

Cody Lehman, Pennsylvania School for Excellence in the Agricultural Sciences
Central Columbia High School, Bloomsburg, PA
Venezuela, Factor 11: **Malnutrition**

From Power to Poverty: Malnutrition's Effect on Venezuela

Venezuela is facing a serious malnutrition crisis. A lack of domestic agriculture, nationalization, and hyperinflation have combined to create an inability to produce enough food to supply the needs of the population. In addition, Venezuela's abundant oil reserves have created an economy dependent upon imports and without an economic backup plan. These factors are not conducive to maintaining a stable, self-sufficient agricultural industry and have, unfortunately, caused the rapid growth of malnutrition throughout Venezuela (Kohut and Herrera).

Venezuela is divided between rural and urban areas, with a strong class stratification that provides economic and political power for less than ten percent of the population. The country's income from oil production has placed the remainder of the population in the middle and lower classes. Typical families within these classes are nuclear consisting of parents and their children, although many include extended family members such as cousins or grandparents. These families are often classified by the wife maintaining the house and acting as the primary caregiver, while the husband makes important decisions and provides financial support ("Relationships, Marriage, & Family Life in Venezuela"). The typical family will not be able to afford health care coverage unless they are in the top ten percent of the population economically. On average Venezuelans receive only 9.1 years of education when 12 is available, with females usually receiving 2 years less than males. The lack of education can be attributed to many children being required to work at a young age to support their families and provide for their needs (Pearson). Because of the socioeconomic status of many families in the lower and middle classes, obtaining a promotion or better employment may be extremely difficult, if not impossible. The class Venezuelans are born into can predetermine the jobs available to them as well as how much they earn, leaving little room for advancement.

More than fifty percent of the labor force is employed in the service industry, with an additional ten percent working in agriculture related careers ("Employment in agriculture"). This is over five times the proportion of the United States population involved in agriculture; however, limited cropland and fertilizer coupled with less advanced agricultural practices means that more people must be involved in agriculture, because one farmer can feed less people than in a country where advanced technology, fertilizer, and chemicals are readily available. Agricultural occupations range from family subsistence farms of small acreage to large government subsidized farms that are fully mechanized and utilizing traditional farming methods implementing practices such as tillage, chemical fertilizer, and pesticides to grow corn, rice, coffee, sorghum, chickens, and pigs. Corn and rice are two of the main field crops grown in Venezuela and are necessary for making staple foods like arepas ("Venezuela Crisis: Farmers Struggle as People Go Hungry"). A family's typical diet consists of these various grains and little meat consumption, compounding the malnutrition issue.

After World War I, the discovery of large reserves of oil in Venezuela led to an economy almost solely dependent on the income from exported oil (Summ). This left the country without any other major form of income, and when its only commodity dropped in value, Venezuela's income was cut in half (Gillespie et al.). During the 1980s, the collapse of the oil market caused a severe economic decline, ultimately resulting in a recession by 2014. This economic downturn, coupled with government debt, has created one of the highest hyperinflation rates in the world. Beginning at over fifty percent in 2014, the hyperinflation rate has steadily climbed to a record high of 1.7 million percent in December of 2018. To alleviate government debts, Venezuela has cut back imports, the very same imports that the country depends on to

feed its people (Gladstone). This has created an endless cycle of bringing in less food for more people who need it, causing six out of every ten families to go without food on a regular basis (Summ).

As a result of this shortage, the price of food was driven through the roof, with a basic food basket costing up to 16 times the minimum wage. Seventy-two percent of a family's income is spent on food, compared to only twelve percent of the average American income, and a 2013 poll found that eighty-seven percent of families are unable to provide enough food for themselves (McComb). These unattainable prices and the lack of available food have led to a major malnutrition issue. The World Health Organization (WHO) states that the child malnutrition rate must pass ten percent to declare a crisis; however, the country is experiencing an 11.4 percent severe malnutrition rate, reaching 13 percent in the most impacted regions, well above the ten percent limit. Malnutrition is especially detrimental to young children, because a lack of essential nutrients like calcium and vitamin D at young ages can lead to more serious problems later in life, including bone growth issues, a weaker immune system, and possibly death (Summ). The fear of not being able to provide for their family has caused many mothers to crowd sterilization clinics, afraid of having more children when they cannot feed the ones they already have (Kohut and Herrera). Hospitals lack the resources to provide enough nourishment for starving infants, and as a result many are given whatever tea can be made instead of the formula they should be receiving. Doctors are warned by the government not to list malnutrition as the cause of death in children, and as a result, most mortalities are listed as natural causes, leaving less cause for the government to address the issue of food insecurity running rampant throughout the country (Kohut and Herrera).

