Hunger in Niger: Policy Implications for Water Resources Management in Nigeria

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Abstract: This study examines the state of food crisis that occurred in Niger Republic in year 2005 as a result of poor rains. It focuses on the Nigerien agricultural sector and economy vis-à-vis the Nigerian agricultural and economic development. While, noting the trend in Nigerian food sector, this study contends that the food crisis in Niger triggered by inadequacy of water resources is a clear indicator of poverty. Thus, Nigeria her neighbour has policy implications to derive and useful lessons to learn from the Nigerian experience. It recommends inter-basin transfer of water and improvement of water infrastructure and technology as possible solutions to Nigerian rain-fed agriculture.

Key words: Food crisis, Niger, policy implication, poverty

INTRODUCTION

The world food picture has undergone dramatic changes with widespread food shortages causing rising food prices, disastrous and recurring hunger. In Africa, a high level of food insecurity and heavy dependence on food aid characterizes the day. The region can ill afford further declines in per capita income and simply does not possess the necessary foreign exchange to satisfy its food needs through inputs (Rosegrant et al., 2001). The rising food prices are driving millions of families on the brink of starvation and communities on the brink of violence. This can be attributed to a number of factors, including: climate change which has destroyed entire harvests; unfair trade practices that place rural farmers at a disadvantage in the global market; population growth and a general lack of investment in agricultural technologies and infrastructures.

Hunger is not just about failed harvest. It roots goes deeper. It is an important indicator of poverty spread that leaves people with few assets, little education and scarce access to health facilities and water resources. Water has become an important element of global politics. It is increasingly accepted that poverty eradication and sustainable development can not be achieved without improving access to water resources, particularly for the word's poor (Ashwin and Quibell, 2005). Water is a tremendously important resource in the developing nations of Africa. Water issue has been at the core of economic, cultural and political life of any nation. Adequacy of water availability greatly influences many aspects of social well-being and prosperity, including health, food security, industrial development and environmental sustainability.

Ashwin and Quibell (2005) asserted that inadequate access to water traps people in a cycle of poverty, poor health and pollution that they find difficult to escape without active intervention. Despite the strategic importance of water, African governments have relied so much on water provided by rainfall for agricultural production neglecting the need for irrigation, water allocation and management, water infrastructure and technology.

The need for water sustainability can be appreciated by considering the food crisis that ravaged Niger in year 2005. The international community responded by donating welfare packages (food aids) to the Nigeriens, though the response was said to have been slow and late. The Nigerien experience is of particular importance considering the fact that there was no war, natural catastrophe, epidemic or any 'Tsunamic' experience. Yet, events got degenerated to such an ugly situation. While, noting the extent of damage caused by this crisis, this study contends that water sustainability and management is an essential strategic task in sustaining national and agricultural development. This study argues that hunger that stalked Niger is a clear indicator of poverty, thus, Nigeria her neighbour has policy implications to derive and useful lessons to learn from the Nigerien experience.

A SOCIO-GEOGRAPHICAL AND HISTORICAL SURVEY OF NIGER

Niger is an inland West-African country surrounded by Algeria, Benin, Burkina-faso, Chad and Nigeria. The land area is 1.27 million km⁻². The climate is very hot and

dry and the country suffers from droughts. The Sahara desert and the Sahel cover a large part of Niger. There is a short rainy period with river Niger being the only permanent body of water.

The population of Niger was estimated at 11.67 million in 2005. The largest ethnic groups in Niger are the Hausa and Djerma-Songhai. Others are; Fulani, Tuareg, Kanuri, Arab and Toubou. Niger's colonial history and development parallel that of other French West African territories. After the contact with the west, Niger became a French colony and French citizenship was conferred on the inhabitants. However, in 1958, Niger became an autonomous state within the French community and got her independence on August 3,1960. Today, the country has a democratically elected president from the first president and legislative elections held in December, 2004.

The nigerien economy in perspective: Niger's economy is one of the poorest in the world with a Gross Domestic product (GDP) of \$2.8 billion in 2003, an annual growth rate of 3%, per capita GDP of \$232 and an average inflation rate of 2.6% (CIA, 2003). It is an economy based largely on subsistence crops and livestock with agriculture accounting for about 40% of GDP. The economy can also boast of the world's largest uranium deposit.

Niger's agriculture and livestock sectors are the mainstay of all but 18% of the population. Fourteen percent of her GDP is generated by livestock production such as camels, goats, sheep and cattle which supports 29% of the population. Traditional subsistence farming, herding, small trading, seasonal migration and informal markets dominate Niger's economy that generates few formal sectors' jobs.

