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Strengthening Human Capital through Nutrition

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STRENGTHENING HUMAN CAPITAL THROUGH NUTRITION

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Mulanje House Capital City, PO Box 30557 Lilongwe 3, Malawi +265 (0) 1 770 611 www.worldbank.org/mw

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The Malawi Economic Monitor (MEM) provides an analysis of economic and structural development issues in Malawi. This tenth edition was published in December 2019 and is part of an ongoing series, with future editions to follow twice each year. The publication intends to foster better-informed policy analysis and debate regarding the key challenges that Malawi faces in its endeavor to achieve high rates of inclusive and sustainable economic growth. The MEM consists of two parts: Part 1 presents a review of recent economic developments and a macroeconomic outlook and risks. Part 2 focuses on a special topic relevant to Malawi's development prospects.

This edition of the Malawi Economic Monitor was prepared by Patrick Hettinger (Senior Country Economist), Julie Bergeron (Nutrition Specialist), Collins Chansa (Senior Health Economist), Toni Kuguru (Health Specialist), Yalenga Nyirenda (Consultant), Tamara Mughogho (Consultant), Efrem Chilima (Senior Private Sector Specialist), Miguel Angel Saldarriaga (Young Professional), Ida Mboob (Digital Development Specialist), Phoebe Folger (Senior Operations Officer), Sunganani Kalemba (Consultant), and Laston Manja (Consultant).

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OVERVIEW

ECONOMIC DEVELOPMENTS

With Malawi's economic growth recovering and single digit inflation, the Government has a key opportunity to rein in fiscal deficits and reduce domestic debt. If it can better control domestic debt levels, the Government could increasingly move towards creating the conditions for the private sector to increase investment, which can drive growth and job creation. To support this, the Government needs to develop a track record of achieving sustainable fiscal deficits in order to contain and reverse the escalating domestic debt burden, to contain interest rates and avoid crowding out private sector investment, and to increase public investment.

Malawi's economy is projected to grow by 4.4 percent in 2019, up from 3.5 percent in 2018. Agricultural activity rebounded in 2019 due to favorable weather conditions, which offset the negative effects from Tropical Cyclone Idai in parts of the southern region of the country. Crop production was generally strong, particularly in the case of maize, with production increasing by 25.7 percent. This supported overall economic growth, despite a decline in tobacco production. However, the ongoing political impasse, with widescale demonstrations that have continued since May 2019, has constrained business activity and increased uncertainty, weighing on investment.

The Government missed the revised fiscal deficit target in FY2018/19. The fiscal deficit increased to 6.5 percent of GDP, higher than the revised target of 5.8 percent. The impact of election-related expenses, increased interest payments and costs associated with the disaster response pushed recurrent expenditure beyond targeted levels by 1 percent of GDP. This was partially offset by under-execution of development expenditure, which was not enough to keep the fiscal deficit to 5.8 percent of GDP. Poor revenue performance, which was lower by 0.5 percent of GDP, compounded the problem.

The fiscal deficit was largely financed by domestic borrowing, further increasing the Government's domestic debt burden. Public domestic debt increased to 32.6 percent of GDP by June 2019, up from 28.6 percent in June 2018. This poses a significant risk to debt sustainability, given the relatively high cost of servicing domestic debt. The stock of external debt, at 30.2 percent of GDP, is mostly contracted on long-term concessional terms and poses only a moderate risk to debt sustainability.

Inflation remains in single digits, although food prices have increased in recent months. Non-food

inflation declined to 4.3 percent in October 2019, supported by a relatively stable exchange rate and prudent monetary policy. However, food prices have soared in 2019, with food inflation at 16.0 percent in October, despite Malawi's strong harvest. Maize price speculation, coupled with tight regional supplies, contributed to the high food inflation.

Over one million Malawians are expected to be food insecure in 2019/20, although this is a reduction over last year. The impact of Cyclone Idai compounded by high food prices could deepen food insecurity and poverty, especially in affected areas in the south. Some households are already starting coping strategies by reducing meals and meal diversification.

The Reserve Bank of Malawi (RBM) has maintained policy rates at existing levels in the context of lower non-food inflation. In July and October 2019, the Monetary Policy Committee held the policy rate at 13.5 percent, with the expectation that higher food price inflation will be temporary. A new reference rate for commercial banks to use as their base lending rate has been implemented since September 2019, with the intention of strengthening the transmission of monetary policy actions to lending rates, although it could raise intermediation costs. Private sector credit growth has picked up in recent months, despite an uncertain business environment.

The current account is expected to narrow slightly to 10.0 percent of GDP in 2019, down from 10.9 percent in 2018, due to improvements in the trade balance. Exports are expected to pick up slightly, driven by sugar and non-traditional exports. In the medium term, global tobacco demand is expected to decline, so there is a pressing need for Malawi to diversify its exports. Imports are expected to increase at a lower rate due to modest demand, despite increased fuel imports during the election period. Cyclone Idai-related imports could increase, although it is expected that these would be funded by donor financing.

Malawi's economic growth is expected to gradually increase to 5.0 to 5.5 percent of GDP in the medium term. Sustained growth in both the agriculture sector and the energy sector from increased electricity supply are expected to contribute to increased economic activity. However, this outlook is susceptible to the risk of weather-related shocks, with poor rainfall having the potential to affect both agriculture production and electricity supply. Further, if the recent political impasse and demonstrations continue, this could also continue to weigh on growth and investment. Thus, there is an urgent need to implement structural reforms to strengthen growth and diversification as a means to increase incomes and job opportunities.

Inflation is projected to remain in single digits, although this outlook is subject to risks related to food and non-food inflation. Maize prices could continue to increase if speculation persists, particularly in the context of the tight regional market. Additionally, if international oil prices increase, this could put pressure on the Price Stabilization Fund's (PSF) limited resources, leading to more hikes in fuel prices and driving non-food inflation higher.

Improved fiscal discipline is needed to underpin sustained macro stability and to reduce domestic debt, however achieving the budgeted deficit of 2.5 percent for FY2019/20 will be a major challenge. Revenues are unrealistically projected to increase by over 40 percent in one year. Although the Government is introducing some new revenue measures, such as a carbon tax on motor vehicles, there are also revenue-reducing measures, and in total tax revenues are unlikely to reach targeted levels. The Government will need to carefully prioritize expenditure over the fiscal year in order to avoid a sizeable deficit, which would further increase high-cost domestic debt. Development spending will need to be prioritized for projects with the highest expected development impact, with the Government only making commitments and executing those projects that can be funded with available resources. In addition, fiscal discipline is needed to build up buffers to prepare for the next climactic shock.

The new administration needs to implement bold reforms to establish a track record of reform and to accelerate job creation. The start of the second administration creates a key opportunity to implement policies that will put Malawi on a new course towards growth. Malawi needs to not only improve agricultural productivity, but also promote growth in other sectors that must eventually absorb a larger share of the workforce. To develop a vibrant economy that offers more job opportunities, Malawi will need decisive leadership to adopt bold policies and carefully allocate limited fiscal resources to the areas that have the most impact on growth, job creation, and poverty reduction. There are several key steps to achieve this:

• Taking tangible steps to strengthen fiscal policy and management in order to anchor macro stability, decrease domestic debt, and increase investment: A first step towards achieving this is to prepare realistic revenue projections for the budget, and rationalize recurrent expenditure and maintain fiscal discipline to keep spending within the budget envelope. It also requires the careful management and prioritization of development expenditure, with the selection of the highest return projects that can be funded within the resource envelop. It is critical to reduce the repeated reliance on domestic borrowing, and instead expand concessional financing. In addition, it also calls for measures to reduce fiscal risks that have derailed past budgets, particularly by increasing the oversight of parastatals. Strong reforms would support growth, which would enable increased revenue mobilization.

- Implementing policies to unlock the potential of the private sector. to strengthen competitiveness, and to increase investment in order to increase jobs opportunities and incomes: The Government needs to transform its relationship with the private sector, so that it proactively removes blockages to economic transformation in order to create more productive jobs for Malawi's rapidly growing population. There is a need to simplify business regulations and taxes to increase transparency and predictability and to reduce trade inefficiencies and distortions. As one step towards achieving this, implementing regulations for the Control of Goods Act could improve predictability and market access, thus enabling a higher level of commercial investment in agriculture. Moreover, tax policies and administration should be reviewed and revised to increase transparency, to reduce ad hoc changes, and to support value addition and the development of key growth-enabling sectors, such as for Information and Communication Technologies (ICT). The Government should also seek to improve Malawi's power supply by moving forward with key generation projects and strengthening the governance and financial performance of sector utilities.
- Investing in measures to increase resilience to shocks: So far, much of Malawi's efforts to achieve poverty reduction have been implemented through the Fertilizer Input Subsidy Program (FISP) and maize distribution following weather shocks. The Government's poverty reduction initiatives could be more efficiently targeted by reallocating public resources to more effective social protection systems that could improve the poor's resilience to increasingly frequent weather shocks, with a broader agenda to support increased growth and incomes. Additionally, to increase resilience, it is essential to implement policies related to environmental management, climate change, and Disaster Risk Management (DRM)

and to strengthen climate and information services. Improving DRM would also reduce Malawi's vulnerability to weather shocks and contain fiscal risks.

Investing in human capital development to facilitate longer-term growth: Malawi is an early adopter of the Human Capital Project and needs to accelerate investments in people to ensure the next generation is more productive, flexible, and innovative. The Government should improve the efficiency of education spending and more effectively target remote areas; and scale up access to family planning services to reduce high fertility rates. Moreover, it is also essential to address Malawi's stubbornly high stunting rates to support human capital development, given that poor nutrition outcomes are strongly correlated with high rates of maternal and child mortality, with negative implications for human capital formation.

STRENGTHENING HUMAN CAPITAL THROUGH NUTRITION

Despite Malawi making impressive strides in reducing childhood stunting over the past five years, 37 percent of children under the age of five continue to suffer from stunting, with significant disparities by geographical areas and wealth brackets. In addition, limited progress on key infant and young child feeding indicators, contributes to the stubbornly high prevalence rates. Stunting and undernutrition result in high rates of maternal and child mortality, with negative implications for human capital formation.

Undernutrition is responsible for 45 percent of child deaths globally. Stunting also has significant ongoing consequences for children's future development and health into adulthood, with significant implications for economic and social development. Under-nourished children tend to have poor physical and cognitive development, predisposing them to health and economic consequences such as lower physical capacity and productivity levels and subsequently to lower wages and lost economic output.

It has been estimated that stunting may contribute to country-level economic losses from foregone income of up to 3 percent of national GDP. Global evidence suggests that for every dollar invested in maternal and child nutrition interventions, there is a return of US\$ 16. It is also estimated that poor childhood nutrition in Malawi has resulted in losses of US\$ 597 million per year as a result of increased healthcare expenses and reduced labor productivity. The Human Capital Index (HCI) estimates that with a score of 0.41, a child born in Malawi will be only 41 percent as productive when she reaches adulthood as she would have been if she had completed basic education and achieved her full health potential.

Women, female adolescents, and children suffer the greatest burden of undernutrition. Global evidence shows that the first 1,000 days of life (from conception to the first two years of life) comprise the most critical window for addressing malnutrition. Child undernutrition, including stunting, often begins in utero, with ongoing deteriorations during childhood, adolescence, and pregnancy. This contributes to an inter-generational cycle of undernutrition, with stunted adolescents giving birth to small children who are at increased risk of stunting.

In Malawi, stunting commences early in life and is widespread across the country. An estimated 24 percent of children under six months of age are stunted. From that point, the rate continues to increase until the children reach approximately 30 months, after which there is a decline. Amongst children aged from five to 60 months, the rate is higher for boys than for girls, except for those in the 35 to 45-month age bracket. Furthermore, childhood stunting in Malawi is higher among the poor, with an estimated 46 percent of children from poor households being stunted, compared to 24 percent of children from well-off households.

The immediate factors associated with stunting in under-five children in Malawi include low weight at birth, diarrheal disease, and an inadequate diet for the child. Furthermore, stunting in under-five children in Malawi can be attributed to issues at the household level that are closely linked to community-level factors. The main factors at the household level are: mother's height; less than four Antenatal Care (ANC) visits; mother's body mass index; poverty; and failure to participate in vaccination. These are also associated with factors at the community level. In Malawi, these include high fertility rates, low levels of maternal education, and inadequate access to safe drinking water and good sanitation.

Improvements in sanitation and antenatal care have resulted in reduced child stunting between 2013 and 2018. Furthermore, a study of households living in districts that received Supplementary Nutrition Interventions (SNIC) in the period from 2013 to 2018 found that an increase in the proportion of mothers who participated in four ANC visits was associated with improved linear growth for their children due to improved pregnancy outcomes, reduced pregnancy complications, improved maternal nutritional status and greater weight gain. Much of the improvement to children's nutritional status in Malawi can be attributed to concerted efforts by the Government and development partners. This includes designating agriculture and nutrition as key national policy priority areas. Malawi has also joined numerous initiatives such as the Scaling Up Nutrition (SUN) initiative in a bid to improve nutrition. In 2012, Malawi implemented the six-year World Bank-supported community-based nutrition (CBN) project as part of the larger Malawi Nutrition and HIV/AIDS Project. The Government of Malawi also reviewed its National Multisector Nutrition Policy in 2018 and promulgated the National Multisector Nutrition Policy and Strategic Plan (NMNPSP) to orient nutrition investments and programming in the period from 2018 to 2022. To further improve childhood nutrition, efforts should focus on maternal nutrition, improving the diversity of diets, and improving livelihoods and resilience amongst the poorest population groups

To make further progress towards reducing stunting, two broad strategies should be implemented to promote optimal maternal and child health, healthy environments, and early access to better food and care. The proposed policy and program options are outlined as follows:

 Interrupt the intergenerational transmission of stunting by prioritizing women's health and nutrition.

