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Hide and Seek: The Nigerien Health-care and Water Crisis

Most days in rural Niger begin the same way as they have for thousands of years. Wake up, sweep the dirt floor, collect the little water available, and wait for the man of the household to return from the city where he is looking for work. The afternoon brings more chores. Feed the family, tend the crops, and find water for your sickly livestock. This may not sound like much of an existence to an American, but compared to other Nigerien families, this rural family is very well off. They have access to crops, and livestock. Most Nigerien families aren't this lucky.

Niger is a small country just north of Nigeria. The northern half of the country is entirely covered by the Sahara Desert while the southern half provides somewhat more suitable for farming. However, this land is extremely dry and very arid. The only crops rural families can plant and harvest in these dry conditions are sorghum and millet. These provide minimal nutrients as compared to Western crops, such as wheat, corn, and soybeans and are extremely hard to digest. About 82% of Niger's population lives on this diet and it is grown on the small percentage of the land is arable; 15% to be exact (Altitude). This low percentage of arable land is due to the encroaching Sahara Desert. With such a high rate of desertification the country is quickly losing more and more arable acres of land to the Sahara. In addition to sorghum and millet, Nigerien farmers raise cattle. Nigeriens usually raise camel or Bororo zebu a type of cow. The cattle that are produced in Niger are not for eating in Niger, but for trading or selling to other communities or countries who then use the cattle to eat or to use as working animals. This trading brings in a considerable amount of money for the herders. They are also used for some land working, but this is limited. Unfortunately these valuable resources are the first to suffer in the many droughts that plague this nation. Most farmers have had to sell their cattle for a fraction of their worth, as most herds have been drastically weakened by poor hydration, sickness, and malnutrition.

Drought has always been a huge issue in Niger. Near for this natural disaster occurrence was in the year 2005. This year brought little rain and numerous locust invasions destroyed most of the crops throughout the country. Merchants from neighboring countries, such as Nigeria, saw the drought coming as the crops began to fail in Niger. The merchants bought up as much of the Nigerien farmers' poor harvests as they could and sold them for ridiculously large sums of money back to the Nigerien population. No one could pay for the food, resulting in the deaths of hundreds of thousands of Nigeriens. Farmers needed to feed their families, so they sold all of their harvests from the future season to pay for the food, knowing that they couldn't meet the demand the merchants expected for the coming season. This meant that most of the farmers had launched themselves into a cycle of unbreakable debt, forcing them for years to give all of their harvests to the foreign merchants rather than their families. Put all of this together and it becomes a devastating hunger crisis. 2010's famine, however, is projected to be far worse; predicting to claim near 7 million lives if aid does not come to Niger (SOS Children).

Men are usually the breadwinners as well as the harvesters and planters for their families. In Nigerien culture, these qualities make men the ones who need the most nourishment and the best pieces of food, meaning the women and the children are left with, most times, nothing more than the table scraps. Because of this cultural belief, children do not get the nourishment they need. To further exacerbate this problem, local superstition forbids women to feed their newborns with the rich breast milk known as colostrum, which gives newborns the jump-start they need for a healthy life. Instead, newborns are feed water until its mother's breast milk is "normal" (Altitude). The water fed to the newborn is usually contaminated with hundreds of thousands of microorganisms, including those highly infectious diseases

such as: diphtheria, cholera, typhoid fever, hepatitis B, and diarrhea (Communicable Diseases, 1) (Niger Healthcare). These diseases can be fatal, especially to already extremely underdeveloped and undernourished newborns. Consequently, an average of one out of six newborn Nigerien babies will die before the age of one (Altitude).

This chronic malnutrition and severe dehydration both happen as a result of two small little details; limited access to fresh water and proper education. Cleaning and dealing with food as well as proper education about health-care, the benefits of doctors, and disease control are subjects that every citizen in every country should know about in order to better their lives and to stay as productive and healthy as possible.. Without fresh water, babies become sick, families go without liquids, and failing farms have yet another obstacle to productive harvests and healthy livestock. Without education, children of the next generation have no source of bettering themselves let alone their country. There is very little formal post-secondary schooling or training for children and adults alike. As a result, the level of illiteracy in Niger is very high. The illiteracy rate in 2010 (anyone person 15 years old and older) averages at a staggering 71.3% of the population as being illiterate (Index Mundi). With such a high rate of illiterate adults, it's no wonder the government is stagnate and people are unable to communicate their needs to others. Literacy is also a barrier preventing farmers from accessing updated agricultural techniques therefore Nigerien farmers continue to use practices that are outdated, extremely tiresome, and very physically draining.

