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## The Issue of Food Security in the Caribbean and Latin America Region

“Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.”  
(World Food Summit 1996)

There are two key components of food security, one being the production or availability of nutritionally adequate and safe food and the second being access or capacity to acquire nutritionally adequate and safe food. The world needs to produce nutritional food safely and people need to have access to safe and nutritional food.

Over 800 million human beings do not have enough to eat in a world that produces enough food to feed every man, woman, and child. Food security is a complex, multifaceted issue that can only be fully addressed through the active involvement of all actors including federal and provincial departments and civil society groups.<sup>a</sup> In 1996, at the World Food Summit 187 nations endorse the Summit’s goal to eradicate hunger and to reduce the number of undernourished people by half, no later than 2015. The goal developed at the 1996 World Food Summit was:

“We recognize the need to adopt policies conducive to investment in human resource development, research and infrastructure for achieving food security. We must encourage generation of employment and incomes, and promote equitable access to productive and financial resources. We agree that trade is a key element in achieving food security. We agree to pursue food trade and overall trade policies that will encourage our producers and consumers to utilize available resources in an economically sound and sustainable manner. We recognize the importance for food security of sustainable agriculture, fisheries, forestry and rural development in low as well as high potential areas. We acknowledge the fundamental role of farmers, fishers, foresters, indigenous people and their communities, and all other people involved in the food sector, and of their organizations, supported by effective research and extension, in attaining food security. Our sustainable development policies will promote full participation and empowerment of people, especially women, an equitable distribution of income, access to health care and education, and opportunities for youth.”  
(Rome Declaration on World Food Security)

Keeping the goal that was developed in 1996 in mind, my research is focused on the food security issue of the Caribbean region. How the effects of natural disasters and agriculture practices correspond to the food production of the Caribbean. The word unemployment and undernourishment mean poverty for citizens, and how pollution affect the two poorest of the country. All of these factors play a part in the Caribbean Food Security.

It’s estimated that 852 million people worldwide are undernourished in 2000. How can such a profitable world let over half of its population go hungry? The Caribbean region, located in the tropics,

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<sup>a</sup> Facts About Food Security, [http://agr.gc.ca/misb/fsb/fsb-bsa\\_e.php](http://agr.gc.ca/misb/fsb/fsb-bsa_e.php)

extends in a broad arc of over 4000 Km from Bahamas in the north to Guyana and Suriname in the south. Based on historical factors, the region also includes, Belize which is in Central America bordering Mexico and Guatemala. The physical beauty of the Caribbean is described as green and fertile, cooled by the trade winds, with a climate of 'perpetual spring.' The lush vegetation, types of fruits and flora and fauna were portrayed with great enthusiasm. The physical beauty of the Caribbean disguises the fact that a high percentage of the Caribbean community is undernourished and unemployed.

Unemployment and undernourishment are two completely different words, but for the people that live in the Caribbean it means poverty. About fifteen percent of the population of Grenada is unemployed. Unemployment is a huge factor to the food security factor and poverty rates related to the country's small size and vulnerability of the economy. Grenada is made up of fifty percent of its population is under the age of twenty and struggling to overcome poverty. Majority of the men with out-migrate in search for employment, leaving the women to look after the household. Another issue for females is teenage pregnancy, which forces young mothers to end their schooling to provide care for their children. There is no proof that the cause of poverty is the fact that most household are headed by women. There is only a slightly higher poverty rate for households headed by women than men. Small island economy affects the youth, restricting their opportunity to complete schooling or to find employment. At the community level, young men feel disenfranchised and find it more difficult to involve them in economic activities. In the Caribbean agriculture is looked upon as an unsatisfactory employment opportunity and not highly looked upon to young people. A job that holds more appeal to young people is a job in tourism, but they may lack appropriate qualifications and skill. These thought came about in recent years when the service sector over took agriculture as the economy's largest employer due to the growth of tourism and free trade zones.