To achieve this, it is vital to reduce or eliminate early marriage; to delay pregnancy among adolescents; and to ensure that women who do become pregnant do so with an optimal nutritional status that is sustained throughout pregnancy. For example, ensuring that adolescent girls and pregnant mothers have access to micronutrient supplements. It is also imperative to make family services more accessible, less costly and of high quality. Other possible measures include those that enhance the enrollment and retention of adolescent girls in schools, particularly amongst poor population groups and in rural areas; and promoting income-generating activities for out-of-school youths.

 Improve livelihoods and resilience to promote access to and consumption of diverse diets among young children, especially during the complementary feeding period.

This includes activities delivered through multiple sectors to promote food security, dietary diversification, and healthier environments for children. Investments in agriculture that support homestead farming or leverage existing platforms and mechanisms (such as communitybased child care centers), while incorporating nutrition-specific messaging have successfully been used in Malawi to promote the production and consumption of diverse foods among women and children.

Social safety nets are a powerful means to reduce poverty, promote equity, strengthen resilience, and improve human capital outcomes, including nutrition. Social protection programs can improve income levels and access to food, and food availability and dietary quality at the household level. Social safety net programs can be used to create demand for health, education, or sanitation services through nutrition education and/or conditionalities. Simultaneously strengthening the supply of such services (health, nutrition, education, etc.) can further maximize the impact on nutrition.

1. ECONOMIC DEVELOPMENTS

1.1 RECENT DEVELOPMENTS

Growth in Sub-Saharan Africa has weakened, with less supportive external conditions

1. Global growth has declined steadily throughout 2019. In particular, the deceleration in global growth in the second quarter was higher than expected, with the Global Manufacturing Purchasing Managers' Index (PMI) reaching its lowest level since October 2012. The escalating trade tensions between the USA and China and the political uncertainty in some advanced economies resulted in a decline in consumer and investor confidence; increased volatility in financial markets; and a weakening of commodity prices. In this context, central banks adopted expansive monetary policies, with some countries, including Germany and China, stating their intention to implement fiscal stimulus plans. With these developments, the global outlook has deteriorated, with the world economy expected to grow by 2.6 percent its slowest since 2008 and considerably lower than the figure of 3.0 percent recorded in 2018 (Table 1).

2. In the first half of 2019, the average growth rate for Sub-Saharan Africa (SSA) increased at a slower than expected pace. Growth in the region has declined due to a slowdown in fixed investment and to a more modest than expected expansion in manufacturing and mining industries, with less supportive global conditions exerting negative pressure on commodity prices and net exports. With the decline in commodity prices, there has been a corresponding decline in tax collection revenues, which has weighed on the public finances of commodity producers. In addition, the economic performance of the region has remained sluggish due to structural constraints to the efficient allocation of resources.

3. Growth performance has varied across SSA countries, with significant differences between resource and nonresource intensive countries. In non-resource intensive countries, growth was generally stronger, with an expansion in public consumption and fixed investment on the demand side, and with the strong performance of the industrial and service sectors on the supply side. By contrast, in 2019, the growth rates for the region's three strongest economies (Nigeria, South Africa, and Angola) are expected to remain below the regional average. Resource-intensive economies face a widening in current account deficits and a reduction in their external buffers due to a decline in exports and capital inflows. Thus, growth in SSA is expected to increase only modestly, with the rate going up from 2.5 percent in 2018 to 2.6 percent in 2019.

4. Looking forward, external conditions are expected to remain weak, with global growth slowing and with growth in the SSA region expected to remain sluggish. Global and regional risks are mainly tilted to the downside. The reescalation of trade tensions between China and the USA and between other major economies and the associated increase in political uncertainty, could lead to a further deterioration to investor sentiment; to a tightening of global financial conditions; and to increased volatility in commodity prices. These factors have the potential to debilitate the economies of countries in the SSA region by causing a decline in fiscal revenues and an increase in current account deficits. Furthermore, reduced fiscal space could further increase already high debt vulnerabilities, with 49 percent of the SSA countries either currently in debt distress or at high risk of debt distress. On the regional front, adverse climate conditions and sluggish investment constitute the most significant risks to the outlook. The region remains vulnerable to weather shocks, including those resulting from drought. These shocks have the potential to negatively impact the output of the agriculture sector and export earnings, which could exert upward pressure on inflation.

Table 1: Real GDP growth

Percent

	2016	2017	2018e	2019f	2020f
World	2.4	3.1	3.0	2.6	2.7
Malawi	2.5	4.0	3.5	4.4	4.8
SSA excl. RSA, Angola and Nigeria	4.6	4.9	4.2	4.0	4.6
Nigeria, RSA and Angola	-1.0	0.9	1.1	1.4	1.7
SSA incl. RSA, Angola and Nigeria	1.4	2.7	2.5	2.6	3.1

Source: World Bank Global Economic Prospects NB: e - estimate, f - forecast

Despite a strong harvest, uncertainty has weighed on growth in Malawi

5. Malawi's economy is projected to grow by 4.4 percent in 2019, an increase from 3.5 percent in 2018. The increased growth rate is largely attributable to an increase in agriculture production, resulting from favorable weather conditions (Figure 1). While Malawi's agricultural production was negatively impacted by Tropical Cyclone Idai, the overall effects were modest, mostly affecting crop production in a number of areas in the southern region. Generally stronger agricultural performance also contributed to growth in agro-processing and household incomes. Improved performance in the industry sector, supported by increased electricity generation in the first half of the year, and in the mining and construction sectors also contributed to the improved overall economic performance. However, the ongoing political impasse, with widescale demonstrations that have continued since May 2019, have slowed business activity and increased uncertainty, weighing on investment.

6. In 2019, crop production rebounded, following a poor performance in 2018 but remains lower than 2016/17 production levels. Over the year, maize production increased by 25.7 percent, going up from 2.70 million metric tons in 2018 to 3.39 million metric tons in 2019 (Figure 2). This increased production was largely attributable to favorable weather conditions and the increased availability of seeds and other inputs. The increase was a turnaround from the situation in 2018, when production was adversely affected by dry spells and Fall Army Worm (FAW) infestations. Other crops for which increased production was recorded include rice (an increase of 43.5 percent); millet (65.5 percent); sorghum (21.3 percent); and groundnuts (5.5 percent). By contrast, total wheat production declined by 1.8 percent.









Source: World Bank MFMod

Source: World Bank staff calculations based on Ministry of Agriculture data, NB: Tubers include cassava and all potatoes

7. Production of key export crops has been mixed in 2019. Over the year, the performance of the tobacco subsector declined, both in terms of production volume and average prices. Tobacco sales volumes declined from 202.0 million kilograms in 2018 to around 165.6 million kilograms through October 2019. Average sales prices have also declined, from US\$ 1.67/kg in 2018 to US\$ 1.43/kg in 2019, so that overall auction sales have declined from US\$337.5 million in 2018 to US\$ 237.0 million in 2019. This should impact tobacco exports in late 2019 and early 2020. Over the medium term, at the global level, the demand for tobacco is expected to decline by about three percent each year. On the other hand, sugar production has increased from 230,020 metric tons in the 2017/18 season to 252,375 in 2018/19, due to favorable weather conditions. Tea production has also increased by about 1.6 percent through August 2019 compared to the same period last year. However, the market for tea has been negatively impacted by low demand, compounded by the failure to close a number of producer-buyer contracts, resulting in excess stocks and lower prices. As a result, tea prices have declined from an average of US\$ 1.8/kg in 2018 to US\$ 1.5/kg in the second quarter of 2019, with the price standing at US\$ 1.2/kg as of August 2019. Going forward, external demand for tea could improve due to a drought in Mombasa. The production of macadamia nuts, an emerging export crop, increased by about 9.7 percent.

8. More stable electricity generation and supply supported economic activity in the first half of 2019, although it has weakened in the second half. The stability and increased supply have been provided through the operation of dieselpowered plants, which involves relatively high costs. Moreover, the reliance on hydro generated electricity remains vulnerable to climate variability. Thus, it may be challenging to maintain current output levels into the medium term, which could weigh on activity and investment potential, particularly in the manufacturing and services sectors.

Upcoming projects that could strengthen supply by 2021 include the commissioning of solar power plants and minihydro power plants through Independent Power Producer (IPP) contracts that could generate up to 216 MW. Other projects expected in the medium to long term include the Mozambique-Malawi Regional Interconnector Project, Zambia-Malawi interconnector, and the Mpatamanga hydro power plant. It will be necessary to move forward with these projects to support more reliable power supply and thereby economic diversification, such as through the expansion of digital technologies, which could boost growth (Box 1).

Box 1: The potential for digital technologies to boost growth in Malawi

International evidence shows that increased access to and usage of ICT services can have a transformational economic impact on developing economies. For example, in Kenya in 2018, the ICT sector grew by 12.9 percent, outstripping national GDP growth. This growth has facilitated the emergence of disruptive technologies across a number of sectors. Perhaps the best example of this transformation is M-PESA, a mobile phone-based money transfer, financing and microfinancing service that has revolutionized Kenya's payments and banking ecosystem.

With similar investments in technology, digital skills, digital payments and ICT literacy initiatives, ICT in Malawi can grow significantly above its current level of 4.1 percent of GDP. Although the ICT sector in Malawi continues to grow, Malawi significantly lags behind its peers in terms of the development and affordability of telecommunications and other digital services. It ranks in 167th place out of 176 countries in the International Telecommunications Union (ITU) ICT Development Index. The rate for mobile penetration stands at 41.3 percent, compared to the average rate of 74.4 percent across Africa.

However, Malawi has the potential to leverage digital technologies to leapfrog and achieve its socio-economic objectives if it implements measures to promote affordability. Malawi's neighbors are reaping digital dividends due to policies that promote affordability. Entry-level broadband packages cost 5.2 percent of per capita GDP in Uganda, 2 percent in Kenya, yet 19 percent of per capita GDP in Malawi. This is due to high taxation regimes in the telecom sector, which adversely impact penetration, services and profits. In Kenya, mobile specific taxes stand at an average rate of around 7.5 percent, compared to 9.5 percent in Malawi. The relative affordability of broadband in Kenya has led to significantly high penetration rates with the rate for 3G population coverage standing in excess of 85 percent. Thus, Malawi needs to undertake significant policy, regulatory and fiscal reforms in order to realize digital dividends.

In Malawi, the lack of competition in critical telecom market segments restricts the growth of the sector. The resulting lack of investment and competitive pressure on prices and quality has severely impacted ordinary consumers, the vast majority of whom access both voice and broadband services through mobile phones. Most services are provided by only two operators, which leads to high levels of market concentration. By comparison, lower market concentration in Uganda has led to lower end-user prices. By encouraging higher competition and new investments in the ICT sector, Malawi will be able to benefit from lower costs and increase in services.

Service delivery in Malawi is also hampered by a severe infrastructure deficit, which limits opportunities for the delivery of high-quality ICT products and services. In particular, the national backbone and access networks need to be further reinforced to ensure a decentralization of ICT opportunities. As it stands, international bandwidth per user in Malawi is 4.2 kbps. In similar landlocked countries, such as Rwanda and Uganda, international bandwidth per user is 7.45 and 5.41 kbps, respectively. By contrast, in Kenya, which has access to a number of undersea cables, international bandwidth stands at 69.01 kbps per user.

By addressing the number of related factors responsible for these constraints, such as a lack of competition in critical telecom market segments; insufficient infrastructure investment; and high costs for international bandwidth, Malawi can unlock opportunities for digital health, digital education, e-agriculture, social protection payments, etc. It will also allow Malawi to make significant strides in ICT development, as has been demonstrated in a number of other SSA countries, where the leapfrogging aspects of technology have had a transformational impact on their economies.

Over one million Malawians are expected to be food insecure in 2019/20, although this is a reduction over the previous year

9. Despite some gains in reducing ultra-poverty since 2011, the moderate poverty rate remains high and the number of poor has increased. While the ultra-poverty rate fell from 24.5 percent in 2011 to 20.1 percent in 2016, over the same time period, the moderate poverty rate increased from 50.7 percent to 51.5 percent. With population growth higher than the pace of poverty reduction, the number of people living below the poverty line increased over this period from

7.1 to 8.4 million. Repeated episodes of macro-economic instability, in addition to shrinking plot sizes; the increased frequency of pest infestations and weather and climatic shocks; the limited availability of farm inputs; and increasing food inflation have impacted agricultural incomes and compromised growth in other income earning opportunities for the poor.

10. Over one million Malawians are expected to remain food insecure in 2019/20, although this is an improvement over the previous year. In July 2019, the Malawi Vulnerability Assessment Committee (MVAC) completed its annual food security assessment. This assessment estimated that a projected 1.06 million people living in rural areas, or 7 percent of Malawi's rural population, will not be able to meet their annual food requirement during the 2019/20 consumption period. This is a decrease from the 3.31 million people so assessed in the 2018/19, only slightly higher than the figure of 1.04 million in 2017/18, and significantly lower than the figure of 6.7 million in 2016/17. The decrease was due to generally stronger agriculture production in 2018/19, with favorable weather offsetting the impact of flooding, Fall Army Worm infestation, and dry spells in some districts.

