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Guatemala: Trapped, Forgotten, and Dried, But Not Beyond Repair

Close your eyes and picture a beautiful, sand-covered coast. There are palm trees hugging the edge of the sand, gentle waves lapping at the coast, and the purest shade of aquamarine in that lively salt water. Now imagine the same nation that is home to hundreds of these idyllic treasures also bears the sixth-worst rate of child malnutrition in the world ("Malnutrition in Guatemala"). In this nation, the Central American country of Guatemala, why is food security such a pervasive problem, especially for being the most populous nation in Central America and a nation where 13.2% of the total gross domestic product comes directly from agriculture ("Central America and the Caribbean: Guatemala")? How could this possibly be?

There are many factors that have contributed to the creation and spread of the national crisis of rampant malnutrition in Guatemala: chief among them are unconducive terrain for attaining aid, widespread political instability, and a devastatingly long drought. All of these factors combine to make the horrendous plague of malnutrition that has stricken nearly half of the nation's children ("Malnutrition in Guatemala"). Yet, solutions exist to these problems, such as a stronger infrastructure, stricter codes of conduct in public offices and practices, and the advancement of food sciences and drought-resistant plants. With the help of foreign allies and with a continued respect for native populations, these solutions will mindfully, efficiently, sustainably, and permanently end the malnutrition crisis in Guatemala.

One of the major contributing issues towards malnourishment has been that areas which suffer most devastatingly from hunger cannot always reach help that is provided from outside sources, such as the United Nations' World Food Program, or the WFP. Some of the WFP's bases, which offer medical services and Vitacereal, a mixture of corn and fortified soy, cannot be accessed by the country's most rural residents who have to walk nearly two hours through dangerously mountainous areas (Escobar). Many of these rural residents are families with small children, and it is these children who are hit the hardest by this epidemic. A steep percentage of malnutrition among the nation's infants and children has led to staggering numbers of cases of marasmus and kwashiorkor, both nutrient deficiency diseases (Escobar). The treacherous journey that many families would have to make, often times with small children, in order to receive the aid being offered to them is simply not worth the risk. What is the point of going to obtain help if accessing the help is riskier and more taxing than simply staying at home and resting in the hopes of getting better? Even though there is aid available to some malnourished Guatemalans, malnourishment still afflicts many of them because the journey to access this aid is too dangerous.

Though difficulties with traveling through the terrain are certainly impactful, the issue of political instability that rattles the nation compounds the detrimental wave of malnutrition. Guatemala is not the region's poorest country. In fact, it is the ninth richest country based on GDP out of the thirty-two nations in Central and South America ("Central America and the Caribbean: Guatemala"). This wealth, however, is not evenly shared among its people. From the 1960s up until a peace treaty was signed in 1996, a brutal civil war tore Guatemala apart. 83% of the 200,000 deaths were Mayan during the thirtysix-year war. In addition, a "U.N.-backed Commission for Historical Clarification...concluded that the vast majority, 93 percent, of the human rights violations perpetrated during the conflict were carried out by state forces and military groups" ("Timeline: Guatemala's Brutal Civil War"). Not coincidentally, it is the Mayans who suffer the greatest from malnutrition. The former vice president of Guatemala said this about the situation: "These people were totally abandoned in the mountains with no infrastructure, no education, no health" ("Malnutrition in Guatemala"). Throughout and after the war, the native Mayan people were and continue to be forgotten. It is because of former government abuse during the war and continuing government ignorance that they are the group most affected by malnutrition. This trend was observed by the University of Denver's Assistant Professor in the department of anthropology Alejandro Cerón in a study of how indigenous people were treated in the public health care system. He said they experienced "discrimination in access to care," "abusive treatment," and "neglect of professional ethics" (Cerón). His conclusion is that "a human rights-based approached...can provide a basis for developing a more inclusive and equitable health system for the entire population" (Cerón). It is clear that the government's ignorance of the treatment of indigenous people in the health system has contributed greatly to the furtherance of these people's afflictions, including malnutrition. Guatemala's government has turned blind eyes to the hardships of the indigenous populations within the health care system, and this has played a large role in the spread of Guatemala's malnutrition problem.

