EDUCATING PEOPLE FOR FOOD SECURITY TO AVERT FOOD CRISIS: THE CASE OF NIGERIA

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Abstract. The year 2008 has been dubbed "the year of global food crisis" by many writers probably because the supply of food around the world dipped precariously leading to sharp increases in food prices around the world that triggered riots and related problems. Certainly many countries particularly in Africa, Latin America, and Asia have been depending on food handouts for decades but the situation appears not to have been as acute as it was in 2008. The need for a new paradigm in food aid has been noted by some NGOs that have initiated effort to make food aid more pragmatic and have broader benefit to recipient countries. On a more extensive and sustained level, there is the need to give young people in developing countries an early orientation in food security by emphasizing agriculture generally and food production in particular in the school curriculum. The paper uses Nigeria as a case study and hopes recommendations herein can be applied in other developing countries.

Keywords: food crisis, food security, food aid, school curriculum, national philosophy of education

Introduction

The Population Reference Bureau¹⁾ indicates that there were 6.55 billion people in the world in 2006 of which 53% were living below \$2 per day, which implies that more than half of the world's population were living below the average world poverty line with Africa having a percentage of 66 on the average. The United Nations World Food Program (WFP) also indicates that by the beginning of 2009, more than 36 countries of the world were facing food crisis of which 21 are in Africa.²⁾ This includes Somalia where pirates are busy hijacking ships carrying food aid to desperate Somali people.

Smith and Edwards²⁾ quoting the World Bank state that global food prices rose by 75% since the year 2000 while wheat prices increased by 200%. The price of corn was most expensive in 12 years and with increased cost of grains came sharp rises in the prices of meat, poultry, dairy, and eggs. The World Bank concludes that additional \$500 million is required to feed 73 million people in Africa, Asia, and Latin America. Unfortunately, the World Bank President, Mr. Robert Zoellick notes that while the demand for overseas aid grows, the supply declined by 8.4% in 2008 when it should in fact grow by 35%.³⁾

World food aid particularly from the United States of America has used the approach of delivering grains and other food items from American farms to needy areas. This has tended to depress food prices in the beneficiary states, discourage internal food production and therefore internal self sufficiency and food security, and kept the developing countries as perpetual beggars. The Bill & Melinda Gates Foundation and the Howard Buffet Foundation of the United States of America have proposed a new paradigm to food aid that is to create an environment for food production and marketing in the poor countries and use of such output as food aid.

So far, the food crisis in developing countries has attracted palliatives by way of food aid. The new approach proposed by the NGOs is undoubtedly a worthy effort; however the longer term approach should concentrate in agricultural education as one of the philosophies of education in the poor countries. There should be an orientation such that every citizen should appreciate the need for self sufficiency in food production as a basis for averting food crisis. This was one of the planks of the "Operation Feed the Nation" programme of the General Olusegun Obasanjo's government in the 1980s and it is the rationale behind the recent action of Mrs. Michelle Obama, the First Lady of the United States of America (USA) who has started a garden in the White House that is expected to generate vegetables and fruits for use by the White House.

Food Security

A fairly comprehensive definition of the concept of food security is presented by the Catholic Relief Agency.⁴⁾ Food security is defined as "people having physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life today without sacrificing investments in livelihood security tomorrow." The definition embodies the concept of sustainability which reminds all that while taking care of the people of today, there is the need to consider future generations.

Another issue that arises from the definition is that of putting people in the position to procure food or produce food by them, not just to consume. This is evidently the understanding by "economic access" in the definition. It is the understanding behind the concept of "capability to function" proposed by Armatya Sen, the 1998 Nobel Prize winner in economic science. Sen discussed the problem of inequality particularly concerning women, writing on what he called the 'missing women' in countries of North Africa, West Asia, India, and China. He recommended development assistance in several forms including credit for entrepreneurial development.⁵⁾ Food security continues to attract high level attention and it is only the unwary that should treat it with levity, which incidentally rulers in developing countries are. In June 2008, a High Level Conference of World Food Security was arranged by the Food and Agricultural Organization (FAO). It is hoped that such high level talk shops will be sustained and that the outcomes will be put to use to reduce the ever-haunting specter of world food crisis.