11. Poverty and food insecurity could deepen for some of Malawi's poor due to the impact of Cyclone Idai and higher food prices, particularly in some of the poorest districts. Cyclone-affected households lost income due to the destruction of productive assets such as land, livestock, fisheries, machinery and working tools. Approximately 300,000 households were affected by their crops being washed away, with the heaviest impact in southern districts (Post Disaster Needs Assessment, 2019). Moreover, higher food prices in 2019, which have contributed to double-digit food inflation (Figure 10), are compounding the situation and restricting food access for many households, particularly in areas with food deficits in southern Malawi (FEWS Net, 2019). Some households are already starting coping strategies by reducing meals and meal diversification.

Expenditure overruns and underperforming revenue expanded the fiscal deficit in FY 2018/19

12. In FY 2018/2019, the Government missed the revised fiscal deficit target of 5.8 percent of GDP. Pressures emanating from election-related expenditures, the disaster response to Tropical Cyclone Idai, and additional interest expenses led the Government to spending more than projected in its mid-year revision. Revenue and grants were also below the revised targets. This led to the fiscal deficit increasing to 6.5 percent of GDP, higher than the revised target of 5.8 percent of GDP and the approved target of 3.8 percent of GDP (Table 2).

13. Despite a good performance in the first half of the fiscal year, domestic revenue collections underperformed by the end of the FY2018/19. Domestic revenue stood at 18.8 percent of GDP, below the revised target by 1 percent of GDP, due to lower than expected collections of both tax and non-tax revenue. The figure was also lower than that recorded in FY 2017/18, when the value of domestic revenue stood at 19.3 percent of GDP. Tax revenue stood at 17.1 percent of GDP, the same level recorded in the previous fiscal year and lower than the revised target of 17.9 percent of GDP. In particular, this underperformance was attributable to the poor performance of corporate taxes, due to claims of capital allowances on investment on digital software by the banking sector and claims on costs related to electricity generation (from diesel for gensets). This was partially offset by the good performance of individual income taxes, attributable to increased salaries of civil servants, increased desk audits, and increased remittances of non-resident tax from the sale of shares in Chibuku Holding Company. Though the decline in vatable imports negatively affected the performance of import VAT, increased enforcement for domestic taxes and increased import volume of motor vehicles and cement led to overall satisfactory performance in taxes on goods and services and taxes on international trade and transactions. Non-tax revenue collections amounted to 1.7 percent of GDP, lower than the revised target of 1.9 percent of GDP, largely due to the poor performance of dividends. The non-disbursement of dividends from the Reserve Bank of Malawi due to revisions to legislation that limited remittances to Government until the bank attains a certain threshold of profit accumulation, contributed to the poor performance in dividend remittance.

14. The overall performance of grants improved in FY 2018/19. Grants reached a value of 2.0 percent of GDP, higher than the revised target of 1.5 percent of GDP. The value of development assistance channeled through the Government budget (1.4 percent of GDP) was enhanced by the disbursement of World Bank Catastrophic Deferred Drawdown Option (Cat DDO) resources. A total of US\$ 40 million was disbursed to assist Malawi to respond to the aftermath of Tropical Cyclone Idai, including to rebuild more resilient infrastructure.

15. Despite the upward revision to the expenditure target at mid-year, the Government overspent in FY 2018/19. At midyear, recurrent expenditure was revised upwards from 20.7 percent of GDP to 21.2 percent of GDP, taking into account the need to allocate additional resources to enhance security and to address other election-related pressures. In addition, expenditure on the disaster response to Tropical Cyclone Idai; increased interest expenses; post-election expenses, including court-related expenses from the on-going election case; and security provisions to address the

ongoing demonstrations exerted additional pressures. With these pressures, recurrent expenditure reached 22.2 percent of GDP. Expenditure on goods and services exceeded the revised target of 6.0 percent of GDP at mid-year due to the increase from the anticipated MK 2.0 billion to MK 7.4 billion to meet the needs of the Tropical Cyclone Idai disaster response. There were also additional pressures related to the cost of servicing of domestic debt, which led to an increase in expenditure to 4.1 percent of GDP, higher than the revised target of 3.8 percent of GDP. Additional resources were also required to settle industrial disputes related to salary increments for staff at public universities and for gratuities for legislators ending their term in May 2019.

Table 2: Fiscal accounts

Percent of GDP

	2015/16	2016/17	2017/18	2018/19		2019/20
					Preliminary	Budget
				Revised	Outturn	Projection
Revenue and grants	21.6	23.5	20.8	21.3	20.8	25.7
Revenue	17.8	20.0	19.3	19.8	18.8	23.3
Tax Revenue	16.0	17.6	17.1	17.9	17.1	21.6
Nontax revenue	1.8	2.4	2.2	1.9	1.7	1.7
Grants	3.7	3.5	1.4	1.5	2.0	2.5
Budget support grants	0.5	0.3	0.0	0.0	0.6	0.0
Dedicated grants	1.8	1.5	0.5	0.6	0.7	1.1
Project grants	1.4	1.7	0.9	0.9	0.9	1.4
Expenditure and net lending	27.6	28.2	28.5	27.1	27.4	28.3
Recurrent expenditure	23.5	21.7	23.8	21.2	22.2	21.0
Wages and salaries	6.4	6.2	6.5	7.2	7.1	7.2
Interest payments	4.0	4.3	3.9	3.8	4.1	4.0
Foreign	0.3	0.3	0.3	0.3	0.3	0.3
Domestic	3.7	4.1	3.6	3.6	3.8	3.7
Goods and services	5.8	5.9	6.7	6.0	6.7	5.3
Maize purchases	0.8	0.7	0.7	0.2	0.2	0.2
Subsidies and transfers	4.9	3.8	5.0	4.1	4.1	4.3
Fertilizer subsidy	1.8	0.7	0.7	0.8	0.7	0.6
Arrears payments	2.5	1.4	1.6	0.1	0.1	0.1
Development expenditure	4.0	6.4	4.7	5.7	5.0	7.2
Domestically financed	0.7	0.7	1.6	2.1	1.9	2.1
Foreign financed	3.3	5.8	3.1	3.6	3.1	5.0
Overall balance (incl. grants)	(6.1)	(4.8)	(7.8)	(5.8)	(6.5)	(2.5)
Primary balance	(2.1)	(0.5)	(3.8)	(2.0)	(2.4)	1.4
Financing	6.1	4.9	8.2	5.8	6.4	2.5
Net foreign financing	1.9	2.5	2.5	1.3	1.1	1.8
Gross foreign borrowing	2.4	3.0	3.1	2.1	1.6	2.6
Budget support loans	0.0	0.0	1.3	0.0	0.0	0.0
Project loans	1.9	2.5	1.7	1.7	1.4	2.4
Other loans	0.5	0.5	0.1	0.4	0.2	0.1
Amortization	(0.5)	(0.6)	(0.6)	(0.9)	(0.6)	(0.8)
Net Domestic borrowing	1.7	0.9	6.2	6.0	5.4	0.8
Securitization of domestic arrears	2.5	1.3	(0.5)	(1.5)	(1.4)	0.0

Source: World Bank staff calculations based on MoFEPD data

16. The accelerated implementation of investment projects prior to elections improved the performance of domestically-financed development expenditure. At mid-year, the target for development expenditure was revised upwards from 5.0 percent of GDP to 5.7 percent of GDP, in anticipation of the completion of domestically financed projects before the election. Domestically-financed development expenditure reached 1.9 percent of GDP—the highest performance in recent years, but still below revised targets. On the other hand, poor foreign disbursements affected the performance of foreign-financed development expenditure, which stood at 3.1 percent of GDP, lower than the target of 3.6 percent of GDP.

Malawi's FY 2019/20 budget assumes optimistic revenue growth

17. Malawi's FY 2019/20 budget projects the fiscal deficit to narrow from 6.5 percent of GDP in FY 2018/19 to 2.5 percent of GDP. However, this projection is based on an overly-optimistic projected nominal increase in revenue of more than 40 percent, or 4.5 percent of GDP. This unrealistic projection poses a risk to budget implementation and could lead to a higher deficit and increased domestic borrowing, particularly given the statutory nature of most of the expenditures. Thus, achieving the projected fiscal deficit will largely depend on expenditure decisions that the Government implements during the fiscal year.

18. While the Government has introduced measures to enhance revenues, they are unlikely to reach targeted levels. The total value of revenue and grants is projected to increase from 20.8 percent of GDP in FY 2018/19 to 25.7 percent of GDP in FY 2019/20. The increase is largely due to the projected increase in tax revenue, which is expected to increase from 17.1 percent of GDP in FY 2018/19 to 21.6 percent of GDP in FY 2019/20. One key factor in this is the Budget's projected GDP growth of 6.0 percent in FY 2019/20, which would be the highest level in recent years. Optimistic GDP growth projections have regularly contributed to revenue shortfalls in the past (Box 3 and Figure 6), and if not realized,

Box 2: Revenue measures in FY 2019/20 Budget may have limited impact on increasing revenues

The Government has introduced numerous new tax measures in the FY 2019/20 budget. While some of these measures may enhance revenues, a series of new tax expenditures and reliefs will reduce the net revenue impact. As such, it may be difficult to achieve the ambitious revenue targets in the FY 2019/20 budget.

 Revenue Reducing Measures Removal of 50 percent export tariff on treated poles; Duty-free clearance of equipment and items that focus on aquaculture; Reduce export allowance for non-processed traditional exports from 25 percent to 10 percent; Increase withholding tax on rental income from 15 percent to 20 percent; Introduce a 1 percent final withholding tax on nonbank mobile money transactions based on the transaction amount; Introduce a carbon tax on both locally and foreign registered motor vehicles; Introduce VAT on oils under chapter 15 of the customs and excise tariff schedule Removal of vat on solar products, liquefied petroleum gas, energy efficient gas and wood cook stoves; Removal of vat on loundry soap; Increased tax-free bracket from K35,000 to K45,000 							
 Introduce a surcharge on imported products that have local substitutes including vegetables, sugar, cooking oil and cement; Reduce export allowance for non-processed traditional exports from 25 percent to 10 percent; Increase withholding tax on rental income from 15 percent to 20 percent; Introduce a 1 percent final withholding tax on nonbank mobile money transactions based on the transaction amount; Introduce a carbon tax on both locally and foreign registered motor vehicles; Introduce VAT on oils under chapter 15 of the customs and excise tariff schedule Removal of vat on solar products, liquefied petroleum gas, energy efficient gas and wood cook stoves; Removal of vat on 1,200 kg or 10 bales of tobacco sold through Auction Holdings; Removal of VAT on laundry soap; Increased tax-free bracket from K35,000 to K45,000 	Revenue Increasing Measures	Revenue Reducing Measures					
	 Introduce a surcharge on imported products that have local substitutes including vegetables, sugar, cooking oil and cement; Reduce export allowance for non-processed traditional exports from 25 percent to 10 percent; Increase withholding tax on rental income from 15 percent to 20 percent; Introduce a 1 percent final withholding tax on nonbank mobile money transactions based on the transaction amount; Introduce a carbon tax on both locally and foreign registered motor vehicles; Introduce VAT on oils under chapter 15 of the customs and excise tariff schedule 	 Removal of 50 percent export tariff on treated poles; Duty-free clearance of equipment and items that focus on aquaculture; Increased export allowance for processed traditional exports from 25 to 30 percent; 50 percent deductible allowance for employers employing people with disabilities; Removal of custom duty on motor cycles of cylinder capacity not more than 100cc; Removal of VAT and excise tax on gas cylinders; Removal of VAT on solar products, liquefied petroleum gas, energy efficient gas and wood cook stoves; Removal of custom duty on flat iron to promote decent housing; Removal of VAT on laundry soap; Increased tax-free bracket from K35,000 to K45,000 					

Table 3: Revenue measures in FY 2019/20 Budget

Source: WB staff summary based on, MoFEPD, 2019/20 Budget Statement

The draft budget proposed introducing a 1 percent final withholding tax on non-bank mobile money transactions. This measure, however, was contested and removed, based on the potential effects on financial inclusion. Instead, the Government has introduced a 20 percent withholding tax on commissions for mobile operators. However, this could also counter efforts to promote digitization and inclusion. The 2017 Global Findex report recognized that Malawi has made significant strides in financial inclusion, with the number of mobile operators increasing from 1,000 in 2012 to 1.8 million in 2017. Yet applying specific taxes on mobile transactions could slow this progress, when, instead, there is a need to increase the affordability of digital technologies in order to support their expansion (Box 1).

The Government is also implementing reforms to tax administration and collection. These include the implementation of an ITAS (Msonkho Online); reviewing tax legislation, particularly for customs and excise; implementing One Stop Border Posts and a single window; and upgrading of ICT systems and infrastructure. The Government also intends to conduct a number of reforms to its VAT system, particularly related to its structure and administration.

The cost of doing business is high in Malawi, with a relatively high tax burden and compliance costs for the region (World Bank 2017). There are a large number of non-transparent and inconsistent incentives that could be rationalized. Tax reforms are often characterized by piecemeal legislation, uncertainty, and unpredictability. The tax system is characterized by many exemptions, which could have a substantial impact on revenue. As such, there is a need to compute tax expenditures to assess the efficiency of these exemptions. Moreover, tax reforms should strive towards enhancing efficiency and rebalancing the tax mix.

this would contribute to lower than projected revenues. In addition, the Government has introduced some measures which may enhance tax collections; however other measures, especially those related to VAT exemptions, will lead to revenue foregone, and therefore constrain the achievement of higher tax collection (Box 2). In addition, the Government anticipates efficiency and revenue gains from tax administration reforms, including the expected implementation of the Integrated Tax Administration System (ITAS) towards the end of the fiscal year. However, even compounded with the proposed tax reforms, these measures are unlikely to facilitate an increase of 4.5 percent of GDP in tax revenue. In addition to tax reforms, the Government has revised user fees to cost-reflective levels to enhance non-tax revenue collection. Non-tax revenue is projected to be maintained at the FY 2018/19 outturn level of 1.7 percent of GDP, while disbursements of foreign aid are expected to increase to 2.5 percent of GDP.

