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Rural Poverty in Nicaragua and What Can Be Done To Fix It

In Nicaragua nearly 50 percent of the population lives in poverty. Of these 2.3 million people 831,000 of them live in extreme poverty, because the land is rough and rugged with little infrastructure within the country, it is detrimental to their advancement. The land has many natural hazards including earthquakes, volcanoes and landslides. The country is also susceptible to hurricanes. One step to help the advancement of Nicaragua and sustain a steady food supply is to provide the energy and water resources needed to increase agricultural productivity providing for the needs of the population and an expanding economy.

Currently one in every three children has some type of chronic malnutrition and nine percent of that has severe malnutrition. With a growing population something must be done to reverse the growing poverty rate. The unstable government is unable to help the rural population since the country does not have the money to make improvements for its citizens. However, some improvements have been made in lifestyle. Nicaraguans recycle rain water in the cities and villages to bathe, drink, and cook with use since there is not a stable clean water supply. In villages and cities they use solar power to help store energy. These are helpful steps in the right direction, but more are needed to be done.

Your typical rural Nicaraguan family resides in villages and lives in man-made huts with extended family; on average about five to six people per hut. There is little to no employment for those in the village because these villages tend to be miles away from the city. Families provide for themselves by creating and maintaining a personal garden near their hut, and live off of what they grow. They provide for themselves off of their surroundings. About 85 percent of their food is from their own gardens, the other 15 percent comes from the village markets and when the family purchases meat for a night. Their meat products are very fresh, because there is no refrigeration. If there is fish, beef, or pork in anyone's possession it is cooked that very day so that it doesn't spoil. Not enough income is being made by the family to purchase food daily so the home grown gardens are a necessity for village families. The women of the families take care of the household, they handle the children and other family members as well as tend to the garden and cook whatever food the family has and make sure that their family has enough to eat. The rural poor are at a disadvantage since there's not much for employment near their homes and with little income coming in, it's harder to provide for a family. The typical foods in the rural areas are rice, beans, vegetables and fresh fruit. They use a lot of different peppers for spices and variations in their food. Sugar cane is in abundance in the area which is not necessarily a good thing considering their dental hygiene and the tooth problems that this cause along with this is there is no sewage system in the village resulting in contamination of everyday belongings. Usually, there are no doctors or dental specialists in the village and with no stable source of water tooth decay and tooth loss happen at young ages. Mission and educational trips are made to the villages from the outside to help make their lives better but there is still much to be done. As families grow, the men chop down trees and build a new hut. These huts are built with the very minimum of which they need to live. Even though these people live in some of the worst living conditions their culture brings them together. Nicaraguans are very close knit people that rely and trust one another to do what they need to do to help each other through any situation.

Although water covers only ten percent of Nicaragua's surface, environmental degradation, pollution, and simple scarcity in some regions pose a threat to the country's ability to provide enough water to sustain its population and productivity. Nearly a third of Nicaraguans do not have access to potable water. In rural areas, where 72 percent of people lack such access, people must often get their water from shallow wells, rivers, streams, and lakes that are polluted with residential sewage, pesticides,

and industrial toxins. Although 93 percent of urban residents can claim to have either legal or illegal water connections, cities are subject to frequent water outages especially during the dry season. Today sewage service is limited to only a few moderately sized cities. In fact, the capital city of Managua does not have sewage treatment. Using the polluted water can cause bodily harm when the water is ingested and also used to grow food. The pesticides and chemicals in the land also affect the land when families are watering their personal garden. The land can start to degrade faster and erode from the pollution blocking the land from retaining its needed nutrients. This affects the family's ability to produce enough food to eat and extra food to sell to obtain some kind of income. The first step needed is clean water to be available to all of its citizens and not privatized as it is now, as well as to inform the world about the need for all Nicaraguans to have clean water to sustain a healthy and fulfilling lifestyle.

One way to create an access to cleaner water sources would be the process of regulatory controls over all the lakes throughout the country as well as rivers in order for the economy to grow and prosper and for the various river and lake water to be a source for drinking water. This could be obtained through the involvement of Lake Nicaragua; it is the largest freshwater lake in Central America and is an important part of the country's economy. With clean water the possibility for exporting fish and the ability to possibly farm along its banks is a part of the plan of the Environmental Protection Agency (EPA). EPA's assistance in Central America countries is funded by U.S. Agency for International Development (USAID). USAID's program that is helping Central American countries aims to reduce the threats of biodiversity and establish the plans for a healthy process for environmental development. The steps of USAID's wastewater programs are to: help the countries establish and strengthen their wastewater pollution-control standards, assist water and wastewater laboratories in achieving international accreditation for data quality assurance and develop operator-training materials for future wastewater-treatment plants. EPA has already recommended that in order to control water pollution that the wastewater-treatment plan is needed for everything that discharges waste into a body of water and monitoring what is discharged, to improve laboratory capabilities to test the discharged materials and water quality, for the government to develop a permitting program to limit waste discharges, create a compliant infrastructure to enforce the permits, increase public participation, and improve watershed management. These are suggestions that are being taken seriously in order to provide clean water. It will take time to see the full effects of this plan but the effects will help greatly in giving the country's citizens clean water for drinking and to keep their food sources productive.

