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Nicaragua, Factor 16: Education

Nicaragua: Educating the People

The country, Nicaragua, officially known as the Republic of Nicaragua, is located south of Honduras and north of Costa Rica ("Nicaragua Education"). To the west it borders the Pacific Ocean to the east it borders the Caribbean Sea ("World Factbook."). Nicaragua is the the largest country in Central America. Even with the claim of being the largest country, it is still only about the size of New York state. To identify this in a manner of surface area, Nicaragua is approximately 51,000 square miles("Countries and Their Cultures."). Nicaragua has three distinct regions, the Caribbean lowlands, the Pacific lowlands and the North Central highlands each with its own unique climate and geography. ("Nicaragua Education."). During the rainy season, May through October, the Caribbean lowlands are the wettest area in Central America. In contrast, the western part of Nicaragua, the Pacific lowlands, are dry year-round. ("Countries and Their Cultures."). While the entire country experiences a tropical climate, the North Central highlands are generally cooler, especially the mountainous region which averages 20°F cooler. Nicaragua has a total population of 5,848,641 people as of July 2014 ("World Factbook."). The largest city in Nicaragua is its capital Managua with almost 1 million people; the second largest city is León with only about 150,000 people, coming no where close to the population of Managua ("GeoNames.").

History:

While the current official language is Spanish, the word, Nicaragua, comes from an older language, Arawak, and translates to next to the water ("Countries and Their Cultures."). Spaniards arrived on the west coast bringing their language with them, even now causing it to be more common to hear the official language in the Pacific lowlands and the North Central highlands. In contrast, the people of the Caribbean lowlands speak a mixture of the Arawak, English and African languages ("Countries and Their Cultures."). In 1936, Somoza staged a coup and became a dictator. His son's succeeded him and the family ruled until 1979 ("Nicaragua Education."). During their rule, the Somoza family didn't care about educating the people, reduced the amount of spending for education and limited opportunities for the population. For example, three-fourths of the population was illiterate and rural school only offered 1-2 years of schooling ("Nicaragua Education."). In 1979, Sandinista won control over the Somoza dictatorship ("Countries and Their Cultures."). In 1980 the government launched a literacy campaign which utilized a community approach and reduced the illiteracy rate from 50 percent to 23 percent ("Nicaragua Education."). This shift in policy dramatically improved the peoples education.

A typical family in Nicaragua would be rather large and consist of a man and a women with somewhere between 4-6 children. Also it is not uncommon to have extended family living together including: aunt, uncle, and grandparents ("The Nicaraguan Family In A Time Of Transition."). The basic diet of most families in Nicaragua would possess rice, bean, corn, and coffee. With this type of diet the person eating will usually not obtain enough vitamins, minerals, and proteins (Schaller). If the family is willing to spend extra money on food then the diet could consist of rice, beans, meat, and juice (*An Overview of Health & Nutrition in Nicaragua.*). Nicaraguan families need approximately 280 U.S. dollars per month

to have essential food and hygiene products (Schaller). A typically a family might bring home 150 U.S. dollar per month or less. (*An Overview of Health & Nutrition in Nicaragua.*). In the Nicaraguan family system, a cycle of poverty and low education is perpetuated by high pregnancy rates among adolescent girls ("World Factbook.").

Agriculture fishing and forestry make up one-third of the labor force and create one-fifth the national income for Nicaragua (Walker). In Nicaragua farms range in size from small subsidized ten acre family farms to large plantations ("Encyclopedia of the Nations."). In the lowlands sorghum and maize are produced, whereas the highlands grow beans and vegetables ("Rural Poverty Portal."). Other commodities grown in Nicaragua include: sugar, corn, rice, bananas, and coffee. Nicaragua also has commercially valuable tree species including: mahogany, pine, cedar, and rosewood. The major livestock raised on the farm are hogs, chickens, cattle and lambs and fishing is a major industry because it has large coastal areas. Farms are struggling with sustainability and consistency of crop yields due to deforestation, water access and pesticide usage ("Environmental Sustainability Issues in Nicaragua." 1). Fifty percent of farm income depends on rain as their water supply and less than two percent of farms uses irrigation systems ("Climate Change and Food Security in Nicaragua.").

There are many obstacles that the typical Nicaraguan family face. The people do not possess the experience or knowledge necessary to increase agricultural productivity, while conserving their valuable non-renewable resources. In rural areas, where poverty strikes most often, small farmers are forced to migrate to urban areas in order to feed their families ("Rural Poverty Portal."). The people of Nicaragua also struggle with poor nutrition due to a combination of their lack of understanding about nutrition and insufficient income to purchase healthier foods. In Nicaragua twenty-seven percent of the children are malnourished, leading to these children having trouble in school and being at higher risk to drop out (Schaller). This creates a cycle of uneducated people not earning wages able to support and educate their family members. Education is the key to breaking this cycle and solving many problems that Nicaraguan families face.

