someone with a tertiary education. For the shocks that occurred in the past 12 months, the corresponding proportions are 30 percent and 21 percent.

The shocks that matter most for welfare are not necessarily the ones most frequently reported. Households were asked whether the shock impacted income or assets or both. The most severe shocks could be those that affect assets and income. Taking this as the measure of the shock's severity indicates that loss of the household head was the most severe shock, closely followed by death of other working member of the household and other family members (Figure 121).

Figure 121: Proportion of households that lost income and/or assets as a result of a shock

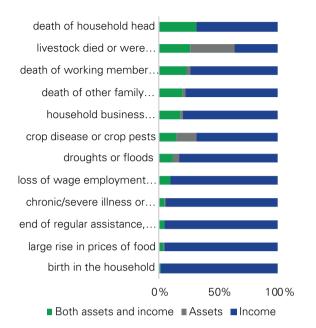
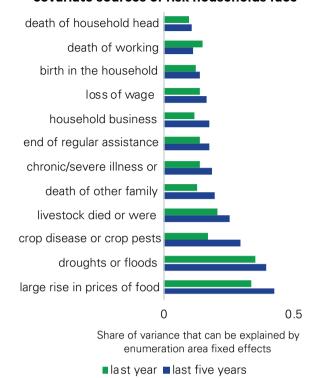


Figure 122: Price and weather risk are the most covariate sources of risk households face



Note: The right figure shows the results of a regression of the reported shock on village fixed effects. The higher the covariate the nature of the shock, the larger the degree to which shocks are explained by these fixed effects.

C. Households have few coping strategies at their disposal to manage shocks

The most severe shocks may not be the ones that cause the largest income or asset losses; the biggest blows can be the shocks households find harder to cope with. A death in the household, drought and loss of wage employment were consistently ranked by households as the hardest shocks to deal with. Nearly all households that experienced the death of their head ranked it as one of the worst two shocks they had experienced. For those who experienced it, the death of a working household member was also ranked as very severe. This was followed by drought. The shocks that are most likely to affect multiple households in the same community at the same time are drought and price risk. Figure 122 shows that drought and food price increases are the most covariate shocks. This makes

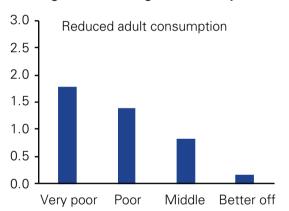
these types of shocks particularly difficult to deal with. Death of other family members and the loss of wage employment were also bad.

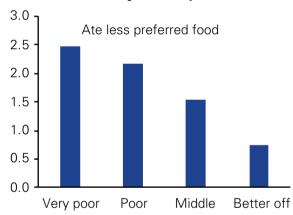
Households often report reducing food consumption in the face of a shock. The share of households stating they reduced their food intake (or substituted preferred food for cheaper food) is fairly large. Looking at shocks that occurred in the past five years, for example, 19 percent of households stated they cut food intake and 14 percent substituted cheaper but less preferred food (the share of households is also large when looking at shocks that occurred in the past year). Interestingly, there is no stark difference in the share of urban and rural households who report reducing food intake in response to a shock, perhaps because this was a period with both crop income losses in rural areas and high food price inflation in rural and urban areas alike.

The high numbers of households reporting a reduction in food intake is concerning. For households with lower levels of consumption prior to the shock, reductions in consumption can lead to undernutrition, with poor health consequences in the short-run and important consequences in the long-term. These include a high risk of stunting, impaired cognitive development, lower school attendance rates, reduced human capital attainment and higher risks of chronic disease and health problems in adulthood (Black et al., 2013; Hoddinott et al., 2013). Those who are stunted average 1.6 fewer years of education, and have 0.625 standard deviation lower outcomes on cognitive tests. As a result, Galasso and Wagstaff (2017) estimate the cost of childhood stunting to be 9-10 percent of GDP per capita for countries in Africa and Asia.

It is not the poorest or the most well-off that employ consumption-based coping strategies, but the households in between, who are both affected and able to reduce food consumption intake. Figure 123 reports data collected through the LVAC survey in 2016 and shows overall worsening consumption because of poor harvests and high inflation. However, the very poorest or the better off households indicated little change in the frequency of eating less preferred food or in the frequency of reducing adult consumption. The figures also highlight that the variation in the use of consumption-based coping strategies across households is largely driven by the wealth of the household.

Figure 123: Change in consumption behavior as result of shock, by consumption level



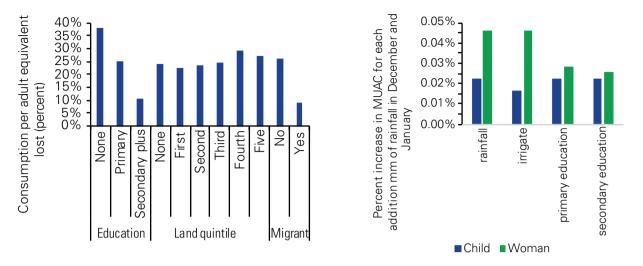


Source: Calculations based on LVAC 2016.

Those who are educated, who have access to irrigation or who have a source of remittance income are less susceptible to risk. Consumption of households with no education drops by 38 percent in the face of a bad shock, compared to 11 percent for households with a secondary education or above. In the LVAC, women with higher levels of education are less susceptible to rainfall risk. Having education makes households more resilient because they can diversify their sources of income in the face of poor

agricultural conditions (Hill and Mejia 2017). Households with migrants in the year prior to the survey were also better able to withstand shocks (Figure 124). For these households, the absolute loss from a shock the size of 2016 would be LSL 60, less than 10 percent of consumption. The nutritional status of children living in households that use irrigation is less susceptible to rainfall risk. This reflects the fact that access to coping strategies varies across households, making them less vulnerable.

Figure 124: Households with education, migrants and irrigation are less susceptible to rainfall losses



Source: Calculations based on the 2017/18 CMS/HBS (left) and LVAC 2016-18 (right).

Note: The size of rainfall shock used in the left graph was a loss of 68mm, representing the difference between the much lower rainfall in 2016 and median rainfall. The loss was calculated using coefficients from a regression of rainfall on consumption, interacting with different household characteristics. MUAC is mid-upper arm circumference.