19. In FY2019/20, expenditure is projected to increase due to higher development expenditure. Expenditure is projected to increase to 28.3 percent of GDP, up from 27.4 percent of GDP in FY2018/19. The increase will be driven by increased development expenditure, with recurrent expenditure projected to decline from 22.2 percent of GDP in FY 2018/19 to 21.0 percent of GDP in FY 2019/20. The Government plans to implement a 12 percent nominal average increase in wages and salaries, causing a slight increase in expenditure on these items, from 7.1 percent of GDP in FY2018/19 to 7.2 percent of GDP. Interest expenses are projected to decrease slightly, going down from 4.1 percent of GDP in FY 2018/19 to 4.0 percent of GDP. Spending on goods and services is projected to decrease to 5.3 percent of GDP in FY 2019/20, down from 6.7 percent of GDP in FY 2018/19. However, pressures related to the on-going post-election court case and security costs could contribute to overruns. Subsidies and transfers are projected to increase slightly to 4.3 percent of GDP in FY 2019/20, up from 4.1 percent of GDP due to increase dtransfers, particularly to cover the administrative costs of delinking the University of Malawi into three constituent universities, as well as increased allocations for pension and gratuities to reduce the waiting period after retirement from seven to three months.

20. Development expenditure is budgeted to increase to 7.2 percent of GDP in FY 2019/20, up from 5.0 percent of GDP in FY 2018/19. This increase is expected to be driven by foreign-financed development expenditure, which is expected to expand from 3.1 percent of GDP in FY 2018/19 to 5.0 percent in FY 2019/20 with greater allocations to agriculture, transport, energy, tourism education and health sectors to spur growth and improve the delivery of social services. Domestically-financed development expenditure is projected to increase slightly from 1.9 percent of GDP in FY 2018/19 to 2.1 percent of GDP in FY 2019/20.

21. The Government continues to prioritize social services, with 37.6 percent of the total expenditures allocated to education, agriculture and health. Education has received the largest share among the five sectors, with a total of MK 313.9 billion (18.1 percent of the total budget). In this sector, expenditure on the construction of primary schools and primary teachers training colleges, as well as the construction of secondary schools and the completion of girls' hostels, has been prioritized. Education is followed by agriculture, with projected expenditure at MK 179.3 billion, or 10.4 percent of the total budget; and the health sector, at MK 158.1 billion, or 9.1 percent of total budget. Prioritized projects in the health sector include the construction of the cancer center and military hospital. The transport sector has been allocated MK 88.3 billion (5.1 percent of total budget), while the energy and mining sector has been allocated MK 45.7 billion (2.6 percent of total budget).

22. The FY 2019/20 fiscal deficit is expected to be largely financed by foreign borrowing, although fiscal deficit outturns in recent years have far exceeded those projected in the budget (Figure 3 and Box 2). Financing mostly through foreign sources would mark a departure from the dependence in recent years on domestic borrowing. However, the reduction in domestic borrowing is based on assumptions of high projected growth in revenue. As stated previously, these assumptions appear to be over-optimistic. If they are not realized, this could lead to higher than projected levels of domestic borrowing and potentially also contribute to a buildup of arrears. In FY 2019/20, the total value of foreign borrowing is projected to reach 1.8 percent of GDP, up by 0.7 percent of GDP from the figure recorded FY 2018/19. The remaining 0.8 percent is projected to be financed by domestic borrowing.

Figure 3: Fiscal deficits regularly overshoot budget levels Fiscal deficit, percent of GDP



Source: World Bank staff based on MoFEPD data

Domestic debt continues to increase, undermining fiscal sustainability

23. The value of Malawi's public domestic debt stock has surpassed that of external debt, increasing the risk of public debt distress. The total value of public debt stood at 62.8 percent of GDP in June 2019, its highest level over the past decade. The stock of external debt has increased only gradually since the 2012 devaluation, going up from 26.5 percent of GDP to 30.2 percent from 2012 to 2019 (Figure 4). On the other hand, domestic debt increased from 13.8 percent of GDP to 32.6 percent of GDP over the same period, due to repeatedly higher-than-expected fiscal deficits. The recent spike in domestic debt poses a significant risk to debt sustainability, given the high debt servicing costs. In contrast, most of the external debt has been contracted on concessional terms and thus poses a more moderate risk.



 Figure 4: Domestic debt has increased, surpassing the levels of external debt
 Figure 5: Public domestic debt shifting from RBM to commercial banks and non-bank sector

 Government debt (percent of GDP)
 Public domestic debt (Billion Kwacha)



Source: World Bank staff calculations based on MoFEPD data Source: W

Source: World Bank staff calculations based on RBM data

24. Public domestic debt has shifted towards the bank and non-bank sectors. Under the current International Monetary Fund (IMF) Extended Credit Facility (ECF) macroeconomic program, the Government has capped borrowing from the Reserve Bank of Malawi (RBM) at zero. Thus, additional financing needs are being met through borrowing from commercial banks and the non-bank sector (Figure 5). At the same time, the RBM began gradually unwinding its holding of Government debt to the commercial banks and the non-banking sector since December 2017. Thus, the share of domestic debt held by RBM has been declining, from 57 percent at the end of December 2017 to 32 percent at the end of September 2019. Consequently, this translates to an increased share of domestic debt being held by commercial banks and the non-bank sector, with the proportion increasing from 19 percent and 24 percent at the end of December 2017, respectively, to 29 percent and 39 percent at the end of September 2019.

25. Stronger fiscal discipline is needed to reduce domestic debt and to create fiscal space. The joint IMF/WB debt sustainability analysis, conducted in September 2019, indicates that Malawi is at high risk of overall public debt distress, with its current level of debt constraining its room for additional borrowing. The cost of servicing domestic debt increased to 21.9 percent of domestic revenue in FY 2018/19. Optimistic revenue assumptions in the FY 2019/20 budget—which thereby avoid addressing the need for fiscal consolidation—could risk further increasing the debt burden. To address this, the Government needs to conduct fiscal consolidation, or risk further reducing the fiscal space for discretionary policy expenditure. In addition, it should seek concessional financing for investment projects, focusing on projects with high returns that are aligned to development priorities.

Box 3: Strengthening budget planning and execution is needed to reduce domestic debt

The Government has sustained high fiscal deficits, which are consistently above budgeted levels (Figure 3). This deviation has been increasing recently, driven by poor performance in both revenue and grants and expenditure. To finance these deficits, the Government has relied on borrowing, largely from the domestic market, which has led to domestic debt and total public debt increasing beyond 30 and 60 percent of GDP, respectively, in 2019.

Optimistic GDP growth assumptions, combined with the effects of natural disasters, have contributed to consistent deviations of revenue and grants against their projections. GDP growth has, on average, underperformed budget projections by 2.1 percent since FY2012/13 (Figure 6). This had negative implications on tax revenue, which consequently performed below their forecasts in four of the last five fiscal years (Figure 7). Compounded with the loss of donor confidence which resulted in poor disbursements of grants, this has affected overall revenue and grants, which have in total underperformed their projections since FY2013/14, except in FY2015/16.





Figure 7: Revenue has consistently underperformed Deviation from approved budget, Percent of GDP



While revenue regularly performs below budget, expenditure is consistently over budget, although the gap has declined somewhat in recent years. To contain the effects of a reduced resource envelope, the Government has frequently opted for to reduce development expenditure, as seen from underperformance in both domestic and foreign financed development expenditure relative to projected levels since FY2013/14 (Figure 8). On the other hand, the Government has consistently overspent on arrears repayment, domestic interest, and goods and services.

Stronger fiscal restraint is needed to reduce domestic debt. The first step in this is to improve budget revenue assumptions, including by taking into consideration the effect of shocks in projections, drawing from historical performance. Additionally, stronger fiscal management calls for focusing on the lines for which the Government has been consistently overspending. The Government should ensure that expenditure on goods and services is within budgeted levels, improve projections on domestic interest, and strengthen commitment controls to avoid the incurrence of arrears. The Government should also improve planning and execution of the development budget, as this would have positive spillover effects on growth and translate to improve domestic revenue/resource envelope.



Figure 8: Recurrent expenditure regularly exceeds budgeted levels

Source: World Bank staff based on MoFEPD data

Source: World Bank staff based on MoFEPD data

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Rising food prices have increased inflationary pressures

26. Headline inflation has remained in the single digits in 2019 although food prices have been accelerating in recent months. With an increase in food prices due to a spike in maize prices, the headline year-on-year (y-o-y) inflation rate increased from a low of 7.9 percent in February to 9.6 percent in October (Figure 10). Malawi's inflation rate has been higher than those of most of its regional peers (Figure 9).

27. In 2019, food inflation reached its highest level since April 2017, largely attributable to increased maize prices. Food inflation peaked in October 2019, reaching 16.0 percent (y-o-y), compared to 10.4 percent the previous year. Although maize production increased by an estimated 24.7 percent relative to the previous year, maize prices rose by almost 60 percent in the period from June to August. As of end-September, these prices were about 67 percent above the five-year average (WFP MVAC, 2019). This trend has been largely driven by speculation amongst traders, who are anticipating a replenishment of the Strategic Grain Reserves (SGRs), coupled with tight regional supplies due to production shortfalls in neighboring countries, and some outflows (despite the export ban). Prices are relatively high in the south, following regular seasonal trends (FEWS NET, 2019). This is expected to negatively affect food security and poverty for some households, particularly those in food deficit areas in the south.

Figure 9: Malawi's single digit inflation remains high on the regional front



Figure 10: Despite lower non-food inflation, increasing maize prices have held headline inflation higher

Headline, food and non-food Inflation, y-o-y, percent



Source: World Bank staff based on data from respective Source: World Bank staff based on NSO data countries' national statistical offices/central banks

28. By contrast, non-food inflation has continued on a downward trend, declining from 9.2 percent y-o-y in October 2018 to 4.3 percent in October 2019. Supported by a relatively stable Kwacha exchange rate and prudent monetary policy, non-food inflation was lower in a number of sub-categories, including housing, water, and electricity (2.3 percent); communication (2.0 percent); and recreation and culture (3.0 percent). By contrast, the rates were relatively high in a number of other sub-categories including health (9.4 percent); education (8.7 percent); alcoholic drinks and tobacco (8.0 percent); clothing and footwear (6.9 percent); and furnishing and household goods (6.6 percent). Year-on-year non-food inflation fell in October 2019 due to utility hikes effected in the month the previous year. However, non-food inflation will face pressure from higher fuel prices in November 2019, after Malawi Energy Regulation Authority (MERA) hiked prices of petrol and diesel by 7.1 percent and 5.7 percent, respectively.

The Kwacha has stabilized after volatility surrounding elections

29. After depreciating by about 6 percent relative to the United States Dollar (US\$) in the second quarter of 2019, the Malawi Kwacha (MK) regained most of this ground by mid-August and has remained roughly stable thereafter (Figure 11). The short-term volatility of the Kwacha could be partly attributed to importers frontloading orders ahead of elections, some election-related speculation, a slow start to tobacco market, and the slow flow of funds for donor projects during the election period. The RBM also tightened foreign exchange bureau trading regulations in September 2019, with stiff penalties for speculative behavior and trading beyond specified bands. While a generally stable Kwacha supports business confidence, it has, however, contributed to real exchange rate appreciation, which could reduce competitiveness and support higher levels of imports (Figure 12).

30. Continued strong reserve levels have supported the Kwacha's stability. Gross official foreign reserves have remained in excess of three months import cover throughout the year. Reserves stood at US\$ 631.6 million (3.0 months import cover) at the end of September 2019, compared to US\$ 689.2 million (3.3 months import cover) in September 2018.

Figure 11: The Kwacha depreciated around elections, despite solid reserve levels

Figure 12: A stable Kwacha/US\$ rate has contributed to the real effective exchange rate appreciating Real and Nominal effective exchange rate, 2010=100,

Official reserves in months of import cover (RHS), Mid Exchange Rate (MK/US\$)





Source: World Bank staff calculations based on RBM data

Source: World Bank staff calculations based on IMF IFS data

Conditions in the financial sector have broadly remained stable in a lower interest rate environment

31. The RBM maintained monetary policy rates in the context of sustained lower non-food inflation. After reducing the policy rate by 150 basis points (b.p.) in January and by a further 100 b.p. in May, in July and October 2019, the Monetary Policy Committee (MPC) held the Policy Rate at 13.5 percent (Figure 13). In addition, it maintained liquidity reserve ratios at 5 percent for local currency deposits and 3.75 percent for foreign currency deposits. The MPC considered non-food inflation to be well-anchored in single digits and the elevation in food prices likely to be temporary.

32. The RBM's resolution that commercial banks use a new reference rate as their base lending rate came into effect in September 2019. This followed a decision made in May 2019 to set commercial banks' base lending rates to a reference rate set as a weighted average of the Lombard rate, the Interbank rate, the 91-day Treasury bill and the Savings rate.¹ Although banks are still free to adjust their margins on top of the base lending rate, maximum lending rates have also reduced. The new reference rate is intended to strengthen the transmission of monetary policy actions to lending rates; however, it could increase intermediation costs for banks.

33. Private sector credit has expanded in 2019, despite an uncertain business environment. Lending to the private sector grew by 17.7 percent y-o-y in September 2019.² The RBM's Bank Lending Survey conducted in June 2019 showed that there had been a marginal growth in demand for loans and credit lines by the households and small and medium enterprises (SMEs) sectors in the first half of 2019. The general perception of the banks was that credit growth to large enterprises had declined during this period as a result of uncertainty related to the general elections in May 2019. Despite the strengthening of credit risk assessment processes, especially for the household segment, overall, both shortand long-term loans increased, reflecting the steep decline in the cost of borrowing as bank lending rates dropped.

