Feeding Fiji's Hungry Cheyenne Tedrow Fairfield Community School District

What do you think of when you hear the word Fiji? Do you think of a vacation destination? Perhaps you think of a type of fancy bottled water. Have you ever thought, though, of what the country of Fiji is like? Or, do you think of what the people in Fiji experience on a day to day basis? Fiji is another nation, much like the United States of America. The nation has some positive qualities, but it also has its problems. Life in Fiji does not seem so different or so bad in comparison to other nations. Fiji has many problems, as many other nations on earth have. Historically, food security is at a low. High prices coupled with the unpredictable weather patterns cause food scarcity. Food is not always available to the poorest people of Fiji because of the processing and distribution system in place. This research essay explores dairy production in Fiji, more specifically the equitable allocation of dairy production output. When you are through learning about Fiji, you will understand how much another nation is just like the United States of America.

# Overview of Fiji

Fiji is a small, relatively isolated island country. There are over 300 islands in Fiji, with the largest two making up over 80 percent of the total land area. Sixteen percent of land in Fiji is suited for agricultural production, and 43 percent is suited for grazing. Fifty-nine percent of Fiji is covered with natural forest.

The population of Fiji lives with a reasonable yet not high standard of living. The population of Fiji is around 800,000, with 51 percent of that population native to Fiji. More than 90 percent of the population is educated at some level and that 90 percent is able to read and write. Life expectancy in Fiji is 72 years old, and infant mortality is relatively low at approximately 2 percent. The normal Family size in Fiji is two to three children

Fiji has unpredictable weather patterns with many extremes, including cyclones and flooding. This presents challenges to those involved in production agriculture.

. Fiji agriculture encompasses dairy production, beef cattle production, veal production swine production, sheep production, goat production, fish, and poultry production. Most of the meat animals are raised on open grazing. Major crop production in Fiji includes pasture for grazing animals, sugar cane, coconut, plantation mahogany, Caribbean pine trees, copra, rice, corn, tobacco, cocoa, ginger, pineapple, bananas, watermelon, and many other fruits and vegetables. Fifty-nine percent of Fiji is covered with natural forest. Commercial food processing and distribution includes both imports and exports. Fiji imports beef, veal, lamb, mutton, and fresh cow's milk. Export products of Fiji include sugar, copra, molasses, fish, coconut oil, taro, ginger, kava, papaya, and eggplant. Exports in the horticultural area are growing while copra, the traditional cash crop of Fiji, is slowly dwindling.

For some of the family's jobs and incomes, agriculture serves as half of the nation's employment. The other half of jobs come from mining, industry, commerce, public services, construction, and other random jobs. Most of the other half of jobs provided lean onto agriculture, or are agriculturally based. Most of the jobs supply and/or manufacture all that Fiji needs to run a subsistence farm.

# Typical subsistence farm in Fiji

Subsistence farming, or producing enough feed to feed your family but not to sell commercially, is 30 to 40 percent of the production agriculturalists in Fiji. Because the average family size in Fiji is two

to three children, the average size subsistence farm in Fiji is just large enough to produce enough food to feed five people for one year. A typical subsistence farm has many factors, for example the size of the farm depends on the size of the family. If the family is large in size, it is required to maintain a larger farm. The crops and yields grown on the farm depend upon the crops able to be grown, given the weather, soil, and resources available; the families major diet; income rates, realizing the higher the income, the more nutritional food is available; the availability of supplies and services necessary to efficiently and effectively farm; and the ability of the family to coordinate food production with the climate.

The typical crops grown on a Fiji subsistence farm are fish, fruit products, root vegetables, sugar, and ginger. Because of the large amount of forestry in Fiji, much of the land is not farmable. The soil and climate in Fiji is not conducive to intensive row crop farming. Therefore, the yields are not as high as they would be expected to be. Therefore, subsistence farms in Fiji are a staple.

# **Equitable Allocation of Farming Output**

How does the farming output to dairy products affect agriculture productivity? In June of this year, a Brucellosis outbreak almost killed Fiji's dairy industry. Brucellosis is a highly contagious, infectious disease. In animals, it causes abortion and other r reproduction problems. Brucellosis is transferrable to humans. So, with the dairy production just getting back up to hype, a lot of struggles have been encountered. A large number of dairy production farms were quarantined when hundreds of the dairy cows tested positive for Brucellosis. They will not be reopened until the government realizes the seriousness of the problem and makes the necessary funds available. The dairy farmers cannot recover without some sort of assistance from the government. This consults a HUGE problem. Family's that run commercial dairy farms drink their own milk and sell to neighbors and friends at low rates. Anyone that drinks Brucellosis infected milk is at risk for contracting the disease. Brucellosis is also known as the contagious abortion disease. If the government doesn't step in and fix, resolve, or maintain this problem, then everyone in Fiji will suffer from a major deficiency in the economy. Without money coming in to dairy production farms, they cannot stay in business. The economic cycle will cycle lower and lower until this problem is addressed. If this problem is fixed, then the dairy production in Fiji will suffer for awhile. The dairy herds will have to regain all the cows that had to be slaughtered.