For many, the simple solution would be to grow all food needed to remedy this malnutrition epidemic right in Venezuela; thereby cutting back on imports and reducing the economic dependence on oil to create a more sustainable economy. Unfortunately, the small amount of land suitable for agricultural production along with poor soil conditions means that agricultural production in Venezuela is limited, as only four percent of the land is utilized for agricultural production ("Venezuela – Agriculture"). To make matters worse, thousands of acres of land lay unused after being seized by the government, further decreasing Venezuela's already limited agricultural land ("Venezuela Crisis: Farmers Struggle as People Go Hungry"). It is estimated that the country can only produce thirty percent of the food required to feed its people, leading to increased dependence on imports ("Venezuela Only," "Venezuela").

Sadly, farmers cannot produce the volume of food required for their country because the fertilizer, pesticides, and machinery parts they need to grow their crop must be imported, which is expensive and often takes months ("Venezuela Crisis: Farmers Struggle as People Go Hungry"). A nationalized agricultural system instituted in 2010 called Agropatria sets the price farmers can sell their crops for; prices that are often far too low to make a profit and lead to the closing of many large farms that cannot afford to purchase enough chicks, fertilizer, or feed to keep their businesses operational ("Venezuela Crisis: Farmers Struggle as People Go Hungry"). There are opportunities for producers to sell their crop at market price if they choose to break the law and authorities look the other way, however many are forced to pay "protection payments" to criminal gangs just to stay in business (Zuñiga and Miroff).

There are no clear solutions or simple repairs for the continually worsening malnutrition issue in Venezuela. The supply of available food is short, hyperinflation is rampant, and the country is unable to support itself with its own products. None of these complications allow for overnight solutions, and in the end the only permanent fixes will take time. However, there are many short-term possibilities that could be implemented to begin a positive change for the country. To reverse the effects of malnutrition and feed its people, Venezuela needs to become more self-sufficient by increasing their production to reduce imports. To achieve this, the government needs to permit free trade for agricultural producers to encourage an increase in production, and the extreme hyperinflation needs to be reversed to increase the value of currency so that food and other products are affordable for the average family. The main issue of malnutrition cannot be resolved if people cannot afford the solution to their problems. Nonprofit

organizations such as Samaritan's Purse and Heifer International offer a potential ray of hope to starving people by providing crop seeds and a wide variety of animals along with proper training in how to raise them to promote sustainability and decrease malnutrition. Through small donations by people who are financially stable, opportunities are created to increase self-sufficiency and reduce the number of people whose nutritional needs are not being met.

Another potential solution involves implementing more animal agriculture into Venezuela's society. Venezuela has relatively low meat consumption, and while recognizing that many cultures have different traditions and cannot be forced to change their practices, incorporating more meat into Venezuelan's diets offers an opportunity to provide a significant amount of protein, iron, and essential amino acids that cannot be easily obtained through plant products. By implementing more meat into the food supply, deficiencies in these nutrients can easily be reduced. In addition, ruminants such as cattle can survive on grass and other forages that wouldn't supply enough energy for swine or poultry; thereby creating a less energy intensive method of producing meat while making use of land that isn't suitable for row crops. On higher quality farmland, cover crops can be grown between cash crops to provide an additional cheap feed source for cattle, simultaneously protecting soil from erosion and adding key nutrients and organic matter back into the soil. To make use of products that would otherwise be wasted, kitchen scraps and food byproducts that are inedible for humans can be fed to animals such as pigs and chickens to convert these leftover scraps into a source of nutrients that people can consume.

The manure from this increased animal population is a great potential source of nutrients that can be used to reduce synthetic fertilizer requirements, improve soil quality and organic matter levels, and create an abundance of compost for communities and families to use in order to grow food locally. With Venezuela's tropical climate, growing food year-round is possible both on farms and in homes. Families that don't own enough land for a garden can take advantage of container gardening to grow a portion of their food, or community gardens that can be used to supply food to people who may not have the space necessary for pots or raised beds. While it may not provide a family's entire food supply, local food production provides a way to reduce fuel and labor expenses as well as final product cost and is an important step toward creating a sustainable food supply and reducing food insecurity.

The change that will have the biggest impact on reducing malnutrition in Venezuela will be joining communities together to produce food locally and sustainably, lessening dependence on food imported from foreign countries. Almost every family has the space and the capability to raise a small flock of chickens or grow a few vegetables, and small animals such as chickens and rabbits can thrive in space limited areas on low quantities of available feed while providing significant amounts of high-quality protein and nutrients. A herd of four breeding rabbits containing three does and one buck can produce enough litters of meat rabbits to supply a family of five with the meat required to sustain them for an entire year, all in a space no bigger than a backyard. Requiring minimal care, a low investment, and little time commitment, a few rabbits could make all the difference between a family's children being malnourished and knowing they will not have to worry about where their next meal is coming from.

