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Tanzania: Eating or Not Eating?

About four years ago a person could walk into a restaurant and not only smell the food in the air, but also the cigarette smoke. A waiter or waitress would ask if this person preferred to sit in the smoking, or non-smoking section of the restaurant. The answer would be made, and accommodations would be provided in that section of the restaurant. On certain occasions, though, that part of the restaurant would be filled, so the choice was either to wait, or to take the other section of the restaurant. This same principle can be applied to Tanzania, only instead of smoking or non-smoking; the question is eating or not-eating? Of course everybody would prefer to eat, but sometimes there just isn't enough food to go around whether the cause is due to bad weather, disease, pests, or even drought.

With a population of 34,443,603, and steadily rising, Tanzania has extreme problems. A population census created by the United Nations, shows that in 2007, for every 13 deaths, there were 39 births to take their place. This means there's an average of twenty-six additional people in Tanzania alone, in any set given time. An average family in Tanzania will usually consist of a mother and father, and an average of 5-7 children. The main crop grown is a white corn, and each family farms only about 2 and 1/2 acres, so feeding a large family can be quite a problem. This problem rises even more, when orphaned children of a close relative join the family unit. All practices are done by hoe, making farming not just a one-man job, but also a family job. Agricultural productivity is limited by the size of the field that a family can handle. The family eats most of what is grown. The white corn can be ground and formed into a ball. A person would poke his finger into this ball so items could be placed inside (such as pinto beans). Full nutrition isn't a worry to them, but it is a worry to us. That is because one of Maslow's theories states that basic needs must be met before security needs can be handled. This means, that before they can worry if they have proper nutrition, they need to know they'll have enough to eat for the day. If that basic need is not met, then the security need cannot be considered.

Healthcare is always a scare because there are not many places to receive care, so death can come in an instant. This poses a threat to children because if all their family dies, who will take care of them?

Population in itself isn't a problem for food security. In some cases a population rise is a very positive trend, but when trying to feed a family of seven on 2 1/2 acres, problems arise. For example, one of the main meats in Tanzania is chicken, but when killing an animal, it must be consumed quickly due to no refrigeration. When an animal is killed, it is not a family feast, but a community meal.

The status of this hunger is very bad and continues to worsen. This is because with such a high population, food quantity is compromised. A study taken about malnutrition show that over 40% of Tanzania's population is malnourished. With the population growing so steadily and so fast, predictions have been made that the number will be changed from 40% to 50% within the next fifteen years. The most challenged would be the people living in urban areas. This is due to the fact that these people work at jobs to make money in order to buy food. An agricultural family, however, makes food to create money. This balances the formula, unless crops are poor during the year. Then, the agricultural families would be at the advantage because they are able to feed themselves and sell whatever they don't need. If they don't have enough to feed themselves, then the people living in the urban areas have no food to buy. This creates stress not only for the urban people, but also for foreign aid, which can only be temporary, because a country cannot depend on foreign allies permanently. Developed countries can only give so much before they have to pull out because of insufficient funds.

With the status getting worse, the situation becomes more difficult to measure. The two types of measurement used are quantitative, and qualitative changes. As the words appear, they mean quantity, and quality. One can look at a census and see that the population growth becomes bigger, but how do you show the quality of the food? The best way to show it is by the number of people suffering from malnutrition. As shown earlier, 40% of the population suffers from malnutrition, and with the projected number expected to increase, we can see the qualitative change by the number.

With this particular issue, and with the current number, a definite resolution may in fact be out of the question. What can be done though, is an improvement in population control. If population growth decreased from 39 to 15, the population would still rise but not as sharply. This would give a quantitative change of diet to people in Tanzania, but the qualitative change in the diet would remain the same. This leads to Maslow's second stage in his theory of the hierarchy of needs: Safety. Once they have enough food, they can start worrying about, "Is this safe to eat" and "Am I getting enough nutrition from this?"

