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Agricultural Transformation in Malawi: Call to Action

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Executive Summary

This background paper seeks to accomplish three tasks. First, it highlights the urgent need for real change in Malawi's economic management and performance. Current trends in economic and population growth against a fixed land area suggest that a "business as usual" approach to economic management is unsustainable as farmland holdings continue to decline while poverty and other socio-economic indicators continue to deteriorate. A reversal of these trends is a matter of urgency. Nothing can be done to increase Malawi's total land area and, at least in the near-term, a significant reversal in the population trend is unlikely. This heightens the urgency for national policy interventions that catalyze and sustain high levels of economic productivity and growth to avoid a grim fate.

Second, the paper highlights the policy interventions that Malawi could adopt in order to achieve significant economic development. Studies have argued that the economy ought to grow by at least 6 percent per annum over a period of several decades to meaningfully reverse the deteriorating socio-economic trends. The paper uses the results of two computable general equilibrium model simulations to interrogate Malawi's growth trends and requirements. Drawing on the agricultural-led development experiences of the global community, this paper argues that a comprehensive transformation of the agricultural sector that reduces its heavy reliance on tobacco and develops strong, market-based linkages between agriculture and industry could be pivotal in achieving the necessary economic growth.

Finally, the paper addresses the more difficult question of how the necessary transformation may be brought about. It makes the case for assembling a "coalition of the willing" to champion this change, argues for the generation of evidence to inform the policy formulation process, and emphasizes the significant role of the State in policy formulation and implementation, and in mobilizing players towards common goals. On this aspect, too, the paper draws on the experiences of the global community – including several African

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countries where top-level political leadership has been the main driver for change. This brings to the fore the associated question of whether leadership can effectively be an agent of change in Malawi's democratic dispensation. The various roles that other key stakeholders can play are also highlighted.

1. Introduction

Malawi faces many challenges that culminate in the country's inability to move out of the unenviable club of the world's poorest countries. The convergence of several factors worsens the country's socio-economic conditions, leading to a deepening of poverty, malnutrition, inequality, and social exclusion. Key among these are rapid population growth and low agricultural productivity on a fixed land area. An industrial sector is hardly existent, and the country's economic growth is dominated by the wholesaling and retailing of mostly imported products. Employment levels, labor productivity, and growth in distribution are too low to reduce poverty.

Malawi's 2018 population of 18.1 million people is projected to reach 44.1 million people by 2050 (UNDESA, 2019). Small farms are becoming even smaller as more and more people must be accommodated in agriculture, particularly because of limited off-farm and non-farm employment opportunities. Very small farms could reasonably provide incomes for rural people if productivity levels were sufficiently high and keeping pace with population growth. Unfortunately, however, the country's agricultural output per worker is among the lowest in the world. Moreover, the agricultural sector has been growing at an annual rate of 2.1 percent since 2000, below the population growth of 2.7 percent.

The confluence of rapid population growth, acute land scarcity, stagnant agricultural growth, and very limited off-farm employment opportunities constitutes an impending crisis. Reversing these trends sooner rather than later may avoid a political and social turmoil that could further set back Malawi's long-term development prospects. Moreover, these trends could make it impossible for the country to be among those countries that will attain the aspirations of the African continent's Agenda 2063, particularly the first aspiration of "a prosperous Africa based on inclusive growth and sustainable development." Action is needed from many quarters – government, private sector, civil society, donor community - but government action would be most decisive as it determines the scope for inclusive

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¹ The Government of Malawi's National Planning Commission is currently developing the country's long-term vision. Initial indications suggest that this will be for the period up to 2063, in alignment with the continental agenda.

growth in the agricultural sector and the overall economy by promoting an institutional framework that generates fair returns on investments across all sectors.

Opportunities exist to avert this impending crisis. Low agricultural yields could be improved, and there is high potential to at least double the country's irrigated crop land (GoM, 2016). About two-thirds of the population are under 24 years old (World Bank, 2020), such that increases in the productivity of agricultural land and labor could provide incentives needed for many young people to stay or move into the country's agricultural labor force. This would allow the country to reap the demographic dividend of having a larger working-aged than dependent-aged population. In many cases, Malawi already has well designed policies in place, but implementation usually falls behind targets. In other cases, there are unknowns that require evidence-based policy formulation followed by implementation. Of all factors, it is leadership that could play the most pivotal role in turning the tide.

This paper is a "call to action" that (i) clarifies why urgent action is needed by elucidating the likely impacts of a continuation of the status quo; (ii) suggests the components of an effective policy and implementation response, drawing upon established evidence; and (iii) seeks to mobilize a "coalition of the willing" to urgently move this change agenda forward.

2. Why is Transformational Action Necessary?

We ask, what might be the outcome of a "business as usual" approach to Malawi's economic management? Can Malawi afford to postpone economic transformation any longer?

2.1. Overview

The current status quo is one of rapid population growth and declining land holdings without adequate gainful on-farm and off-farm employment opportunities. The result is slow economic growth and deepening poverty. Perpetuating this status quo promises a foreseeable catastrophe whose occurrence is no more than a mere generation away, if it is not occurring already.

2.2. Population Growth is Rapid

Malawi's population has been growing at an average rate of 2.75 percent per annum, from

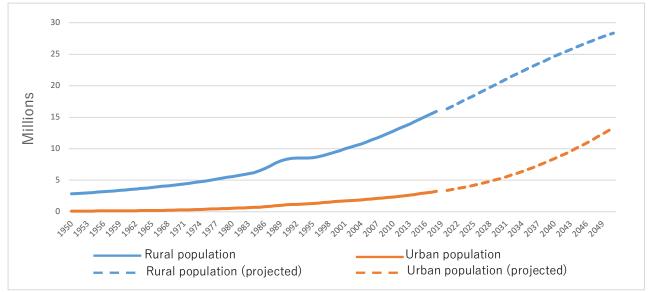


Figure 1. Population Trends and Projections

Source: World Bank (2020)

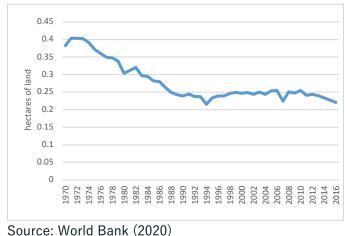
3.7 million people in 1960 to 18.1 million people in 2018 (Figure 1). Although the urban population has grown by 5.1 percent per annum - some of which is attributable to the reclassification of small towns from rural into urban areas - urbanization is still less than 17 percent. This is largely attributable to a low initial urbanization rate of only 4.4 percent in 1960, and slow industrialization that limits off-farm and non-farm employment to only 8.4 percent (World Bank, 2020). Two-thirds of the urban population lives in the poor conditions of slums that do not inspire rural-to-urban migration, and the country remains a predominantly rural agrarian society.

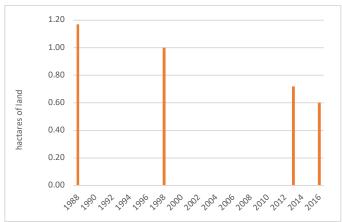
These projections predict the amplification of an already desperate situation in a country where the levels of poverty are among the highest in the world (see Section 2.12), and where the delivery of public services is already stretched. Government policies on population control are yet to show results in slowing this trend.

Malawi's population density reflects this population trend, rising from 39.7 people per square kilometer of land in 1961 to 192.4 people in 2018. The aforementioned projections would raise this to about 468 people by 2050, and way in excess of 500 at the expiry of the continental Agenda 2063.