The need for both clean water and alternative energy sources is at a high demand in Nicaragua considering there is a population growth rate of almost two percent annually. With the population growing, actions towards achieving both of these needs should be made immediately in order for the severity of the current problems not to get any worse than they already are. Currently, the environment surrounding the citizens of Nicaragua is being degraded by both human products and the effects that nature has in combating these products. Soil erosion is a big problem that affects all of the country; the nutrients from the soil are needed by farmers so that they can make a large gain in revenue from their crop during their harvest season. Trees also need the nutrients from the soil so they can grow and keep producing air for everyone. With soil erosion being a big problem the need to reverse the affects of the eroding soil would be to irrigate more land to compensate for the lost land usage. These advancements in the country's water and agricultural system would open up doors for rural families to establish an income to provide their families with more than just their own food and also provide better shelter and clothing. The situations families are facing now are the same but look to improve in the future, with outside help coming in to educate the people of the country.

With agriculture there are many ways to approach finding an alternative reusable energy source, many of which can be expensive but with time the benefits from the source will be seen emphatically. There is solar power which is used in villages already but the demand for more energy is needed. The best to fit Nicaragua's climate would be hydro energy that would use fast flowing water as a source of energy. Another source would be wind energy that would use the force of the wind and convert that into mechanical or electrical power. Both would help create a more abundant energy source for farmers to use to cultivate more land to help grow more crops to sell and eat. The various industrial companies within the cities would benefit from this by giving them the ability to work more efficiently and create more job opportunities within the country so that more families could have an income to purchase food and other necessities. Alternative energy would be very costly for the country but the economic turnaround would be seen enough therefore the government will want to invest in these sources to further their presence among leaders in fixing their poverty problems.

The trends of clean water and increased energy sources to improve the nation's agricultural standpoint and family situations is staying the same having the EPA and USAID stepping in to help in November of 2008; the situation looks to improve, if the country takes the recommendations from USAID into consideration and begins following them, the country's poverty and food status should start to improve. Measuring how the given solutions and their problems can be found by observing if poverty rates begin to drop or rise and that will determine whether improvement is being made. The measurements being taken would be able to indicate that the current situation is changing in either a positive or negative way. As of now with the chance of potential change of the situations for families and farms are staying the same, but it will take time to finish supplying the alternative sources, meaning that time will be needed to see if the situation can and will improve. If improvement is made food supply will grow in favor of families and farmers and help the economy with the potential of exporting products.

Improving or resolving the clean water and energy source problems would be huge for the country and its citizens. It would give more job opportunities for families to earn some sort of income to help increase the amount of food the family can produce and purchase. Gardens and farms products would be enough for families to eat and sell for another source of income and overall improve the lifestyle and living of rural areas and cities. It would also help preserve and restore the environment, starting with helping to reverse soil erosion and degradation of forests. The animals as well as humans would have safe water to drink and the products from the lakes of Nicaragua would help the country's economy improve. The women would benefit from being able to support their families with the income coming in from the job of the man and food from the garden or using the income to purchase food for the family. The women would also be able to use the income to help create a safer living place for her family. The urban dwellers would have places to try and obtain employment to get them back on steady ground and provide for themselves, this too would help the poverty rate decrease. The small farmers would benefit from being able to have healthier soil with enough nutrients to help their crops grow to feed themselves and sell to others for their income. Everyone would benefit from these factors being solved in one way or another to help their family.

Increased agricultural productivity could improve the trends and affect the status of the current food and poverty factors. First by small-scale family farmers and there being enough clean water for their crops to be healthier and improve the nutrients in the soil. The problems started from the deposit of sewage and waste that decomposed into the land. It's good for things to decompose naturally but it's not beneficial on a food, land and economical status. Secondly, by small gardeners for them to be able to provide for their families and know that their situation is improving and give them confidence to better

their life in all aspects. It will improve the livelihood because they know that problems can be fixed and turned around and they don't have to live the way did before. The yield of families will improve but still be present because the thought of their old life with barely enough food and no money will always be in the back of their mind and they will not want their family to end up in that situation ever again. Once their life has improved from the factors being corrected they won't want it to go back to the way it was before.

Recommendations for the people of Nicaragua after all is corrected include: having farmers focus on their crops and give their time to help achieve cleaner water for everyone, so that they can receive an income from their crops and strengthen the economy by selling and exporting its main resources. Villagers should help with the clean water but take advantage of the alternative energy sources and become employed to bring in a family income to help the economy as well as their family. They should use the clean water to help with their hygiene so that once water is contaminated it has the ability to be cleaned. Everyone should control their waste and make sure that what is being thrown away is being thrown away and deposited safely and not hazardously.

Suggestions for rural village communities, the government, companies and other International Organizations to help follow through with the recommendations above include: International Organizations and the Nicaraguan Government supporting the alternative energy sources by funding the production of each, along with assigning supervision so that they know what is being done to decrease the poverty rate and to be able to distribute clean water around the country. The United Nations and UNICEF helping send relief volunteers to help with the production and supervising of the installation of these sources. They should also send people to educate the people of Nicaragua about the importance of keeping their water clean and how much they will benefit from not only the clean water but the new energy source. It would be best for all these organizations to show the citizens that they care about them and that they're there to help them create a better and healthier life.

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