

POLICY BRIEF

A Cost-Benefit Analysis: Improving industrialisation and youth employment in Malawi

July 2021

KEY MESSAGES

- Malawi's youth have constrained opportunities for decent and full time employment. A quarter of youth in Malawi are underemployed, and almost all youth are employed in the two lowest skill tiers of employment, including youth who have finished secondary and tertiary education. More than 40% of youth who are deemed highly skilled only work in jobs that require low skill levels, typically self-employed, informal, micro-enterprises that have limited value addition.
- The root cause of the youth underemployment and unemployment in Malawi is a lack of jobs which itself is caused by limited structural transformation of the economy. Internationally and in Malawi, the typical policy response to youth employment challenges is to focus on vocational and skills training for youth. However, this approach neglects the demand side of the labor market. Boosting industrialization and the broader business environment can stimulate firm growth that would naturally employ more skilled labour.
- Industrialization is defined more broadly than simply the growth of manufacturing services but rather as a process of economic transformation that results in employment creation. To that end, a number of tradable services industries share many characteristics as manufacturing, particularly the capacity to create better jobs. They benefit from productivity growth, scale and agglomeration economies. This analysis focuses on two interventions in that sphere: A poultry outgrower model that strengthens market linkages to increase the value of agricultural commodities in Malawi and a credit guarantee scheme for medium, small and micro enterprises (MSMEs).
- The poultry outgrower model strengthens connections between small scale poultry farmers, commercial poultry firms, and soybean processors. Small-scale poultry farmers can use soybean oilcake to generate more and higher quality eggs for commercial poultry firms. At the same time this would increase demand for soybean oilcake, utilizing existing capacity which is currently idle. The intervention would generate MWK 1.4 for every MWK 1 invested and 10,800 years of employment between 2021 and 2040. The benefits of agro-processing value chain integration can be expanded through exports.
- The Credit Guarantee Scheme (CGS) aims to provide MSMEs with greater access to formal finance, improving their ability to invest in production-enhancing inputs, including hired labour. The intervention generates MWK 1.05 for every MWK 1 invested and 11,776 years of employment between 2021 and 2026.
- International experience has shown there is no 'silver bullet' for industrialization and job growth in any economy. This paper demonstrates the potential for job creation from addressing barriers in market linkages and access to finance in two relatively narrow and specific areas. Mass employment requires a portfolio of targeted interventions. Besides these two interventions, other research papers in the Malawi Priorities series provide complementary interventions that support Malawi's wealth and job creation aspirations including land titling, agricultural commodity exchange reform, energy sector reform, improving education quality and artisanal and small-scale mining support.

Context

This analysis grew from two distinct research questions: "Where should Malawi focus its resources to achieve industrialization?" and "Which policies can effectively address youth unemployment and underemployment?" In considering the challenges and opportunities for both areas, the authors recognized a number of overlaps and common spaces for growth, and as such, the analysis was merged. Malawi's young workforce participants are reliant on Malawi's ability to improve industrialization, without which any amount of skilled labor would remain unused.

Since 1980, Malawi's growth has fallen behind the Sub-Saharan Africa average, with weak and volatile growth highly dependent on rainfed agriculture and unreliable agricultural outputs. Maize and tobacco have been at the center of Malawi's politics and economy, however, in order to achieve economic growth, there is a need for product diversification and investment in measures that promote productivity. At the same time Malawi's youth have constrained opportunities for decent and full time employment. A guarter of youth in Malawi are underemployed, and almost all youth are employed in the two lowest skill tiers of employment, including youth who have finished secondary and tertiary education. More than 40% of youth who are deemed highly skilled only work in jobs that require low skill levels, typically self-employed, informal, micro-enterprises that have limited value addition. Conventional skill development programs, which are regularly conducted in response to youth unemployment, fail to adequately respond to these challenges.

Intervention 1: Poultry Farm Outgrower Scheme

Malawi's agro-processing value chains are characterized by weak linkages and inefficient marketing channels, largely driven by infrastructure gaps and information asymmetries between stakeholders. There is often a mismatch between supply and demand for agricultural products, and it can be challenging for agro-processors to achieve profitable margins. The animal feed to poultry sector value chain is one such example of a value chain that could benefit from greater integration. The intervention modelled in this study is a poultry farm outgrower scheme that aims to strengthen connections between small scale poultry farmers, commercial poultry firms, and soybean processors. Small-scale poultry farmers can use soybean oilcake to generate more and higher quality eggs for commercial poultry firms. At the same time this would increase demand for soybean oilcake, utilizing existing capacity which is currently idle.