Shocks have a large impact on welfare because households have few coping strategies at their disposal to manage shocks. Most households do not take specific actions to manage the shocks they report experiencing, and poor households are less likely than other households to act to manage shocks. Figure 125 shows that nearly three-quarters (72 percent) of households facing a shock in the past five years reported they had done nothing to manage it, and this proportion was only slightly lower for shocks experience in the past year (62 percent). Compared to urban households, a higher share of rural households responded that they did nothing in the wake of a shock. This could be because households had few actions available to manage the shocks or because the shocks did not have

much impact. The shocks that households were more likely to act on were deaths in the household or shocks that resulted in loss of non-agricultural income - loss of wage employment, the loss of household business income or the end of regular assistance. These are also the most idiosyncratic risks, easier to manage through local markets and networks. A larger share of the poor did not do anything in the wake of the shock, which could suggest that they do not have any means of coping with the shock. For shocks in the last five years, 76 percent of poor and 67 percent of non-poor reported doing nothing. The gap is nearly as large—67 percent compared to 58 percent—for shock episodes that occurred in the past year.

Percentage of households 90 80 70 60 50 40 30 20 10 Other consumption strategies Reduced tool consumption Other ■ Non poor ■ Poor ■ Total

Figure 125: How households manage shocks in Lesotho

However, households are sometimes able to use networks and markets to manage the impact of income shocks. Receiving help from family and friends is the most commonly reported coping mechanism in the 2017/18 CMS/HBS. About a guarter (24 percent) of households that experienced a shock over the past five years – and 17 percent over the past year – report relying on informal networks of friends and family. Compared to urban households, a larger share of rural households relies on these informal networks. For shocks experienced in the past five years, 26 percent of rural households and 20 percent of urban households have received help from friends and family. This pattern was also present when considering the most recent shock episode: 19 percent of rural households received help from friends and family, compared to 13 percent of urban households.

Informal networks are used more by the non-poor, the less educated and female-headed households.

When considering shock episodes in the past year, 19 percent of the non-poor and 15 percent of the poor relied on informal help to cope with the effects of the shock. However, it is less educated households that are more likely to rely on help from family and friends: 21 percent

of households headed by someone with no education relied on help from family and friends, compared to 15 percent of households whose head has a tertiary education.

None of these coping mechanisms—informal networks, credit, asset sales or increased labor market activity—were used much in the face of covariate shocks that affected many households in the same area at the same time. This highlights the challenge of covariate shocks. The initial shock is compounded by the fact that fewer labor market opportunities are available in local markets, fewer willing local buyers of stocks or non-productive assets and fewer lenders available in localized credit markets.

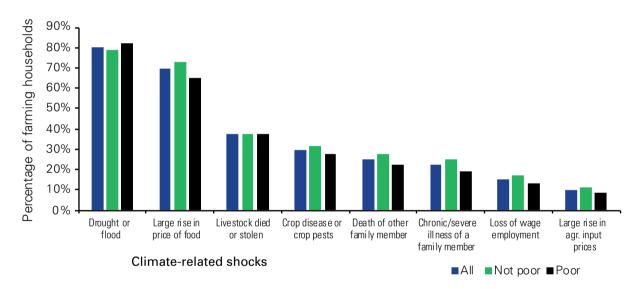
Urban households and better off households have more coping mechanisms available. A higher share of urban households relies on working longer hours, starting a new business or saving cash – all coping mechanisms that are arguably easier to apply in an urban setting. A higher share of non-poor household adopts saving cash or borrowing money as a coping mechanism.

D. The impact of climate-related shocks is significant, especially among agricultural households

Climate change, with its prospects for frequent droughts and heavy seasonal floods, is a key challenge to the agriculture sector. The country also experiences hail and frost. Lack of irrigation and weak farmer knowledge of climate-smart agricultural practices exacerbate the negative impacts of climate change. Over 80 percent of households reported that their financial situation was severely impacted by droughts or floods during the past five years, while 30 percent suffered from crop diseases or pests (Figure 126). Furthermore, about 37 percent of farming households

were negatively impacted by livestock death or theft. Adverse weather events have often been associated with the reduced yields and increases in food prices reported by 69 percent of households. These shocks affected a similar share of poor and non-poor farmers. Given the large role of agriculture in the livelihoods of Basotho, weather shocks have a major negative impact on production, incomes and food security in both rural and urban areas. Over half a million people are currently in need of food assistance due to poor rainfalls in 2018-2019. In addition to the adverse weather events, many farming households have also reported experiencing other shocks, such as death or illness of a family member, loss of wage employment and increases in agricultural input prices.

Figure 126: Share of farming households exposed to shocks, by type of shock and poverty status, 2017



Source: Calculations based on the 2017/18 CMS/HBS.

Rain shortfalls have a large impact on consumption in rural households, particularly those with little education and no migrants. For example, the 2016 rainfall shock reduced consumption by 23 percent for the median rural household.⁴¹ Consumption of households with no education dropped by 38 percent in the face of a bad shock, compared to 11 percent for

households with secondary education or above (Figure 127). Education makes households more resilient because they can diversify their sources of income in the face of poor agricultural conditions (Hill and Mejia, 2017). Households with migrants in the year prior to the survey were also able to better withstand shocks.

⁴¹ These estimates come from a regression of consumption on satellite rainfall estimates for the main growing season prior to the month for which consumption data was collected. Rainfall totals from December and January, the period when maize is most susceptible to rainfall shortfalls, were used as a measure of the severity of the shock. Data collection spanned 13 months, so the very poor rainfall conditions in 2016-2017 were captured for some households. Although the timing of a rainfall shock is exogenous, the exposure to rainfall shocks in general is not exogenous. To control for this, the first and second moments of the historical rainfall distribution for each location were included. This allows the impact of rainfall shortfalls on consumption to be considered causal (see Dell et al. (2012) for a discussion of this approach and Hill and Porter 2017 for an application to Ethiopia). The full method and results are detailed in Hill et al. (2019).

40% Consumption per adult equivalent 35% 30% 25% 20% 15% lost (percent) 10% 5% 0% None Secondary plus None First Fourth Third Second Primary

Figure 127: Impact of rainfall shocks across types of rural household, 2017

Land quintile

Rainfall risk appears to impact those without land and large farmers equally. Those without land may be poorer but more likely to have income sources outside of agriculture. Those with more land are better off, but their income is more concentrated in agriculture

Education

and their consumption is more susceptible to shocks. Farmers are more susceptible to rainfall risk compared to non-farmers, but there is no significant difference in the impact of rainfall shocks on consumption across farmer types.

Migrant

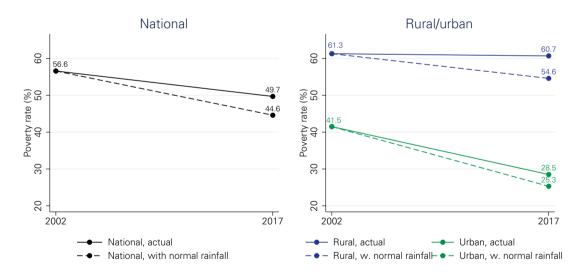


Figure 128: Poverty rates had rainfall been normal

Source: Calculations based on the 2017/18 CMS/HBS.

