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Measuring Access to Food in Tanzania: A Food Basket Approach

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What Is the Issue?

Tanzania, a country rich in agricultural resources and a net exporter of its primary staple, maize, is subject to chronic food insecurity and suffers from periodic droughts that reduce harvests. Policies to address food insecurity have been hindered by lack of accurate estimates of production and existing food needs. This study uses data from the 2010/11 Tanzanian National Panel Survey (TZNPS) to construct a set of representative food baskets for mainland Tanzania, Dar es Salaam, and two geographical zones. Using current retail food prices, ERS calculated the monthly cost of the food baskets over a 3-year period (January 2010 to February 2013). Tanzania is one of 19 focus countries under the U.S. Government's Feed the Future initiative and is a recipient of U.S. foreign assistance. Comparing monthly food-basket costs with per capita income provides a more precise identification of the segments of the Tanzanian population who most need food aid than is possible using existing methods.

What Did the Study Find?

Using data from TZNPS, the authors estimated calorie and expenditure shares for 15 foods and food groups for 7 geographic zones of mainland Tanzania plus the business capital Dar es Salaam. The authors used the calorie shares to construct representative food baskets for Dar es Salaam plus two of the zones: the surplus-maize-producing Southern Highlands and the maize-deficit Lake Zone in the northwest surrounding Lake Victoria. The two zones were chosen to illustrate the wide divergence in diets across the regions of Tanzania. In particular:

- Diets vary considerably among Tanzania's geographical regions. Maize dominates the diets in the surplus-maize-producing regions of the Southern Highlands. In contrast, while maize is still an important component of household diets in the maize-deficit regions in the north, it makes up a smaller share of calories. Households in these regions favor other sources of starch such as cassava and banana.

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- The food basket cost is lowest in the Southern Highlands because of the ready availability of low-priced maize. The cost is highest in Dar es Salaam, the business capital and largest city, and the cost is also high in the Lake Zone.
- From January 2010 to February 2013, food basket costs rose rapidly in nominal terms but rose more moderately in real terms.
- Households in the bottom two income quintiles face potential problems with access to food. The cost of a minimal food basket is close to 100 percent of the average income of the bottom quintile; the figure is 80-90 percent for the second quintile. Households in the Lake Zone potentially face greater difficulties than those in the Southern Highlands because of higher food costs and lower average income.
- Fewer households in Dar es Salaam face difficulties with food access. Average income in Dar es Salaam is nearly twice that of the Southern Highlands and Lake Zone, but the food basket cost, while high, is not twice the cost of that in these two zones. Further TZNPS data suggest that a greater share of households in Dar es Salaam belong to the country's upper income quintiles.

How Was the Study Conducted?

The TZNPS on households provides estimates of the calorie shares of specific food items in household consumption. Using those data, ERS created monthly representative food baskets for each of 7 geographic zones that provided a daily per capita average of 2,137 calories (the average daily per capita intake reported in the Tanzanian Food Balance Sheet produced by the United Nations Food and Agriculture Organization). The study presents food baskets for mainland Tanzania, Dar es Salaam, and two geographical zones—one in the southern grain-growing area, the other in a grain-deficit zone bordering on Lake Victoria. The baskets included 15 food groups, which accounted for 67 to 88 percent of daily calorie intake. The food groups included maize (corn), rice, beans, cooking bananas, millet and sorghum, potatoes, sweet potatoes, wheat and other grains, cassava, poultry, beef and goat, fish, cooking oil, ripe bananas, and mangoes and other fruit. ERS used retail prices reported by Tanzania's National Bureau of Statistics to calculate the monthly cost of the food baskets. Comparing the monthly food basket cost with an estimate of monthly per capita income by quintile provided a measure of household access to food.