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BACK TO THE FUTURE

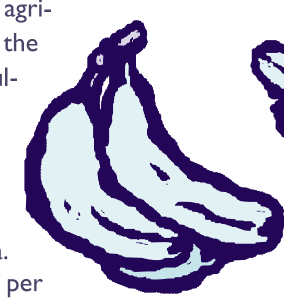
Reversing Recent Trends for Food Security in Eastern Africa

Steven Were Omamo

Recent trends in agricultural growth and food security in Eastern and Central Africa (ECA) have been discouraging. With very low labor productivity, yields, and growth rates, agriculture is unable to keep up with population growth or achieve the type of pro-poor growth needed to reduce poverty dramatically. Yet agriculture accounts for about half of the region's gross domestic product (GDP) and is the main source of livelihood for the majority of the population. Behind this gloomy picture, however, lies agriculture's potential to be the engine for growth in ECA. What do the ECA countries need to do to effectively exploit the potential of agriculture and meet the needs of their burgeoning populations?

RECENT TRENDS IN ECA AGRICULTURE

ECA is made up of 12 countries (Burundi, Democratic Republic of Congo [DRC], Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Rwanda, Sudan, Tanzania, and Uganda), covering an area of 9.5 million square kilometers, with a total population of more than 300 million people. Most of these people live in rural areas and pursue agricultural livelihoods, and about one-third of the region's total land area is devoted to agricultural uses. The distribution of the region's GDP closely matches that of its agricultural GDP; countries with relatively large national economies also have relatively large agricultural economies, and vice versa.



Land productivity—agricultural output per hectare—has increased steadily in recent decades in ECA, but labor productivity—agricultural output per worker—has declined substantially. This decline is greatest in DRC, Kenya, Madagascar, Malawi, and Tanzania. Labor productivity in Ethiopia, Rwanda, Sudan, and Uganda has recovered substantially in recent years, mainly owing to reductions in civil strife.

Given these trends in agricultural productivity, it is not surprising that average yields for the region's major crops currently fall well below those elsewhere in Africa, and even further below global levels. Only for cassava, beans, coffee, and tea do the region's yields compare favorably with average African and global levels. These trends in productivity growth have translated into poor overall agricultural growth rates in individual countries and for the region as a whole. Overall performance of agriculture in ECA in 1993–2003 was slightly better than in the preceding decade (Table 1). But at 2.73 percent, annual agricultural growth did not keep pace with population growth, which stood at close to 3 percent over this period.

Slow agricultural productivity growth in the region has major implications for aggregate relationships among agricultural production, consumption, and trade in the region. Most countries in ECA are net importers of their main agricultural commodities. Only coffee, tea, fruits, and vegetables are consistent exports from the region, with Kenya, Tanzania, Uganda, and Ethiopia accounting for the largest shares of those exports. Kenya is also the region's principal importer of agricultural commodities.

Table 1—Agricultural growth rates (%) in ECA, Sub-Saharan Africa, and developing countries, 1983–2003

Region/country	Crops		Livestock		Total	
	1983–93	1993–2003	1983–93	1993–2003	1983–93	1993–2003
Eastern and Central Africa	1.33	2.91	2.25	2.55	1.79	2.73
Sub-Saharan Africa	3.81	2.78	1.77	2.31	3.16	2.65
Developing countries	2.83	2.92	4.96	4.19	3.46	3.35

Source: FAOSTAT, November 2004.
Note: Compound annual average growth rates are from regression estimates. Value of agricultural production is expressed at constant 1989–1991 international prices. Sub-Saharan Africa includes South Africa.

RECENT TRENDS IN NUTRITION AND FOOD SECURITY

Because of low productivity in the agricultural sector, which employs and sustains most of the region's population, hunger and malnutrition have deepened in the region in recent years. Between 1979 and 2000, the number of malnourished adults in ECA grew at a faster rate than did overall population. Rates of child undernutrition and child mortality—which is closely linked to undernutrition—stood above those for Sub-Saharan Africa and other developing regions of the world.

The picture that emerges for ECA is therefore one of a region progressively less able to meet the food needs of its burgeoning population. With agriculture looming so large in most national economies, sluggish growth in agricultural productivity has translated into sluggish overall growth and generally low per capita income. High levels of agricultural importation—particularly of staples—appear to only partially fill the consumption needs of a population lacking purchasing power. The result is high levels of adult and child malnutrition and towering child mortality rates.

TAPPING THE POTENTIAL OF AGRICULTURE IN ECA

Recent research points to the kinds of policy reforms and institutional innovations that would deliver broad-based growth and poverty reduction in ECA. A clear priority is productivity growth in agricultural subsectors where there is high and growing demand in the region, including for livestock products, major staples, oilseeds, fruits, and vegetables. Specific opportunities for action are likely to vary geographically:

In areas with relatively high agricultural potential but poor infrastructure and low population density, one viable option is more intensive production of key nonperishable commodities. Staples are likely to continue to feature prominently in these zones, as are oilseeds and traditional cash crops like coffee and tea. Productivity growth in livestock systems would be extremely rewarding in these areas but should be approached carefully given the perishability of livestock products. Such areas can be found in all ECA countries, including most of central DRC; southern Sudan; parts of Kenya, Tanzania, and central Uganda; and widely scattered areas in Ethiopia and Madagascar.

