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Proposed Response to Food Insecurity in Tanzania

Food insecurity is when the amount of food produced is insufficient for the number of people who need it. Food insecurity continues to be an acute problem in the world, especially in Africa. This is so because out of the twenty-two countries in the whole world suffering severely from food insecurity, sixteen are found in Africa. Tanzania, my home, is one of those sixteen countries.

Food insecurity in Tanzania is mainly caused by the rapidly increasing population which in proportion is greater than the food produced. The absence of reliable farms able to produce a sufficient amount of food also attributes to food insecurity in Tanzania. Most Tanzanian farms are subsistence farms producing only the amount of food needed by the farm family. The farm family doesn't have the ability to produce a large amount of food and offer surplus due to poor farming conditions. These have led to a decrease in the national food production hence leading to food insecurity. Food insecurity is worsening. If immediate acts are not taken to address the problem, hunger will be at hand and the national economy will dramatically drop due to low production of goods within the nation.

The nation is mostly made up of nuclear families with an average family size of approximately five family members, i.e. a father, a mother, and three children. The food that this family eats mainly is ugali and beans. This is very popular since ugali is simply made up of cooked maize flour with some water and the beans are mostly black beans which are simply boiled and eaten with the ugali. This meal is highly rich in carbohydrates and plant protein. However a good meal should include carbohydrates, proteins (both animal and plant protein), vegetables, fruits, and some fats as well. This kind of meal has all the nutrients needed by the body. Families which lack this solid meal suffer from nutritional disorders since their diet is very poor. The level of education of most family members is limited to the primary school education. Few children complete their secondary school level.

Tanzanian farms are of generally one to three hectares in size. About 70% of Tanzania's crops are cultivated by hand hoe, 20% by ox plow, and 10% by tractor. This division is not encouraging at all for it shows that the food production takes much more time since the means of crop cultivation are poor. The crops grown in these farms include a wide range of cereals and some non-cereals. The cereals include maize, rice, millet and sorghum while the non-cereals include tomatoes, carrots, and oranges. When small surpluses do occur the food is marketed in the local markets and sometimes sold nearby to neighbors.

Tanzania faces a variety of problems that affect its agriculture. The emigration of citizens from the rural areas to the urban areas due to searching of better livelihoods and sources of income causes a decrease in agricultural laborers hence a further decrease in food production. Additional problems include lack of capital for farm establishment, poor energy sources, absence of water sources, absence of marketing areas and customers, and dependence upon unreliable and irregular water conditions.

Although food insecurity in Tanzania is severe, the government has been struggling to keep food production at a level that meets the needs of the growing population. The government has done this by strengthening its Ministry of Agriculture, Food Security, and Cooperatives which one of its major goals includes "Sustaining food availability and supply at household level by 2010" Also the Ministry of Health and Social Welfare is heavily supported by the government and aims at improving the health of the citizens by encouraging farming of different kinds of crops so as to sustain a more balanced diet for the citizens of the nation.

I honor the government for such efforts but also there are various ways to take this problem solving a step further. These include conducting research in crop biology to find better crop species for more yield, developing better cooperation among farmers so that they work together for the development of the nation, finding better ways to solve water and energy problems for farm industries, introduction of intercropping and crop rotation farming systems, ensuring better profit for farmers so that they can market their goods and discourage emigration of individuals from rural to urban areas and educating farm families on better farming methods such as using insecticides which have small effect on the plants, water resources and the farmers themselves.

Food insecurity in Tanzania is a significant and complex problem caused by many factors. There are various ways through which food insecurity can be addressed to in Tanzania. Reversing of natural resource degradation and adapting farming to water scarcity and climate change being one of the ways can be addressed as follows.

Natural resource degradation in Tanzania effects agricultural productivity widely. Natural resource degradation leads to water scarcity and climate change as well. Natural resources, water availability and good climate are three very important factors for agricultural production in Tanzania. Farm families have difficult conditions due to the absence of these factors since most rely on rain and natural rivers as the major sources of water for their farms. Lack of water, which is mainly due to the change of climate and degradation of natural resources, leads to a decline in agricultural production of the families thus less food is available.

