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Somalia: Creating Healthier Environments through Education

Water, known by many as liquid gold, sustains the life of every creature upon the earth. Like many developing countries, Somalia lacks accessibility to sufficient and safe drinking water. Somalia endures its worst drought in sixty years; which places 3.7 million people are in need of immediate humanitarian assistance (*the Guardian*). Due to the devastating drought, Somalia's malnutrition rates are the highest in the world--currently exceeding 50 percent in many parts of the country (*Inside Toronto*). The absence of enough safe drinking water and food causes many problems; both which affect Somalia's economy and the overall wellness of its people. Drought directly affects the lives of everyone around it; the absence of water causes the majority of farmers' crops to shrivel up and die. The remaining, and small, harvest becomes high in demand to Somalis. As competition for a low supply of crops rises, the price per crop significantly increases, forcing families to reduce their food intake to minuscule amounts (*Poverty Reduction and Equity Group*). Reduced food supply represents one of the many effects of drought. Limited water supply drastically reduces civilians' consumption and use of water and food. This jeopardizes the health of civilians because they cannot participate in daily sanitation initiatives such as bathing, cooking and cleaning. In many cases, the limited amounts of water Somalis attain contains various pathogens and diseases, such as Hepatitis A and E, Cholera, Salmonella typhimurium, and E. Coli (*Charity Water*). Each of these diseases impairs its victims' senses and limits their ability to function. Untreated, these pathogens spread systemically and eventually cause death. The process in receiving healthcare in Somalia varies significantly from most stabilized countries. Healthcare is completely free to the public and operates on a walk-in system (as opposed to scheduling appointments) (Esse). A walk-in system of healthcare poses additional problems because it limits Somalis' access to a first-come-first-serve basis and turns many civilians away from the clinics. Perhaps the highest percentage of disease-stricken civilians lies within the lower class. Impoverished civilians are among the first to go hungry or lose their homes, and the last to receive an education (*Inside Toronto*). With an average Somali family consisting of 5 people; a mother, father, and three children, larger impoverished civilians will suffer additional hunger (Abdinisir). This tragic drought draws millions nearer to poverty, starvation and death. However, reducing the amount of infected people by means of education offers hope. Professional instruction from seminars and information booklets on water catchment, sanitation methods and genetically modified seeds methods empower Somalis to reach to a new level of thinking and rise above their poverty level. Education restores the lives of drought victims, saving Somalis from the plight of ignorance and teaches them methods of sustainability.

Located along the eastern horn of Africa, Somalia contains 246,199 square miles (or 776,000 square feet per person) of nomadic, farm and urban land (*World Factbook*). Nomads, also known as hunters and gatherers, represent the majority of the population and generate income from fish and livestock (*Nations Encyclopedia*). Farm families make up the second most popular occupation. Farmers practice dry land farming, a method specifically for dry weather climates, which allows crops to grow with less irrigation and maintenance. A typical Somalian farm family produces bananas, rice, sugarcane, frankincense, sorghum and corn (Esse). Bananas, rice and meats of sheep, goats cattle and camels serve as the most common foods in the average Somalian diet. While most Somalis consume enough meats, most remain deficient in fruits and vegetables. These crops primarily receive water from the Shabelle and Jubba river valleys (*World Factbook*). The rain and growing season generally lasts from October until April, while the harvesting season runs from May to September. However, due to the severe drought conditions, minimal amounts of water come from the Shabelle and Jubba river valleys. Clean water is limited. The limited clean water supply forces many communities to charge money for their water (Charity Water).

In an attempt to compensate for the missed rainfall, civilians desperately search for alternative sources of water. Those who cannot afford enough water or do not have access to a clean water source must search for water in every place imaginable. Many drink from holes in the ground or collect water from puddles or ponds contaminated with animal feces as well as many other bacteria (*Charity Water*). Somalis who collect dirty water drastically increase their chances of contracting the diseases and risk their health and the health of others around them. Currently, 80 percent of illnesses in developing countries are linked to water-borne diseases (*Charity Water*). Hepatitis A, Cholera, Salmonella typhimurium, and E. Coli are just a few of many water-borne diseases that render Somalis weak and vulnerable (*Charity Water*).

Why is there such an absence of clean water? While the current drought devastation continues to sweep across Somalia, the root of the problem lies with the absence of educational funding. Since 1991 Al Qaeda has infiltrated the Somali government, instilling fear into the lives of Somali people and, in many ways, implementing a despotic government. Shortly after the infiltration, citizens' hopes fell as Al Qaeda leaders eliminated government funding for education and sanitation initiatives (*the Guardian*). In many areas of underdeveloped nations, like Somalia, remain uneducated on basic methods promoting healthy lifestyles. Somalia's literacy rate continues to reach drastically low numbers; an overall 37.8 percent possess literacy skills (49.7 percent of males and 28.5 percent of females) while the average Somali child attends school for only three years (*World Factbook*). In order to live a healthy life and reduce the risk of attaining water and food borne diseases, certain practices of food preparation, rain conservation and catchment methods need to be implemented into Somalis' daily routine. These methods bring citizens closer to the ultimate goal of positive change through education.

