Strategic Approaches to Food Security in Bangladesh

Fatema Roksana¹, Md. Alamgir Jalil^{2*}, M. Masihul Alam³

¹ Lecturer in Economics, Amla Govt. College, Kushtia, Bangladesh, Email-<u>rfatema2010@gmail.com</u> ² Lecturer in Accounting, Kushtia Govt. College, Kushtia, Bangladesh, Email-<u>maj250980@gmail.com</u> ³Assistant Professor, Department of Applied Nutrition and Food Technology, Islamic University, Kushtia.

*Corresponding author

Abstract:

This paper tends to present an overview of food security status, its link with poverty, the current policies and programs of the government and to suggest some strategic options to improve access to food for the vulnerable community of Bangladesh. Macro level secondary data on the behavior of food prices and poverty situation is collected from a number of periodicals and reports. Then after manual processing of the raw data a qualitative analysis is made to evaluate current status of food security and strategic actions of the government. Through the qualitative analysis it is found that food security system remains susceptible till today because of major production shortfalls, inadequate food availability, limited coverage of safety net programs, inefficient distribution and vulnerability due to natural disasters and fluctuation in prices. Thus food security system is very weak and ineffective for poor peoples who live below the poverty line. In this consequence, government of Bangladesh must play a significant role in attaining effective food security for all by undertaking some strategic actions.

Key words: Food security, poverty, safety nets, strategic actions, Bangladesh.

1. Introduction

Food security is the fundamental precondition for growth and economic development. It is a multi-dimensional development issue that requires cross-sectored integrated intervention. It depends on agricultural production, food availability, employment opportunity and economic earnings, intra household decision making, resource allocation, health and nutrition etc. Ensuring food security is one of the major challenges for Bangladesh towards the progress of MDGs. According to the World Food Summit (FAO, 1996) statement, "food security exists when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life." Sustainable food security requires stable supply of adequate food, properly functioning markets and the ability of households to generate a combination of home-produced food and income sufficient to cover all their basic needs. Food security is recognized as a public good as well as a social and economic good which ensures benefits to all individuals and remain available after optimum consumption. Paarlberg (2002) think that providing public goods to the people is the key responsibility of the government. Although international and non-governmental organizations assist government in this regard, ultimately the responsibility falls to government at all levels. So, Government should play the vital role to ensure "the public goods needed by societies to remain peaceful and prosperous, goods that are unlikely to be produced in sufficient quantity by private markets alone or by non-governmental institutions" (Paarlberg, 2002). In this consequence, food security should have the topmost priority for socio-economic stabilization and development in Bangladesh. Effective policies and programs must be set by the government as well.

2. Statement of the Problem

Sen, A.K. (1981) stated the food entitlement decline (FED) approach contends that global food problem is not essentially an issue of production, but the capability of enabling people to have access to food. Inefficient food distribution systems play a negative role in providing access to food for all, even though there are indications that regional imbalances in global food production have been at the center of the problem. Stable food price is an important factor to enable people to have access to food. FAO (2008) Food Price Index shows 12 per cent increase between 2005 and 2006, but there is an increase by 24 per cent in 2007 and further jumped by 50 per cent up to July 2008. Slow-growing supply, low stocks, and supply shocks at a time of surging demand for feed, food and fuel have led to such drastic price increases and these high prices do not appear likely to fall soon (Von B. J. (2007).

Rashid M. H. and Islam M. S. (2009) also stated that dramatic rise in almost all food prices to such a height that these went far beyond the purchasing power of the millions of poor consumers around the world, leaving them underfed and malnourished. MoEF (2008) stated that Bangladesh is ranked as one of the most vulnerable countries to tropical cyclones and sixth most vulnerable country to floods. Sudden natural shocks dampen the purchasing power of people and thus worsen the food security. According to FAO directory, food insecurity results from the poor governance and lack of institutional support. Generally, food insecurity means unequal and improper distribution of food to the target regions, households and individuals of a country. Some other factors affecting food security of Bangladesh are unavailability of food resulting from drought, flood, crop failure or other natural disasters, inadequate access to food for low purchasing power and poor utilization of food because of inferior health status and incurable diseases such as AIDS. For this reason, the researchers intend to study the current status of food security in Bangladesh aimed at investigating appropriate role and strategic actions of the government aimed to ensure food security for the people of Bangladesh.

