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Tackling Egypt's Rising Food Insecurity in a Time of Transition

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OWING TO A SUCCESSION OF CRISES AND WORSENING POVERTY, FOOD SECURITY IN EGYPT STARTED TO DETERIORATE as early as 2005.[1] These crises included the avian influenza epidemic in 2006; the food, fuel, and financial crises of 2007–2009; a further rallying of global food prices starting in late 2010; and the challenging macroeconomic context that followed political instability in the wake of the 2011 revolution (see Figure 1). Egypt's net food-importing status (that includes importing 45–55 percent of its wheat needs) makes it vulnerable to fluctuations in international food prices. Higher global food and fuel prices and lower foreign currency inflows from exports, tourism, foreign direct investment, and other sources that have only partly been offset by increased remittances have meant a widening of the balance of payments deficit. The Egyptian pound has depreciated by 10 percent since December 2012, and currency reserves have fallen to less than three months' worth of imports.[2] This situation adds to the cost of key food commodities such as wheat and puts their availability at risk in the short to medium term. The challenging macroeconomic backdrop has adversely affected households. Per capita economic growth fell dramatically from an annual average of 4.5 percent between 2005 and 2008, to 3.1 percent between 2009 and 2010, to almost zero in 2011 and 2012, and was coupled with growing unemployment. New data from Egypt's Household Income, Expenditure, and Consumption Survey (HIECS) show that the average household spends 40.6 percent of income on food.[3]

Poverty has driven an increase in household food insecurity. New estimates from the 2010/2011 HIECS show that income poverty increased from 19.6 percent in 2004/2005, to 21.6 percent in 2008/2009, to 25.2 percent (21 million people) in 2010/2011 (see Figure 1). Between 2009 and 2011, 15.2 percent of the population (12.2 million people) fell into poverty, double the percentage of those who moved out of poverty (7.7 percent), and a further 12.6 percent of the population remained in chronic poverty. There is a significant correlation between income poverty and poor access to food, highlighting that food security in Egypt remains an issue of economic access. The estimated prevalence of those who are income poor and have poor food consumption also increased from 14 percent in 2009 to 17.2 percent in 2011.

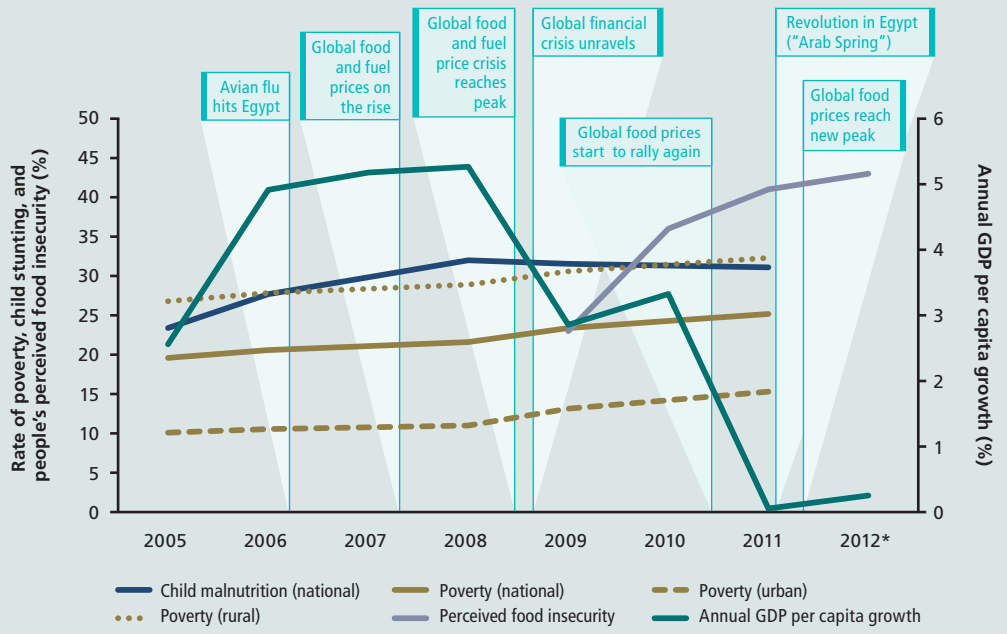
Child malnutrition has reached very high levels. Chronic malnutrition among children started to rise as early as 2003, and by 2008 about one-third of Egyptian children under the age of five were stunted. Since then, child malnutrition has remained high, indicating not only a delink between nutrition and economic growth, but also limited capacity of the health system to adequately and regularly detect, treat, and monitor malnutrition, especially in children under age five.[4]

