The Cooperative Food Bank: Quest for Sustainable Food Security of Mankind

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Abstract

This paper aims to institutionalize food sub-sector interventions in the private sector for increasing supply by accelerating domestic production, imports or food aid, building up viable storage facility, distribution by efficient & transparent marketing, distribution by income transfers and maximizing consumption by all at all times for sustainable food security. Food is very essential for survival of human beings. It helps human beings to attain their normal growth of body and a healthy nation with strong physique by providing nutrition that in turn will lead the country to achieve an overall economic development. Agriculture provides food for the country. For increasing more food the agricultural sector and the conditions of the peasants are to be improved simultaneously. Bangladesh, a land of wellwatered by numerous rivers, highly fertile and productive soil, faced a number of dreadful famines in the past for not of course due to shortage but for lack of access to food for foreign rule and lack of effective government. However, repetitions of such famines are not desirable at any time in future. The scenario of food supplies of the world has been changing very rapidly due to weather & climatic changes, man-made disasters and economic changes that reduced scopes of importing it in recent years as food surplus countries have been imposing bans on exports. As long run solutions the country does not have any alternatives but to increase supply and store food as much as it can with all efforts and judgments. All instruments including subsidies on inputs (credits, fertilizers, seeds, fuel, electricity, irrigation, agricultural equipment, etc), viable storage facility and above all right prices for food must be ensured for self-sufficiency and sustainable food security. This article has some reservations with the policies as followed by the World Bank and the International Monitory Fund with respect to domestic production, storage, saving of indigenous seeds and structural arrangements of the economy for supplying food to the vulnerable. Beyond the present concept this article has proposed to institutionalize food sub-sector by the

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Cooperative Food Bank in the private sector, which has been designed in conformity of the interventions as advised by the Holy Qur'an to sustain food security of all for reducing starvation, malnutrition, poverty and famine. With this end in view a set of macroeconomic, agricultural and international economic policy needs to be formulated with consensus through democratic process for sustainable food security, human and overall economic development.

Background of the Study

Food is very essential for survival of human being, as body needs food within a few hours of having meals. Food helps human beings to attain their normal growth of bodies and a healthy nation with strong physiques by providing nutrition that in turn will lead the country to achieve sustainable human development and overall economic development in the long run. Necessity of food is more perceived when there are adversities or famines. So food must be secured to everybody at all times without distinction of castes, creeds and colours. Men/women are permitted to grow food and use it for satisfying their hunger. Food can make friendship among men/women, societies and countries of the world. However, a destruction or alternative use of food by anybody or any state is a serious crime to humanity.

The scenario of food supplies of the world has been changing very rapidly due to weather & climatic changes, man-made disasters and economic changes. Bangladesh faced two devastated foods and one severe cyclone named SIDR in 2008, which caused serious damages in food production. Moreover, import prices of rice and wheat also went up due to scarcity and strong effective demand. As results within a year in Bangladesh the prices of rice and wheat increased by 186% (from Tk.14 to Tk.40/per Kg) and 150% (from Tk.18 to Tk.45/per Kg) respectively. In spite many countries including USA have been using their cereals like maize for making bio-fuel e.g. ethanol by which 250 million people could be fed. The economic boom occurred in China and India has enabled their vast citizens to command more food. All of these causes put enormous pressures upon developing countries. For example, people of Mauritania, Mozambique, Senegal, Uzbekistan, Yemen, Bolivia, Indonesia, Ivory Coast, Burkina Faso, etc burst out their severe protests and people of Haiti, Egypt and Cameroon engaged themselves in riots for food. The angry people of Haiti killed 10 people including 1 peacekeeper. Consequently, the world leaders including UN officials apprehended that men, societies and countries would fight with each other in future to establish their rights on food as it would become scarce gradually.

According to FAO food positions of 9 Asian countries were vulnerable due to floods and cyclones out of which the position of Bangladesh was very critical followed by Indonesia, Nepal, Pakistan and Sri Lanka. Bangladesh spent more on imports of food than other countries. The country spent 19% of its total imports on food whereas Nepal spent 17%, Maldives 16%, Sri Lanka 12%, Pakistan 11% and India 3% of their total imports for this purpose.

1.1 Basic Facts about Food Production in Bangladesh

Total area of Bangladesh is 147,570 square kilometers. About 73% of its land is suitable for agriculture, but only 32% of the suitable land is irrigated, which is a barrier to increase food production. In the core food basket of Bangladesh rice is the staple food, which is about 85% of total food production of the country. Total estimated demand for food grains of Bangladesh was about 285.20 lakh metric tons, whereas estimated total production was 271 lakh metric tons in 2007-08. Thus, a shortfall was about 14.20 lakh metric tons. In the near future the estimated demand for food grains of the country will go up to 320 lakh metric tons per annum. But with the present capacity of this sector the country can produce about 290 lakh metric tons of food grains per year. However, production can be increased if crop hypothecation loans, fertilizers, quality seeds and pesticides are provided and irrigation facilities are extended in times.

Agricultural sector is the main pillar of Bangladesh economy. About 80% of the total populations live in the villages, 70% of total populations depend on agricultural for their livelihood and 48% of total work forces are engaged in the sector. Agriculture produces food for 150 million people of the country. This sector accounts for 22% of the country's GDP. For increasing more food for people this sector and the conditions of peasants are to be developed simultaneously. Bangladesh, a land of well-watered by numerous rivers, highly fertile and productive soil, faced a number of dreadful famines in the past for not of course due to shortage of food but for lack of access to it for foreign rule and lack of effective government. Food and other agricultural productions have been caused to decline in the world in recent years due to climatic changes and natural disasters which in turn caused to reduce the scopes of importing it as the food surplus countries have been imposing bans on their food exports. At this moment the country does not have any alternatives but to increase supply and store food as much as it can with all efforts and judgments. However, as a long run and sustainable measure the attainment of food self-sufficiency through increasing production is urgently needed. All instruments including subsidies on inputs

(credits, fertilizers, seeds, fuel, electricity, irrigation, agricultural equipment, etc), viable storage facility and above all right prices for food must be ensured. The core objectives of food policy are to increase food production, economic storage facility and improved food distribution to ensure enough food for all for reducing hunger, malnutrition, poverty and famine. With this end in view a set of macroeconomic, agricultural and international economic policy needs to be formulated with consensus through **democratic process** for sustainable food security, human and overall economic development.

2. Definition of food

Food is defined as comprising nuts, pulses, fruits, cereals, vegetables, sugar cane, sugar beet, starchy roots, edible oils, livestock and livestock products (World Development Report, 1991: p. 275). The core food items for Bangladesh are Rice, Pulse, Edible Oil, Wheat (Coarse Flour & Flour), Powered milk, Salt, Sugar, Potato, Chick Pea/Gram, Fish & Fish Products, livestock and livestock products, Onion, Garlic and Ginger,

3. Food Security

Food security is defined as availability of sufficient food of choices of all people at all times along with necessary purchasing power. Thus food security includes three things such as availability of food, choices of the people for food and purchasing power to acquire it. The choice of the people is a must, because one cannot satisfy hunger of the people for rice by potatoes or maize or vegetables etc. The word 'choice' belongs to the concept of democracy and it is the democratic right of the people.

