The recent crisis of soaring food prices has moved the world to respond. Many factors contributed to the unprecedented rise in food prices including high energy prices, changing patterns of consumption, low investment in agriculture, low harvests in some major agricultural regions, and the use of grains for biofuel production. The responses have been sub-optimal due to information deficit and political pressure. Short-term and long-term strategies are yet to be developed. Some supply surplus countries have imposed a ban on exportation of food and certain supply-deficit countries have removed tariffs to increase imports to supplement domestic food supplies. This paper discusses some of the causes of the food crisis, and its implications for the Ghanaian economy. It concludes that Ghana needs its own tailor-made strategies that will result in sustainable food security. Ghana needs to strengthen its own capacity in resource mobilization for increased agricultural production and research that achieve national level priorities.
recently took place in many countries around the world. According to Benson, Minot, Pender, Robles and von Braun (2008), violent and non-violent riots occurred in countries including Argentina, Bangladesh, Burkina Faso, Cameroon, China, Cote d’Ivoire, Egypt, Ethiopia, Germany, Japan, Pakistan, Senegal, Switzerland and Thailand.

The challenge of meeting the first millennium development goal (MDG) under the current circumstances of soaring food prices is considerable, especially in Sub-Saharan Africa (Fan and Rosegrant, 2008). Food price increases have consequences for the world’s poor. There is the likelihood that high global food prices are here to stay for the foreseeable future (von Braun, 2008). Both developing and developed nations are faced with increased food prices, with each one responding differently to the situation. The extent of the increases varies from country to country and between rural and urban areas. The variation in responses can be attributed to the variations in the causes in each country.

Countries that are net food exporters will benefit from improved terms of trade if export restrictions are not imposed. Net food importing countries will be the hardest hit. Almost all countries in Africa are net importers of cereals. Due to the crisis, some net food exporting countries are currently restricting food exports to protect their consumers. For example, China has banned rice and maize exports, India has banned milk powder exports, Bolivia has banned the export of soybean oil to Chile, Colombia, Cuba, Ecuador, Peru, and Venezuela, and Ethiopia has banned exports of major cereals (von Braun, 2008).

This situation of rising food prices raises concerns about how to ensure food security, especially in the long term. A discussion of the issues reveals the options available to nations such as Ghana in ensuring that one of the most basic needs of the citizens is met. This paper discusses factors influencing the recent soaring food prices, the implications of the crisis for Ghana, and the required responses needed to achieve a sustainable solution for food security for rural and urban populations in the long term. Effective strategies can only be developed if the implications of the crisis and its causes are well understood.
**Food Security Revisited**

Poverty, inequality and food insecurity are the most crucial and persistent problems facing humanity and their alleviation should be at the heart of any meaningful development effort (FAO, 2001). About 860 million people in the world do not have sufficient access to food and the required energy supply to lead a healthy life. This number has not changed from the 1990–1992 figures on which the World Food Summit and Millennium Development Goal commitments to halving hunger by 2015 were based (FAO, 2008). Governments’ responsibility to feed their citizens is increasingly discussed under a “Right to Food” aspect of the World Food Summit (FAO, 2002) and some countries go as far as to establish legal obligation of the government in respect of their populations. Governments need to find long-term sustainable ways of feeding their people. Emergency programmes do not solve the problems, not even development programmes, unless they are backed by the right political decisions. Political will to take strategic decisions in combination with appropriate investments and effective implementation is required.

Governments at the 1996 World Food Summit maintained that 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”. Food security, according to USDA (2008), includes the ready availability of nutritionally adequate and safe foods and the assured ability to acquire acceptable foods in socially acceptable ways. Food security therefore includes availability, affordability, and utilization at national, local and household levels.

Due to the rising food prices, the world’s food system is now facing complex new challenges that threaten to affect adversely the livelihoods and food security of people around the globe, particularly the poorest (von Braun, 2008; World Bank, 2008b). USDA’s Economic Research Service estimates that the number of food-insecure people in 70 developing countries rose from 849 million to 982 million in 2006-07 and Sub-Saharan Africa is considered as the most food-insecure region (Rosen, Shapouri, Quanbeck, and Meade, 2008). This has a variety of implications and calls for a well
coordinated agenda by Sub-Saharan African countries to address the situation in a sustainable way.

**Rising Food Prices**

In the first quarter of 2008, wheat prices increased by 130 percent and maize prices increased by 30 percent over the 2007 figures. Food prices particularly increased during 2007 and the early part of 2008, more than doubling in some cases (IFAD, 2008; von Braun, 2008). Earlier in 2008, rice prices jumped to unprecedented levels. Dairy products, meat, poultry, palm oil and cassava have also seen significant price hikes (von Braun, 2008). As shown in Figure 1, prices have been declining since the middle of 2008 but have not reached their 2007 levels. The price of Thai white 100% B second grade rice was US$311/ton in 2006, reached US$963/ton in May 2008 and has seen a slight decline (see Figure 1). Increased prices pose a serious threat to reaching the MDG/World Food Summit goals of halving the number of hungry people by 2015.