Costs and Benefits:

The primary benefits of this intervention are the increase in egg sales, cost savings through increased efficiency of egg production, as well as the increased income to labour entering the soybean processing sector. Costs include start-up capital costs, recurring capital and operations and maintenance costs, and the social cost of carbon emissions.

The intervention would generate MWK 159 million initially, rising to MWK 6,050 million by 2040. 80% of the benefits accrue to the poultry sector in terms of higher egg sales and cheaper production costs, with the rest going to the soybean sector. The cost of the intervention is MWK 222 million rising to MWK 4,337 million for startup and ongoing costs for outgrower farmers. The intervention would generate MWK 1.4 for every MWK 1 invested and 10,800 years of employment between 2021 and 2040. The benefits of agro-processing value chain integration can be expanded through exports. The results of the poultry egg outgrower scheme modelled in this study are based on projected domestic demand for poultry eggs. The Government of Malawi could work with entities such as the Malawi Investment and Trade Commission to identify opportunities to expand exports of poultry eggs to regional neighbours to expand and diversify the benefits of value chain integration.

Intervention 2: Credit Guarantee Scheme

Formal lenders cannot easily distinguish between good and bad borrowers. As such, formal loans are set at higher rates, forcing many SMEs out of the formal finance market. These credit-constrained SMEs may be unable to invest in production-enhancing inputs, including hired labour. On the other hand, financiers are often unable or unwilling to lend to SMEs due to the relatively high risk



Figure 1: Key barriesr to employment growth

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of default compared to larger firms. To help address these issues, the intervention modelled is a credit guarantee scheme to provide SMEs with greater access to formal finance. However, it is important to note that the government should not engage in loan generation in the space of banks. Banks have the infrastructure, incentives and capability to assess lending risk. Instead, the role for the government should be to assume some of the risk of lending, that the banks would not otherwise.

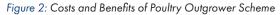
Costs and Benefits:

The primary benefits of this intervention are the increased return on capital to SMEs who gain access to credit through the intervention, as well as the SME surplus that accumulates from a reduction in the cost of borrowing. By 2026, the intervention would require MWK 10,712 million in costs of financing, defaults and administration but generate MWK 11,039 million in returns and surplus for MSMEs. The intervention generates MWK 1.05 for every MWK 1 invested and 11,776 years of employment between 2021 and 2026.

Overall Policy Implications

The root cause of the youth underemployment and unemployment challenge in Malawi is a lack of jobs which itself is caused by limited structural transformation of the economy. While many youth employment programs cite a lack of skills as a constraining issue, skills development alone will not address the challenge of youth employment in Malawi.

Demand-driven education and skills development programs are still needed. Due to the mismatch of demand and supply in the labour market in Malawi, it is likely that economic growth will need to be accompanied by investment in education and infrastructure to connect youth to employers. These programs should be designed



and funded based on the skills demanded by the job market.

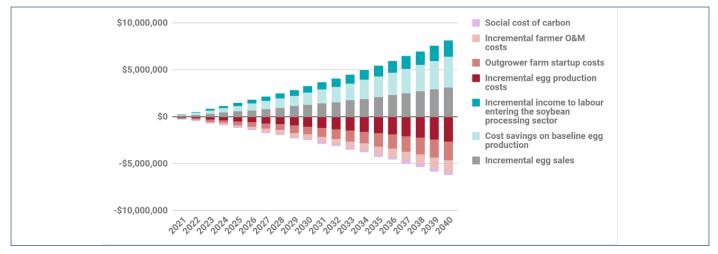
Industrialization is defined more broadly than simply the growth of manufacturing services but rather as a process of economic transformation that results in employment creation. To that end, a number of tradable services industries share many characteristics as manufacturing, particularly the capacity to create better jobs. They benefit from productivity growth, scale and agglomeration economies.

Any intervention that might be designed should undertake a thorough assessment of considerations related to land tenure.