Rural poverty would have declined by 6 percentage points if rainfall had been normal. The urban-rural divide increased from 2002 to 2017, with urban poverty decreasing while rural poverty stagnated. This is partly due to rural areas being more vulnerable to the low rainfalls experienced in 2016. Had rainfall been normal,

then rural poverty would have declined by 6 percentage points. Urban poverty would also have declined, but more modestly at 3 percentage points (Figure 128). Yet, even with normal rainfall, a large urban-rural divide would remain in Lesotho.

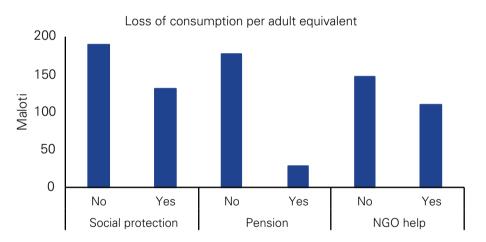
E. Existing social protection programs are limited in the degree to which they help households mitigate the impact of shocks

The social protection system is well set-up to help households manage life-cycle sources of vulnerability because there is a high coverage of children and elderly. However, few households report receiving help from the government or non-governmental organizations (NGOs) in the face of shocks. Households that experienced drought, crop disease or chronic illnesses were more likely to report receiving help from government or NGO resources. These are situations in which informal networks, labor markets and financial markets struggle to provide the required support to affected households. But too few households have benefited from public support.

The underutilization of public support persists despite the significant government and humanitarian response often put in place when large covariate

shocks occur. A national and international response was initiated in response to the El Niño drought of 2015-2016. The Government of Lesotho mobilized US\$21 million through budget reallocation, from which US\$10 million were used for sectoral response and an additional US\$11 million to provide a food price subsidy. More than US\$40 million was raised from humanitarian partners. In addition, the World Bank mobilized US\$20 million through the Crisis Response Window (CRW) and US\$1.4 million through the Contingent Emergency Response Component (CERC) under the Smallholder Agriculture Development Project (SADP), Cash transfers and emergency funds were used to support the affected population groups. The resources were delivered to the affected people through social protection schemes as well as emergency response systems. The food subsidy was found to have limited impact for vulnerable populations. The resources would have been better spent on cash transfers (World Bank, FAO and WFP 2017).

Figure 129: The impact of a rainfall shock on households receiving different types of public transfers



Source: Calculations based on the 2017/18 CMS/HBS.

Note: The size of rainfall shock used was a loss of 68mm which represents how much lower rainfall in 2016 was compared to median rainfall. The loss was calculated using coefficients from a regression of rainfall on consumption, interacting with the receipt of different transfer programs.

Analysis shows that pensions help households mitigate the impact of shocks, but existing social protection programs are limited as coping mechanisms. Regression results are used to estimate the impact of the 2016 shock on rural households that did or did not receive three types of transfers: social protection, pensions and NGO support.⁴² Figure 129 graphs the results from the regressions of rainfall shocks interacted with whether an individual received transfers from the government or NGOs. Social protection transfers reduced the impact of rainfall shocks on beneficiaries - but only a bit and did not eliminate the impact. This was also true for help from NGOs. By contrast, a pension eliminated a household's vulnerability to rainfall risk. Rural households receiving pension support are richer than other rural households - so those without pensions experience a larger relative loss than those with pensions. This could be part of the reason pension recipients fare better in shocks. In addition, pension income was constant and sizeable, reducing any impact of variable agricultural income on consumption.

F. Conclusion and policy discussion

This chapter has shown that life is risky for many Basotho, and the period 2016-2017 was a challenging one for the many households that experienced severe drought and high food prices in addition to the health shocks typical present. The higher prevalence of shocks with large impacts on welfare in rural areas results in poorer households being exposed to greater risk. When shocks occur, households have few available coping mechanisms. This is particularly true for shocks that affect many households in the same community or market at once. As a result, consumption is often reduced in response to this type of shock, increasing poverty and producing long-run consequences on human capital attainment for children. In 2016. the drought resulted in a 23 percent reduction of consumption for rural households.

The 2015-2016 El Nino was particularly bad with reductions in consumption, increasing poverty rates by 5 percentage points. But it was not a one-off event. Climatic shocks will continue to impact Lesotho, likely with increasing frequency and severity as a result of climate change. Preparing for these events is essential, and some policy options are discussed below. The key is for investments to be made now, before a crisis, so that resource mobilization and planning do not start after the crisis, delaying an effective response. Hill et al. (2019) estimate that the cost of failing to get a response in place in time to meet the consumption needs of those suffering from drought is 3.9 percent lower income (GDP) per capita in the long run. The gain from an emergency response that is one month quicker is 0.8 percent of income per capita in the long run.

The most cost-effective way to reduce vulnerability is to reduce exposure to shocks (Hill 2019). The analysis has shown that investments in irrigation and education both have a potential to do that. Irrigation reduces the impact of low rainfall on agricultural output, and education increases the ability of individuals to earn income in other, less-rainfall dependent sectors, either before or in response to the shock. Increasing investments in education and irrigation are thus an important part of a plan to make Lesotho more resilient in an increasingly uncertain world. The impact of the 2015-2016 drought contributed to, and was compounded by, the rise in food prices. This points to a role for lowering barriers to agricultural trade and facilitating private investments in storage as steps toward reducing exposure to price risk.

Better financial market development can spread risk beyond the immediate social network and social protection, increasing the ability of households to manage the remaining risks. Agricultural insurance could protect farmers against disasters by transferring risks to credit markets. It could also help increase farmers' agricultural productivity and access to financial services. The Government of Lesotho could look at policy options to support the expansion of agricultural insurance.

⁴² Social protection includes school feeding, cash for work assistance and food aid given as part of public assistance. These programs benefit 14.1 percent, 3.8 percent and 2.8 percent of the population respectively (Boko et al. 2019). Ideally, this category would have included the child grants received by 8.8 percent of the population, but data on this program was not collected in the household survey. Pensions capture all those receiving social pensions (comprising 4 percent of the population) or other forms of pensions (military, civil service, etc.) as well those receiving state support through disability grants. Those receiving secondary school and university bursaries were not included, and other programs not captured by the household survey were also not included. From the data presented in Boko et al. (2019), the main programs are included in the analysis.