Recent findings challenge long-standing assumptions about the geographic concentration of the poor. Although poverty in rural areas is still twice as high as in urban areas, poverty in urban areas has been rising faster than in rural areas, challenging previous assumptions that poverty in Egypt is overwhelmingly rural. Although Upper Egypt remains the poorest and most food-insecure region, pockets of income poverty and poor food consumption are increasingly evident in Lower Egypt and greater Cairo, where nearly 43 and 25 percent of people, respectively, have poor access to food. Child malnutrition has likewise grown in urban areas, with the HIECS estimating that urban Upper Egypt has the greatest proportion of stunted children, at 39 percent, compared with a national average of 31 percent.

In response to the cumulative shocks, households have adopted more severe coping strategies that may have negative impacts on nutrition in the medium term. These strategies include relying more on less expensive and

diverse food for 88 percent of poor households surveyed; reducing daily consumption of meat, poultry, and fish (72 percent); purchasing food on credit (44 percent); and reducing meal portions (41 percent). This is in line with data from the Information and Decision Support Centre/World Food Programme food security monitoring publication, *Egyptian Food Observatory*, which notes that as their debt accumulates, poorer households are shifting away from borrowing money to reducing food consumption and switching to cheaper food.[5] This switch adds to already poor dietary diversity and may contribute to a further deterioration in nutritional status.

FIGURE 1 Overview of key food security and development indicators in Egypt, 2005–2012



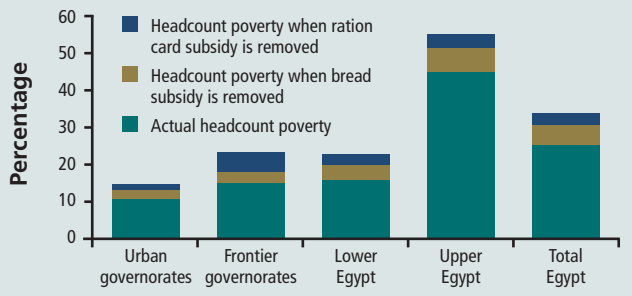
Source: Authors' representation based on Demographic and Health Surveys; Household Income, Expenditure and Consumption Survey; Gallup World View data; Ministry of Finance, *Financial Monthly* (January 2013), www.mof.gov.eg/MOFGallerySource/English/Reports/monthly/2013/Jan2013/a-b.pdf; and Economist Intelligence Unit, *Country Report: Egypt* (January 2013). *Projected for annual GDP per capita growth.

One of the key government measures to protect households during crises is an extensive social safety net that includes food subsidies. Food subsidies are part of a variety of social safety net schemes in Egypt. They accounted for 1–2 percent of gross domestic product (GDP) during the past decade, compared with fuel subsidies, which have accounted for 5–7 percent. Food subsidies are made up of two components: (1) ration cards that allow 80 percent of Egyptian households to buy set quotas of specific commodities at subsidized prices from specific outlets and (2) baladi bread sold at 5 piasters (about US$0.01) per loaf, for which there are no entitlement restrictions and distribution takes place on a first-come-first-served basis. Currently baladi bread makes up 61 percent of food subsidies, compared with 39 percent for ration card–based commodities.