Natural resource degradation in Tanzania is currently worsening. Resources are more degraded than how they are maintained or developed. People cut down more trees for making different timber products than how they plant them. Climate changes add onto this due to the fact of global warming. Further more, the decrease in forest resource leads to the decrease in rain availability which leads to water scarcity for the growing crops. Due to this, production in small farms is largely reduced thus the decrease in food attained for the farm families. When one cuts more trees with a small replacement or none at all this might lead to desertification of the area since it will reach a point where no trees will be available hence bare land. This means no protection against mud slides, soil erosion and other natural disasters such as hurricanes. Tanzania, as a developing country, is disadvantaged by all these great agricultural catastrophes.

Water bodies in Tanzania are highly degraded as well. Lakes, rivers, and the Indian Ocean are suffering severely from degradation. This is mainly caused by the dumping of various waste materials (especially waste chemicals) from industries into these water bodies due to the lack of areas for waste disposal. A good example of this is the disposal of sewage water from the whole of the Tanga region residents into the Indian Ocean. In the city of Dar-es-Salaam which is the major business center in the whole country located in the coast of Tanzania. The sewage from the whole city is disposed into the Indian Ocean along with all of the wastes from the Muhimbili hospital which is the largest government hospital and the most sophisticated within the whole country. These have led to poisoning the water bodies leading to the death of aquatic organisms such as fish which are of great economic importance to the nation. Fish act as a good source of animal proteins and provide many other nutrients thus their loss worsens the diet of the families.

A number of wild animals including rhinoceroses and giraffes are rapidly decreasing and some close to extinction such as the rhino. Deforestation is damaging the habitats of the wild animals leading to the death of these precious wild animals which attract tourist.

The government of Tanzania is responding to the major challenges it faces. The effectiveness of its response can be observed and measured through the improving conditions of the farm families, natural

resources, water availability, and farm management by establishing various organizations including Tanzania Fisheries Research Institute (TAFIRI) which carries research activities on both marine and fresh waters as well as ensuring their safety, the National Tree Seed Program (NTSP) which is responsible for collecting tree seeds of good quality to meet the country's seed requirement and to produce enough for export. Some of the steps taken by the governmental organizations include reforestation of natural forests, trying to keep the rivers, lakes and the Indian Ocean clean and safe by discouraging the disposal of waste materials into these water bodies, creating policies which will improve forest management such as "Panda miti kata mti" which means one should plant two trees for each tree cut, encouraging irrigation farming systems, and ecosystem conservation and management. In the year 1999, a national campaign of tree planting was initiated and about 100 million trees were planted throughout the whole country.

Measures taken by the government are somewhat effective but are not completely addressing the problem at hand. The spending of huge amounts of money by the government in trying to solve the problems at hand is one important step that the government has taken in response to food insecurity.

Regretfully, some of the government officials are making the condition worse. Corruption and bribery have been major problems among the country's leadership. Due to corruption, some of the government money does not reach the intended areas at all. This is because some of the leaders steal the money from the government for their own benefits which is corruption. Bribery on the other hand also plays a big role since some of the leaders are bribed by investors so that they can give them access to the natural resources without payment of any taxes and are allowed to degrade them for private gains and harm to the nation.

Increasing agricultural productivity by small-scale farmers might help to some extent but its impact will not be significant. Small-scale farmers depend on rain, good climatic conditions and natural resources to guide them through their farming. Unfortunately the same factors which are mainly needed for the production are the ones which are missing. This means the impact of increased agricultural productivity will not be observed since its effect is too small to be seen. However no matter how small the effect might be it will have an impact on the particular family that succeeds in increasing its production. This might give way to surpluses which will act as an income for the family after marketing the crop surpluses.

Major efforts need to be applied in order to increase productivity of small-scale farmers in Tanzania and thereby address the whole issue of food insecurity. One of the recommendations based on the research on Tanzania is to aim on the factors and ways through which food insecurity can be addressed effectively. This can be by increasing production of small scale farmers in an effective way by addressing as many factors affecting agriculture as possible. In order to increase the productivity of small scale subsistence farmers the following is applicable.

