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### **Malawi: Finding Solutions for the Future**

Malawi is one of the poorest countries in the world, and yet the people of Malawi are known to be the most respectable and heart warming people. Malawians go through some of the harshest living conditions and instead of fighting and striking out in anger, they join together as a strong community and help each other. For many, life is a constant battle. “Over fifty percent of Malawi’s population is classified as poor and approximately twenty five percent live in extreme poverty conditions” (Simbani, Peter). Less than twenty five percent of the malawi people are above the poverty line.

Finding a proper home in Malawi for a family is very difficult. When living in the city for example “from Kawale and Mchesi and formal settlements in Lilongwe, Malawi capital city is less common. Building a house in the formal sector is expensive. Many residents are unable to access decent rental homes, due to high rental prices and lack of financing options, leading many to live in informal settlements, which houses the majority of the urban population” (Mkula). When families cannot afford to live in the urban areas they move to rural areas and build houses that do not have electricity, telephones, and running water. For example the Phiri family struggles by living on one dollar a day for a family of four. Most homes in Malawi are “mud huts, clay brick houses with iron roofs, and dirt floors” (Marmion). Houses in Malawi only have two bedrooms and a kitchen that also acts as a living room. The Phiri family lives in a rural neighborhood, and travel two miles every morning to work in their fields. The mother and her eighteen year old daughter, like other women and children work hard to provide a home for their families on a daily basis. “Martha must pump their water from a well and carry the water five times a day and scoop out debris if possible to prevent waterborne diseases” (Marmion). Most women will bare five children and most children will not make their fifth birthday, dying of starvation or diseases like Malaria and AIDS. Sadly, the people in Malawi can not afford to get sick, they don’t have the money to pay for medical attention or medicine. However, in most cases they can not prevent getting sick. Sanitation and the spreading of diseases is a huge problem because the people can not fight off any cold or flu symptoms quickly like the citizens in United States. If one family member gets sick its very likely that the illness will spread to other family members in the household and at least one family member may even die. Sickness is prevalent due to no running water, medicines, or hospitals close by.

The most popular jobs in Malawi are “agriculture, industry and services” (Manda and Makowa). With agriculture such a big part of Malawi’s culture you would think that they could produce more than enough nutritious food for the country, “However, most farmers have less than a hectare to grow and fill bulks with their crops. They also have declining soil, and fertility that has limited smallholder productivity” (Manda and Makowa). Malawi farmers work with a hectare, which is a average of 2.41 acres. Smallholder farmers grow their crops to provided for their families by, having food on the table and selling goods at the market however; dry or

flooded fields can become an issue to provide for their families. With such High demand for food and low supply of product and land, harsh weather conditions can hurt families. However “Farmers in the United States have an average of 440 acres of farmland” (Kassel) and if farmers in America have a bad season their production will decrease but will not plummet like Malawi’s farmers because farmers in the United States have updated technology, irrigation systems and lastly insurance to back them up if weather damages the fields.

Malawi’s land scape is filled with a diversity of vegetation and beauty. Plateaus and mountains cover most of the land, and beautiful beaches surround Lake Nyasa. Lake Nyasa is 360 miles long and about 1500 feet above sea level, making it the 12th largest lake in the world. The lakes in Malawi are a life source for farmers and families. The lakes are used for recreation but also a source of water for crops and drinking water for families. Wells are a source of water as well.

Malawi has two seasons, dry and rainy. Farmers plant and harvest in the dry season that begins in April and ends in October. The raining season starts in November to the end of March. As I began my research about Malawi, I learned that it has experienced recent devastation. Constant droughts and floods have greatly impacted it during the past few years. I spoke to Bettie Kawonga who is a “40 chances” award recipient from 2014 and I asked her for her regards on the devastation. As a Malawi citizen she has established a network of community Business incubation centers in Malawi to better the underemployed Malawian youth. She replied, “for the past few years now we have droughts. Last year we experienced flooding in many parts of Malawi. This year we are already experiencing flooding in some parts of the country. This is causing many families in the flooded areas (>5000 families) to lose their belongings, livestock, crops and will not be able to harvest enough food. Families will need staple foods, and government assistance in the short to medium term. Scientists are speculating that these events (droughts and flooding) are induced by climate change and will continue in Malawi and in other Southern African countries” (Kawonga, Bettie). Bettie Kawonga gave me the eyes and ears about Malawi’s government and what people are going through. From there I researched what President Peter Mutharika solutions are to help his people. The President is building dams to control the water levels in the lakes. That is a great solution, but the Malawi people also need something to help farmers and families to restore and clean up the damage.

