

The role of NGOs to improve food security in Bangladesh: The BRAC perspective

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Running head: Food security of the poor in Bangladesh

Abstract

Bangladesh is one of the worst food insecure nations in the world today. This paper looks into some food security issues of the poor, the most food insecure group, particularly with respect to the role of non-governmental organisations (NGO). Some learning from the development programmes of BRAC, which are directed to the poor women to improve their food security is briefly highlighted in this paper. A long-term commitment to the very poor as well as targeted efforts supported by short-term food subsidy is required to improve their situation on a sustainable basis. Effective partnership between the government, NGOs and donors is a key to the success in increasing the current food security situation.

INTRODUCTION

Though access to food is a basic human right, hunger and undernutrition continue to be serious problems in the developing countries. Hunger is defined as a long-term condition where people do not have enough to eat while undernutrition is a condition brought about by inadequate consumption of food rich in specific nutrients. BRAC, a non-governmental organisation in Bangladesh, has been involved in implementing multidimensional large-scale programmes in rural development, health and education since its inception in 1972. Women are the major development partners in these programmes. The two broad aims of BRAC are poverty alleviation and empowerment of the poor. BRAC recognises the interaction between poverty and poor nutritional status, and therefore, is committed to improve food security of the poor in general and women in particular through its on-going development initiatives (1-2).

Concept of food security

Food security has a wide range of dimensions, ranging from food supply at household, community, national and global levels to adequate food consumption by each individual. Food security is defined as “to ensure that all people at all times have both physical and economic access to the basic food they need” (3). There are two major determinants of food security – availability and access to food. Availability of food, however, does not ensure access to sufficient amount of food. Food may be available at national or community level, but a household may not have adequate access to it mainly due to economic constraints. Due to the preferential intrahousehold food allocation practice, food available at household level is not equitably distributed among all members (4).

OVERVIEW OF FOOD SECURITY SITUATION IN BANGLADESH

In spite of the significant progress in improving its overall socioeconomic condition during the last decade (5-6). Bangladesh has nearly half of the population still living below the poverty line, i.e., per capita daily calorie intake <2122 kcal. Despite the growth in food production and its availability, food insecurity is still a major problem due to the lack of purchasing power especially

among the rural and urban poor. More than 50% of the rural population is landless and depends on casual labor for their livelihood. Due to the seasonal fluctuation of employment in agricultural sector and limited opportunities in non-agriculture sector, millions suffer from poverty and subsequent food insecurity.

Production and availability of food grain: Food accounts for more than 62% of the total household expenditure in rural Bangladesh (6). Food grain production in Bangladesh almost doubled during the period from 1969-70 to 1992-93. The average annual food grain production from 1990-91 to 1992-93 was 19.3 million metric tons (mmt). Between 1993-94 and 1994-95 the production declined to 18.2 mmt due to depressed prices and natural disasters. The productions increased over the next two years to 19.2 and 20.4 mmt. In spite of a large increase, the production of food grain is not yet sufficient to meet the total food requirements of the country (Table 1). These wide fluctuations in production cause instability in food grain prices with serious implications for household food security (7).

Table 1: Food requirement and availability in Bangladesh, 1996-97

Population (million)	123.80
Food requirement*	20.50 mmt
Production of food grains	20.43 “
Seed and wastage (10%)	2.04 “
Net production	18.39 “
Food balance	(-) 2.11 “

* Total food-grain requirement estimated on the basis of per capita per day requirement of 453.59 gms.

Source: GOB. Fifth Five Year Plan 1997 - 2002

Production and availability of of fruits, vegetables, pulses, oilseeds, milk, fish, meat and eggs: In 1993-94, production of fruits, potato, vegetables, pulses and oilseeds amounted to 1.43, 1.44, 1.17, 0.53 and 0.47 mmt respectively. In 1993-94, per capita availability of the above food items was 12.2, 12.3, 10, 4.5, and 4 kg, respectively. Milk production amounted to 1.4 mmt in 1994-95, however, per capita availability of milk recorded a 7% decrease over this period.

Production of fish during 1983/84-1994/95 has increased by about 60%, from 754,000 to 1,200,000 metric tons. The per capita availability of fish in Bangladesh has increased from 7.7 kg/year in 1983/84 to 9.6 kg in 1994/95. In 1994-95, total meat production was 505 mmt with per capita availability of only 4.03 kg, which is one-eighth of the world average. The egg production increased at an annual rate of 5.5% during 1986-87 to 1994-95, the amount in 1994-95 being 2,539 million pieces. The per capita availability of egg during the same period increased from 16.28 to 20.24 pieces (7).