3. Objectives

The specific objectives of this study are as follows:

- ✤ To study food security status in Bangladesh,
- ✤ To assess the trend in factors affecting food security,
- To evaluate government's strategies towards improving access to food for reducing food insecurity and vulnerability due to price and production instability and
- * To recommend effective and strategic approaches to strengthen food security programs in Bangladesh.

4. Methodology

This study is conducted on the basis of secondary data. Macro level secondary data is collected from different periodic statistical reports published by government of the republic of Bangladesh and international organizations. After collecting data from several sources it was reviewed and processed manually. Finally, a qualitative analysis is made to evaluate the level of food security and investigate the government strategies to ensure food security. However, the researchers couldn't collect sufficient current data for their time constraint. So, finding of the study may not effectively reflect the latest scenario of the food security status in Bangladesh.

5. Literature review

An intensive review of the existing literature on the Food Security has been made. Significant findings of this review are as follows:

Food security is concerned not only with food availability but also with access to and utilization of food. So, Food security can be explained in terms of food availability, access to food and utilization of food (USAID, 1995). "**Food availability** means sufficient quantities of food are consistently available to all individuals within a country. Such food can be supplied through household production, other domestic outputs, commercial imports or food assistance. **Food access** is ensured when households and all individuals within them have adequate resources to obtain appropriate food for a nutritional diet. Access depends upon income available to the household, on the distribution of income within the household and on the price of food. **Food utilization** is the proper biological use of food, requiring a diet providing sufficient energy and essential nutrients, potable water, and adequate sanitation." "Effective food utilization depends in large measure on knowledge within the household of food security and poverty-oriented programmes not only assist poor rural populations to produce more and diversified products but to produce a surplus that can be marketed and thereby generate income for the purposes of improving quality of life through improved diet and nutrition, investment in productive activity, and as collateral for credit to purchase inputs and/or other supplies to enhance agricultural or non-agricultural enterprise." (FAO, 2003)

"Food systems encompass food availability (production, distribution and exchange), food access (affordability, allocation and preference) and food utilization (nutritional and societal values and safety), so that food security is, therefore, diminished when food systems are stressed. Such stresses may be induced by a range of factors in addition to climate change and/or other agents of environmental change (e.g. conflict, HIV/AIDS) and may be particularly severe when these factors act in combination. Urbanization and globalization are causing rapid changes to food systems. Climate change may affect food systems in several ways ranging from direct effects on crop production (e.g. changes in rainfall leading to drought or flooding, or warmer or cooler temperatures leading to changes in the growing season), to changes in markets, food prices and supply chain infrastructure." (Gregory, P. J. et al. 2005)

"At the same time as delivering food security, we also need to significantly decrease the climate impact of food production, improve the resilience of food production to future environmental change, protect biodiversity, protect our freshwater resource, move to healthier diets, and reduce the adverse impacts of food production on the whole range of ecosystem services. Waste reduction is often cited as a way of reducing food security concerns. About 30–40% of food in both developed and developing countries are currently wasted; in developing countries this is dominated by pre-consumer losses whilst in developed countries food waste is dominated by post-consumer losses." "Globally, about 1.3 billion tons of food is wasted each year. Reducing waste, especially from the most resource intensive food products (meat and dairy), could play a role in delivering food security and reduce the need for sustainable intensification, since more of the food produced would be consumed. Whilst waste reduction alone will not allow us to meet our 2050 food security goals, its contribution is of the same magnitude as there distribution of nutrients and water to close the yield gap. As many smallholder farmers in developing countries exist on the edge of food insecurity, a reduction in food losses in developing countries could have an immediate and significant impact on their livelihoods." (Pete Smith, 2013)

