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Food Insecurity and Food Aid in Africa

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Concepts and Terms

The prevailing definition of food security, agreed upon at the 1996 World Food Summit, is “a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.” Food insecurity exists when that condition does not hold.

Food security is commonly conceptualized as resting on three pillars: availability, access, and utilization. These concepts are inherently hierarchical, with availability necessary but not sufficient to ensure access, which is in turn necessary but not sufficient for effective utilization. Availability reflects the supply side. Access reflects food demand, as mediated by cash availability, prices, and intrahousehold resource allocation. Utilization reflects whether individuals and households make good use of the food to which they have access, commonly focused on the intake of essential micronutrients such as iodine, iron or zinc, and vitamins A and D. Some consider stability to be a fourth dimension of food insecurity capturing individuals’ susceptibility to food insecurity due to interruptions in access, availability or utilization.

The temporal aspect of stability links to the oft-made distinction between chronic and transitory food insecurity. Chronic food insecurity reflects a long-term lack of access

to adequate food, and is typically associated with structural problems of availability, access or utilization, especially poor access due to chronic poverty. Most food insecurity is chronic (Barrett 2002). Transitory food insecurity, by contrast, is associated with sudden and temporary disruptions. The most serious episodes of transitory food insecurity are commonly labeled “famine”, typically caused by simultaneous or sequential availability, access, and humanitarian response failures.

Food Insecurity in Africa

By UN (2009) figures, 29 percent of Africa’s sub-Saharan population was undernourished in 2008, a slight decrease from 32 percent in 1990-92. Meanwhile, the proportion of undernourished North Africans remains near 3 percent (UN 2009). But these figures offer only a snapshot of those suffering from insufficient macronutrient intake at any given moment. They neglect both those suffering micronutrient deficiencies and those at risk of being food insecure. While no rigorous, widely-accepted estimates of this greater population exist, it almost surely doubles the proportion suffering food insecurity (Barrett 2002).

Such highly aggregated estimates mask considerable heterogeneity within Africa. Food insecurity has substantially worsened in some countries – especially those suffering sustained political violence, such as DR Congo and Zimbabwe – while others, such as Cameroon, Ghana and Nigeria, have achieved significant progress. Some post-conflict countries, such as Angola and Mozambique, have experienced rapid declines in undernourishment, but overall levels remain high. In east and southern Africa,

undernutrition rates have fallen even while, due to population growth, the number of people suffering undernutrition has increased (FAO 2008).

Threats to Food Security

Food insecurity usually has multiple causes that coexist at the individual, household, community, and national levels. A solid understanding of the “covariate” causes of food insecurity common to a broad subpopulation (due, for example, to prices, extreme climate events or civil unrest) is essential to generalized interventions (e.g., food aid) and to long-term, aggregate improvement in food security at the level of communities, countries and regions. Meanwhile, an understanding of the individual-level (“idiosyncratic”) causes of food insecurity is essential to successful targeting of interventions to specific food insecure persons.

Covariate threats to food security

Most people in any country – even highly agrarian ones – are net food buyers, dependent on markets for food. While higher food prices induce increased local food production, high food prices also threaten the food security of low-income consumers. Because a large share of smallholder food producers are net food buyers due to limited land holdings and low productivity, food insecure agrarian populations commonly benefit in the short run from lower food prices (Barrett 2002; 2008). Price spikes can be catastrophic for poor populations, who commonly spend half or more of their total income on food and rarely have adequate assets to draw on during periods of crisis.

The food price spike that began in late 2006 returned attention to food availability questions. African countries missed out on Green-Revolution style agricultural productivity increases. Indeed, because domestic food production dwarfs cross-border

commercial food trade or international food aid shipments, low domestic agricultural productivity remains the primary determinant of chronic food insecurity in Africa. Improving small farmers' access to improved technologies and productive assets stimulates both greater production and greater marketed supply, thus improved domestic agricultural productivity and marketing is widely seen as central to improving food security in Africa. And because a small minority of large landowners produces the overwhelming majority of food surpluses marketed in sub-Saharan Africa, even productivity growth only among non-poor farmers can improve food security, by increasing food supply and thereby lowering domestic prices, and by stimulating demand for unskilled farm labor (Minten and Barrett 2008).

Compared to other regions, sub-Saharan Africa is particularly vulnerable to hunger induced by natural hazards, such as slow-onset drought (IFRCRC 2009). And the number and impact of African disasters seem to be growing. Over the past two decades, the number of food emergencies in Africa has tripled while 68% more Africans perished in disaster-related deaths during 1999-2008 than the previous decade (IFRCRC 2009). More frequent extreme climate events due to anthropogenic climate change threaten more frequent, severe, local food supply disruptions.