Small-scale farmers should have an understanding that they need to change according to the changing climatic conditions so as to increase agricultural productivity. These may include lending of loans from the government and private institutions for investment, seeking agricultural knowledge on new technology, controlling population shifts (the higher the population the more land needed for settlement), and constructing better storage facilities for the goods produced. Other measures include adapting modern farming techniques such as the use of machines (including tractors) and usage of modern genetically modified seeds, and the development of infrastructures so as to ensure transportation of crops produced. This will increase agricultural productivity since these address most of the significant factors that are essential for carrying out farming activities successfully.

Women empowerment should also be encouraged within the farm families. At present, women in Tanzania especially in farming families are not given a chance to participate fully in agricultural

activities. Women are just considered as meant for labor in the farms and do not participate in any important decision making for running the farms. Women should be given more power to talk within family meetings because they have different valuable ideas. This will enable the sharing of different ideas by women which might be very helpful in the running of the family farm. These might include anything of everything from the farming activities to the running of the family's entire farm. Women can help more than how they are allowed to participate at present. They need more chances to show their abilities. The government should provide more education to the farmers so that both men and women are equal and can perform similar duties.

Tanzania is endowed with significant natural resources. Among these include forests and woodlands, wild animals, rivers, lakes, and wetlands. Rivers and lakes include the Lake Victoria, Lake Tanganyika, Lake Manyara, River Wami, and River Rufiji. All farm areas around these water resources can engage into irrigation farming system. Relying upon irregular climate is not one of the characteristics for having a good production from the farms within the nation. Proper methods and processes can be introduced so as to enable irrigation farming to take place hence reducing dependence upon the unreliable climatic conditions which do change from time to time.

Tanzania has already started a race against food insecurity in some parts of the country. Most of the things that ought to be done are already on the way. At the community level, the community should also help the government so as to successfully overcome food insecurity. The farming communities need to unite in order to increase the labor force on their farms. Farm families should consider coming together and seeing that food insecurity is not about individual families on their own, it is about their own society that they live in, the nation, and the world at large. They should look ahead and determine what will happen if they do not come together as a nation and face the problem of food insecurity at hand. The condition can worsen which means the end product for all this might be the rising of a famine within the country.

Uniting farmers can give rise to strong agricultural cooperation. These will enable the farmers to help each other which will encourage the production of crops within their farms through sharing different ideas on farming. This will finally lead to an increase in the agricultural production of the country hence reduce risk of food insecurity.

The government as well has played a huge part in fighting against food insecurity. All of the citizens at some point depend on their leaders of the nation to come up with a solution to the problems that the country faces. Despite the fact that the government has begun fight against food insecurity by importing farm facilities which are being helpful to some of the farmers in the country, it should expand this program to all parts of the country that need to be addressed. This will ensure the balance and distribution of farm facilities around the nation so as to encourage high agricultural production. The government should also reduce the taxes on farming related products (such as seeds and fertilizers) imported so as to encourage more importation. This will help in the reduction of the prices of the farming products sold within the country. This means more small farmers will have access to these products which will aid in increasing the production.

World wide organizations and companies within the nation also need to play a part in the eradication of food insecurity within Tanzania and the world in general. The private companies within the nation as well should help in the elimination of food insecurity within the nation. From financial institutions to non-governmental institutions, Tanzania can become a food secure nation as can the rest of the world. Any worldwide organization that deals with food, agriculture or health including Food and Agricultural Organization (FAO) and World Food Program (WFP) should increase their surface area for action so as to have more effect on the countries that are in deep danger of running into famine due to

food insecurity including Tanzania. There are also some other world wide organizations which can also help in the reduction of food insecurity within the whole world if they work together.

Food insecurity is a worldwide food problem which affects many countries in the world especially those in Africa. While this is just a glance at food insecurity in Tanzania, some other countries around the world have the same condition or even worse than what Tanzania faces. In order for food insecurity to be tackled the whole world should work as a team; even those countries that experience no impacts of food insecurity. Unity is the key to the winning of this war against food insecurity. Food insecurity can be tackled if all nations put their strengths together and deal with food insecurity through working as a team then food insecurity can be eradicated. Despite global food crisis being ranked second among the first top ten catastrophes by the United Nations (UN) there is an answer to food insecurity. Tackling world food insecurity will lead to the world being food secure and aim on concentrating efforts on other major world problems.

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