![Figure 1 Export Prices of Rice from Thailand and US](Source: FAO, 2008)
According to the FAO, as at the late 1990s, the challenge of ensuring food security was most critical in low-income, food-deficit countries. Of the 86 countries that were defined as low-income and food-deficient at that time, 43 were in Africa (FAO, 1999). Today, with the presence of increasing food prices, the situation poses an even more threatening problem to households and policy makers alike.

According to the International Food Policy Research Institute (IFPRI)’s list, 21 countries experienced violent and 44 countries non-violent protests due to the food crisis. Most of the protests have been led by the urban poor who are nowadays thought to have a food bill that constitutes over 50 percent of their income (Benson, Minot, Pender, Robles and von Braun 2008). Those food-insecure people are much at risk as they require more money to acquire food on daily basis.

Many small-scale farmers are poor and most of them are not able to benefit from the higher prices as they cannot afford the needed fertilizers, improved seeds and other inputs to increase productivity. Higher prices do not filter down to the farm-gate, where farmers sell their produce, because poor roads and powerful intermediaries limit their access to markets. Besides, many poor farmers are net buyers of food (Khor, 2008). As such, small-scale farmers in rural areas, who produce the bulk of the food consumed, are among the most affected by the high food prices, for the very reason that many of them are net-food buyers. After their stock is used up, they re-enter the market to purchase food for household consumption. Interventions should therefore not focus on urban poor alone, though they are more likely to make their voice heard. The rising food prices present an enormous opportunity to farmers who are surplus producers. Policies that enhance their performance need to be pursued. Achieving food security cannot be done without a transformation of the rural economy.

Calls for emergency plans and food aid are becoming louder. Nevertheless, short-term relief measures as might be required by most vulnerable households at present are not viable long-term solutions (Wolter, 2008). Therefore, a coordinated global response is needed to address the humanitarian crisis effectively as well as enhance the productivity of agriculture for the future.
In line with the New Partnership for African Development (NEPAD) philosophy of increasing reliance on Africa's own resources, the challenge faced by the 2006 Abuja Food Security Summit was how to accelerate reduction of food and nutrition insecurity through fostering mind-set change in mobilization and utilization of African resources to implement priority projects at national and continental levels (AU, 2006). The Abuja Summit recognizes that success in agriculture and food security requires efforts in addressing equity, peace and security, good governance, education and health issues.

Causes of the Food Crisis and their Implications for Ghana

**Increasing Fuel Prices**
Increasing fuel prices are a major driving force in pushing food prices up as biofuel policies are strengthening linkages between food and energy. This has affected input prices, transportation costs, and ultimately, prices of agricultural products. According to Wolter (2008), rising energy needs from emerging economies, such as China and India, alongside subsidies for biofuels have led to increased use of food crops for energy production. As stated by the World Bank (2008), land is shifted out of food production to produce biofuels.

In Ghana, increases in transportation costs naturally result in increases in food prices and the prices of other commodities. Besides, there is the tendency for farmers around the world to shift land from food production to the production of products that can be used for biofuel production. This is a tendency likely to be adopted by poor farmers as it enables them to cope with the food situation and escape poverty.

**Changing Consumption Patterns**
Among the combination of factors contributing to the crisis is the push-and-pull of global agricultural demand and supply. Consumption of staples, such as cereals and high-value foods such as meat and dairy products, is on the rise due to high income growth in the emerging economies, such as India and China where food preferences are shifting. At the same time, increasing use of grain and oilseeds to produce biofuels makes prices rise (von Braun, 2008). Efforts have been made by many nations and governments to meet new demand trends but these efforts have been limited by the problems of land degradation, underinvestment in agricultural
innovation, and sustainable use of resources. While demand is increasing fast and the consumption trends changing, increases in supply are minimal. Holmes (2008) puts it as a ‘hunger for richer foods’.

An increased demand for imported foods in Ghana can be attributed to exposure to western culture. In many parts of Ghana, a high percentage of the diet consists of carbohydrates and depends on the production of roots and tubers. Ghana produces enough roots and tubers and the impact of the rising food prices is due to changes in consumption patterns to rice and wheat products.

**Agricultural Production Shortfalls**

Supply and demand forces only account for part of the problem. Food production levels around the world are at their lowest since the 1980s (von Braun, 2008). More than half the world’s population live in low-income, food-deficit countries that are unable to produce or import enough food to feed their people. Today, the emphasis is moving to a preference for food self-sufficiency.