Lacking sources of proper education, Nigeriens cannot restore their once short-lived, shaky democracy. Niger's government is highly unstable and extremely poor. The country has gone through citizen regimes, military coups, dictatorships, and finally a French style semi-democracy, consisting of a prime minister and a president.(CIA-The World Factbook) Although short-lived, Niger did adopt a democracy in 1999 after the former leader, Ibrahim Bare Mainassara, was overthrown and assassinated by a coup of civilians and political activist groups. The next leader, Daouda Mallam, established the countries fifth republic, which was based off of a French style, semi-presidential democracy. Niger drafted a new constitution and elected its first president, the incumbent Mamadou Tandja. The incumbent president, Mamadou Tandja, was elected in 2004 in a fair and free election with 65% of the vote(Niger-State Department). However stable their government may have been, they now are slipping back into old habits. They also are one of the poorest governments in the world.

Not only is the government highly detached from its citizens but it is also, unfortunately, slowly dissolving under Tandja's rule. In May of 2009, Tandja dissolved the National Assembly, giving him control of all of Niger's townships. This was followed by the dissolution of the Constitutional Court in June, which slowed down elections and extended his power (CIA-The World Factbook). The National Assembly headed elections and was essentially the Congress in Niger with all of its incumbents elected by the civilians of Niger. The Constitutional Court interpreted the Constitution and kept the government running smoothly and in its place. With the dissolution of both, Tandja has no one to answer to and can therefore rule as long as he wishes unless a military or civilian coup threatens his empowerment. Therefore, Niger has no way of electing someone who will get them out of financial distress and debt, leading them in a vicious cycle of drought, water shortages, and malnutrition as there is no governmental help or money to give to the country for much needed infrastructure, agricultural, and educational resources. Most children become sick from the lack of food and water and most, especially those under five, get many diseases that are treatable, but there is hardly, if any, health care for rural families meaning most children will die from these illnesses.

Health care in Niger is a major issue. Per 100,000 people, there is an average of 3 doctors and 22-23 nurses. Most people live in the rural parts of the country, making travel to the city where these doctors are near impossible. In 2005, as the devastating drought loomed, over half of Niger's population was not able to access health services. For others that could travel to a health facility, most could not afford the

services as prices for health-care in the country are sky high (WHO International). Niger's government only spends about \$5 per person for health-care per year (Gureco). Only one third of women in Niger receive prenatal care and other medical services (Degan). One reason for this is that most women believe in home births and natural remedies. Births are often unsanitary, unassisted, and with no medical assistance (Degan). The factor of the distance from a hospital, poor service once there, and the price all play key roles in most mothers decisions to have a home birth.

Nigerien income has been historically limited due to constant droughts and the resulting bad harvests. The Nigerien government has not been able to play a role in the reforming of the economy and improving the life of their people due to their lack of tax revenue and instability. The income for Niger per person is only about \$630 per year (Gapminder), compared to the average income per person in the United States is \$41,674 per year (Gapminder). Niger's government only makes about \$200/year more than the average Nigerien does, which is then used for defense and debt payments (US Dept. of State). Although Niger was given enhanced debt relief in 2000 under the Heavily Indebted Poor Countries program (HIPC), most of their money still goes toward their heavily reduced payments and defense.

With no water sources, constant water shortages, no money either in the home or in the government, a dubious government, very little food with little to no nutritional value, and an ever-growing population, Niger needs a dramatic and intricate plan of action. Niger doesn't just need food; they need to know the techniques and skills of keeping their food clean and their crops as productive as possible.

The World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) are two key players in Niger's health care crisis. Both organizations own a total of 48 hospitals in the country, 24 each (World Food Organization). WHO has recently launched a new health care project in the country to fight malnutrition and train the countries few doctors on how to spot and treat the disease that appear as a result. The project also targets and follows up on any child under five years old, hoping to bring down the countries mortality rate of 1 out of 7 child deaths. In April of 2010, WHO was granted \$635,000 dollars to start this project as wells provide much needed medicines to the WHO hospitals throughout the country (World food Organization). However, this is not enough. Even though one third of Niger's women will visit a hospital owned by one of these two organizations, that leaves two thirds of women without health care. And of the one third of women that do go to hospitals, half of that group only go if the birth has gone wrong and there are complications (UNICEF). Also, most of those babies born in the home develop many diseases due to poor after birth care as well as lack of proper nutrients from the mother's milk. These issues often result in thousands of unnecessary newborn deaths.

WHO, UNICEF, and all organizations like them need to focus on educating the people about the benefits of health care as well as providing it. If citizens of Niger don't even know about or have access to a hospital, they definitely don't know all the benefits that hospitals provide. Educating about diseases, healthy birthing, and nutrition should be the first service done for Niger, not just providing free health-care to those who find their way in to the hospitals.