While raising yields and food production on existing farmland is necessary, it is not sufficient to attain global food security; it also requires informed policies to achieve an accessible, affordable, nutritious and safe food supply produced using practices that protect soil quality, conserve water and biodiversity, and reduce greenhouse gas emissions. Indeed, there is growing recognition that ensuring global food security and protecting the environment is perhaps the single greatest scientific challenge facing humankind. So, basic components of food security are: (1) availability and stability of supply, (2) access, affordability, policies and markets, (3) nutrition and food safety, and (4) environmental sustainability. (Editorial, Global Food Security, 2012)

"Reducing poverty and food insecurity involves enhancement of agricultural productivity and production, and income generation among producers as well as among those in rural areas who do not work in the land. Institutions are the structuring features that command access of people to assets, to voice, and to power over their own lives, and that regulate competing claims to limited resources. Agricultural and rural extension (communication) programmes are needed to reach out to those in rural areas who often enough constitute the majority population. It is fundamental for government to address those institutional, governance and politicoeconomic factors that tend to exclude individuals and population groups from progress." (FAO, 2002) "Differentiated strategies require that governments consider two different organizational tasks: firstly, the coordination of multi-sectoral entities (public, private and third sector) and the implementation of programmes to assist diverse rural communities, farmers groups and households toward improved farm systems and livelihoods. Dialogue and cooperation are demanding, and will likely call for new attitudes and skills. Government will probably need to improve the capabilities of the multi-sectoral partners (including its own relevant public sector agencies, such as agriculture, water, education, health, transportation, interior etc.) and at the same time the capabilities of community and farmer group leaders. The programmes developed and promulgated by the different sectoral partners will also require new efforts at financing their programmes and eventually evaluating them for the purpose of up scaling." $(FAO)^{1}$

World agricultural productivity, especially in poor countries, is the key to global food security and the fight against hunger and poverty. Slow increases in world food production and declining rates of yield growth in main food crops threaten world food security. Land and water constraints, underinvestment in rural infrastructure and agricultural innovation, lack of access to agricultural inputs, and weather disruptions are impairing productivity growth and the needed production response. These factors, combined with sharp increases in food prices in recent years, have added to concerns about the food and nutrition situation of people around the world, especially the poor in developing countries. (Braun, J. v. et al., 2008)

Social protection is crucial for accelerating hunger reduction. First, it can protect the most vulnerable, who do not benefit from economic growth. Second, social protection, properly structured, can contribute directly to more rapid economic growth through human resource development and strengthened ability of the poor, especially smallholders, to manage risks and adopt improved technologies with higher productivity. A wide range of policies and instruments fall within the remit of a social protection system. However, Safety nets, or social assistance/ transfers normally targeted at the poor and not requiring a financial contribution from the beneficiaries, are only one component of social protection. In addition, social protection includes aspects of labour market policies for education, health, nutrition, HIV/AIDS and agriculture. Safety net programmes

¹ Source- Agricultural Extension, Rural Development and the Food Security Challenge- 2003, FAO of United Nation

within social protection are also a key factor in driving economic growth. They can allow for the acquisition of the human capital (for both children and adults) that leads to increased productivity. They can buffer the poor from economic or climatic shocks, leading to investment in agriculture and greater adoption of improved technologies that increase farm income. In addition, they can contribute to the construction of infrastructure through public works programmes, thus providing public goods that are essential for increases in GDP per capita. (The State of Food Insecurity in the World, 2012)

6. Access to food in Bangladesh

Access to food depends on income or purchasing power of people, the poverty situation, and distribution system of any country. Gerard J. Gill et al. (2003) shown that almost all commentators, including the citizens and governments of developing countries, identify chronic and pervasive poverty as the most basic cause of food access problems. Increase in income of the household means greater access to food and thus can positively influence food security at the household level. Poverty as is well agreed a major determinant of chronic household food insecurity. The poor do not have adequate purchasing power to buy required food, even when food is available. Moreover, the poor are vulnerable to shocks, such as natural disasters and crop failure that cause transitory food insecurity. Increased food prices also results in transitory food insecurity of the poor as their real income goes down. Even when the national level food security is achieved, a number of individuals and groups in the country are still hungry because they do not have the access to food. Although, food availability in Bangladesh has improved, further improvements on access to and utilization of food, to be sustainable and large-scale, needs renewed efforts from the government, civil society and the development partners.