Food subsidies have played an important role in protecting the poor from the impact of high food prices in recent crises.[6] Assuming no immediate substitution, a removal of food subsidies, coupled with households' purchasing the equivalent nonsubsidized commodities, would lead to an expenditure effect that could push national poverty estimates from 25.2 percent to about 34 percent (see Figure 2). This sizable effect on poverty occurs because subsidized food accounts for nearly a fifth of poor households' food expenditure, whereas subsidized baladi bread accounts for 71 percent of bread consumed by poor households. Many Egyptians perceive food subsidies to be one of the key benefits made available by the government, and many perceive bread as a right.

However, increased poverty has resulted in an over-reliance on cheap and calorie-dense foods with limited nutrient content, including subsidized commodities. HIECS data suggest that some 35 percent of Egyptians suffer from poor dietary diversity and a further 56 percent are on the border. There is a strong correlation between poverty and poor dietary diversity, with 56.2 percent of the population in rural Upper Egypt, Egypt's poorest region, having a poor dietary diversity score and only 1.9 percent a high score. Rising poverty has resulted in increasing dependence on cheaper, calorie-dense foods, including subsidized commodities, all of which have a correlation with obesity. Compounded by high food prices, changing lifestyles, and poor nutritional awareness, obesity in Egypt is on the rise, with an estimated 48 percent of women older than 15 being obese. The coexistence of obesity and stunting has added to the phenomenon of the double burden of malnutrition in Egypt, now among the highest in the world. Indeed, when increases in micronutrient deficiencies are taken into account, Egypt suffers from a triple burden of malnutrition.[7] The economic cost of anemia alone is associated with a 2.5 percent drop in future earnings.[8]

FIGURE 2 Increase in poverty without food subsidies



Source: Authors' calculations based on 2010/2011 Household Income, Expenditure, and Consumption Survey.

In the current economic climate where government resources are constrained and rising poverty has meant growing food insecurity and nutrition challenges, increasing efficiencies in the subsidy system can facilitate investment in job creation and targeted food security and nutrition interventions. Although food subsidies have supported vulnerable households through food access, they are not designed to resolve all poverty-related challenges. Reforming the subsidy system to make it more efficient would lead to savings that could be invested in more targeted food security and nutrition interventions as well as job-creating initiatives in poorer areas. Losses and leakage across the baladi bread supply chain, for example, are estimated at 30 percent.[9] The ration card system also suffers from poor and limited targeting; it covers 80 percent of the population, including 73 percent of nonpoor households, but excludes 19 percent of the most vulnerable households. Moreover, fuel subsidies that account for more than a fifth of the budget and 6 percent of GDP provide an even more sizable opportunity for efficiency savings.

Table 1 shows a set of four food subsidy policy options that are based on an extensive literature review and lessons from other countries and that may be politically feasible within a specific time frame.

1. **Follow business as usual.** Given Egypt's severe macroeconomic challenges and growing food insecurity, this scenario is not feasible.
2. **Improve supply chain efficiency.** Efficiencies in the subsidized baladi bread supply chain can be achieved through covering wheat stored in open bunkers (*shonas*) to reduce losses, packaging and labeling bread, and introducing model bakeries. Management of the strategic inventory of wheat could be shifted to the General Authority for Supply Commodities, and additional silos could be built in key locations—potentially by the private sector—to facilitate this. Liberalization of wheat prices should continue in line with recent government pilots. These recommendations allow for sizable savings at relatively low cost. More costly in the short term but with potentially sizable long-term savings are government plans to replace ration cards with smart national ID cards, including those for bread, that would improve monitoring and reduce ghost users; these reforms would not be without political challenge given sizable vested interests. The government should continue its program of fortifying subsidized wheat flour with iron and

TABLE 1 Policy options and expected impacts on budget, poverty, and nutrition

Policy option	Possible time frame	Impact on budget deficit	Impact on poverty	Impact on infant nutrition
Follow business as usual	Not an option	-	+	n
Improve supply chain efficiency				
Improve storage	Short term	+	n	n
Reduce leakage	Medium term	+	n/+	n
E-system	Long term	+	n/+	n
Improve targeting				
Including the most vulnerable	Medium term	-	+	+
Excluding the least vulnerable	Medium to long term	+	n	n
Self-targeting	Medium term	+	n	n
Complement and substitute				
Targeted nutrition programs	Short to medium term	n /+	+	+
Income generation programs	Short to medium term	n /+	+	n/+
Targeted cash/in-kind transfers	Medium term	n /+	+	n/+

Source: Authors' compilation. Note: "+" = expected positive effect; "-" = expected negative effect, "n" = expected neutral effect.

folic acid and subsidized cooking oil with vitamins A and D, roll out fortification to the commercial sector, and revise and enforce food-quality standards, particularly for wheat flour and baladi bread.