Figure 2. Arable Land in Malawi (ha/person)

Figure 3 Average farm size (ha)





Sources: Alwang et. al. (1999); Sofranko et al. (1989); Jumbe et al. (2016)

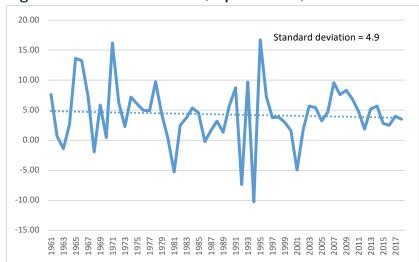
2.3. Land is Becoming Increasingly Scarce

In parallel with the increase in population density, the available arable land per person is also steadily falling. Arable land holding per person reached a peak of 0.40 hectares by 1971 as more virgin land was cleared for agricultural expansion but declined to a mere 0.22 hectares by 2016 (Figure 2). At this trend, the holding size could decline further to just 0.15 hectares by 2050. The average farm size has similarly shrunk steadily to less than one-half of that in 1971. Averaging 0.6 hectares by 2016 (Figure 3) and coupled with low yields (see Section 3.3.1), most farms are now too small to support a family, and most farm households depend on other sources of income to supplement their livelihoods. If, as projected, the rural population doubles again within 24 years, farms will fragment to the point where, barring dramatic increases to land productivity, most will provide no more than a small contribution to basic household food needs. Increasingly more Malawian households may fall into that desperate situation: according to Malawi's Fourth Integrated Household Survey (IHS4), the proportion of households with very low food security increased rapidly from 32 percent during 2010/11 to 61.4 percent during 2016/17, partly on account of crop failure due to El Niño in that agricultural season (GoM, 2017).

2.4. Economic Growth is Slow

Malawi's overall economic performance has been mixed, but growth has generally been too slow to meaningfully reduce poverty. Annual growth averaged 4.3 percent during 1961 –

Figure 4. Real GDP Growth (% per annum)



Period	Growth (% p.a.)
1961-1969	5.30
1970-1979	6.25
1980-1989	1.72
1990-1999	4.13
2000-2009	4.53
2010-2018	3.80
1961-2018	4.29
2000-2018	4.22

Source: World Bank (2020)

2018, with wide variations and a somewhat declining trend (Figure 4). In constant 2010 United States dollar terms, the country's gross domestic product (GDP) increased from \$872.8 million in 1960 to \$9.4 billion by 2018. Persistently impressive economic growth rates, averaging 6.2 percent per annum, were registered during the first fifteen years since the attainment of political independence in 1964. But the onset of the global oil crisis in 1979 (hence a surge in world oil prices), the Mozambican civil war of 1977 – 1992 (hence increased costs of sea access through the Nacala Port), episodes of failure in rain-fed agriculture, and a decline in world tobacco prices, among other factors, damped economic growth during the 1980s to an annual average of only 1.7 percent. Growth buoyed to 16.7 percent in 1995 as the economy recovered from a prior year contraction of 10.2 percent on account of better agricultural performance and the resumption of donor aid following the adoption of political pluralism. No semblance of the impressive post-independence growth outcomes was experienced again until 2006 - 2010. A spike of good economic management (particularly fiscal discipline), the introduction of the Farm Input Subsidy Programme (FISP) and favorable weather in that period led to an average annual economic growth rate of 7.4 percent, and an associated per capita real GDP growth of 4.2 percent (Arndt, Pauw & Thurlow, 2016; Mangani, 2020). Since 2010, however, average annual growth has only been 3.8 percent, barely keeping ahead of population growth. This has been due to an admixture of poor economic management and adverse climatic conditions which the susceptible, largely rain-fed and hoe-based smallholder agricultural sector is incapable of withstanding.

Smallholder agriculture accounts for approximately 70.0 percent of the sector's output, while the rest is from better managed estates.

The slow overall economic growth mirrors the performance of the agricultural sector (broadly defined to include forestry and fishing) and its linkages with manufacturing (principally the agro-processing industry). Annual agricultural growth averaged 4.0 percent during 1970 – 2017, but only 2.3 percent during 2012 - 2017. In constant 2010 US dollars, value added from agriculture rose from \$502.3 million in 1970 to \$2.4 billion by 2017. This, however, represents a significant decline in the sector's contribution to GDP from 48.4 percent in 1960 and 41.0 percent in 1970 to 26.1 percent by 2017 (Figure 5). Agricultural growth accounted for only about one-third of the growth in national income over 2012-2017. The aforesaid projected exponential increase in population density suggests that the role of agriculture could diminish significantly over the next three to four decades with potentially dire consequences for smallholders. Evidence suggests that soil fertility and land productivity diminish precipitously when population density exceeds 500 persons per square kilometer, and that total household income per adult equivalent declines significantly as population density rises (Muyanga & Jayne, 2014).

The manufacturing (or industrial) sector's share of GDP has also declined from 12.3 percent in 1975 to 9.4 percent in 2017. Annual growth in manufacturing value added averaged 3.1 percent during 1976 – 2017. Impressive manufacturing performance was recorded from the mid-1970s to the early 1990s, reaching 19.1 percent of GDP in 1992. Most of this was attributable to state participation in the economy through the investment

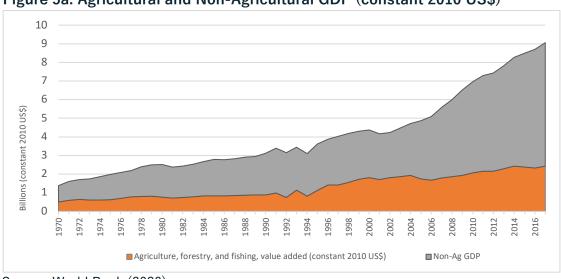


Figure 5a. Agricultural and Non-Agricultural GDP (constant 2010 US\$)

Source: World Bank (2020)

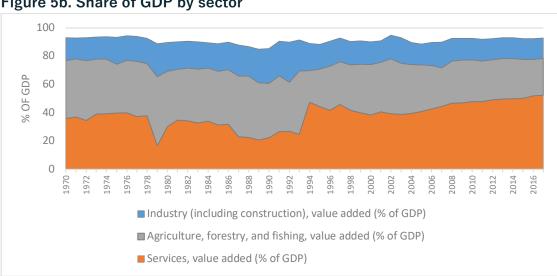


Figure 5b. Share of GDP by sector

Source: World Bank (2020)

holdings of the Malawi Development Corporation (MDC) and the Agricultural Development and Marketing Corporation (ADMARC), as well as the quasi-privately-owned Press Holdings Limited. This trend was reversed after the adoption of neoliberal policies and the resultant privatization of state-owned enterprises which commenced as early as 1984 but was stepped up upon the creation of the Privatization Commission in 1996. Many privatized, formerly state-owned enterprises either closed shop or significantly scaled down operations (Chirwa, 2000; Magalasi, 2008; Mangani, 2020). Disinvestment and low capacity utilization are common, largely on account of significant supply-side constraints. Land-locked Malawi

faces high costs of sea access. Additional constraints to private sector development include poor access to and the high cost of finance, unreliable electricity supply, the high cost of dealing with corruption, and an unfavorable tax regime (Chilima et al., 2017).

