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Imagine that you were deprived of the right to eat. Imagine not having the luxury of being able to utilize markets where food is of great abundance. Imagine enduring the painful sensation of hunger, reminding you that you were forced to divide your only meal of the day amongst your children. If you feel frightened by this, you should; because this is all too real for many families across the world, specifically in developing countries like Venezuela. Food insecurity is occurring in every corner of the globe and threatens to take the lives of millions. As Americans, the majority of us seem unable to grasp this truth because we are privileged in ways some could only dream of. Although some Americans may be food insecure, not many experience the severe starvation known by many Venezuelans. By the year 2050, the world's population is expected to reach over nine-billion. That fact alone is alarming in the agricultural industry, which is solely responsible for feeding every human living and breathing on planet Earth. Reaching sustainable levels of food production has always been and continues to be the primary focus in agriculture today. So where are we, the scientists, farmers, and those working in the industry, in achieving this? We surely are not there yet, but specific steps can be taken in these countries that are facing hunger issues to produce more food. The first step to fixing a problem is, obviously, identifying it. In Venezuela, it is evident that farmers are unable to properly access markets to sell their produce. Improving access to markets through infrastructure development could potentially take Venezuela from a country with very minimal food production, to a country with food production near optimal levels. Needless to say, once an issue is acknowledged, action must be taken upon it. Which in this case would mean improving access to markets through infrastructure development or in other words, building roadways.

Through the use of demographical information, agriculturalists are better able to identify the reason behind struggles in reaching agricultural sustainability. Similar to other South American countries, the people of Venezuela originate from three major groups: Caucasians, or pardos, who tend to be more of city dwellers: Indians, who are seen in large numbers in the Amazonian region, and blacks; who live mostly along the coastline (Venezuela, Countries and Their Cultures). Surprisingly, this predominantly white-controlled country has seen little to no ethnic conflict. Top positions in Venezuelan government are usually occupied by the lighter-skinned citizens, but there are no severe differences in the treatment of the differing races. The average size of a family in Venezuela, as of 2012, was four people. A typical family contains (two) parental figures as well as younger kin whose numbers vary depending on various factors but average out at three (Venezuela, Central Intelligence Agency). This is information has stayed relatively consistent throughout the years.

The lifestyle of a typical Venezuelan rural farm family is comparable to those of other countries facing measurable food shortages. Because of limited access to technology, the farmers who occupy small ranches are forced to rely on old techniques to tend to their crops (Venezuela, Nations Encyclopedia). The most common crops produced in Venezuela are corn, rice, coffee, and cacao seeds (Venezuela Agriculture). These small ranches are unequipped and unable to produce adequate amounts, though, even for a small village. As a result, one ranch will typically only feed two to three families, one being the farmers. Concerning their diet, Venezuelans eat three main meals; a large breakfast and mid-day meal, and then a smaller portioned evening meal. A very popular dish is called arepas which are composed of a filling, such as ham and cheese or bacon, and then surrounded by a thick fried disk of cornmeal. These are eaten throughout the day as snacks or may sometimes accompany a meal. Most Venezuelan dishes are not complex and derive from mainly two or three ingredients because they do not have a variety of food to choose from (Typical Venezuelan Food).

Another struggle for Venezuelan farmers, as well as other citizens, is having access to healthcare. A recent collapse of the economy had a ripple effect greatly impacting the hospital services in the country. Hospitals lack the basic medicines and other materials needed to tend to patients (Castro, Maolis, and Yvas). As the number of patients increase, the number of doctors has only been decreasing at an exponential rate. With little pay, the doctors have no reason to stay and eventually leave. Hospitals have very little staff and it is rare for a citizen to be able to see a specialist even in the urbanized areas as a result of the inadequate pay. In situations where people are unable to see doctors and receive medicine, there are many problems that follow. If a disease is contracted, the only thing that can be done is wait and hope for an improved condition. For example, the recent outbreak of the Zika virus, which hinders prenatal development, has hit Venezuela hard. The Washington Post explicitly stated, "Venezuela faces the worst case scenario as the Zika outbreak expands" (Partlow). Even for simple medical problems, there are no ways for citizens to receive care or treatment. One Venezuelan doctor stated, "Little by little, medical care is disappearing" (Partlow). This hinders agricultural productivity because farmers are not able to stay healthy year round. Farmers often have to surrender to their illness and give up on farming. That means one less source of food, leading to higher levels of food security.