Effects of Education:

The Somoza family didn't focus on education during their rule, which caused a high number of uneducated people trying to make a living. When the Sandinista government took over, they started a literacy campaign, which was highly effective. This campaign utilized large groups of volunteers from the community that would learn to read and then pay it forward by teaching others to read. Violent actions were the downfall of the long-term success of this program (Williams). The government that took control after Sandinista, reorganized the education system. The new system reformed the curriculum to focus on religion instead of literacy, placed direct control of the curriculum on parents, and financed the education system by charging the communities. The government's view was that communities were responsible for teachers in schools (Williams). The major problems with this new system are only wealthy citizen were educated, and people in rural communities couldn't afford to educate their children. Of the Latin American countries Nicaragua has the largest dropout rate with only 61 percent of the children completing fourth grade, and 46 percent graduating high school (Williams). One major issue according to the Penn State Extension, for the community of Talolinga is:

“The community has a school that serves 1st to 6th grade. After that, students must walk one-way for over an hour to reach the high school in the community of Santa Rosa de Peñon below.”

The lack of opportunity for education limits the employment opportunities and wages that a family can earn, therefore; creating a better education system would allow future generations to flourish. Any initiatives in agriculture education would encourage conservation, provide knowledge about modern agriculture practices, incorporate technology, increase crop yield, lower food prices, create extra income, and improve the quality of life for families.

Population Growth will affect education because Nicaragua has limited schoolhouses now, and it is hard for all the children to go to school. As the population grows Nicaragua will have to continue to build more schoolhouses, which costs money that is scarce. If water is unavailable to the entire population, then the majority of the resources will be distributed to the educated, wealthy who can afford it. When agriculture education is lacking, farmers don't have the knowledge to use pesticides properly and to keep crop production sustainable. In Nicaragua people who farm rely on the weather to produce crops for their income, especially in the Caribbean region. So when the climate drastically changes, farmers struggle to produce high yield, therefore; implementing new agriculture practice and technologies is imperative to reducing the risk of climate effects on the economy. Alternative energy sources, such as biofuels, can create additional markets for farmer's products. In order to use these technologies, the community needs extension services to educate them about these industries.

Addressing Educational Needs:

To improve agricultural education, Nicaragua needs to follow Sandinista original campaign with literacy, investing in the training of a mass of volunteers. These volunteers would have the duty to teach their community the agricultural research and technology that was taught to them. Whereas, a campaign teaching agriculture would be beneficial in rural communities, in urban areas more resources such as schoolhouses, quality school supplies and qualified teachers is necessary. Even now projects where people in communities from Nicaragua collaborate with other communities around the world to help build schoolhouses are proceeding. The missionary, Annie Pollard, has participated in one such successful project in Nicaragua (Pollard). This is an example of a project, which easily could be scaled up with some funding. Another example that Marvin Aguirre and Javier Espinoza are currently completing with the support of the Penn State University Extension Young Grower Alliance (YGA); St. James Lutheran Church in Gettysburg, and the non-profit organization Project Gettysburg Leon (PGL) involves the men acting as extensions in Talolinga. This program is a classic case showing responsibility shared between government, community and organizations equally. In order for programs like these to continue to be successful, it is vital that families value education by continuing their children's education at least until graduation.

Something that was not available before, but could be used to help improve the education of Nicaraguan people would be the use of technology. We could create blogs, use pictures, send videos to citizens in Nicaragua, that could teach them about what they need to do to improve farming productivity, and conservation. In 2012 Nicaragua had about 700,000 facebook users; having one-eighth of the population regularly posting on social media (Rogers). Many Nicaraguans are using the internet to receive their news. Publishing an article on new farm techniques could reach out to part of the population which could

continue to be shared to the other part of the population that does not have connection to the internet. This would continue teaching everyone whether in school or out, and help them have access to new information that could improve their lives.

Summary and Conclusion:

In conclusion the education system has fluctuated with attitudes of the governing body. This has led to a large gap in education for poor and rural citizens, which creates a cycle of poverty. Families struggle with affording basic necessities, medical care and education. The agriculture industry, whether crop, trees or livestock farms has suffered because people managing the land are lacking in not only knowledge, but skills and expertise to sustain high levels of production. Knowledge is passed down from generation to generation. If we were to use the same scenario in the United States, then we would still be opening prairie land with wooden plows, hand-broadcasting seed, hand reaping small grain crops, and gleaning seed from chaff in an open alley barn. It is challenging for us to see the similarities with Nicaragua as we compare our agricultural production today. However, if we reflect on the pursuit of excellence that has and continues to foster innovation in production agriculture as well as improved inputs, it is easy to see what education and land-grant institutes have done to provide food security in our country. Education has the potential to improve sustenance farming in Nicaragua to the point that extra production, similar to the agricultural revolution of the United States, provides for needed income to assist in improving the education of Nicaragua's youth. Through use of new technology and persistence with keeping an open mind to differentiated methods of instructional delivery, we now have an unprecedented ability to reach the masses in Nicaragua with some of our own valued assets – our own students. In addition the scarcity of schools leads to overcrowding in urban areas and long commutes to school in rural ones. It is imperative that different organization, both in and outside of Nicaragua, form partnerships because everyone has a responsibility to improving living conditions there. In order to reduce the poverty rate and help conserve natural resources, education, especially curriculum involving agriculture, is the key solution.

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