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STRENGTHENING FOOD ASSISTANCE AND FOOD POLICY RESEARCH

Floods, Food Assistance, and Food Markets in Bangladesh

Coping With a National Emergency

The synergy between food assistance and market development contributed to avoiding a food-price crisis.

In addition to being well targeted, timely, and efficiently administered, food assistance needs to reach the vulnerable in sufficient amounts and maintain a long enough presence to address their needs in the medium as well as the short term.

In 1998, widespread flooding covered two-thirds of Bangladesh, threatening the food security of tens of millions of households. The less physically destructive floods of 1974 had caused large-scale famine, resulting in tens of thousands of deaths. Despite an enormous loss of rice production in 1998, and the fact that public food stocks were at low levels, a major food crisis was averted. Nevertheless, these floods did carry a high cost. They led to an increase in both wasting and stunting among preschool children, causing them to fail to grow at a critical point in their mental and physical development. Many did not recover: fifteen months after the flood, 40 percent of children who lived in flood-exposed households had still not regained their preflood nutritional status. Additionally, many poor households that were forced into debt as a result of the floods continued to carry enormous debt burdens.

The Government of Bangladesh took action to aid households as they coped with the negative consequences of the flood. However, even though wide-scale famine was averted, the rise in child malnutrition and in indebtedness suggests that the response was only partly successful. Why was famine averted? Why did the debt burdens of households increase? What role did the government and the private sector play in generating these outcomes and what could be done differently next time?

Insights from IFPRI Research

IFPRI research examined how the government facilitated the emergence of the private sector in food markets and responded to the food shortage following the 1998 flood, and the extent to which food aid relief programmes were effective in maintaining households' food security. These investigations draw on a longitudinal data set of approximately 750 rural households interviewed three times in the 12 months following the flood.

The role of food markets

Government policy was based on the realization that food imports and food aid alone would not be enough to make up for the projected shortfall in food availability due to a crisis. Deliberate steps had been taken in early 1998 after the 1997 drought damage to crops to encourage private-sector imports of rice to stabilize domestic markets. These steps included the removal of a 2.5 percent tariff on rice imports, the expedited clearance of rice imports, and stricter limits on government sales of subsidized rice. Due to the policy of encouraging private-sector imports, the private sector was able to import substantial quantities of rice to keep the domestic market price from rising above import parity levels. Another essential government policy was long-term investment in agricultural research that, while costly to the country's biodiversity, enabled the expansion of the winter season (*boro*) rice crop, thus reducing its dependence on the flood-susceptible monsoon season (*aman*) rice crop. A consequence of the well-functioning market (increased number of participants, market size, investments in infrastructure) that emerged was a relatively modest rise in rice prices in the aftermath of the floods. On average, rice prices rose about 12 percent, far less than the nearly 60 percent rise following the 1974 floods.

Government food assistance and household coping strategies

The 1998 flood led to major crop losses, losses of other assets owned by households, and lower employment opportunities. It thus affected household incomes as well as market prices. It damaged or destroyed people's homes, reduced their access to safe water, destroyed or damaged

sanitation facilities, and increased illness—all of which placed additional demands on households' incomes that competed with their food needs.

The government of Bangladesh responded by supplying food aid to about four million households through two main direct transfer relief programmes: the Vulnerable Groups Feeding (VGF) and Gratuitous Relief (GR) programmes. These appear to have been well targeted to flood-exposed households and to the poor. The GR food assistance went mainly to flood-exposed households, while VGF transfers were targeted to the poor. However, while valuable, the actual per capita caloric addition was small. In some cases assistance did not arrive on time to meet immediate needs because of limited government stocks and delayed international food aid arrivals. Households were forced to borrow to purchase food, one of the main coping mechanisms employed following the flood (other ways of adjusting to the shock included reducing expenditures and selling assets). More than 60 percent of poor, flood-exposed households in the IFPRI sample borrowed money in the months immediately following the flood. Of these, more than half borrowed money for food, mostly from friends, neighbours, and moneylenders. Although some of the food received as aid was used to pay off loans, household debts rose to an average of 1.5 months of typical consumption compared with only a small percentage of monthly consumption prior to the flood. Households coping with the destruction of their homes, unsafe drinking water, and reduced caloric consumption were faced with crippling interest rates ranging from 21–67 percent. Eight months after the flood, many households' incomes had risen substantially, but increases in the income of poor flood-exposed households lagged behind the rest of the population. Even fifteen months after the flood, poor flood-exposed households still had lingering debts that were a high share of their incomes.

Implications for Food Assistance Programming

Natural disasters affect food security in three ways: by causing food prices to rise, by causing incomes to fall, and by increasing vulnerability to future food security-threatening crises. Encouraging the development of the private sector in rice marketing was crucial in keeping supplies of food steady and in moderating increases in food prices. But sole reliance on private food markets as a response was clearly insufficient. Direct aid to flood-affected households remained important. The VGF and GR aid programmes were well targeted, but they delivered too few calories to meet demand, and the increased debt burdens now shouldered by poor households increased their vulnerability to future shocks.

Lessons drawn from the response to the 1998 flood emphasize the critical importance of food assistance and other complementary targeted services even when well-functioning markets are present. In addition to being well targeted, timely, and efficiently administered, food assistance needs to reach the vulnerable in sufficient amounts and maintain a long enough presence to address their needs in the medium as well as the short term. Targeted cash transfers or short-term employment to buffer household incomes so that they could meet their non-food needs may have been an effective complement to increased direct food distribution in the aftermath of the 1998 flood. Additionally, credit programmes enabling households to restore lost assets and pay back debt in a reasonable time horizon and at reasonable interest rates could have helped to mitigate the indebtedness that left households vulnerable long after the flood waters receded. Bangladesh's many successful microfinance institutions serving the poor could be of service in this regard. It must be recognized, however, that large systemic shocks like the 1998 flooding spur loan delinquency and cash withdrawals simultaneously, placing enormous burdens on microfinance institutions that, even during normal times, are struggling to achieve some measure of financial sustainability. Finally, the establishment of savings programmes to help households smooth consumption in the face of large drops in their incomes due to natural disasters like floods would help reduce dependence on food assistance.

Carlo del Ninno, Paul A. Dorosh, Lisa C. Smith, and Dilip K. Roy (2001) "The 1998 Floods in Bangladesh: Disaster Impacts, Household Coping Strategies, and Response," Research Report 122, International Food Policy Research Institute, Washington, D.C. Contact author at l.c.smith@cgiar.org.

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