

Agriculture for Development in Ghana: New Opportunities and Challenges

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Impressive growth and record poverty reduction over the past 20 years have made Ghana an African success story. The average GDP growth rate between 1984 and 2006 was 4.9 percent, while per capita GDP increased by close to 2 percent annually. Agricultural growth has played an important role in this development, with an average annual growth rate of 5.5 percent over the past five years. Policymakers and researchers agree that the sector can continue to play an important role in Ghana's future development, as it accounts for 40 percent of GDP, three quarters of export earnings, and employs 55 percent of the labor force.

Recognizing this, the government of Ghana is implementing the Comprehensive Africa Agriculture Development Programme (CAADP) Roundtable discussion. CAADP provides an integrated framework of development priorities aimed at restoring agricultural growth, rural development and food security in line with the achievement of the first

Millennium Development Goal (MDG1) of halving poverty by 2015. The main target of CAADP is achieving six percent agricultural growth per year, supported by the allocation of at least ten percent of national budgetary resources to the agricultural sector.

This brief highlights the feasibility of the CAADP targets in Ghana, their potential impacts on the Ghanaian economy, and the quantity and type of investments necessary to achieve them. The estimates are based on an economywide model developed by IFPRI. It is hoped that the findings summarized here will help policymakers and other stakeholders make informed long-term decisions to stimulate Ghana's economy and meet the poverty target of MDG1.

GHANA WILL ACHIEVE THE FIRST MDG

Under its current growth path, Ghana will reduce poverty from 28.5 percent in 2006 to 16.4 percent in 2015 (Figure 1 and Table 1), and can meet the first Millennium Development Goal of halving poverty by 2015. In fact, under this "business as usual" scenario, the national poverty rate will be halved in 2008, at 24 percent, compared to 52 percent in 1991–1992. If this occurs, Ghana will be the first African country to meet the poverty target of MDG1.

This baseline scenario predicts non-agricultural growth to rise as well, with the industrial and service sectors growing at 5.6 and 5.2 percent per year, and overall GDP to grow at an average rate of 4.9 percent per year (Table 2).

Figure 1: Changes in poverty rates under simulations (percent)

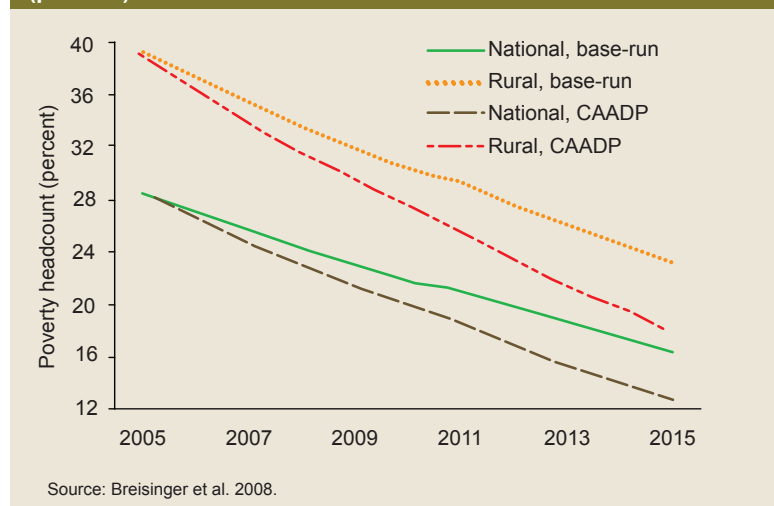


Table 1: Poverty rates under the baseline and CAADP scenarios

	Data 2005	Baseline 2015	CAADP 2015	Additional poverty reduction by 2015
North	62.7	48.6	40.6	7.9
Rest of the country	19.7	8.6	5.6	2.9
National	28.5	16.4	12.5	3.9
Rural	39.2	23.2	17.5	5.7

Source: Breisinger et al. 2008.

The rural poverty rate will also be halved by 2009, when it reaches 31.9 percent, compared to 63.6 percent in 1991/92. However, little progress in poverty reduction can be expected in the North—the poverty rates in this lagging region will remain as high as 49 percent in 2015—and regional differences in incomes will increase (Table 1). Moreover, if Ghana continues “business as usual,” the country will be unable to reach its more ambitious goal of becoming a middle-income country by 2015. Therefore, although Ghana is on track to meet MDG1, it must still search for new opportunities to accelerate growth and poverty reduction, especially in lagging areas.

IMPLEMENTING CAADP CAN HELP GHANA BECOME A MIDDLE-INCOME COUNTRY

If Ghana reaches the CAADP target of six percent agricultural growth, its achievement of MDG1 will be secure, and the country can reach its goal of becoming a middle-income country by 2015. In fact, the CAADP target of six percent agricultural growth is the minimum growth rate required to achieve the middle-income goal, which is not achievable under Ghana’s current growth path.

Under the CAADP growth scenario, which is feasible with reasonably ambitious improvements in crop yields and subsector growth, overall GDP growth will rise from 4.9 to 5.8 percent per year, and both national and rural poverty rates will be cut in half one year earlier than under the current growth path.

Rural poverty will fall to 17.5 percent by 2015, substantially lower than the 23.2 percent predicted under the “business-as-usual” scenario. This translates to an additional 850,000 people moving out of poverty, mostly from rural areas.