When researching solutions of drought and flooding devastations, I went back to the native American farming techniques for irrigations. It is cost effective to create irrigation systems from nature. The only problem is Malawi’s drought and floods are more extreme and they need a solution that is stable and will work the majority of the time. I have found two possible solutions. The first solution is ETC (Engineering Solutions For Water Management). This company has products in over 32 countries, and their products have solutions for aquaculture, agriculture, and flood control. ETC will help Malawi’s flooding problem and have engineers establish water pumps to control water intake and outtake for large amounts of water. Malawi’s government will have to pay for the service because the machines are expensive and for large communities rather than households. The machines will clean up the water and create more jobs because, the machines need to be monitored and maintained. Many of the company’s cases have helped countries that have gone through the same environmental devastation. Cantón Durán Provincia

Del Guayas Ecuador, a city in Ecuador was dealing with flooding issues affecting the people. ETC came in and put in one of many of their machines a Movitec, which was able to evacuate about 264 gallons of water in one second and 792,516 gallons just in one hour. They can either move or hold the water in a more efficient way before any damage has occurred for families and businesses. In Columbia they installed their floating pumps to control water levels in a lagoon to avoid flooding. ETC machines are lightweight, handle large amounts of water, easy installation and start up. Malawi needs a solution before the damages get any worse.

Another solution comes from iDE, an organization that assist the wellbeing of people in poverty. Paul Polak, the founder of iDE believes improving the lives of people in need. iDE helps farmers by teaching them business skills like crop diversity, planting tactics, water storage, and market strategies. iDE helps farming but also financing, and sanitation. iDE financing strategy helps families get small loans to provide their family with better living conditions. This organization created a sanitation program called WASH. The WASH program creates solutions for unsafe water, teaching people proper hand washing including soap, and building toilets. Their solution to clean water is Super Tunsai ceramic water filters that are affordable and safe. The filter removes at least 99% percent of bacteria in the water. This will increase the survival rate for children in Malawi drastically. WASH helps countries all over the world by building toilets for families. iDE allows people to work or pay a small amount for their needs. iDE toilets cost thirty five dollars, with possible loans from the bank. Sanitation provides good health, decreases disease and provides a good school and work environment. iDE can clearly help the Malawi people to restart again and teach an efficient way of providing for families to stay healthy.

Families have lost everything they hold dearly due to the floods and droughts. This environmental devastation will continue for years to come and will affect the majority of the Malawi population. In the year 2015 “flooding in southern Malawi has submerged 35,000 hectares of cropland underwater, swept away livestock and displaced 174,000 people” (Stylianou, Ellie). in year 2018 dry spells cover the rest of the country and “with little or no rain still not falling in some parts of the country and fall armyworms still destroying crops will result in hunger over 3.8million people up to the next crop season”(ReliefWeb). Fall armyworms came to Africa late in 2016. These pests feed on crops and can take over fields they have been capable of causing economic damage and farmers are struggling to afford pesticides to kill off these worms. This weather threatens the agriculture cycle, vulnerable food security and all the people in Malawi. These weather conditions are spreading diseases to the livestock and the people. People can not prevent these diseases from spreading at home because the farmers can not even feed their family a healthy stable diet.