Social protection policies are another means for governments to help households manage these risks. These programs provide a dependable source of household income that is not subject to risk (for example, pension support) and can be scaled up to provide more support in hard times. The government and international community did increase support in response to the most recent crisis. The analysis in this paper shows the response did help to ameliorate the shock a bit, but the impact was limited. Further reforms to social protection systems can help, such as improving the coverage and being ready to scale up in the time of a shock. Box 19 details some policy recommendations coming out of an OPM review of the latest response. Being ready to scale up requires having an early warning system that provides accurate information on when and where scale-up is required and triggers that can be used to develop clear transparent rules for scaling-up support to households. It also requires pre-financing arrangements to finance the added benefits. The Disaster Risk Financing Diagnostic (World Bank 2019d) shows that the existing policy framework for disaster financing in Lesotho does not have a systematic strategy to mobilize financing for disaster response. The most recent El Niño drought in 2015-2016 was addressed through humanitarian aid and budget reallocations, which took considerable time and diverted resources from high-yielding development projects. Scaling up would also requires having all potential beneficiaries in a national database. Scaling up is easier for existing beneficiaries already in social protection systems, but this analysis shows that nonbeneficiaries were also exposed to shock, pointing to the need to expand the list of potential beneficiaries.



Box 19: Strengthening the ability of social protection to help households manage shocks

A case study produced by researchers at The Oxford Policy Management (OPM) in cooperation with the Overseas Development Institute (ODI), the Cash Learning Partnership (CaLP) and INASP examined how the social protection system could become more shock-responsive. The study's main recommendation were:

- Support to routine social protection. Improvements to the regular functioning of the core social protection programs and delivery systems, including the Child Grant Programs (CGP) and Old Age Pension (OAP) (expanding coverage, updating beneficiary lists, improving payment systems, etc.), will make a considerable difference in their efficiency and effectiveness when they are used in a crisis.
- Support to the emergency response mechanism in place. Strengthening the Disaster Management Authority (DMA) and its ability to deliver on its mandate will enhance its value in a crisis. Today, resources do not match the system that is meant to be in place. Steps forward could include identifying a mechanism to assure the emergency fund has money available to distribute in times of need.
- Planning and preparedness. The crisis is not the time to design the mechanism. Once the immediate emergency is over, preparatory work can begin on the ways (if any) social protection programs and delivery systems might make useful contributions in response to future shocks. This should take into account not only what was done by the government and its partners during the response to El Niño, but also what was not done (use of the National School Feeding Programme, OAP, wider NISSA database). Integrate consideration of non-contributory social assistance programs into contingency plans, including an indication of how to provide resources for the expanded programs.
- **Coordination.** Spell out more clearly the ways in which the social protection sector should feed into the DMA's structures and processes for coordinating emergency response.
- Anticipation and analysis of financing needs for crises. Strengthen the process for anticipating financing requirements on a routine basis through better preparedness and contingency planning processes, supported by available data and/or by an improved early warning system.
- **Development of the NISSA.** While NISSA is undergoing reform, reach a decision on four major aspects determining its relevance in a shock: (i) Comprehensiveness: how will households not on the NISSA be reached? (ii) Accuracy: how can households report changes to their material circumstances that affect their categorization in the database? (iii) Accessibility: how can the District Disaster Management Teams easily use the data? This may require investment in infrastructure and training.
- M&E of interventions and the use of delivery systems. Conduct reviews of the emergency interventions implemented during the El Niño crisis, including cost-efficiency analyses if possible. Prepare a framework of measurable criteria to gauge the efficiency and effectiveness of future interventions (extending to measures of outcomes, i.e. their benefit to households, not only indicators of the efficiency of outputs, such as timeliness of disbursement).

Chapter III.2: Social protection and poverty and inequality in Lesotho

The social protection system plays an important role in mitigating poverty and reducing inequality in Lesotho. The country spends about 4.5 percent of GDP on social protection, higher than most countries in Sub-Saharan Africa. The social protection system has contributed significantly to decreasing the poverty gap and to reducing inequality, with cash transfers playing the most important role. The impact of social protection could further be enhanced through efforts to continuously improve harmonization and synchronization of programs, strengthen inter-agency collaboration and continue efforts to improve programs delivery.

A. Social protection programs in Lesotho

Lesotho has a comprehensive social protection system, and the country has continuously pursued actions to improve its efficiency, efficacy and **equity.** The right to social protection is enshrined in the constitution, which establishes the government's responsibility to actively promote and maintain the welfare of its citizens. The National Social Protection Strategy (NSPS 2014/15-2018/19) for Lesotho, developed by the Ministry of Social Development is a key strategic document to guide the sector's development. The goal of the Strategy is to provide comprehensive and inclusive social protection that reduces poverty, vulnerability and inequality, increases resilience to risks and shocks, promotes access to services and to the labor market and stimulates economic growth and social stability.

This chapter of the Poverty Assessment focuses on programs captured in the 2017/18 CMS/HBS to better understand their performance in terms of coverage of the poor, targeting accuracy and impact on poverty and inequality. The programs represent

most of the public programs, implemented by various government agencies, whose objectives also include direct or indirect income/consumption support to their beneficiaries. As an example, the school feeding program's main objective is to improve school attendance (school feeding is normally universal, i.e. it does not exclude any child.). At the same time, it is an indirect income support to households whose children benefit from school meals. Similarly, the Tertiary Education Bursary Program is an investment in tertiary education and may not be specifically targeted at poor students only. At the same time, it does provide income support to its beneficiaries. The programs were grouped into the following five categories: (1) in-kind programs (School Feeding Program); (2) public work programs (cash-forwork or public works program - Fato Fato); (3) cash transfers (Old Age Pension, Child Grant Program, Public Assistance Program); (4) social insurance programs (Civil Service Pension, Public Officers Defined Contribution Pension Fund⁴³ and Workmen's Compensation Fund⁴⁴); and (5) education subsidies (Orphans and Vulnerable Children Bursary and Tertiary Bursary). Box 20 provides an overview of the programs used in the analysis.

⁴³ Public Officers' Defined Contribution Pension Fund. The Public Officers' Defined Contribution Pension Fund has been established under The Public Officers' Defined Contribution Pension Fund Act of 2008.

⁴⁴ This program is part of Lesotho's labor programs, but it could also be classified as a social insurance program.