There are many organizations that could help and also benefit from Niger, especially the World Bank. The World Bank has done nothing for Niger except throw money at their problems. Niger needs to have any money given to them put into specific projects. When the country is simply handed money, the government will not use it to benefit the citizens. The money will go to either debt payments to other countries or defense instead of food, infrastructure, or education like it should. Most projects funded by the World Bank support cereal banks, which can acquire food such as millet and rice and construct store houses for them, and land management projects, especially for desertification(The World Bank). However, these projects and loans are only given when a dire situation arises, meaning that Niger is already suffering before it can access these monies. This is an inefficient policy because every problem is linked to the next. Drought means further desertification. A failed crop in a drought season means the

farmer and his family don't know how to deal with the changing weather or they simply don't have the resources. Bad or no harvests mean people starve and die from malnutrition. The next season will continue the cycle. Niger needs to have a constant stream of support, finances, and plans so they can further all of these things in order to make a stable community. The World Bank needs to not only find the finances to give to Niger, but invest those finances into other organizations that will do specific works throughout the country. Intricate infrastructure plans such as new, permanent hospitals, irrigation systems that connect whole communities and cities rather than one township having its own. Further research should be made on stopping desertification as well as better infrastructure to keep the desert out of the country and restoring the land to its once lush landscape. These are things that are essential for a community, especially a farming community, to thrive.

Another essential part of Niger's community is water. 64% of rural Niger doesn't have access to any water source ("Safe Drinking Water is Essential). In urban areas, human waste covers the streets due to poor sanitation, contaminating the little water that the cities do have. Long lines and few wells means not everyone is able to receive the amount of water their families so desperately need. In rural areas the situation is even worse. Although there is a smaller chance of fecal matter contaminating the water, the sheer distance from any water source makes it near impossible to get water. Rural families need to travel to the nearest city to even find a working well. And since travel is on foot, women and children must walk for hours just to reach a well (Drinking Water is Essential). The only real water source is ground water, which is obtained through the digging of large wells that are often in the cities and very far apart. These wells are very primitive, not lined with cement, mere holes in the ground. Because they are not lined with cement bacteria from the ground often seeps into the water (Drinking Water is Essential). The World Bank and UNICEF are working to alleviate some of these issues by adding pumps to these wells and lining them with cement so that bacteria and other diseases from the ground cannot contaminate the water supply. WHO also funds many drillers and manufacturers who can build an average of 100 wells a year which helps an additional 25,000 people (Drinking Water is Essential). Although many citizens are being helped through the digging of these wells, the wells locations are still making it hard for people to access fresh water. The wells are only in certain places, and the money Niger has received from WHO for the building of the wells will only go so far. Monitoring of the wells will have to happen in order to keep the wells active throughout the cities of Niamey, the capitol, and Agadez, two of the most populated cities in Niger, as Niger does not receive enough rain to keep them filled for the demand. And if any well runs dry, the citizens in the town go thirsty.

There really is no other way to solve Niger's water problems. Not only is there high demand for the substance, but the aquifer that Niger shares with Mali and Nigeria is quickly running dry. The Iullemeden aquifer stretches an expanse of 500,000km² under the countries of Mali, Niger, and Nigeria. These three countries share the aquifer and use the funds given by organization such as OSS, WHO, and UNICEF to drill into the resource. Unfortunately, due to low rains, drought, and desertification, this massive resource is quickly running dry. Population growth also plays a role in the disappearance of this aquifer. In 1970, 80 million km² of water annually were being used to benefit these three countries. In 2004, the amount of water used shot up to 180 million km² of water used annually. The population growth in those years went from 6 million inhabitants to 15 million and that number is expected to double by 2025. Climate change is also taking its toll on the aquifer. Water is evaporating out of the aquifer and due to low rains, that water is not being replaced at the same rate that it is being taken. WHO and UNICEF really are doing the best job at handling the situation (Iullemeden Aquifer,). However, some things that could be changed about their programs are how water is distributed. If water consumption is monitored and wells are able to be kept active, Niger can continue to expand infrastructure for wells, giving more and more of the country safe access to water as well as maximizing the number of wells that are active.

Niger has many issues that need to be resolved. However, they are a very teachable country that, if given the right opportunities, has high potential for being a real world player. As of right now, however, they

just don't have the resources to reach their goals. With vast uranium deposits that could bring in millions of dollars for the country, Niger needs a place to start in order to use these deposits for their benefit. Without the rest of the world's help, this country with this potential for success, will flounder.

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