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ETHIOPIA

GROWTH OPTIONS AND POVERTY REDUCTION

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With a per capita income of only about 20 percent of the African average, Ethiopia is one of the world's poorest countries. More than 85 percent of the country's population lives in rural areas, where agriculture is the main economic activity and where the poverty ratio is particularly high. In addition, stagnant agricultural growth, together with unpredicted droughts, has resulted in persistent food crises and food insecurity. Hence, any strategy for slashing Ethiopia's poverty and hunger must focus on generating rapid and sustainable growth in the agricultural sector.

To identify which kinds of investments have the greatest impact on agricultural growth, a deeper understanding of the linkages between agriculture, economic growth, and poverty reduction is needed. This brief is based on a spatially disaggregated, economywide model that enables analysis of growth and poverty reduction linkages at national and regional levels from 2004 to 2015. The analysis considers the results for growth and poverty reduction of continuing with business as usual and of focusing on growth in four agricultural subsectors—staple crops, livestock, traditional exportables (coffee), and nontraditional exportables (selected fruits and vegetables, cotton, chat, sesame seed, sugar, and other horticultural products). The results of the model analysis reveal a number of conclusions for agricultural investment.



GROWTH IN STAPLES IS THE PRIORITY FOR POVERTY REDUCTION

Growth in staple crops makes a greater contribution to poverty reduction than any other agricultural or nonagricultural sector modeled. A scenario for staple crop growth indicates the capacity for 3.4 percent growth per year from 2004 to 2015. When one takes into account other economic linkages, this scenario results in gross domestic product (GDP) growth of 3.9 percent per year and agricultural GDP (AgGDP) growth of 3.5 percent per year. In the model, growth in staple crops causes the rural poverty rate to fall to 37.7 percent—an additional 10 percentage points of poverty reduction for the same year under the business-as-usual scenario, in which growth follows its current trends, and 8 percentage points below the 2003 rural poverty rate.

Why does growth in staple crops have such a significant effect? Cereals and other staple crops are the most important

income source for the majority of small farmers. Moreover, the world in which Ethiopian farmers operate is unlikely to change in the next 10 years, and increased domestic supply of staple crops will continue to be the most important source of food energy for both rural and urban poor consumers. With improved access to regional or world markets, Ethiopian farmers could export wheat to its East African neighbors like Kenya, for Ethiopia is the largest wheat producer in the region and Kenya is a wheat importer. Better market access and improved production conditions, such as irrigation, will also give farmers more opportunities to diversify. Many subsistence crops, like oilseeds and pulses, that are grown extensively among poor farmers can become marketable commodities, and this shift would further increase poor farmers' cash income.

LIVESTOCK GROWTH NEEDS TO BE COMBINED WITH STAPLE CROP GROWTH TO REDUCE POVERTY

The livestock growth scenario assumes annual productivity growth of 7.6 percent and results in GDP and AgGDP growth

rates similar to those modeled for staple crops. Nevertheless, under the simulations, livestock sector growth has a smaller

effect on poverty, which falls to 39.7 percent in 2015 driven by livestock sector growth, compared with 36.7 percent driven by staple crop sector growth. A key factor in this result is the smaller share of poor farmer income derived from the livestock subsector. Moreover, both the rural and urban poor consume far fewer livestock products. Consequently, poor consumers in both rural and urban areas benefit less from the lower prices of livestock products that increased production induces.

GROWTH IN EXPORT CROPS PLAYS A LIMITED ROLE IN POVERTY REDUCTION

In the two export growth scenarios, output of both traditional and nontraditional exportables is assumed to grow by 13 percent. Yet the impact of this growth on poverty is small, reducing the poverty rate only 4.2 percentage points below baseline levels to 40.2 percent.

A majority of poor farmers are often unable to adopt the necessary technologies without significant extension support, and the initial investments required for such commercial production are also prohibitive. In addition, increased agricultural

A combination of growth in both staple crops and livestock has a greater effect on poverty reduction in rural areas. With this combination, simulation results indicate a drop in rural poverty from 45.8 percent in 2003 to 33 percent in 2015. The linkage effect is particularly strong in the food-deficit areas, where the poverty rate falls from its high 2003 level of 60.5 percent to 49.6 percent in 2015.

export production, by definition, provides little direct benefit to poor consumers in rural and urban areas, since such commodities are not in poor consumers' consumption basket. Promoting growth in this subsector, however, can indirectly benefit poor people by creating more employment opportunities as a result of economic growth. Given that the most important constraint to growth in agricultural exportables is lack of market access, there is a strong need for reduced market transaction costs and greater investment in transportation.

INVESTING IN MARKET MATTERS FOR HALVING POVERTY

Seventy percent of Ethiopian farmers are reportedly more than half a day's walk away from an all-weather road. The combination of poor market access and high transportation costs significantly increases the gap between consumer and producer prices, which ultimately lowers the prices received by affected farmers. According to the simulation, when growth in the agricultural sector is combined with improved marketing margins resulting from improved infrastructure, GDP growth increases to 5.8 percent per year, and AgGDP growth increases

to 5.4 percent per year. The poverty rate under this scenario falls significantly, from about 46 percent in 2003 to about 24 percent in 2015. When agricultural growth is augmented by reduced market costs and an additional 1 percent annual growth in nonagriculture, simulation results show that growth in both GDP and AgGDP could reach about 6 percent per year, enabling the national poverty rate to decline to 23 percent in 2015, about half of the 2003 poverty rate.

CONCLUSION

Ethiopia faces dire challenges in alleviating poverty, let alone in meeting the Millennium Development Goal of halving the incidence of poverty by 2015 compared with 2000 levels. Agriculture has the potential to play a central role in decreasing

poverty and increasing growth in Ethiopia, but agricultural growth will require concurrent investments in roads and other market conditions.

This brief is based on:

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