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Colombia, Factor 16: Education

**Education Changes Agricultural Production**

What is food insecurity? Most people will define it as a lack of food resources in poor developing countries. However, it relates to not only hunger, which is a form of it, but it is actually “limited or uncertain availability of nutritionally adequate and safe foods or …ability to acquire acceptable foods in socially acceptable ways.” (Children’s Health Watch 1). Food insecurity is a global problem. Even rich nations like the United States, Britain and China suffer from it. Food insecurity has greatly influenced the world’s economy, education, and billions of people. Colombia is one of many victims, where food insecurity is threatening the mental, physical and social health of over 5 million people.

1. Introduction about food insecurity in Colombia

Colombia is a fast developing nation located in the South America Tropical region. Colombia has the third-biggest economy in South America, and is the 2nd largest country in South America with a population of over 47 million people. The country has prolific natural resources and a strong economy (IFPRI 1). However, not every Colombian has a stable life. According to ENSIN, Colombia’s National Nutrition Survey, 12% of Colombians are affected by food insecurity, especially in rural areas. Over thirteen percent of rural children are afflicted by food insecurity. Among these children, 6 % are underweight and many are at the risk of serious malnutrition (par. 1). Moreover, Colombia’s agricultural production and importation has significantly decreased. In contrast to 2007’s wheat production, 2010’s yield declined by 20,998 million tons, and maize production was reduced to 197,000 million tons (IFPRI 1). All the while Colombia's population is constantly growing at a rate of about 1.04% per year (World Facts Book 1). Their reliable food resources are decreasing and the limited amount of crop production cannot satisfy Colombia's growing population. Therefore, food insecurity in Colombia is a severe problem, and thus has created difficulties for many Colombians.

2 Lives of people in Montes de Maria

Montes de Maria is a rural region located in northern Colombia, near the coast of the Caribbean Sea, and has a population of 300,000 people (Wikipedia par.3). Families in Montes de Maria usually consist of four to five people, two parents and two to three children. The farm size varies from region to region, and the average is about 1.2 hectares. Tobacco and cocaine are popular planting choices among the farmers, because people believe that selling tobacco and cocaine can be more profitable than other crops. Due to that reasoning food production in Montes de Maria has greatly decreased. Violent confrontations are active, and have been a big issue that troubled the Colombian government. "...violence since 1995 forcibly displaced more than 110,000 people, or over half the population" ("Consolidation’, Land Restitution, And Rising Tensions in Montes de Maria" par.7). As one of the most turbulent areas in Colombia, Montes de Maria is the center of aggression and drug trafficking. Although the Colombian government has tried many ways to solve these issues, there is still unlawful drug trading and violence. Other problems also concerned many people in Montes de Maria, For example, there are poor sanitary conditions, old equipment, underdevelopment, poverty and low education opportunities. However, many people do not receive the help they need because most people lack health care access. Moreover, people are secluded from the outside world, because of the isolated geography of Montes de Maria (Holland & Martin 93). In summary these issues create a difficult environment and contribute to the growth of food insecurity.
3. The Colombian diet

Meats often show up on a Colombian's dining table, as well as hot chile peppers, which are part of popular home cooking in Colombia. Colombians like to cook meals with olive oil or heavy cream which is a result of heavy influences of Spanish cooking because Colombia was once a colony of Spain. Colombia is teeming with fruits and grains. Colombians have a custom of growing vegetables in their backyards or farms, and they usually grow crops or fruits such as coffee, avocados, rice, bananas and potatoes. ("Crops" par.1) However, most people will sell their agricultural products for money to support family, because their incomes are often insufficient to feed all of their family members.

4. Nutritional deficiency of Colombian children

In Montes de Maria, food insecurity has seriously affected the physical growth and mental health of people, especially the children. According to a research conducted by World Food Porgramme, 35% of Colombians are at risk of chronic malnutrition, which means four out of every ten children are malnourished (World Food Programme par.1). Food insecurity causes nutritional deficiencies in rural children and severely threatens their health.

One of the most common health problems, found in people, specifically children, who suffer from food insecurity, is foliate deficiency. Folate deficiency has a negative impact on the brain and the heart's development. Sometimes Vitamin B deficiency can follow foliate deficiency, which can result in reduced appetite, cardiovascular disease, and depression. Vitamin A is also a common nutritional deficiency that generally accompanies zinc deficiency. They will lead to vision impairment, a slow growth rate, and a weakened immune system. Lack of Vitamin A can also lead to iron deficiency in the body, which “results in an insufficient supply of oxygen to cells, eventually causing anemia, fatigue, poor work performance, slow cognitive and social development in children, and decreased immunity.” (“Colombia” par.6). In short, children's health is greatly affected by a poor diet.

5. Major factor that led to food insecurity

Food insecurity has troubled the leaders of Colombia for many years. In order to solve this long-term issue and to improve the quality of life of people, leaders have promoted research. The results of research indicate that a low education level is the main factor that contributes to the development of food insecurity. For instance, a longitudinal research that was conducted by Tefera Belachew, Craig Hadley, David Lindstrom, Abebe Gebremariam and Carl Lachat showed that youths from ages 13-17, that suffer from food insecurity, have higher rates of school absences compared to children who do not suffer from food insecurity (Belachew, Hadley, Lindstrom, Gebremariam, Lachat,and Kolsteren1). Sadly, the results also show that the female absence rate is nearly 7% higher than that of males, which would suggest that females in Montes de Maria are more likely to suffer from food insecurity because they received less education.