Food Crisis – Causes and Effects

Although 2008 has been dubbed the year of the world food crisis, as is common with such phenomena, the problem did not arise suddenly in 2008. There have been several causes that have accumulated over the years and decades and only sort of exploded in 2008. The causative agents range from poor public policy to interestingly, changes in the standard of living of people in the positive direction that have changed consumption patterns.

That many developing country administrations have been misplacing priorities and have been mismanaging funds is not a new story. Myanmar and Somalia have been fighting for space on the top of the list of Transparency International's most corrupt nations of the world when China is quietly but surely working her way up to replace Japan as the world's second largest economy.

The situation in the developing countries was not helped by decades of "assistance" by way "free" food that came with several debilitating and entangling strings. Former President Bill Clinton of the USA, a man whose love for Africans had in 2008 regretted in a speech at the United Nations that African governments have for a long time been pressured to drop subsidies on fertilizers and seeds before getting food aid from the USA and Europe.⁶⁾ The law in the USA requires that the \$1.5 billion or more in annual food aid must be in the form of food grown in the USA and shipped in US-flagged vessels to needy countries. One of such ships – the Maersk Alabama was in April 09, 2009 intercepted by pirates on the Somalia coast as it steamed towards the Mombassa port in Kenya to discharge food meant for Somalis. It was carrying twenty 400 foot containers of food aid from WFP and the US government for Somali people⁷⁾.

There are other causes of rapidly reduced food stock and increasing food prices not only in poor countries but all over the world. Walt⁸⁾ quoting J. von Braun the Director General of the International Food Policy Research Institute, Washington DC, notes the role of increase in price of crude oil from 2006 as well as droughts in grain producing areas. These, he regards as systemic causes of the food crisis in the world. Problems associated with weather, global warming, massive use of grains for the production of bio-fuels, Malthusian constraints, and natural disasters have also been highlighted at different fora. The use of grains for the promotion of bio-fuel programmes is regarded by the Executive Director of the WFP Josette Sheeran as "a silent tsunami".⁹⁾ A Sunday Herald editorial¹⁰⁾ describes the massive use corn for ethanol production as "growing food to feed cars instead of people." The USA supplies 60% of the world's maize but currently uses up to 25% of her maize produce for ethanol production. Meanwhile Cyclone Nargis in Myanmar in 2008 caused considerable damage to rice production of which the ripples will continue for several years to come although before 2008, production had fallen from an annual 4 million tons to 40, 000 tons as a result of poor public policy.

Of intense interest is the fact of the growth of the middle class in India and China as noted by the Globe and Mail.¹¹⁾ In India, the middle class grew by 9.7% by 1990; by 2007, the growth had reached 30%. In China the middle class grew by 8.6% in 1990 and by 70% by 2007. This, in the opinion of the World Bank President Mr. Robert Zoellick has generated an increase in the demand for protein and a concomitant increase in the demand for grains. The trend is demonstrated in Table 1, which shows the sharp increases in the per

capita consumption of different types of foods in China in particular between 1990 and 2005. The table shows the percentage change between 1990 and 2005.

Type of	India	China	Brazil	Nigeria
Food				
Cereals	1.0	0.8	1.2	1.0
Meat	1.2	2.4	1.7	1.0
Milk	1.2	2.4	1.7	1.0
Fish	1.2	2.3	0.9	0.8
Fruits	1.3	3.5	0.8	1.1
Vegetables	1.3	2.9	1.3	1.3

Table 1. 2005/1990 Ratios of Per Capita Food Consumption

Source: "High and rising food prices: Why are they rising, who is affected, how are they affected, what should be done?" J. von Braun. USAID, Washington DC. April 11, 2008.

It is noteworthy for developing countries, that while effort is made to improve the standard of living of citizens, the change in eating habits must be borne in mind, in which case policy synchronization and farsightedness are crucial in development planning.