However, drought cycles, desertification, variation in rainfall, swarms of locust invasion and the drop in world demand for uranium had undercut an already marginal economy. The persistent uranium price slump has brought lower revenues for Niger's uranium sector. Although, agriculture still provides 72% of the national export proceeds. Inadequacy of water caused by variation and insufficient rains makes it difficult for the country to feed its population. As a result, the country relies on grain purchases and food aid to meet food requirement.

Exploitable deposits of gold are known to exist in Niger around the Niger River. Substantial deposit of phosphates, coal, iron, limestone and gypsum also has been found in the country. Niger also has oil potential. The economic competitiveness created by the January 1994 devaluation of the Communaute Financiere Africaine (CFA) franc contributed to an annual average economic

growth of 3.5% throughout the mid-1990s. But the economy stagnated due to the sharp reduction in foreign aid in 1999.

The country qualified for enhanced debt relief under the International Monetary Fund (IMF) programme for Highly Indebted Poor Countries (HIPC) in December 2000. The total debt relief from the country's creditors is worth \$890 million which is equivalent to 53.5% of her total debt as of 2000. The overall impact of the relief is substantial because it has helped to slash the debt service as a percentage of government revenue from 23-8.4% in 2003. In its efforts to consolidate macro-economic stability, the government constituted a poverty reduction strategy plan to combat corruption, thereby focusing on improving health, primary education, rural infrastructure, agricultural inadequate production, agricultural policy environmental protection.

An X-ray of food situation in Niger in 2005: The food crisis that ravaged Niger in 2005 was no more news, for it was hard to miss hearing about Niger, the country where millions were reportedly suffering from severe hunger and yearly cycle of chronic food shortages. Two things happened in 2005 that triggered the hunger crisis: heavy rains that ended earlier than expected and the swarms of locust that moved in devouring crops in the country in the previous season.

It was reported that almost 100% of crops in Niger in 2004 were destroyed by swarms which contain billions of insects capable of consuming its own weight in vegetation everyday. In short, a ton of locusts can eat as much food in one day as 2,500 people.

According to International Federation (IF), the food situation in Niger which was described as a 'silent famine' left many with no option other than to sell their tools, household goods and even clothes to buy food. They had almost nothing left while, risking hunger in the future. Others were trying to survive by eating wild roots and leaves. Many were too weak to search for food while, families that depended on their animals for survival watched their herds waste away.

The crisis hit children harder. They were more fragile and not ready to fight against diseases. Nearly 10,000 children were fed in nine IF centres in the hardest hit Maradi, in southern Niger by the Spanish Red Cross supported by International Federation. More than 47,000 children under five received supplementary food at 53 IF feeding centres as at November, 2005. The United Nations estimated that 200,000 children were suffering from malnutrition.

Johanne Sekkenes, head of the Niger mission of Doctors Without Borders (DWB) said that, 'on the average, two children die each day in Maradi clinic, often because they arrived too late to be helped'. DWB also reported that about 5000 children a week were being admitted in its five emergency feeding centres, all weak and emaciated, many on the verge of starvation.

Moustapha Kadi, a member of the government's food crisis task force confirmed this food situation when he said, This was not inevitable. The international community has a certain responsibility here. After the rains stopped short last year and locusts ravaged the fields, the government estimated there would be a grain shortfall of about 220,000 metric tons and issued an alert. Unfortunately, the international community didn't react quickly enough. In a related development, the government of Niger had estimated that at least 2.5 m people don't have enough to eat while, 80,000 children were at the risk of becoming severely malnourished.

Though, the world food programme has stopped short of calling the crisis a famine, because food was still available, but only for those wealthy enough to pay for it. However, the ugly food situation described above demands a critical attention by the government of the nation concerned and better still Nigeria. This is because, hunger is not just about failed harvest, its root goes deeper with an important indicator of grinding poverty.

Therefore, to an outside observer looking into the Nigerien episode, the nation offers a wealth of lessonsperhaps more negative than positive.

AN OVERVIEW OF NIGERIAN AGRICULTURAL CONDITION

Over the years, it has become more and more apparent that any meaningful discussion of policies and priorities for alleviating hunger, poverty and achieving growth depends on economic overview/assessment of where we have been, where we are and where we are headed. It therefore, appears justifiable to briefly appraise the state of Nigerian agriculture in order to point out useful lessons from the Nigerien experience. Nigeria is the largest country in Sub Sahara Africa (SSA) with an estimated population of 140 million. The country has a total land area of 98.3 million ha out of which 71.2 million ha are cultivable while, only 34.2 million ha are actually being cultivated (Daramola, 2004).

Agriculture is the back bone of the economy. The roles of agriculture remain significant in the Nigerian economy despite the strategic importance of the oil sector. However, Nigerian agriculture has suffered many reverses during the past couples of decades from period of booming export trade in agricultural commodities to an import dependent and mono-cultural economy based on oil.