When we can sustain the agriculture in Malawi we can look upon another major issue in this country underemployed Malawian Youth. Families cannot afford their children to go to school so many drop out or can never afford to attend college. Instead the youth are sent out to look for jobs to support their families needs. The quality of education is poor which affects the youth when looking for jobs. Right now most of the Malawi youth are working in poor conditions, 25 percent are unemployed and 82 percent are under qualified in their current jobs. Bettie Kawonga is using her fund from her World Food Prize award to establish a network of community business incubation centers to better the underemployed Malawian youth, which makes up 60

percent of the population. Her centers are teaching and equipping the youth to become successful business people for the Malawian Dairy sector. The youth will have mentors that will guide and teach them the skills they need like, dairy husbandry, agriculture management, loans and savings, business proposal writings and lastly start up business funds to become professional and successful entrepreneurs. Bettie Kawonga believes improving the employment rate for the youth will improve lives by “sustainable growth in socio- economic development in Malawi, attain food and nutrition security, and reduce poverty”(Kawonga, Bettie). When the youth get the education they need and become successful, life in Malawi will change drastically.

Malawians go through one of the toughest living conditions in the world and join together as a strong community. You have heard the devastation happening right now in Malawi but, you have not heard what progress has been made. Local farmers in the Zomba district have joined together to create solar powered pumps and storage dams. The solar powered pumps pull water up from underground for irrigation and the storage dams are used for aquatic farms. The farmers are planting sweet potatoes and beans that can withstand the dry spells. This proves when it comes a time of struggle Malawian’s will work hard together as one country until everyone can support their families. Madonna the famous artist has been a big support of making a impact on the Malawian youth. Madonna has adopted four children from Malawi and In 2017 Madonna opened a children's hospital in the city Blantyre. This year she is celebrating her sixtieth birthday by launching a fundraiser for the month of August to raise 60,000 dollars for Malawi foundations rural orphanage, Home of Hope. The money will be used for meals, schools, uniforms and health care. Lastly the USAIDD’s food for peace is funding a two five year programs in southern Malawi. The programs are Catholic Relief Services (CRS) and Project Concern International (PCI). “Both of these programs are focusing on increasing access to and availability of diverse and nutritious foods, improving health of pregnant and lactating women and children under five and lastly building proper households” (U.S. Agency for International Development). These programs and fundraisers are helping with multiple large issues that Malawi needs help with to improve life in their country. This is a few examples of the progress that is happening now and will continue if other organizations support and help Malawi’s needs.

The people of Malawi are known to be the most respectable and heartwarming people but with floods and droughts due to the climate change are affecting crop production, and families lives. The Malawi people will starve of hunger in the coming years during the climate changes. If we do not act now and help support Malawi, many people will die of hunger and eventually turn to violence to make sure their families will have food on their plates. To help start preventing this environmental disaster from becoming something way worse; I believe that the business and organization that I found will be one of many solutions for preventing starvation and to help Malawi get back on their feet again. ETC will transport and control the water intake and outtake levels for the dried up lakes that is one of the country’s water sources; they can transport large amounts of water away from submerged fields so the people can clean up the damage and have land to start a life again. Lastly ETC machines will create more jobs around the country which will help stabilize finances for families. iDE will come to teach the people how to efficiently live off the land of rural and Urban communities and will educate them on sanitation, business skills, market strategies and financing. The last solution is Bettie Kawonga’s incubation centers that will better the Malawi youth. These solutions will all make a difference to Malawi’s future.

There are so many Organizations and Business that can help Malawi sustain Agriculture and employ the youth. Malawians do not need additional handouts but needs to strengthen themselves with new technology and education. If we can help empower the youth and all people in Malawi their success will be reality. This brings to mind a famous quote, give a man a fish and you feed him for a day but teach a man to fish and you will feed him for a lifetime.” We need to help Malawi and look to the future by educating and empowering the youth. Young people with the right guidance can lead their country out of hunger and live a healthy safe life. Families will be able to afford to go to doctor’s appointments to grow their knowledge about diseases and how to prevent them, effecting Malawi’s death numbers to drop and life span to grow higher in age. Families will be able to afford to purchase or build a proper home that has all the facilities they need to grow a healthy family. Children will attend school and attend college to work for a degree to help their family but also the economy to improve roads to financial aid from the government. Lastly the food production will increase and give the people more opportunities to put healthy meals on the dinner table, and food security will increase in huge numbers and will affect everyone in Malawi. World hunger is a never-ending battle, but if we join forces by donating to charities which help global poverty issues we can start a chain reaction by making a difference in people's lives globally.

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