Food Consumption: The level of per capita daily calorie consumption has been going down in rural areas between 1962-64 and 1995-96 (2251 kcal vs. 1892 kcal), while it has remained more or less the same in urban areas (8). The average diet in rural Bangladesh is not only deficient in energy by about 7%, but is also imbalanced. Over 82% of the total calorie come from cereals, and when all plant sources are added the proportion reach nearly 93%. The greatest deficiency is in the consumption of pulses and oils (Table 2). The consumption of such diet in low-income group is even worse than shown in the table, which indicates widespread malnutrition among them.

Table 2. Dietary pattern in rural Bangladesh

Food	Actual ¹			Desirable ²		
	Intake (g)	Energy (Kcal)	% of total energy	Intake	Energy (Kcal)	% of total energy
Cereals	452	1559	82.4	372	1281	55
Roots and tubers	70	62	3.3	130	115	5
Pulses	10	45	2.4	66	231	10.5
Leafy vegetables	21	7	0.4	132 ³	57	2
Non-leafy vegetable	92	42	2.2	-	-	-
Meat	6	7	0.4	22	24	1.5
Fish	32	45	2.4	50	50	2
Egg	3	5	0.2	7	11	0.5
Milk and milk products	13	10	0.5	47	30	1.5
Fruits	13	7	0.4	57	57	2
Fats and oils	6	59	3.1	38	342	15
Sugar & sweeteners	6	24	1.3	36	100	4
Others	6.8	20	1.0	3	12	1
Total	730.8	1892	100	960	2310	100

1=National Nutrition Survey, 1995-96

2=Five Year Plan, GOB, 1997-2002

3=non-leafy vegetable included

Nutritional consequences: A large majority of the child population aged 6-71 months suffer from protein energy malnutrition (PEM): 5% suffer from severe, 38% from moderate and 43% from mild PEM (8). Women and children are the worst victims of malnutrition. Maternal malnutrition during pregnancy has its effect on foetal growth; about 40% of the babies are born with low birth weight (<2.5 kg) (9). In addition to PEM, about 70% of the non-pregnant women and 69% adult men suffer from anaemia (10). About 0.68% pre-school children suffer from nightblindness (11) and about half the population has iodine deficiency disorders (12).

KEY STRATEGIES TO ACHIEVE FOOD SECURITY

Considering the socio-economic situation of Bangladesh, food security strategies should be focused on effective food supply with equity and demand management. The key supply-side objective is to achieve self-sufficiency in food grain production in the short and medium-term and achieving self-reliance in the long run. Other strategies include an increase in income transfer through creation of

rural employment opportunities; low and stable consumer food prices; and improved nutritional status of the population through emergency short-term interventions. One such example is the Bangladesh Integrated Nutrition Project (BINP) implemented by the Ministry of Health and Family Welfare, Government of Bangladesh and assisted by the World Bank and UNICEF.

The Government of Bangladesh has a strong role in the management of food grains. The major government strategy to improve food security includes the public food distribution system (PFDS) by food subsidisation, “food for work” programme, free distribution of food to destitute population, targeted feeding programmes, and marketing and trade policies. The PFDS focuses on food supply to the vulnerable groups and operating the strategic reserves. With regard to demand-side instruments, food security is closely linked with poverty in Bangladesh. While in the recent past the country has practically achieved food self-sufficiency through increased production, access to food remains a major problem for about half of the population due to poverty.

The disadvantaged position of the women that is determined by their socio-cultural, political and economic status must be taken into account in developing an effective food security strategy. Women are involved in many aspects of food production, processing and preparation. Yet, they earn and consume less than men, they survive less than men, and are subjected to unjust and harsh social and political conditions and taboos. The main avenues of a food security strengthening programme for landless poor women are improved purchasing power through credit, skills development through training, increased access to different income generating activities, and improving awareness of a balanced diet for better health and nutrition.

An effective nation-wide food security monitoring and surveillance system is necessary to identify the seasonal food insecure regions/communities, causes and types of food insecurity, and the population groups at risk. The system would utilise different information gathering techniques on food and nutrition such as fortnightly written reports, field visits to ‘at risk’ areas, and special reviews. It is evident that the present monitoring and surveillance arrangement is not adequate to take care of the current load, which needs further strengthening. A co-ordinated effort of various government agencies and NGOs may be very effective in building such a nation-wide system.

FOOD SECURITY AND ROLE OF NGOS

There has been a spectacular growth of NGOs in Bangladesh, which has drawn global attention. These NGO programmes along with their social and motivational activities have contributed significantly in poverty alleviation and improvement of food security of the poor in Bangladesh. In addition to the government support, involvement of NGOs to improve food security can be categorised under three different components: producing food; improving access to food; and involvement in cross-cutting issues such as health and nutrition, gender equity, and development of community institutions.