The Nigerian economy during the first decade after independent in 1960 could reasonably be described as an agricultural economy with agriculture serving as the engine of growth for the overall economy (Ogen, 2004). During this period, Nigeria was the second largest producer of cocoa, largest exporter of palm kernel and largest producer and exporter of palm oil. Nigeria was also a leading exporter of other major commodities such as cotton, groundnut, rubber and hides and skins (Ogen, 2004). The agricultural sector contributed over 60% of the GDP in the 1960s and despite the reliance of Nigerian peasant farmers on traditional tools and indigenous farming methods, these farmers produced 70% of Nigeria's exports and 95% of its food needs (Lawal, 1997). Sadly, the agricultural share of the GDP has declined significantly over time from about 90% before independence to as low as 22% in 1980 but had increased to 40.3% in 2003. Nigeria has the potential to build a prosperous economy and provide for the basic needs of the populace but today the nation is among the poorest countries in the world.

Successive governments, in a bid to solving the slow growth rate of agriculture and food production resulting in growing food imports and food insecurity have instituted a number of programmes in the past. Some of these programmes include; the Farm Settlement Scheme, Operation Feed the Nation (OFN), River Basin and Rural Development Authorities, the Green Revolution Programme, the Agricultural Development Project (ADPs) and the establishment of the Nigerian Agricultural and Cooperative Bank (NACB) now Nigerian Agricultural and Cooperative and Rural Development Bank (NACRDB), among others (Aladejimokun and Akinbile, 2006).

Inspite of these efforts, Nigerian agriculture has failed to generate significant foreign exchange, feed agroindustries, improves the living standard of farming households and rural dwellers and provide effective demand for industrial goods.

An X-ray of Nigerian food situation: A major indicator of the depressed performance of the Nigerian agricultural sector is the food crisis experienced in the country in the past years. The inaccessibility of Nigeria people to enough food and their ability to acquire it have now reached a chronic and transitory dimension (Olarinde *et al.*, 1999). Despite the abundant human, natural resources and favourable climate with which Nigeria is endowed, the country has not been self-sufficient in food.

World Bank projection revealed that between 1980 and 1990, 17% of the entire population experienced food insecurity annually. Presently, Nigeria population growth

is about 2%, implying that there is food deficit in Nigeria. It was also indicated that the rate of domestic food production declined by an average of 0.42% annually between 1960 and 1985 which resulted to large importation of food, thereby depleting the nation's foreign exchange reserves. The country that used to be the world's leading producer and exporter in previous years has now become a net importer of palm oil, vegetable, wheat, rice and other staple food items. The food import bill rose significantly from ₹801,967 in 1970 to ₹147 billion in 1996.

Foreign trade statistics report in 2001 painted the danger that is clearly besetting the nation's food sector when Nigeria recorded an increase of 105.6% in food import over the previous year. In monetary term, the nation expended ₦ 128.6 billion on foreign food item. Report on Nigeria Human Development report put the country's population of the poor as 36.1 million in 1985 and 34 million in 1992 and this has since increased by 61% to 55.8 million in 1999. Ogen (2004) reported that between 1973 and 1980, Nigeria became a net importer of various agricultural products. A total of 7.07 million tons of wheat, 1.62 million tons of rice and 431,000 tons of maize were imported. While, in 1982 alone, Nigeria imported 153,000 metric tons of palm oil and 55,000 metric tons of cotton at the cost of \$92 million each. Thus, from ₦ 47.8 million in the 1960s, the cost of food imports rose to ₩ 88.2 million in 1970 and ₩ 1.027 million in 1988. This depressed statistics shows that Nigeria has become one of the poorest nations in the world, with one in every 2 Nigerians being poor.

POLICY IMPLICATIONS AND LESSONS FOR NIGERIA

The challenges of improving food insecurity in Nigeria are not intractable. Intense concern over the future prospect of Nigeria is a theme echoed in this study. In light of the ominous threats of worsening food insecurity and health, Nigeria has the following to learn from the Nigerien experience:

- Nigeria must learn that food self sufficiency is achievable regardless of climate change. The nation must aspire to move from its productive potential of rain-fed agriculture limited by natural conditions to aggressive integrated irrigation and highly commercialized agricultural economy.
- Deteriorating natural resources, stagnant technologies and rising population densities remain common features of the rural landscape in Nigeria. Suitable priorities must therefore, be set to stimulate rural inhabitants to play their roles in economic and social development. Rather than allowing migration

