MARCH 2022

MALAWI

COUNTRY REPORT

Prepared by
the Foundation for a Smoke-Free World

FOUNDATION FOR A SMOKE-FREE WORLD

Overview

The country report[1] below provides a high-level overview of the tobacco sector in Malawi. It opens with a brief description of large-scale changes in global tobacco production and their implications for Malawi, a key focus for the Foundation for a Smoke-Free World's (herein referred to as "the Foundation" or "FSFW") Agricultural Transformation Initiative (hereafter referred to as "the ATI"). The report then examines the lived experiences of smallholder tobacco farmers with an emphasis on their economic well-being, health, and environment. It then pivots to summarizing the in-country landscape in which a transition to alternative livelihoods must potentially take place. In doing so, the report simultaneously seeks to make a case for change while providing a multifaceted contextual window into the country's economic, agricultural, regulatory, operational, and political profile with a focus on the tobacco sector at large.

Changes on the Global Tobacco Production and their Impact on Malawi

In recent decades, global tobacco production has had notable year-to-year variations, although production has fallen from a peak of nearly 7.6 million tons in 2013 to 5.9 million tons in 2020 (Figure 1). Despite these variations, the long-term trend in global tobacco production appears to be flat. Global tobacco production remained between 5.5 and 7.6 million tons over the past two decades, with no discernible or statistically significant linear trend during this time (FAO 2022).[2]

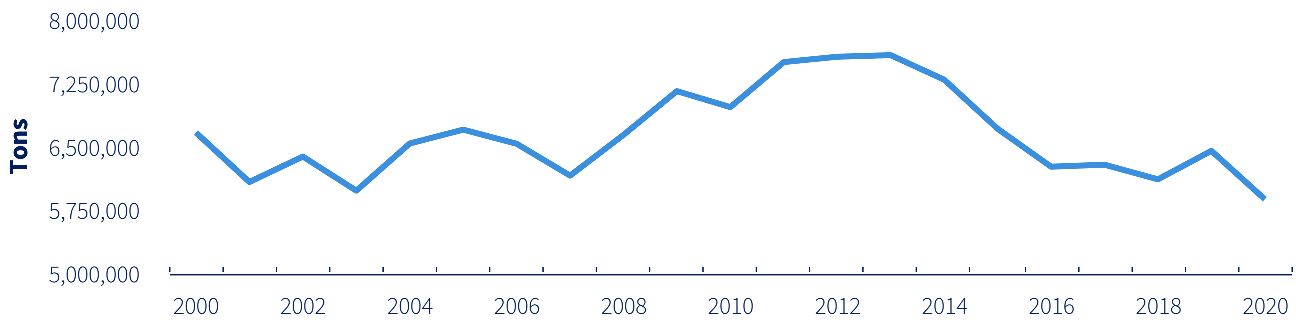


Figure 1: Global tobacco production in tons from 2000 to 2020.

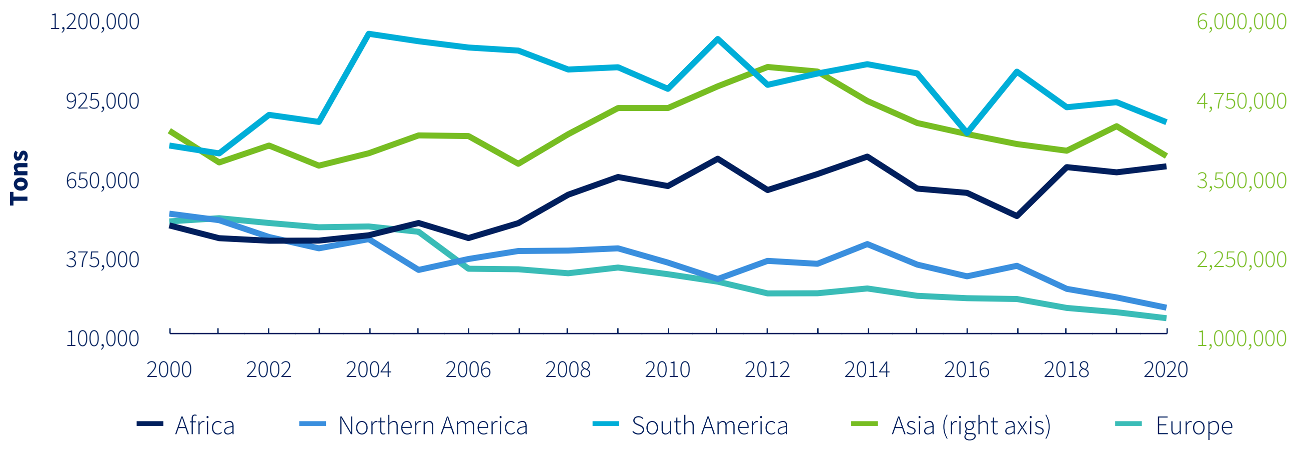
Source: FAOSTAT.

[1] The country report is a snapshot in time and will be updated regularly as the economic, political, regulatory, or sectoral situation evolves. It is a high-level contextual piece on Malawi, a key focus for the Foundation's ATI, and is by no means considered to be exhaustive.

[2] All tobacco production, harvest, and yield data by country and region used in this report refer to crop production data obtained from FAOSTAT, the statistical database of the Food and Agriculture Organization (FAO) of the United Nations. FAOSTAT obtains its data from FAO member countries through questionnaires, national publications, or country websites.

Analyzing global tobacco production at the level of regions, however, reveals a clear shift from high-income countries in Europe and North America to low- and middle-income countries in Africa, Asia, and South America in recent decades. Asia remains the largest producer of tobacco (Figures 2 and 3).

Figure 2: Trends in tobacco production in tons by region from 2000 to 2020.