4. Food Insecurity

Food insecurity is defined as lack of access to sufficient food of choices of the people and purchasing power to acquire. Food insecurity may be both transitory and chronic.

4.1 Transitory Food Insecurity

Transitory food insecurity is defined as a temporary decline in a consumers' access to sufficient food because of instability in incomes, high prices, foodstuffs losses and disruption of food production due to war, floods, cyclones, droughts and earthquakes, disruption of distribution chains, change in government machinery and political instabilities. Transitory food insecurity takes place due to

lack of entitlements to enough food of the households and improper distribution of food. During the last few decades the rate of growth of world food production was faster than the population growth. However, lack of entitlements and improper distribution of food did not help to eliminate starvation. Thus starvation (S) is a function of entitlements to enough food (E) and distribution of food (D) (Sen, 1982: pp. 2-4). It can be expressed symbolically as,

$$S = f(E, D)$$
 ... (1)

where, $\delta S/\delta E$, $\delta S/\delta D < 0$ which imply that entitlements to enough food and better distribution of food can minimise starvation.

Famine is defined as a situation of the most severe shortage of food during transitory food insecurity when victims cannot acquire any food of their choices due to lack of purchasing power and are deprived of receiving any humanitarian food aid (charitable food) from anywhere. The study of the world worst famines reveals that instability (during booms or slumps) and high variation of food production and price of domestic food reduced income of the wage labourers or rendered them jobless who could not buy food owing to not having purchasing power, for example, the Great Bengal famines (1770 and 1943), and the Bangladesh famines (1974 & 2008). During the British rule in India the government raised taxes in cash due to which the peasants had to sell their crops to the English Merchants in 1769. They were forced to buy these crops in 1770 at a very high price. But most of them could not acquire necessary food grains due to lack of purchasing power. Further the famine, 1943 was occurred due to the failure of the then British Government. The great Bengal Famine occurred in 1943 during boom when the increase in food demand fueled by gains in urban income inflated food prices faster than rural wages grew. The Bangladesh Famine 1974 was happened due to the then political turbulence. The then Bangladesh Government could not assess the situation and was not adequately prepared to encounter the famine in 1974 when wage labourers lost their jobs as a result of agricultural production declines and the victims could not acquire food.

The Bangladesh Silent Famine/Hidden Hunger, 2008 has taken place due to ineffective government and absence of democracy. Before the occurrence of the situation the country faced two devastated floods and one severe cyclone (SIDR). The non-political caretaker government could not assess the requirement of food for the country. The Government started with a stock of about 3.50 lakh metric tons of food at the beginning of the year. However, the situation was such that the government would require enhancing food reserve to 10-15 lakh metric tons. Perhaps, the political leaders could not compromise to run the government with

such a low level of food reserve. Further, the caretaker government relied on India as the biggest supplier of rice for Bangladesh. But the unstable or varying decisions of the Indian government for export of rice and interruption of the supply of rice by the Indian authority at the land ports have raised the prices of rice in Bangladesh several times. The government could have diversified the importing countries and the required rice could be bought from Myanmar, Vietnam, Thailand and Cambodia. Some of the advisors of the Caretaker Government could not assess the severity of the food crisis with skills, wisdom and intelligence. It was believed that the uprising of general mass could not have been taken place in Bangladesh due to the state of emergency.

4.2 Chronic Food Insecurity

Chronic food insecurity is defined as a continuously inadequate diet of choices resulting from the lack of resources to produce or acquire enough food. The people affected by continuous inadequate diet easily expose to serious health risks usually caused by various diseases and parasites. The victims are deprived of forming human capital through schooling and training programmes due to lack of physical fitness, i.e. lack vigour, alertness and vitality required for the jobs. Inadequate human capital lowers productivity, which in turns depresses output and income. The lower levels of output and income make it more difficult for families and nations to extricate themselves from the cycle of poverty (Reutlinger, 1985: pp. 7-11). For example, chronic food insecurity took place in Ethiopia, Somalia and Sudan. Further continuous inadequate diet is also one of the main obstacles to human and overall economic development in Bangladesh.

5. The Scope of the Study

The paper aims to institutionalize the five food security interventions that may be regarded as sustainable solutions to the problems, which are as under:

5.1 Ensure Enough Food Supply

The first instrument is to ensure enough food supply by accelerating domestic food production, imports or food aids or combination of all. Sufficient supply of food can be obtained through increasing domestic production by exploring comparative advantage of favourable weather conditions along with optimum utilisation of resources (financial, natural and human) of the state. The expanded food sub-sector will increase domestic food supply, employment opportunities and incomes of the rural people that will enable them to encounter food insecurity

and famine. For maximization of profits lands other than rice fields and other natural resources should be devoted to produce non-food commercial crops such as coca, coffee, cotton, jute, silk, tea, etc which will increase employment opportunities and income of the rural poor people. Incomes augmented from commercial crops will enhance purchasing power of the peasants and wage labourers for enabling them to buy more staple food and other basic needs. The additional demand for food caused by population and economic growth may be fulfilled by **import** and **food aid**.

5.2 Build up Permanent Food Reserve

The second type of intervention for solving food problem is to build up permanent food reserve. Food reserve should be built up permanently by domestic food, imported food or food aid or combination of all for smooth supply, price stabilization and psychological tranquility in societies and states. In fact the poor people (marginal and landless peasants) of Bangladesh cannot keep food for a few months by storing up due to their financial stringency and thus fail to use own produced food during food insecurity and famine. In addition the public sector cannot store food due to unrealistic low fixed price for the domestic food producers as determined by the government, lack of public storage facility, corruption of the officials and high budgetary cost. Through building up storage domestic food can be saved from wastage and smuggling, and kept food in the region and within the boundary of the country for securing food during food insecurity and famine.

5.3 Proper Distribution of Food by Efficient and Transparent Marketing

Food is usually distributed to the consumers by two ways such as marketing channels and income transfers (humanitarian distribution of food). Thus, third food security intervention is to establish efficient and transparent food marketing organisations. The effective demand for food is fulfilled through efficient and transparent marketing of food. Transparent and equitable distributions of food are prerequisites to ensure food security. Food is being marketed in Bangladesh through a chain of middlemen, importers (business syndicates) and various government ministries and departments. The government ministries and departments engaged in food marketing are not so transparent and efficient in the country. Alternatively the private sector dishonest hoarders, corrupted businessmen and business syndicates exploit the consumers by realising higher prices through hoarding food items, which in turn create artificial shortage and increase sufferings of the general masses, for example, during silent famine and hidden hunger in 2007 and 2008 in Bangladesh.

