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National Responses to Food Insecurity

“What we are facing today is an unprecedented challenge. In part, it is humanitarian emergency that demands urgent food and food related assistance for the world’s poor and vulnerable. But soaring food prices are also emblematic of large structural crises that will have an even worse impact on the world’s food supply if immediate measures are not taken to stabilize global food markets, and to increase investment in agriculture in a sustainable way. Global demand for food will only grow in the future and we must be prepared for that”. Mr. Srgjan Kerim, President of U.N’s General Assembly.

National Responses to Food Insecurity refer to national approaches to the security of food. These approaches include all kinds of efforts made by the nation to the security of food. These efforts could be seen as we go on. Food Insecurity itself refers to a situation whereby people live in hunger and fear of starvation. This is said to be existing when people were undernourished as a result of high cost of food or physical unavailability of food and/or inadequacy in food nutrition.

Food security on the other hand refers to the situation whereby people do not live in hunger or fear of starvation. In the world-wide, around 852 million people are without enough food to eat on a regular basis and 2 billion people are facing intermittent food insecurity. Countries numbering up to 22 (out of which 16 are in Africa) have the undernourishment prevalence rate of 35%. Three quarters of the world’s poor live in the rural areas and make their living from agriculture; particularly, subsistence.

Among the West African countries, I would like to focus my research in this essay about Nigeria. In Nigeria, most urban poor and rural families make their living from subsistence farming. This is due to the level of poverty and poor agricultural input. They mainly depend on it as their occupation, source of income, food for direct consumption and so on. They absolutely depend on their farm for earning their living; therefore, the higher the output of the farm, the better their standard of living and the lower the farm’s output, the worse their standard of living. This can also lead to food insecurity. So improvement in agricultural productivity aimed at small-scale farming will lead to benefits for farmers and urban gardeners. This affects the rural and urban poor first. When farmers are able to grow more food these people have better diets and under market conditions that offers a level of playing field, higher family income. With more money farmers are more likely to diversify production and grow higher-value crops, benefiting not only themselves but the economy as a whole.

A typical Nigerian urban poor family has a size range of 28-30 members comprising father and mother, children, uncles, aunts, Grandma and Grandpa, nephew, niece, cousins and all sorts of relations, living together as a family. Their occupation may be farming or fishing. This might be because of lack of employment opportunities. Typically, the intake of an imbalanced diet is highly pronounced on this family. They might be eating yam, rice or maize, twice a day and continuously. Some families of this caliber might have cassava or yam once in a day and in a continuous situation. This advent of taking one variety of food day by day continuously might be a result of low farm output at the end of the year.

Children and probably most members of this kind of family are bound to malnutrition because they have an unbalanced diet throughout year. Some farmers are illiterate while others are literate. They

know the importance of education, but as a result of low family income, kids are taken out of school to stay at home and join the farming. Some of their kids are very brilliant and brave but as a result of low family income children's education is greatly affected. Some richer families may take some kids from such family and sponsor them in school, but this is limited. Other children may grow up and join robbery and destroys people's lives and properties. Some parents do not understand the importance of education and prevent their kids from going to school. Some parents would even disown their kids for not complying with them when they tell them to stop going to school. This kind of life is mundane to many kids and at times can even lead them to commit suicide.

Since farming is their occupation as a result of lack of job's opportunities or illiteracy, the farm is their source of income though subsistence (i.e. farming done on a small scale to feed ones immediate family). The tendency of the family to have enough income at the year end is very low for several reasons:

1. Farming is done on small-scale.
2. Meant for immediate feeding of family.
3. Probability of low produce at the year end.
4. Needs arise any time and do not wait for the end of the year.

Families' lives are threatened badly because of the above mentioned reasons. Some kids regret being given birth to. As mentioned, families are in danger because needs arise at anytime without warning. This has tempted some parents to join robbery and stealing, cheating and embezzlement, etc. This greatly had a lot of bad effects on the nation's economy.