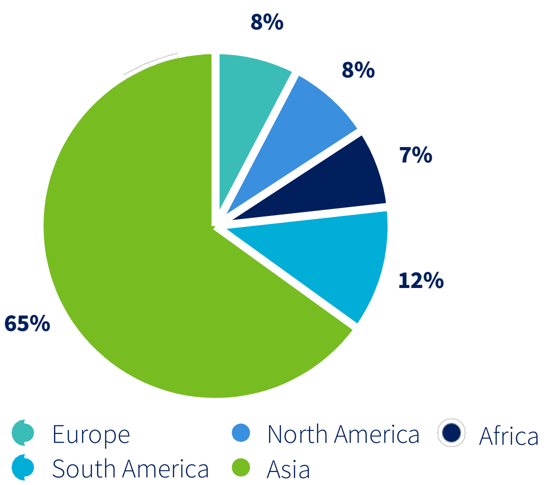


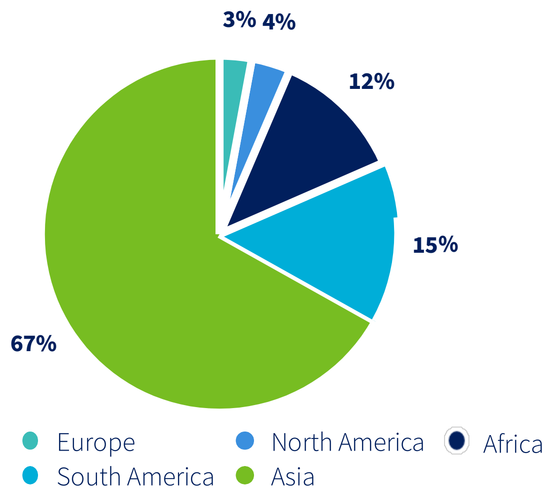
Source: FAOSTAT.

Between 2000 and 2020, tobacco production dropped from 503,604 tons to 167,579 tons in Europe and from 530,760 tons to 204,403 tons in North America. These changes reflect a nearly 67% and 61% decline, respectively, in tobacco production in both regions (FAO 2022). During the same period, tobacco production increased from 489,400 tons to 694,424 tons in Africa and from 766,959 tons to 847,988 tons in South America, representing approximately 42% and 11% rises, respectively (FAO 2022). Tobacco production decreased marginally from 4,264,487 tons to 3,865,185 tons in Asia during the same period.

These shifts are best illustrated by the shrinking share of tobacco production in Europe and North America and the growing share of tobacco production in South America and parts of Africa (Figure 3; FAO 2022).

Figure 3: The percentage of global tobacco production by region in 2000 (left) and 2020 (right).[3]





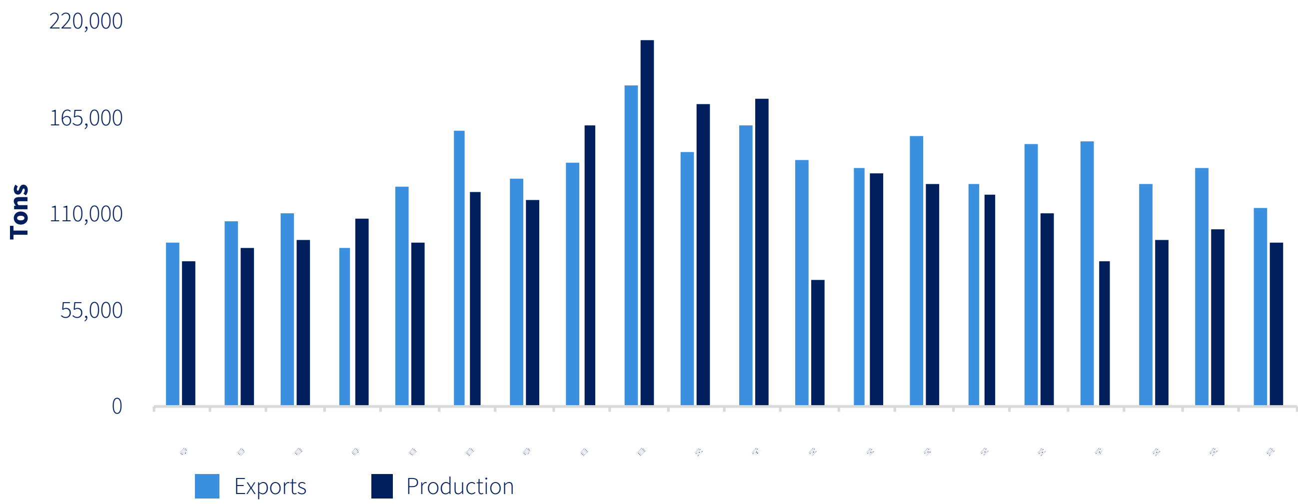
Source: FAOSTAT.

[3] Asia includes Oceania, Australia, and New Zealand.

These increases in tobacco production have been largely driven by China, Brazil, and sub-Saharan Africa (the contribution of the United States has fallen over time, although still ranked as the sixth largest global producer). In 2020, sub-Saharan Africa was home to five of the top tobacco-producing countries in the world, including Zimbabwe (4th), Mozambique (7th), Malawi (10th), and Tanzania (11th) (FAO 2022). The impact of these shifts is particularly pronounced in these countries, with tobacco constituting a major cash crop and ostensibly providing much-needed fuel for their economies.