5.4 Proper Distribution of Food by Income Transfers

The fourth type of intervention for solving food problems is to have proper distribution of food by income transfers. Food should be so distributed as it reaches to its all consumers at all times. Only proper distribution of food will minimise starvation and eliminate food insecurity and famine. Income can be distributed through transfer payments in cash or in kind to the poor during food insecurity and famine. The ways of income transfers as followed by the government of Bangladesh are to distribute food through ration food, OMS, VGD, VGF, food for education, food for works, etc.

5.5 Maximize Consumption of Food by All Consumers at All Times

The fifth and final food security intervention is to maximize consumption of food by all consumers. The ultimate objectives of the above four interventions are to enable all consumers to increase their consumption of food at times. The consumers can be grouped into three categories. The first group includes those consumers who can fulfill effective demand (economically sound). The second category includes those consumers who have exceptionally low level of income to fulfill effective demand such as wage labourers, landless farmers, small and marginal farmers, artisans, urban workers like haircutters, rickshaw drivers, children under certain ages, pregnant and lactating mothers, etc. The third category of consumers are those who have no money or means to acquire food like beggars, vagabonds, orphans, etc. The core objective of the food policy is to provide enough food to the economically vulnerable people. For this purpose different groups of vulnerable people, their numbers, occupations, level of incomes, items of food as chosen by them, requirements and locations of selling subsidised rations and distribution of charitable food should be selected. However, as measures to increase consumption of the poor people the reselling or smuggling of the subsidised ration food and charitable food should be strictly prohibited. Thus the sale of subsidised ration food and distribution of charitable food provided by the government or donors will be well targeted to avoid unintended beneficiaries and to lower budgetary costs. Another way to enhance consumption of the local poor people will be through increasing production of non-tradable domestic food such as cassava and the like. Finally, temporary employment opportunities will have to be created for the poor people through various public employment programmes like building flood protection dams/bands, digging canals & rivers, roads, food for works, etc to give them the means to earn and buy more food and other essentials.

6. Economic Policies for Food Security Interventions

The food security interventions involve a wide range of activities and functions that can be accomplished by formulating appropriate macroeconomic, agricultural and international economic policy.

6.1 Macroeconomic Policy for Food Security

The macroeconomic policies of the countries with favourable weather conditions should allow exploring their comparative advantages in productivity and production for national self-sufficiency in food. The prices will be an instrument to provide incentives to the farmers for allocation of their resources in food production. The expanded food sub-sector will increase employment opportunities and incomes of the rural people. The real incomes of the poor people can be enhanced through income transfers such as subsidised ration food and charitable food. The deficit or net importer countries can enhance their food supplies through imports. Foreign exchange reserve will be an ultimate and respectable instrument of the deficit countries for importing food to encounter food insecurity and famine. However, the variation in exchange rate should be minimal to stabilise prices. The volume of international grain trades has been declining due to contracted supply and growing effective demand in the producing countries. The importing countries faced a new phenomenon of reduced scopes for importing food grains as the surplus countries had imposed new restrictions on exports. This situation calls for a consensus to be attained through United Nations or World Trade Organisation to remove all barriers, specially political trade embargoes and give opportunities to everybody or every country for buying necessary food grains through international trade on humanitarian ground. In addition foreign trades, of a net food importer country, should be increased with the food surplus countries so that food can be imported at the time of needs. The poor countries that lack foreign exchange can seek external assistance for food aid to meet the deficit. For receiving such food aid the government of a country should be democratic that accepted by the international communities. National buffer stock should be built up permanently by domestic food, imported food or food aid or combination of all to ensure enough food supply at relatively stable price during transitory food insecurity and famine. By building economically viable storage facilities food may be reserved for benefits of the producers and consumers. Through the viable storage facilities food produced by subsidies with taxpayers money can be kept in the region and within the country by preventing smuggling of food from country. The monetary policy in the form of money supply can reduce food insecurity and famine by reducing interest rate and increasing credit facilities, which will raise investment, output and income. Sufficient credit facilities at low rate of interest will induce the farmers to produce

more, reduce cost of holding reserves and stabilise price thereby. The institutional structures of economy determine how different individuals, enterprises and organisations will perform their economic activities for food security. The existing institutional structures of the state owned parastatals such as BADC, TCB, etc engaged in research, development & promotion, production, supply, storage, distribution and marketing of food will have to be reviewed and rationalised for their roles to develop agricultural sector and safeguard the interests of the producers and consumers.

6.2 Agricultural Sector Policy for Food Security

Agricultural sector is the main pillar of Bangladesh economy. For producing more food for the people agricultural sector and the conditions of peasants are to be developed simultaneously. Bangladesh, a land of well-watered by numerous rivers, highly fertile and productive soil, faced a number of dreadful famines in the past for not of course only due to shortage of food supply but also for lack of access to it for insensible foreign rule and lack of effective government. However, repetitions of such famines are not desirable at any time in future. As long run solutions to these problems the country does not have any alternatives but to increase domestic food production with all efforts and judgments. All instruments including investments and subsidies on inputs and infrastructure for increasing domestic production, storage facility, proper distribution, consumption and above all right prices for food must be ensured for self-sufficiency and food security. However, in order to avoid high budgetary cost the distribution of subsidised inputs should be specific and targeted so that it will not be misused or smuggled. The government supports are also needed for agricultural research, development and promotion with a view to increasing sustainable productivities of land and labour at lower cost of production for long run solvency in food. The landlessness among the majorities of peasants is one of the obstacles to increase food production and causes for low incomes of the poor people and deprivation thereby. Thus, food security calls for an appropriate land reform that is a prerequisite to enhance food production and better distribution of incomes to be earned by the landless framers from land. Finally the land, which is classified for food production cannot be used for alternative purposes.

6.2.1 Subsidised Inputs for Food Production

Many countries including Bangladesh faced a new phenomenon in 2008 when required food could not be purchased from world markets with cash foreign exchange due to a ban on exports of food imposed by surplus countries in apprehension of its shortage in their own countries. However, many great political

leaders of Bangladesh have already realised about the course of action to be undertaken in this regard. Some of them have already opined that necessary food should have been produced in the country by providing necessary inputs if required by subsidies. However, the country would have to come to a **strong political commitment** for a rational policy for food security. Traditionally Bangladesh government provides subsidies on chemical fertilizers, fuel seeds, electricity, irrigation, agricultural equipment, etc for boosting agricultural production.