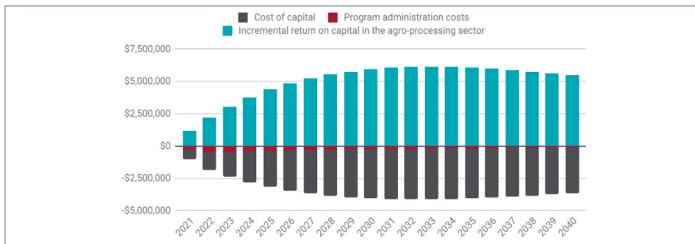
Land tenure is an exceedingly complex and often contentious matter which should be a central consideration of any intervention that is designed to advance industrialization and youth employment in Malawi. Poorly designed interventions can cause more harm than good by excluding marginalized citizens from accessing benefits or, worse yet, further marginalizing people by dispossessing them of their livelihoods.

International experience has shown there is no 'silver bullet' for industrialization and job growth in any economy. Mass employment requires a portfolio of targeted interventions:

While the interventions modelled in this study are expected to yield net benefits for Malawi's economy, they fall well short of the 1 million jobs that the Government of Malawi hopes to create during its term. This level of job creation will require a larger portfolio of interventions, of which the two we have modelled can serve as examples. Other research papers in the Malawi Priorities series provide complementary interventions that support Malawi's wealth and job creation aspirations including land titling, agricultural commodity exchange reform, energy sector reform, improving education quality and artisanal and small-scale mining support.







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SUMMARY TABLE

Intervention	BCR	Costs	Benefits
Credit Guarantee Scheme	1.05 Fair	Costs over 6 years Capital costs (MWK 48,085 million) Program administration costs (MWK 3,348 million)	Benefits over 6 years Increased revenue and surplus earned by MSMEs (MWK 54,100 million)
Poultry Outgrower Scheme	1.3 Fair	Costs over 20 years Incremental egg production costs (MWK 17,790 million); Outgrower farm startup costs (MWK 14,369 million); Incremental farmer O&M costs (MWK 8,188 million)	Benefits over 20 years Value added by poultry outgrowers (MWK 21,429 million) Cost savings on baseline egg production (MWK 22,355 million) Increased income to labour in soybean sector (MWK 11,778 million)

Note: BCRs are based on costs and benefits discounted at 8% (see accompanying technical report). BCR ratings are determined on the following scale Excellent, BCR > 15; Good, BCR 5-15; Fair, BCR 1-5; Roor, BCR < This traffic light scale was developed by an Eminent Panel including several Nobel Laureate economists for a previous Copenhagen Consensus project that assessed the Sustainable Development Goals.

Malawi Priorities: Background

Malawi Priorities is a research-based collaborative project implemented by the National Planning Commission (NPC) with technical support from the African Institute for Development Policy (AFIDEP), and the Copenhagen Consensus Center (CCC) to identify and promote the most effective interventions that address Malawi's development challenges and support the attainment of its development aspirations. The project seeks to provide the government with a systematic process to help prioritize the most effective policy solutions so as to maximize social, environmental and economic benefits on every kwacha invested. Cost-benefit analysis is the primary analytical tool adopted by the project. Cost-benefit analysis will be applied to 20-30 research questions of national importance. Research will take place over the course of 2020 and 2021.

Research questions were drawn from the NPC's existing research agenda, developed in September 2019 after extensive consultation with academics, think tanks, the private sector and government. This sub-set was then augmented, based on input from NPC, an Academic Advisory Group (AAG) of leading scholars within Malawi, and existing literature, particularly previous cost-benefit analyses conducted by the Copenhagen Consensus Center. The research agenda was validated and prioritized by a Reference Group of 25 prominent, senior stakeholders. The selection of interventions was informed by numerous consultations across the Malawian policy space, and one academic and two sector experts provide peer review on all analyses.

Cost-benefit analyses in Malawi Priorities consider the social, economic and environmental impacts that accrue to all of Malawian society. This represents a wider scope than financial cost-benefit analysis, which considers only the flow of money, or private cost-benefit analysis, which considers the perspective of only one party. All benefit-cost ratios (BCRs) reported within the Malawi Priorities project are comparable.

The cost-benefit analysis considered in the project is premised on an **injection of new money available to decision makers**, that can be spent on expanding existing programs (e.g. new beneficiaries, additional program features) or implementing new programs. Results should not be interpreted as reflections on past efforts or the benefits of reallocating existing funds.

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