In 2019, tobacco exports accounted for 55.6% of total merchandise exports in Malawi ($584 million USD) (OEC 2019), rendering Malawi one of the most – if not the most – economically tobacco-dependent country in the world. Such figures are often cited as one of the reasons why Malawi has likely been a prominent opponent of tobacco control globally and has not acceded to or ratified the World Health Organization's Framework Convention on Tobacco Control (Wisdom 2018). Based on the Foundation's internal analyses, Malawi's tobacco sector is best characterized as a "grower-exporter" – meaning that it exports the vast majority of the unmanufactured tobacco it produces (Figure 4) and does so in excess of any tobacco imports. In 2020, Malawi exported approximately 112,439 tons (more than it produced during the year), primarily to countries in Europe (such as Belgium, Luxembourg, Germany, Poland), Russia, and the United States, a 22% decrease in exports since 2018 (FAO 2022).

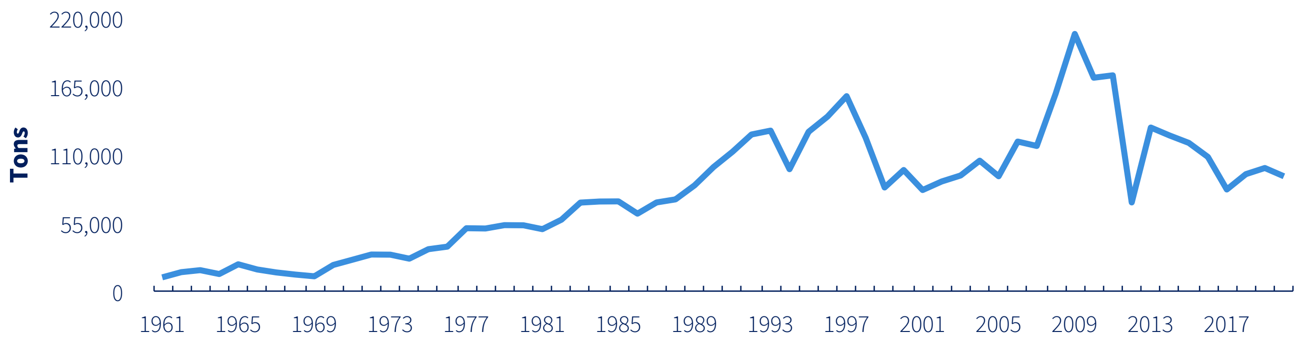
Figure 4: Tobacco production (dark blue) versus exports (light blue) in Malawi from 2001 to 2020.



Source: FAOSTAT.

Increases in tobacco production over time in Malawi have been driven by the expansion of cultivated area and improvements in yield, peaking in 2009 with the production of 208,155 tons of tobacco before falling back to previous levels of around 94,000 tons in 2020 (FAO 2022). Although production in any given year has fluctuated, likely because of external forces such as changes in market conditions and weather patterns, the overall trends in cultivated area and yield have been upward, with a slight decline over the past year. Between 1961 and 2020, the total amount of land used for tobacco production grew more than two-fold from 41,763 to 94,769 hectares (ha) and yield similarly increased from 2,922 to 9,878 hectograms per hectare (hg/ha).

Figure 5: Tobacco production in Malawi from 1961 to 2020.



Source: FAOSTAT.

The Tobacco Sector in Malawi

Malawi has a long history of tobacco production for commercial purposes, traceable to the early 1890s (UNCTAD 2011). Six varieties of tobacco are grown in Malawi, with burley tobacco being the most common and constituting the vast majority of total tobacco produced (UNCTAD 2011, Fraym 2019). In 2020, burley tobacco comprised 83% of tobacco produced while flue cured comprised 14% (Reserve Bank of Malawi 2021). Commercialization of the crop took a prominent role in the colonial economy and became even more central after independence in 1964 as a primary source of wealth, patronage, employment, and foreign exchange (Shah 2020).

Early on, production was carried out by large estates, often restricted to an elite cadre of growers (Jaffee 2003). These farmers were permitted to sell their tobacco to international buyers at officially recognized local auctions (Jaffee 2003). Smallholder farmers, in contrast, were restricted in the varieties they could grow, and their sales were often limited to government agencies at far below market prices (Jaffee 2003). Such laws and regulations codified a system in which smallholder tobacco farmers were structurally disadvantaged from the very beginning of the development of the tobacco industry in the country. Accordingly, most of the opportunities for smallholders to participate in the sector at that time were tenant, laborer, or other subordinate positions on an estate.

It was only in the mid-1990s[4] that smallholder farmers were able to engage the tobacco sector more earnestly (FAO 2015). Since then, tobacco production in Malawi has become dominated by smallholder farmers, who supply most of the country's tobacco (Jaffee 2003, FAO 2015).

It is worth noting that smallholder farmers, however, represent simply the first link in the tobacco value chain in Malawi. They are concentrated primarily in central and northern Malawi (Fraym 2019). The majority of them grow tobacco under contract with leaf-buying firms (Fraym 2019). In 2021, nearly 86% of tobacco was sold through the contract system while nearly 14% was sold via the auction system (RBM 2021). To help ensure quality, market coordination, and aggregation at harvest, the firms typically encourage farmers to join clubs of 10 to 30 farmers. These clubs allow for institutional access, collective action, economies of scale, and supporting networks such as tobacco auction and extension services (Negri 2008).

[4]When the government opened the tobacco sector in 1989, smallholder farmers with rented land remained excluded from substantive participation in the sector.