6.2.2 Impacts of Subsidies on Food Production in Bangladesh

Total amount of food that estimated to be produced in Bangladesh was about 290 lakh metric tons of rice in 2008/09. Total amount of revenue to be earned from this quantity of food production will be about US\$ 1450 crore i.e. US\$14.50 billion (price of 1 metric of rice is estimated to be US\$ 500) and in Bangladesh currency Tk.101,500 crore (1 US\$ equals TK.70) per year. Amount of subsidies on agricultural inputs is earmarked Tk.3,600 crore in 2009-10, which is 5.55% of the total value of production, which is well within the limit of WTO provision. According to the WTO as a developing country Bangladesh can provide subsidy to encourage agricultural production up to 10% of the total value of the products. This implies that subsidy equivalent to Tk.1 will generate revenue up to Tk.28 each time all other thing remain constant. Therefore, providing subsidy in food sub-sector of Bangladesh is profitable, because the country has comparative advantage in food production due to favourable weather conditions, fertile lands, abundant low-waged labourers, etc. More importantly the amount of subsidy Tk.3,600 crore may be treated as a premium per annum for food security of the 160 million people of Bangladesh. The impact of subsidies on inputs for food production can be analysed through the following figure-1:

Let us suppose that Land (L) and Fertilizer (F) are used to produced 275 lakh metric tons of rice per annum (F_{275}) and use of other inputs like irrigation, pesticides, etc remain constant. Let us assume that the price of fertilizer has increased due to withdrawal of subsidy from it. Let us also assume that the food producers of the country are initially in equilibrium at point A where isoquant (F_{275}) happens to be tangent to the isocost line (C/P_L , C/P_F). Let the price of F now rises from P_F to P_{F^*} due to withdrawal of subsidy. Rising price of F will decrease the amount demanded of F. But the cultivable areas of Bangladesh will remain the same due to its limitation. It may also happen that utilisation of land will decrease due to lack of fertilizers. Thus the intercept of original isocost line ($O, C/P_F$) will shift to the left. Now it can be seen that the new intercept $O, C/P_{F^*}$

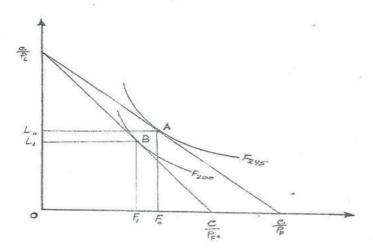


Figure 1: Impact of Withdrawal of Subsidies on Food Production in Bangladesh

is smaller than the original intercept O, C/P_F . The new isocost line $(C/P_L, C/P_{F^*})$ happens to be tangent to the new isoproduct contour at B with lower level of output (F_{200}) . Therefore, the withdrawal of subsidies or disruption of supply of fertilizers will have a negative impact on food production in Bangladesh.

6.3 International Economic Policy

6.3.1 Role of World Bank (WB) and International Monitory Fund (IMF) for Food Security

By mandate the WB is to deal with food production and nutrition interventions of its member countries. Whereas the IMF Cereal Import Facility programme provides finance to the low-income countries to import cereals in times of domestic crop failures or high international grains' prices. The roles of WB and IMF were frustrating, as they were indifferent for food crisis in 2008 when the world experienced the lowest reserves for last 35 years and about 100 million extremely poor people of the low-income countries were likely to face death risk due to severe food shortage. For example, the country like Bangladesh could not get proper response from the WB and the IMF for funding importation of food grains though the country had fulfilled the requirements of the IMF. The WB has discouraged the poor countries for building up national food reserves, which has already increased the risk of their vulnerability in the present unstable world grain markets. They have been advocating for use of genetically modified (GM) seeds as these seeds have failed to generate desired production in second generation. Several countries have already been affected by using GM seeds. Further the WB

and the IMF have also slowed down the progress of agriculture of low-income countries by imposing stringent conditions so as to withdraw subsidies from agriculture.

Problems of food insecurity and famine of a country are local in nature, multidimensional and interventions are short timed and very large in magnitudes. Thus, the interventions for reducing food insecurity and famine will be diversified and decentralized. It would be rather impossible for the WB and the IMF to solve the problems of food insecurity and famine of all the countries of the world simultaneously. However, the financial resources of the WB and the IMF are still very vital for encountering food insecurity by exploring comparative advantages in food production of the poor countries. Thus the policies that guide the WB and the IMF are needed to be reoriented for greater benefits of mankind. The financial resources of the WB and the IMF may be used in the low-income and developing countries with the wisdom and skills of the local people for eliminating their hunger, malnutrition, poverty and famine.

7. Democratic Process for Food Security and Development

Political commitment and democratic process are required for food security. social security and economic development. The participation of all parties in democratic process can only ensure efficient policy formulation and implementation for investments and subsidies in agriculture to increase production, employment and income that solves the food problems. Conversely, restrictions on political process may deepen the crisis and prolong the sufferings of the people during food insecurity and famine. For example, the impacts of the state of emergency and crackdown on political parties were multidimensional and severe during the Silent Famine in Bangladesh in 2008. Firstly, the nonpolitical caretaker government supported and backed by army could not take immediate steps to increase stock of food due to their inability to assess the requirement of food in 2008. Secondly, the caretaker government could not take farsighted and diversified trade policies to import staple food for the country, which resulted in economic shock due to the varying decision of the Indian authority and interruption of the supply of rice raised its prices several times in Bangladesh. Thirdly, incomes of the general masses were reduced due to lack of employment opportunities caused by contraction of economic activities in 2007 and 2008. Fourthly, the victims of the Silent Famine in 2008 lost their savings due to buying food with inflated prices. Fifthly, the state of emergency and the role of Anti-Corruption Commission created such a fearful situation when the rich people, sensible social workers & organisers and great political leaders could not trickle down humanitarian food aid or Jakat to the poor people.

Cooperative Food Bank (CFB) for Food Security for Present and Future Generations

8.1. Definition of the CFB

The CFB will deal with procuring and supplying inputs for domestic production, acquiring food from local markets at prevailing prices, through imports or aids for its members or customers, selling these at fair prices and distributing ration or charitable food to them at all times with consents of its members. The unit of CFB can be established at villages, unions, Upa-Zillas, towns, industrial areas, cities, etc, depending on the needs of its members or customers. Ultimately all people of the country will be the owners – cum – customers of the CFB. It is proposed to be established urgently to meet challenges of affects of globalization (i.e. aggression of large economies, WB & IMF) on food and nonfood agricultural productions of poor and developing countries through uniting all peasants for potential growth by exploring comparative advantages. The food producers will get maximum benefits of procuring inputs in time at lower cost and earn maximum profits by selling and storing their products through the bank and consumers or retailers will get their food directly from the CFB at fair prices without involvement of middlemen.

