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Hailey R. Huber

Bruno Central School

Bruno, SK

Kenya, Malnutrition

Kenya: Saving Women & Infants from Severe Malnutrition

Kenya is situated on the east side of the African continent next to the equator (Advameg Inc, 2019). The area of Kenya covers a total of 581,309 square kilometres. This exquisite country has landscape that includes rainforests, deserts, rivers, and oval hills throughout the designated area. Kenya is filled with many unique resources including limestone, soda ash, salt, gemstones, fluorspar, diatomite, etc and is also the leading producer of coffee and tea in the world. This developing nation is suffering from severe poverty which is mainly caused by undiversified economy, gender inequality, lack of policies, health problems, increasing population, and water crisis (World Bank, 2019).

There are 49.7 million residents calling this place home but over 44 million live below the poverty line (World Bank, 2019). The number of people living here has doubled in the past 25 years. The median age throughout the country is 19.7 years old (CIA World Factbook, 2018). In Kenya about 73.94% are ruralized citizens and the other 26.06% are mainly urbanized. Over half of the population live in small villages, towns, farms, and lack modern appliances, running water and electricity. Kenya's current President is Uhuru Muigai Kenyatta (World Atlas, 2019).

Kenya borders the East Indian Ocean between Somalia and Tanzania. The hottest months occur in February and March which makes its way to 21 degrees celsius in its capital Nairobi (World Travel Guide, 2019). The lowlands are mostly dried up while the highlands tend to be more temperate with 4 different seasons. By the tropical coast the humidity is usually high in April and May but depends on the monsoon winds they experience. "Most Kenyans live in the highlands where Nairobi, the capital, sits at an altitude of 5,500 feet. Its terrain rises from a low coastal plain on the Indian Ocean to mountains and plateaus at its center. West of Nairobi the land descends to the Great Rift Valley, a 4,000-mile tear in the Earth's crust. Within this valley in the deserts of northern Kenya are the jade-green waters of famous Lake Turkana (National Geographics Partners LLC, 2018)."

Kenya's population is among the most diverse in Africa. There is nationally about 4.4 people that live in each household. "One of the most striking features for those who visit Kenya is the traditional way of life of its native people. Most of Kenya's population lives in scattered settlements. In the traditional society, tribes or ethnic groups are normally determined by geographical region and common culture (Ekaterina Zhdanova-Redman, 2018)." Kikuyu group lives in huts constructed of poles and lattices made of sapling and filled with mud, brushwood walls and the roofs are thatched with grass (Miki Dowsing, 2016).

Women in a household are usually the ones that carry the water and food from long distances to their home (Cultural Atlas, 2019). The water they use for bathing, dishes, and drinking is not the clean, safe water we have access to. Which they are also affected by drought from being in such hot savannah like deserts. They are supposed to obey their husbands' commands and expected to care for the children and

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the home (Cultural Atlas, 2019). The husband is relied on to support the family financially by participating in a career, most likely farming.

"Corn remains the most important staple food in Kenya and its consumption continues to increase despite calls by Government of Kenya (GOK) for diet diversification (Kenya- Agriculture, 2017)." It is mainly being imported from the East. This country also grows tropical fruits that include mangoes, oranges, pineapple, bananas, papayas, and pears, and is the third leading producer of fresh fruits in the world. A few of the vegetables grown on small farms consists of corn, potatoes, peas, and beans.

At the beginning of the 21st century drought affected the northern part of Kenya causing most of the food crops to be destroyed and families to mainly live off of maize. They face challenges such as the lack of nutrition because of their climate changes has resulted in over 50% of Kenya's population living with malnutrition (Kenya's Face, 2019).

Malnutrition is a physiological abnormality that's caused by not enough or too much of a macronutrient or micronutrient, and this is the crisis in this African country. The scarcity of food is causing children to develop diseases, to become very sick, and possibly die. Malnutrition deficiency is caused in humans or animals from imbalances in energy, protein and other nutrients. Nearly 73,000 children in Kenya are living in distress from malnourishment (Data Dredger, 2019).

Protein deficiency which is a macronutrient deficiency causes many young children to develop severe fatigue, and lethargy. Lethargy results in poor growth and swelling throughout the body. A bloated round stomach is a symptom that is common and visible. "About 41 percent of the population of Kenya is classified as undernourished by the World Bank. Every one and three children suffer from chronic undernourishment. This means they do not receive adequate nutrition in their diet. Of children under the age of five, about 23% percent are underweight, and over 34% percent are considered stunted. (Advameg Inc, 2019)." Children who are stunted are therefore officially impaired from developing naturally. They won't gain beyond 80% of growth than those who are not stunted. In Kenya malnutrition is a serious issue with vitamin A, zinc, and iron deficiencies which is known as the highest in the country.

It is crucial, stated by the American Academy of Pediatrics (2010), that children are particularly vulnerable to undernutrition in the first thousand days of life and have severe consequences if they aren't getting proper nutrients. Outcomes of malnutrition in a small child can include severity of infections, loss of IQ in the range of 3-13 points, blindness, reduced attained schooling and income, increased risk of chronic disease including diabetes, cardiovascular disease, high blood pressure, and some forms of cancer. (Canadian Food Grains Bank, 2019).

The Kitui ethnic group suffers mainly from access of water. They are one of the three counties in the Eastern province in the south of Kenya. Their area is highly prone to drought, regular crop damage, and no household can grow all of the foods that are required to feed an infant over the time of a year (Kenya Face, 2019). Stunting affects 29% of children aged 6-23 months (Kenya Face, 2019).