This isn't the only problem. Dairy production in Fiji faces other problems, such as low milk yield due to poorly managed nutrition. Another problem facing Fiji dairy production is inadequate fencing, which provides problems with the protection of animals from wildlife and the elements. Serious weed control issues face Fiji dairy producers, which cause a lower amount of animal feed to be available. Further escalating the animal feed available is drainage problems in the soil. Dairy farmers in Fiji also face low stock rates, lack of hygienic water supply and electricity, increasing loss of land-leasing rights and the occasional loss of the dairy license. Fiji dairy cattle farmers lack of overnight chilling facilities, and they have a disturbingly unhealthy dairy environment. All of these problems hold back the hardest working of the dairy farmers in Fiji.

# Affect of Subsistence Farms on Dairy Output in Fiji

If more small subsistence farms increased their productivity rate, how would this affect Fiji? Fiji's agricultural economy would boom, but would Fijians be happy? No, of course not, here in America we try and do as little as we can, and make as much money as we can. We are a lazy nation, but not the only one. Fiji believes in the same motto. Fiji is the opposite of China, in the sense that it seems as if China's motto is make everything America wants, and make huge profits, and sell low to our people, the Chinese. Fiji doesn't have a supportive nation of economy like we do. Fiji makes, what Fiji needs, or they import items that they cannot make.

However, a larger number of small farms in Fiji could be a key to improving the food supply and the quality of the food supply in Fiji. If the food production were spread out across Fiji, the farmers would be able to devote more time to improving their farm production habits. Thus, the agricultural technology used and available to the famers would increase. If the subsistence farms were to grow, the production would increase over time. As the country develops, those small subsistence farms would then be combined and managed until agricultural reaches a more commercial scale,

#### Recommendations for Increasing Dairy Output in Fiji

Fiji should increase their farm production, in just dairy, by just 15-20%. Then, by the increase, the economic boom would drive people to have a higher export rate, in-turn making efficiency a top priority. Also, an increase in dairy production in Fiji is not enough. Education in agriculture is the key to continued success in Fiji agriculture. Fijians need to learn the best available methods of animal welfare in order to produce dairy products at the highest rate possible.

Also, crop control is essential to Fiji. If crops were to be controlled and managed more effectively, there would be an increase in the amount of agricultural production. Also, more animal feed would be available at a higher nutritional rate, thus increasing dairy production. Technologies developed and used in other countries in regards to weed control, fungal control, and insect and other pest control, could easily be transferred and incorporated into Fiji. It is important, however, that the Fiji farmers learn from the earlier mistakes of farmers using these methods. For example, they must learn to use chemicals such as pesticides and fertilizers with the environment in mind. They also must combine many methods of control with the chemical control. It is important, too, to realize that Fiji has some methods of crop control that are working and simply need to be supplemented to improve them.

By upgrading their knowledge and equipment, Fiji's dairy production would be of the greatest interest to the nation. It would also lower the prices of food to the Fiji people, thus improving the economy. Right now, many dairy products have to be imported, which means they are of a higher cost. Only the middle and upper class have this important nutritional food group available to them. This would help improve the health of the country if dairy products were more available to the Fiji people.

# Role of Communities, Governments, Companies, and Other Organizations in Improving Fiji's Agriculture

In order for Fiji to increase their agricultural production, it is imperative to educate them. The communities of Fiji must be open to education as a whole, given their 90 percent literacy rate. The farmers of Fiji must open their minds to learning new technologies and news ways of producing crops. In order to accomplish this, humanitarian organizations must come in and slowly change the mind set. If a humanitarian organization were to send a successful dairy farmer from another country in to work with the Fiji dairy farmers, the dairy farmer could show success in producing dairy with his or her tried and true methods of dairy production. As the Fiji dairy farmers see the success of the "new" ways of producing dairy, they would adopt the methods.

Moving towards a more sustainable agriculture and healthier agriculture must become the goal of the Fiji government. With this in mind, the governmental role of agriculture in Fiji must improve. In order to ensure a safe food supply, regulations must be put into place and monitored. An organization similar to the United States Department of Agriculture would be helpful. An organization similar to this in the Fiji government would facilitate education of farmers in their area of production agriculture, ensure food safety, and help integrate current technology into Fiji's production agriculture and agricultural business system.

The Fiji government must put the basic needs of its population first. As seen in history, when the basic needs of a country are met, the other parts of the country will develop. In order for Fiji to move from a developing country to a developed country, technology is imperative.

Over time, as the new technology were adopted, the Fiji farmers would be able to increase their dairy production to provide Fiji with the dairy products necessary to provide a nutritional food supply for its people. This would improve the health of the people of Fiji while lowering the portion of a Fijian's income spent on food. By doing so, the entire economy of Fiji would improve. If more money were available to be spent in Fiji on other products, the economic cycle of Fiji would continue to cycle up.

#### Conclusion

Fiji is a country that is developing. It faces challenges and obstacles in everyday living. As the country move forward, it will be imperative for Fiji to provide a safe, nutritional food supply for its people. In order to Fiji to produce food, especially dairy products, safely, efficiently, and effectively, the Fiji government must get on board and provide educational supports to the farmers. Technology must be integrated into the dairy production systems of Fiji in order to increase production. As the population of Fiji continues to grow, it becomes imperative the Fiji farmers produce more on less. If Fiji were to be sustainable in production of animal feed, and not spend a large amount of money importing feedstuffs, they will be able to produce more milk at a lower cost. In conclusion, social supports are necessary in order to ensure a safe, secure, and efficient food production in Fiji. Once the food supply in Fiji is secure, the other parts of economic development can occur.

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