3. **Improve targeting.** Self-targeting through mandatory registration could discourage better-off households from using the food subsidy system. Targeting could also be improved by clarifying targeting criteria, regularly updating the database to include newborns and exclude those who have died, and using geographic targeting for Upper Egypt and proxy means testing for urban areas and Lower Egypt. These targeting practices would save resources and contribute to improved food security. Furthermore, although the most food insecure would continue to receive full ration entitlements to subsidized commodities, the least vulnerable could be moved to partial rations for baladi bread and ration cards that are gradually phased out.

4. **Complement and substitute.** Targeted nutrition interventions focusing particularly on maternal and child nutrition could be introduced. Vouchers could be used for specific commodities and target groups, such as pregnant and lactating women, to aid access to wider dietary diversity. In-kind transfers are preferred by the most vulnerable, particularly in circumstances of high inflation and low market access, whereas cash transfers could be used for the relatively better-off and in areas with good market access. Finally, conditional cash transfers, vouchers, or both for education or health services could be used to top up in-kind assistance to the most vulnerable. In the longer term they could replace subsidies and be linked to price indexes, particularly for food, to counter the effects of inflation.

Lessons from other countries' experiences and Egypt's previous subsidy reform attempts suggest that creating an understanding (why should the rich get subsidies?) and managing expectations (what are people getting in return?) are critical for success. In addition, a monitoring and evaluation system is needed to inform decisionmaking, and policymakers must learn and adjust accordingly during the reform process. Finally, subsidy reform is likely to be most successful if it is integrated into a broader national strategy of development and food security.

NOTES

1. "Food security" is defined in line with the Food Security Framework agreed to by the Committee on World Food Security in which food security results from adequate food availability and access as well as proper food utilization; Food and Agriculture Organization of the United Nations (FAO), *Rome Declaration on World Food Security and World Food Summit Plan of Action,* 1996, http://www.fao.org/DOCREP/003/W3613E/W3613E00.HTM; FAO, *Declaration of the World Summit on Food Security,* 2009, ftp://ftp.fao.org/docrep/fao/Meeting/018/k6050e.pdf.
2. Central Bank of Egypt, *February 2013 Statistical Bulletin,* March (Cairo, 2013).
3. Central Agency for Public Mobilization and Statistics (CAPMAS), Household Income, Expenditure and Consumption Survey (Cairo, 2011).
4. C. Breisinger, O. Ecker, P. Al-Riffai, and B. Yu, *Beyond the Arab Awakening: Policies and Investments for Poverty Reduction and Food Security,* IFPRI Food Policy Report 25 (Washington, DC: International Food Policy Research Institute, 2012).
5. Egyptian Cabinet's Information and Decision Support Centre and World Food Programme, *Egyptian Food Observatory,* no. 10 (December 2012).
6. World Bank, *Egypt's Food Subsidies: Benefit, Incidence, and Leakages* (Washington, DC, 2010).
7. Anemia in children younger than five doubled from 26 to 48 percent between 2000 and 2005; F. El-Zanaty and A. Way, *Egypt Demographic Health Survey* (Cairo: Ministry of Health and Population, 2005). Data from the 2011 Household Income, Expenditure and Consumption Survey suggest rates of greater than 50 percent.
8. World Food Programme, *Economic Benefits of Flour Fortification in Egypt: Applying Global Evidence to the National Environment* (Cairo, 2010).
9. World Bank, *Egypt's Food Subsidies: Benefit, Incidence, and Leakages.*

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