As a result of the relatively slow growth in agriculture and manufacturing, most GDP growth over recent years has come from the services sector - but this, too, is neither adequate nor poverty-reducing. The share of services in GDP has risen from 38.3 percent to 52.4 percent during the 1960 – 2017 period. By this metric, services surpassed agriculture in 1994. Average annual growth in services value added has not been too different from agriculture growth, at 4.3 percent during 1970 – 2017, but a surge in the services sector has been witnessed since 1995 when it has grown by an annual average of 5.2 percent. This growth is almost entirely attributed to an increase in the distribution (i.e., wholesaling and retailing) of primarily imported products from South Africa (29% of 2017 imports), China (18%), India (15%) and a few other trading partners², a trend that erodes foreign exchange and distresses the trade balance. Labor productivity in this nature of a services sector is relatively higher than in other sectors: less labor is employed to facilitate high-value trading. As a result, in 2017, services value added per worker in terms of 2010 constant US dollars was estimated at US\$3,300, compared with US\$2132 for industry and US\$470 for agriculture (World Bank, 2020). But these statistics do not necessarily imply that wages in services and industry are significant higher, as these are referenced on the official minimum wage, currently set at K35,000 (US\$48) per month of unskilled labor.

2.5. Employment Opportunities are Limited

The increasing economic dominance of Malawi's imports-dependent distribution services sector clearly creates more foreign than domestic employment in the production of output. Coupled with the sluggishness of the industrial sector, this means that excess labor cannot be freed from agriculture – where both labor productivity and returns are relatively low - due to lack of alternative employment opportunities. Figure 6 shows that the shares of agriculture, services and industry in total employment have not changed significantly over time. In particular, agriculture continues to employ upwards of 70 percent of those in

² See www.oec.world/en/profile/country/mwi/#Imports

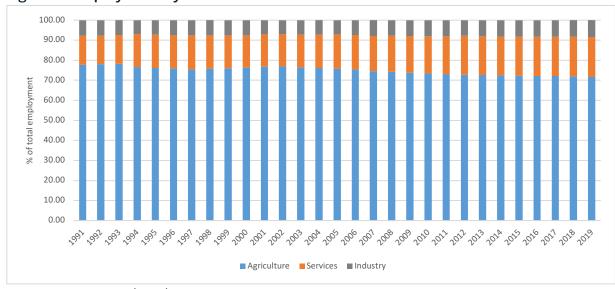


Figure 6. Employment by Sector in Malawi

Source: World Bank (2020), based on modeled ILO estimates

employment, and the share has not significantly changed since 1991. Most of the few workers who moved out of agriculture went into services. However, services employment only grew from 14.6 percent in 1991 to 19.9 percent in 2019, confirming that the growth in services' share of GDP has not created sufficient employment for poverty reduction. Employment in the manufacturing industry remains worrisomely stagnant, averaging 7.7 percent. Rather than becoming a producing and exporting economy, therefore, Malawi is fast evolving into a non-producing and vending economy.

2.6. Tobacco Prices are falling steadily

Malawi is the most tobacco-dependent economy in the world. In general, the share of tobacco to total export proceeds has been steadily declining over time, from an annual average of 69.9 percent during 1990-1994 to 52.6 percent during the 2015-2017 (Chirwa, 2011; Figure 7; Table 1). Smallholder production of burley tobacco accounts for most of the proceeds, although the expansion of estate farming during the 1960s and 1970s was initially the dominant contributor. About 1.9 million people were estimated to be directly employed in the tobacco sector by 1999 (Koester et al., 2004).

The average nominal price of the export has been declining sharply in recent years, from a peak of just over US\$1,000 per ton in 2009 to a low of US\$193 in 2015 (Figure 8). The main implications of this trend are two-fold. First, the income levels of tobacco-dependent

Figure 7. Main Exports (% of total exports)

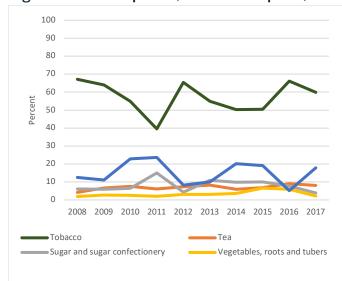


Table 1a. Main Exports (% of total exports)

	2015	2016	2017	Mean
Tobacco	45.8	52.6	59.3	52.6
Sugar	9.1	7.9	3.9	7.0
Tea	6.2	6.5	8.0	6.9
Legumes	5.4	3.4	2.0	3.6
Oil cake, etc	1.2	0.4	6.9	2.8
Alcohol	0.2	5.0	0.6	1.9
Other nuts	1.9	1.5	1.7	1.7
Groundnuts	1.0	1.0	2.2	1.4
Machinery	1.7	1.5	0.7	1.3
Other	27.5	20.2	14.6	20.8

Table 1b. Total Exports (US\$ Million)

	• •		•
2015	2016	2017	Mean
1080.1	1022.2	883.9	997.2

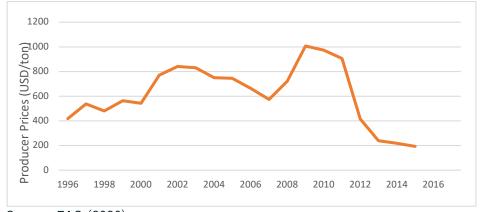
Source: UN Comtrade (2020)

Source: trademap.org

households have declined sharply, contributing to slow growth in per capita GDP. Second, the country's trade balance has deteriorated as no other exports have effectively made up for the declining tobacco proceeds.

The aims of the National Export Strategy 2013 – 2018 to diversify the export base through the creation of three additional export clusters – namely oil seed products, sugar cane products and manufactures - to supplement tobacco were well-intentioned but hardly realized. The result is that the authorities grapple with the challenge of maintaining foreign

Figure 8. Tobacco Producer Prices



Source: FAO (2020)

exchange reserves and defending the domestic currency, necessitating recourse to balance of payments support from aid agencies, and/or the application of unsustainable interventions such as exchange rate fixing and currency swaps.

2.7. Growth in GDP per capita is Slow

GDP per capita is a critical statistic in measuring societal well-being, despite its inability to account for inequalities in income distribution and differences in utility functions that may arise from demographic and other social factors. Malawi's GDP per capita in constant 2010 US dollars has grown by a mere 1.5 percent per annum on average, from US\$238.5 in 1961 to its all-time highest value, at US\$516.8 in 2018 (Figure 9). Nonetheless, the 2018 level is only 4 percent of the world average, and among the lowest in the region. GDP per capita growth exceeded population growth until the end 1970s, but this trend was not sustained in the subsequent period to the turn of the millennium. Although there was an encouraging trend during 2003-2014, growth in GDP per capita has since slumped to less than 0.5 percent per annum (Table 2). Malawi is barely running fast enough to avoid a *Malthusian trap*, a situation where population grows geometrically while aggregate income grows more linearly.

Figure 9. GDP per capita (constant 2010 USD)

Source: World Bank (2020)

Table 2: Growth Rates in Population and Per Capita GDP (% p.a.)