- to urban centres where white collar jobs are no more available. A way of doing this is by providing credit facilities for these rural-based peasant farmers and ensuring that it gets to the target farmers.
- Nigeria faces the biggest challenges in improving food security because of the prevailing political, social, economic and multi-ethnicity problems which are huge and evident. The government will therefore, require the necessary political will and foresight to make appropriate decisions among competing sectors.
- Mamadon Tandja (President of Niger) reportedly told BBC that he accepted there were food shortages in some areas after poor rains and locust invasions but that it was not unusual for his country. This was nothing short of gross insensitivity to the plight of the populace by down playing the hunger crisis. We therefore, expect that Nigerian government would learn from the Niger's experience by being more sensitive to various statistical report/data presently and clearly besetting the nation's food sector. Nigerian government should not wave this signal aside but face this challenge with adequate strategy.
- A long record of failure and concern over the availability of exploitable water supplies indicates that potential for irrigation expansion in Nigeria is unlimited. However, significant achievement can be recorded if concerted efforts are geared towards greater public investment in water infrastructure. Since, water scarcity and shortages do not prevail everywhere in Nigeria due to her different ecological zones, inter-basin transfer of water resources from abundant regions into water short regions is also recommended. It should be noted that the high costs of water transfer and uncertainty regarding water right poses obstacles to such plans and actions in Nigeria. However, it is suggested that Nigerian government should give priority to the certainty and security of water right in order to improve water resources in the country. While, noting the limited participation of stakeholders in the provision of water in Nigeria, this daunting task should never be left to the government alone.

In a depressed and distressed economy like that of Nigeria and with a population of 140 million, one thing is clear that Nigeria can easily be enmeshed in the type of food crisis (even worse) in which Niger found herself than it is in a prosperous self-sufficient economy. We must therefore, take heed of the 'ethics of time', for the time factor is an ethical value in itself. Every minute lost, every decision delayed might lead to such crisis than expected.

CONCLUSION

The primary thrust of this study has been on the fundamental contributions of agricultural development in forestalling the occurrence of hunger in any country. Hunger is an indicator of wide spread poverty in any economy. Essentially, the study believes that the ugly and frustrating experiences of food crisis that took place in Niger prior to and in year 2005 could happen in any country that fails to develop and redirect its agricultural sector to ensure sustainable development and food security. It is apparently clear that the experience of Niger was avoidable if the government has been more sensitive to the plight of the populace.

It is the view of this study, that, Nigeria has policy implications and useful lessons to learn from the Nigerien experience in order to avert worst situation (food crisis) that can result because of her teeming population. It is therefore, highly incontrovertible, given the experience of Niger, that Nigeria (and indeed almost every developing country) should give urgent attention to agricultural development processes as a way of battling food insecurity.

REFERENCES

Aladejimokun, O.A. and C.O. Akinbile, 2006. Farmers' Demand for Tractor Hiring Services in Ondo State, Nigeria: An Application of Queuing Model. Applied Tropical Agriculture (ATA), a publication of the School of Agriculture and Agricultural Technology. The Federal University of Technology, Akure, Nigeria, 11 (1 and 2): 51-56. ISSN: 1118-6712.

- Ashwin, R.S. and G. Quibell, 2005. Water Right Reform in South Africa. In: Bryan, R.B., R. Claudia and Ruth Meinzen-Dick (Eds.). Water Right Reform: Lessons for Institutional Design. Published by International Food Policy Research Institute, Washington, D.C., pp: 153-166. ISBN: 0-89629-749-7.
- Central Intelligence Agency (CIA), 2003. Niger Geography. CIA World Factbook at www.cia.org.com
- Daramola, A.G., 2004. Competitiveness of Nigerian Agriculture in Global Economy: Any Dividends of democracy? Inaugural lectures series 36, delivered at the Federal University of Technology, Akure on 2nd March.
- Lawal, A.A., 1997. The Economy and the State from the Precolonial Times to the present. In: Osuntokun, A. and A. Olukoju (Eds.). Nigerian peoples and Culture. Ibadan, Davidson, pp: 197-198.
- Ogen, O.J., 2004. Agriculture and Economic Development in Malaysia, 1960-1995: A viable Model for Nigeria. J. Econ. Finan. Stud., Adekunle Ajasin University (AAU), Akungb-Akoko, Ondo State, Nigeria, 1 (1): 122-137. ISBN: 978-35786-7-4.
- Olarinde, L.O., J.O. Ajetomobi and A.O. Ajetomobi, 1999.
 Revealed Competitiveness of Nigeria Agriculture:
 Prospect for Food Security. In: Fabiyi, Y.L. and
 E.O. Idowu (Eds.). Poverty Alleviation and Food
 Security in Nigeria. Publishd by Obafemi Awolowo
 University, Ile-Ife, Nigeria, 2 (1): 241-246.
- Rosegrant, M.W., M.S. Paisner, S. Meijer and J. Witcover, 2001. Global food projection to 2020: Emerging Trends and Alternative Future. Published by International Food Policy Research Institute, Washington, D.C. USA, pp. 206.