Major issues, besides population growth, will be climate change and water scarcity. These situations will play a crucial factor in the lives of the population now and in the future. Climate change isn't something that can be controlled by any one country, but it can be adapted. Genetic engineering could be the answer to this problem. If scientists could discover a crop that is more drought resistant, takes up less space, can survive in the African climate, and give more nutrients, or switch to a different crop all together. As one of the most famous sayings goes, "If at first you don't succeed, try again," and that is exactly what Tanzania should do. If climate changes within the next 50 years make this white corn too difficult a crop, then the crop should be switched or genetically modified, which may be easier said than done. In other parts of the world, GM (genetically modified) crops have been disapproved. A GM potatoes killed lab rats in one test. Another GM crop, this time a soybean, had traces of a Brazilian nut, which caused severe allergic reactions.

Water scarcity will very likely be the leading catastrophic factor in the years to come. As river water isn't a dependable source of water, most people turn to wells. Some families today have to walk miles just to get access to water, but for the past 15 years the Evangelical Church of America (ELCA) has been drilling relief wells in Tanzania. This has been a huge relief to families in Tanzania, but if the population continues to grow the way it does, these wells will dry up faster than ever before. This is a problem that can only be resolved by drilling more wells. Not only should the ELCA still do that they've done, but also ask other organizations to help with the cost. The cost of drilling a new well is around \$10,000 and can be a very heavy burden.

Recommendations for resolving high population growth can be very controversial. Would birth control be an option to give to every single woman in Tanzania? Different factors come into play when talking about how to reduce the population growth. One of the factors is money. If we were to send birth control pills for every woman in Tanzania, who would pay for it? Who would distribute it? Another factor is religion. Does birth control conflict with their religion? The final factor is a person's morals and ethics. Can we as American's just pretend that this situation of food scarcity is just going to go away on its own?

My own recommendations are to send representatives to Tanzania to help educate the women about birth control and to raise awareness of the rising population. Kofi Annan once said, "Knowledge is power. Information is liberating. Education is the premise of progress, in every society, in every family." If we can educate the Tanzanian people, then hope for a less sharp population increase is definitely a possibility.

Another recommendation is to increase productivity. To increase productivity, creating a co-op is the solution. Co-ops could be very beneficial to the Tanzanian people. For instance, instead of everybody on their own and living off just the corn, a group of families could form a co-op. While one family grew

corn, another could grow tomatoes, while another grew peas, while another possibly grew wheat. So instead of having to live off just the corn, more nutrition comes into play and can be distributed throughout the families who are part of the co-op. Another thing to help increase productivity would be to buy one tractor per co-op. Because so many of the Tanzanian people wouldn't be able to afford it, this is where the co-op can be beneficial again. The financial burden wouldn't be as heavy if the co-op bought a tractor and all the families used it together. If a tractor was used, then productivity would almost skyrocket compared to the methods currently used. Another idea is to use wind energy to help grind corn faster. Instead of grinding being a chore, it can be an easier task to complete.

Another recommendation is to bring Tanzania to the world market by using the co-op idea. If the other ideas worked, then excess may start being produced. When too much is produced, it can be sold. This plan would get Tanzania into the world market. One of the biggest factors with everybody in today's world is organic. Tanzania would be a perfect country to help with this situation because no fertilizer is being used. Every nutrient obtained by the crops is all-natural. This could be the perfect niche for Tanzania. If consumers are willing to pay two dollars for a bushel of corn, the price may double or even triple if the corn is organic.

With these recommendations, my suggestion is to contact the United Nations. Our role as part of the UN is to provide education to the people of Tanzania about birth control. Aiding in the form of genetically modified crops, and teach the Tanzanian people about co-ops, to help them be more productive. All of this will open the door to the world market and more opportunities for the Tanzanian people.

From different points of view come different opinions on how a solution should be made. One thing scientists can agree on is that the problem is there, and it's not going to get better on its own. If GM crops come into play soon, food won't be as big a problem, but it would turn into a problem if the population growth stays the way it is, or even increases. Nobody can really tell where the future will lead, but one can only hope that with commitment to the Tanzanian people, the load won't be such a heavy burden. Based on my recommendation of sending representatives to Tanzania, the more knowledge the Tanzanian people get, the better off they are.

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