	1961-1979	1980-2002	2003-2014	2015-2018	1961-2018
Population	2.67	2.85	2.75	2.69	2.76
GDP Per Capita	3.02	-0.40	2.90	0.45	1.46

Source: World Bank (2020)

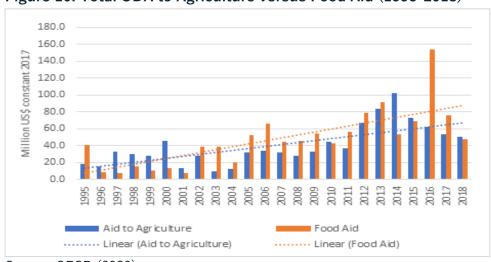


Figure 10: Total ODA to Agriculture versus Food Aid (1995-2018)

Source: OECD (2020)

2.8. Dependence on Food Aid is Rising at the Expense of Agricultural Aid

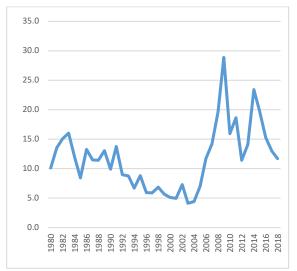
Recourse to food assistance somewhat understandably increases during drought or flood years, a reflection of an agricultural sector that has not developed resilience to disaster risks. Worrisomely, however, the country is incapable of feeding itself even in a normal agricultural year because of low agricultural productivity. While 2016 was a particularly unique year due to the El Niño effect, the provision of food aid has become the norm rather than the exception. Fluctuations in food aid needs have widened, partly in response to climate change. An increasing dependence on food aid means that there is a declining amount of official development assistance (ODA) left for investment in agricultural and other development efforts (Figure 10).

2.9. Subsidies Dominate the Agriculture Budget at the Expense of Agricultural R&D

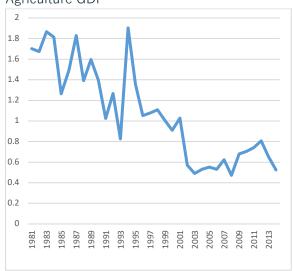
Although the government spends a larger share of its total budget on agriculture than most African countries - and meets the Comprehensive Africa Agriculture Development Programme (CAADP) goal of ensuring that at least 10 percent of the national budget is allocated to the sector (Figure 11a) - it spends the majority of that budget on subsidies and relatively little on growth fundamentals like agricultural research and development (R&D). The introduction of FISP increased the share of agriculture in total government expenditure from a mere 4.4 percent in 2004 to 29.9 percent in 2009 and 23.4 percent in 2014, the latter two being years when national elections were held in the country. Although this has declined

Figure 11. Government Agricultural Expenditures

a. As a percentage of total expenditure



b. Agricultural research spending as percentage of Agriculture GDP



Source: ASTI (2020)

Source: resakss.org

subsequently to an annual average of 15.9 percent during 2010 – 2018 (and 14.9% when 2014 is excluded), agriculture still claims a significant part of the national budget. FISP expenditures alone accounted for 90.8 percent and 62.0 percent of the other recurrent transaction (ORT) expenditures of the total budget of the ministry responsible for agriculture³ during 2011/12 and 2015/16 fiscal years, respectively. On the other hand, expenditure on agricultural R&D has plunged from an already low 1.9 percent of agricultural expenditure in 1994 to a meagre 0.5 percent in 2014 (Figure 11b). Clearly, FISP dominates the ministry's day to day work at the expense of research and extension services. The surges in FISP expenditures during election years leave little doubt that the programme is a critical consideration in mobilizing political support, making it challenging to interrogate its appropriateness without risking the loss of political capital. Yet, FISP expenditures are becoming increasingly difficult to justify because they are a waste whenever climatic conditions become unfavorable for rain-dependent agriculture, as was the case in 2016.

2.10. The risk of Soil Loss and Degradation is High

Over three-quarters of Malawi's soils are at risk of loss (Omuto & Vargas, 2019). This makes soil loss one of the key threats to food security and nutrition, agricultural growth, the

³ ORT expenditures are government expenditures excluding capital expenditures and personal emoluments.

provision of ecosystem services, and the achievement of the Sustainable Development Goals (SDGs). Although some amount of this loss occurs naturally, most of it is due to human activity, principally intensive agriculture, deforestation and the introduction of land-uses that are not well matched to the land-use capability.

It is on record that "Malawi appears to have reached a tipping point, where soil organic matter (SOM) is below minimum levels. There are multiple lines of evidence that, on many farms, SOM status has degraded to a level that no longer supports maize growth or responsiveness to fertilizer. The tipping point level for soil organic matter has been proposed to be 1.2 percent (equivalent to 0.7% of organic carbon)" (Snapp, n.d.). The results are quite telling: at about 2 kilograms of maize per nitrogen kilogram of fertilizer (or roughly 1.1 kilograms of maize per kilogram of fertilizer), crop response to fertilizer input is extremely low (Snapp et al., 2014; Kopper, Jayne & Snapp, 2020; Burke, Snapp & Jayne, in press). Unless the soil degradation trend is addressed, agricultural development will not be successful, nor will investments in agricultural subsidies be sustainably fruitful.

2.11. Marketing rigidities disincentivize agricultural investments

The government imposes various controls on agricultural pricing and marketing. Effectively, the minimum prices set by government for critical agro-products such as maize become the prices paid to smallholder farmers, who are seldom in a position to negotiate. Moreover, set prices are often so low that the returns to the farmers efforts are painfully small and provide little incentive for other investments. Export bans, usually applied on key products such as maize or cash-crops with local demand from agro-processors (such as legumes), prohibit Malawians from benefiting from higher regional or international prices. Food security considerations are usually cited as justification for maize export bans, while other bans arise to appease private interest groups. As estate farmers are usually able to lobby for better terms or hoard output until prices improve, it is the disorganized smallholder farmers who bear the blunt of these rigidities. In general, Malawi is yet to entrench smallholder agriculture as a business and is not able to take advantage of global export opportunities for its agricultural products either because the quality is low, or because the quantities are too small to satisfy big international orders, or because of information asymmetries. As government-controlled prices and export restrictions are usually set during the harvest season, they create sunk investments in agriculture that demotivate subsequent

Table 3. The World's Poorest Countries

Rank	By GDP/Capita ^a	By GNI/Capita ^b
10	Madagascar	Togo
9	Comoros	Sierra Leone
8	South Sudan	Madagascar
7	Liberia	Mozambique
6	Mozambique	Malawi
5	Niger	Liberia
4	Malawi	Niger
3	D.R. Congo	D.R. Congo
2	Central African Republic	Central African Republic
1	Burundi	Burundi

Notes: a) See www.gfmag.com/global-data/economic-data/the-poorest-countries-in-the-world. Data are PPP-adjusted in current international dollars. b) See www.247wallst.com/special-report/2019/11/06/25-poorest-countries-in-the-world-3/. The data are PPP-adjusted in constant 2011 international dollars.

investments. Tobacco, which has better structured markets, is an exception but, as noted, this is primarily a buyers' market: prices have significantly declined over time.

2.12. Poverty is high and rising

The combined effect of the above realities is that economic management policies have not succeeded to alleviate poverty. Malawi's incidence of poverty (measured as the poverty headcount ratio at \$1.90 a day (in constant 2011 international dollars, adjusted for purchasing power parity (PPP)) "increased by 0.3 percent per year on average during 2003–2008 and 0.9 percent per year on average during 2008–2015, reaching 75.7 percent in 2015, up from 70.3 percent in 2003. Malawi's 2015 poverty rate was the highest among Southern African countries with available data". National estimates from the IHS4 show that more than one-fifth of Malawians live in extreme poverty, while more than one-half live in moderate poverty (GoM, 2017). Moreover, low wages referenced on a Government-regulated minimum wage account for a working poverty rate (i.e., percentage of the employed living below US\$1.90 per day, in PPP-adjusted constant 2011 international dollars) as high as 66 percent (World Bank, 2020).