In areas with low agricultural potential and low population density, livestock systems undergird livelihoods. Improved animal health, breeding for disease resistance, and improved animal nutrition and pasture management would be good triggers for broad-based productivity growth. Such investments should be accompanied by measures to help herders accommodate the increased risk that is often associated with more intensive production practices. Areas falling into this category include low-lying arid and semi-arid regions of Ethiopia and Eritrea, central Sudan, southeastern Kenya, and eastern DRC.

In areas with high agricultural potential and high population density, natural ecosystems are under pressure from low agricultural productivity growth coupled with growing food demand. To raise productivity growth and solve problems like soil nutrient depletion, soil erosion, pests, and weeds, farmers could pursue high-value livelihood opportunities featuring intensive use of improved technologies. Many such technologies already exist but are knowledge intensive, and structures and processes will be needed to promote sustained learning by farmers and service providers. Areas falling into this category are found mainly in ECA's high, wet zones—for example, much of Burundi and Rwanda, central Kenya, western Uganda, northeastern Tanzania, and parts of the Ethiopian highlands.

Potential Strategies and Areas for Investment

Productivity growth without significant improvements in market functioning is counterproductive. Physical impediments to agricultural trade and exchange related to poor infrastructure remain high in ECA. With major investments in roads, railways, and telecommunications, the scope for sustained agricultural productivity growth in ECA will be greatly enhanced. Ongoing efforts to overcome institutional constraints to market development are particularly promising. These efforts include smallholder-oriented market information systems and commodity exchanges and smallholder collective action to reduce transaction costs, enhance quality of output, and improve access to new markets.

Growth in nonagricultural sectors is also essential to sustained growth in the agricultural sector, because it provides crucial off-farm employment and income opportunities for rural populations, as well as generating demand for agricultural products.

In some areas high transport costs and other structural factors isolate local economies from outside sources of effective demand for local products. Improvements in storage, processing, and distribution can promote demand for income-generating enhancements in local products. Milk and oilseeds appear to be especially promising target commodities because their markets are large and their potential for value addition via agroprocessing and other forms of agroindustrialization is high.

In areas where external trade is a more viable option and a lack of tradable commodities is a clear constraint on growth, improved agroprocessing, distribution, and provision of farm inputs are likely to be important. Under market liberalization, the private sector's willingness and ability to invest in these functions may depend on the presence of measures like improved market information systems and preferential tax schemes.

The Promise of Regional Cooperation

Regional agricultural development initiatives are likely to have significant returns. Since many crops are grown throughout the region, opportunities to develop regional agricultural R&D initiatives should be exploited. In addition, the potential for modern biotechnology to spur productivity growth is controversial but cannot be ignored. Development of regional biosafety frameworks and intellectual property rights regimes may help the region overcome the tensions raised by biotechnology and avoid wasteful duplication of effort.

Similarly, most market-related constraints occur throughout the region. Solutions identified in one country may apply in others. Information sharing can reduce learning costs. Where market constraints are linked to poor infrastructure, regional initiatives to improve rural infrastructure and to remove barriers to movement of goods may generate high returns.

Cross-sectoral linkages have both national and regional manifestations. For instance, measures that target sustained growth in, say, both plant husbandry and agroprocessing might require national action to ensure that farmers and traders have access to key technologies and information, as well as regional action to standardize grades and quality requirements.

ECAPAPA-IFPRI PARTNERSHIP

The Eastern and Central Africa Programme for Agricultural Policy Analysis (ECAPAPA) and the International Food Policy Research Institute (IFPRI) are jointly implementing a regional research program to respond to the development challenges in the 12 ECA countries. This set of six briefs summarizes recent research by IFPRI and ECAPAPA aimed at building understanding about policy reforms and institutional innovations that could promote growth, poverty reduction, and food security in Africa.

The brief *East Africa: Seed Policies* summarizes the outcomes of regional consultative processes on seed policy that are being convened and backstopped by ECAPAPA. These processes aim to promote cross-border trade and exchange of seed by rationalizing and harmonizing policies, regulations, and standards in national seed industries. Dialogue, analysis, and action involving seed traders, public officials, and scientists in a number of ECA countries have resulted in agreements on uniform standards and procedures for seed variety evaluation and release, with major cost savings and expansions in trade.

The brief *Uganda & Tanzania: Pro-Poor Public Investment* describes research on the impacts of public investments on growth and poverty in those two countries. Impacts are shown to differ by economic sector and by geographic location, suggesting the need for careful prioritization and targeting.

Uganda: Income Strategies and Land Management summarizes research on land management practices and smallholder income strategies in Uganda. It provides significant insight into the complex relationships among smallholder household livelihood strategies, individual and collective natural resource management practices, poverty, and alternative policy measures. Tradeoffs among key policy objectives are identified.

Another brief, *Ethiopia: Growth Options and Poverty Reduction,* outlines research on policy strategies for achieving broad-based growth and poverty reduction in Ethiopia. Agriculture is revealed to have the potential to play a major role in pro-poor growth in Ethiopia, with growth in the staple crop and livestock sectors identified as especially fruitful.

Ethiopia: Livelihoods, Growth, and Markets summarizes research on the importance of local and regional urban centers to rural livelihoods in Ethiopia. Research results demonstrate that local market towns and cities are important focal points for rural household economic activity. Differential access to these locations is shown to have important growth and welfare impacts in rural areas.

Finally, *Kenya: Property Rights* is based on research on collective action, property rights, and livestock economies in Kenya's pastoral areas. Conditions in factor and output markets, population pressure, herders' attitudes toward risk and change, and social and political institutions governing land tenure security are found to jointly influence collective decisionmaking in ways that increase the economic vulnerability of pastoralists. ■

FOR FURTHER READING

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