

Achieving Agricultural Development and Economic Growth in Malawi: How CAADP can help

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Agriculture is an important mainstay of the Malawian population. It contributes about 40 percent of the gross domestic product (GDP), comprises 60 percent of foreign exchange earnings, and employs three quarters of the population. In light of this, and the renewed focus on agriculture's role in development, the Government of Malawi is preparing its Agricultural Development Plan (ADP) to revitalize agriculture as an engine of growth and development. Malawi is also in the process of implementing the Comprehensive Africa Agriculture Development Programme (CAADP), in association with the New Partnership for Africa's Development (NEPAD). CAADP provides a framework of development priorities aimed at restoring agricultural growth, rural development, and food security in the African region. CAADP's main target is achieving 6 percent agricultural growth per year, supported by the allocation of at least 10 percent of national budgetary resources to the agricultural sector.

A recent International Food Policy Research Institute (IFPRI) study used an economywide model to estimate the investments required to meet the 6 percent agricultural growth target of CAADP, and analyzed the effects of this growth rate on the economy. To help policymakers and other stakeholders make informed long-term decisions to stimulate the Malawian economy and meet the first Millennium Development Goal (MDG1) of halving poverty by 2015, the findings of the study are summarized below.

MALAWI IS NOT ON TRACK TO HALVING POVERTY BY 2015

Under its current growth path, Malawi will fall short of achieving MDG1 of halving poverty by 2015. The study estimated a "business-as usual" baseline scenario to predict growth performance between 2005 and 2015. This

scenario assumed that agricultural yields will continue to grow slowly over the coming years, with agricultural GDP growing at around 2.8 percent per year, and manufacturing and services growing at approximately 3.2 and 3.7 percent per year, respectively. Overall GDP growth will average 3.2 percent per year, which is in line with the average GDP growth rate of 2.8 percent from 1990 to 2005.

Under this scenario, per capita GDP will grow at 1.0 percent and poverty will decline modestly from 52 percent in 2004 to 47 percent in 2015. However, with an expanding population, the absolute number of poor people will increase from about 6.5 million in 2004 to 7 million by 2015. Thus, Malawi must accelerate growth and poverty reduction beyond its current trajectory if it is to come close to achieving the MDG1 of halving poverty by 2015.

PURSUING THE GOALS OF CAADP IS FEASIBLE FOR MALAWI AND FACILITATES POVERTY REDUCTION

Given Malawi's current high rate of poverty, even achieving 6 percent agricultural growth will not be sufficient to halve poverty by 2015. To do so, both agriculture and non-agriculture will need to grow at about 6.9 and 7.6 percent per year, respectively, an unlikely growth rate in Malawi. However, even though the MDG1 target appears beyond reach, implementing CAADP will substantially reduce the number of poor people living below the poverty line by 2015, and will be feasible by 2015 if the country can realize reasonably ambitious improvements in crop yields and subsector growth. Compared to the baseline scenario, such agricultural growth will increase annual GDP growth from 3.2 percent to 4.8 percent and reduce national poverty from 47 to 35 percent by 2015. Higher growth under the CAADP scenario will lift almost 2 million additional people above

the poverty line by 2015 and reverse the trend of increasing absolute numbers of people in poverty. Food security will also improve, with annual average per capita cereal consumption rising from 154 kilograms under the baseline scenario to 177 kilograms by 2015 under the CAADP scenario. Therefore, while implementing CAADP will not enable Malawi to reach the MDG1 poverty target, it is still a worthwhile goal due to its welfare effects.

CAADP BENEFITS BOTH RURAL AND URBAN HOUSEHOLDS

According to the model, under the CAADP scenario, faster agricultural growth will benefit the majority of households but the distribution and type of benefits will depend to a large extent on the household's location. Partly due to rising agricultural incomes under CAADP, rural households will benefit more than households in urban areas in terms of income growth. Per capita incomes for rural households will grow by an additional 1.2 percent per year compared to 1.0 percent for urban households. Poverty reduction will also vary. Rural poverty will decline by an additional 13 percent, while urban poverty will decline by only 6 percent. Urban areas will see benefits under CAADP, but they will experience them in terms of production growth. Compared to the baseline, urban farm production will increase by 3.3 percent under CAADP, while rural farm production will only increase by 2.4 percent. This will be largely driven by the expanding maize production projected under CAADP, which constitutes a larger share of urban agricultural land than in rural areas.