The country is regularly on the lowest end of global rankings in poverty (Table 3) and human development. It was ranked at position 172 out of 189 countries in the 2018 UN

⁴ See https://www.resakss.org/node/3

Human Development Index, alongside war-torn and fragile states, despite a generous endowment of life-supporting natural resources and prolonged peace. Malawi stands as the stark exception to the assertion, made by the Global Finance, that "all these extremely fragile and underdeveloped economies (of which Malawi is one) have either recently been through civil war or are suffering from ongoing sectarian or ethnic conflicts".

Box 1. Why is change urgently required in Malawi?

Changing how the economy is being managed is necessary to reverse a worsening trend of declining living standards caused and/or characterized by the following:

- ✓ The population is growing too fast and farm sizes are becoming too small, making it increasingly difficult for smallholder farming to meet even the most basic subsistence requirements.
- ✓ Off-farm employment opportunities are limited, leading to over-employment in agriculture where returns are too low.
- ✓ Economic growth is slow, mostly because of low agricultural productivity and slow growth of manufacturing.
- ✓ Growth in the services sector is largely sourced from wholesaling and retailing, which do not create adequate gainful employment.
- ✓ Tobacco prices have declined sharply, lowering incomes and creating consequential external imbalances.
- ✓ Dependence on food aid is rising and becoming a norm, limiting the levels of aid for agricultural development.
- ✓ Agricultural subsidies crowd-out expenditures on agricultural research and development and distract government's attention away from agricultural extension and productivity promotion interventions.
- ✓ Controls in agricultural pricing and marketing prevent farmers from getting fair returns on investment.

As a result, Malawi is among the poorest countries in the world and, unfortunately, in the same ranks with the world's conflict-torn economies.

3. What Economic Transformation is Required... and Possible?

Given Malawi's current low level of per capita income, high poverty rate, high population density, and high dependence on a low productivity agricultural sector, what growth opportunities exist for the country? Are these opportunities sufficient to launch an economic transformation that would propel the country to middle income status within a generation?

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⁵ Parenthetical statement added for clarification. See www.gfmag.com/global-data/economic-data/the-poorest-countries-in-the-world

3.1. Overview

The importance of the agricultural sector in the development of a country is welldocumented. In addition to creating employment, supplying food and guaranteeing basic welfare, growth and higher productivity in the agricultural sector could release labor, capital and raw materials necessary for the growth of other sectors. In turn, higher agricultural growth also increases demand for the output of the non-agricultural sectors. Where the structure of the economy permits, these linkages – a key features of the agricultural demand led industrialization (ADLI) - are clearly poverty-reducing (see Singer (1979), building on Lewis (1954) as well as Fei and Ranis (1961)). Directly, the poor's participation in productive agriculture generates both employment and profits. Indirectly, labor freed from agriculture gets employed in the non-agricultural sectors. Additional economy-wide benefits from a functional agricultural sector arise from its contributions to foreign exchange earnings and government revenues. There are arguments against agriculture-led development, but the general consensus is that agriculture is crucial for economic growth, especially at the initial stages of development for agro-based economies. Agriculture sector-led transformation is particularly important for land-locked economies that face high costs in international trade. Theoretical models of agriculture-led economic growth and poverty reduction have also received enormous support from empirical investigations. In most developed economies, including England, the United States of America and Japan, agricultural revolutions preceded industrial revolutions, and agriculture played enormously significant roles in their industrialization (Dethier and Effenberger, 2011).

Ethiopia has been recognized as one of Africa's fast emerging economies, registering high economic growth in the new millennium: real GDP growth averaged 10.9 per cent during 2004–14 (Moller, 2015). As a non-extractive economy (i.e., one without oil or a huge mining sector), this impressive economic growth has been largely driven by agriculture-based economic reforms, supported by the services and construction sectors (Moller & Wacker, 2017; Fantu et al., 2018). Similar stories of the catalytic role of agriculture in development have been documented for other African economies, including the observation that while these economies face many new challenges, there is little evidence to suggest that they can bypass a broad-based agricultural revolution to successfully launch their economic transformations (Diao, Hazell & Thurlow, 2010).

The Government of Malawi has championed several long-term development aspirations since independence. Two that have dominated the development discourse are that (i) Malawi should graduate into a middle-income country by growing GDP per capita to US\$1000 by 2020; and (ii) poverty should be halved by 2015. The former was stated as the primary objective of the Government's "Vision 2020", while the latter was a target under the Millennium Development Goals (MDGs). Calculations undertaken at the time showed that attaining middle income status required an average annual GDP growth of 7.0 percent during 2000 - 2020, while others showed that halving poverty within fifteen years required annual GDP growth averaging 6.0 percent (NPC, 2020). These targets have also dominated Malawi's development discourse because of their ease of measurability, ease of association with societal progress, and ease of cross-country comparability. In fact, the target GDP growth of 6.0 percent per annum has been generally accepted as the magic bullet. For these reasons, this note focuses on these two goals, though we acknowledge they are far from being the only key aspirations that the country set under the MDGs, Vision 2020, and a host of other development plans. Unfortunately, for reasons already stated, GDP only grew by an annual average of 4.2 percent during 2000-2018, far below the requirements for hitting either target.

Several economy-wide studies have modeled alternative growth scenarios for Malawi, highlighting feasible options for achieving the growth and poverty alleviation goals. Among these are two computable general equilibrium (CGE) modeling studies, both of which are based on the work by the International Food Policy Research Institute (IFPRI). The first, by Benin et al. (2012), provided alternative growth scenarios for 2004-2015. The second was conducted by Benson and Hartley (2020) and provided alternative growth scenarios for 2018-2030. The key findings and messages are presented in the sequel.

3.2. CGE Scenario Modeling Results for Malawi

Benin et al. (2012) constructed a dynamic computable general equilibrium (CGE) model based on a 2004 social accounting matrix (SAM). The model has household, farm size and regional breakouts, as well as a considerable disaggregation of the production sectors. The authors reported and contrasted two scenarios for 2004-2015; a baseline (or business as usual) scenario, and an agriculture-led growth scenario that approximated a plan for achieving 6.0 percent agricultural growth, as desired under CAADP. This study is one of the

few attempts to pinpoint what the CAADP 6.0 percent agricultural growth target would require in the way of crop yield increases. Although the study covered a now historical period, it assess what rate of land productivity growth in Malawian agriculture would be needed to achieve MDG objectives related to poverty reduction and overall economic GDP growth, taking account of the growth linkages between agriculture and other sectors of the economy. Taking maize, for example, the study assumed a growth rate of 3.47 percent per year in the CAADP scenario, which would have raised maize yields from 1.13 metric tons per hectare (mt/ha) in 2004 to 1.64 mt/ha by 2015. This is well below experiment station yields of 5 mt/ha.

Under the "CAADP scenario", national GDP was predicted to grow almost 50 percent faster than the baseline scenario; from 3.24 percent to 4.78 percent per year. The impact on the non-agricultural sectors was also quite modest. The predicted growth rate in manufacturing GDP increased from 3.2 percent per year in the baseline to 3.7 percent per year, while that in services GDP increased from 3.7 percent to 4.03 percent per year. The simulated decline in poverty was also below the rate needed at the time to achieve the MDG target of halving poverty, at 34.5 percent in 2015 compared to 47 percent in the baseline.

The simulations demonstrated that agricultural growth (even at 6.0% per year) would have been insufficient on its own to drive the national economy at the more transformative rate needed to significantly increase per capita incomes and productive employment, and to significantly slash poverty rates over 2004-2015. They showed that additional and independent growth in the non-agricultural sectors was also required, which would have added directly to GDP growth and, by increasing the national demand for agricultural output, indirectly enabled agricultural GDP to grow even faster than by 6.0 percent per year. However, the study did not attempt to address how independent growth in the non-agricultural sectors could be achieved. Additional simulations found that the agricultural and non-agricultural sectors would have had to grow by 6.9 percent and 7.6 percent per year, respectively, over 2004-2015 in order to achieve the MDG goal of halving poverty by 2015.