The effects of the world food crisis are most evident in the food riots experienced in many countries of the world. In 2008, unrests were witnessed in Burkina Faso, Cameroon, Senegal, Mauritania, Cote d'Ivoire, Egypt, Morocco, Mexico, Bolivia, Venezuela, Pakistan and South Africa, all developing countries in Africa, South America, and Asia. The riots forced the Prime Minister of Haiti to resign as indicated by Global Issues.¹²⁾ Sheeran¹³⁾ had also

indicated that about 100 million people all over the world could face hunger while the New York Times³⁾ quotes Robert Zoellick as predicting that there could be social unrest in at least 33 countries as a result of the crisis.

One of the fall outs of the food crisis is heightened international awareness of the dangers of food crisis and therefore need for urgent action for, as development economists have noted for decades, poverty in one part of the world means poverty everywhere. In April 2008, Mr. Gordon Brown, Prime Minister of Britain hosted a food summit as a reaction to the world food crisis; the FAO as earlier indicated, hosted a conference on food security in June of the same year. The World Bank¹⁴⁾ created a new \$1.2 billion rapid financing facility tagged the Global Food Crisis Response Program (GFRP) In May 2008. By April 09, 2009, \$734.4 million had been released to 31 countries.

Food Aid: A New Paradigm

While the World Food Program continued to cry out for increases in allocation for food aid from the developed countries using the extant approach of buying food from the farmers in the donor countries, two NGOs came up with a new approach in 2008. Walt⁷⁾ reported that Mr. Bill Gates and Mr. Howard Buffet (the oldest son of billionaire Warren Buffet) went to the United Nations and announced their plan to provide a total of \$75 million for the promotion of small scale agricultural production in Africa and Latin America in a programme tagged "Purchase for Progress."

The Bill & Melinda Gates Foundation and the Howard Buffet Foundation are to provide \$66 million and \$9 million respectively to encourage production of food by 350, 000 small scale farmers in 21 countries of Africa and Latin America, the output to be sold to and used by the WFP and other agencies as food aid. The thrust is to provide money for training of farmers in better farming techniques, purchase of farm inputs including fertilizers and seeds as well as money for transportation of produce to sale points. The small farmers will obtain credit under the programme after winning contracts of supply from the WFP. The scheme is said to be a market-based initiative in which a borrower gets credit only if he or she can prove that a market exists, which in this case is assured by way of contracts of supply from the WFP.

The Executive Director of the WFP, Mr. Josette Sheeran as quoted by Walt⁷⁾ has described the scheme as "a revolution in food aid." The plan recognizes the place of small farmers and the importance of marketing in agricultural production. Braun¹⁵⁾ had also noted that "the backbone of world agriculture is small farmers … we will only grow out of the food crisis if these people have access to markets." This should not be a surprise for even in the world of business; small scale firms form the back bone of the private sector in all economies of the world.

Food Security in Nigeria

Food constitutes a sizeable proportion of the budget of many people particularly in the developing countries. The New York Times³⁾ notes that

[M]ost Americans take food for granted. Even the poorest fifth of households in the United States spend only 16% of their budget on food. In many countries, it is less of a given. Nigerian families spend 73% of their budgets to eat, Vietnamese 65%, Indonesians half. They are in trouble.

Nigeria is in trouble although apparently because of the resilience and long suffering orientation of Nigerians, they never riot even in the face of food crisis. A one-time Federal Minister Mr. Umaru Dikko once declared that Nigeria has no problems because no one eats from the dustbin. This may be true because Nigerians have a way of squeezing water out of rock. With a population of 140 million as indicated by the National Population Commission¹⁶⁾ following the 2006 national census exercise, Nigeria is the world's

 10^{th} most populous country and the most populous country in Africa. It is the world's 6^{th} largest petroleum exporting country and has 50% of her land area cultivable.

In spite of the resources mentioned above however, the country is far from being able to feed her population. Japan has no crude oil and just 15% of the land is cultivable, yet Japanese people are sure of food security and the country as a whole boasts of the second largest economy and the highest life expectancy in the world.

The Food and Agricultural Organization¹⁷⁾ indicates that there was a high level of undernourishment in the Nigerian population; this stood at 9% in 2003-2004. The per capita consumption of food is small relative to other countries as shown in Table 1. Food consumption should be expected to be inadequate, what with crucial indices that show high level of poverty in the country, 92% of the population living below \$2 income per day and life expectancy of 44 years for instance.¹⁴⁾ The country is in the group of highly indebted poor countries (HIPCs), having a per capita income of \$1040 as against the average of \$4950 per capita for less developed countries.