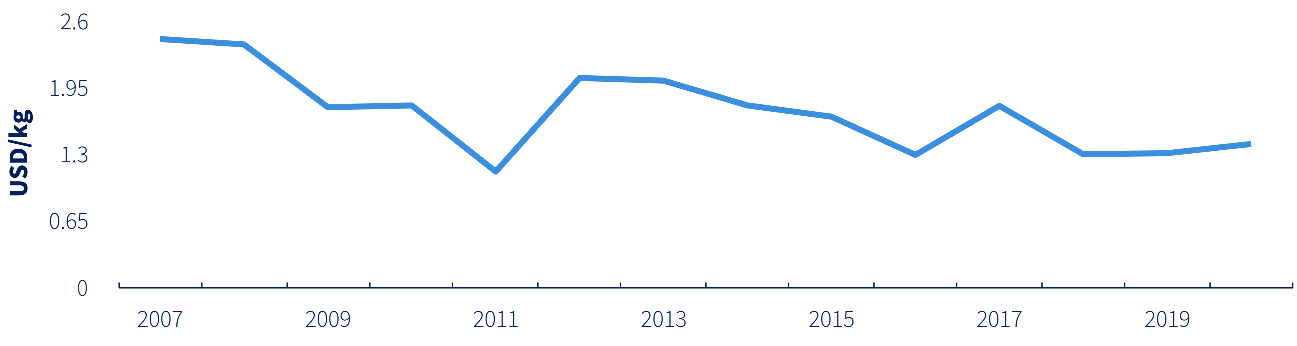
In 2013, the tobacco industry adopted an integrated production system (IPS) that involves establishment of contractual obligations between growers and merchants for production and marketing of tobacco in a sustainable manner (Mantchombe 2015). Through the contractual arrangements farmers access inputs loans, extension services, and an assured market at the end of the growing season (however, there are often no guarantees on the price). IPS has helped farmers to double tobacco yield and maintain compliance with global tobacco marketing requirements such as seed integrity and traceability as well as management of child labor involvement in tobacco production. However, some farmers have complained about unclear contractual agreements and overpriced inputs (Mantchombe 2015). Many farmers have opted into the contractual arrangements because it is otherwise difficult to access banking and credit facilities, among other reasons.

The market can be best described as one with high seller concentration and low buyer concentration, resulting in a monopsonistic dynamic (Makoka 2017). Farmers, therefore, are likely have less bargaining power in setting prices at auctions. The involvement of private companies became possible only following liberalization in the 1990s. Buyers of tobacco leaf include companies such as Limbe Leaf, Alliance One, Japan Tobacco International, Premium TAMA, Associated Tobacco Company, and Malawi Leaf Company (UNCATD 2011).

Based on recent data, several insights come into sharp relief. First, although tobacco continues to be a major crop and comprises between 12% and 15% of the country's gross domestic product (GDP) (Tobacco Commission 2021), the number of tobacco farms have decreased from nearly 400,000 to a little under 178,000 in 2019 (Wineman 2021).[5] Second, tobacco's contribution to the total value of crop production has decreased from 39% in 2004 to 18% in 2019 (Wineman 2021).

Malawi is ready to diversify its agriculture, and a 2016 study showed that only 25% of Malawian farmers were satisfied with the prices they received in 2014, and 41.3% have considered switching to alternative crops (Fraym 2019). Tobacco farmers are struggling, with producer pricing becoming hard to predict and recently hitting new lows (Figure 6). Considering these dynamics, the government appears keen to reduce its overreliance on tobacco, as evidenced by its explicit focus on diversification and sustainable agricultural transformation in Malawi's key policy frameworks, including the Malawi 2063 and other initiatives.

Figure 6: Burley Average Auction Price (USD) in Malawi, 1999-2021.



Source: National Statistical books (various years) and Tobacco Commission of Malawi.

[5] Data from the Integrated Household Survey.

The Lived Experience of Tobacco Farmers

Given the shifts in global tobacco production and the pronounced effects that they have had on the tobacco value chain in Malawi, it is important to understand the lived experiences of smallholder tobacco growers in the country. A closer look reveals that they are arguably often the least compensated and most disadvantaged link in the tobacco value chain, with existing practices often taking a toll on their economic well-being, health, and environment.

Economic well-being

Despite some claims that tobacco farming provides a ladder out of poverty for individuals, the empirical evidence suggests otherwise (Hu 2015, Lepan et al 2014). The challenges these farmers face negatively affect their economic well-being, health, and environment.

Specifically, many smallholder farmers operate under contracts in which tobacco buyers provide necessary inputs of tobacco farming (e.g., fertilizer, pesticide, seeds, extension, among others) in exchange for the right to purchase their harvest. Such arrangements allow buyers to circumvent the risks of land ownership – along with its associated disputes and supervision – while exerting substantial control over the inputs, access to credit, and purchase price of the resulting leaf (Otañez 2014). As a result, farmers themselves are often forced to reside on thin margins (Lepan et al 2014, Kibwage 2009, Fraym 2019). For many, once the costs of their labor and loans are factored into the equation, their income becomes ultimately negativeand they become trapped in a cycle of perpetual debt to the buyer, whereby they have no reasonable economic choice other than to continue contract tobacco farming to ensure some cash flow and subsistence (Kibwage 2009, WHO 2014, Otañez 2014). Indeed, even though the economy of Malawi is arguably predicated on tobacco farming as illustrated above, the overall poverty rate is 50.7% (2019/2020) and the poverty rate in rural areas, where most Malawians reside, is even higher at 57% (World Bank 2021, IMF 2021).

It is also important to note that the effects of tobacco farming are not limited to the heads of the household. Producing tobacco is labor intensive. Significant manual work is required to prepare the land, plant the seeds, water the plants, and apply fertilizers and pesticides as well as harvest, cure, transport, and pack the resulting leaves (Hu 2014). As a result, children are often called upon to work on smallholder tobacco farms. In a 2015 National Child Labor Survey, Malawi reported that 38% of children between 5 and 17 years of age are involved in child labor activities (International Labour Organization 2017).