Conflict displaces huge numbers of people and was a primary cause in nearly half of Africa's 20th century famines (Devereux & Maxwell 2001). IFRCRC (2009) reports that in 2008 in Africa there were 15.3 million refugees or internally displaced persons. Conflict not only destroys lives and livelihoods, it disrupts markets, production cycles and humanitarian operations. The resulting misery and desperation too often begets a vicious circle.

Idiosyncratic threats to food security

Some individuals are food insecure for idiosyncratic reasons, even in communities that are food secure in aggregate. A critical factor driving individual and household-level food insecurity is poverty. Throughout Africa, land holdings are becoming more concentrated; most variation in per capita farm sizes occurs within rather than between villages (Jayne et al. 2003). Rates of child wasting and, especially, stunting fall rapidly with increases in gross national income, as reflected in Figure 1, reflecting the strong, bidirectional relation between poverty and food insecurity. Yet, the benefits of growth can be distributed unevenly across households, with many facing food insecurity even during periods of rapid economic growth (Ahmed et al. 2007). Households that face social exclusion, or have less political voice and power are typically more vulnerable to suffering food insecurity (Chambers 1989).

Disparities in wealth, unequal benefits of growth, and individual influence are not the only reason for within-country variation in food security. Because most asset and income shocks appear idiosyncratic and most African households have limited access to risk management mechanisms such as insurance and credit, risk often translates into food insecurity. Fear of jeopardizing future livelihoods often causes people to choose temporary food insecurity over the sale of productive assets. And within households, the most vulnerable members of shock-affected populations – children and women, in particular – typically suffer disproportionately from food consumption shortfalls during episodes of acute food insecurity, often suffering even when other household members manage to cushion themselves against shocks (Hoddinott 2006). These transitory phenomena can have permanent consequences. Short-term deprivation, especially among

very young children in formative stages of cognitive and physiological development, often leads to permanent impairment of performance and earning potential, transmitting food insecurity intergenerationally. Even among adults, severe short-term food insecurity can ensnare individuals and households in nutritional poverty traps (Dasgupta 1997).

Food Aid in Africa

Food aid – the international, concessional transfer of food or cash for the express purchase of food – has been the global community’s traditional response to food insecurity in low-income, food-deficit countries. When shortages emerge, high-income agricultural exporters donate from their surpluses, although these volumes have declined steadily as OECD government-held surpluses have largely vanished over the past twenty years. Food aid nonetheless remains a dominant form of development assistance to Africa. For example, more than half of US economic assistance to Burkina Faso, Cape Verde, Ethiopia, and Niger, 1999-2005, arrived as food aid (Simmons 2009).

Food aid is widely criticized. First, food aid is budgeted in monetary, not physical units. Therefore, food aid volumes vary inversely with food prices and transportation costs, falling precisely as need peaks. Second, food aid deliveries take months, often arriving too late to respond effectively to emergencies. Third, because most food aid is “tied” – i.e., shipped from the donor country, in violation of OECD agreements limiting aid tying – it is significantly more expensive, on average, than food procured in or near the destination. Fourth, by expanding aggregate marketed supply, food aid – especially that monetized through markets by government or NGO recipients – can depress and destabilize prices, creating disincentives for local producers on whom aggregate food

insecurity most fundamentally depends, although the evidence on food aid's effects on prices and production is quite mixed (Abdulai et al. 2005; Barrett & Maxwell 2005).

Food aid nonetheless remains essential in response to emergencies marked by food availability shortfalls and poorly functioning local food markets, conditions that obtain with some frequency in Africa. Over the past decade, donor countries have been reforming food aid practices so as to improve their utility in responding to covariate shocks that give rise to widespread food insecurity (Barrett et al. 2009). Local and regional purchases and cash transfers are becoming much more common in Africa, early warning systems continue to improve, and a wider range of more nutritionally appropriate foods are in use, including micronutrient enriched therapeutic foods for children suffering severe undernutrition.

So long as food insecurity in Africa remains widespread and commonly triggered by covariate shocks, international transfers, including food aid, will remain necessary. But food aid is merely one instrument in the broader pursuit of food security; and its continued reform is desirable in order not to disrupt fragile food marketing systems or depress recipient country producer incentives. Moreover, food aid is of considerably less importance than are improvements to African agricultural productivity and market functioning and increased incomes and enhanced safety nets to provide increased security against severe shocks. Such advances will turn fundamentally on technological advances, institutional and policy improvements well beyond the domain of food aid.

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