34. Malawi's commercial banks generally remain in a sound and stable condition. As of June 2019, banks had recorded reasonable levels of profitability and Return on Equity (ROE), averaging at 21.2 percent, an increase from 16.9 percent in June 2018 (Figure 14). Liquidity levels remain adequate, with the ratio of liquid assets to deposit and short-term

¹ The weights for the reference rate are Lombard Rate (59 per cent), 91-day (T-bill) rate (10 per cent), interbank market rate (30 per cent), and savings rate (1 per cent).

² Most of this growth has been in the "other sectors" category, which averaged 50 percent y-o-y growth from June to September 2019. Agriculture, forestry, and fisheries recorded only average growth of 19 percent over this period, wholesale and retail trade 11 percent, and manufacturing declined by 1 percent. "Other sectors" includes Mining & quarrying; Electricity, gas, water & energy; Construction; Restaurants & hotels; Transport, storage & communication; Financial services; Real estate; and Other sectors.

liabilities standing at 59.1 percent, a sufficient level to effectively support intermediation. This liquidity level is largely supported by stable funding sources, reflecting growing levels of deposits and assets. The banking sector's capital buffers remained in sufficient levels, with the capital ratios well above minimum statutory requirements. Asset quality continued to improve, with the ratio of Non-Performing Loans (NPL) to gross loans and advances standing at 4.8 percent in June 2019, considerably lower than the level of 12.7 percent in June 2018. This resulted from banks increasing write-offs of NPLs and some increased recoveries (which peaked in December 2018) in order to reach RBM-prescribed targets. However, the RBM's June 2019 Bank Lending Survey shows that the NPL ratio for the wholesale and retail sector and, to a lesser extent, the manufacturing sector remain relatively high.



Percent





Return on Equity (ROE), NPL to gross loans and advances, private sector credit growth (y.o.y.); percent



Source: World Bank staff calculations based on RBM data

Source: World Bank staff based on RBM data

35. While the microfinance sector remains small, it was found to be in sound health in the first half on 2019. Overall, the sector's asset quality improved in the first half of 2019. The overall NPL ratio for deposit-taking microfinance institutions stood at 4.7 percent in June 2019, the same level recorded in December 2018. By contrast, the NPL ratio for the non-deposit-taking microfinance institutions decreased from 12.6 percent in December 2018 to 7.9 percent in June 2019. The ROE for the deposit-taking microfinance institutions increased to 6.1 percent in June 2019, up from 2.0 percent in June 2018. By contrast, the non-deposit taking sub-sector recorded losses. The difference is due to the fact that the deposit-taking microfinance sector is sufficiently capitalized, unlike the non-deposit-taking microfinance sector.

Tobacco has continued to dominate exports

36. Tobacco continues to account for about half of Malawi's total exports. This is followed by sugar (7 percent of exports); tea (5 percent); and edible nuts (4 percent). Exports of tobacco decreased marginally from US\$ 342.2 million to US\$ 341.4 million in the first ten months of 2018 compared to 2019, a 0.2 percent decrease. A substantial increase in export volumes (by 13 percent) was offset by a 12 percent decline in prices. Export volumes were relatively higher in the early months of 2019 as 2018's strong harvest was exported, and this growth is expected to moderate in the coming months as 2019's smaller crop is exported. Tea export volumes have declined by about 15 percent through August 2019, slowed by delays in contracts. In addition, following Cyclone Idai and the disruption to the Beira transportation route, some exporters delayed shipments. Sugar export volumes, on the other hand, increased by about 37 percent in 2019, with exports comprising around 30 percent of local production. The value of exports of edible nuts, including macadamia nuts, and pulses are also expected to increase in 2019.

37. Although petroleum imports have increased throughout 2019, **overall import growth is expected to remain weak due to subdued demand.** In 2019, petrol and diesel imports have increased, largely due to the increase in Malawi's number of vehicles and to the increased demand during the election period. The increased use of diesel-powered generators has also contributed to the growth. With the reductions in the Farm Input Subsidy Program (FISP) in real terms, fertilizer imports have been steadily declining over recent years. Imports could pick up slightly due to some Cyclone Idai-related recovery efforts.

38. The current account is expected to narrow slightly to 10.0 percent of GDP in 2019, down from 10.9 percent in 2018, due to improvements in the trade balance. Exports are expected to increase slightly, driven by a strong pickup in sugar and other cash crop exports, offsetting a slight decrease of tobacco exports. The total value of imports is expected to increase at a lower rate, despite increased fuel imports during the election period. Cyclone Idai-related imports could pick up, although they would be expected to be funded by donor financing.

1.2 MACROECONOMIC OUTLOOK AND RISKS

Increasing fiscal restraint will be critical to reduce high debt levels, and to support investment and higher growth

39. Bolder reforms are needed to sustainably reduce poverty. Malawi's medium-term growth is expected to gradually pick up to between 5.0 to 5.5 percent. This would be supported by sustained improvements in the agriculture sector and by energy projects coming onstream, thereby improving power supply. However, this outlook is susceptible to the continuing risk of weather-related shocks, with poor rainfall having the potential to negatively impact both agriculture production and electricity supply. Additionally, if the recent political impasse and demonstrations continue, they could also further weigh on growth and investment. Moreover, with Malawi's high population growth rate of around 3 percent, on a per capita basis, growth needs to increase even higher to reduce poverty rates. This highlights the importance of promoting reforms to increase growth, diversification, and job creation.

40. The Government needs to urgently improve fiscal discipline to sustain macro stability and reduce debt. Achieving the budgeted deficit of 2.5 percent for FY2019/20 will be a major challenge. Revenues are unrealistically expected to increase by over 40 percent (in nominal Kwacha terms) in one year. The Government will need to carefully prioritize expenditure over the fiscal year in order to avoid a sizeable deficit, which would further increase the level of high-cost domestic debt. With much of the recurrent budget consisting of statutory expenditures which cannot be reduced, the Government will need to prioritize development projects that have the greatest development impact, only making commitments and executing those that can be funded within available resources. This could otherwise also contribute to a buildup of high-cost arrears. In order to reduce high cost domestic debt, there is a strong need to maintain fiscal discipline, starting with the formulation of realistic budget assumptions.

41. Inflation is projected to remain around 9.3 percent in 2019, before declining slightly over the medium term. A relatively stable exchange rate has contributed to a steady decline in non-food inflation, with this trend expected to continue over the medium term. The IMF Extended Credit Facility (ECF) arrangement is also providing support to macroeconomic management. However, fluctuations in maize prices and fuel costs could pose a risk to the general price outlook. Despite domestic food availability, a tight regional market and budgeted maize purchases, which have driven price speculation, could drive up the grain price further. On the non-food front, domestic pump prices were held constant from January to November 2019. The MERA cushioned the impact of the increased landed costs of petrol and diesel beyond the five percent trigger limit through the Price Stabilization Fund (PSF) for each month up until November, when it raised petrol and diesel prices by 7.1 percent and 5.7 percent, respectively. If international oil prices rise, this could lead to further upward revisions to fuel prices. Additionally, the pass-through from the recent exchange rate depreciation could also exert upward pressure on inflation.

42. Despite less supportive global and regional conditions, Malawi's external position has improved. Malawi's external sector is highly dependent on tobacco exports and oil imports. While tobacco exports have decreased marginally in the first ten months of 2019, global demand is expected to reduce over the medium term. An increase in non-traditional exports is expected to support a modest growth in exports. Imports are expected to increase at a lower rate, particularly as new energy generation comes online, reducing imports of diesel for generators, combined with continued subdued demand, and expected lower international oil prices. Moreover, while the country was affected by Cyclone Idai, agriculture production has rebounded, which should limit food imports. Yet the import bill could face short-term upward pressure due to Cyclone Idai related humanitarian assistance and to recovery and reconstruction work. As such, the current account deficit is projected to narrow to a range of 8-10 percent of GDP over the medium term and will continue to be financed by official development assistance.

Bold reforms are needed to support stronger growth momentum, job creation, and poverty reduction

43. The new administration needs to implement bold reforms to establish a reform track record and accelerate job creation. The start of the second administration offers a key opportunity to implement policies that put Malawi on a

new course towards greater economic growth and the creation of an increased number of productive jobs. Malawi needs to not only improve agricultural productivity, but also promote growth in other sectors that must eventually absorb a larger share of the workforce. To develop a vibrant economy that offers more job opportunities, Malawi will need decisive leadership to adopt bold policies and carefully allocate limited fiscal resources to the areas that have the most impact on growth, job creation, and poverty reduction. There are several key steps in this process:

- Taking tangible steps to strengthen fiscal policy and management in order to anchor macro stability, decrease domestic debt, and increase investment: A first step towards achieving this is to prepare realistic revenue projections for the budget, and rationalize recurrent expenditure and maintain fiscal discipline to keep spending within the budget envelope. It also requires the careful management and prioritization of development expenditure, with the selection of the highest return projects that can be funded within the resource envelop. It is critical to reduce the repeated reliance on domestic borrowing, and instead expand concessional financing. In addition, it also calls for measures to reduce fiscal risks that have derailed past budgets, particularly by increasing the oversight of parastatals. Developing a strong fiscal policy track record would support growth, which would enable increased revenue mobilization. It would further enable increasing public and private investment, which is critical to increase job creation.
- Implementing policies to unlock the potential of the private sector, to strengthen competitiveness, and to increase investment in order to increase jobs opportunities and incomes: The Government needs a comprehensive focus on changing its relationship with the private sector, so that it proactively removes blockages to economic transformation within the agricultural and non-agricultural sectors. This is needed to increase diversification and to create more productive jobs for Malawi's rapidly growing population. A more diversified economy would be less susceptible to shocks, creating a virtuous cycle to support a more stable fiscal policy. There is a need to simplify business regulations and taxes; to ensure higher levels of transparency and predictability; and to reduce trade inefficiencies and distortions. As one measure to achieve this, the Government could implement regulations for the Control of Goods Act to improve predictability and market access, thus enabling a higher level of commercial investment in agriculture. Moreover, tax policies and administration should be reviewed and revised to increase transparency; to reduce ad hoc changes; and to enable increased value addition and the development of key growth-enabling sectors, such as for ICT. As part of this, the Government should also seek to improve Malawi's power supply by moving forward with key generation projects and strengthening the governance and financial performance of sector utilities.
- Investing in measures to increase resilience to shocks: So far, much of Malawi's efforts to achieve poverty reduction have been implemented through FISP and through maize distribution following weather shocks. The Government's poverty reduction initiatives could be more efficiently targeted by reallocating public resources to more effective social protection systems that could improve the poor's resilience to increasingly frequent weather shocks, with a broader agenda to support increased growth and incomes. Additionally, to increase resilience, it is essential to implement policies related to environmental management, climate change, and Disaster Risk Management (DRM) and to strengthen climate and information services. Improving DRM will also reduce Malawi's vulnerability to weather shocks and contain fiscal risks.
- Investing in human capital development to facilitate longer term growth: Malawi is an early adopter of the Human Capital Project and needs to accelerate investments in people to ensure the next generation is more productive, flexible, and innovative. The Government should improve the efficiency of education spending and more effectively target remote areas, while also scaling up access to family planning services to reduce high fertility rates. Moreover, it is also essential to address Malawi's stubbornly high stunting rates to support human capital development, given that poor nutrition outcomes are strongly correlated with high rates of maternal and child mortality, with negative implications for human capital formation.

The special topic of this MEM focuses on investing in Malawi's future through strategies to improve nutrition in under-five children. It considers three broad areas of strategy to promote optimal maternal and child health, healthy environments, and early access to better food and care. These are: (i) interrupting the intergenerational transmission of stunting by prioritizing women's and adolescents' health and nutrition; (ii) improving access to and consumption of diverse diets among young children and pregnant women; and (iii) improving livelihoods and resilience for the poorest and most vulnerable population groups.

2. SPECIAL TOPIC: Strengthening Human Capital through Nutrition

Sustaining progress in reducing child stunting in Malawi

Childhood stunting affects 149 million children under the age of five globally, resulting from a complex interplay of environmental and biological factors, including maternal nutritional status, feeding practices, sanitation and hygiene, morbidity and frequency of infection, and access to health care, among others (WHO, 2019). Malawi has made impressive reductions in childhood stunting over the past five years, thanks in part to large and significant improvements in Water, Sanitation, and Hygiene (WASH) practices and behaviors. Nevertheless, 37 percent of children under the age of five continue to suffer from stunting, with significant disparities between geographical areas and wealth brackets.

In Malawi, stunting commences at an early stage of children's lives, often as early as the first six months of life. Despite geographical disparities, stunting is widespread across the country, with most districts exhibiting a prevalence rate in excess of 30 percent. In addition, indicators related to infant and young child feeding (especially those that relate to dietary diversity and adequacy) remain extremely low, contributing to the stubbornly high stunting prevalence rates. Maternal characteristics, particularly mothers' height and body mass index, are very strong predictors of child bearing, putting them and their children at high risk for poor nutrition outcomes, which exacerbates the intergenerational transmission of stunting. The consequences of stunting and undernutrition have significant implications for human and economic development: poor nutrition outcomes are strongly correlated with high rates of maternal and child mortality, with negative implications for human capital formation. With the combined impact of these factors, undernutrition and stunting can contribute to economic losses from foregone income equal to up to three percent of GDP at the country level.