Health

Further, a disproportionate number of countries that grow tobacco have high levels of malnutrition and undernourishment. This correlation has become all the easier to discern in recent years as production has shifted to low- and middle-income countries. In sub-Saharan Africa, for instance, several countries – including Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe – are global leaders in tobacco production. All of them except for Zimbabwe have high prevalence of growth stunting, thought to be secondary to malnutrition and undernourishment (World Bank 2020a). In Malawi, specifically, more than one of every three children under age five is stunted according to the country's Demographic and Health Survey (NSO 2017).

Environment

The environmental risks associated with tobacco farming are particularly pronounced in low income countries like Malawi. A review of the literature revealed that tobacco farming contributes to deforestation and soil degradation (Lecours 2012). These are the results of both suboptimal land-clearing practices as well as runoff of fertilizers and pesticides. Between 1990 and 2007, for instance, Malawi lost 13,400 ha of land to tobacco farming (Zafeiridou 2018). Deforestation is estimated to be responsible for "33,0000" ha of land lost per year, and is mainly attributed to agriculture, tobacco growing, and excessive use of biomass (Ngwira 2019). It has a severe impact on food security and rural livelihoods, especially in developing countries where arable land is diverted away from growing food as well as soil degradation and climate change.

Key takeaways

Smallholder farmers occupy the lowest-valued component of the tobacco value chain. As the most vulnerable link in the value chain, farmers are frequently forced to grow tobacco at their own expense, literally and figuratively. Contract farming arrangements with major tobacco buyers often leave many smallholder farmers in poverty and some in perpetual debt. Their surrounding environment suffers as a result of deforestation and soil degradation. The collective impact of growing tobacco on the lived experiences of smallholder farmers and their families thus underscores the need to find alternative crops or livelihoods.

The Broader Macroeconomic, Operational, and Political Landscape in Malawi

Catalyzing a shift toward alternative livelihoods depends on farmers' viability for generating stable incomes relative to the perceived certainty of tobacco earnings. This means having in place a conducive economic, regulatory, and political environment that enables the profitability and adoption of new and alternative technologies, livelihoods, and overall, more vibrant and growing local economies.

The remainder of this report provides a brief and high-level overview of the economic, regulatory, and political environment in Malawi. It concludes by highlighting salient elements of each and their implications for the country's outlook at the time of writing.

Economic Overview

Malawi is land-locked and one of the most densely populated countries in sub-Saharan Africa. According to the United Nations' Human Development Index, Malawi ranks 174 out of 189 countries, with a score of 0.483[6] placing the country in the low human development category (see Table 1). Levels of undernutrition and malnutrition are high and life expectancy stands at a modest 64.3 (see Table 1). These constraints, among others, have placed an intrinsic limit on the country's land and labor productivity and economic growth to date.

The country's political woes – primarily in the form of corruption, institutional weakness, and lack of consistent policies have constrained its economic performance (see section on "Political Environment"). Coupled with its relatively poor infrastructure, dependence on external donors, sensitivity to external shocks

[6] The HDI was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone. Every year the United Nations ranks countries and the resulting composite statistic index is a measure of average achievement in key dimensions of human development.

and overreliance on the agriculture and the tobacco/tea sector, its economy has experienced significant volatility in recent years, underscoring the need for structural reforms to achieve diverse and sustainable economic growth.

A closer examination of the country's economic trajectory brings two key themes into stark relief.

First, Malawi is highly dependent on rainfed agricultural sector (Geirtz 2015). About 80% of Malawi's population depends primarily on agriculture for its livelihood, which in turn has a significant impact on poverty reduction and macroeconomic growth. Given the sector's size and contributions, the country has appropriately prioritized the review and development of agriculture through numerous policy frameworks.

Maize is the staple food in Malawi, so food security is often interlinked with or defined by the availability and accessibility of maize. Maize is grown by virtually all smallholder farmers and ranks first in terms of total area of crop harvested, and second in terms of amount of crop produced. To address the country's current maize deficit, the government has subsidized seed varieties and fertilizers (Giertz 2015). This emphasis also broadly hints at an ironic conundrum for the country – despite the size of its agriculture sector as illustrated above, a sizable population perpetually face food deficits, including of maize, which is a staple food for the country.

Malawi's dependence on agriculture for income growth and food security, however, leaves it particularly vulnerable to forces beyond its control, such as adverse weather conditions, droughts, pests, and fluctuations in global commodities prices.

Second, Malawi is highly dependent on inflows of economic assistance from international institutions such as the International Monetary Fund (IMF), the World Bank, and donor nations (USDS 2015). The revelation of a high-level corruption scandal in September 2013 reportedly resulted in an abrupt halt of such financing between 2013 and 2016 (USDS 2015, AIDDATA 2014).[7] The economy was markedly affected as a result, but the country has managed to secure international assistance (eNCA 2017). In 2020, Malawi's government cancelled the extended credit facility with the IMF amidst changes in the policy direction by the new government. The new extended credit facility arrangement has not yet been agreed upon because of the outstanding case of potential misreporting of the 2018 foreign exchange reserves and improvements in the frequency and quality of data reporting (IMF 2021).

Further, the economy has been severely affected by the COVID-19 pandemic. The pandemic and government expansionary policies contributed to the country's fiscal deficit. This resulted in domestic debt that increased to 37% (2019-2020 fiscal year) of the country's GDP (Ministry of Finance 2020). The growing debt crowds out private sector investment and hinders medium-term economic prospects. Foreign direct inflows, for instance, decreased from $822 million USD in 2019 to $98 million USD in 2020 (UNCTAD 2021).

The country's economic growth has been predictably modest over time, but strained by economic hardships stemming from the pandemic. Real GDP growth is projected to pick up to 2.2% in 2021 from 0.9% in 2020 due to increased agricultural output driven by an improving global economic outlook. Growth in industry and service sectors has remained weak, largely because of structural constraints.