Yet while political instability exacerbates malnutrition greatly for the indigenous populations, there remains one factor that indiscriminately impacts all Guatemalans and their malnourishment: the drought. The continuous four-year drought in the country has led to a dramatically decreased crop yield in the nation ("Food Assistance Fact Sheet"). For a nation that thrives off of a diet of corn and beans, two crops that require up to 27,000 gallons of water per acre for a substantial yield, the drought has clearly devastated the native residents (Markham). The drought has also contributed to the proliferation of *roya*, also known as coffee rust, that decimates coffee plants throughout the country. As coffee, along with sugarcane, corn, bananas, and beans, are the top five exports of Guatemala, the gargantuan toll that this fungus has caused is obvious. In addition, agricultural jobs comprise 31.4% of all of the labor force of Guatemala ("Central America and the Caribbean: Guatemala"). This means that in addition to the direct affect the drought has on the shortage of raw materials to produce food, the drought has had the added side effect of increasing unemployment. This increase in turn translates to the inability of parents to feed themselves or their children, thus furthering the cycle of malnutrition. Since 2014, this drought has laid waste to Guatemala's agriculture, thus increasing the amount of malnourished individuals in the nation.

However, to each of these largely formidable impediments to nourishment, there exists a long-lasting and advantageous solution. The first issue, lack of access to pre-existing aid, can be combatted with an improved infrastructure. The Guatemalan government must make the creation of safer, more efficient, routes, and thus the creation of more job opportunities, a priority as the country continues to combat malnutrition. With the creation of more jobs such as engineers, builders, and road workers, not only will access increase as routes to aid become safer and more reliable, but there will be more diversity in the work force. Today, only 7,489 kilometers of Guatemala's 17,621 kilometers of roadways are paved (Central America and the Caribbean: Guatemala). Paving these roads, as well as creating new, reliable routes leading from rural communities to aid centers, will not only increase safety, ease, and efficiency of travel from these more rural location, but it will also help to diversify Guatemala's labor force. As stated before, 31.4% of all Guatemalan workers labor in the area of agriculture, so with more jobs created through infrastructure, those agricultural workers who struggled or failed during the drought will now have jobs on which to rely. In turn these workers will be able to feed their families, and both the extremely rural citizens and formal agricultural workers will experience increased nutrition and calorie intake. A better infrastructure will yield higher rates of calorie consumption and nutritional foods as those presently with little to no access will be able to reach aid, and those who cannot afford to feed their families because of other industry shortcomings will be able to have new sources of income with which to put more food on the table.

Still, increased access alone cannot solve the malnutrition crisis: once these rural, often largely native communities gain dependable physical access to aid, there must be stricter and clearer regulations put in place to ensure that these and all other citizens will receive fair and equal treatment. As Alejandro Cerón's study concluded, "Addressing mistreatment in public health settings will involve...profound, complex and sustained interventions at the programmatic and policy levels beyond the strict realm of public health services." Such interventions could occur at any level of practice, from implementing anti-discrimination courses in nursing school to sending highly trained, independent inspectors to hospitals and aid centers in order to assure that proper care is given to all patients. Human rights must remain at the forefront of all who practice medicine and prescribe treatments so that all people may be seen equally throughout the medical field. Creating a government-sponsored committee that includes a UN human rights expert, rural and urban doctors, and both native and Hispanic politicians to build and shape new anti-discrimination policies could drastically decrease the number of malnourished Guatemalans. With new codes allowing for every citizen to receive equal treatment, the malnutrition rate in Guatemala will decline immensely.

But one large barrier to the end of malnourishment in Guatemala remains that effects all citizens equally, no matter where one lives and no matter one's heritage: the drought. This rampant drought has led to the third year in a row of low-yielding harvests, contributing greatly to the 915,000 people who are "moderately to severely food insecure" ("Dry Corridor"). There are ways, however, of putting an end to the devastating effects of this drought. Food science is the main conduit for change: there need to be new UN- or ally-funded Guatemalan-based food laboratories constantly conducting research on the country's main agricultural exports. These scientists can help in spearheading studies of changing the genetic makeup of these exports to create hybrid breeds that require less water as the drought continues indefinitely. These food scientists could also create a feed that is denser with nutrition so that livestock can continue to grow and feed people, even when some of their corn-based feed becomes challenging to grow. Food science must be at the forefront of the charge to end malnutrition in Guatemala, so that the nation is prepared to feed its people healthy, nutritious food in any type of conditions