Different factors threaten food production in some poor countries. Such factors include rapid increases in population, civil unrest, reduced soil fertility, inadequate irrigation facilities, inappropriate agricultural policies, and high fuel prices. According to Quaye (2008), erratic rainfall patterns, high cost of agrochemicals, lack of knowledge on improved farming and post harvest practices as well as lack of production credit and markets for farm produce are some of the constraints militating against increased production and improvement in food security in Northern Ghana.

Natural as well as man-made factors have contributed to the poor performance of agricultural production and productivity. According to the International Fund for Agricultural Development (IFAD), civil unrest has had negative effects on food production and transportation in countries such as Kenya, Uganda and Chad, thus pushing prices up. Natural disasters such as drought and floods aggravated the situation, and countries such as Ghana and Angola were hit by both drought and flood (IFAD, 2008).
Further, agriculture has been pitifully under-funded. In Ghana, the budget allocation to the agricultural sector has been very low. African Heads of State, at the Maputo Declaration, agreed to adopt sound policies for agricultural and rural development, and commit themselves to allocating at least 10% of national budgetary resources for the implementation of these policies within five years. This was in 2003 and the concern was that 30 percent of the population of Africa was chronically and severely undernourished and that the continent has become a net importer of food and the largest recipient of food aid in the world (AU, 2009).

As mentioned earlier, Ghana is a net-cereal importer. Though Ghana produces enough roots and tubers, domestic food production of cereals only lasts for a period. This accounts for the importation of large volumes of cereal.

**Varying Responses to the Food Crisis**

*At the Global Level*

Various international organisations and multilateral agencies have responded to the crisis with various action plans. The World Bank Group's New Deal on Global Food Policy embraces short, medium and long-term responses. These include safety nets such as school feeding programme and conditional cash transfers, increased agricultural production, a better understanding of the impact of biofuels, and action on the trade front to reduce distorting subsidies and trade barriers (World Bank, 2008). Currently, the World Food Programme has the drive to buy food aid locally.

Ghana is considered one of the hard-hit countries. Other countries hard-hit by the food crisis are Burkina Faso, Burundi, Côte d'Ivoire, Madagascar, Mali, and Niger. The World Bank seeks to provide US$100 million to these hard-hit countries to meet their additional expenses of food imports and to enable them buy seeds for the new season (World Bank, 2008). It is important to note that the money is not free and will have to be paid back at some time.

The FAO seeks a significant increase in its budget, to provide poor rural farmers with the seeds, fertilizers, animal feed, infrastructure and irrigation they need to feed themselves, their communities and countries (Holmes, 2008). According to Jacques
Diouf, the Director General of the FAO, ‘the development of international agriculture has for too long suffered from being last on the list of political priorities. Agriculture needs vastly more resources to reflect its role’.

Addressing food insecurity means increasing food production and addressing the root causes of vulnerability through a range of interventions, including rural development, agricultural research, building livelihoods and social protection (Livelihoods Connect, 2008). The World Bank intends to double spending on agricultural research and development from about US$400 million to US$800 million over the next five years, working through the Consultative Group on International Agricultural Research (CGIAR) (World Bank, 2008b).

At the National Level
In a World Bank press release, though importing countries can cut tariffs to reduce prices now, in the longer term their farmers will need local markets and incentives for them to revive agriculture production. Suddenly, the paradigm of food security has shifted back to the traditional concept of greater self-sufficiency instead of relying on cheaper imports (Khor, 2008).

Increased supply and trade liberalization were strategies adopted by Ghana. In addition to the school feeding programme, the nation adopted a reduction in tariffs on food imports to help make more food available. However, the implications of reducing tariffs for the country are many and include:

- The loss in revenue in the face of continual borrowing and high dependence on donor support.
- The increased challenge of local rice production to effectively compete with the unrestricted foreign imports.
- Those who will benefit from the removal of tariffs may not be the poor who are most affected by the soaring food prices. The rural poor, especially, may have no benefit.
• The nation cannot continue to depend on the food production levels of other countries to meet its local food needs. As mentioned earlier, food surplus countries are now restricting exports to protect their own consumers.

• Ghana cannot afford to use its hard earned foreign exchange to import tons of rice at the expense of the development of the local rice sector.

Maize and Rice Production in Ghana
The Ministry of Food and Agriculture (MOFA) of Ghana estimates show that maize is grown by about 64 percent of farming households in the country. Maize yields are rather low and often less than 1 tonne/ha. This is due to biophysical and socio-economic constraints such as weeds, pests and diseases, unfavourable weather conditions, low soil fertility in the face of high fertilizer cost, poor infrastructure and high post harvest losses. There is limited use of purchased inputs, and, according to MOFA (1998), Ghana has been among the world’s lowest fertilizer consumers even during the days of heavy subsidization.

The figure below shows that there has not been much change in maize yields since the early 1990s despite rapid technological transformations in the agricultural sector at the global level. The challenge to reach food security will continue to persist if yields remain at these stagnant levels (See Figure 2).