The benefits of CAADP will also vary within rural areas. Rural households producing higher-value export-oriented crops, such as tobacco, will experience greater production and income growth than households in rural areas producing other crops. However, households that do not produce exports will still benefit from production growth, both directly, due to yield improvements, and indirectly by reallocating cropland to higher-value crops. Therefore, although the benefits of CAADP will affect different types of farm households in different ways, each type of household will experience a positive impact.

BOTH FOOD AND EXPORT CROPS SHOULD BE PRIORITIZED FOR PRO-POOR GROWTH

The study found that export crops, such as tobacco, will play a role in increasing per capita incomes and may be an appropriate priority in Malawi's agricultural growth strategy. Yet households producing these crops are typically less poor than other rural households. Thus, agricultural growth driven exclusively by export crops will have less of an impact on poverty.

Growth driven by food crops, however, such as maize and pulses, will be more pro-poor. Food crops tend to be a more important source of agricultural income for poorer households in more remote areas of the country, and reduce urban poverty by decreasing urban food prices. However food crops have limited scope and lower growth potentials than export crops, which means they contribute less to national

Table 1: Estimated funding requirements (Growth rates and shares)

Real growth rates (%)	Base	CAADP		MDG1	
		Low Efficiency	High Efficiency	Low Efficiency	High Efficiency
Total government expenditure	6.4	10.7	9.0	12.8	9.7
Agriculture	12.4	26.3	19.3	32.5	22.4
Non-agriculture	5.7	7.6	7.6	7.6	7.6
Agricultural expenditure shares (%)					
Agriculture expenditure in total expenditure					
2004	7.0				
2010	9.8	16.5	12.3	20.8	14.0
2015	12.8	30.5	19.0	42.7	23.7
Agriculture expenditure in agricultural GDP					
2004	6.0				
2010	10.2	17.1	12.2	21.7	13.5
2015	15.9	41.2	22.0	63.5	26.5

Source: Benin et al. 2008.

Table 2: Estimated agricultural funding requirements (2004 Kw, billions)

	CAADP			MDG1	
	Base	Low Efficiency	High Efficiency	Low Efficiency	High Efficiency
2004	4.2	4.2	4.2	4.2	4.2
2005	4.7	5.3	5.0	5.5	5.1
2006	5.3	6.7	5.9	7.3	6.3
2007	5.9	8.4	7.1	9.7	7.7
2008	6.7	10.6	8.5	12.9	9.4
2009	7.5	13.4	10.1	17.1	11.5
2010	8.4	17.0	12.1	22.6	14.1
2011	9.4	21.5	14.4	30.0	17.2
2012	10.6	27.1	17.2	39.8	21.1
2013	11.9	34.2	20.5	52.7	25.8
2014	13.4	43.3	24.4	69.9	31.5
2015	15.0	54.7	29.1	92.6	38.6
Total	103.0	246.3	158.4	364.4	192.3
Annual average	8.6	20.5	13.2	30.4	16.0

Source: Benin et al. 2008.

agricultural growth. Thus, Malawi should not overly rely on one single crop sector for its agricultural growth strategy but rather pursue a broad-based agricultural growth strategy that encourages export crops for economywide growth and maize for poverty reduction, while also encouraging pulses and horticulture.

AGRICULTURAL INVESTMENTS MUST BE EFFICIENT

Increasing agricultural growth to meet the CAADP growth target will require additional investment in the sector. If this public spending is efficiently allocated, with a high rate of return, less additional investment will be required. In the average Sub-Saharan African country every 1.0 percent increase in total agricultural spending causes at least a 0.3 percent increase in agricultural GDP. At this rate, achieving and sustaining the CAADP target of 6 percent agricultural growth rate in Malawi will require agricultural expenditure to grow by 19 percent per year (Table 1). This amounts to additional spending (above the baseline funding requirements) of Kw 158.4 billion from 2005 to 2015 or Kw 13.2 billion per year (Table 2). This means the government will need to allocate almost one fifth of its total budgetary resources to agriculture by 2015. However, if the government actually receives a more modest return on its spending, then public spending on agriculture will have to grow at about 26 percent

per year in order to reach the CAADP target. This equates to Kw 246.3 billion from 2005 to 2015, or Kw 20.5 billion per year, representing almost one third of the government's total budget by 2015. Therefore, it is important that the government not only increase its investment in agriculture, but also greatly improve the efficiency of its spending in the sector.