Malawi will remain dependent on external foreign aid to meet its financing needs and is focused on securing loans from the IMF in early 2022. Policies in the near term will be focused on supporting economic growth while subsequently tackling public discontent over growing economic hardships and poor vaccine rollout (EIU 2022). The recently released Malawi 2063 will guide growth in the medium to long term, with a focus on

[7] Malawi has not fully recovered from the $32 million USD cashgate scandal. The scandal as well as general concerns over fiscal laxity prompted an initial halt in budget support from key donors including the IMF and World Bank.

agriculture production and commercialization, urbanization and industrialization, infrastructure development, agricultural production, and private sector-led initiatives to transform Malawi into a self-reliant industrialized upper middle-income economy (NPC 2020).

Operating Environment

Despite its political and economic constraints, Malawi outperformed its regional neighbors in terms of ease of doing business. It was ranked 109 of 190 countries in terms of ease of doing business in 2020, notably better than other sub-Saharan African countries such as Mozambique (138), Tanzania (141), and Zimbabwe (140) (World Bank 2020f).

The relative strength of its ranking reflects significant improvements in the business environment in recent years. Specifically, and among other drivers, the country has successfully strengthened its access to credit by adopting a World Bank-supported law on secured transactions that establishes a centralized, notice-based, and online collateral registry (the high cost of loans, limiting access to finance, is a major problem in Malawi). However, substantial challenges to improving the business environment remain.

First and foremost, corruption continues to complicate investment in the country. Transparency International's Corruption Perceptions Index ranked Malawi 110th of 180 countries in 2021, with a score of 35, reflecting the fact that corruption likely remains endemic (TI 2021). Second, red tape and bureaucratic delay characterize several sectors (USDS 2015). Third, and of concern for those involved in the agricultural sector, there are several regulatory and transactional hurdles particularly associated with having secure land tenure (Shah 2020). Fourth, even after an investment has been implemented, obtaining skilled and semi-skilled labor remains a challenge given that most of the country's labor pool is unskilled or low-skilled. To mitigate these challenges and attract investment, Malawi has introduced a raft of initiatives to help investors navigate regulations and procedures.

Political Environment

Malawi secured independence in 1964, and its political landscape, while rife with fault-lines and shortcomings, has maintained a relative degree of stability. Its greatest upheaval came in the early 1990s when, under intense pressure from local activists and international donors, one-party rule under President Kamuzu Banda gave way to multiparty democracy. Since then, the country has held six multiparty presidential and parliamentary elections. Elections have typically been free, with an established electoral process, but not all observers consider them to be fair or fully credible. The elections are often characterized by ethnic-identity politics and patrimonialism as opposed to robust debate over governing philosophy, ideology, and policy. The result has been a lackluster democracy built upon relatively weak institutions.

Malawi's struggles with democracy are likely to continue as long as power remains concentrated in the office of the president and the country's legislature remains relatively weak, resulting in a dynamic that effectively undercuts any legitimate system of checks and balances. The current president, Dr. Lazarus Chakwera, has been in office since mid-2020 and will likely remain till the next parliamentary elections, scheduled to be held in 2025. However, he faces friction within the nine-party ruling alliance and a growing public perception that the government is failing to meet its election promises, as underscored by protests toward the end of 2021 (EIU 2022). Political stability could be undermined by a potential food, healthcare, and economic crisis.

Conclusions

In recent decades, global tobacco production has undergone significant changes. Chief among these has been a shift in tobacco production from high-income countries in Europe and North America to low- and middle-income countries in Africa, Asia, and South America. The effects of this shift have been particularly pronounced in sub-Saharan Africa in countries like Malawi, which is arguably home to the most tobacco-dependent economy in the world and therefore is a focus of the Foundation's Agricultural Transformation Initiative.

A closer look at the tobacco value chain within Malawi reveals that smallholder tobacco farmers are often the most disadvantaged and vulnerable link in the chain, with tobacco production often coming at their expense, literally and figuratively. Moreover, day-to-day work and exposures associated with tobacco farming are harmful to the health of those who carry it out as well as to the surrounding environment. Collectively, such observations underscore the extent to which the existing value chain harms the economic well-being, health, and environment of smallholder tobacco farmers and helps make the case for shifting away from tobacco dependence, particularly as the global demand for tobacco declines.

Bringing about such a shift, however, requires an understanding of the macroeconomic, policy, and political landscapes in Malawi, given that risks in these spheres can hinder the adoption of even the most technically efficient, economically sound, and farmer-friendly alternatives for diversification.

At present, it appears that the seeds of political will to shift away from tobacco dependence exist but will need significant nurturing through demonstration of evidence-based and sustainable interventions underpinned by science, technology, and innovation. Moreover, the existence of a simple alternative or single catalyst for such a shift is unlikely. It is difficult to envision that the solution may, for instance, be found in substituting one crop, such as maize or soya, for another. Instead, an array of alternative, sustainable, and investment-friendly crops, livestock, and other sources of livelihoods will be needed, and change is likely to be gradual and incremental.

Ultimately, the success of these livelihoods will depend on addressing the many structural obstacles currently facing the economy in general and the agricultural sector, including limited access to inputs, barriers to reliable financing and sustainable investments, deficits in infrastructure, creation of markets for alternative high-value crops and gaps in knowledge, policy, and institutional capacity (Keyser 2007).

References

AIDDATA. (2014). Donor dependence, donor withdrawal: implications of Malawi!s Cashgate scandal. https://www.aiddata.org/blog/donor-dependence-donor-withdrawal-implications-of-malawis-cashgate-scandal. Published February 14, 2014. Accessed March 8, 2022.

eNews Channel Africa (eNCA). (2017). World Bank resumes aid to impoverished Malawi. https://www.enca.com/africa/world-bank-resumes-aid-to-impoverished-malawi. Published May 6, 2017. Accessed March 8, 2022.

