

## The Future of Smallholder Farming in Malawi

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- Farm size in Malawi averages 0.73; roughly 30% of Malawian farmers are near landless, operating less than 0.5 ha.
- Given current low levels of farm productivity, farm sizes are too low to allow the majority of rural households to derive enough income from farming to get out of poverty.
- Raising agricultural productivity on smallholder farms is a precondition for economic transformation in Malawi; farm productivity growth will determine the rate of employment and income expansion in the rest of the economy.
- Raising agricultural productivity in Malawi will require substantially increased investment in research and development, agricultural extension, and infrastructure (e.g. roads, electricity, irrigation, etc.).
- Strengthening individualized tenure rights and rural financial institutions will promote sustainable agricultural productivity growth.
- Increased private investment in Malawian agriculture is crucial, but it is the state that determines the how much private investment flows into the country. The flow of private investment to Malawian agriculture will rise dramatically when the state creates and begins to implement a compelling and comprehensive vision for agri-food systems development.

### Background

Smallholder farmers, defined as households operating less than 5 hectares, constitute the bulk of agricultural producers in Malawi. Most of them are poor and food insecure. As witnessed in the Asian green revolution, smallholder-led farm productivity growth can catalyze economic transformation. For countries in the early stages of their development, inclusive forms of agricultural productivity growth generate far higher growth linkages and multiplier effects with the rest of the economy than large-farm or non-farm development models. Smallholders tend to spend their incomes on locally produced goods and services, therefore stimulating the rural non-farm economy and creating additional jobs.

However, the viability of the smallholder-led agricultural transformation strategy in Malawi faces several challenges including low productivity, dependence on rain-fed production systems with only one growing season, and limited use of

irrigation. Besides these known problems, the sector must prepare to cope with increasingly acute challenges such as high population densities and the increasing weather variability.

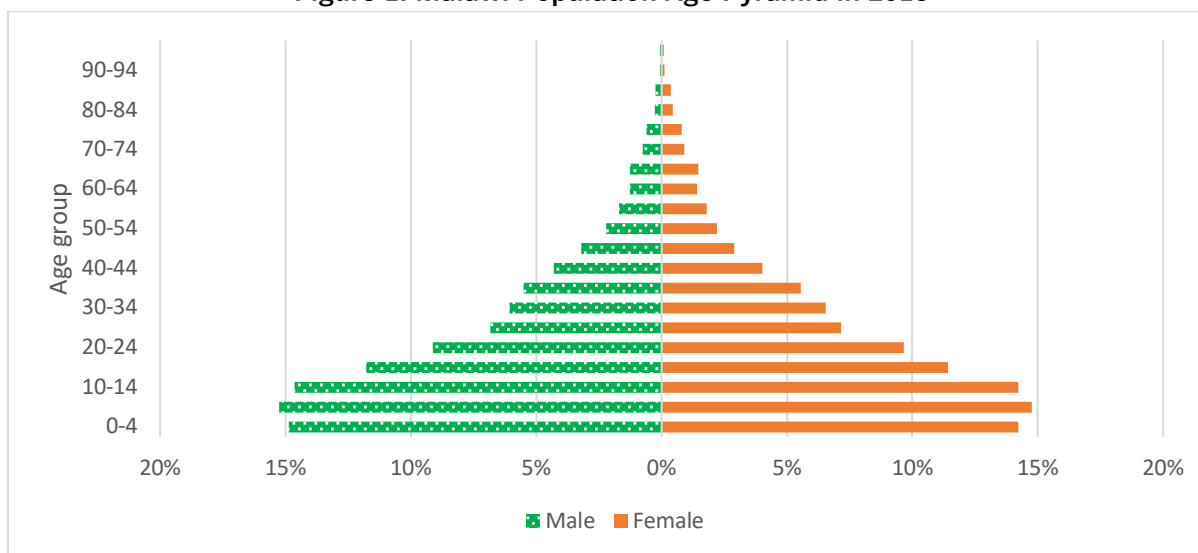
This paper examines if there is potential to revitalize smallholder farming in Malawi. Specifically, the paper : (1) identifies the key challenges facing agricultural growth in light of Malawi's current agricultural situation and emerging trends; (2) projects the consequences of a 'business as usual' strategy; and (3) identifies promising government strategies to support smallholder livelihoods.