Food Supply

Food production: As stated earlier, the current domestic production of food grains is unable to meet the requirement. The NGO programmes, which are mostly targeted to the landless poor, have a limited scope and access to effectively address the food grain production. However, NGOs can efficiently address the production of other nutritious foods such as pulses, vegetables, fruits, fish, meat, milk and eggs. The production of these food items can be increased through incorporating the agricultural extension services in their existing rural development interventions, training in production techniques, and through the increased provision of special credit programme to the target populations. In addition, access to good quality high yielding variety seeds, low cost appropriate technologies for transportation and storage of fruits and vegetables should be made available. Poor fishermen can be organised to increase their access to water bodies and better management of water resources to increase fish production. Small and medium scale poultry enterprises can be encouraged by ensuring adequate support in the rural areas such as the provision of medicines, vaccines, and quality feed.

Post-harvest management: In Bangladesh and many other developing countries, substantial post-harvest food losses are incurred from harvesting to final consumption. Appropriate post-harvest technology covering areas such as threshing, storing and transporting should be designed and implemented by NGOs in collaboration with the government particularly for seasonal fruits and vegetables. Targeted credit should be provided to ensure the use of appropriate technology.

Pest controls and management training to reduce food losses should be conducted. Another important approach is to train women in low cost processing and preservation of seasonal fruits and vegetables, coupled with consumer education on processed fruits and vegetables.

Access to Food

In Bangladesh, low purchasing power was identified as a major obstacle to improve food security for the poor. NGOs can expand their scope to implement targeted employment and income generating activities among the poor, women and other disadvantaged groups. As NGO experiences in Bangladesh suggest, expanding credit programmes for landless farmers and distressed women without collateral can create an environment of sustainable income generation. Such initiatives may cover special training programmes on poultry and duck rearing, livestock rearing, fish culture, and vegetable cultivation through the government and NGO network among the most vulnerable groups. Both production and marketing aspects should be included in such programmes.

As presented earlier, the major source of energy in an average Bangladeshi diet is cereal, mainly rice. The contribution of other food items such as fats and oils, pulses and animal products towards total energy intake is grossly inadequate leading to an imbalanced diet. The rural poor need to be economically empowered and adequately informed, so as to the extent to have better accessibility and consumption of foods like fats and oils, pulses and animal products. Because the diet is deficient in energy, a significant proportion (20-30%) of the ingested protein is used up for energy synthesis, rather than in bodybuilding and maintenance. The NGO implemented poverty alleviation programmes can include strategies to increase accessibility and consumption of protein-rich foods, particularly pulses. If pulse consumption is sufficiently increased (say four folds), the increase in animal product consumption which is a relatively expensive source of protein, would not be necessary.

Bangladesh experiences two food lean periods in a year: one during September to November (before Transparent Aman harvest) and the other during March/April (before Boro harvest). During these periods, food prices are highest but the agricultural labour wage is lowest. So, both

food availability and accessibility are worst during these periods, affecting the landless, marginal and even small farm families (who together constitute more than 60% of the rural population). Special ‘Safety Net’ programmes operated jointly by the GOB and NGOs, e.g., Vulnerable Group Development (VGD) Programme, should be intensified in the lean periods.

Due to a number of social and cultural factors, a large proportion of the population does not have adequate nutrition education and thus are not aware about their food needs. There is a need to develop easy-to-understand information, education and motivation (IEM) material on nutrition and health issues for the rural population. NGOs can work together with the government in developing materials that properly addresses people’s need in general and the poor in particular. NGOs can take the responsibility of disseminating much of the IEM materials to the target population with their proven ability to work at the grassroots level.

NGOs can intensify their on-going advocacy initiatives to ensure the participation of poor rural women in planning programmes designed to improve their food security. Although rural women traditionally play a critical role in household food management, their participation and involvement in planning and implementation of programmes aimed at improving food security is often neglected. The women’s groups already formed at the grassroots level can provide a formidable platform for the government agencies who wish to design and implement such programmes.

Cross-Cutting Aspect

Women’s participation: The role and participation of women are critical for good food management because traditionally they play the central role in striving for sustainable household food security. In particular they are always involved in food production, storage, selection and preparation, and dissemination of knowledge concerning health care and nutrition. Women are confronted with many constraints that limit their participation in any development initiative. The main constraint is that women in Bangladesh lack recognition for such participation. They lack education and training particularly in improving their socio-political skills, which limit their access to production resources, technology, management training, credit, processing and

marketing. Finally, women do not enjoy full representation in decision-making, particularly at the local level. To overcome these constraints, women's capacity should be built through skill development in production, selection, storage, processing and preparation of food. There should be adequate opportunity for women's participation in development initiatives, which may be instituted through policy directives and changed practices. By ensuring greater representation and participation of women in decision making at all levels, particularly at the community level, improved food security will result. A recent initiative to increase the participation of women in local government units is a step in the right direction in this context.