8.2 Objectives and Functions of the CFB

'Praise be to Allah, who is the Lord of the Worlds (Ayat 1 of Suura 'Faatihah, the Opening)' and the Giver of fruits (i.e. food) to all such of them as believe in Him and as for whoever disbelieves (Ayat 126 of Suura 'Bagarah, the Cow of the holy Qur'an). Men/women are required to produce their food by using given weather conditions (rainfall, sunshine, temperature, wind, etc), land, human and financial resources. They are also responsible for management of food such as its supply, distribution and consumption. Mismanagement of it results in food insecurity and famine. The holy Qur'an has rightly advised some instruments of food policy in Suura 'Yuusuf' which were successfully followed by the then Egyptian authority under the guidance of the prophet 'Hazarat Yuusuf (A)' about 4,000 years ago for solving problems of the seven years prolonged food insecurity and famine. The importance of accelerating domestic production, building up reserve, proper distribution, price supports & charitable food for vulnerable, skillful utilisation of wealth & resources of the state, wisdom & knowledge of the statesmen for timely interpretation of events and savings of seeds for sustainable solutions to food problems are stated in it. The instruments of food policy as formulated through Ayat nos. 6, 21, 22, 43, 46, 47, 48, 49, 55, 59, 60, 63, 65 and

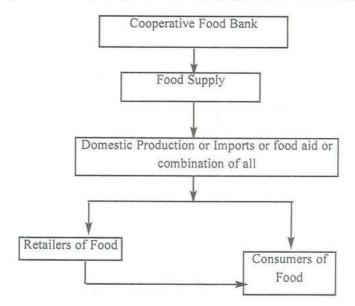


Figure 2: A simple organizational set up of the CFB will be as follows

88 of Suura 'Yuusuf' for solving seven years prolonged food problems will be very useful for sustainable solutions to such problems of present and future generations. In addition destruction of food has been prohibited by the holy Qur'an in its Ayat no.205 of Suura 'Baqarah'. However, a new innovation for alternative uses of cereals for producing bio-fuel by the developed countries has already accelerated contemporary food crisis of the world to some extent. The Qur'anic advice will be of utmost important for prohibition of alternative uses of cereals for food security on humanitarian ground.

The policies for solving food problems as commanded by Al- Qur'an have been stated in brief in this paper. The economic policies on the same issues have also been studied alongside. The policies of Al-Qur'an for solving food problems of mankind are universal in nature, while policies of economics have limited uses that constrained by the happenings of the immediate past and present scenario on the same issues. The policies of economics formulated for encountering food problems are provisional while the holy Qur'an recommends for sustainable solutions in this regard. For example, the policies of Al – Qur'an for increasing domestic food production, storage, distribution, census/households survey, skilled & careful management of resources of state, price support to poor buyers, provision for charitable food and saving of seeds during adversities for future use are universal and sustainable solutions to food problems. Further the farsightedness of the holy Qur'an for preventing from alternative uses of human

food are well acclaimed for solving food problems. Here is the supremacy of Al-Our'anic economics over the man written economics.

A modern state has manifold responsibilities with its vast population and administrative areas. It may not be able to deliver food to its citizens from door to door and one by one. However, mechanisms may be developed through the CFB to create self-supported institution for supply, building up viable storage facility, distribution and consumption of food in normal situation as well as during food problems. The objectives and functions of the model of CFB have been so designed as these will largely try to conform to the Qur'anic instruments to achieve the objectives of food policy for sustainable solutions to the problems. The CFB will help to remove food insecurity and famine through providing food to all people at all times. The bank will provide a forum for uniting producers, consumers and retailers of food under one umbrella for their mutual benefits. With this end in view the bank will fulfill the following objectives of food policy through institutionalizing food sub-sector:

8.2.1 Enough Supply by Domestic Production, Import or Food Aid or Combination of All (DIA)

The main objective of the bank is to get enough supply of food by accelerating domestic food production, imports or food aid or combination of all (DIA) that to be dispensed to its members or customers on demand. For attainment of the objective the bank will aim at increasing productivities and production of domestic food by exploring comparative advantage of favourable weather conditions and ensuring producers' prices for attainment of national self-sufficiency with lower cost through investments and subsidies on inputs. If the bank is unable to procure enough food domestically, it will import food to fill up the shortage. If domestic production and import fall short of the requirement of food, the bank will request for foreign food aid through an appropriate diplomatic channel. The supply of enough food is necessary, but not sufficient conditions for solving food problems.

8.2.2 Build up Economically Viable Storage Facility of Food (VSF) for All Times

Viable storage facility for food refers to enough stock of food that can be acquired by all at all times at fair prices through market mechanisms as well as income transfers. The CFB will build up viable storage facility (VSF) for storing up food produced by its members, imported food and foreign or local food aids. The small, marginal and landless peasants are the backbone of the agriculture. The CFB will

enable the small, marginal and landless farmers to store up their produced food grains that they cannot keep for a few months due to financial stringency and help them to utilise their produced food at the time of need thereby. In such case the bank will buy and sell food at the prevailing market prices. Likewise the members can use the CFB in many ways including food trades for their benefits. The CFB will guard against the misuse or alternative uses and any loss of food and prevent smuggling food from the country through storing up food by purchase during the harvesting period. Thus it will help to keep food in the production region and within the country for future uses.

8.2.3 Distribution of Food through Efficient and Transparent Marketing (ETM) at All Times

Food should be so marketed efficiently and transparently by eliminating middlemen (like wholesalers, hoarders, local business syndicates, etc) as it reaches to its all consumers directly within the shortest possible time, i.e. after few hours of having meals with a view to minimizing starvation. Storage of food is necessary, not sufficient condition for solving food problems. For example, there were enough stocks of food in 1770, 1943, 1974 and 2008 in Bangladesh, but the victims could not acquire food due to lack of purchasing power and lack of proper distribution. Therefore, the CFB will devote itself to proper distribution of food by efficient & transparent marketing (ETM) and income transfers. The bank will establish direct link between consumers and retailers through eliminating middlemen, hoarders and work as service provider for government, donors, NGOs for food distribution programmes and inputs deliveries for food production. The bank will also render service for sanction, disbursement and repayment of loan. The bank may work as conduit for distribution of Jakat funds to be paid by rich Muslims to the poor people.

8.2.4 Optimum Utilisation of Wealth and Resources (UWR) of the State for Food Security

Food security has to be ensured through accelerating domestic production, imports and various income transfer programmes by investment and subsidies if required from available wealth and resources (financial, natural and human) of the state with knowledge of statesmanship, wisdom and skills for human and socio-economic development. The CFB will open a scope for optimum utilisation of resources by integrating all including peasants, intellectuals, social workers and political leaders to ensure food security. It will collect savings from producers, consumers, retailers and investors and invest them in its activities with skills and

intelligence of locals and expatriates (if available). The bank will work for rural economic development by increasing investments and subsidies in agriculture and guard against the economic shocks for all people in times of natural calamities, disasters, food insecurity and famine by providing them with enough food.

8.2.5 Saving of Seeds (SOS) for Continuation of Present and Future Productions

Saving of seeds (SOS) and their productions are urgently needed for conservation, promotion, multiplication and production of more quality food for attainment of self-sufficiency in food with lower cost at present and in future. Utmost care should be taken for distribution of food during adversities (natural disasters, i.e. floods, cyclones, etc), food insecurity and famines so that required seeds can be preserved or saved for continuation of production. The CFB will indent for quality seeds from the producers/suppliers and save/store it up for continuation of present and future food production. It will also provide grounds for innovation of quality seeds through research and work as National Seed Bank for preservation as well as multiplication of quality seeds for further uses.