### Main challenges facing the agricultural sector in Malawi

The future of smallholder farming in Malawi will be determined by how the government addresses the following challenges:

*High population growth and densities:* While population growth has slowed down in other continents, it has been on the upward trajectory in

**Figure 1: Malawi Population Age Pyramid in 2018**



Source: 2018 Malawi Population and Housing Census. Note: The horizontal reference line highlights that the majority of Malawians (74%) are below 25 years of age.

sub-Saharan Africa. In Malawi, the UN predicts that population will grow from 19.1 million in 2020, to 25.8 million by 2030, 34.1 million by 2040, and 44.1 million by 2050.<sup>1</sup> Increasing population density poses a number of challenges such as diminishing farmland sizes, unsustainable agricultural intensification, and rapid rise in the number of young people. For example, farm sizes are now too small with 30 percent of the farmers operating less than half a hectare while 76 percent of the farmers operate farms below one hectare. About two thirds of Malawi population are under 24 years of age, and 45 percent is under 15 years (Figure 1). Moreover, urbanization is low and has not kept pace with the population growth to stabilize available farmland, spur agribusiness opportunities, and provide non-farm employment opportunities.

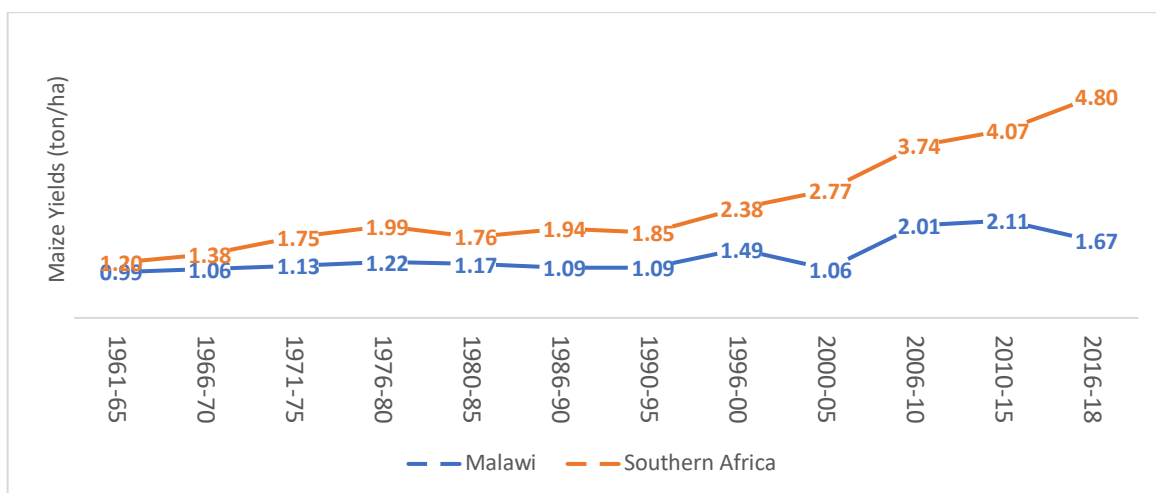
*Low agricultural productivity:* This largely due to limited use of productivity enhancing technologies—e.g., fertilizer and hybrid seeds. The country has a large yield gap in almost all crops. For example, while maize yields in Southern Africa region have quadrupled since 1960-65 period (Figure 2), maize yields have remained low in Malawi. Increasing inorganic fertilizer use intensities is necessary in improving agricultural

productivity. However, crops response to inorganic fertilizers is dependent on the soil organic carbon content.<sup>2</sup> Degraded soils respond poorly to inorganic fertilization. Consequently, with shrinking farm sizes and degraded soils, the country must brace for impaired crop response to inorganic fertilizers if nothing is done to boost the soil organic carbon levels.