Food and Agriculture Organization of the United Nations. (2022). Food and agriculture data. https://www.fao.org/faostat/en/. Accessed March 8 2022.

Food and Agriculture Organization of the United Nations. (2015). Review of Food and Agricultural Policies in Malawi. Country Report 2014. https://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/448014/. Published 2015. Accessed March 8, 2022.

Fraym. (2019). Insights Into the Current Tobacco Farming Landscape in Malawi. https://www.fraym.io/wp-content/uploads/2019/02/Fraym-Report_Foundation-for-a-Smoke-Free-World-compressed.pdf. Published January 2019. Accessed March 8, 2022.

Giertz A, Caballero J, Galperin D, Makoka D, Olson J, German G. (2015). Malawi: Agricultural Sector Risk Assessment. World Bank Group Report Number 99941-MW. https://documents1.worldbank.org/curated/en/802281467999353954/pdf/99941-WP-P148140-Box394838B-PUBLIC-TAPMalawi-ASRA-WEB-01072016.pdf. Published December 2015. Accessed March 8, 2022.

Hu TW, Lee AH. (2015). Tobacco control and tobacco farming in African countries. *J Public Health Policy*. 2015;36(1):41-51. doi: 10.1057/jphp.2014.47.

International Labour Organization. (2017). Malawi: 2015 National Child Labour Survey Report. https://www.ilo.org/ipec/Informationresources/WCMS_IPEC_PUB_29055/lang--en/index.htm. Published March 17, 2017. Accessed March 9, 2022.

International Monetary Fund (IMF). (2021) IMF Staff Country Reports. Malawi: 2021 Article IV Consultation—Press Release; Staff Report; and Statement by the Executive Director for Malawi. IMF Country Report No. 21/269. https://www.imf.org/en/Publications/CR/Issues/2021/12/17/Malawi-2021-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-511105. Published December 20, 2021. Accessed March 9, 2022.

Jaffee S. (2003). Malawi!s tobacco sector: standing on one strong leg is better than on none. Africa Region Working Paper Series; No 55. Washington, DC: World Bank. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/505031468757241265/%20malawis-tobacco-sector-standing-on-one-strong-leg-is-better-than-on-none. Published June 1, 2003. Accessed March 9, 2022.

Keyser JC. (2007). Crop substitution and alternative crops for tobacco. http://www.cittadeltabacco.it/wp-content/uploads/2012/09/keyser_study.pdf. Published February 2007. Accessed March 9, 2022.

Kibwage JK, Odondo AJ, Momanyi GM. (2009). Assessment of livelihood assets and strategies among tobacco and non tobacco growing households in south Nyanza region, Kenya. *Afr J Agric Res*. 2009;4(4):294-304.

Lecours N, Almeida GE, Abdallah JM, Novotny TE. (2012). Environmental health impacts of tobacco farming: a review of the literature. *Tob Control*. 2012;21(2):191-196. doi: 10.1136/tobaccocontrol-2011-050318.

Makoka D, Drope J, Appau A, et al. (2017). Costs, revenues and profits: an economic analysis of smallholder tobacco farmer livelihoods in Malawi. *Tob Control*. 2017;26(6):634-640. doi: 10.1136/tobaccocontrol-2016-053022.

Mantchombe MK, Msango SKR, Chamango AMZ, Gomonda RWJ, Khumbanyiwa AG. (2015). The integrated tobacco production system (IPS) model: opportunities, challenges and future prospects for Malawi. https://www.coresta.org/sites/default/files/abstracts/2015_AP12_Mantchombe_0.pdf. Published 2015. Accessed March 9, 2022.

Ministry of Finance, Republic of Malawi. (2020). Annual Public Debt Report for the 2019/2020 Financial Year. https://www.finance.gov.mw/index.php/our-documents/debt-aid. Published September 2020. Accessed March 9, 2022.

National Planning Commission (NPC). (2020). Malawi Vision 2063 . https://malawi.un.org/sites/default/files/2021-01/MW2063-%20Malawi%20Vision%202063%20Document.pdf. Published 2020. Accessed March 9, 2022.

National Statistical Office of Malawi and ICF (NSO). (2017). Malawi Demographic and Health Survey 2015-16. Zomba, Malawi, and Rockville, MD: NSO and ICF; 2017. https://www.dhsprogram.com/publications/publication-fr319-dhs-final-reports.cfm. Published February 2017. Accessed March 9, 2022.

National Statistical Office of Malawi. (2018). 2018 Statistical Yearbook. http://www.nsomalawi.mw/index.php?option=com_content&view=article&id=41&Itemid=95. Published 2018. Accessed March 9, 2022.

Negri M, Porto GG. (2008). Burley tobacco clubs in Malawi: nonmarket institutions for exports. Policy research working paper 4561. The World Bank Development Research Group; 2008. https://documents1.worldbank.org/curated/en/974911468301577299/pdf/wps4561.pdf. Published 2008. Accessed March 9, 2022.

Ngwira S, Watanabe T. (2019). An analysis of the causes of deforestation in Malawi: a case of Mwazisi. *Land*. 2019;8(3):48. https://doi.org/10.3390/land8030048

Observatory of Economic Complexity (OEC). (2019) Malawi country profile, 2019. https://oec.world/en/profile/country/mwi. Accessed March 9, 2022.