A more recent study used a modified and updated version of the earlier dynamic CGE model (now based on a 2015 SAM), to compare alternative sector growth strategies over 2018-2030 with each other and with a baseline (Benson and Hartley, 2020). As in the earlier study, the simulations show that even reasonably optimistic growth rates in crop yields and

agricultural production will not be sufficient to transform the Malawian economy very quickly, and that additional sources of non-agricultural growth are required. The authors compare three alternative sector-led growth strategies with each other and the baseline. These scenarios involve separately increasing the annual growth rates of total factor productivity (TFP) in agriculture, industry and services by 20 percent compared to the baseline. How TFP could be thus increased in each sector is not discussed; the intent was to assess how accelerated growth in each sector would influence overall GDP growth and poverty reduction.

The study found that, on their own, 20 percent improvements in sector TFP growth rates are too small to make much difference to Malawi's overall growth performance compared to the baseline. The baseline scenario generated for 2015-2030 in the Benson and Hartley (2020) study is more optimistic than in the earlier study for 2004-2015, but still portrays Malawi as a tortoise that will grow and transform only slowly, creating sufficient employment to absorb a growing population, but with only modest improvements in living standards. An unanswered question is whether even this scenario is sustainable as the land frontier for expanding agriculture is now about exhausted, the crop yield growth stimulated by FISP has mostly run its course, and climate change threatens even current levels of agricultural productivity.

An accelerated and perhaps more sustainable transformation will require substantial new investment in agriculture to grow the sector at a faster rate. The model simulations also show that reasonably attainable agricultural growth, while necessary, will not be sufficient to transform the Malawian economy quickly. Productivity improvements in the industrial and services sector must also play important and supporting roles.

3.3. Real Opportunities Exist to Turn the Tide

Several factors jointly create real opportunities that may aid transformation and growth in Malawi, including the scope for significantly increasing yields, expanding land under irrigation, and reaping the demographic dividend.

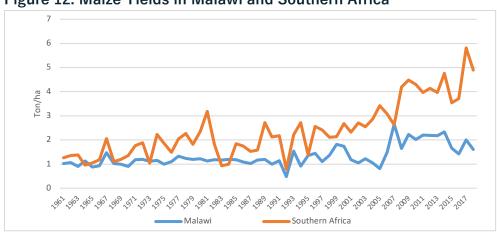


Figure 12. Maize Yields in Malawi and Southern Africa^a

Source: FAOSTAT (2020). a) Includes South Africa.

3.3.1. Scope for Increasing Yields and Total Factor Productivity

Although the average cereal yield has increased from 1.0 ton per hectare (ton/ha) in 1961 to 1.9 ton/ha 2017, there have been wide variations in between (Figure 12). Large gaps exist between average farmer yields and those achieved by the best farmers. In terms of maize alone, for instance, yields have grown by an annual average of 5.8 percent during 1962 -2018, rising from 1.0 to 1.6 ton/ha. The average yield has been a low 1.3 ton/ha, although experimental stations are able to deliver up to 5 ton/ha. The maximum national yield ever reported in official statistics was 2.7 ton/ha in 2007. However, the 2007 official yield has been disputed as a data artefact that arose from a precipitous drop in the official tally of maize area cultivated in that year; with a lower denominator, then, the yield calculation was "higher" (Messina, Peter & Snapp, 2017). The over-attribution of the 2007 yield spike to FISP by the authorities has also been questioned in the literature (Lunduka, Ricker-Gilbert & Fisher, 2013; Ricker-Gilbert et al., 2013). Although starting from roughly the same base relative to other countries in the region, the yield growth in Malawi compares very unfavorably with the average annual growth of 9.4 percent for the Southern Africa region during the same period (though this was largely driven by growth in South Africa). The region's comparable average yield was 2.4 ton per hectare, and a maximum yield of 5.8 ton per hectare was registered in 2018 when Malawi's own average yield was only 2.0 tons (Figure 12). Targeting to close this yield gap creates real potential for achieving at least the 6.0 percent agricultural growth rate as articulated in the Government's National Agriculture

Investment Plain (NAIP) of 2018, and there is evidently enough expert opinion to think that this may be possible with the right policies and investments.

Similarly, Malawi's agricultural TFP is among the lowest in Sub-Saharan Africa: although agricultural growth rates in Malawi were pretty high between 2001-2016, almost all of it was due to land expansion and greater use of inputs/land ratio, but very little TFP growth. Given the strong positive correlation between agricultural TFP and agricultural output growth, increasing such productivity is a sure way of stimulating agriculture-led economic growth.

3.3.2. Scope for Increasing Irrigable Land

The Government recognizes that huge opportunities exist to increase irrigation agriculture, especially around Lake Malawi and the Shire River, as follows:

"Only about 4 percent of crop land is currently irrigated, yet land and water resources are sufficient to more than double this amount. The total area of irrigated land stood at 104,000 ha in 2014 of which about 46 percent was estates and 54 percent smallholder. The irrigated area has been growing steadily since 2006 at the rate of around 5 percent per annum and almost all of the growth has been on smallholder irrigation schemes. Overall there are about 56,600 household beneficiaries of the smallholder irrigation schemes, but these represent only around 3.3 percent of all rural households" (GoM, 2016).

Other estimates suggest that the country's irrigation potential is even larger; that total irrigable land is in the range of 480,000-620,000 hectares, of which only 16-20 percent is under irrigation; and that irrigation has the potential to quadruple yields (GoM, 2015). This is considering the fact that Lake Malawi, a freshwater lake, occupies about a quarter of the country's area.

The launch of the 14-year (2018-2031) Shire Valley Transformation Project (SVTP), a US\$224 million project funded by the World Bank, the African Development Bank, other donors and the Government of Malawi, addresses part of the need to exploit the country's

⁶ This observation is derived from the Economic Research Service Agricultural Productivity Database, USDA. See https://www.ers.usda.gov/data-products/international-agricultural-productivity/

irrigation potential. The project targets to extend irrigable land by about 42,000 hectares through the development of gravity-fed irrigation schemes. Together with the bank's US\$95 million Agricultural Commercialization Project which became effective in 2017, proper implementation of the SVTP could significantly improve the production of sugar and other crops, increase food availability, link farmers with markets and raise farmers' welfare. Although this would be a huge leap on the irrigation front and a potential game-changer, it is unlikely that its results will materialize quickly enough nor be adequate for the country's required turnaround in agricultural performance.

Box 2. What challenges and opportunities exist for the structural transformation of Malawi's economy?

- ✓ Transforming the agricultural sector in order to raise its productivity and profitability, as well as to strengthen its links with the non-agricultural sectors, creates real opportunities for addressing Malawi's challenges of economic stagnation and poverty.
- ✓ The agricultural sector needs to grow by more than 6.0 percent per annum in order to have an impact on poverty. Moreover, using agriculture as a lead sector may be necessary, but coinciding productivity improvements in the industrial and services sectors could supplement agricultural growth to expedite poverty reduction. A holistic multi-sector investment approach is necessary to achieve simultaneous multi-sector growth.
- ✓ Real challenges to agricultural growth exit: the land frontier for expanding agriculture is effectively exhausted, the crop yield growth stimulated by FISP has mostly run its course, and climate change threatens even current levels of agricultural productivity. The necessary transformation will require substantial new investment in agriculture just to maintain recent growth rates; more still if the rate of growth is to increase.
- ✓ Significant exploitable opportunities for agricultural-led growth also exist; yields and productivity can increase at least to average regional levels; there could be at least a two-fold increase in irrigable land; and most of the population is youthful, hence creating the opportunity to reap a demographic dividend.

