Rebecca Lehman, Pennsylvania School for Excellence in the Agricultural Sciences, Central Columbia High School, Bloomsburg, PA Argentina, Factor 4: Animal Health-Final Version

Argentina: Animal Health

Argentina is a South American country located in the southern portion of the continent. It is the eighth largest country in the world with a population of 45.8 million (Eidt). Among this, 92.5% of the population lives in urban areas. The country of Argentina has much diversity including plains, deserts, forests, tundra, mountains and rivers. Temperatures can reach extremes up to 120 degrees fahrenheit. On average, this country produces 20 to 40 inches of rainfall a year. The area of this large country is one-third the size of the United States. The climate in Argentina varies from warm, moderate, arid, and cold. The main language in Argentina is Spanish while some minor languages include English, French, and German. Most importantly, Argentina once ranked one of the wealthiest nations when it comes to livestock and cereals.

The household structure for a family in Argentina varies by class. A low or middle class family may have many children in order to take advantage of government subsidies in order to assist in the raising of the children. Most middle-class and high-class families have only one or two children and some parents even hire maids to babysit their children while they go to work. The female's role in the household is to raise the children and oversee the finances, while the male's role is to provide financially for the family. When it comes to diet, Argentinians eat more beef per capita than any other people in the world. Since Argentina produces most of their own beef, it can be consumed almost daily. Education in Argentina has its pros and cons. Though Argentina has a 98% literacy rate, the quality of the education it provides is poor due to lack of government funding. School days are normally only a half day and bilingual teachers are scarce, so it can be difficult to teach children who speak English when the main language is Spanish ("Education and schools for expats in Argentina"). Health care is relatively available in Argentina with 50% of people obtaining the care they need (Assure). The quality of this care is usually satisfactory with Argentina having one of the nicer care facilities in Latin America. On the contrary, in poorer regions to the north, health facilities may be lacking medical equipment and/or staff.

In terms of farming, Argentina is a good location for soybeans, wheat, and maize. It houses one of the richest topsoils in the world. Agricultural practices include agrochemical, genetically modified seeds, and direct sowing without a plow. They also produce a high percentage of beef cattle, sheep, dairy cattle, as well as horses ("Animal Husbandry"). Argentina houses a plethora of beef cattle, at around 50 million head. It is made up of a bounty of organic farms. Argentina is home to 1,578 farms considered to be organic. Ninety percent of these farms are small or medium sized. A farm in Argentina needs to be two and a half times as large as a farm in a state such as Kentucky to be sufficient. For example, a 3,000 acre farm in Kentucky would be as profitable as a 7,500 acre farm in Argentina ("A Look At Agriculture Outside the U.S."). When it comes to ownership, 69% of these farms are owned by the farmer and 19% of them are rented (Coroneo-Seaman). When it comes to urban areas, Argentina is one of the most urbanized countries in the world. Ninety-two percent of the people living in Argentina live in an urban area (Bolay). One of the issues with these areas is pricing for living accommodations in an urban area. Wages in the area have not risen to keep up with the rising cost of rent for houses in populated areas.

Food security in Argentina is posing a large issue. Five and a half million out of the 42 million people who live in Argentina face some sort of food security issue, 16% of them being families with children (Marcos, A., & Perez, A. M). A reason for that stems from the crisis starting in 2001. The peso was increasingly losing its value and by 2002, families were struggling to pay for food, housing, and

other general commodities. Many jobs in Argentina are not considered "formal" jobs, so people seeking employment are forced to find informal and unstable jobs to make ends meet ("Country Profile Argentina"). Another issue is not having the balance of exports and imports. Argentina produces enough food to feed its country, however its economy heavily relies on the revenue from exporting those grains and agricultural products to others.

In Argentina, another major concern is animal health. In 2002 Argentina began to experience issues with foot and mouth disease in cattle. Foot and mouth disease in cattle is a highly transmittable virus that occurs in cloven-hoofed animals such as cows, goats, sheep, pigs, and deer. Obvious signs of the disease include ulcers in the mouth which creates a smacking sound when eating. The cattle they relied on for exportation was found to have spread foot and mouth disease to the United States, which had eliminated the disease in 1929 (WTO). This caused the United States to ban imports of beef from Argentina, which Argentinas economy so heavily relies on. Currently, there are five sections in Argentina dedicated to vaccination of cattle. In two of the sections, the cattle are vaccinated (Marcos, A., & Perez, A. M). Cattle two years of age and older are vaccinated yearly while cattle less then two years of age are vaccinated every six months. In the other three sections, no cattle are vaccinated. This is completed to ensure immunity and that not all cattle will develop immunity to the vaccine. Ultimately, the desired outcome will be that all cattle develop a natural immunity to the disease and that the disease will be eradicated through that form of management. The mortality rate is five percent in adult cattle and up to twenty percent in young calves. Symptoms include depression, weakness, fever, and vessels filled with clear liquid appearing in the mouth and on the teats. The disease can spread a week prior to symptoms and one to seven days after symptoms have disappeared. Infection can be spread by touch or airborne. It has even been seen to spread by a mother's milk to her calf. The transport of cattle across these five zones, live or dead, is illegal, making it difficult for efficient trade.

For the typical family, especially cattle ranchers, it can be difficult to export the beef they raise due to the zoning issues. For many Argentina families, this is a number one source of income, so it is important that this issue is resolved. A plan to improve food security would be to continue the vaccination program until the disease is completely extinguished in Argentina and then input a new plan of action. The vaccine plan could expand to assure vaccines are available to everyone. The possibility of requiring a vaccine through a vaccine and tagging program where cattle are required to be tagged when shipped and that tag can only be administered through a veterinarian who also administered the vaccine could be beneficial to assuring all cattle in Argentina are being vaccinated against this disease. This funding could be provided by the government seeing as these exports of cattle are important to Argentina economy. Once considered disease free, Argentina should slowly reduce the routine vaccination of their cattle. Once routine vaccination is reduced, the government can eliminate zoning. However, how can these vaccines be funded? A way to assist in funding is by having companies such as Zoetis, Merck and Elanco provided and pay for a percentage of the vaccines while the remaining portion can be assisted by the Argentina government. Finally, other countries could invest in this to ensure they are receiving the beef they need from Argentina. Not only are the exports important for Argentinas citizens, but also for other countries' economies. A good way for the regular citizen to have a role in this is by advocating and urging their government to implement this routine to protect their income and livelihood. This will create an easier situation for families to be able to get their beef to ports to be able to export them and generate an income. It is also allowing for the government to ensure that the animals are disease free when reaching ports as to protect other countries from this disease. Due to the high prices on rent and other commodities, without these needed exports, it can be difficult for a small family to earn a living. When it comes to the regular citizen, consuming beef that has been produced in Argentina is important. Even going as far to consume beef produced in your "quadrant" could also be beneficial.

With rising prices on rent and the decrease in wages, food security for Argentinians is a large issue. Many are facing poverty in Argentina with problems that could be simply corrected. The animal

health regulations are accomplishing very little in assisting the concerns of these families. The zoning issue stops thousands of small family ranches from exporting the beef they need to make ends meet. Whether this issue is resolved in the current future or not, this plan of action can be implemented in case of other disease or viral outbreaks. By becoming disease free and eliminating vaccinations and zones, it will be easier for the common Argentina family to export their products and have enough money to sustain themselves.

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