In this context, it is critically important for Malawi to strive to make further progress towards improving nutrition. To achieve this, two broad strategies should be implemented to promote optimal maternal and child health, healthy environments, and early access to better food and care. These two broad strategic areas are presented in Figure 15 and include: (i) interrupting the intergenerational transmission of stunting by prioritizing women's and adolescents' health and nutrition; and (ii) improving livelihoods and resilience to promote access to and consumption of diverse diets among young children and pregnant women. In particular, interventions to delay pregnancy among adolescents and to ensure that pregnant women receive adequate nutrition at least until delivery and throughout lactation should be prioritized. Furthermore, investments in nutrition must involve a multisectoral approach, leveraging activities and efforts in other sectors, such as agriculture, health, early childhood education and social protection, to address the root causes of stunting and undernutrition in Malawi.

Investments in nutrition are needed to boost human capital development and to promote economic growth

44. Undernutrition, including stunting, wasting, and micronutrient deficiencies, is responsible for 45 percent of child deaths globally (WHO, 2019). In addition to contributing to child mortality, stunting, especially when it occurs early in children's life, has significant ongoing consequences for their future development and health into adulthood, with these impacts having major implications for economic and social development (WHO, 2019; Hoddinott J, et al, 2013). Poor nutrition often leads to children's poor physical and cognitive development, predisposing them to health and economic consequences that continue throughout the course of their lives (United Nations, World Bank, 2015). For example, suboptimal cognitive performance and achievement at school that result from stunting translate into lower physical capacity and productivity levels, and subsequently, lower wages and lost economic output, both at the individual and societal levels (World Bank, 2018).

45. The quality of early childhood care, especially in the first 1,000 days of life (from conception to the first two years of life), has a profound impact on brain and cognitive development,³ including longer term effects on learning, skills gain, and ultimately income. Global evidence shows that the first 1,000 days comprise the most critical window for addressing malnutrition, as it is during this period that most physical growth, brain and psychosocial development and human capital formation occurs. Irreversible damage in child development takes place if a child does not receive proper nutrition during this period.

46. It has been estimated that stunting may contribute to country-level economic losses from foregone income of up to 3 percent of national GDP (World Bank, 2006). Thus, improved nutrition is fundamental to building human capital. As a basic building block of human capital, good nutrition contributes to economic development and to sustainable and equitable growth (World Bank, 2006). At the global level, evidence suggests that for every dollar invested in maternal and child nutrition interventions, there is a return of US\$ 16 (Engle, *et al*, 2011). In Malawi, it has been estimated that

³ The WHO (2019) defines ECD as the cognitive, linguistic, socio-emotional and physical development of the child from prenatal stage up to eight years of age.

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poor childhood nutrition outcomes have resulted in losses of US\$ 597 million (2012 terms) or US\$ 39 per capita per year as a result of increased healthcare expenses and reduced labor productivity.

47. Persistently high levels of stunting are a serious impediment to human capital development. With more than one third of Malawian children suffering from stunting, it is critical to tackle this forcefully, given its negative effects on human development and economic growth. The United Nations' Cost of Hunger study estimates that almost 60 percent of the current working-age population in Malawi suffered from childhood stunting and had 1.5 fewer years of education than their non-stunted counterparts. The HCI, of which stunting is a core component, estimates that with a score of 0.41, a child born in Malawi will be only 41 percent as productive when she reaches adulthood as she would have been if she had enjoyed complete education and full health (World Bank, 2018).



Figure 15: Current Nutrition Situation, Key Determinants, and Policy and Program Recommendations

Childhood stunting has declined over the past two decades, but there is still room for significant improvement

48. Stunting affects **37** percent of children in Malawi and is the most significant nutritional challenge facing the country (National Statistical Office (NSO), 2017). Women, especially female adolescents who are still growing themselves, and

children suffer the greatest burden of undernutrition, given their increased nutritional demands during these periods of rapid growth and development. Child undernutrition, including stunting, often begins in utero and continues to deteriorate during childhood, adolescence, and pregnancy, contributing to an inter-generational cycle of undernutrition, with stunted adolescents giving birth to small children who are at increased risk of stunting (Figure 16). Adolescent girls are particularly critical in this cycle: girls who become pregnant do not benefit from potential catch-up growth; instead pregnancy and lactation in adolescence further slows and stunts a girl's linear growth, exacerbating this intergenerational cycle (Rah et al, 2008).

Malawi's 37 percent child stunting prevalence rate is higher than the estimated regional average of 34 percent, but it demonstrates a significant improvement from the period 1992 to 2004, when the rate in Malawi hovered near 50 percent and was amongst the highest levels in Sub-Sharan Africa.

49. Malawi's current 37 percent child stunting rate demonstrates improvement; yet remains high. While this is still higher than the estimated average regional rate of 34 percent, it is a significant improvement over the period from 1992 to 2004, when the rate stubbornly hovered near 50 percent and was amongst the highest levels in sub-Saharan Africa (Figure 17) (UNICEF, 2017; NSO, 2001; NSO, 2011). In terms of nutritional indicators such as the rate of prevalence of underweight children, the rate has also declined by more than half from 1992 to 2018, while wasting decreased from

six percent to two percent over this period. Despite these improvements, with Malawi's high rate of population growth, the absolute number of stunted under-five children has increased from 1.26 million in 2004 to 1.31 million in 2015/16.



Figure 16: Children who are stunted turn into stunted adolescents and women who then give birth to small children who are at increased risk of stunting

Source: United Nations Administrative Committee on Coordination/Sub-Committee on Nutrition, 2000.

Figure 17: Malawi has seen improvements in key child nutrition indicators between 1992 and 2018, but needs further efforts to continue these trends

Trends in key childhood nutrition indicators, Malawi: 1992-2018



Note: The 2013 and 2018 WB CBN surveys are nationally representative.

Source: National Statistics Office (2017); Osendarp, S., Shilpi, F., Gondwe, T., et al (2019).

Understanding child growth patterns and trends is essential for the effective design and implementation of interventions to sustain reductions in stunting

50. In Malawi, stunting commences early in life and is widespread across the country, with the rate having actually increased in some districts over time. Data from the Malawi Demographic and Health Survey (MDHS) 2015-16 and from the integrated community-based nutrition (CBN) program evaluation in 2018 show that 24 percent of children under six months of age are stunted (Osendarp, 2019). From that point, the rate continues to increase until the children reach approximately 30 months, after which there is a decline (Figure 18). Amongst children aged from five to 60 months, the rate is higher for boys than for girls, except for those in the 35-45-month age bracket (Figure 19). These results are aligned with the data presented in Box 5 (Table 4).

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Figure 18: Stunting among young children begins early in Malawi, and levels off at 30 months of age

Trends in key childhood nutrition indicators, Malawi: 1992-2018



Figure 19: Stunting prevalence is higher among boys than girls in Malawi

Incidence of stunting by sex, Malawi (6-59 months)



Source: Osendarp, S., Shilpi, F., Gondwe, T., et al (2019).

51. There are also significant disparities in the rate of prevalence of stunting between different geographic areas and income brackets. Stunting is widespread throughout the country, with the majority of districts recording a rate significantly in excess of the WHO threshold level that defines a 'very high' prevalence rate (\geq 30%) (De Onis *et al*, 2019). The districts of Mzimba in the northern region; Mchinji, Dowa, and Dedza in the central region; and Machinga in the southern region recorded the highest rates, with a stunting prevalence in excess of 40 percent in all these districts in 2018. While at the national level, there was a reduction in the rate between 2013 and 2018, there was a deterioration in certain districts, including Mzimba, Kasungu, Lilongwe, and Mchinji (Figure 20). Most of these districts receive support from various development partners, including from the recently approved World Bank-funded Investing in the Early





Stunting in under-five children by district, Malawi: 2013 vs 2018

Source: Osendarp, S., Shilpi, F., Gondwe, T., et al (2019).



Years project, which will operate in Mchinji district. Although childhood stunting in Malawi affects households in all income levels, the prevalence rate is higher among the poor. An estimated 46 percent of children from poor households are stunted, compared to 24 percent of children from well-off households (NSO 2017).

Underlying causes of childhood stunting in Malawi are associated with factors that children are exposed to at individual, household, and community levels

52. The immediate factors associated with stunting in under-five children in Malawi include low weight at birth, diarrheal disease, and inadequate diet for the child (Figure 15).⁴ This is alarming, given that in the period from 2013 to 2018, there has been a decline in the average diet quality and meal frequency of under-five children (NSO, 2011, 2017; Osendarp *et al*, 2019). Specifically, performance in terms of many key infant and young child feeding indicators, namely the proportion of children who consume the minimum number of food groups and meals per day deteriorated from 19.7

percent in 2013 to 12.4 percent in 2018 (Osendarp *et al*, 2019). The reason for the decline in performance in terms of the dietary diversity indicator, which occurred despite significant investments and other improvements in nutrition and food security throughout the country, remains unclear and needs to be further investigated.

53. Each of the immediate factors associated with stunting in under-five children in Malawi can be attributed to issues at the household level that are closely linked to community-level factors. The main factors at the household level, by order of prominence, are: mother's height (less than 152cm); less than four ANC visits; mother's body mass index (BMI less than 18); poverty; and failure to participate in vaccination (Figure 15). The main causes of stunting at

The proportion of mothers in Malawi who practice exclusive breastfeeding declines drastically from 81 percent for infants aged 0-1 months to 34 percent for infants aged 4-5 months. Similarly, the proportion of infants aged 6-23 months that consume a minimum acceptable diet is only 8 percent (NSO, 2017).

the household level are often interrelated and largely driven by poverty. The relationship between childhood stunting and the main causes of undernutrition at the household level also varies by age. Poor feeding practices during pregnancy, and for infants and young children, contribute to inadequate food intake among these population groups (Box 4). The low level of consumption of animal-source foods by pregnant and lactating mothers (vital to maintain adequate health and nutrition during pregnancy and early childhood) is another key underlying problem. In this context, the biological determinants of child stunting (i.e. short maternal height and low BMI) are reflective of long-term deprivation and stunting that began in their mother's childhood. As a result, children have a much higher likelihood of being stunted if their mother has a short stature and/or a low BMI (United Nations, World Bank, 2015).

54. Factors associated with stunting at the household level are also associated with factors at the community level. In Malawi, these include high fertility,⁵ particularly among adolescent girls, low levels of maternal education, and inadequate access to safe drinking water and good sanitation. Many of these underlying and basic factors stem from deeply rooted gender norms that disadvantage women in educational attainment, employment opportunities, and decision-making power despite their primary role in feeding and caring for children and the household in addition to many other tasks (Ragasa et al, 2019).

Improvements in water, sanitation, and hygiene were the most significant contributors to reduced stunting from 2013 to 2018

55. Improvements in hand washing from 2013 to 2018 accounted for 71 percent of the reduction in child stunting in Malawi over the two points in time (Osendarp et al, 2019). An analysis of the main factors contributing to the decreased prevalence of child stunting in the period from 2013 to 2018 in Malawi (Box 5) is consistent with results from other countries, which identify improvements in hygiene as a key underlying determinant of nutritional change (Headey et al, 2016; Nguyen et al, 2017). The other main contributing factors were improved sanitation and the use of bed nets, which accounted for 9 percent and 8 percent of the change, respectively. With the impressive gains in WASH in Malawi over the two points in time, most households (more than 95 percent in 2018) have access to sanitation facilities and safe water. This suggests that the potential to achieve further reductions to stunting through WASH interventions may have been exhausted. Instead, future efforts will need to focus more on health and nutrition-specific interventions, together with interventions to improve other determinants of stunting such as household food security and infant and young child feeding practices, as these continue to remain sub-optimal for the majority of young children in Malawi (Osendarp et al, 2019).

⁴ Based on an analysis of the MDHS for 2010 and 2015-16 that used UNICEF's conceptual framework of the determinants of child nutritional status (UNICEF, 1990).

⁵ High fertility in Malawi is caused by early marriages, early child bearing, and a large number of adolescent pregnancies.

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Box 4: Poor feeding practices contribute to inadequate food intake for infants and young children

Poor feeding practices during pregnancy, and for infants and young children, contribute to inadequate food intake among these population groups. In Malawi, the proportion of mothers who practice exclusive breastfeeding declines drastically from 81 percent for infants aged 0-1 months to 34 percent for infants aged 4-5 months (Figure 21).



Figure 22: Key infant and young child feeding practices among children 6-23 months in Malawi Percent



Source: NSO, 2017

Similarly, beginning at six months, complementary feeding practices are inadequate. Dietary diversity among children 6-23 months is low, with only 25 percent of infants consuming foods from the four food groups, while 29 percent of infants were fed the minimum number of times appropriate for their age. Even less children receive a minimum acceptable diet (MAD), which is a composite of the diversity and frequency indicators for breastfed and non-breastfed children aged 6-23 months. The proportion of infants aged 6-23 months that consume a MAD is only 8 percent (NSO, 2017) (Figure 22).

Compliance with at least four antenatal care visits enhances nutritional outcomes in young children

56. Children of mothers who participated in four ANC visits recorded relatively good nutritional outcomes. A study of households living in districts that received Supplementary Nutrition Interventions (SNIC) in the period from 2013 to 2018 in Malawi found that an increase in the proportion of mothers who participated in four ANC visits was associated with improved linear growth for their children (Osendarp et al, 2019). Interestingly, this study showed that the likelihood of a child from the mother's second pregnancy experiencing stunting was significantly lower compared to that of a child from that same mother's first pregnancy if the mother had participated in four or more ANC visits. Further, the nutritional outcomes of children from short mothers who participated in four or more ANC visits were better than those born to short mothers who did not participate in these visits. This suggests that short mothers' participation in at least four ANC visits could eliminate the inherent disadvantage in linear growth experienced by their children.