In fact, Poverty is the main factor affecting the food security in Bangladesh. The food security condition in Bangladesh can be measured by analyzing the present poverty condition of the county (Table 1). Although Bangladesh has achieved progress in poverty reduction, there is widespread poverty and hunger. There are also marked variations in poverty incidence between rural and urban area. According to the FAO Statistical Year Book (2013), surprisingly 25 percent of our people are still undernourished and 19 percent don't have access to water resources. Moreover, 65 percent of personal income is spent for food and more than half of that is spent for rice. Another remarkable point is that Bangladesh is fully dependent on import for dairy products. Apart from this, a large segment of the population consumes less than 1805 kcal per capita per day, which is much below the norm of the minimum energy intake of 2122 kcal, for living a healthy productive life. Moreover, recent spike in food prices, regular natural disaster and strains on global market causes additional destabilization.

	Absolute poverty, Daily less than 2122	Hardcore poverty, Daily less than 1805
Year	kilocalorie food intake (%)	kilocalorie food intake (%)
1988-89	47.7	28.4
1991-92	47.5	28
1995-96	47.5	25.1
2000	44.3	20
2005	40.4	19.5
2010	31.5	17.6

Table-1: Trends of Poverty based on DCI Method (Head Count Ratio)

Source: BBS (Bangladesh Bureau of Statistics)

7. Low cost food supply

There is remarkable progress in increasing domestic production of food commodities in Bangladesh. It is trying to attain self-sufficiency in crop product for decades. But, Sustainability of agricultural production systems is already challenged by declining land and water resources, high input and energy costs, increasing food prices, depressing effective demand by the poor, slow technology generation and so on. On the top of all, challenges of climate change i.e. floods; drought, cyclone etc. are superimposed, meaning that the country will be exposed to a range of disaster risk and vulnerability. While the population of the country is growing, demographic pressures and increased urbanization have caused cultivated area to decline per year. As cropping intensity has approached its limit, growth will need to come from intensification of cereal production, diversification into high value crop and non-crop activities, and value addition in the agro-processing sector, including storage, processing and marketing. This will require reforming the agricultural research and extension systems, and financial and other regulations. Land administration and security issues also need to be addressed.

In 1980s, the Structural Adjustment Program (SAP) was implemented where input market was gradually liberalized and the private sector was allowed to import and sell fertilizers, seeds, pesticides and irrigation equipment. This system has had an adverse impact on the small and marginal farmers. Rapid increase in price of fertilizers, seeds and pesticides from deregulation in price control outweighed the benefit of increased yield by decreasing the earning of these small farmers. In the absence of proper regulation farmers have been exposed to market volatility and profiteering from hoarding, artificial price hikes and oligarchies of the traders. In this way the marginal farmers has been pushed to the weak end of a trapped supply chain stated by Hossain M. and Rushidan I. R (2003). However, the policies pursued by the government to increase domestic production include provision of incentive price to the growers, implicit and explicit subsidy on major agricultural inputs including credit and investment in agricultural research for generation of new technologies.