Food Security in National Philosophies of Education

National philosophies of education usually provide different thrusts or foci that reflect the thinking of governments on the direction that a country should go. Nigeria's National Policy on Education has gone through many reviews since the first was published in 1977. The philosophies of Nigeria's education are based on national development goals articulated in the 4th National development plan of 1974. These are general goals that present dreams that are more or less utopian and almost unachievable. The lack of specifics might account for the fluid nature of the impact of education in the nation's development process. For instance, the national policy on education in Singapore specifies the first aim of primary education as "a good grasp of English language" followed by the local language for Singaporean children.¹⁸⁾ This leaves no one in doubt as to what public education policy is. Thus on a general note, the education goals of Nigeria that should inform the national philosophy of education should specify not just "a self-reliant" nation but self reliance in crucial sectors such as agriculture, science, and technology. The 4th edition of the National Policy on Education¹⁹⁾ introduced a number of changes and highlighted emerging areas that require emphasis. These include information communication technology education, life-long education, universal basic education and the need to get young Nigerians to cultivate reading habit.

The edition however failed to highlight in particular, the crucial need for environmental education given the increasing need for citizens to be aware and conscious of issues on environmental management and sustenance. There is little emphasis on agricultural development given the crucial role of agricultural production in a country that moved from a net exporter of food in the early days of independence to a net importer of food following the growing role of crude oil in the national economy. There is therefore the need for a national policy on agricultural education that would make basic agricultural training compulsory at least up to Basic 9, that is, Junior Secondary 3 where the Universal Basic Education scheme terminates.

At present, the national curriculum provides for the teaching/learning of agriculture and home economics at the primary level. At the secondary school level, the curriculum is divided into three groups – A, B, and C. Group A lists subjects described as "core" and includes English, French, mathematics, a local language, integrated science, social studies/citizenship education, and introductory technology. All the courses in this group are compulsory. In Group B are subjects - seven in number - that are described as "pre-vocational" of which the student is to select just one out of. The subjects include agriculture, business studies, home economics, local crafts, computer education, fine arts, and music. In a country where agriculture is not only regarded as an occupation for the lowly and engagement in it is often backbreaking and cheerless, it should not be a surprise to anyone if the students do not select agriculture.

This situation repeats itself at the senior secondary level where agriculture is also an elective. It is fairly unlikely that many students would consider agriculture as a subject of choice. It is therefore suggested that agricultural science should be made one of the core courses at the junior secondary level so as to give young people an early orientation on the role of agriculture not only in food security but in national economic and social development.

It is interesting to highlight the action of Mrs. Michelle Obama, the First Lady of the USA in starting a vegetable garden in the White House. The commencement exercise involved children from primary schools. As a commentator in CNN noted, a \$50 investment in the garden is capable of generating \$1200 returns during harvest. The message of what may be regarded as a token gesture is that every citizen should have a farm. This was the central message of the Operation Feed the Nation scheme of the General Obasanjo military administration in the late 1970s, which to this writers, has been one of Nigeria's most significant and useful public programmes. The second message from the White House garden is that young people should be encouraged to show interest in food production from an early age.

Conclusion

The global food crisis that reached an acute level in 2008 generated riots in many countries. Food aid is short term in nature and it benefits the farmers and transporters in the donor countries. While a new approach is being canvassed, it would be better to make agriculture part of the young as they are growing. Thus in Nigeria for instance, the general principles of the national policy on education should highlight the need to inculcate in the child, the thought of agricultural or food production as a critical component of national life.

Specifically, agriculture as a subject should be moved from the status of a prevocational elective to a core subject at least up to junior secondary 3 where the Universal Basic Education scheme terminates. The curriculum of life-long education (yet to be articulated) should also emphasize agriculture. These will require a specific national policy on agricultural education and a review of the National Policy on Education to refocus and place emphasis of agricultural education.

NOTES

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