If every family was able to play a small part in improving self-sustainability, malnutrition may not be an issue affecting people throughout Venezuela. By encouraging every family to focus on what they can grow on the land they have, food production in communities could become diversified and families could provide each other with what they need. Farmer's markets and other local retail areas would provide an opportunity for people to sell the excess food they grow within the community, supporting local growers and increasing free trade that allows them to sell directly to each other, rather than selling commodities at unfair government set prices. Not only does this create reliable, sustainable sources of food within each individual community, but also economic benefits for the people who live there.

The future may look bleak, but there is still hope for Venezuela. With the government in total control of food distribution, Venezuela has relied almost totally on imports while disregarding advances in domestic production (Zuñiga and Miroff). In a misguided attempt to maintain an image of self-sufficiency, government officials refuse to permit international aid organizations to deliver food to the hungry. Individual communities have the capability to come together and support each other, with each of the members doing their part to contribute what they can. The solution to a problem as large as the one Venezuela is facing is not found in altering the government or making dramatic societal changes. The solution comes from each person doing what they can to help contribute to their family, community, and ultimately their country.

Bibliography

"Employment in agriculture (% of total employment) (modeled ILO estimate)."
Data.worldbank.com, The World Bank Group, Sept. 2018,
data.worldbank.org/indicator/SL.AGR.EMPL.ZS. Accessed 18 Feb. 2019. Map.

Esteves, Junno Arocho, editor. "Malnutrition in Venezuela is now a crisis." *americamagazine.org*, America Press, 19 May 2017, www.americamagazine.org/politics-society/2017/05/19/malnutrition-venezuela-now-crisis. Accessed 18 Feb. 2019.

Gillespie, Patrick, et al. "Venezuela: How a Rich County Collapsed." *Money.cnn.com*, Cable News Network, 30 July 2017, money.cnn.com/2017/07/26/news/economy/venezuela-economic-crisis/index.html. Accessed 18 Feb. 2019.

Gladstone, Rick. "How Venezuela Fell into Crisis, and What Could Happen Next." *Nytimes.com*, The New York Times Company, 27 May 2016,
www.nytimes.com/2016/05/28/world/americas/venezuela-crisis-what-next.html. Accessed 18 Feb. 2019.

Kohut, Meridith, and Herrera, Isayen. "As Venezuela Collapses, Children Are Dying of Hunger." *Nytimes.com*. New York Times, 17 Dec. 2017,
www.nytimes.com/interactive/2017/12/17/world/americas/venezuela-children-starving.html. Accessed 18 Feb. 2019.

McComb, Bayley. "Hunger in Venezuela: Solving the Country's Food Crisis." *Borgenproject.org*, 28 Sept. 2016, borgenproject.org/hunger-in-venezuela/. Accessed 18 Feb. 2019.

Pearson, Tamara. "UNESCO: Education in Venezuela Has Greatly Improved." *Venezuelanalysis.com*, 27 Jan. 2010, venezuelanalysis.com/news/5107. Accessed 20 June 2019.

"Relationships, Marriage, & Family Life in Venezuela." *Safaritheglobe.com*, Safari the Globe, Nov. 2013, www.safaritheglobe.com/venezuela/culture/relationships-marriage-family/. Accessed 19 June 2019.

Summ, Brianna. "Economic Failures Are to Blame for Child Malnutrition in Venezuela." *Borgenproject.org*, 13 Nov. 2017, borgenproject.org/child-malnutrition-in-venezuela/. Accessed 18 Feb. 2019.

"Venezuela." *Everyculture.com*, Advameg, 2019, www.everyculture.com/To-Z/Venezuela.html. Accessed 18 Feb. 2019.

"Venezuela - Agriculture." *Nationsencyclopedia.com*, Advameg, 2019,
www.nationsencyclopedia.com/Americas/Venezuela-AGRICULTURE.html. Accessed 18 Feb. 2019.

"Venezuela Crisis: Farmers Struggle as People Go Hungry." *Today Venezuela, Today News*, 21 Dec. 2017, todayvenezuela.com/2017/12/21/venezuela-crisis-farmers-struggle-as-people-go-hungry/. Accessed 19 June 2019.

"Venezuela Inflation Rate." *Tradingeconomics.com*, Trading Economics, Feb. 2019,
tradingeconomics.com/venezuela/inflation-cpi. Accessed 18 Feb. 2019.

"Venezuela Only Produces 30% of the Food Needed to Maintain Its Population." Fao.org, FAO, 12 Nov. 2017, www.fao.org/in-action/agronoticias/detail/en/c/1071630/. Accessed 18 Feb. 2019.

Zuñiga, Mariana, and Nick Miroff. "Venezuela's Paradox: People Are Hungry, but Farmers Can't Feed Them." *Washingtonpost.com*, The Washington Post, 22 May 2017, www.washingtonpost.com/world/the_americas/venezuelas-paradox-people-are-hungry-but-farmers-cant-feed-them/2017/05/21/ce460726-3987-11e7-a59b-26e0451a96fd_story.html?utm_term=.494c790cf6ce. Accessed 18 Feb. 2019.