The global food crisis has apparently generated awareness in international politics that food security can only be achieved through substantial investment in agriculture and the development of rural areas. In the long run, investment in agriculture and improving resilience among farmers will obviously be the key factor of providing sustained access to food for all and reducing vulnerability to price volatility and natural disasters such as drought. Braun, J. v. et al. (2008) shows that, output growth resulted from increased investment in agricultural Research & Development (R&D) would triple (from 0.53 in 2008 to 1.55 percent in 2020), which would increase the overall output growth rate from 3.6 to 5.05 percent. Regionally, Southeast/East Asia's output growth coming from R&D would increase by 2.26 percent, South Asia's by 1.78 percent, and Africa's by 1.1 percent. Moreover, increased investment allocated to maximize agricultural output would reduce the total number of poor by 204 million between 2008 and 2020. Of these, almost 95 million live in South Asia (with 71 million in India), 67 million in Sub- Saharan Africa (53 million in West Africa), and 41 million in Southeast/East Asia. In order to maximize total agricultural output, R&D investment should therefore be allocated to Southeast/East Asia and South Asia. But, there is little investment for R&D in Bangladesh.

8. National security stock

National security stock is necessary for easy access to food for poor households during the crisis and disasters. Governments maintain public food stocks in order to: (a) provide emergency relief during periods of natural disasters, (b) alleviate chronic food insecurity through targeted food distribution to poor households, and (c) take steps, when necessary, to stabilize food markets. Some researchers argue that public food stocks also provide "political insurance," by making it possible for the Government to avoid criticism for failing to tackle sharp swings in rice prices or to meet disaster relief needs stated by Planning Commission (2008). In view of the difficulties Bangladesh faced in procuring rice from the international market in 2007/08, many policy analysts argue that the country should have a buffer stock to deal with crisis.

Period	Rice	Wheat	Total
1989 – 1993	560	530	1090
1994 - 2002	460	410	870
2003 - 2008	677	156	726

Table 2: Public stocks of cereals in Bangladesh: 1988-89 to 2007-08 ('000 Metric Ton)

Figures are rounded average of end-June stocks for the periods shown. Source: World Bank (2008)

So, there is no alternative to maintain security stocks (Public and Private) and ensuring a corruption-free public distribution system to ensure access to food. Managing access to food is a challenge in terms of maintaining adequate stock and supplying them to the poor in time. Since external and domestic supply demand and market conditions are constantly changing, an effective public stock policy (in terms of level, composition and cost) requires constant monitoring and analysis.

9. Safety Nets for vulnerable

This unlike others is exclusively a government obligation. In the absence of purchasing power, the private market fails to provide food for the impoverished. Through income transfer, direct food distribution and labor intensive public works schemes, the government of Bangladesh targets the population groups, regions and seasons where nutritional stress is most acute. Government is trying to ensure food security by widening the safety net programs and ensuring a public distribution system to offset the food insecurity problem. Since food grain prices remain high time to time, safety net programs can be effective to protect the poor consumers and ensure food security for all. There are a number of safety net programs in Bangladesh against floods, cyclone and land erosions that help to insulate the poor from idiosyncratic shocks and food crisis. These safety net programs are a) Food transfer: VGD, VGF, FFE etc. b) Cash transfer: RMP and c) Food For work Schemes.

These programs run for a limited period of time and directly target at the affected households. Eighteen hundred and four thousand M. tons of food was distributed by PFDS (Public Food Distribution System) through various food-based safety net programs in 2000/2001 to 2008/09 (Table 3).

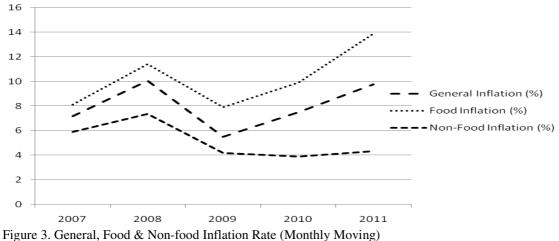
Period	Food procurement ('000 Metric Tons)		Food distributions ('000 Metric Tons)		Procurement/public distribution (%)				
	Rice	Wheat	Total	Rice	wheat	Total	Rice	Wheat	Total
1981-1990	324.1	91.1	415.2	538.4	1604.2	2142.6	60.2	5.7	19.4
1991-2000	456.3	104.0	560.3	615.1	1143.1	1758.2	74.2	9.1	31.9
2001-2009	1051.2	187.1	1238.3	1121.1	744.2	1865.3	93.8	25.1	66.4