The Caribbean's small size and its exposure to natural disasters are important factors contributing to poverty. The nation is cut off from mainstream economy, which consists of mostly international trade and is susceptible to global developments. Eighty- seven percent of individuals farm independently rather than a household activity. Men, women, and children are involved in agriculture, and tend to their own land. Most farmers work on part-time basis rather than an all year long activity. In the Caribbean the amount of land people own tends to run extremely small. Farmers that have less than 1 acre of land make up fifty percent of the farming population and ninety percent of farmers own less than five acres. The society finds its difficult to overcome poverty due to the illiteracy, lack of technical and/or entrepreneurial skills, and lack of access to productive resources, including credit, and to resources such as social and or productive organizations, markets and/or market information, and technical and financial support services.<sup>c</sup> Many of the farmers that farm more than 200 hectares grow their crops in monocultures while in smaller farms they use a system where several crops are grown on the same piece of land. Using this method enables the farmers to harvest all year long, making production rates to be smaller. The larger farms grow mainly bananas and some tree crops like coconut, avocado and mango. The smaller farms grow a variety, from bananas, tree crops, root crops, and vegetables. In the Caribbean thirty-two percent of the land is under permanent crops, which means the plant stays all year long and will produce a crop every year. Soil conservation is a must to help prevent practice problems in the Caribbean farming because a large part of the crops are on hillsides. To help this matter terraces, stone barriers and walls are built. Also to protect soil they use soil, land and vegetative management like hedges, grass barriers and mulching.

One example of mal-practice is a process called "Flash-n- Burn." This process includes cutting a section of the rain forest down, digging out the stump, and burning all forms of vegetation. This process clears fertile farming ground. The effects of this practice cause more damage and harm than the small amount of crops produced from the land. After a while the soil loses its fertility and the family will move

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<sup>c</sup>Information pulled from <http://www.ruralpovertyportal.org>

on repeat the practice again, leaving very loose top soil and land of low value.

The trends in farming do not look good for the community of Grenada. Due to the constraints faced by the farmers of the Caribbean community, many young people are leaning away from agriculture. Since 1991 there has been a thirty-six percent decrease in the number of farmers. The average aged farmer is 54 for women, and 48 for men. The agriculture sector is not forcing the young labor to enter the field. "The results are a downward spiral: a large proportion of uncultivated land low productivity and the loss of traditional farming knowledge and techniques." (Rural poverty in Grenada)

In the Caribbean conflicts are now the most common cause of food insecurity. The human-induced disaster is escalating a natural crisis, such as drought, to a food security emergency which has grown over the years. "Now I produce again," says farmer Ethiel Brieones. In 1997 El Nino brought flooding and then drought to the Dominican Republic, Ecuador and Peru. In the fall of 1998, hurricanes George and Mitch destroyed lives, crops, and infrastructure. The result has been a decline in food supplies and damaged distribution system.

Mr. Brieones lost all of the past three years of growth of his cacao, coconuts, and lemons to the ten months of rain from El Nino. The rains caused the hills of the area to turn into rapid mud slides filling the water canals with infertile mud that covered many hectors of land. From one extreme to the next, then months of rain followed by ten months of drought. The whole province of Manabi of Ecuador was left with nothing but grey, hard cement- like land. Most farmers lost everything they had. Following the 20 months of hardship, many farmers had a year of very low production.

Now seven years later the farms of Latin American are back to being green. Looking out over the hectors to find papayas, peppers, beans, bananas and maize. The Special Program for Food Security (SPFS) changed the crops of the farmers to something that would grow in less fertile soil left over after El Nino. With the new crops over 530 farmers had a very good harvest after changing crops and cultivation methods.

Before 1998 it was common to see farmers selling their surplus on the local market, but after El Nino he produces to feed his family. The SPFS has recently helped farmers by installing irrigation systems on small plots of land, helping to produce better crop.