Box 20: Lesotho's Social Protection Programs

- The Child Grant Program (CGP) was launched in 2009 with the technical and financial support of the European Union and UNICEF. Households qualify for the cash grant if they have children below the age of 18 and they are classified as ultra-poor or poor based on community targeting and proxy means testing administered under the National Information System for Social Assistance (NISSA). The program provides a monthly benefit of LSL 120 for households with one to two children, LSL 200 for households with three to four children and LSL 250 for households with five children or more. Benefits are provided on a quarterly basis, following a predetermined timetable. The program covered 37,000 households across all 10 districts in 2014 and expanded to close to 50,000 in 2018. The total budget of the program is LSL 58 million.
- The Public Assistance Program (PAP) is the country's oldest social assistance, with the objective of providing destitute people cash and in-kind support on a temporary (up to six months of benefits) or permanent basis (for example, cases of severe disability). PAP beneficiaries are self-targeted, but decisions on eligibility and the benefit amount rests mostly with the Ministry of Social Development district managers in the country's 10 districts, based on the ministry's guidelines. The PAP delivers a quarterly benefit between LSL 250 and LSL 500. Benefit delivery is done at the district level by social welfare officers. In fiscal year 2018-2019, the program reached a total of approximately 12,000 beneficiaries, or 0.5 percent of the population, for a total budget of about LSL 41 million.
- The Orphans and Vulnerable Children (OVC) Bursary program was established in 2000 to support access to education (especially secondary education) for orphans and vulnerable children. The program is mainly self-targeted, but it follows established guidelines, with beneficiaries being children under 18 years old who have lost one or both parents or whose parents are sick, disabled or incarcerated. The NISSA has been used to target OVC bursary beneficiaries. Applications are received across the country and processed through the district OVC Bursary officers working under the Ministry of Social Development. Decision on the allocation of benefits is made based on targeting guidelines and a predetermined quota by district until available resources are exhausted. Until 2017, the OVC was implemented in parallel with a similar program, the Post Primary Bursary managed under the Ministry of Development Planning. Since the beginning of 2018, the two programs have been merged into a single one under the administration of the Ministry of Social Development. As of 2018, the program covers approximately 23,000 beneficiaries.
- The Old Age Pension (OAP) was established in 2004 to prevent Basotho elderly from falling into destitution. The OAP is a universal, non-contributory social pension, targeted to every Basotho aged 70 years old and above not receiving a civil service pension. The OAP is the country's largest safety net program, and it is managed by the Ministry of Finance's Department of Pensions. OAP applications are received at the district level all over the country and submitted to the Pensions Office in Maseru for processing. OAP beneficiaries receive a monthly cash grant of LSL 750, disbursed by Ministry of Finance payment officers through 293 pay points. The benefit amounts have rapidly increased since the establishment of the program from LSL 150 in 2004, to LSL 540 in 2015, LSL 700 in 2017, and LSL 750 in April 2019.
- The School Feeding Program is overseen by the Ministry of Education and Training in cooperation with the WFP. It is one of the oldest programs in Lesotho to support attendance and nutrition of children. It covers all children in public primary schools and early childhood care and development (ECCD) centers across Lesotho by providing one or two meals at school. The program supports two main goals: better nutrition for children in primary schools and ECCD centers and retention and improved school outcomes for program beneficiaries. School feeding in Lesotho is divided between WFP (covering 200,000 pupils) and the government (which caters for another 200,000). Since 2011 the government has been paying WFP to manage approximately 55 percent of the program in the hard to reach parts of the country.

- The Watershed Management Public Works, also known as the Fato Fato program, is administered by the Ministry of Forestry, Range and Soil Conservation. The Fato Fato serves the dual objectives of environmental conservation and income support through the cash-for-work approach. Through Fato Fato, households are offered a maximum one month of work per year to participate in conservation activities. The program employs a total of 69,000 people across Lesotho 3.2 percent of the population at a monthly wage of LSL 1,200 (or LSL 60 per day for a period of 20 days per month), one month per year. Public works activities include a range of land management and soil conservation activities, such as planting trees for fuel and wood, planting fruit trees, land rehabilitation (rehabilitation of rangeland and grass cover, removal of invasive species, construction of infiltration ditches, terracing to reduce erosion) and water harvesting (installation of roof tanks, water storage and dams). Farmers are provided with free seeds to protect eroding soils. The program is self-targeted and not restricted to the poor. The monthly wage of LSL 1,200 is high compared to the national upper-bound poverty of LSL 648.88 per adult equivalent per month in 2017-2018 prices.⁴⁵
- The Tertiary Bursary Program is one of the biggest government programs in Lesotho. It was launched in 1978 to support skills development and employability of Basotho citizens by providing partial scholarships to qualified students who intend to pursue higher education either in Lesotho or abroad. The program is managed by the National Manpower Development Secretariat (NMDS), under the Ministry of Development Planning. It supports approximately 23,500 students. The program covers tuition, the cost of research, text books allowance, accommodation, a food allowance and travel cost to and from the location of training. The program was allocated LSL 641 million in FY18/19, the second highest allocation for a single transfer program, behind only the OAP.
- The Public Officers' Defined Contribution Pension Fund is established under the Public Officers' Defined Contribution Pension Fund Act of 2008. The Fund provides government employees with pension benefits upon leaving the government services. The fund works like a saving account with joint government's and employees' contributions. Investment managers invest and manage the funds. The following public service employees are eligible to benefit from the Fund: servants at disciplinary services, local government, public service and teaching services.

⁴⁵ WFP Lesotho supported the development of new guidelines on effective implementation of public works programs, in line with integrated catchment management principles, and is supporting the implementation of the other proposed reforms through pilot initiatives in Maseru, Botha-Bothe, and Leribe. An evaluation of the pilot is underway, and lessons learnt are intended to support wider reforms of the program. WFP also supported, in collaboration with the World Bank, knowledge exchange with the Ethiopia Productive Safety Nets Public Works from which lessons could also be learnt to improve the Fato (World Bank 2019f).

The performance of the above listed programs that are provided to the population by the Government of Lesotho is measured by targeting efficiency, adequacy of the programs and their impact on poverty and inequality.⁴⁶ One of the key elements is to look at whether and to what extent the poor benefit from the public support programs. The performance is determined not only by the programs' design, but also by resources invested in their implementation and very importantly by the efficiency and efficacy of the program's implementation. In addition to looking at the performance of all programs classified as social protection programs for the purpose of this analysis, this chapter looks separately at the performance of the social assistance programs.⁴⁷

B. Public spending on social protection

Compared with other African countries, Lesotho has fewer social protection programs; however, resources allocated to them are higher than in other

countries in Sub-Saharan Africa. There are 10 main social protection programs in Lesotho, 48 compared to an average of 15 programs per country in the Africa region and 20 programs in the lower middle income countries (LMICs) (Figure 130). Despite a relatively small number of programs, Lesotho spends an average of 4.5 percent of GDP on social protection programs. This is higher than the averages of 1.9 percent in the Africa region and 1.8 percent in LMICs (Figure 131).49 The spending is dominated by two programs. The Old Age Pension (OAP) is the largest spending category, accounting for 1.9 percent of GDP and 42 percent of total social protection spending (Figure 132).50 It is followed closely by the Tertiary Bursary Program, which accounts for 1.7 percent of GDP and 38 percent of total social protection spending. The two programs account for 80 percent of total government spending on social protection. The third largest spending category is the School Feeding Program, accounting for 0.5 percent of GDP and 11 percent of the total social protection spending.