Table-3: Domestic procurement and public distribution of food grain

Source: Calculated data from BBS

10. Food price stabilization

In Bangladesh the price of daily essential product is hiking day by day which causes real incomes to fall and increased poverty and food insecurity in Bangladesh. A Centre for Policy Dialogue (CPD) study (Rahman et al. 2008) estimates that high inflation and rapid rise in rice prices increased poverty by 8.5 percent (12.1 million) between January 2005 and March 2008. High price pushed many people into poverty which will require emerging costs of the crisis. For those, already struggling to meet their daily food and nutrient needs, the double shock of food and fuel price rises represents a threat to basic survival. The poorest households reduce the quantity and/or quality of the food and thus fall in malnutrition. Their real income goes down with high inflation rate that worsen the status of low income group. But, Governmental policies and actions are not yet proved effective to control this mechanism.



Source: Bangladesh Bureau of Statistics

However, measures to reduce the impact of high food prices on the poor include targeting social assistance and nutritional programs to the poorest, removing grain trade restrictions, when food prices exceed threshold levels. Improving country capacity to manage volatility through financial market instruments, better weather forecasting, more investments in agriculture, the adoption of new technologies, such as rice fortification to make it more nutritious, and efforts to address climate change are also needed. Government of Bangladesh attempts to stabilize food grain market prices as it is a determinant of welfare for both producers and consumers particularly for the poorest group in Bangladesh. The policy instruments that Government uses to control seasonal price fluctuations within acceptable limits are:

- The domestic procurement program, where government purchases grain from the open market to maintain a floor price for farmers (below which market prices would not fall),
- An open market sales (OMS) program to reduce food grain prices during price hike and
- Increasing subsidies to agricultural inputs aimed at reducing the cost of production.

The domestic procurement program has been being used in Bangladesh since the late 1970s to maintain floor prices; the OMS program was introduced in the early 1980s. The government has increased subsidy for food

grains and agricultural inputs to check price hike of food grains aimed at keeping production cost low, and offering a cushion to the poor through various safety nets. The government lowers prices of non-urea fertilizers several times to benefit farmers, and help them maintain a balance in the use of fertilizers and get a better output. Economists consider the additional subsidy necessary to cushion the impact of soaring prices of essentials on the poor.

11. Strategic actions of the Government for food security

Food is a basic human need and the government is responsible to ensure a dependable food security system for the nation. This is crucial for Bangladesh as a lion part of the national income has to be spent to procure food. The Government's firm commitment to achieve food security for all is reflected in the development plans of the government. The goal of the first national food policy adopted in 1988 is to achieve food security for all people by increasing food production and attaining self-sufficiency. Bangladesh is a signatory of the 1996 World Food Summit, GATT Uruguay Round Agreement in 1994 and as agreed in different Bangladesh Development Forum meetings, she is to develop a comprehensive food security policy for the country. MoFDM (2006) stated that National Food Policy (NFP) 2006 has declared its overriding goal of ensuring a dependable sustained food security system for all of the country by ensuring availability of food, access to food and utilization of food. That is, three objectives of NFP are to ensure: (i) adequate and stable supply of safe and nutritious food; (ii) access to food through enhancing people's purchasing power, and (iii) adequate nutrition for all, especially women and children.