57. Participation in ANC visits may improve child nutritional status due to their impact on improved pregnancy outcomes, reduced or better managed pregnancy complications, improved maternal nutritional status and/or greater weight gain. For instance, mothers who participated in a greater number of ANC visits may be more likely to receive and consume micronutrient supplements during their pregnancies, thereby reducing their risk of anemia and other micronutrient deficiencies. An analysis of data from 69 low- and middle-income countries demonstrates improvements in neonatal and infant mortality and reduced probability of low birth weight, stunting, and underweight when mothers participate in at least one ANC visit, with these effects being even greater for mothers who participated in at least four ANC visits (Kuhnt et al, 2017). Headey et al have also documented improved pregnancy outcomes, a reduced rate of incidence pregnancy complications, and improved maternal weight gain in the case of mothers who participate in a greater number of ANC visits during their pregnancies (Headey et al, 2016). Each of the cited improved outcomes are important for improving children's nutritional status at birth and into early childhood.

Box 5: Decomposition analysis to estimate which changes in determinants contributed to observed reductions in stunting from 2013-2018 in Malawi

Using data from the 2013 and 2018 Community Based Nutrition (CBN) surveys,⁶ a Oaxaca-Blinder decomposition analysis was used to estimate which underlying determinants of undernutrition contributed to the improvements in stunting over these two points in time (2013-2018). Details of the method are described in Osendarp et al, 2019 and Headey et al., 2016. Changes in height-for-age z-scores (HAZ) between 2013 and 2018 (Table 4), are statistically significant for all children, boys, and among older children (6-24 months).

	HAZ 2013	HAZ 2018	HAZ change 2013-2018
	Mean (SD)	Mean (SD)	Mean (SD)
All children (6-60 months) (n=7,428)	-1.7 (0.02)	-1.6 (0.02)	-0.1 (0.04)***
Sex-disaggregated			
Boys (n=3,664)	-1.8 (0.04)	-1.6 (0.03)	-0.2 (0.05)***
Girls (n=3,764)	-1.6 (0.04)	-1.5 (0.03)	-0.05 (0.05)
Age groups			
6-24 months (n=3,018)	-1.4 (0.05)	-1.4 (0.04)	-0.04 (0.06)
24-60 months (n=4,410)	-1.8 (0.03)	-1.7 (0.03)	-0.1 (0.04)***

Table 4: Changes in HAZ by year, sex, and age group from the CBN Survey 2013-2018

***p<0.01

The ability of the model to explain changes in HAZ between 2013 and 2018 was more than 90% for all children, 64% for boys, and 72% for older children (Figure 23). Explanatory variables that were included in the model as potentially attributing for the improvements in stunting were those that changed positively in the same time period (2013-2018), these being: water and sanitation practices; food security; sleeping under a bednet; breastfeeding practices; maternal thinness; delivery in a health facility; and head of household education level.

Improvements in water, sanitation and hygiene were the most significant contributors to the reduction in stunting seen in Malawi from 2013-2018. Other improvements, such as improvements in antenatal care practices, also contributed to reductions in stunting. Figure 23: Decomposition analysis explains most of the changes in stunting over time



Joint efforts by the Government and development partners have contributed to children's improved nutritional status

58. Much of the improvement to children's nutritional status in Malawi can be attributed to concerted efforts by the Government and development partners. Malawi has long recognized the economic repercussions of stunting and in 2011 was the first country to join the Scaling Up Nutrition (SUN) initiative, a global movement that unites national leaders, organs of civil society, bilateral and multilateral organizations, donors, businesses, and researchers in a collective effort to improve nutrition. The Government of Malawi was a pioneer in Africa in the establishment of a high-level Department for Nutrition and HIV/AIDS (DNHA) under the president's office and the placement of nutrition officers in all relevant line ministries to promote multisectoral coordination for nutrition. To reduce poverty and food insecurity, the Government of Malawi has designated agriculture and nutrition as key national policy priority areas (MGDS 2006-2011, MGDS 2011-2016) and MDGS II promotes agricultural diversification. In 2012, Malawi implemented the six-year World Bank-supported CBN project as part of the larger Malawi Nutrition and HIV/AIDS Project. The CBN project included interventions aimed at improving Infant and Young Child Feeding (IYCF) practices and dietary intake among women and children; reducing infections through improved hygiene and prevention activities; and increasing the uptake and quality of care during pregnancy. With support from other development partners, the project's implementation framework has been replicated and scaled up to cover all districts in Malawi.

⁶ The surveys were conducted to evaluate the impact of the Support to Nutrition Improvement Component (SNIC) Project. 25 « MALAWI ECONOMIC MONITOR DECEMBER 2019

59. In 2018, the Government reviewed its National Multisector Nutrition Policy and developed the National Multisector Nutrition Policy and Strategic Plan (NMNPSP) to orient nutrition investments and programming in the period from 2018 to 2022. The NMNPSP details how relevant programs are to be implemented across Malawi, with a focus on five outcomes, as follows: (i) improved maternal nutrition and care; (ii) improved IYCF practices (outlined in the Infant and Young Child Nutrition Strategy 2009–2014); (iii) improved intake of essential micronutrients; (iv) prevention and treatment of common infectious diseases; and (v) improved management of acute malnutrition. At the district level, the implementation of the NMNPSP is led by various multisectoral coordination committees at the district, area, and village levels, with these committees including representatives from health, agriculture, education, and civil society organizations, to guide the implementation of activities down to the beneficiaries at the household level. Nutrition Focal Points sit at the district level to support the coordination of activities from each of these ministries and at various levels within the district. At the most decentralized level, the Village Nutrition Coordination Committee (VNCC) is responsible for establishing linkages with the Area Community Leaders Action for Nutrition (ACLAN) structure, which has been scaled up nationally and coordinates care group volunteers who are tasked with the responsibility for activities related to community sensitization and mobilization on nutrition (Pensulo, 2016; The Government of Malawi Department of Nutrition HIV and AIDS, 2018).

To further improve childhood nutrition, efforts should focus on maternal nutrition, and improving livelihoods and resilience amongst the poorest population groups to promote more diverse diets

60. The policy and program options to reduce stunting in Malawi require a multisectoral approach that includes both **nutrition-specific and nutrition-sensitive actions** (Ruel *et al*, 2013). While efforts to reduce stunting in Malawi over the last decade have yielded impressive results, there has been a decline in the pace in the reduction of stunting in the period from 2016 to 2018. Consequently, stunting continues to be one of Malawi's biggest development challenges. Addressing this challenge requires effective interventions that focus on the key determinants of stunting, particularly for the most affected population groups.

61. Nutrition-specific interventions can help to address the immediate determinants of fetal and child nutrition and **development**. These determinants include inadequate food and nutrient intake, poor feeding and parenting practices, and child morbidity (Ruel *et al*, 2013). These interventions are typically delivered through the health sector, but this can vary depending on how nutrition issues are structured in the political and governance system.

62. Nutrition-sensitive interventions, on the other hand, can improve the underlying determinants of fetal and child **nutrition**. These determinants include food security, adequate caregiving resources at the maternal, household and community levels, and access to health services and a hygienic environment (Ruel *et al*, 2013). Nutrition-sensitive interventions are typically delivered through sectors other than health while still striving to achieve nutrition goals and objectives.

63. Addressing household and community level determinants of stunting requires a multi-sectoral, gender sensitive approach. The rural Malawian population that is most vulnerable to stunting is heavily reliant on agriculture as their main source of livelihoods. Existing Government platforms such as Community-Based Childcare Centers (CBCC), Care Groups (CG), and networks should thus be enhanced to integrate and deliver a number of nutrition interventions that promote access to nutritious foods as a means of improving the quality of children's diets.

Proposed policy and program options to improve nutrition in Malawi

64. The proposed policy and program options to improve nutrition in Malawi are centered around two broad themes: 1) Interrupt the intergenerational transmission of stunting by prioritizing women's health and nutrition; and 2) Improve livelihoods and resilience to promote access to and consumption of diverse diets among young children, especially during the complementary feeding period. These are elaborated on below.

1) Interrupt the intergenerational transmission of stunting by prioritizing women's health and nutrition

65. To interrupt the intergenerational transmission of stunting, it is essential to reduce early marriage; to delay pregnancy among adolescents; and to ensure that women who do become pregnant do so with an optimal nutritional status that is sustained throughout pregnancy. As pointed out earlier, maternal height and body-mass index are strongly correlated with children's risk of stunting in Malawi (Osendarp *et al*, 2019). Moreover, the high prevalence of adolescent pregnancy perpetuates the intergenerational cycle of stunting. Almost a third (29 percent) of adolescents aged 15-19 have borne at least one child, contributing to Malawi's having one of the highest rates of adolescent fertility in Eastern

and Southern Africa (Figure 24). Pregnancy in adolescence halts the growth of the mother and contributes to short stature in adulthood (Rah et al, 2010), which in turn increases the risk of her children experiencing stunting, morbidity, and mortality throughout early childhood and beyond (Black et al, 2013).

66. Calorie and micronutrient deficits, including iron, folic acid, calcium, and iodine deficiencies, in pre-pregnancy and pregnancy contribute to adverse maternal and neonatal outcomes and to conditions that hinder optimal growth and cognitive development (Black et al, 2013). Given the demonstrated positive association between at least four ANC visits and child nutritional outcomes, it is critical to ensure that all women have access to high-quality ANC services that include nutrition interventions. One example of promoting social and behavioral changes related to diet and care prior to and during pregnancy, or amongst adolescents to interrupt intergenerational stunting, is the World Bank-supported Adolescent Nutrition Sensitive Agriculture Project. The project targets 6,000 adolescents, with one of its key objectives being to build life skills through the formation of girls-only and boys-only clubs.



Figure 24: Malawi has among the highest adolescent fertility rates in Eastern and Southern Africa

Source: Most recent Demographic and Health Survey (DHS)

Interventions to delay pregnancy and childbearing among adolescents

67. Culturally sensitive policies and programs that delay marriage and make family planning services more accessible, less costly, and of higher quality can help to promote lower rates of fertility. Actions that can support the scaling-up of family planning include: an expanded range of available forms of contraceptives; deploying an increased number of workers to make home visits to discuss and educate women and their partners on family planning; the provision of postpartum family planning programs; the ramping up of social marketing programs for family planning; and addressing quality concerns to reduce the high rate of discontinuation of family planning services. Since the provision of family planning services to adolescents can be challenging, youth-friendly centers could be used to provide family planning and reproductive health services in combination with life skills training. Other possible alternatives might include measures to enhance the enrollment and retention of adolescent girls in schools, particularly amongst poor population groups and in rural areas; and the promotion of women's empowerment through income-generating activities for out-of-school youths.

Interventions to ensure that women maintain optimal nutrition prior to and throughout pregnancy

68. Existing platforms that reach adolescents, such as schools and youth programs, should be leveraged to deliver nutrition interventions. The school system could be used to deliver various types of nutrition-specific and nutritionsensitive programming, such as school feeding, anemia control, deworming, skills-based health education programs, and others. In Malawi, where 29 percent of adolescents aged 15-19 have already begun childbearing (NSO, 2017), providing these adolescents with access to key nutrition services before or during pregnancy would contribute to improved outcomes for both the mother and the child. For pregnant women, it is critically important to scale up access to high quality antenatal care services and to promote their use from the first trimester of pregnancy to support improved nutrition among women. This is consistent with the evidence provided above that shows that antenatal care services are essential to promote healthy pregnancies and positive nutritional and other outcomes for both the mother and child. It is important for health service providers to ensure that nutrition services and education are included as a

component of the basic antenatal care package (including nutrition counseling, provision of micronutrient supplements, and management of complications for all pregnant women). Multi-level and culturally adapted messaging campaigns are also critical to driving community-level demand for antenatal care usage early in pregnancy, given the strong sociocultural norms around pregnancy in Malawi.

2) Improve livelihoods and resilience to promote access to and consumption of diverse diets among young children, especially during the complementary feeding period

69. Just over one in 10 of young children in Malawi currently consumes an adequate diet, as determined by a composite indicator that measures both meal frequency and diversity. This low level is the result of three interrelated factors, including widespread food insecurity; a lack of access to nutrient dense foods, especially in rural and remote areas; and inadequate feeding practices at the household level. In 2019, the Malawi Vulnerability Assessment Committee (MVAC) estimated that 1.06 million people (or 7 percent of the rural population) in Malawi would be food insecure during the 2019/20 consumption period. This high level of food insecurity negatively impacts dietary intake and nutritional status. Food security is defined as "physical and economic access to sufficient, safe, nutritious, and culturally acceptable foods to meet dietary needs" (FAO, 2006; World Bank, 2006).

70. The combination of widespread food insecurity and lack of dietary diversity among children requires solutions to address the root causes of food insecurity. This includes activities delivered through multiple sectors to promote food security, dietary diversification, and healthier environments for children. Investments delivered through the agriculture sector that support homestead farming by smallholder farmers and self-consumption are one means of improving the availability and consumption of diverse foods among women and children. The use of or leveraging of existing platforms and mechanisms such as community-based child care centers to deliver and promote nutritious foods, are another promising mechanism to promote the production and consumption of diverse foods among young children and pregnant women.