⁴⁶ It is important to empasize that reduction of poverty is not nececerly the target of every program. Some programs are universal, while there are not targeted to address poverty. In this analysis we do not distinguish whether the program raches its objective, but measure to what extent poor benefit from them.

⁴⁷ The World Bank classifies social protection programs into three main clusters of programs: (i) social insurance or contributory social protection programs (e.g. old age, survivors' and disability insurance, unemployment insurance; work accident insurance). The function of these programs is to mitigate the risk of income loss due to old age, disability, unemployment or loss of a breadwinner; (ii) social assistance/ social safety net programs or non-contributory programs whose function is help people cope with poverty, risks and vulnerability to prevent them from falling into destitution and engaging into negative risk coping strategies; and (iii) labor market programs whose function is to build resilience and strengthen people's capacity engage in gainful economic activities.

⁴⁸ The following Lesotho social protection programs were included in this comparison: School Feeding Program, cash-for-work or public works program (Fato Fato), Workmen's Compensation Fund, Old Age Pension, Child Grant Program, Public Assistance Program, Civil Service Pension, Public Officers Pension, Orphans and Vulnerable Children Bursary, and Tertiary Bursary.

⁴⁹ Note that global social safety net average spending is 1.5 percent of GDP, according to The State of Social Safety Nets 2018 report: https://openknowledge.worldbank.org/handle/10986/29115.

⁵⁰ Civil service pensions are considered part of social insurance, and they are not part of the social safety net analysis. However, to put it in the overall SP (social insurance + social safety net) context, expenditures on the civil service pensions are about 0.95 percent of GDP. Hence, total SP spending in the country is about 5.5 percent of GDP.

Figure 130: Number of social protection programs

15

Africa

25

20

15

10

5

0

10

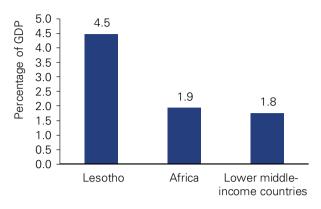
Lesotho



Lower middle-

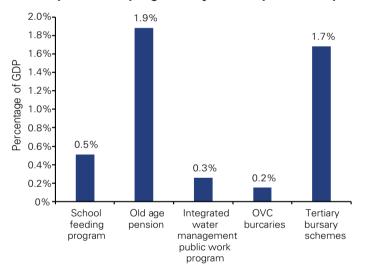
income countries

Figure 131: Spending on social protection programs, percentage of GDP



Source. For Lesotho: Calculations based on the 2017/18 CMS/HBS. ASPIRE database for other countries: http://datatopics.worldbank.org/ASPIRE/

Figure 132: Top 5 social protection programs by total expenditure, percentage of GDP



Source: Calculations based on the 2017/18 CMS/HBS.

Note: The spending on in-kind food assistance and postsecondary TVET bursaries, the two remaining SP programs account for only 0.04 percent of GDP.

C. Program coverage and efficiency

The overall coverage of social protection programs is high in Lesotho, mostly due to the School Feeding Program. Close to 71 percent of the population lives in a household with at least one member who benefits from a social protection program, leading to high overall coverage (Table 13). The School Feeding Program, a universal program covering children in public primary and secondary schools has the largest coverage, with

the majority of Basotho families having children who benefit from it. Social pension, a universal benefit for all elderly persons, also shows relatively higher coverage (15.5 percent). Fato-Fato cash for work program also has a relatively large coverage (13.5 percent). The Child Grant Program is benefiting 9.1 percent of the population. Coverage of social insurance (contributory pensions and Workmen's Compensation Fund) is

low, with only 1.7 percent of the population living in a household receiving this benefit. The coverage of the bottom two quintiles by social protection is excellent: 92.1 percent of the population in the bottom quintile

(85.4 in the second quintile) reside in households where at least one member benefits from social protection programs.

Table 13: Coverage of social protection programs, by quintile and poverty status

		Quintiles of per capita consumption, net of all cash transfers					Poverty Status	
	Total	Q1	Q2	O 3	Q4	Q 5	Poor	Non- poor
All social protection	70.5	92.1	85.4	74.4	61.5	39.1	86.8	52.3
In-kind subsidy	59.8	75.8	76.6	64.0	51.6	31.3	74.8	43.8
School Feeding Program	59.8	75.8	76.6	64.0	51.6	31.3	74.8	43.8
All public work programs	13.5	16.8	18.9	15.1	10.9	5.9	17.8	8.8
Cash-for-work or public works program (Fato Fato)	13.5	16.8	18.9	15.1	10.9	5.9	17.8	8.8
Cash transfers	22.6	45.2	25.9	19.8	15.7	6.5	32.0	12.6
Old Age Pension	15.5	35.4	16.0	11.7	9.8	4.5	22.4	8.0
Child Grant Program	9.1	17.4	11.4	8.4	5.8	2.8	13.1	4.9
The Public Assistance Program	0.8	1.4	8.0	8.0	0.7	0.2	1.1	0.5
All social insurance	1.7	0.4	0.4	1.5	2.5	3.5	0.6	2.9
Civil Service Pension, and Public Officers Pension	1.2	0.4	0.3	0.4	1.9	2.8	0.3	2.2
Workmen's Compensation Fund	0.6	0.3	0.2	1.1	0.6	0.7	0.4	0.7
Education subsidies	6.0	1.2	2.3	5.4	9.1	11.8	2.8	9.5
Orphans and vulnerable children bursary	1.5	0.9	1.2	2.5	2.3	0.6	1.4	1.6
Tertiary Bursary	4.5	0.3	1.2	2.9	6.8	11.2	1.4	7.9

Source: Calculations based on the 2017/18 CMS/HBS.

Note: Program coverage is the portion of the population in each group living in households that receives the transfer. While many programs operate at the individual level, they contribute to overall household consumption, indirectly benefiting all members of a household. Quintiles are based on the consumption aggregate net of all cash transfers (pre-transfers income). It should be noted that coverage of the programs also depends on the program design. For example, the coverage of the Old Age Pension is determined by the number of elderly 70 plus years of age; Tertiary Bursary is determined by the number of tertiary education students. Same for orphans, etc.

The social protection coverage of the poorest is very high: 86.8 percent of those living in poor households receive some form of social protection.