Moreover, one of the MDGs is set to reduce the number of undernourished people to half by the year 2015. The Food Planning and Monitoring Unit (FPMU) of the Ministry of Food and Disaster Management formulated a National Food Policy Plan of Action for (2007-2015) with the technical assistance of FAO project 'National Food Policy Capacity Strengthening Programme (NFPCSP)'. Furthermore, Article 15(a) of the Constitution of the People's Republic of Bangladesh declares the fundamental responsibility of the state is to secure the provision of the basic necessities to its citizens' life including food. On the other hand, Article 18(a) of the Constitution outlines "the state shall regard the raising of the level of nutrition and improvement of public health as among its primary duties". To achieve all these, concerted efforts required in the implementation of food security enhancing programs involving all concerned ministries and agencies. As obvious, attaining the targets will require addressing all aspects of food security namely, a) higher volume and greater efficiency in domestic food production b) timely and efficient food distribution mechanism with adequate infrastructure c) making food available and assistance to the food insecure; in particular during disaster and d) elevating the purchase power of the poor to enhance their access to food. At present, programs of the Government are subsidy to inputs for low cost food supply, targeted food distribution for Vulnerable, national security stock and price stabilization policy etc. Usually most of the programs are seasonal or emergency covering. So, they have short term effect and inadequate coverage. However, two broad approaches used to increase access to food in Bangladesh especially for the poor are:

- * The short-run approach in which food or cash is directly transferred through some programs,
- The long-run approach, through which the government designs policies, implements Programs and invests in development projects with a view of raising incomes of the poor and their capacity to acquire food through employment generating activities.

12. Recommendation:

Food and Agricultural Organization (FAO) of United Nations, Commission on Sustainable Agriculture and Climate Change (CSACC), Consultative Group on International Agricultural Research (CGIAR), International Food Policy Research Institute (IFPRI) etc. are devoted to and pioneer of the agricultural research in the world. So, the FAO Statistical Yearbook (2013), final report (Achieving food security in the face of climate change, March 2012) from the CSACC, CGIAR and IFPRI report (International agricultural research for food security, poverty reduction and the environment, 2008) has been reviewed for necessary guidelines to face the massive challenge like food security. Review and findings of the study suggest that current status of food security and access to food in Bangladesh can be improved only if effective strategies, policies and programs are undertaken along with the existing actions immediately by the government and agricultural development partners. However, the following strategies and policies should be considered for ensuring the access to food as well as food security in Bangladesh:

Formulating strong and appropriate policy for agricultural development and extension to up scale the basic components of food security,

- Coordinating public and private entities and implementing effective programmes to assist rural communities, farmers groups and households to improve farm systems and livelihoods,
- Strengthening the public sector agencies such as agriculture, water, education, transportation health etc. to design and manage food security programmes effectively,
- Integrating food security and sustainable agriculture into existing national policies for sustainable increase of agricultural production by lowering negative environmental impacts,
- Providing effective training to agricultural development and extension staff in the public and private sector aimed at developing overall services to the beneficiaries,
- Recognizing the access of private sector to agricultural development and extension services and promoting collaboration with private entities to perform food security actions,
- Ensuring transparent regulatory environment that promotes private investment and increases farm productivity to ensure self-sufficiency in food,
- Developing effective programmes and policies for the populations and sectors vulnerable to natural disasters, climate changes and food insecurity for providing necessary support,
- Reforming food access and consumption patterns to fulfill basic nutritional needs and fostering healthy and sustainable eating patterns at all levels of the society,
- Reducing pre-consumption losses and wastage in food systems targeting infrastructure, farming practices, processing, distribution and household habits,
- Establishing comprehensive and integrated information systems with open access covering human and ecological dimensions of Bangladesh,
- Managing natural resources (land, forests, water, livestock, etc.) and Planting resilient, nutritious and fastgrowing shrubs for dairy cows and goats in drought-prone areas,
- Formulating regional agricultural trade and procurement policies and patronizing agro and dairy industries for more agriculture based domestic employment and productivity,
- Financing food security programmes and eventually evaluating them for the purpose of up scaling so that they can be effective to lessen food insecurity and poverty,
- Raising fund and the level of investment in research and development of sustainable agriculture and food systems to accelerate the social prosperity and
- Building public awareness of the importance of food and nutrition security for healthy living and controlling prices to increase purchasing power of the low income group.