![Maize Yield](image)

Figure 2 Maize yields in Ghana from 1970 to 2005
Ghana has the capacity for growing rice and different rice production strategies and opportunities are currently being explored. The Lowland Rice Development Project (LRDP) and the Aveyime Rice project are examples. The major drawback is that farmers have to compete with cheap imports.

**Looking Ahead - Solutions and Required Strategies**

The complexity of the sources that drive the food prices upwards has made the task (of finding appropriate solutions) more challenging. According to the World Bank (2008), the task is clear but not simple. Every country is expected to evaluate its specific situation and design appropriate set of responses as well as its own strategies for mobilizing additional resources. Over dependence on donor support may not be a strategic option for resource mobilization.

On the other hand, as the Livelihoods Connect rightly stated, people who are vulnerable to food shortages and famine cannot wait for longer term development programmes to bring them out of poverty. More short-term and gender specific measures with large geographical coverage in form of food for work, cash for work, school feeding, school gardening and so on are required in the meantime.

The discussion of the concerns raised about increasing food prices has captured additional aspects of the food and nutrition situation of the poor and vulnerable in poor nations. Besides a lack of total caloric intake, the quality of food intake, the diversity of food consumed is coming back into the agenda. Changes in food consumption patterns necessitate a modification in production patterns to include more high value products. Training in nutrition might be another way of increasing awareness of the need for food quality.

Benson, Minot, Pender, Robles and von Braun (2008) affirmed that rising food prices provide an incentive and opportunity for many developing countries to strengthen the contribution their farmers make to national economic growth and poverty reduction. In
Ghana as in many African countries, food production is mainly undertaken by small-scale farmers, most of whom are women.

Fan and Rosegrant (2008) affirmed that investing in agriculture is critical for reducing poverty and hunger in developing countries and is an essential element in addressing the current food price crisis. Increased agricultural growth, with sound government spending, is important in current times for various reasons. It will play a key role in:

- addressing the current world food crisis,
- contributing to overall economic growth, and
- helping to achieve the first MDG of halving the proportion of poor and hungry people by 2015.

Africa's agricultural and rural development problems have been related to misguided policies, weak institutions and a lack of well-trained human resources. In addition to challenges of climatic conditions, unstable social and political environments can worsen the food situation in Africa. Gender equality, effective human resource development and good governance are necessary strategies that should be factored into all efforts.

Policy choices and investments made now can either improve or further worsen the food security situation in the future. As stated by von Braun (2008), a good policy framework is critical and counterproductive measures such as biofuel policies should be changed without delay. Biofuel policies have already undergone changes such as subsidy removal (in Europe). For Ghana, policies must be focused as the limited resources should not be spread too thin. The nation needs a national policy on food and biofuel production.

Deficiencies in information should be removed as they lead to distorted policy actions. Data is needed to determine who the poor are, their number, exactly where they are, and the extent of the problem in every region of the country. Otherwise, interventions may not reach the targeted population who need it most. Targeted interventions are more effective, but require specific disaggregated data that is not ambiguous.
Concluding Remarks

Some of the responses of the global community are enumerated above but what is Ghana’s own strategy? There is an urgent need to clarify the national strategy, communicate it effectively to all stakeholders, and design effective implementation strategies that ensure sustainable food security. Every action must be result-oriented and based on relevant and appropriate data.

The paradigm has shifted to food self-sufficiency. Countries are formulating policies to protect their consumers and Ghana needs policies that will both accelerate agricultural production and protect the consumer. The rising food prices present an enormous opportunity to farmers who can produce a surplus for the market and Ghana needs policies that result in increased agricultural production and productivity, coupled with policies that transform the rural economy. Heavy reliance on cheaper imports does not seem to be the optimal solution, considering the response in food surplus countries.

Short-term measures include food distribution, such as carried out by the World Food Programme. The programmes’ decision to buy food locally means that an additional increase in Ghana’s agricultural production is required. This has other implications. First, resource mobilization and allocation for increased agricultural production needs to be strengthened. Increased fuel prices have resulted in increased costs of agricultural production and more financial resources are needed in the sector. Secondly, increased efforts towards Ghana’s rural development agenda are necessary due to the relationship between agricultural growth and the improvement of the rural sector in general. Thirdly, there is the urgent need to develop the physical infrastructure that links the rural economy to urban markets.

The World Bank is currently planning to provide seeds and fertilizers to farmers in poor countries in the coming planting season to ensure fast results to curb the food situation. Ghana does not need to wait for the World Bank. The country needs to start action on the provision of planting materials to its own farmers with its own resources. Policy formulation should focus on addressing food and biofuel production and the
information deficit situation. Though more funding is provided through the Consultative Group on International Agricultural Research (CGIAR), it cannot replace the country’s own efforts in the same direction.
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