Are African Countries Paying Too Much Attention To Agriculture?

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Escalating food prices in 2007-2008, climate change and land grabbing have woken the world up to the extraordinary challenge of feeding 9 billion people by 2050. Indeed, following several world summits, policymakers are now convinced of the need for a significant increase in public investment in agriculture. Even the private sector is scaling up its investment in the sector (Financial Times, 27 January 2010). In Africa, an Alliance for the Green Revolution in Africa (AGRA), led by former UN Secretary General Kofi Annan, has taken root.

Has the pendulum swung back too far?

Is it really in every country's interest to raise its agricultural production? As long as food is tradable, global and household food security do not imply national food self-sufficiency. Economists at the International Growth Center (ICG) sponsored by DFID are warning against an 'Agriculture first' approach in sub-Saharan Africa (SSA). In their view, over emphasis on agriculture in general, and smallholder agriculture in particular, will not produce the required growth and poverty reduction in all but possibly landlocked SSA.

Whether agriculture can act as an engine of growth hinges critically on food being non-tradable. Rising agricultural productivity then translates into lower food prices, thereby increasing real incomes and demand for locally produced goods and services, and thus growth outside agriculture. Given increased market integration across and within countries, they very much doubt whether these traditional intersectoral growth linkages still hold.
According to this view, agricultural development in Africa is also likely to bypass most of the poorer smallholders. Economies of scale in processing, marketing and transport favour large scale farming. To promote growth and reduce poverty, governments are thus advised to focus attention elsewhere. In particular, the promotion of extractive industries is believed to hold much more promise for growth in mineral rich countries. And coastal Africa is better positioned to grow its way out of poverty through manufactured exports, the argument goes. When it comes to agriculture, a more sympathetic view of large-scale farming is called for.

**What do the numbers say?**

Have African food economies indeed become so open as to undermine agriculture's traditionally strong intersectoral linkages? On the contrary, the series of recent studies examining African food market integration during the 2000s confirms that most food markets continue to be only weakly integrated in international markets. There is also new econometric evidence of continuing intersectoral linkages emanating from agriculture. Perhaps the most innovative study for Africa uses light intensity from outer space to capture non-agricultural activity, thereby circumventing many measurement issues. A one standard deviation increase in rainfall in the rural hinterlands (an exogenous proxy for agricultural growth) is found to increase GDP in the nearby cities by 4 percent. Writing off traditional intersectoral linkages from agriculture is not supported by the evidence, including the econometric evidence.

But it is especially the greater participation of poor people in agriculture that gives the sector its edge in poverty reduction. Taking into consideration both the contribution of agriculture to growth and the greater participation by the poor when growth comes from agriculture, a given increase in agricultural per capita GDP reduces the total $1-day poverty gap squared by at least 5 times more than the same increase in GDP per capita outside agriculture—this despite being the substantially smaller sector. When it comes to $1-day headcount poverty (and taking into account sector size) agriculture is up to 3.2 times better at reducing poverty than non-agriculture. This advantage diminishes as countries become richer and inequality increases. Non-agricultural growth is more effective in reducing poverty among the better-off ($2-day) poor. For all poverty measures, the poverty reducing potential of non-agriculture activities reduces substantially when extractive industries make up a sizeable part of the economy.

**Can there be potential for smallholder agriculture?**

The larger poverty reducing potential of agriculture when inequality is lower underscores the importance of fostering smallholder agriculture. Economies of scale in marketing and processing are real, but mainly so for high-value crops. Institutional innovations such as outgrower schemes and farmer organizations help smallholders link into the global supply chains. Experience in Kenya shows that smallholders can also successfully supply dairy produce to the growing domestic urban markets. But more importantly, given that cereal yields in Africa are still just 1.3 mt/ha, only about a quarter those in East Asia (4.7 mt/ha), increasing staple crop productivity is the key priority. Scale economies in staple crop production and marketing are small. Staple crop production is especially plagued by many input and factor market failures.

How to get input, credit and better agronomic techniques (many of them sitting idle on the shelves of agricultural research stations) into the hands of these smallholders should be the focus of policymakers’ attention. Many institutional innovations are being tested such as input vouchers in Tanzania, seed fairs in Niger, mobile phone banking in Kenya, and weather insurance in Ethiopia. Important efforts must now go into learning from these experiences. Overall, the recently observed improvement in Africa’s agricultural performance is heartening.
That said, a smallholder agricultural development strategy does not necessarily imply primary attention to the smallest of farmers who might not be expected to benefit directly. The poorest farmers, the bottom tercile or half in many villages, usually don't have enough land to make a living only from agriculture, even at much higher yields. Yet it is through the multipliers in the rural economy that smallholder development (albeit uneven) can translate into broad based growth and poverty reduction.

This underscores the need for complementary investments outside agriculture including for small town development, which is necessary to mediate the supply response and employment expansion of the non-agricultural sectors and to facilitate the transition out of agriculture. In the absence of a buoyant rural economy, unskilled, land poor farmers typically have nowhere else to go but to join the poor in the slums of the capital city—the rapid urbanization and urbanization of poverty observed in many African countries over the past couple of decades. Urban economists show indeed that it is the degree of over- or under-concentration of the urban population that matters for growth, i.e. the extent to which the urban population of a country is concentrated in one or two metropoles as opposed to being spread across many smaller urban centers, and not the level of urbanization per se.

**Killing the goose, before it has laid its (golden) egg … once again!**

Contrary to the doubts raised by ICG, the most recent empirical evidence supports larger policy attention to agriculture, especially from a poverty reduction perspective. Obviously, improving agriculture's performance also requires complementary interventions outside the sector such as rural roads, investments in social services, improved governance, and small town development. Together they will facilitate a successful transition out of agriculture, not least by the poorer smallholders.

But the need for complementary rural interventions should not distract policymakers from taking firm and sustained action to foster agricultural growth to begin with. The majority of African governments are still devoting
substantially less than 10 percent of their budget to agriculture—the level sustained by many Asian countries during much of the latter half of the 20th century and the target adopted recently by African governments under the Comprehensive Africa Agriculture Development Programme (CAADP). There are valid concerns about the capacity to absorb too rapid an increase of spending on agriculture and the concentration of the current increase in spending on input subsidization. However, given the clear poverty reducing advantages of growth in agriculture, concerns about too much attention to agriculture seem premature at best.

Further reading


http://www.theigc.org/article/role-agriculture-growth-revisited-africa

http://ideas.repec.org/a/kap/jecgro/v8y2003i1p47-71.html

http://www.nber.org/papers/w15199

http://ageconsearch.umn.edu/bitstream/58563/2/AAMP_Maputo_11_Food_price_transmission_in_Africa.pdf


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