13. Conclusion

As about one-fourth of the total population lives below the poverty line, ensuring access to food for all is very difficult for the government of Bangladesh. The limited income of a large part of the people does not permit them to have sufficient food intake. To achieve food security for all, the National Food Policy, 2006 must be implemented which emphasizes on adequate and stable supply of safe and nutritious food; increased purchasing power and access to food of the people; and adequate nutrition for all individuals, especially women and children. The strategic goal of our national policy should be to improve the 'access' concerns for an effective food security system as well. Moreover, government should expand social safety net programs to ensure the food security of low income households and vulnerable groups to the food insecurity.

However, increasing poor peoples' access to food requires improvement of earning capacity of the poor and vulnerable section of the population and successful implementation of the targeted food programs in a cost effective manner. Government should undertake a number of strategic actions for playing a significant role to uncover the basic demands of the people of Bangladesh like food security. Therefore, it is obvious that responsible and good governance is a prime requirement to achieve an effective food security along with all other MDGs.

References

Asia, page no.28, Working Paper 231, Overseas Development Institute, 111 Westminster Bridge Road London SE1 7JD UK

Bangladesh Bureau of Statistics (BBS), Reports of the Household Income and Expenditure Survey (Different years) Statistics Division, Ministry of Planning, Dhaka

Braun, Joachim Von (2007): The World Food Situation: Now Driving Forces and Required Actions. International Food Policy Research Institute, Washington DC

Braun J. v. et al. (2008): International agricultural research for food security, poverty reduction and the environment, Consultative Group on International Agricultural Research (CGIAR), International Food Policy Research Institute (IFPRI), 2008.

Chiang Rai, Thailand, Microfinance, PKSF Building, Dhaka, April 1, 2008.

CSACC (2012): Achieving food security in the face of climate change, Commission on Sustainable Agriculture and Climate Change, March 2012

Editorial (2012): Global Food Security, ELSEVIER journal, 1 (2012) 81-82

FAO (2008): Food Outlook, Food and Agricultural Organization, June 2008.

FAO (2013): Statistical Year Book, Food and Agricultural Organization, 2013

Gerard J. Gill, John Farrington, Edward Anderson, Cecilia Luttrell, Tim Conway, N.C. Saxena and Rachel Slater (December 2003), Food Security and the Millennium Development Goal on Hunger in

Gregory P.J. (2005). Climate change and food security, Philosophical transitions of Biological sciences, B (2005) 360, 2139-2148

Hossain Mahbub and Rushidan Islam Rahman 2003: Agriculture and Rural Development of Bangladesh, Dhaka University Press Ltd.

Hossain, Mahabub (2008): Food Security in Bangladesh: Progress, Current Crisis and Future Challenges, Paper presented in a seminar organized by the Institute of

M. Harun-ur-Rashid and Md. Shirazul Islam 2009: Country Report: Bangladesh Strategic Approach To The Improvement of Agricultural Productivity Towards Food Security In Bangladesh, Submitted To Fourth Session of The Technical Committee of Apcaem 10-12 February 2009,

MoEF (2008): Bangladesdh Climate Change Strategy and Action Plan 2008, September 2008.

MoFDM (2006): National Food Policy, 2006. Ministry of Food and Disaster Management, Government of the People's Republic of Bangladesh, 14 August, 2006

Planning Commission (2008): Moving Ahead: National Strategy for Accelerated Poverty Reduction, 2009, Draft PRSP, May 2008.

Rahman et al. (2008): Trends, Determinants and Impact on Poverty, Dhaka, Centre for Policy Dialogue (CPD).

Rahman, Mustafizur, D. Bhattacharya, W.B. Shadat and U.Deb (2008): Recent Inflation in Bangladesh.

Sen, A.K. (1981): Poverty and Famines: An Essay on Entitlement and Deprivation. Charendon Press, Oxford.

Smith, Pete. (2013): Delivering food security without increasing pressure on land, Global Food Security, ELSEVIER journal, 2 (2013) 18–23

World Bank (2008): "Bangladesh: Agriculture and Food Policy Note." prepared by Hans Jansen and Nihal Fernando, Dhaka.