The cost of land, transportation (different farm land in different areas), water supply, energy, processing and storage facilities, and societal and environmental factors really affect the farm size in Nigeria. Farmers may have some portions of land in different areas and have no means of transportation. Sometimes they may try trekking to the farm but will be discouraged if the farmland is not productive. Other cases, like having no money to fertilize the unproductive or exhausted land, has made many farmers abandon their agricultural lands. Hence, poor farm input produces poor output. Farmers cultivating about three acres of land may be switch to cultivating only one acre because of fear of all physical labor, coupled with low harvest. The problems of insects, pests and disease also affect farm size. The crops grown in most of their land are the crops they have been growing and having a successful harvest. Illiterate farmers continue growing such crops continually and this can result in land or soil exhaustion. Farmers should be taught the scientific way of rotating their crops on the farm. A farmer may be growing ground nut, yam, cassava, rice, beans, etc. at first, but then may turn and start cultivating yam only because the land produces more yams at the year end.

Agricultural practices such as planting, weeding, harrowing, ridging, harvesting, thinning, stumping, nursery, watering, fertilizing and others are done manually. Farmers hardly practice mechanization as a result of their level of poverty. This also affects the farm size because farmers cannot cover the task as the machine does. Farmers are bound to turn old quickly, and this weakens their nerves. Marketing is not all that pronounced since they have little to eat and even less for sale. So marketing is only done when there is a huge harvest. As earlier mentioned, the employment is farming and the farm's

output is their wages. Their wages will probably not be real cash because sometimes there is low harvest and the food they get serves as their wages. Other times there is excess crops which are sold for an income. They typically get their food from the farm and have less access to private or community gardens because the farm is the place they typically get their food. In fact, the major barriers to improving productivity and income or for an urban family, employment, wages, access to food markets or gardening opportunities are: illiteracy, poverty, cost of land, transportation, farm machines, facilities, fertilizer, fuel, irrigation, open market and other agricultural input. This is because all these things require cash for acquirement which is very impossible to farmers.

Conducting scientific research into crop biology and agronomic technologies for improving yields, disease and drought resistance, and sustainable agricultural system is the best way of solving of all these problems in the country. This will improve food security and increase agricultural productivity. This is due to the reason that the goal of each farmer is to achieve a great harvest. For this goal to be reached crops must be protected from the attack of pest and disease. This could be done through conducting agricultural/scientific research into crop biology and agronomic technologies to know the kind of pests and diseases that could destroy a given crop. It will also tell us the kinds of soil such pests and diseases could be found and know how to match them to resistance crops. Farmers should know that the weather changes continually and may result to drought and farmer must know the soil with high water retaining capacity and know the crops that require a lot of water and match them together. The factor mentioned above helps farmers and agricultural scientists to know more about agriculture and to maintain its sustainable system. Illiterate farmer may also be taught how to use chemicals like pesticides, fungicides, herbicides, and fertilizer the right way. This will reduce the level of illiteracy that is one of the barriers to improving agricultural productivity. Illiterate fish farmers may ignorantly use Gamaline 20 for fishing. This almost killed all the fish in the water and contaminates the water, thereby making it unsafe for some living creatures. Contaminated water is harmful to man directly or indirectly. Conducting scientific research will help to approach these problems in Nigeria.

The role this factor is playing presently is highly beneficial to all and helps farmers to know how to mix chemicals in proportion and know which are selective or non-selective. This factor helps many farmers to enjoy their career and this makes it much easier. Implementation of this research and educating farmers will provide a higher level of income, sending many children back to school. Also it gives families the opportunity to have a more balanced diet than what they had been consuming in the past. With an increase in income, farmers will have the opportunity to continue to improve farming methods. One way this will be done is through using machinery instead of manual labor for cultivation. This will also improve the overall economy by providing people with year-round jobs. Farmers will also learn the benefits of the crop rotational system and learn which soil is suitable for a given crop; weather conditions and topographic factors suitable for some crops. This will allow farmers to have better harvests, making food available for consumption and also to sell to acquire cash. This factor also helps the economy by providing factories to manufacture mechanization machines like planters, tractors, bulldozers, mowers, harvesters, sprayers, incubators, etc. Even with all this improvement provided by research, agricultural extension is needed greatly in Nigeria most especially the rural and the slightly urban areas that have a lot of illiterate farmers. Maintaining practicing this factor will result in a sustainable agricultural system.