Improve livelihoods and resilience for the poorest segments of the population

71. Effective social safety nets are a powerful means to reduce poverty, strengthen resilience, and improve human capital outcomes, including nutrition (Ruel *et al*, 2013). The potential of social safety net programs is enormous in a context such as Malawi's, which not only experiences recurrent exposure to climatic and environmental shocks, but also high levels of food insecurity. Social safety net programs can improve income levels and access to food, and food availability and dietary quality at the household level (Ruel *et al*, 2013; World Bank, 2013). Social safety net programs can be used to create demand for health, education, or sanitation services through nutrition education and/or conditionalities. For example, conditionalities can promote the use of routine health and nutrition services, like immunizations and participation in growth monitoring. Increasing women's income and ensuring their control over that income has also been demonstrated to have a significantly greater effect on child nutrition and household food security than measures to increase income controlled by men (UNICEF, 2011). Simultaneously strengthening the supply of the services being promoted (health, nutrition, education, etc.), while targeting nutritionally vulnerable population groups, such as households with pregnant women and young children, can further maximize impacts on nutrition.

72. Despite Malawi's high rates of poverty and malnutrition, its current level of expenditure on safety net programs is roughly half the African average. This may largely be attributed to inadequate Government funding from domestic sources. Thus, Malawi's safety net program is heavily dependent on donor funding, which is not financially sustainable. Options to achieve more sustainable funding for safety net programs include: a reallocation of resources away from less effective poverty reduction initiatives; a redirection of humanitarian financing towards social safety net initiatives; or exploration of contingency or reserve financing mechanisms to make the safety net system more resilient and sensitive to shocks. To improve livelihoods and resilience for the poorest and most vulnerable population groups, the Government should mobilize more resources from domestic sources to sustain the social safety net system, while improving the mix of safety net programs to increase their efficiency and linkages between them. To maximize their impacts on nutrition outcomes, social safety nets need to be carefully designed and targeted to align them with other existing initiatives, strategies, and platforms.

Interventions to increase agricultural productivity and diversification

73. Well-designed, appropriately-implemented agriculture programs that take a nutrition-sensitive lens could result in both improved incomes and the increased consumption of nutritious foods, both of which could contribute to improved dietary quality (Ruel et al, 2018). Agriculture is the backbone of Malawi's economy, so it will be central both to increasing economic productivity and incomes and to reducing food insecurity. A recent analysis in Malawi shows positive linkages between agriculture diversification, household dietary diversity and livelihood resilience (Heumesser et

al, 2019). However, Malawi's agriculture sector is currently characterized by low levels of productivity, largely due to its dependence on a single rainy season, lack of diversification due to policies that incentivize monocropping, low soil fertility, significant post-harvest losses, and weak links to markets. The reliance on rain-fed agriculture creates a high level of vulnerability, particularly in the context of frequent weather shocks.

74. Nevertheless, nutrition-sensitive agriculture interventions could overcome many of these challenges and increase access to a more diverse range of foods among nutritionally vulnerable populations. These could include programs to promote homestead food production systems, home vegetable gardens, bio-fortified crops, small animal husbandry, livestock, fisheries, and dairy production, and improved access to markets. Agriculture programs that improve livelihoods and resilience to weather-related shocks and that enable households to minimize post-harvest losses could also play an important role in promoting increased food security. The Farm Input Subsidy Program (FISP) could be expanded to further promote agricultural diversity by ensuring that input vouchers are redeemable for a wide range of productive inputs, rather than focusing exclusively on maize (Heumesser *et al*, 2019). Gender-sensitive measures to increase income and income controlled by women, to reduce time and labor constraints, and to promote women's empowerment should be incorporated into agriculture programming, particularly given women's vital role in child feeding and care in Malawi.

Leverage existing platforms and mechanisms to promote production and consumption of diverse foods

75. Malawi is among the few countries in Africa that have made significant investments in the development of a national Early Childhood Development (ECD) program, with an extensive network of community-based childcare centers (CBCC). This network could serve as a platform for the delivery of interventions to improve the diets of young children. Over the past 30 years, the Government has invested in the development of an extensive network of CBCCs that now reaches 45 percent of the rural population (Twalibu *et al*, 2018). As discussed in Neumann *et al* (2014), the original purpose of CBCCs was to meet the needs of children who were orphaned and vulnerable as a result of the HIV and AIDS pandemic and who needed care and protection. The CBCCs have since evolved into rural pre-schools for children aged three to six years, with the centers intended to be self-sustaining, initiated, managed, and owned by the communities they serve. CBCCs are intended to provide a safe learning environment for children, with early development and learning opportunities that are meant to prepare them for formal schooling. A key feature of the CBCCs is the provision of a mid-morning porridge meal, which is prepared by parents using food that has been contributed by the community (Twalibu *et al*, 2018).

76. Targeted interventions to improve dietary diversity at the CBCC have improved nutrition outcomes among children who attend the centers and their younger siblings (Box 6) (Neuman et al, 2014). Despite the large number of CBCCs throughout Malawi, an evaluation led by the World Bank in 2011 found that half of the centers visited were closed, with a majority of these centers stating that the primary reason for their closure was a lack of food to provide to the children (Neuman et al, 2014). The implementation of an integrated agriculture and nutrition program (the Nutrition Embedded Evaluation Program, NEEP) in Zomba district demonstrated positive results in terms of the quality of meals provided at the centers, with improved dietary intake among children attending them and improved nutrition knowledge among caregivers (Box 6) (Gelli et al, 2018). These results show that CBCCs have the potential to serve as an important platform to improve nutrition among children. The World Bank-funded Investing in the Early Years Project, which commenced in August 2019, will contribute to increasing the availability and functionality of the centers, enabling them to play a significant role in improving nutritional outcomes.

77. International experience shows that child care centers can also play a significant role amongst even younger children and infants. Peru's *Cuna Mas* program used child care centers to deliver nutritional services, to improve the quality of children's diet, and to reduce stunting among children and infants of 0-3 years of age. The *Cuna Mas* program was established in 2012 to provide comprehensive child care services to vulnerable children below the age of three years. Child care centers have been used not only for the delivery of child care services, but also as an entry point to monitor growth; to conduct home visits to households with stunted children; and to conduct a nutrition program that specifically focused on improving the quality of food that children received at school (Marini *et al*, 2017).

Interventions to implement the Nutrition Education and Communication Strategy

78. Malawi's Nutrition Education and Communication Strategy (NECS) promotes optimal infant and young child feeding practices, including the use of locally and seasonally available foods to improve dietary intake among vulnerable and food insecure population groups (Pensulo, 2016). This strategy is a key resource for achieving sustained improvements to nutrition in the country. In 2011, Malawi became one of the first countries to join the Scaling Up Nutrition Movement. This action represented an important shift in nutrition programming in the country, with a shift from a curative approach

to a preventive approach that prioritizes nutrition education and communication (Pensulo, 2016). To accommodate this change, the NECS was developed in 2012 and intended to ensure that all messages and materials related to nutrition education and communication were harmonized and standardized. The NECS is comprehensive and well developed, embracing a multi-sector coordination effort to involve key sectors such as the ministries of agriculture, health, education, gender and community development, local government, finance, information, trade and industry, to address malnutrition in Malawi.

79. Implementation of the NECS requires further strengthening. For example, at present, community care groups who are the primary agents responsible for the delivery of messages related to nutrition to the community serve as volunteers. It is possible that their effectiveness could be enhanced through the development of a better incentive structure. Another issue that needs to be addressed is the fragmentation of funding for the rollout of the NECS, which has led to variations in implementation between districts. In addition, issues related to monitoring and accountability limit the flow of data from the community to the national level (Pensulo, 2016). Improving efforts to use and scale up the delivery of messages through the NECS could contribute to improved dietary intake among women and children. Finally, ensuring that donors fully align themselves around the NECS is critical to maximizing the effectiveness of their support. Limited donor alignment around national nutritional strategies like the NECS presents a risk to local ownership and commitment, and can create inefficiencies, high transaction costs, and duplication of efforts that hamper progress in nutrition outcomes (World Bank, 2016c).

Box 6: Impact of the Nutrition Embedded Evaluation Program (NEEP) on nutrient intake and child anthropometry in Zomba, Malawi

The Nutrition Embedded Evaluation Program (NEEP), which was piloted in a sample of CBCCs in Zomba district, demonstrated improvements in dietary intake both among targeted children as well as their younger siblings. The NEEP was intended to improve the diversity of household production and to increase levels of knowledge amongst mothers on issues related to child nutrition, feeding practices, and children's diets. The intervention provided training on specific issues related to agriculture and nutrition, with demonstrations (planting, processing, cooking) and the provision of inputs (seeds and chicks). Relative to the standard intervention group, communities participating in the NEEP saw improvements in dietary intake among children assisting CBCCs (Figure 25: Children assisting CBCCs receiving the NEEP), and linear growth of younger siblings (Figure 26).







These results demonstrate the potential of CBCCs to serve as a platform to fill important dietary gaps among children who attend the centers, and beyond. There are important spillover effects from this type of intervention, with the training of caregivers and community members having the potential to yield even greater impacts among younger children who are in a critical period of growth and development.

Data

Table 5 : Selected Macroeconomic Indicators

	2015	2016	2017	2018	2019
					Est.
National Accounts and Prices					
GDP at constant market prices (percentage change)	2.8	2.5	4.0	3.5	4.4
Agriculture	-2.0	-2.3	5.0	2.4	4.3
Industry	3.5	2.4	2.2	2.0	3.4
Services	4.7	4.4	4.0	4.3	4.8
Consumer prices (annual average)	21.9	21.7	11.5	9.2	9.3
Central Government (percent of GDP on a fiscal year basis)					
Revenue and grants	21.4	21.6	23.5	20.8	20.8
Domestic revenue (tax and nontax)	18.6	17.8	20.0	19.3	18.8
Grants	2.8	3.7	3.5	1.4	2.0
Expenditure and net lending	27.1	27.6	28.2	28.5	27.4
Overall balance (excluding grants)	-8.5	-9.8	-8.2	-9.2	-8.6
Overall balance (including grants)	-5.7	-6.1	-4.8	-7.8	-6.5
Foreign financing	2.5	1.9	2.5	2.5	1.1
Domestic financing	3.3	1.7	0.9	6.2	5.4
Amortization (zero coupon bonds)	0.8	2.5	1.3	-0.5	-1.4
Privatization Proceeds	0.0	0.0	0.3	0.0	0.0
Money and Credit					
Money and quasi money (percentage change)	23.7	15.2	19.7	11.4	12.8
Credit to the private sector (percent change)	29.9	4.6	0.4	11.5	13.7
External Sector (US\$ millions, unless otherwise indicated)					
Exports (goods and services)	1,616	1,502	1,675	1,852	1,993
Imports (goods and services)	2,346	2,569	2,606	2,709	2,771
Gross official reserves	670	605	757	790	777
(months of imports)	3.4	2.9	3.2	3.3	3.2
Current account (percent of GDP)	-9.2	-14.7	-11.3	-10.9	-10.0
Exchange rate (MWK per US\$ average)	499.6	718.0	730.3	732.3	-
Debt Stock					
External debt (public sector, percentage of GDP)	33.5	32.0	33.2	31.2	29.8
Domestic public debt (percentage of GDP)	20.9	23.6	24.5	28.6	32.6
Total public debt (percentage of GDP)	54.4	55.6	57.7	60.2	62.8
Poverty					
International Poverty rate (US\$ 1.9 in 2011 PPP terms)	69.5	70.3	69.7	69.5	68.7
Lower middle-income poverty rate (US\$ 3.2 in PPP terms)	87.7	89.4	89.2	89.1	88.8
Upper middle-income poverty rate (US\$ 5.5 in PPP terms)	95.8	96.7	96.7	96.6	96.5

Source: World Bank staff calculations based on MFMod, MoFEPD, RBM and IMF data

Table 6 : Key maternal and child health and nutrition indicators (DHS and CBN)

	2004	2010	2013	2015	2018		
	(DHS)	(DHS)	(CBN)	(DHS)	(CBN)		
Anthropometric and biometric indicators							
Prevalence of child stunting among children <5 years (%)	53.0	47.0	40.0	37.0	37.0		
Prevalence of child wasting among children <5 years (%)	6.0	4.0	3.0	3.0	2.0		
Prevalence of child underweight among children <5 years (%)	17.0	13.0	16.0	12.0	12.0		
Prevalence of low BMI (<18.5) among women of reproductive age (%)	9.2	8.8	ND	7.2	ND		
Proportion of women of reproductive age who are of short stature (%)	3.1	2.4	ND	2.8	ND		
Children under 5 years with anemia (%)	73.2	62.5	ND	62.6	ND		
Women of reproductive age with anemia (%)	44.3	28.9	ND	32.7	ND		
Infant and young child feeding practices indicators							
Proportion of children who are exclusively breastfed from 0-6 months	52.8	71.4	ND	61.0	ND		
Proportion of children who consume a minimum dietary diversity (MDD)	ND	27.9	ND	22.9	23.3		
Proportion of children who receive a minimum meal frequency (MMF)	ND	55.9	ND	29.2	49.7		
Proportion of children who receive a minimum acceptable diet (MAD)	ND	19.9	ND	8.1	12.4		
Antenatal care practices							
Proportion of pregnant women who attend ANC4+ (%)		45.5	52.7	52.7	53.1		
Proportion of women who took iron tablets or syrup (%)		91.2	ND	92.4	90.4		
Marriage and child bearing practices among adolescent girls							
Percentage of women age 20-49 who were married by age 20	73.3	75.0	ND	68.9	ND		
Proportion of women aged 15-19 who have had a live birth or who are pregnant (%)	34.1	25.6	ND	29.0	ND		

ND: No data

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The World Bank Malawi Office Plot 13/59 Off Presidential Way Mulanje House, City Centre P.O. Box 30557 Lilongwe 3 Malawi

Tel: +265 1 770 611 Fax: +265 1 770 158

Email: infomalawi@worldbank.org www.worldbank.org/malawi

The World Bank 1818 H Street, NW Washington, D.C. 20433 USA Tel: +1 202 473 1000 Fax: +1 202 477 6391 www.worldbank.org



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