8.2.6 Provide with Opportunity for Buying Food (OBF) to All Consumers at All Times

The consumers with effective demand, i.e. with necessary purchasing power should have been given opportunities for buying enough food of their choices in home and abroad at all times. The CFB will ensure opportunity for buying food (OBE) by all people those who have effective demand. As a humanitarian intervention affected people will also be given opportunity for buying food on deferred payment. It will provide for enough ration food to all people who have inadequate money to fulfill effective demand. The government and donors will adjust the amount of subsidy provided for ration food. The bank will initially satisfy demand for food of internal consumers. Thereafter, the bank will devote itself to fulfill demand for food of other countries through diplomatic channels and international food trades, if there is plenty of supply.

8.2.7 Purchasing Power and Empowerment (PPE) of Poor to Enable Command on More Food

The income generating and income transfer activities of government can be institutionalised through the CFB for increasing purchasing power and empowerment (PPE) of poor people. The bank will increase purchasing power of rural poor people by creating employment opportunity in food and nonfood

agricultural production, viable storage facility, distribution and consumption of food. The CFB will also help the government for extending income-generating activities such as food for work and income transfer activities as food for education programmes and the like. The CFB will help community development through human resource development and **economic empowerment** of rural poor people through organising them in economic activities for creating more employment opportunities.

8.2.8 Controlled Distribution of Food (CDF) for targeted consumers during Its Great Scarcity

During great scarcity of food wealth & resources and skills of statesmen, political leaders, economists and other intellectuals of the state should have been combined and devoted to regulate and control distribution of food so that everybody gets her/his provision. The bank will control distribution of food on behalf of the state with utmost cares and skills so, as it will be able to deliver food to all hungry people under its jurisdiction during great scarcity of food.

8.2.9 Census and Agricultural Survey (CAS) of Supply, Distribution & Consumption of Food

The CFB will carry out population census intended to distribute food among the vulnerable for effective solutions to food problems so that everybody gets her/his provision to satisfy hunger. Agricultural survey signalizes to the planners, policy makers and administrators about potentials for domestic production and provides estimates for shortfall or surplus of national food supply. The CFB will undertake agricultural survey of the areas under its jurisdiction on the arable lands, irrigation facilities, kinds of fertilizers to be applied, climate & weather conditions, etc for making rational plan for exploring potentials of food production.

8.2.10 Distribution of Food by Income Transfers (DIT) to Vulnerable during Food Problems

The responsibility of the state is to provide with food to its vulnerable citizens through subsidised ration or charitable food by distribution of income transfers (DIT) for satisfying their hunger at all times. A modern country has manifold responsibilities with its vast population and administrative areas. The state may not be able to deliver food to all from door to door and one by one. However, mechanisms may be developed by the CFB to create self-supported institution for proper distribution of food at all times. The CFB will distribute enough charitable food to all people who do not have any money to acquire food on

behalf of the state, NGOs and donors to the selected individuals as identified by population census. The government and donors will adjust the amount of subsidy provided for charitable food.

8.2.11 Prohibition of Alternative Uses of Food and Agricultural Lands (AFL)

The CFB will guard against the alternative uses of food and agricultural lands (AFL). The developed countries have long been practicing dumping crops into the ocean and destruction of cattle to increase prices of these products. Subsequently these countries have introduced a new technological innovation for using crops like maize for making bio-fuel. The industrial use of maize has put enormous stress on other food grains through increasing their demand and prices. The Holy Qur'an has rightly pointed out that destruction of crops and cattle by human beings are regarded as mischief, which is not loved by Allah (Ayat no 205, Sura no 2 titled Baqara). Because, Allah is the giver of sustenance to all and no body is allowed to destroy it. Hence, alternative use of food caused enormous sufferings of human beings and greatly accelerated food crisis of the world to some extent in 2008. The CFB will guard against alternative uses of food and agricultural lands/crop fields in its areas of jurisdiction.

9. Functions of the CFB

From the foregoing discussions one can develop a Famine Reduction Function (F) to facilitate formulation and efficient policy transfers for solving food problems, which is as under:

F = f (DIA, VSF, ETM, UWR, SOS, OBF, PPE, CDF, CAS, DIT, AFL) ... (2) Where,

- (1) $\delta F/\delta DIA < 0$, i. e. an increase in the supply of food by accelerating **domestic production**, **import or food aid (DIA)** will stabilize supply, price and remove food insecurity and famine.
- (2) $\delta F/\delta VSF < 0$, i.e. an increase in the **viable storage facility** to be built up by **DIA** will ensure enough stock of food that can be acquired by all at all times at fair prices as well as income transfers.
- (3) $\delta F/\delta ETM < 0$, i.e. equitable distribution of food by efficient and transparent marketing will enable all consumers to acquire food of their choices with fair prices at all times to satisfy their effective demand.

- (4) $\delta F/\delta UWR < 0$, i.e. proper utilisation of wealth and resources of the state with skilled and statesmanship qualities will increase welfare of all at all times by devoting more fund to investment and subsidies in production, imports, ration and charitable food for solving these problems.
- (5) $\delta F/\delta SOS < 0$, i.e. saving of seeds is very important to continue food production at all times to ensure food security and continue food production at lower cost.
- (6) δF/δOBF< 0, i.e. an **opportunity for buying enough food** in home and abroad will help all consumers to fulfill their effective demand to minimise starvation. Net deficit countries need removal of all barriers including political trade embargoes, imposed by food surplus or others countries, under the auspicious of the WTO and the UN so that they can import enough food uninterruptedly.
- (7) $\delta F/\delta PPE < 0$, i.e. economic and political **empowerment** will create leadership with statesmanship quality among the poor people that will increase food production, employment opportunities, income and purchasing power, which in turn enable them to command more food.
- (8) $\delta F/\delta CDF < 0$, i.e. the **controlled distribution of food** by the state regulations during great scarcity will help to send food to the reach of all needy people that will minimise their starvation.
- (9) δF/δCAS < 0, i.e. population census/household survey and agricultural survey will gather information to help and guide the planners, policy makers and administrators to take appropriate plans to produce enough food and proper distribution thereof for solving food problems.
- (10) $\delta F/\delta DIT < 0$, i.e. selling subsidised rations and distribution of charitable food will help the poor people to get food to their reach that will eliminate their starvation.
- (11) $\delta F/\delta AFL > 0$, i.e. alternative uses of food have positive correlation with food insecurity and famine as the use of maize for making bio-fuel has already accelerated food crisis to some extent in the world. In addition, alternative uses of agricultural lands/crop fields for industrial and other purposes will reduce total food production that will accelerate food insecurity and famine in the world. Thus, the ownership of food and agricultural lands gives a great responsibility to the owners for proper utilisation of them for food security of mankind.