The nonexistence of purifying equipment and water catchment systems holds a drastic impact on daily life in Somalia. Somalis do not have the luxury of access to tap water in their kitchens, or water faucets in their bathrooms--in fact, most civilians are without access to clean water in their town. Many Somalis rise at the crack of dawn, walking miles upon miles to replenish their water containers with water. At the tap, they wait in long lines to refill their five gallon water containers, hoping the well has enough water to spare for their family. If they are lucky, they will walk home with full containers. Many children carry forty-four pound water containers on their backs. Somali children fulfill a vital role in transporting water; however, the added time spent out in the sun and the transportation of heavy waste containers jeopardizes their health and forces parents to choose between educating their children or sending them to collect water. Many fill their containers with contaminated water for very few Somalis have access to clean water. Unfortunately, most parents can't afford to educate their children and sacrifice another able-bodied worker. The heartbreaking truth is that for many parents, choosing education over work is comparable to choosing death over life. Educational programs established to educate children and adults on water catchment systems possess incredible potential. Types of water catchment systems include: hand-dug wells, and rooftop gutters (*Charity Water*). By utilizing these systems, families can drastically reduce walking time between their home and the water source. Families will also increase their self-sustainability without having to rely on a community well for water (*Charity Water*).

Water purification also possesses great importance. Through sanitation methods, Somalis will have access to safe drinking water. With easier access to clean water, Somalis can utilize more water for every-day chores. The combination of proper food preparation methods and access to clean water sanitizes bacteria, further reducing the risk of water and food borne diseases. Together, with instruction from water sanitation officials, education on proper collection, preparation, and sanitation methods will greatly reduce the number of people affected by water and food borne disease.

Those who educate their children must have enough money to afford education and lose an extra helper. Instead of viewing education as a luxury, what if civilians thought of it as a service; a service in which children receive an education while learning new methods to promote healthy lifestyles through water sanitation and purification. If children spend more time at school, they reduce the risk of developing

diseases and injuries, which in turn, would help them live longer and be more productive. Through educational programs, families can receive water resource materials and adults may attend informational workshops. These workshops educate civilians on various water catchment, sanitation and conservation methods (*Project Wet*). Water education organizations like *Project WET* and *Charity Water* link productive work with the specific purpose of motivating children and adults to learn. As George Washington Carver said, “Education is the key to unlock the golden door of freedom.” These organizations strive to eliminate the choice between education and survival, and, in doing so, they make education possible for all.

Today numerous organizations like UNICEF live and work in Somalian refugee camps providing several services to millions of Somalis in need (*Inside Toronto*). While Somali civilians stay at the camp, the organization provides adequate health care, housing, water and food. Drastic measures of aid continue as government organizations devote millions of dollars to airlifting water in order to keep the civilians alive (*Inside Toronto*). The organizations’ ultimate goal of helping people in need is honorable; however, their plan forces the civilians to become too reliant on foreign aid. Organizations provide public shelters and give them standardized portions of food and water each day. Instead of working hard to become employed and rise above their poverty level, most Somalis take the organizations’ aid for granted. A key solution to this grand problem is education. A timeless philosopher once remarked, ‘If you give a man a fish he eats for a day, however, if you teach a man to fish, he eats for a lifetime.’ If Somali citizens receive an education that teaches habits of self-sustainability, they will benefit far more than if they remained in a camp and were dependent on foreign aid. Through education Somalis would learn of certain sanitation and preparation methods which would greatly reduce risks of catching water and food borne diseases.

In addition to education of precautions and sanitation measures that citizens take part in, scientists and researchers work diligently to develop improved forms of agriculture seeds. Some of these seeds include: split pigeonpea, groundnut, chickpea, cowpea, beans and sorghum. These seeds require less water than the same seeds of the past, allowing farmers to grow more crops. In addition to requiring less water, the seeds are resistant to insects and other pests who generally munch on the plants. Through the use of these seeds, plants will yield larger quantities of crops that are bigger and better looking (the Guardian). Positive effects of genetically modified seeds are supported with research from agriculture research institutes. ICRISAT (International Crop Research Institute for the Semi Arid Tropics) found a 38 percent increase of pigeonpea harvests when farmers used genetically modified pigeonpea seeds, while modified groundnut seeds increased yields by 59 percent. Higher yields of better produce allows farmers to charge less for produce, sell more produce and make more money. If more farmers use genetically modified seeds, more Somalis could afford to eat and grow healthy. One simple farming practice holds the power to save lives and promote positive change in the Somali community.

Education on water collection, sanitation as well as food production allow Somalis to reach beyond the plight of ignorance to attain information beneficial to all aspects of life. Knowledge empowers Somalis to think in new ways and create innovative ideas. These ideas may change the way their people grow food, or increase the steps they take towards preparing food. Genetically modified seeds require less water and produce quality crops of greater quantity. As farmers learn of the benefits of these seeds, more people will buy them and reap the benefits of their fine crop. Along with education of modified seeds, public instruction seminars held by private and government organizations address issues of improper sanitation, and the unsanitary procedures in which some Somalis collect food and water. Instructors then implement new methods of food preparation and water sanitation such as, using a pond-sand filter to purify water and cooking food over a fire to kill bacteria. Somalis who possess knowledge of preparation and sanitation methods have the power to dramatically reduce the risk of attaining water and food borne diseases. These methods promote healthy life styles and reduce the spread of water and food borne diseases. Instruction on various rain catchment systems holds an invaluable importance to Somalis.

With catchment systems like wells and rooftop gutters in place, millions of Somalians will access more water from the convenience of their home or town. Time spent collecting water can be used for something else like getting a job or going to school. Through relevant forms of education, life only changes for the better, allowing Somalis not only a convenient alternative to previous unhealthy practices, but an essential element of Somalian survival. In this time of extreme drought, no Somalian can afford to waste precious time and resources collecting water if they don't need to. Through education civilians learn measures of living healthy lifestyles, without having to rely on refugee camps to take care of their every need. Education promotes self-sustainability, innovative thinking and healthy lifestyles and opens endless doors to success. As time passes and more civilians learn of water catchment systems, sanitation methods and the benefits of genetically modified seeds, Somali civilians will unite to become independent of world relief organizations, and overcome the water crisis.

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