IMPROVING FOOD SECURITY FOR THE POOR: THE BRAC INITIATIVE

BRAC's multi-dimensional programs are designed to reach the poor including the most vulnerable section of the population. To ensure its program effectiveness, BRAC constantly reviews its programs and approaches with the poor, particularly the poor women, as they are its major partners in development activities. BRAC is an advocate of active participation of the poor in designing the programs to improve their socioeconomic status. Major BRAC interventions include savings and credit program, various employment and income generation activities, social development activities including training in legal education and human rights, essential health care, water and sanitation, non-formal primary education and provision of program support enterprises. About 98% of the programme participants are women (13). Today three million rural poor households are covered by BRAC's development program. The major BRAC interventions directly linked to food production include development of poultry, livestock, fisheries, agricultural crops, and fruit and vegetable production programs. Organized savings, credit, skill development, and marketing services promote self-employment in the above sectors enhancing greater availability and access to food. Provision of training in human rights and legal education, motivation and active participation in health, water and sanitation, and programs on adult literacy and children's education have contributed to create a more favorable environment for enhancing access to food and improving nutrition.

Lessons learned at BRAC

According to a recent impact assessment study on BRAC's rural development program, involvement of women in income generating activities had improved their ownership and control over assets and their status both in the household and at the community level (14). All these have reduced the discriminations against women in various socioeconomic aspects and have positively contributed to their improved food security. BRAC programs have also improved their coping capacity against crisis, reduced seasonal fluctuation in food expenditure, enabled them to have higher amount of food stocks in both peak and lean seasons of the year, and thus have made them less vulnerable in terms of food security (14). The study further showed positive improvement in the poverty status of the participants. Both incidence and intensity of poverty have been reduced. Average per capita calorie consumption improved. BRAC members were found to be consuming more nutritious food items such as vegetables, fish and meat than the comparison group (non-members). There were also improvements in health and sanitation conditions and education of children (14). Health and nutrition programs put a special emphasis on pregnant and lactating mothers.

A lesson learned from the development programs of BRAC is their inadequacy to effectively satisfy the special needs of the bottom 10% of the rural poor in ensuring sustainable food security. The poorest have a very low asset-base with lack of alternative employment and/or income sources. It is difficult for this group to sustain its membership in any NGO. They lack the capacity to raise regular savings deposits and repay loans regularly. In many cases they do not have any adult male income earner. Thus, micro-credit programs alone can not solve their problems. Experiences indicate that along with different development inputs, this very poor segment of the rural population needs subsidies, like food aid, until they can raise their asset-base and become capable of coping with crisis. This would enable them to effectively participate in development programs to improve their food security.

IGVGD program - a BRAC initiative for the poorest: BRAC's Income Generation for the Vulnerable Group Development (IGVGD) program is specifically designed to transform a food aid program into a development program so as to sustain their economic activities and link this group with the mainstream development activities. It is a joint venture of the government and

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BRAC and is supported by the World Food Program (WFP) and Polli Kormo Shohayak Foundation (PKSF). The primary selection of the Vulnerable Group Cardholders¹ is done by the Chairperson and members of the local Union Parishad and is finalized by the Department of Relief and Rehabilitation, Department of Livestock Services, and BRAC. The poor destitute women, who are given VGD cards², are eligible to participate in the program.

The main objective of the IGVDG program is to include the most vulnerable poor women in the development activities on a sustainable basis, and therefore, to improve their household food security. Major activities include small group formation, training on poultry rearing and other income generation activities, provision of micro-credit, and health and nutrition education. At the same time, non-formal primary education and basic health services are also offered. By the time the IGVDG cycle of 18 months ends, most of these women are able to initiate self-employment projects and continue to have a steady flow of income through involvement in BRAC's regular rural development programs.

A study assessing the impact of the IGVDG program on nutritional status suggested that the program had significant positive effects on meal frequency, egg intake and the anthropometric status of the pre-school children. Moreover, sense of wellbeing and self-confidence were higher among the program recipients than comparable non-recipients (15).

¹ *Vulnerable group has been defined as divorced, separated, or abandoned women who do not have access to productive assets and a regular source of income.*

² *VGD card – Vulnerable Group Development (VGD) card is given to a woman who receives a monthly ration of 31.25 kg wheat for a period of 18 months.*

CONCLUSION

Both rural and urban poor especially destitute women and children are the most food insecure groups. In program planning and management, the special developmental needs of this segment of the population should be given proper recognition. A long-term commitment and coordinated efforts supported by the allocation of sufficient resources are required to improve the overall food security situation on a sustainable basis. To enable the poorest to effectively participate in the development programs and to improve their food security, initial food subsidies may be offered to them along with different development inputs. In the context of Bangladesh, this also needs an effective collaboration between the government and the NGOs in planning and implementing such programs.

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