While all these solutions are great, there are things to keep in mind in continuing forward with enacting

them: Guatemala cannot end malnutrition on its own, and whoever helps them cannot disrespect the cultures and customs of the people just in an effort to help. So far, in response to the crisis, the United States, through the US Agency for International Development, gave roughly thirty million dollars to Guatemala in 2016 and 2017. This money has been utilized to educate communities on how to better manage their natural resources, as in how to continue producing them sustainably and in a way that continues to yield them the most profit. The money has also been used to boost access to more diverse jobs so that, just as with increased infrastructure, as the drought continues indefinitely, rural Guatemalans have jobs on which to fall back rather than be completely out of options for employment. USAID also has the more specific goals of improving maternal and child healthcare and increasing household access to food. Some of the ways that these two groups can be specifically targeted for aid is through increased educational programs that have guaranteed meals, more sanitary spaces, and safe faciliteis. A video created by the nonprofit Girl Effect, a nonprofit which seeks to keep impoverished girls in school past the age of 12, says that if girls don't stay in school past puberty, they will live a life of arranged marriage; young, dangerous, and frequent childbirth; and eventually prostitution in order to have funds to raise their children. However, they say that if girls stay in school through puberty, they will be educated, and therefore be able to make a living for themselves rather than sell themselves and their bodies. Not only this, but their children will also be healthy and more likely to get a full education (The Girl Effect). By increasing the standard of education in Guatemala, more children, especially girls, will stay in school longer and become healthier, well-managing adults who can more effectively feed their families. In addition, USAID's Office of Food for Peace, or FFP, "provides assistance in the form of cash transfers, for food, food vouchers, cash-for-training and cash-for-assets programs" ("Food Assistance Fact Sheet"). These measures have been and continue to be very beneficial and appropriate for the issue. Most of them, including the training programs and increased access missions, focus much more heavily on long-term resolutions rather than simple bandages that only temporarily ease the issue. The fact that the main purpose of these funds from the United States is to educate citizens rather than just send cheap meals to them indicates that the people of Guatemala will be able to work with the United States to solve the issue as opposed to being agency-free observers of their own crisis. Unfortunately, the new White House administration has declared that the US will only be affording Guatemala eleven million dollars in 2018, a mere third of what we have been offering for the past two years ("Food Assistance Fact Sheet"). This means that some of the programs in Guatemala will become under-funded and thereby stagnant in their efforts to assist. But, as stated previously, the measures are preventative measures as well as active solutions, not simply active solutions, so citizens are already on the path of improvement. With outside assistance, Guatemala will be on a much faster route to ending malnutrition, but as well there needs to be a longstanding respect for native cultures who wish to continue their traditional practices. The best way to ensure that every party is happy and healthy at the same time is to establish very communicative relationships between natives and scientists, so that as healthier, more drought-resistant plants are created, they can be slowly adapted into the native cultures. Typical farming practices, foods, and dishes of these culture must be kept at the forefront of development for these specific cultures, so that they may stay alive in the healthiest way possible. Scientists can work on making crops already grown traditionally by native culture more nutritious, rather than completely change the foods they have been growing for centuries. Outside assistance from other countries and international bodies, as well as open communication and respect toward pre-existing native cultures, will help Guatemala overcome their malnourishment problem much more quickly and peaceably.

It is clear that Guatemala suffers a devastatingly large amount from malnutrition. Its younger population

is the most affected, which means that the upcoming generations, who should be full of bright ideas of ways to face this problem, are unable to help. Guatemala needs to address its internal discrimination issues and help further its citizens rather than hinder them, but they cannot do it alone. The United States and United Nations must remain allies and benefactors of Guatemala if it is to overcome this issue. There is hope, though. In August of 2017, The Guatemalan President of the National Congress Oscar Stuardo Chinchilla, and the United Nations Development Program executive director David Beasley pledged themselves on a signed commitment to bring an end to the rampant malnutrition in the nation. The long-term plan is to reduce the number of malnourished individuals by half by 2030, with "budget support, clear objectives and goals, and activities that will provide stability and sustainability to the efforts implemented by the state" ("Guatemala Congress Signs"). Not only that, but currently 34.5% of Guatemala's population is under the age of fifteen, meaning that the country is in transition more from unstable high birth and death rates to stable low birth and death rates ("Central America and the Caribbean: Guatemala"). Their people are preparing correctly for their nation to become one of a lower population growth rate, or a nation of stability and reliability. This devastating issue of malnutrition has not gone unnoticed, and with full UN and government support to cut malnutrition down, the issue is well on its way to betterment. Though, still, it cannot be done alone. Guatemala is a beautiful nation with amazing people: protecting them from the dangers of malnutrition must be a top priority of its allies and the nation itself in order to continue its growth.

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