Of the many things that could help resolve limited access to healthcare in Venezuela, education does not seem to be one of them. Education in Venezuela does not seem to provide any help for the increasing need of hospital personnel. The Venezuelan literacy rate is one statistic that has increased, rising from 73% in 1970 to a current 93% (Education in Venezuela). Although the number of private universities is increasing, education levels in Venezuela are following the same trend. Only 20-30 percent of the Venezuelan population ever obtain a degree. Those 20-30 percent who do end up receiving higher education tend to stay in urban areas anyway, away from the rural areas where the farmers could use them. After all, one cannot blame those who have received higher education for wanting to live in urban areas because there are more job opportunities that offer higher pay.

A result of strengthening infrastructure in Venezuela would certainly be improved healthcare and education circumstances. This is due to the fact that the flawed economy in Venezuela would be stimulated by a stronger infrastructure. Investing in infrastructure would mean many new opportunities for Venezuelan companies to grow and expand. Moreover, citizens of Venezuela would experience boosts in employment as a direct benefit of a better economy. As mentioned above, the current inadequate pay for healthcare officials is an issue that is greatly affecting Venezuela but, a boost in employment gives the hospitals who need workers money to pay them. Just as it would give schools the opportunity to pay for educators to cultivate the next generation of students that are going to face the impending issue of food insecurity.

Perhaps the most significant barrier to increasing agricultural productivity in Venezuela is that of the farmers having limited access to markets. Venezuelan farmers struggle to find markets to bring their produce to because there are no ways to easily get there. The problem is not that there are no places of market, the problem is that farmers do not have roads to travel by to bring their produce to the markets. In the rural areas where the farmers live, improving access to markets through infrastructure development could be the solution to the absence of food at the markets (Castro, Maolis, and Yvas). Addressing this issue by building roadways or other forms of transportation would give farmers the access they desperately need to increase productivity on their farms.

The markets tend to be in the more heavily populated areas because people migrate towards them. On the other hand, the many family owned and operated ranches that are not located in these populated areas are in the rural areas where there is farmable land. These rural areas are not home to large amounts of people, so it is understandable that no one has constructed roadways in the area yet. The absence of roadways continues to have profound effects on agricultural productivity of the Venezuelan farmers. When farmers are unable to reach these marketplaces, they have no way to sell their produce and, therefore, have no

viable source of income. The ripple effect continues as the farmers then struggle to purchase materials or things needed to carry out life on the farm. Farmers are left with no other option than to only produce just enough food for themselves to survive. When a farmer is forced to only produce sufficient amounts of food for his own family, it means that the rest of the Venezuelan citizens, who do not own ranches or farms, do not have a source of food.

A national Venezuelan study has recently revealed that around seventy percent of the people that were studied have had to stop buying food items because they have become either unavailable or too expensive to afford (The Nightmare Of Grocery Shopping In Venezuela). With the population increasing, and the already-low levels of food production, staying stagnant, the situation in Venezuela is dire. By 2050, the world's population is expected to bypass nine billion people, making the crisis of world hunger even more prevalent. Likewise, the infrastructure in these rural Venezuelan areas where the farmers live is extremely weak. The small family owned farms are not government funded like the large agricultural corporations are in Venezuela. The produce from these large corporations is mainly exported out of Venezuela anyhow, not helping to feed the citizens of the country who is funding them. The government has paid little attention to these small farms which have prevented them from growing and being able to produce larger amounts of food. The Venezuelan government needs to take a proactive approach to this food crisis and address it now. It is not only negligent to ignore this pressing issue, it is merely unacceptable. The government can start by identifying the reason behind the struggles on family owned farms and then doing everything in their power to eradicate these issues.

These conditions on the family owned farms have been staying considerably lethargic throughout the years and have shown no signs of change. It is evident that there is a strong correlation between the weak infrastructure and the inflation of food prices and the absence of food completely. Building these roadways will be a sure start to fixing the situation in Venezuela and then in other countries with similar situations as well. Once these roadways are constructed, there would be a noticeable decrease in the prices of food, making it more available to the hungry citizens of Venezuela. When people do not have to pay unreasonable prices for food items, they are then allowed to build their personal financial standing. In turn, this could reduce poverty levels in Venezuela when items necessary to live comfortably, do not possess so much monetary value. The increased trade within the country would also lead to economic development and allow the family-owned farms to expand and grow more produce. Economic development would likely occur when more food is being sold and purchased because the exchange of wealth could balance out the wealth in the country between the urban areas and the rural ones (Venezuela, U.S. Library of Congress). As you can see, there are many benefits of strengthening rural infrastructure.