"Despite strong economic growth in the region, five countries are projected to face substantial food insecurity over the next decade. Grain production is not expected to keep up with population growth and foreign exchange is projected to be insufficient to close the gap with commercial imports. The destruction caused by hurricanes Georges and Mitch will increase hunger and delay improvements."  
(Birgit Meade)

Throughout the natural disasters the region's grain and root production grew and food aid became rare in this region. Food security must be achieved through a country's own resources, meaning that gaps have to be filled by increasing either production or commercial imports or both. The hard work and efforts finally paid off. In 1999 it was recorded that Latin America and the Caribbean had the strongest performance growth in agricultural output. Through the tough times of El Nino the citizen of Latin America and the Caribbean learned new crops to plant and harvest. They learned new ways of cultivation and were helped by Special Program of Food Security to install irrigation systems to help production.

Pollution from agriculture can impact negatively on a broad spectrum of people, especially in regions like the Caribbean where much of the population lives near water. Their livelihoods are critically dependent on fertile soils and healthy marine ecosystems. Agricultural pollution can raise the costs of agricultural production through soil contamination, phyto-toxicity and pest resistance, threatening poor farmers' livelihoods. It can threaten public health and it can reduce the competitiveness of food exports by raising concerns about food safety standards. Down-stream, agricultural pollution can undermine fishers' livelihoods and impact on other ecosystem services by degrading sensitive aquatic resources of the coastal zone, particularly coral reefs, thereby endangering tourism amenity value.

Research in agriculture pollution has proven that sedimentation and agro-chemicals influence coastal waters and livelihoods based upon them. After hurricanes and tropical storms there was reef decline caused by sediment. The sediment can potentially cause costly consequences for the environment, poor fishers' livelihoods and tourism-related employment opportunities. The affects of sedimentation on coral is both directly, by killing them, and indirectly, by reducing their resilience to other forms of disturbance or stress and by disrupting coral replenishment. This issue affects the Caribbean society tremendously. It's not just the coral industry being affected but the fishery industry. The fisheries bring in almost \$150,000 for the Caribbean economy along with the snorkeling tours which bring almost \$10,000 for the Caribbean economy. If the pollution issue is not controlled there will be at least \$160,000 drop in the Caribbean economy, and will cause a more dramatic effects on the unemployment rates and poverty rates.

The Caribbean's food security revolved around keeping and striving to achieve the World Food Summits goal of developing human resources, encourage generation of employment, incomes, and promote equitable access to productive and financial resources. Natural disasters are action beyond human control, but the one thing humans can control is the recovery. Having and striving for rapid recovery and developing new methods to deal with effects left over by the storms. With keeping the idea of moving ahead in mind, the Caribbean can overcome the odds of hurricanes and tropical storms. Encouraging the population to become educated on agriculture actions and consequences of production methods and chemical use will help save the Caribbean's ecosystem, environment, and the health of its residents. By becoming educated, and finding new alternatives to methods of the past, the region is reaching and making goals to improve their quality of living.

With the help of organizations like the United Nations, NRSP and FAO I believe they can help educate other organizations become more understanding on the food security issues of all countries, not just the Caribbean. If many small organizations put their efforts together the problems could be solved quicker and more effectively. If organizations like the local farmer groups and seed companies would send their products over to counties of need this could help feed the needy and protect the food security issue.

To become a successful region everyone has to be willing to help. It's not just going to change by a few people trying to make a difference for everyone. Everyone has to be willing to achieve one goal at a time, as a team! The government is going to be the key motivators to encourage the countries to become a healthy, successful and profitable area. The issue of food security is not just going to fix itself overnight. It will take generations, along with the help of other countries and regions to help teach and give suggestions to help out the needy region or country. The habit of healthy lifestyles will develop over time but only with the help of everyone.

Today, world natural resources are being used as if they will always be there. I don't believe that people understand how scarce the resources really are and how far they will stretch. Conservation and alternative methods will be the key in saving the world's natural resources. For one example, ethanol, a gasoline product made from the byproducts of corn. These alternative methods will replace the oil we use for fuel. This also is healthier for the environment and its residents. Not just the Caribbean, but the entire

world will need to realize the consequences of today's actions and how they will play a part in the future of the world. The research on global warming, soil conservation and health factors will all help develop a more prosperous future.

The world food security issue is a very large issue that will take years and a large amount of time to resolve. With the cooperation from everyone, not just the large foundations and organizations the countries with food security issues will reach relief sooner.

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