Otañez M, Graen L. (2014). Gentlemen, why not suppress the prices?: Global leaf demand and rural livelihoods in Malawi. In: Leppan W, Lecours N, Buckles D, eds. *Tobacco Control and Tobacco Farming: Separating Myth From Reality*. London, UK: Anthem Press; 2014:61-95. https://www.anthempress.com/development-studies/tobacco-control-and-tobacco-farming-pdf. Published September 2014. Accessed March 9, 2022.

Reserve Bank of Malawi. (2021). Report and Accounts for the Year Ended 31st December 2020. https://www.rbm.mw/Publications/AnnualReports/. Published August 24, 2021. Accessed March 9, 2022.

Shah R, Ferguson R, Khonje M. (2020). The Past, Present, and Future of Land Use in Malawi: A Background Review. MwAPATA Institute working paper no. 20/07. https://www.mwapata.mw/_files/ugd/dd6c2f_e89ce6d684ba4c7ab54288a6a165e8fb.pdf?index=true. Published November 2020. Accessed March 9, 2022.

The Economist Intelligence Unit (EIU). (2022). Malawi country report. https://store.eiu.com/product/country-report/malawi. Published 2022. Accessed March 9, 2022.

Tobacco Commission. (2021). Demand of Malawi's tobacco intact –Tobacco Commission. https://www.tccmw.com/TCCCC/demand-for-malawis-tobacco-intact-tobacco-commission/. Published November 23, 2021. Accessed March 9, 2022.

Transparency International (TI). (2020). Corruption perceptions index: Malawi 2020. https://www.transparency.org/en/cpi/2021. 2020. Accessed March 9, 2022.

United Nations Conference on Trade and Development (UNCTAD). (2011). Competition Issues in the Tobacco Industry of Malawi. https://unctad.org/system/files/official-document/ditcclp2011d5_en.pdf. Published 2011. Accessed March 9, 2022.

United Nations Conference on Trade and Development (UNCTAD). (2021). World Investment Report 2021 – Investing in Sustainable Recovery. https://unctad.org/system/files/official-document/wir2021_en.pdf. Published 2021. Accessed March 9, 2022.

United National Development Programme (UNDP). (2020a). Human development reports. Latest human development index ranking. https://hdr.undp.org/en/content/latest-human-development-index-ranking. Accessed March 8, 2020.

United Nations Development Programme (UNDP). (2020b). Human development reports – Table 5: Gender Inequality Index. https://hdr.undp.org/en/composite/GII. Accessed March 9, 2022.

United States Department of State (USDS). (2015). Investment Climate Statement – Malawi 2015. https://2009-2017.state.gov/documents/organization/241857.pdf. Published May 2015. Accessed March 9, 2022.

Wineman A, Chilora L, Jayne TS. (2021). Trends in tobacco production and prices in Malawi. MwAPATA Institute policy brief no. 9. https://www.mwapata.mw/_files/ugd/dd6c2f_7aff30ee919847ddb39ceb7a947a3a73.pdf?index=true. Published May 2021. Accessed March 9, 2022.

Wisdom JP, Juma P, Mwagomba B, et al. (2018). Influence of the WHO Framework Convention on Tobacco Control on tobacco legislation and policies in sub-Saharan Africa. *BMC Public Health*. 2018;18(Suppl 1):954. doi: 10.1186/s12889-018-5827-5.

World Health Organization (WHO). (2014). Economically sustainable alternatives to tobacco growing (in relation to Articles 17 and 18 of the WHO Framework Convention on Tobacco Control). Report by the Working Group, Conference of the Parties to the WHO FCTC Sixth Session. Moscow, Russian Federation; 2014. https://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_12-en.pdf. Published 2014. Accessed March 9, 2022.

World Bank. (2016). Maternal mortality ratio (national estimate, per 100,000 live births) – Malawi, 2016. https://data.worldbank.org/indicator/SH.STA.MMRT.NE?locations=MW. Published 2016. Accessed March 9, 2022.

World Bank. (2019). Life expectancy at birth, total (years) – Malawi, 2019. https://data.worldbank.org/indicator/SP.DYN.LE00.IN?locations=MW. Published 2019. Accessed March 9, 2022.

World Bank. (2019a). Net ODA received per capita (current US$) – Malawi, 2019. https://data.worldbank.org/indicator/DT.ODA.ODAT.PC.ZS?locations=MW. Published 2019. Accessed March 9, 2022.

World Bank. (2020a). Prevalence of stunting, height for age (% of children under 5) – Malawi. https://data.worldbank.org/indicator/SH.STA.STNT.ZS?locations=MW. Published 2019. Accessed March 9, 2022.

World Bank. (2020b). Urban population growth (annual %) – Malawi. https://data.worldbank.org/country/malawi. Accessed March 9, 2022.

World Bank. (2020c). Rural population growth (annual %) – Malawi. https://data.worldbank.org/country/malawi.

World Bank. (2020d). Rural population (% of total population) – Malawi. https://data.worldbank.org/country/malawi.

World Bank. (2020e). GDP per capita (current US$) – Malawi, 2020. https://data.worldbank.org/country/malawi. Published 2020. Accessed March 9, 2022.

World Bank. (2020f). Doing Business 2020: Comparing Business Regulation in 190 Economies. https://documents1.worldbank.org/curated/en/688761571934946384/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies.pdf. Published 2020. Accessed March 9, 2022.

World Bank. (2021). The World Bank in Malawi - Overview. https://www.worldbank.org/en/country/malawi/overview#1. Updated November 23, 2021. Accessed March 9, 2022.

Zafeiridou M, Hopkinson NS, Voulvoulis N. (2018). Cigarette smoking: an assessment of tobacco!s global environmental footprint across its entire supply chain. *Environ Sci Technol*. 2018;52(15):8087-8094. https://pubs.acs.org/doi/10.1021/acs.est.8b01533