Presently, the status of this factor is higher than it was, but better standard of living may result if the status continues to get better. Agricultural extension has begun to reach some rural areas and that

makes life in these areas much better than it was. Some parents' conditions changed favorably and most of them send their children back to school as earlier said, because of the increment in the level of family income. The improvement of this situation improves the quality of life for Nigerians. About 50% of the necessary amount of food and income for the family are being attained presently. This needs to be improved and can be simply through improving yields by scientific research. According to Poverty Portal, 90% of Nigeria's food is produced by small-scale farmers. Improving their yields and quality of life significantly improves that of the whole of Nigeria.

Also, women farmers typically have smaller farm plots than those of men. This means that the situation of small farmers is disproportionately affecting women. Families headed by women tend to be poorer; possibly because men are seen as have a higher status. However, women play a major role in all areas of agriculture and this type of improvement will make drastic changes in their lives.

Measurement of this factor is based on the number of farmers that were satisfied with their yields and their lives in general. Measurements indicate that the situation will continue to change favorably because of the potential changes, the situation of our farms and urban family will continue to improve. Improvements in this factor will considerably increase the amount of food and income available in our family due to increase in farm size and output out of which some can be sold to raise more income in the family. Preserving the environment in a sustainable way benefits all the nation's citizens, not just any individual.

Yield increases translate into increased food security by providing more money for farming and urban families and their communities. With increased incomes they can attain improved diets and health care, better educate their children, and purchase household goods and farming technologies. Subsistence farmers also manage a disproportionate share of the world's water and land's resources, so raising the productivity of their existing land would be more environmentally beneficial than clearing more land for field.

My recommendations as to how increase productivity by small-scale farmers or urban gardeners should be implemented to improve the food security and income of our farm or urban family are:

- a. We should be wise, rational, and prudent in using the available resources/food. There will be great achievements in life and improvement in food security if we can make use of the available food/resources in a way that offers maximum satisfaction. Therefore we should always be hungry for knowledge of what we don't know and even to know more on what we knew partially.
- b. Farmers should also try to cultivate wheat, rice, and other grains which are staple foods of the poor; dairy and meat products from corn and soy for those with larger incomes; and ethanol from corn and sugar cane or bio-diesel from soy and oil palm of fuel for transportation. This will really help the nation's economy to grow financially and economically. Also try and create room for educating young kids, hence they are the leaders of tomorrow.

My suggestions for appropriate roles for the communities, national government, companies and other organizations like (United Nations, World Bank, private or civic organizations and others) in implementing my recommendations are:

a. Members of these bodies should be considerate, obedient, respectful, meditative and not extravagant and be hard working for nation's betterment. Bodies like the United Nations and the government should try and create an atmosphere in which farmers will be educated about the results from agricultural yield and sustainability research and providing access to and support for implementing methods from this research. Also establish schools and to train teachers that will teach students how to conduct scientific research in crop biology and agronomic technologies for improving yields, disease and drought resistance, and sustainable agricultural systems thereby making them to become future's research workers.

b. Also encouraging parents and students by awarding the hard working ones with scholarships and to provide more teaching facilities. World Bank should try to grant loans to farmers and encouraging them to do better by awarding scholarships. Companies should try to work hand in hand with the factory to produce more advanced farm machinery, processing and storage facilities. International organizations should work hand in hand with nations to maintain peace and security among all the nations of the world. Students should work hard to be leaders of tomorrow and parents should encourage the children in going to school.

If all these bodies are obedient to all these suggestions, they can implement my recommendations, thereby improving this factor for Nigeria. Improvement of this brings about not only food for those who need it, but also an income for struggling families. This income will provide schooling and increased opportunities for the youth of the nation. All from something as simple as providing research to farmers.

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