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Puerto Rico: Helping Puerto Rico Improve Nutrition with Education and Agriculture

## **INTRO**

Puerto Rico it is a territory of the United States and is in need of support. Recently Puerto Rico has had the misfortune with destruction from Hurricane Maria on September 16, 2017-October 2, 2017 and an earthquake on December 28, 2019. While all of this is happening, President Trump has decreased the amount of aid the United States of America has given Puerto Rico and they haven't been able to fully rebuild and recover. Also there is a great need for nutritional education and agricultural development. With the support from the United States we can help Puerto Rico become more self-sufficient and improve their lifestyle.

## **BACKGROUND**

Puerto Rico is located in the middle of the Caribbean Sea. It is 3,515 square miles and is mainly mountainous with large coastal areas. According to the article "Climate of Puerto Rico", on average the climate is predominately tropical rainforest with temperatures sticking around 85 degrees fahrenheit yearly. The capital of Puerto Rico is San Juan, which is located on the northern coast. Puerto Rico became a territory of the United States on December 10, 1898 after the Spanish-American War under the terms of the Treaty of Paris. This year (2020), if legislation passes, Puerto Rico will become incorporated and become our 51st state in January 2021. When this idea came out, 97% of Puerto Ricans voted yes to becoming the 51st state. ("2017 Puerto Rican Status Referendum" 2017)

Puerto Rico's economy relies mainly on federal aid from the United State's government. As reported by NBC News, President Trump was going to send \$92 billion in aid, but the country has received \$15 billion. The territory is a self-governing commonwealth in association with the United States. Their chief of state is the President of the United States, and they elect a governor to serve as head of their government. ("2017 Puerto Rican Status Referendum" 2017)

As of April 3, 2020, the United States Census Bureau reported, the population consists of 2,860,853 people, with 76% white, 12% African American, and 12% are other ethnic groups. The average family size is 2-3 people. It is common for three generations to live together and a close family bond between them is important. Family loyalty is more important than individual success. Family is the foundation of their social structure, whereas in our country friends and same age peers are our social structures.

## HOUSING

Housing is very expensive with the average house costing \$175,00-\$319,000. ("Housing Cost in Puerto Rico") There are three types of housing available for Puerto Ricans, barrio, urbanization, and for a majority public housing. For an average family their total income is \$20,000 per year compared to the United States's \$62,000 per year. ("Puerto Rico") The leading jobs include cashiers, teachers, food service, tour guides, manufacturing equipment, and people working in the pharmaceuticals industry. Less than 3% of the workforce have an agriculture related job, and the numbers keep decreasing due to Hurricane Maria and the earthquake in 2019. (Rivera, Magary. 2020) (Data USA:Puerto Rico")

### **EDUCATION**

Many of the schools were damaged during the hurricane and earthquake. Similar to the United States, Puerto Rico offers private and public school options. The primary language taught and spoken in schools are Spanish and English. Going to school is a requirement for children ages 5-18. Sixty percent of the population earn a high-school diploma or higher. Puerto Rico is currently in the process of redesigning their education system due to the hurricane and earthquake. ("Education in Puerto Rico.")

# **FOOD**

Puerto Rican's diets typically include fiber packed beans, rice, fresh fish, tropical fruits, and many herbs and spices. Their cuisine is often fried, spicy, high in fat and sugar. These food habits contribute to a high rate of obesity, diabetes, and hypertension in Puerto Ricans. (Dixon, Laura 2018) ("Health Conditions and Lifestyle Risk Factors of Adults Living in Puerto Rico" 2018)

Puerto Rico is facing many more challenges today due to their recent natural tragedies. One of them is the lack of nutritional food. Before the hurricane, 1.5 million Pureto Ricans were food insecure. The largest poverty numbers were for females ages 25-44 and males ages 45-54. After the hurricane 82 percent of the current crops were destroyed by Hurricane Maria, which equals \$780 billion. One mayor estimated that about 5,000 residents faced starvation. (Herzog, Hayley 2018)

## **SOLUTIONS**

There are many non-profit aid organizations working for Puerto Rican citizens. Puerto Rica receives a block grant with a fixed amount of federal funding to provide basic household food assistance through the Nutrition Assistance Program (NAP). There are other federal programs like (WIC), for women, infants, and children and school meals programs. These programs are all important to Puerto Rica because over two fifths of its residents and over half of its children lived in poverty, in 2018, according to the United States Census Bureau data. (Keith-Jennings, Brynne and Wolkomir, Elizabeth. 2020)