Given that growing the economy by an annual average rate of 4.2 percent since 2000 has not changed the poverty picture, new studies will be needed to estimate the required growth rates for achieving national objectives which may be set by the country's Vision 2020 successor.

3.3.3. Scope for Harnessing the Demographic Dividend

About two thirds of Malawi's population is under 24 years of age, and 45 percent is under 15 years. Absorbing this rapidly growing population of young people into the workforce is amajor challenge at present because of slow economic growth – the national estimate for youth unemployment in 2017 was 40.5% (World Bank, 2020), but it also offers a huge demographic opportunity if the country could shift onto a more dynamic economic transformation. Rapid agricultural growth would generate productive employment multipliers for younger workers throughout the food system and help drive agro-industrialization. Additionally, new jobs could be created through growth in industry and services, but this would need to be backed with policies that assist young people, including education, training and skills development, as well as business support.

4. Conditions for Effective Transformation

The Government has long recognized the imperative of agricultural growth, but so far, its efforts have proved disappointing. How could that be turned around?

4.1 Overview

It is clear from the previous section that if Malawi is to grow out of its current predicament, avert the pending crisis, and begin to transform to a middle-income country, then the rate of agricultural growth will have to be accelerated to at least 6.0 percent. Even this will not be sufficient, but it is a necessary first step to any successful economic transformation.

The Malawi Government recognizes that its medium- to long-term development has to be agriculture-led. For this reason, all of the country's development strategies, including the current Third Malawi Growth and Development Strategy (MGDS III), identify agriculture as the first priority sector. The government recognizes some of the key challenges that must be addressed in order to develop the sector and, through it, the country at large. For instance, the MGDS III notes that:

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⁷ According to the 2018 Malawi Population and Housing Census.

"Other than over reliance on rain-fed agriculture, which is prone to climate related shocks, there are other challenges that make many households vulnerable to poverty. These include: (i) animal and plant diseases which lead to major crop and livestock losses; (ii) price volatility of maize, fertilizer, and tobacco;... These factors put monetary burden on most households and continue increasing vulnerability among Malawians."

Thus, most of the challenges affecting the agricultural sector are known, and their solutions have already been emphasized in government policy documents. The government has even committed significant resources to agriculture, averaging 17.2 percent of its total budget over 2009-18, and far exceeding CAADP's 10 percent goal. Rather than overall resource availability *per se*, the problem has been that enormous resources have been directed to investments with low pay-offs at the expense of potentially high pay-off investments within the agriculture sector.

Other challenges, however, may not have equally clearly stipulated solutions, either because the need for solutions has not received adequate attention from the government, or because there is no consensus on how to proceed on those challenges. In both cases, applying concerted efforts towards an agriculture-led transformation of the economy can no longer be postponed.

4.2. The Crucial Role of Leadership

Regardless of whether or not the challenges are well-defined, and solutions are known, the most critical enabler of the required transformation is effective leadership: the political will to drive change. Determined developmental leadership has led to highly commendable and inclusive economic transformations in Rwanda (Box 3) and Ethiopia over the past two decades. Both of these are African economies that share some of Malawi's opportunities and challenges, such as being land-locked with high population densities and experiencing environmental and resource degradation threats, as well as vulnerability to climate change. But one key difference is that Malawi has not experienced the large-scale armed conflicts that the two have undergone during most of their recent history.

The presence of a strong political will in Rwanda and Ethiopia has been critical in driving policy change to successfully address some of the economic challenges. These illustrations show that leadership helped to raise public and private sector investment inflows, and to strengthen local human and institutional capacities (e.g., via ministries and extension systems) to implement policies and investment strategies more effectively. Some positive lessons on the role of leadership are also being generated in neighboring Tanzania. Generally, the evidence suggests that development is a leadership-driven process. Therefore, the need to secure leadership's unwavering commitment to the implementation of evidence-based economic reforms cannot be overemphasized.

Independent Malawi has experienced some spikes of effective and impactful leadership. The commendably high growth outcomes of the first fifteen years from independence and their replication during the last half of the 2000-2010 decade are episodes that have been attributed to the stance of leadership.

Box 3. Leadership for Change – Lessons from Rwanda⁸

The 1994 Rwandan genocide left about one million people (20% of the population) dead and destroyed whole towns. GDP per capita (PPP-adjusted) fell to \$416.

The process of re-building Rwanda started with a clear direction set from the presidency, coupled with a decentralisation process for implementation. Key interventions included women empowerment, a stern fight against corruption, development of education and human resources, reducing bureaucracy and facilitating investment, developing tourism, and embracing the role of ICT in development.

Within twenty years, Rwanda achieved stellar results: social cohesion and a sense of nationalism; per capita GDP (PPP-adjusted) of \$1,592, growing at around 7% per year; a rank of 32 in the world ease of doing business rakings, ahead of France (38), Spain (52) and Italy (65); and a rank of 18 globally (and 1st in Africa) in the performance of its institutions, ahead of Austria (22) the United States (30), France (32) and Italy (106). Women now account for more than 60% of Members of Parliament, and Kigali, the capital, is one of the safest places to be in Africa.

There is no debate that visionary and transformational leadership characterized by positive values such as unity, patriotism, selflessness, integrity and responsibility are central to the ongoing transformation in Rwanda.

⁸ See http://camunico.com/leadership-for-change-lessons-from-rwanda/ and https://www.newtimes.co.rw/news/defence-minister-visionary-leadership-central-rwandas-transformation

A local illustration of the role of leadership can be drawn from Malawi's experience with the institutionalization of tobacco as the country's most important export crop. This process was the result of deliberate and concerted efforts by both the colonial government and, most especially, the Malawi Congress Party (MCP) dictatorship. The result of these government initiatives is that, to date, tobacco has the best marketing, financing, administrative, research and farmer organization infrastructure in the country. It is the only crop whose production and marketing is properly regulated by the government through the Tobacco Commission (TC); it has the best farmer organization institution, the Tobacco Association of Malawi (TAMA), formed in 1929 and a registered as a trust in 1983; and it has a specialized premier research institution responsible for conducting research and providing technical and extension services on the crop, the Agricultural Research and Extension Trust (ARET). ARET was established by tobacco farmers in 1995. Tobacco is also by far the crop that receives the highest support from financial institutions.

The decision to diversify from tobacco and/or to transform the agricultural sector requires a strong government that can provide the necessary leadership and manage the implications of the attendant policy changes. Unfortunately, persistent slippages in the implementation of well-articulated policies and shortfalls in reaching development targets do not bear testimony that result-oriented leadership has been sustained over long periods.

Critically, there seems to be a positive correlation between effective leadership and the perpetuation of political power in the examples drawn from local and regional experiences. There is no debate that the MCP-rule was authoritarian, nor that some authoritarian tendencies characterized the 2006 – 2012 period in Malawi (Mangani, 2020), which is also on record as a success story, at least in part. The pragmatic developmental states established in Rwanda and Ethiopia, too, exhibit traits that do not conform to Western democratic principles. In other cases, such as Botswana, a weak opposition has, by default, fashioned political stability – a critical factor in that country's transformation from extreme poverty to upper middle-income status. Unfortunately, multi-party democracy sometimes means that political correctness and expediency pose a limitation to the implementation of major development policy shifts, even where such shifts have obvious net benefits and where delays in their adoption pose clear threats. Malawi faces this challenge.