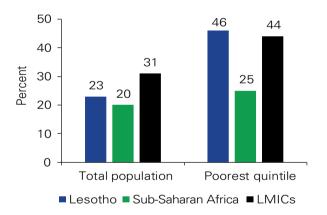
The survey-based estimates indicate that the school feeding program has the highest coverage among poor households, reaching close to 74.8 percent. Close to 32 percent of the poor have access to the cash transfers, and 18 percent of the poor households have access to the Fato Fato program.

Transfers to support education have relatively small coverage and benefit mostly the non-poor due to the adverse selection. Coverage rates for school bursaries targeted to orphans and vulnerable children show that very few secondary school students receive the benefit. On average, 6 percent of the population lives in households with access to scholarships (Table 13). The program's overall coverage rate among secondary school students is 4 percent. For university and postsecondary TVET bursaries, overall coverage rates

are very low: among individuals of postsecondary age (ages 19–22), 3.3 percent receive university bursaries and 1.3 percent receive postsecondary TVET bursaries. Coverage strongly favors the non-poor. While 9.5 percent of the non-poor live in the households receiving education subsidies, only 2.8 percent of the poor get this payment. Very few of the poor children go into tertiary education. Low coverage reflects low number of OVC in secondary and very few children attending universities, mostly from better off households.

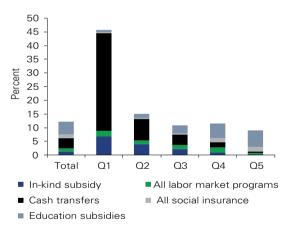
The coverage of cash transfers is comparable to that for Sub-Saharan Africa but lower than in other LMICs. The cash transfers reach 23 percent of the population, compared to an average of 20 percent for Sub-Saharan Africa and 31 percent for LMICs (Figure 133). Cash transfers reach 46 percent of the poorest quintile, significantly higher than the Sub-Saharan Africa average (25 percent) but comparable to the LMICs average (44 percent).

Figure 133: Coverage of cash transfers, percent, 2017



Source: Calculations based on the 2017/18 CMS/HBS for Lesotho, ASPIRE database for other countries.

Figure 134: Transfer amount received by a group as a share of the total consumption, 2017



Source: Calculations based on the 2017/18 CMS/HBS.

Social protection transfers contribute significantly to the living standards of the poor. Government programs account for almost 13.9 percent of households' total consumption (Figure 134). The figure increases to 47.9 percent for the poorest quintile, in other words, almost half of the consumption in the poorest 20 percent of the population comes from social protection programs. Here, cash and in-kind transfers play the most important role, while scholarships and the social pension (OAP) are more important for richer quintiles. As a comparison, cash benefits cover 21 percent of the consumption of the average poor person across LMICs, compared to almost 37 percent in upper middle-income countries.

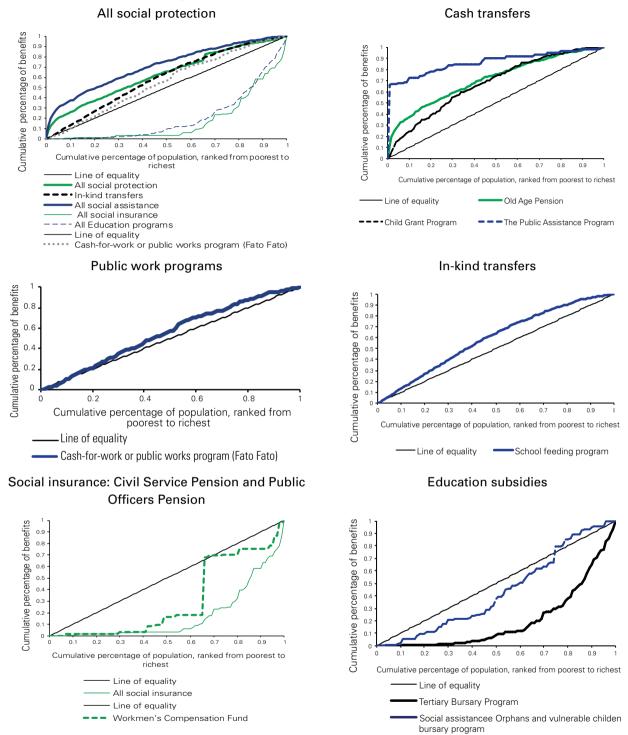
Social protection as a whole is progressive in Lesotho, mainly driven by social assistance and in-kind transfers. Concentration curves grouped by types of programs and each individual program are shown in Figure 135. Figure 135 shows that the social protection system as a whole is above the equality line, suggesting progressivity. However, not all programs are strongly progressive. Public work programs are, on average, neutral, while social insurance (mostly civil service pensions) and stipends for secondary education of orphans and vulnerable children and for tertiary education are regressive.

 Cash and in-kind transfers are strongly progressive in Lesotho. This includes the Public Assistance Program (highly progressive), the Child Grant Program and Old Age Pension (Figure 135). Similarly, the school feeding program is progressive, providing more benefit to the poor population (Figure 135).

- The public works program is slightly progressive.
 Although not targeted at the poor (see program description above), the cash-for-work program benefits the poor more (Figure 135). Among the workers in the program, 16.8 percent come from households in the poorest quintile, compared to 5.9 percent from the top quintile.
- Education bursaries are regressive in Lesotho.

 Both the university and Orphans and Vulnerable
 Children bursaries are regressive (Figure 135).
 University bursaries are the most regressive
 program, as students from richer households are
 more likely to attend colleges: affluent children fare
 better in high school, graduate more frequently
 and usually have parents who themselves pursued
 higher education.
- Social insurance programs have very small coverage, and they are generally regressive. As earlier discussed, only 1.7 percent of the population report access to the Civil Service Pension, Public Officers Defined Contribution Pension Fund and Workmen's Compensation Fund. The coverage of these programs is regressive, benefitting mostly richer segments of the population. As with education subsidies, the likelihood of having access to social insurance coverage is higher for better-off formal workers.

Figure 135: Concentration curves for social protection programs (Based on pre-transfer income, direct and indirect beneficiaries)



Source: Calculations based on the 2017/18 CMS/HBS.

Notes: Ranks are defined based on the consumption aggregate net of all cash transfers.

The social protection beneficiaries' distribution across quintiles suggests that progressivity and targeting efficiency could be improved. This would require a multi-sectoral approach. For example, a very few orphans and vulnerable children receive education grants and those that receive them come from better off households. This likely reflects their low progression to secondary education in general. Increasing the number of OVC coverage would require a multi layered approach, including tutoring and mentoring and better social oversight (services from social workers in collaboration with teachers, etc.). Having more OVC in the program would improve beneficiary and benefit incidence and make the program less regressive and eventually progressive. Similarly, the school feeding program is universal – yet the coverage is at about 75 percent. One of the most likely determinants is the fact that poor children, in particular boys, drop out of school once they reach secondary education. Making sure that all children attain secondary education will increase the program's progressiveness. The OAP is universal for the elderly 70 plus who have no civil service pension. It is a progressive program. It could be made more progressive if limited to low income elderly, but this is a sensitive political economy decision.