There are always other items to factor into the equation, some including the unavoidable challenges that will occur after the construction of the roads. Specifically, the issues encompass climate change, urbanization, energy demand, or population growth. The world is an ever-changing ecosystem and in recent years, it has been scientifically proven that climate change is in fact present. Constructing roadways or other forms of transportation should not largely affect climate change directly. Of course, there are things to consider, such as greenhouse gasses released by automobiles or other forms of transportation. Some may say the strengthening infrastructure could adversely affect climate change, but the benefits of strengthening infrastructure far outweigh the minimal effects that could occur concerning climate change. Moving on, building roads would likely have a direct effect on urbanization in Venezuela. With roads to travel by, citizens would be encouraged to travel the country which could lead to the formation of new cities or villages. An influx of new jobs would likely occur due to the new availability of land, but would also lead to further urbanization of the country. This is inevitable in the long run because the population increasing at such as rapid rate will cause people to spread out and find new places to live. This could also benefit the country because it would decrease the contrast between the urban areas and the rural areas which leading to increased communication between the people and the farmers, ensuring that all needs can be known and met.

After considering all factors, building roadways would increase urbanization of the country. This is not a major issue because urbanization is going to happen eventually so there is no reason this alone should deter one from the ideas of constructing roadways. Especially in this case, when the numerous benefits outweigh with minimal side effects. An idea that may attract one to the thought of constructing roadways concerns energy demand. It is very practical to think that building roads on formerly unused land could result in the discovery of new energy resources. Along these roadways, power lines could be added to distribute power throughout the country. This, of course, could wait until the funds are available to do so. As far as energy consumption in the process of constructing said roadways, this could be something to consider if there was a severe absence of energy, but in South America that is not so much of an issue (Vera). As mentioned above, population growth is an ever occurring issue in today's world. When roads are constructed, the unused land is more easily accessible for emerging farmers. This could address the issue of land use in Venezuela. In the past, an easily recognizable issue in Venezuela is that only a small percentage of land was being used for agricultural purposes. When this unused land is more accessible, upcoming farmers could use it to produce more food and further resolve the issue of world hunger.

The task of building roads is actually not as simple of a task as it may sound. It requires much more preparation and forethought than one may think. First off, to build the roads there must be enough funding to do so. Considering what the roads could mean to solving world hunger, the World Bank should consider a partnership with the Venezuelan government over the construction of such roads (Projects & Operations). The World Bank's stance on the issue could either be detrimental or one that could mean that farmers will finally be able to send their produce to market. It would be very important that the World Bank would be able to understand the weight of their decision and be a willing and very capable to partner with the Venezuelan government and partly fund the operation. If this does not go through, the funds would have to be derived from another source that could be secured, as the need is great. Presuming that the required funds are available, the government would begin deciding where construction would take place. The Venezuelan government should consider the location of marketing areas as well as the location of farmers. The productivity of the farmers will completely depend on the location of these roadways. The location of these roadways should also not interrupt many existing farmed areas. After the location of these roads is decided, preparation of the land should begin, followed by the construction of the roadways (Survakanta). The Venezuelan people should be the ones to build the roadways, which will create more jobs and, in turn, stimulate the economy in the process. This would be another added benefit of improving and strengthening infrastructure. This whole process will likely take upwards of ten years. It would be long and hard but surely worth it in the long run. Farmers should be kept informed throughout the process so that they are sure to use the roadways immediately after they are open for traffic. The government should promote communication between the farmers and the markets. The government must make sure that there are no other obstructions keeping the farmer from marketing their product. There is no excuse for a nation with its citizens being malnourished and underfed. In situations like this, the government should be doing everything in its power to ensure every one of its citizens does not go to bed hungry.

Venezuela is visibly struggling with agricultural productivity and feeding the hungry, but this could be changed through improving access to markets through infrastructure development. Constructing these roadways would mean that farmers would be able to more easily bring their produce to market. This will increase the quantity of food at markets and decrease the prices of the produce that have gotten out of hand in recent years. Strengthening roadways would not only help to resolve the issue of the absence of food at markets but, in turn, develop the economy and much, much more. In a short thirty-four years, we must be prepared to feed the nine billion people expected to be living on this Earth. This can be accomplished through sustainable agriculture, which is the primary focus in the agricultural industry today. The Venezuelan government is a key player throughout this entire process. To allow their citizens to be more productive agriculturally, they must tend to the needs of farmers and recognize their struggles.

Medical support and education needs in Venezuela have to be fulfilled in order for the farmers to achieve their goals, which as of now include providing food for their country who is currently struggling with finding a reliable source of food. These farmers are keeping Venezuela, as well as the rest of the world alive by doing their very best to feed others. It is inexcusable that these farmers are unable to access markets where they can sell their food. Considering what the implementation of roadways could mean to the citizens of Venezuela and to the rest of the world, it is crucial that they voice their stance on this project to make known to the government that this isn't just another idea able to be pushed away. Now that the issue in Venezuela has been recognized, action must be taken upon it. Participation from the World Bank as well as the Venezuelan government is required for this project to take place. After all, this project is a road to food security.

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