Although Puerto Rico receives a lot of aid for food from non-profit organizations and the federal government, educating them can lead to increased self-sufficiency and accountability. According to a spokeswoman for the Department of Family Affairs, more than 330,000 elderly people are among Puerto Rico's residents on the food stamp program. An additional 22,000 families asking for aid over the past year were denied assistance. Because of these outrageously high numbers, good nutritions and staying healthy needs to be taught to the citizens of Puerto Rico. One way is to teach nutritional education through the schools starting at a young age and continuing throughout the grades. Currently women of the households are the only ones buying and preparing food. All people should be taught nutrition and food preparation. Furthermore, the citizens of Puerto Rico need to learn how to produce healthy foods. These efforts would help lower the poverty level and make the Puerto Ricans self sufficient and appreciate what they have accomplished.

The United States could provide college loans to students to teach nutrition. Then the student nutritionists would develop and teach a nutritional program while traveling to Puerto Rican schools, their college loan would be forgiven. The program will teach the difference between healthy and unhealthy foods, food preparation, and food storage. These programs could be taught at each grade level and would include demonstrations as well as activities for the students. The lessons would be appropriate for all ages and build on one another.

For Puerto Rico, it would be important for its citizens to learn how to grow and produce healthy foods. The same college loans could be offered to agricultural students. It is important for all citizens of Puerto Rico to know how to grow food as well as raise healthy livestock. Community gardens could be developed in low income neighborhoods, which then ordinary citizens could sell their produce at garden markets to earn extra family income. Increasing their income and tax base would give more tax money to improve infrastructures, which have been heavily damaged by Hurricane Maria and the earthquake. The climate in Puerto Rico would be perfect for growing food, with the average temperature reaching 85 degrees fahrenheit 365 days a year. "Every acre is three times as productive as most acres in the northern hemisphere," said Mike McCloskey, a U.S. Dairy farmer. (Charles, Dan 2017)

According the article William Gould, et al., in their article "Land Use, Conservation, Forestry, and Agriculture in Puerto Rico," Puerto Rico imports 80% of the food they consume. By cutting back on imports and producing more crops on the island, Puerto Rico would be able to cut back on expensive import costs and enjoy fresh high quality food. Increasing agriculture would boost the economy and provide more jobs. Less than 2% of Puerto Rico's workforce is employed in an agricultural job.

Dairy farming is the biggest agricultural economy. Beef and pork are currently being imported into the country. I think our country could ship small amounts of those animals down to Puerto Rico so they can start up their own herds, and teach them to produce them efficiently. With the support of the American Cattlemen's Association, cattle raising could be demonstrated to them. It would also be beneficial for Puerto Rican farmers to tour our farms on the mainland. In Puerto Rico, pastures can feed the livestock 365 days a year. Puerto Rico should be able to cut the 85% of imported food down to 50%. (Charles, Don. 2017)

Our agricultural departments at universities would overlook these projects by sending students to Puerto Rico, and in exchange Puerto Rican agricultural students could intern at our agricultural universities on the mainland. Agricultural departments at universities could team up with the American Farm Bureau to help with the funding and the creation of these projects. Another group to support our ideas is a group of Puerto Rican agricultural entrepreneurs, led by Eduardo Burgos and Franco Marcano, who are promoting more farms on the island to produce homegrown food. They want farming to become not only an employment but also as a necessary source of healthy food for the Ruerto Picans. (Acevedo, Nicole 2018)

### **CLOSING**

It is important to help Puerto Rico because they have had many recent destructive tragedies causing a great deal of property damage and President Trump is decreasing aid to their country. Another reason to help them is that in the next year they may become the 51st state in our country. Malnutrition, especially in the poverty areas, can be improved by educating children as well as adults in the schools and with community programs. Helping Puerto Ricans develop a strong agricultural economy is important. They need the resources to improve their agriculture. Our goal is for Puerto Rico to become self-sufficient and healthy. With the help of our country's aid, and non profit organizations teaming up with agricultural universities, these goals can be met.

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