Caregivers for children of that age rely mainly on various kinds of porridge, including maize porridge or millet, and legume or multigrain. Milk, rice, potatoes and green bananas are also core foods.

Secondary core foods include ugali which is maize porridge, tomatoes, kale, cowpea leaves, and cabbage and are also limited to animal source foods that include milk. This is not enough nutrition to keep an infant or young child's health sufficient (Kenya Face, 2019).

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Our world is in need of hope for the future. We are suffering from food waste, crop damage, climate change and various other damages to our food supply which is leading millions if not billions of human life into malnutrition. "16 million children worldwide suffer from severe acute malnutrition; nine-fold increased risk of death. Pregnant women and children under 2 years of age are at risk of undernutrition which can lead to irreversible damage (Canadian Food Grains Bank, 2019)." People say our world is going to run out of food by 2050 and that is terrifying for everyone. We need to take action and we need to take it now.

Nutrition specific Programs in over 34 countries have been assisting children and pregnant women with nutrition and helped save thousands of lives (Canadian Food Grains Bank, 2019). These programs have supplied optimum maternal nutrition during pregnancy which costed \$571 per person and saved a total of 102,000 people. Programs offered infants and young children to be fed and saved 221,000 lives which costed \$175 per person (Canadian Food Grains Bank, 2019). Its programs like the United Nations that could supply pregnant women and infants with proper nutrition for the first 1000 days of their lives because it is crucial and it will help sustain these famine countries that are in potential danger (Canadian Food Grains Bank, 2019).

Two thirds of Kenyans depend on the crops they grow for their livelihood and survival (Farm Africa, 2019). Activists could help women learn how to grow vitamin rich vegetables around their homestead and show them how to prepare it for their family. (Canadian Food Grains Bank, 2019) This helps the family stay healthy so they aren't at particular danger for malnutrition. It provides them with micronutrients that is essential for a healthy lifestyle.

A possible solution to ending hunger would be to help farmers produce and grow crops in Kenya so they can sell some of their quantities by creating a market system so they could earn a little more money for their family. While they could still use subsistence farming for themselves it wouldn't necessarily have to be called that any longer.

The women in Kenya suffer from inequality and aren't allowed to own assets. They usually have decisions made for them, and don't have access to education, land, or employment. (USAID, 2019). The gender equality ratio in Kenya is gaining greater power and is getting better since the constitution in 2010 that marked a new beginning for women living there. "Seeking to remedy the traditional exclusion of women and promote their full involvement in every aspect of growth and development. (USAID, 2019)."

An apprenticeship program for women would be an excellent solution for women. Women go through many challenges in their life including pregnancy which is a time where proper nutrition is needed. These women should be given a choice whether they want an education, a career, to own land, or to be given the right nutrients so they don't suffer from malnutrition.

Apprenticing for a women would mean they would work under the supervision of another farmer so they can learn how to grow their food supply. In all honesty women are the ones that carry the baby, need food to grow that baby so it's healthy and this remedy is obviously not happening in their world. Girls are the ones suffering from food security and them being aware of this would begin an enlightenment.

Since Kenya has doubled in population in the last 25 years and has been increasing numbers by 1 million each year, we know this is a food security issue. There are two reasons the Kenyan population is known to be increasing too fast, number one is that their fertility rate is extremely high, and their family numbers are higher. Second Kenyans are living longer than they used to. Their life expectancy has changed from the age of 54 to expected age of 68 in 2050 (World Bank, 2010). According to the UN that is 3000 people per day (World Bank, 2010). Our world is not ready for this rapid increase of people let alone Kenya.

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Over the next 30 years, by 2050, that is 85 million citizens in Kenya. Over 44 million now are living in poverty. There has to be a sustainable solution to reduce the amount of poverty in this country.

Without enhancing education to improve in Kenya the resolution of malnutrition will not be met. Teaching students in high school about birth control may contribute to this topic tremendously. Whether it may be abstinence, condoms, or birth control it would reduce the amount of population that is increasing so rapidly. Since their population is growing so fast and there are not enough resources this might help transition food dearth in this particular place.

Saskatchewan has been contributing to farming tremendously to its country and globe by being Canada's most important grain producing region for exporting one third of the world's durum wheat. It has the second largest cattle herd in the country following Alberta. Saskatchewan has improved in technology a large amount in the last decade by incorporating precision equipment and farming into their agriculture. Saskatchewan is developing more efficient ways of producing crops by utilizing fertilizers, chemicals, and establishing precision farming.

Even though Saskatchewan may seem small with a population of 1.162 million people compared to Kenya with a 49.7 million population, it still has a lot of innovative farming technology to offer to citizens to help aid malnutrition in Kenya. The genetic makeup of our varieties is improving in our crops because of research and innovative technological advances that are increasing yields and the products are used for a variety of different resources rather just than one.

Better wheat varieties have been developed in Saskatchewan through research, better disease resistance and pest resistance meaning increased yields and potential increase in the amount of grain that can be produced. The varieties of wheat could be shared with Kenyans to increase their potential yields and to provide more food for their people. By using wheat to upgrade their crop they will be producing 10 times more food growth than what they would with older varieties.

Kenyans are facing malnutrition, citizens are starving, children are dying, the population is growing, food production is not meeting the need. The issues in this country can be alleviated to create a healthy life for them. These approaches to saving Kenyans are possible and encourage individual rural Kenyans to improve nutrition within their own families. The human race should all have the ability to learn, lead, and succeed.

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