10. Members of the CFB

The CFB as proposed will be very useful, powerful and great bank in terms of its objectives, functions and volume of business transactions of the country as well as of the world (if the concept is exported to other countries with partial modification if required). The producers, consumers and retailers of food will be the members of the CFB. The producers of food will get their inputs through the CFB. It will be obligatory for every food producer to become a member of the CFB to get inputs through subsidies or purchased by the bank from the markets (internal & external). The membership of the CFB will be mainly determined by the amount of investment and business transaction made by the individual in the bank. The membership of the bank will also be conferred to producers and poor people by the government, NGOs or donors for selling their subsidised inputs and ration food or distribution of free inputs and charitable food. The consumers may depend on the CFB for supplies of food for their consumption. The retailers of food will also get their supplies from the CFB for resale. The bank will work for welfare of the general masses. Thus, in term of customers are concerned it will be the biggest bank in the country. Ultimately all people of the country may be the owners - cum - customers of the CFB for their supply of food.

11. Modus Operandi for Running the CFB

The CFB will be established in the private sector by observing formalities, rules and laws of cooperative of the country. The CFB will work by its appointed manpower and guidance of a technical, monitoring and evaluation committee, which will be as under:

11.1 Organisational Set up for a Unit of the CFB

The CFB will be operated with its permanent manpower. The organisational set up for a unit of the CFB will be as under:

11.2 Technical, Monitoring and Evaluation Committee (TMEC) for a Unit of the CFB

11.3 Terms of Reference (TOR) of the TMEC

The TMEC will perform its responsibilities by observing the following TOR to advise and guide the bank for attainment its objectives and functions that to be achieved by the CFB for sustainable food security:

 The TMEC will devote itself to bring about welfare for human beings through production, viable storage, distribution and consumption of food. The TMEC will undertake population census and agricultural surveys of the areas to find out the scope for production, distribution, consumption, food surplus or deficit, etc and will send signals well in advance to the planners, administrators and policy makers for decisions.

Organisational set up for a unit of the CFB

| Serial Number | Name of Posts | Number of Posts | Duty Shifts |
|---------------|------------------------------|-----------------|-------------|
| 1 | Manager | | 1 |
| 2 | Food Collector | 1 | 1 |
| 3 | Food Distributor | 1 | 1 |
| 4 | Savings & Investment Officer | 1 | 1 |
| 5 | Account Officer | 1 | 1 |
| 6 | Cashier | 1 | 1 |
| 7 | Labour | 4 | 2 |
| 8 | Sweeper | 2 | 2 |
| 9 | Guard | 3 | 3 |
| | Total | 15 | |

 The TMEC will assess the seasonal needs for agricultural inputs and request the government for timely delivery of inputs. It will also procure inputs from local and international markets.

The technical, Monitoring and Evaluation Committee of the CFB may be constituted as follows

| Serial Number | Name of Officer/Representative | Status | Number |
|---------------|---|-----------|--------|
| 1 | The Branch Manager | Convener | 1 |
| 2 | Representatives of Members | Members | 7 |
| 3 | Food Collector | Member | 1 |
| 4 | Food Distributor | Member | I |
| 5 | Savings & Investment Officer | Member | 1 |
| 6 | Upa-Zilla Agriculture Officer or her/his representative | Member | 1 |
| 7 | Upa-Zilla Cooperative Officer or her/his representative | Member | 1 |
| 8 | Representative of Upa-Zilla Nirbahi Officer (UNO) | Member | 1 |
| 9 | Local Public Representatives (3 persons) | Member | 3 |
| 10 | Union Agriculture Assistant | Member | 1 |
| 11 | Account Officer of the CFB | Member- | 1 |
| | | Secretary | |
| Total | | | 19 |

- The TMEC will arrange purchase of surplus food at the prevailing market price. Thus the CFB will help to keep food within the region and the boundary of the country to secure food during insecurity.
- The TMEC will find out employment opportunities in production, distribution and consumption.
- The committee will determine service charges for government, NGOs and foreign donors for food distribution programmes.
- The TMEC will determine profits from food trade and will distribute share of profits to the members.
- The TMEC will collect small saving from the small farmers, marginal farmers, landless farmers, wage labourers, consumers of food, retailers, etc. and form capital through food production, food storage, food distribution and marketing chains.
- The committee can increase its members if required and include new rules or modify of its existing rules of TOR, if required.
- 10. The committee will meet in a weekly meeting regularly.

12. Fund of the CFB

- 12.1 Producers will invest for their inputs of production, storage and continuous supply of food.
- 12.2 Consumers will invest for their continuous supply of food.
- 12.3 Retailers will invest for their continuous supply of food.
- 12.4 Startup capital from the government as loan that based on the terms and conditions of profits and losses will form capital of the bank. Further government grants in cash or kind part of that will form revolving capital for the bank depending on the terms and conditions of aid.
- 12.5 Foreign aid from the donors in the form of food aid apportionment of, which will form revolving fund for the bank depending on the terms and conditions of aid.
- 12.6 Donations received from the local rich people apportionment of that will form revolving fund for the bank depending on the terms and conditions of aid.
- 12.7 The CFB can borrow money from the investors (internal and external) based on the terms and conditions of profits and losses. The national scheduled banks and international financial institutions such as WB, IMF,

- ADB, IDB, etc can invest money following the CFB's policy to explore comparative advantages in food and nonfood cash crops sub-sectors of the developing countries.
- 12.8 The CFB will also collect its capital through sale of its shares in the stock market. The producers/ peasants, consumers of food and retailers of food will buy the shares of the bank from the stock markets.
- 12.9 Service charges from the government, NGOs and donors.
- 12.10 Share of profits to be earned from trades of food and other commercial crops.

13. Volume of Business Transaction of the CFB

It is assumed that about 30% of total food produced in Bangladesh will be bought and reserved by the CFB. With the present capacity the country can produce about 290 lakh metric tons of food (in terms of rice) per year (2008-09). So 30% of total output will be 87 lakh metric tons. It is also assumed that the price per metric tons of rice is about US\$500. Therefore, the total value of the produce will be about Tk.101,500 crore and the total price of 87 metric tons of rice will be approximately Tk.30, 450 crore (US\$ 1 equals Tk.70).

The country has allocated **Tk.3600** crore in the budget of 2009-10 as subsidy in the agricultural inputs. The total approximate value of subsidy on agricultural inputs will be about 3.55% of the total value of the product that is well within the permissible limit of the WTO regulation . It is assumed that the CFB will work as conduit between the government and farmers for distribution of subsidised agricultural inputs in cash or kind.

As food safety-net programme 15.90 (test relief 4 lakh MT, VGF 5.5 lakh MT, food for work 3.75 lakh MT and VGD 2.65 lakh MT) lakh metric tons (MT) of food will be distributed in 2009-10 to secure access to food and generate employment. The total amount of subsidy on food will be approximately **Tk.5,565 crore** for 2009-10. The CFB will work as service provider for government, NGOs and foreign donors for distribution of ration and charitable food.

Thus the total volume of transaction of the CFB will be about **Tk.39,615** crore per year. The volume of business transactions of the CFB will gradually increase with the involvement of the bank in socioeconomic activities of the country.

14. Findings and Policy Recommendations

The **supply of food** can be enhanced through increasing domestic production or imports or food aid or combined of all for sustainable food security.