Parents' education also affects their families’ food security statuses. Based on a survey that took place in a Colombian school, forty-two percent of the families are afflicted by food insecurity, and they had one thing in common --- their parents' education levels were low; they had only been educated for one to four years. On the other hand, families who had gone to college had the least food insecurity (IsanakaMora-Plazas, Lopez-Aranabaylin and Villamori1). Education level has tremendous impact on a family's food security status. Thus, the Colombian government should address the educational issues in rural areas, hopefully leading to more opportunities for families to obtain food security.
6. Other Possibilities that may have caused food insecurity in Montes de Maria

Lastenia Berrio, a nutritionist detached by the Colombian government believes that the people's tendencies may have contributed to the severe malnutrition in Montes de Maria. “It is very common that a family sells the fruit they grow in their backyard to buy a soda and chips.” (“Strengthening Food Security in Colombia | Global Communities” par.5). Colombians do grow various kinds of fruits, but they sell these foods, that are nutritious and valuable for their health, and use the money to buy junk foods.

Another factor that may have caused food insecurity in Montes de Maria is poverty. According to the rules of society, whoever has a higher education gets greater employment opportunities. Unfortunately, many people in Montes de Maria are not well-educated, and the money they earn cannot sustain their families. Thus, children have to drop out from their schools and go to work to support their families’ living expenses. However, that leads to a cycle of poverty and worsens the issue of food insecurity.

Climate change is also a big issue. After Colombia stepped into industrialization, the environment has been seriously damaged. Climate change in Montes de Maria affects the growth of crops and the food productivity. As the food production decreases and as population increases, food scarcity becomes more relevant. There are other possibilities that resulted in food insecurity, such as geography, poor hygiene and lack of contact with the outside world (“Strengthening Food Security in Colombia | Global Communities” par.2). However, education is the underlying factor. Through education, people can realize the importance of nutrition and learn about climate change, so they can figure out solutions to the very situations they, as well as others, may be in.

7. Solutions

As food insecurity continually develops in Montes de Maria, the Colombian government came to a realization that education is the major cause of food insecurity. Therefore, Colombia tends to focus more on the education of rural people. For example, nutritionist Lastenia Berrio was appointed to teach the people in Montes de Maria about nutrition and ways to store water and food (“Strengthening Food Security in Colombia | Global Communities” par.5). Moreover, the Colombian government has started training younger generations in agriculture and useful farming skills as well as technology in order to improve food security for their community. “The San Onofre municipal government and the social organizations Mugesco and K-pacitar designed a project to create 150 vegetable gardens for families with young children to improve their food security.” (“Strengthening Food Security in Colombia | Global Communities” par.3). The project will last for eight months, and during this period, participants can gain the knowledge and skills needed for growing, and harvesting crops (“Strengthening Food Security in Colombia | Global Communities.” par.4). This encourages agricultural development and reminds people that agriculture is a necessary association with human culture, history, and life. Without agriculture, the land will not yield a steady supply of food for people to feed themselves.

The Colombian government has invested a lot of money in educating young people, because they value their children. Through education, people will raise awareness of the significance of agriculture, and promote the revitalization of Colombia, to answer the severe condition of food insecurity in Colombia.

8. Conclusion

All people should learn how to address food security, because it is not just a serious problem in Colombia, but it is also a world wide issue. Surprisingly food insecurity is damaging the well-being of 925 million people every day. For example the people of Montes de Maria, a small and relatively unknown region in Colombia, are facing a severe case of food insecurity. Moreover, poverty, a poor education system, and climate changes only add to the increasingly difficult lives of people around the world. There are some solutions to prevent food insecurity from spreading. First of all, parents can teach
their children about agriculture, and food in general, to help the younger generation be more aware about the significance of agriculture and the consequences of food insecurity. Through which young people will also be encouraged to stop wasting foods and save more precious resources. Secondly, schools can teach students about knowledge, technology and skills used in agriculture. For instance, Hy-Hopes, an organization in U.S. set up educational laboratories for teaching students about nutrition, how to plant, care, and harvest crops. Hy-Hopes believe that education plays an important role in the development of the community (Hy-Hopes par. 1&2). They said that “…we believe it of critical importance to teach young people about energy conservation, nutrition, and responsible agriculture.” (Hy-Hopes par.1) However, there is a potential problem of this solution. In order to set up education programs and schools, a big amount of money and other resources are necessary. But how can we collect the necessary resources, including money, first, ask the government for the help which may be readily available, because it is the duty of a nation to save it's people from suffering. Furthermore, spread the news of food insecurity to the community and persuade people to raise money to help others. Moreover, since the residents in rural areas are mostly farmers, people must have lands for farming. Therefore, asking the residents to share lands for educational purposes, could be another practical solution. In conclusion, the former President of South America, Nelson Mandela famously said, “Education is the most powerful weapon which you can use to change the world.” Education is a powerful weapon that determines the result of the battle against food insecurity and it has the ability to change the world.
Bibliography:


3 Making Investments in Poor Farmers Pay. Issue brief no. 1. Web