The key question, therefore is: how does a young and evolving African democracy ensure that leadership effectively plays its critical role in economic transformation?

4.3. The Role of Evidence and Research

Developmental leadership requires evidence-based inputs to guide the policy formulation and implementation processes. Both the challenges that are widely agreed upon and those for which little consensus exists are most effectively addressed through coalition-building championed by respected Malawian-led policy advocates equipped with dependable evidence. In this regard, leadership extends beyond the commitment of senior government decision makers and policy champions, and needs to involve a "coalition of the willing", representing parliamentarian, public, private, donor and NGO interests, that can help to mobilize and sustain political support for the agenda over election cycles, and contribute to its effective implementation. Such a coalition needs to be supported by evidence-based policy analysis to promote public debate and build consensus. It should also be a coalition capable of driving the change process forward.

While many countries in the region have built highly active, credible, and respected local agricultural policy analysis institutes that play an organizing and consensus-building role (e.g., the Indaba Agricultural Policy Research Institute (IAPRI) in Zambia), Malawi has no such institution. It is, therefore, imperative to establish a home-grown research institution capable of generating new knowledge as the foundation for evidence-based policies, to support public debate, and to build consensuses capable of driving Malawi's development agendas forward. Experience in other countries suggests that the uptake of policy research recommendations increases when such recommendations are generated by domestic onestop-shop institutions, rather than relying on research conducted solely by foreigners, or by a loose patchwork of institutions. This is in part because local researchers can be trusted to have the interest of their own country and a better understanding of the local context, including the cultural and institutional structures that shape policy processes. Such a local policy institute can also benefit from contacts with outside agencies for capacity building and joint research, while still serving as the main conduit for policy advice to the government. The newly developed MwAPATA Institute has the potential to assume this important role in Malawi.

4.4. Addressing Challenges with "Known" Solutions

Many agricultural value chains have great unmet potential to address development challenges in Malawi. The current situation, however, is characterized by an unpredictable policy environment featuring ad hoc and frequently changing marketing and trade policies. Stated policy reforms that would promote private investment and smallholder farmer access to markets, services and technologies are sometimes implemented incompletely, or not at all, and there is little evidence of coordination between the government and the private sector in their investments. This apparently uncoordinated and unpredictable approach to policy implementation creates a high-risk environment for farmers and private firms (large and small). For example, Malawi was ranked 44th and 50th out of 62 countries by the World Bank's Enabling the Business of Agriculture (EBA) analysis with regard to ease of doing business in the fertilizer and seed industries, respectively. Redressing policy incongruency and uncertainty is a necessary condition for creating a hospitable enabling environment for broad-based and sustained agricultural sector growth. Consensus on the key barriers and how to effectively address them, right up to the highest levels of government, will be necessary to drive the inclusive agricultural and economic transformation that will improve the livelihoods of Malawi's smallholder farmers.

Although many of the constituent parts of an effective and comprehensive strategy for Malawi's agricultural sector are known and widely agreed, a critical mass of support has yet to be mobilized to address these issues. Many of these are related to policy: eliminating trade barriers, streamlining regulations that inhibit private investment and competition in agricultural value chains, reducing the level of unpredictability in agricultural markets to promote new entry and investment in agricultural value chains, increasing public commitment to quality physical infrastructure, agricultural research and development to generate new farm technologies, and extension services that help farmers to sustainably adopt them. One important requirement is, therefore, to mobilize the coalition of support necessary -- from the public sector, private sector, farmer organizations, civil society, and international development partners -- around a comprehensive agricultural policy strategy to drive agricultural transformation forward in Malawi. Assembling this "coalition of the willing" to rally behind a determined national leadership and to demand locally generated evidence is very critical.

Box 4. What Will it Take to Implement a Transformation Agenda in Malawi?

- ✓ Effective and development-focused leadership is the single-most important factor in driving the agenda for change. The recent experiences of Rwanda, Ethiopia and Tanzania attest to the fact that development is a leadership-driven process. Malawi needs to find an effective formula for entrenching political will for transformative reforms.
- ✓ Therefore, the need to secure leadership's unwavering commitment to the implementation of evidencebased economic reforms cannot be overemphasized.
- ✓ Leadership needs to be buttressed by a "coalition of the willing", representing parliamentarian, public, private, donor and NGO interests, that can help mobilize and sustain political support for the agenda over election cycles, and contribute to its effective implementation.
- ✓ Malawi needs a home-grown institution capable of generating new knowledge as the foundation for evidence-based policies, to support public debate and build consensus on the way forward (including in those areas where solutions are unknown, unclear or sensitive such as how to proceed on the role of tobacco in the economy), and to build a coalition capable of driving the process forward. The newly developed MwAPATA Institute has the potential to assume this important role.
- ✓ A large chunk of Malawi's challenges is well-known with known solutions but resolving them is hampered by an unpredictable policy environment, featuring ad hoc and frequently changing marketing and trade policies that create a high-risk environment for farmers and all private firms.
- ✓ Malawi should begin to implement policy reforms that will promote private investment and smallholder farmers' access to markets, services and technologies.

In this regard, MwAPATA Institute is putting in place the Malawi Agriculture Policy Reform Mechanism (MAReM) as a common platform to facilitate the coherent visioning, development, adoption and implementation of reforms in the wider agriculture sector in Malawi.

4.5. Addressing Challenges with "Unknown" Solutions

Another category of challenges revolves around "unknowns". For example, there is broad agreement that alternative agricultural value chains will need to be developed and supported to reduce Malawian smallholders' reliance on tobacco as a cash crop. The government's reliance on tobacco for export revenue has persisted despite shrinking global demand in response to declining smoking, indicating that Malawi's economy is vulnerable. However, there remains a dearth of evidence to guide governments and the private sector to determine which value chains provide the greatest potential in which areas of the country; which types of investment in physical infrastructure would provide the greatest benefits per dollar spent depending on which commodity value chains are prioritized, and which specific policies could be implemented to accelerate private investment in these value chains. The Malawian

government and agribusiness companies are seeking concrete information to guide their investments – which value chains, where, and how – an area of further research interest.

4.6. Next step

Moving forward, it will become necessary to explain how the desired transformation promoted by this Call to Action might be implemented. Clearly, more work is required over as short a period as possible to move this agenda forward. For that purpose, MwAPATA Institute is putting in place the Malawi Agriculture Policy Reform Mechanism (MAReM) as a common platform to facilitate the coherent visioning, development, adoption and implementation of the necessary reforms in the wider agriculture sector in Malawi. The socio-economic trends presented in Section 2 of this paper suggest that this reform process is long overdue, and aught not be delayed any further.

5. Conclusion

This paper highlights the urgent need for real change in Malawi's economic management and performance in order to avert a looming national catastrophe. Emphasis is on the significance of transforming the country's agricultural sector to develop strong, market-based linkages between agriculture and industry promote national prosperity. Further, the paper addresses the question of how the necessary transformation may be brought about, making the case for assembling a "coalition of the willing" to champion this change. In this regard, the experiences of some African countries suggest that top-level political leadership has been the main driver for change. This brings to the fore the associated question of whether leadership can effectively be an agent of change in Malawi's democratic dispensation.

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