PRODUCTIVITY MUST INCREASE TO REACH THE CAADP TARGET

Although Ghana has seen high average agricultural growth rates of 5.5 percent in recent years, some researchers have noted this growth has been supported by favorable external conditions and driven by extensive forces, such as land expansion, rather than improvements in productivity. IFPRI model results indicate that improvements in productivity, rather than land expansion, will be needed to reach the CAADP growth scenario. In fact, under the model of six percent agricultural growth, productivity accounts for 47 percent of GDP and 56 percent agriculture GDP. Staple crops are an important source of growth in both the current growth path (accounting for 52 percent of agricultural growth) and the CAADP scenario (46 percent). Growth in export crops has a large contribution as well: 20 percent of agricultural growth in the current scenario and 32 percent under CAADP. However, these productivity gains will require substantial increases in Green Revolution-type investments, including rural

Table 2: Growth under the baseline and CAADP scenarios

	Data	Simulation results	
	2001-2006 average (%)	Base-run	CAADP
Annual Growth		2006 – 2015 annual average (%)	
GDP		4.9	5.8
AgGDP	4.2	4.2	6.0
Industry	5.6	5.6	6.0
Services	5.2	5.2	5.5
Contribution to GDP growth			
AgGDP		31.8	39.4
Industry		31.7	28.4
Services		36.5	32.3
Share of GDP	2005	2015	
AgGDP	38.7	37.6	38.1
Industry	27.9	27.9	27.5
Services	33.4	34.5	34.4

Source: Breisinger et al. 2008.

Table 3: Aggregate economic indicators for the agriculture/rural and non-agriculture/urban groups

	Agriculture/rural			Non-agriculture/urban		
	Annual growth rate		% Increase from base by 2015	Annual growth rate		% Increase from base by 2015
	Base	CAADP		Base	CAADP	
GDP	4.2	6.0	19.3	5.4	5.7	3.3
Production	4.3	6.1	18.8	5.5	5.9	4.3
Exports	3.6	6.0	25.7	5.7	6.2	4.3
Imports	4.7	4.1	-6.3	4.9	5.8	9.0
Consumer price index by 2015 (%)	2.7	-1.9	-4.5	-2.0	3.0	5.2
Wage rate of labor	2.9	4.1	12.1	2.7	3.9	12.1
Real household income	4.6	5.8	12.2	5.0	6.0	10.2
Savings	4.5	5.8	13.2	5.1	6.1	10.3
Terms of trade for agriculture	4.9		-3.9			

Source: Breisinger et al. 2008.

infrastructure, such as irrigation, marketing, extension, and agricultural research and development.

SPILLOVER FROM CAADP-LED AGRICULTURAL GROWTH WILL BOOST GHANA'S ECONOMY

Spillovers and surplus transfers from CAADP-led high agricultural growth to non-agricultural sectors will raise non-agricultural GDP 3 percent higher than in the current growth scenario (Table 3). For example, productivity growth in staple crops means Ghana can produce more food and agricultural materials using less labor input. This lowers the cost of labor and allows labor to migrate from rural to urban areas and engage in non-agricultural growth. As observed during the development experiences of many Asian countries, this supply of low-cost labor is critical to support the development of labor-intensive manufacturing and services. Likewise, surplus transfers of export crops provide additional foreign exchange earnings which help non-agricultural sectors by financing capital and imports of consumer goods. However, productivity growth in staple agriculture is crucial. Without it, growth in exports can

raise the domestic demand for food, which can result in either higher food prices or the need for more food imports. Also, without the corresponding decrease in staple prices, the increased demand for labor and capital to support export growth can inflate factor prices. Under these conditions, it often becomes difficult to develop labor-intensive manufacturing and services. Such a situation could significantly slow the structural transformation of Ghana.

RURAL AND URBAN HOUSEHOLDS BOTH BENEFIT UNDER THE CAADP SCENARIO

The model results show that poverty reduction is the result of increased incomes and lowered food prices driven by productivity growth in the agricultural sector. Urban house-

Table 4: Growth in household income in the CAADP scenario

	Growth in agricultural income	Additional growth in agricultural income from the base-run	Growth in total income	Additional growth in total income from the base-run
Urban			6.09	1.11
Accra			6.28	1.14
Coast			5.97	1.09
Forest			5.94	1.08
S. Savannah			5.93	1.08
N. Savannah			6.14	1.12
Rural	5.76	1.33	5.82	1.29
Coast	6.19	1.17	6.08	1.14
Forest	5.89	1.42	5.88	1.40
S. Savannah	5.25	1.04	5.49	1.06
N. Savannah	5.93	1.62	6.02	1.53

Source: Breisinger et al. 2008.

holds share the gains from agricultural growth acceleration under CAADP, with rural and urban incomes growing at similar rates of around 6 percent (Table 4). Rural households also benefit from additional income growth under the CAADP scenario (1.29 percent compared to 1.11 percent under the current growth scenario.)

AGRICULTURAL GROWTH UNDER CAADP IS PRO-POOR, BUT TARGETED INTERVENTIONS ARE STILL NEEDED

Accelerated income growth under CAADP will speed up poverty reduction in the lagging regions of the country, particularly the North, which will benefit from the largest additional poverty reduction, as shown in Table 1. However, given the region's high initial poverty rate (63 percent in 2005/06 compared to 20 percent nationally), poverty in the North will remain high in 2015 even under the CAADP scenario, at 41 percent, 30 percentage points higher than the national average. Thus, while CAADP growth has a faster and larger impact on the poorest areas of the country, it is still not sufficient to immediately reduce the regional divide. Policies and interventions planned under the CAADP framework should be integrated with interventions targeted toward the North and the poorest of the poor.

CONCLUSION

Agriculture is important for Ghana not only as a source of growth but also as a tool for poverty reduction. By directing more resources to the agricultural sector by implementing CAADP, Ghana may not only reduce poverty beyond the first MDG, but also increase the likelihood of reaching middle-income status. While CAADP has impressive poverty reduction capabilities, the regional disparities in Ghana are too deep to be immediately eradicated. Therefore, regionally targeted policies to the North and the poorest populations should be integrated with the implementation of CAADP to ensure even development.

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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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