KEY INVESTMENTS MUST BE PRIORITIZED

In order to realize the growth and poverty-reducing potential of CAADP, Malawi will need to prioritize long-term investments and focus on programs

such as agricultural research and development, irrigation and rural infrastructure.

Long-term investments

In 2007, the Government of Malawi spent about 6.5 percent of its total budgetary resources on fertilizer subsidies. While spending on fertilizer will lead to large short-term productivity gains, unlike spending on research or irrigation, these gains will not carry over. A single subsector dominant investment strategy is unlikely to yield desirable outcomes on its own. Malawi may need to sacrifice some of its short-term productivity gains for more sustainable development investments and a more balanced spending portfolio.

Research and development

Investment in agricultural research and development (R&D) offers great potential for enhancing productivity and reducing poverty. Thirtle et al. (2003), for example, showed that for every 1 percent increase in yield brought about by investments in agricultural R&D, 2 million Africans can be lifted out of poverty. However, agricultural R&D spending in Malawi has been erratic and declining over time. It is currently at the African average level of 0.5-0.6 percent of agricultural GDP, but below the 1 percent recommended by the World Bank.

Irrigation

The impacts of irrigation on agriculture are well known, in part due to the success of the Asian Green Revolution in the 1960s and 1970s, which relied heavily on the rapid expansion of irrigated areas. Malawi has an irrigation potential of about 162,000 hectares, but only a little over 2 percent of the total arable land is under irrigation. The Government of Malawi, under the framework of Malawi's Growth and Development Strategy (MGDS) for 2006 through 2011, is planning to construct and promote small- and medium-scale irrigation schemes to enhance food and cash crop production and has consequently earmarked about 1.2 percent of the total budget for these. This allocation will raise the area under irrigation to 16,000 hectares by 2011. Whether this allocation will be sufficient to reach the set target remains uncertain.

Rural infrastructure

Investment in rural infrastructure, particularly feeder roads, has been shown to have large poverty reduction effects per unit of investment. Malawi currently ranks 16th in Sub-Saharan Africa for road density, with only 161 kilometers per 1000 square kilometers. The inadequacy of the country's current transportation infrastructure has resulted in high costs of production, with transportation representing about 55 percent of costs, compared to 17 percent in other less-

developed countries. Under the MGDS, Malawi is planning to spend Kw 7.6 billion to improve its road network, focusing on routine and periodic maintenance, rehabilitation and upgrading, with targets of 71 percent of the road network in good condition, 18 percent in fair condition, and 11 percent in poor condition. Although this is not likely to improve road density, it should significantly improve road conditions.

CONCLUSION

By directing more resources to the agricultural sector through its ADP and implementation of CAADP, Malawi will be able to significantly improve the well-being of its population. While CAADP will not enable Malawi to achieve the MDG1 poverty target, 6 percent agricultural growth is a feasible goal that leads to impressive poverty reduction. However, in implementing CAADP, Malawi will need to focus its investments to ensure that the economic benefits and welfare impacts reach the poorest. This will require not only increased public expenditures to the sector, but also more efficient spending targeted to long-term programs with well-known beneficial impacts.

This brief was prepared by Melissa Lambert and Marcia MacNeil based on the International Food Policy Research Institute (IFPRI) Development Strategy and Governance Division Discussion Paper No 00794, *Agricultural growth and investment options for poverty reduction in Malawi* (2008) by Samuel Benin, James Thurlow, Xinshen Diao, Christen McCool and Franklin Simtowe. The full discussion paper is available for download at <http://www.ifpri.org/pubs/dp/ifpridp00794.pdf>.

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The ReSAKSS nodes offer high-quality analyses to improve policymaking, track progress, document success, and derive lessons for the implementation of the CAADP agenda. ReSAKSS is jointly funded by the United States Agency for International Development (USAID), the UK Department for International Development (DFID), and the Swedish International Development Cooperation Agency (SIDA). The nodes are implemented by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Institute of Tropical Agriculture (IITA), the International Livestock Research Institute (ILRI) and the International Water Management Institute (IWMI), in collaboration with regional and national partners.

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