Households frequently benefit from several programs and the overlap is not monitored. Figure 136 present the transfer frequency in the total population and by poverty status. The multitude of programs is a good feature of Lesotho's social protection system, as different programs have different objectives. Also, some programs, such as school feeding, or OAP are universal as they pertain to all children and all elderly. The issue that deserves attention is that 13.5% of the poor report not receiving any transfers.

100 5.2 7.9 10.0 Share of total population (%) 90 18.7 80 26.8 70 39.7 60 46.0 50 40 51.8 30 47.9 20 30.1 10 13.5 0 Total Poor Non-poor **2** ■3 more

Figure 136: Transfer frequency in each population group, percent

Source: Calculations based on the 2017/18 CMS/HBS.

Social protection implementation arrangements can be improved: Multiple ministries administer safety net programs with limited coordination among them on both the policy and administrative levels. Paper-based application processes for some programs (e.g. the Public Assistance Program and Old Age Pension) are lengthy and result in unnecessary costs and delays. Each ministry involved has its own application process for eligibility determination, intake/registration and

information management. Most are manual and paper-based, leading to significant inefficiencies. It can take months for approval of applications. This results in administrative duplication and inefficiencies. A possible solution is to establish a unified web-based platform for application and delivery of benefits, which would simplify the application and enable cross sharing of information. However, for that, Lesotho needs much better access to electricity and broadband.

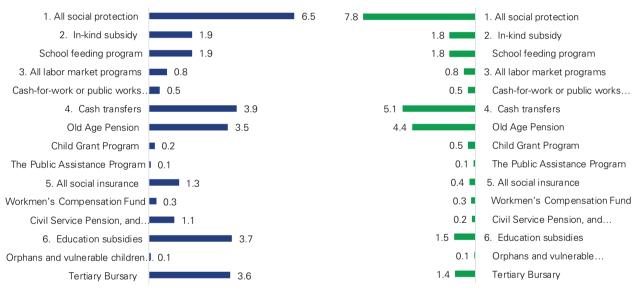
D. Impact of social protection on poverty and inequality

The impact of social protection programs on poverty is strong. In 2017, social assistance transfers reduced the poverty headcount rate by an estimated 6.5 percent (a 3.1- percentage point reduction) and the poverty gap by 21.9 percent (a 5.3- percentage point reduction) (Figure 137). In reducing the poverty gap by 21.9 percent, the poverty-reducing impact of Lesotho's social assistance system ranks ahead of the average for Sub-Saharan African countries (15 percent).

The inequality-reducing impact of social assistance is significant. Social transfers reduced Lesotho's Gini coefficient by an estimated 7.8 percent (Figure 138). In other words, the Gini would be 3.8 percentage points higher without the transfers. This is a significant impact on inequality, greater than in many other counties. In other countries contained in the ASPIRE database⁵¹, the Gini coefficient is reduced by 1.7 percent by social assistance transfers, and the reduction is, on average, 0.7 percent in Sub-Saharan Africa. Cash transfers play the most significant role in reducing poverty and inequality.

Figure 137: Simulated poverty reduction associated with social protection programs, percent

Figure 138: Simulated reduction in inequality (Gini) associated with social protection programs, percent



Source: Calculations based on the 2017/18 CMS/HBS.

⁵¹ ASPIRE: The Atlas of Social Protection Indicators of Resilience and Equity http://datatopics.worldbank.org/aspire/

E. Conclusion and policy discussion

Lesotho's social protection system plays an important role in reducing poverty and inequality.

The country spends about 4.5 percent of GDP on social assistance, with significant impacts on poverty and inequality reduction. As a whole, the system is progressive. However, not all programs are strongly progressive. Public work programs are, on average, neutral, while social insurance and education stipends/ grants are regressive (although tertiary bursaries have a strong impact on poverty reduction). The gains in poverty reduction could be increased, in particular by improving the programs' administration.

Understanding the factors behind some of the programs' weak progressivity and some programs' regressive distribution is the first step to improve performance. Solutions are likely to require multiple interventions by various agencies. For example, about 13 percent of the poor are not covered by any program. Understanding why that is the case would enable the government to take action to possibly reach 100 percent of the poor. Increasing the OVC coverage would require a multi layered approach, including tutoring and mentoring and better social oversight (services from social workers in collaboration with teachers,

etc.). Having more OVC in the program would improve beneficiary and benefit incidence and make the program less regressive and eventually progressive. One of the most likely determinants is the fact that poor children, in particular boys, drop out of school once they reach secondary education. Making sure that all children attain secondary education will increase the program's progressiveness. The OAP is universal for the elderly 70 plus who have no civil service pension. It is a progressive program. It could be made more progressive if limited to low income elderly, but this is a sensitive political economy decision.

Lesotho needs to continue to improve the social protection delivery system. Putting in place a better integrated targeting system to identify the poor and grant them benefits, would improve the coverage of the poor and beneficiary and benefit incidence. For example, means testing is done only for the Child Grant Program. For other programs, eligibility criteria and information are difficult to verify. As a result, eligibility is essentially subjective. An important improvement would involve a good targeting mechanism, based on a means test and linked across programs. An expanded National Information System for Social Assistance (NISSA) could serve as the main targeting tool for social protection programs.

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This report examines progress and challenges in reducing poverty in Lesotho. Lesotho's poverty rate is lower today than it was 15 years ago. However, with a poverty rate of 49.7 percent in 2017, poverty remains widespread. Economic vulnerability is high, with more than 75 percent of the population either poor or vulnerable to poverty. This suggests that most of the population lack economic opportunities and are deprived on multiple fronts. Urban areas experienced greater poverty reduction due to improvements in education and increases in incomes from well-paying jobs, largely in the services sector. In rural areas, poverty stagnated due to slow growth in agricultural incomes, a fall in remittances and vulnerability of the rural population to weather shocks.

Despite the growing urban-rural poverty divide, inequality fell as a result of expansion of social protection and an increase in wage incomes among the poor. In spite of this, Lesotho remains one of the 20 percent most unequal countries in the world.

A combination of policies that improve human capital, promote job creation and address high unemployment, increase agricultural productivity, together with those that build resilience against economic and environmental shocks, would boost shared prosperity and accelerate poverty reduction in Lesotho.