*Rain-fed agriculture is not resilient to weather shocks:* The country is heavily dependent on rain-fed agriculture with only one growing season. This is notwithstanding the country’s huge irrigation potential that is estimated at 407,862 hectares and only 116,249 hectares have been developed. Overreliance on rain-fed agriculture exposes the country to weather shocks such as droughts. This has led to recurrent food insecurity and dependence on food aid that reduces donor aid flow to agricultural development. The frequent food insecurity also pushes farmers to allocate more farmland and time to maize production at the expense of high value crops.<sup>3</sup>

*Land markets are informal and land rights are largely tenuous.* Land market operations are thin in Malawi. Recent studies show that land rental markets in the country are promoting efficiency by

**Figure 2: Maize Yields in Malawi and Southern Africa**



Source: FAOSTAT (2020).

facilitating transfer of land to more productive farmers.<sup>4</sup> However, land rental markets could be driven by “distress renting”. The tenants are found to be wealthier than their landlord, and the landlords rent out land to meet immediate cash needs, or because of lack of labor and/or capital to cultivate the rented-out land. Perhaps the persons who need the land the most and lack financial resources to buy or lease land are crowded out of the market by wealthier investors.

*Inadequate/poor infrastructure:* Inadequate and poor infrastructure impedes agricultural productivity growth and commercialization, and agro-industrialization. For example, about 74 percent of the total road network in the country is unpaved and dilapidated.<sup>5</sup> The electricity supply faces several challenges such as low power generation due to declining water levels from droughts, siltation of rivers, and poor maintenance of hydropower plants. Inadequate infrastructure increases the costs of doing the agricultural business in the country. It impairs access to markets, increases transportation costs, and limits value addition activities.

*Unconducive policy environment:* Most of the policies and legislations regulating the agricultural sector were put in place soon after the country’s independence in early 1960s. Some of these policies are now outdated and in conflict with the realities of

a relatively liberalized economy. This has led to an unpredictable and inconsistent policy actions that stifle the private sector investment in agriculture. For example, the *ad hoc* export and import bans on agricultural produce hurts agricultural commercialization.

*Limited opportunities outside of agriculture:* There are limited employment opportunities outside agriculture to absorb excess labor in agriculture and the young people in search of livelihoods. The available rural and urban non-farm jobs are few and attract low earnings, lower than the US\$1.90/person per day, the internationally agreed poverty line. They are basically “poverty jobs”.

### **Key policy thrusts for addressing challenges facing smallholder farming**

We outline key policy proposals that require the attention by government and other key stakeholders to ensure a better future of smallholder farming in Malawi:

1. *Invest in increased agricultural productivity and improved soil health:* The greatest return on investment for agricultural productivity growth comes from: (i) research and development; (ii) education (especially farmer extension), and (iii) infrastructure (especially roads and electricity).

2. *Invest in irrigated agriculture:* Tap the huge unexploited irrigation potential to reduce the country's overreliance on rain-fed agriculture.
3. *Shore up land rights and tenure laws:* Secure land rights to incentivize long-term investments in soil health that are necessary for sustainable intensification. Individualization of tenure will promote agricultural productivity.
4. *Improve access to rural finance:* Improved rural finance services will ease resource-poor households' access to farm productivity enhancing technologies as well as access to land.
5. *Make policy environment predictable:* Provide a conducive policy environment for agricultural commercialization. Review policies and regulations that hinder the business of agriculture.
6. *Improve policy coordination:* Improve coordination between government policy, and public and private investment decisions. Make policymaking processes more inclusive by increasing private sector and civil society participation.

*Diversify employment creation beyond agriculture:* Creation of new non-farm employment opportunities to absorb the rapidly growing population and especially the young people. But, is instructive to note that no economy in history has successfully transitioned from being poor and agricultural to non-poor and industrial without first

increasing agricultural productivity. Increases in agricultural productivity leads to surplus production, which simultaneously leads to more disposable income for productive farmers (and their employees), spurring demand for goods and services produced off the farm, thereby stimulating the rural and urban non-farm economy and non-farm employment generation.

*This Policy Brief is not for citation. For additional resources and to cite this work, please refer to:*

Muyanga, M. et al., 2020. The Future of Smallholder Farming in Malawi. MwAPATA Working Paper No. 20/03, Lilongwe. Available at: <https://mwapata.mw/publications>.

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*This research was produced with the help of a grant from the Foundation for a Smoke-Free World (FSFW) Agricultural Transformation Initiative (ATI) through the Michigan State University (MSU) Food Security Group. The contents are the responsibility of study authors and do not necessarily reflect the views of FSFW, ATI and/or MSU.*

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