For long run solutions to the food insecurity **domestic production** should be increased in the country by devoting available natural resources and providing necessary inputs if required by subsidies. The country will have to take a strong political commitment for such investment and subsidies. Agricultural subsidy for food sub-sector may be treated as a **premium for food security** of the 160 million people of Bangladesh in the uncertainty of the present world grain markets.

The present policy for providing essential inputs at subsidised lower prices should have been continued. Any policy transfers without empirical study will be a disaster for farmers and the country.

For promoting sustainable food production required fertilizers should be produced and made available in the country. For facilitating this more factories for producing Urea, TSP, SSP, MOP, DAP, etc are to be built in the country by the remittances of the expatriate workers with their consents. The expatriate workers will be the owners of such factories. The Government will be the buyer of these fertilizers like KAFCo. The government will give guarantee to the investment. Thus, the expatriate workers and people of the country will be more benefited.

The production of **non-food cash crops** should also be promoted so as to augment income and purchasing power of the peasants for enabling them to buy food and other basic needs.

For long-run solvency growth of domestic food can be accelerated by **scientific research and improved farming technologies**. Benefits of new technologies are to be ensured to all.

To remove transitory food insecurity national buffer stock of food should be to build up. The high capital-cost for building buffer stock and holding excessive reserve can be minimized by the CFB to be created in the private sector for building viable storage facility. The government can play its role as facilitator for the growth of private sector through the bank for promoting food sub-sector.

The CFB as proposed can provide services for government, NGOs, foreign donors and local rich people for operations of ration and charitable food and Jakat with a view to eliminating starvation, malnutrition, poverty and famine.

The CFB as proposed will be able to flourish local agricultural businesses and can bring about economic and local political empowerment by its activities for generating employment and income.

The taxpayers are deprived of benefits of subsidies provided for food production due to **smuggling**. Storing up food can mitigate the problem by the CFB during harvesting time. Further **social and political awareness** are to be created among the people of border areas to prevent smuggling food.

The countries, which frequently experience food insecurity, must keep sufficient foreign exchange reserve to import necessary food. In addition they can avail the opportunities of the IMF Compensatory Financing Facilities for financing sporadic increase in food imports.

The countries, which have no scopes to increase domestic food production and foreign exchange reserve to import necessary food, can seek **foreign assistances for emergency food aid**.

Food should be so distributed as it reaches to its consumers. Only proper distribution of food among all will help to encounter food insecurity and its extreme famine.

The **proper utilisation of wealth & resources** of the state with skills at all times can secure food for the people of the country. The intellectuals, very important persons and sensible political leaders of the country must be entrusted with the responsibilities for encountering adversities and famine.

The saving of quality seeds is very important to continue food production for present and future generations at lower cost. Thus, production of quality seeds has become a turning point for the present agricultural sector to achieve self-reliance in this regard by promoting in-country research for making available quality seeds for the country. Therefore, National Seed Bank should be established soon so as to promote and safeguard the seeds of not having lost from the country forever.

The people without distinction of castes, creeds and colours should be given opportunity of buying enough food of their choices for satisfying their hunger.

The poor people should be given necessary **purchasing power** through income transfers so that the vulnerable can acquire their food of choices for satisfying hunger during hard times and famines.

The controlled distribution of food during great scarcity are to be introduced by the state authority to send food to reach of vulnerable in hard times, which in turn will reduce their starvation and famine. **Population census and agricultural surveys** are urgently needed to help and guide the planners, policy makers and administrators to take appropriate plans to produce sufficient food and distribution thereof for encountering food insecurity and famine.

Provision for subsidised ration and charitable food should be continued and expanded to poor of the Monga areas to help them to get food to their reach, which will reduce starvation and famines.

The alternative use of food for making bio-fuel has already accelerated starvation in the world. Therefore, use of food for making such bio-fuel should be reviewed and stopped immediately.

The code of conducts of the local people along with civic senses should be taught and formed in such ways as to motivate them to respect economic activities of other people. Above all they have to be motivated not to destroy or misuse any crops fields, cattle and good food.

Transitory food insecurity or its extreme famine can be faced through creating **political atmosphere** rather than quantitative controls on imports, exports and the internal movements of food because the latter aggravate balancing supply and demand and price stabilization.

Better price is an instrument for increasing food production, which will reduce imports and lower requirement of direct foreign exchange. The consumers may be given additional purchasing power in the form of higher wages or salaries and poor households are to be brought under food safety net.

The local people, financial institutions and organisations are more experienced and knowledgeable than WB, IMF, Asian Development Bank (ADB) and NGOs for promoting sustainable domestic production. Thus, a country should **explore potential local talents** first and be too much careful when accepting and implementing recommendations and prescriptions of foreign institutions and NGOs.

The financial resources of WB, IMF, ADB and NGOs are very vital for countering hard times and famines. However, such resources may be used in the developing countries with the wisdom and skills of the local people for this purpose.

15. Conclusion

Food security helps to attain sustainable human and overall economic development. An efficient food security system is a short timed intervention that

secures access to enough food of choices by all people within a few hours just after having meals at all times. By adopting an efficient mix of agricultural sector. macroeconomic and international economic policies, which are intended to institutionalize food sub-sector, a country can attain food security. Enough food supply can be achieved by accelerating domestic production, import, or food aid or combination of all. In a state of uncertainty of food aid, scarcity of foreign exchange as well as new export restrictions imposed by the food surplus countries, there is no alternative but to increase domestic food production to stabilise supply and prices of food. In such situation the country would have to come to a strong political commitment for formulation of a rational policy for increasing domestic food production with an end in view to attaining long run sustainable food security of the country. Domestic food production can be increased through exploring comparative advantages based on population census, agricultural survey and policy indicators by requisite investments and subsidies in inputs and infrastructures out of wealth and resources of the state. A viable storage facility is to be built up by acquired supply to encounter transitory food insecurity and famine. However, sustainable solutions to the problems demand proper distribution so that every body gets her/his provision for enough food at all times, which can be attained by efficient & transparent marketing and income transfers for the targeted consumers. For continuation of quality food production at a lower cost and for solving food problems saving of seeds is urgently required. Further the world leaders should come to a consensus to stop alternative uses of food for making bio-fuel and the like, which has already accelerated food crisis of the world to some extent. Food security interventions are short timed, local in nature and large in magnitude. Thus, any financial resource to be achievable from WB, IMF, ADB, NGOs, etc will be a tremendous booster for food as well as non-food agricultural production in the developing countries if and only if such investments are made with wisdom and skills of local people. For efficiency and transparency as well as reducing budgetary pressure government sector should play its role only as facilitator and private sector should be institutionalised through the CFB for increasing domestic production, viable storage facility, distribution by efficient and transparent marketing, distribution by income transfers and maximizing consumption of food. The people, without distinction of castes, creeds and colours, may use the concept of the CFB as an economically viable instrument to achieve most of the objectives of food policy.

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