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Discussion Paper BRIEFS

Food Consumption and Nutrition Division of the International Food Policy Research Institute

Discussion Paper 138

Food for Education Program in Bangladesh: An Evaluation of its Impact on Educational Attainment and Food Security

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Pervasive poverty and undernutrition persist in Bangladesh. About half the country's 130 million people cannot afford an adequate diet. Poverty has kept generations of families from sending their children to school, and without education their children's future will be a distressing echo of their own. Furthermore, from birth, children from poor families are often deprived of the basic nutritional building blocks that they need to learn easily. Consequently, the pathway out of poverty is restricted for children from poor families.

Overview of the Food for Education Program

In the country's tradition of creating innovative development programs whose replication is attempted elsewhere, the Government of Bangladesh launched the first-ever Food for Education (FFE) program in 1993 on a large-scale pilot basis. The program was designed to combat the country's poverty and malnutrition by developing long-term human capital.

Many children from poor families in Bangladesh do not attend school mainly because they contribute to their family's livelihood and cannot be spared. The FFE program provides a free monthly ration of foodgrains to poor families if their children attend primary school. Thus, the FFE foodgrain ration becomes an income entitlement enabling a child from a poor family to go to school. The family can consume the grain, thus reducing its food budget, or it can sell the grain and use the cash to meet other expenses. FFE provides immediate sustenance for the poor, but perhaps more important, it has the potential to empower future generations by educating today's children. Education would equip children from poor families to improve their productivity, thereby expanding their future income-earning opportunities.

By 2000, the FFE program covered about 27 percent of all primary schools in Bangladesh. Out of 5.2 million students enrolled in schools with FFE, about 40 percent receive foodgrains (mostly wheat) through the program. About two million families benefit from the FFE program. Households with primary-school-age children become eligible for FFE rations if they meet at least one of four targeting criteria. To maintain their eligibility, children must attend 85 percent of classes each month. The program costs US\$0.10 per student per day, totaling US\$77 million in 2000.

Purpose of the Study

This study describes the main features of the FFE program and evaluates its performance in fulfilling its official objectives of increasing school enrollment, promoting school attendance, preventing dropouts, and improving educational quality.

This study also examines the targeting effectiveness of the program, its impact on food consumption and nutrition, and the

efficiency of the foodgrain distribution system. After evaluating program performance, the study presents conclusions for policy.

Data, Evaluation Results, and Policy Conclusions

In September and October 2000, IFPRI collected primary data from multiple surveys covering primary schools with and without the FFE program, households including program beneficiaries and nonbeneficiaries, communities, and foodgrain dealers. In addition to the surveys, academic achievement tests, designed to assess the quality of education received by students, were given to students enrolled in both FFE and non-FFE schools. Based on these data, IFPRI researchers used a variety of quantitative and qualitative methods to evaluate the FFE program.

Educational effectiveness. The school survey results suggest that FFE has been successful in increasing primary school enrollment, promoting school attendance, and reducing dropout rates. Furthermore, the enrollment increase is greater for girls than for boys.

Since the inception of the program in 1993, the number of teachers per school has remained virtually constant in all schools, while student enrollment has increased significantly in FFE schools. As a result, there are more students per teacher in FFE schools than in non-FFE schools. Moreover, because of increased enrollment and class attendance rates, FFE school classrooms are more crowded than non-FFE school classrooms. Consequently, there have been concerns that relatively crowded classrooms in FFE schools have caused the quality of education to deteriorate.

The student academic achievement test scores, on average, are lower in FFE schools than in non-FFE schools. However, further analyses reveal that, within FFE schools, the average test score of FFE beneficiary students is less than that of nonbeneficiary students, and this brings down the aggregate score in FFE schools. In fact, the nonbeneficiary students in FFE schools scored about the same as students in non-FFE schools on the average, despite a significantly larger class size in FFE schools. Hence, there is a caution against drawing conclusions about the impact of the FFE program on achievement test

scores. Follow-up research will concentrate further on this important issue.

Moreover, students in government schools performed better in the achievement test than students in nongovernment schools, and this is true for both FFE and non-FFE schools. Government primary schools have better facilities, more qualified teachers, and provide better incentives to teachers compared to nongov-

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ernment primary schools. This indicates that the quality of primary education is directly related to physical facilities and quality of teachers of primary schools. Therefore, in order to improve the quality of education in FFE schools in general and in nongovernment FFE schools in particular, the program would need complementary financial assistance to improve school facilities, hire better qualified teachers, and provide training as well as adequate monetary incentives to teachers.

Effectiveness of targeting households and communities. The household-level analysis suggests that in general, FFE effectively targets low-income households. However, considerable scope exists for improving targeting, as a sizeable number of poor households remain excluded from the program while many nonpoor households are included. A more accurate yet low-cost means testing method, such as the indicator-based proxy means tests to predict household income and welfare, needs to be considered to improve targeting.

The village census findings indicate that there is a considerable scope for increasing primary school enrollment through geographic targeting of the FFE program at the *thana* level. Given the large regional disparity in the rates of enrollment and literacy across *thanas*, it is clear that FFE could have a much larger impact on enrollment if larger shares of program resources were targeted to areas with relatively lower enrollment rates.

Effectiveness of the foodgrain distribution system. Recently, the FFE foodgrain distribution system began distributing food through private dealers rather than through school management committees, as was previously done. This evaluation finds that this dealer-based system is far from satisfactory. Individual FFE beneficiaries have difficulty claiming their free and full ration from powerful and profit-minded private dealers, and they experience losses in their foodgrain entitlement due to dealer malpractice. Also, a great deal of time and money is spent on traveling to dealers' distribution centers to collect rations.

Past studies on the public food distribution system in Bangladesh conclude that ration channels that depend on private traders to deliver subsidized food to the poor invariably suffer from heavy leakage. The private-sector profit motive is valuable when it stimulates competitive cost-cutting and efficient delivery of services. It is a disadvantage, however, when it motivates

diversion of subsidized or free foods away from intended beneficiaries.

The FFE program can lower leakage by modifying the distribution system that the program had followed prior to the change to the current dealer-based system. In the modified system, schoolteachers would not be directly involved in foodgrain distribution. Instead, either a local NGO, or a youth club, or even a private dealer would deliver foodgrains to the beneficiaries in the school premises on a set day each month. This system would empower beneficiaries by establishing a sense of group solidarity among recipients, assisting them in clarifying the amounts of rations to which they are entitled, and facilitating collective action against pilferage. This system would reduce inconvenience and transaction costs to beneficiaries in collecting their FFE rations.

Recommendations for Follow Up

Future research on FFE could focus on program extensions aimed at improving the cognitive abilities of children. Two specific issues could be explored in this regard—combining FFE with school feeding, and expanding the program to preschool children. Experiences in other countries have shown that undernutrition reduces a child's ability to concentrate and retain what has been learned. School feeding, especially a light snack early in the day, has been shown to improve performance in case studies from outside Bangladesh. Furthermore, a preschool feeding program (such as the National Nutrition Project in Bangladesh) could become a key intervention for improving the cognitive abilities of children. Better-nourished preschool children will be better learners in primary school and beyond.

Keywords: Bangladesh, school enrollment, targeting, foodgrain distribution

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