

Dylan Childs  
West Marshall High School  
State Center, Iowa  
Brazil, Factor 19

### **Brazil: Improvements of Transportation and Benefits for Brazil**

Brazil has had a rough life from the beginning with the country being a colony and then having a military government that ignored the transportation system until till recently. Over the years the population grew and spread out all over the country, getting farther and farther from the transportation system. The governments never put much into improving and enlarging the transportation system. Now most of the roads linking communities together are dirt paths. The highways are in such bad condition vehicles can't go very fast. There are large bodies of water throughout the country, but most of them are in remote, desolate areas. Brazil has very few kilometers of railways that could handle moving large amounts of products quickly and cheaply. Small farms make up majority of the agricultural products produced in and exported from Brazil, but there is little return on the products Brazilians sells to the market leaving the farmers poor. With transportation expansive, the prices on the products sold are high but a large amount of money is used to pay to move the products. Also, families in rural areas have difficulty sending their kids to school and getting to medical centers. Progress has been made on the transportation system, but Brazil still needs help.

Family size and composition, diet, education, and access to health care vary greatly due to the area such as, like in the middle of a city or in the middle of nowhere. The average family size is about four people a household, but can vary from area to area and family to family. A family usually consists of the two parents and a couple of kids. Diets vary from area to area since there are a variety of environments from a tropical forest to semi-desert areas. With different types of environments, different foods are raised. Until recently, the public schools were very poor and very few, but today the education system turned around and is getting better every year (Still a Lot to Learn) There are schools and medical centers throughout the country; however, some families live in remote areas away from public services, making it difficult to send kids to school or get medical help. Every area is different from sizes of families, diets, education, and health care.

Crops grown and agricultural practices are similar to those in the United States, but one difference is the size of the farms. The farm sizes are small; they are nicknamed "family agricultural," since small farms make up majority of the farming in Brazil. The main crop grown in Brazil is coffee, but Brazilians also grow corn, soybeans, sweet potatoes, sugar cane, tobacco, and cabbage (World Crops Brazil). Cattle, swine, sheep, and poultry birds are raised and exported from Brazil. Brazilian farmers practice sustainable agricultural practices a high percentage of the time. A majority of a small farm's income is selling the products raised on the farm, but some farm families have a family member not in the agricultural world bringing in more money. Brazilian farmers want to preserve the environment, grow the same crops, and hopefully increase the size of their farms.

Some of the major barriers small family farms face is moving products from home to the market, earning more money for an easier life, and getting to public services. The transportation system not reaching far from large cities makes it difficult to get products to market quickly to make more money (Transportation Brazil). Since small farms have a low income, small farmers can't afford new genetically modified seeds that create a higher yield for their area to make a little more money. Public services, like schools and medical centers, are difficult to use since people live far away or just difficult to get to the public services. The barriers small farms face may look big and difficult but can be tackled if focused on one at a time.

The factor I have chosen to discuss is getting products from the farm to the market to be distributed and sold. Improving the transportation system will indirectly improve the productivity by allowing farms to get a better seed that will yield more products. If farms could increase the crops grown and get livestock raised faster to markets, the farm can save more money on transportation costs, freeing up more to be reinvested into the farm. Food would be more available to poor people because prices would drop since shipping costs would be less. Also, the quality of the food would get better since the agricultural products would be fresher. Moving the products of the farms to markets will have a positive effect on businesses and citizens.

The role of the factor of the transportation system is an important one presently causing problems for the small farms. Right now the transportation system is holding back small farms from growing and increasing income. How the transportation system is holding the small farms back is to transporting any kind of products is expensive(10-15%), leaving less return for the farm to improve or make life easier (Brazil-Transportation). Farms could raise more crops on the same amount of land, but the farmers can't afford to pay for new seeds with new genetics to raise yields since the cost of shipping the products is high. With expensive transportation leaving little profit, family farms are barely making payments on the land and are not able to afford medical care or send their children to school. Also, since the small farms have little money to spare, families can't afford different foods that might help improve health. Since shipping food takes longer, food when it reaches market is not as fresh and some might have started to rot and lose nutritional value. If the transportation system is improved and expanded, yields would be higher, incomes would increase, food prices would go down, and nutritional value of food might increase, too.

The transportation system is in a difficult situation, the environment is being affected, and when the transportation system changes, it will affect a lot of people. Right now the transportation system needs some reform, and the longer it takes, the more difficult it will be to improve. In some areas, forest has been destroyed to build roads and railways, and water ecosystems have been disrupted since ships and barrages started moving people and material. Most forest and water ways haven't been destroyed or disrupted for the benefit of the transportation system. Women, children, and people everywhere will benefit from the transportation system improvements. The transportation improvements would create jobs for the unemployed citizens right off, and then jobs would be created to maintain and keep improving the transportation system. Products raised on farms all over the country could be shipped faster to locations that will distribute products to where the products are needed. Also, if the cost of transportation goes down, agricultural products could have prices reduced so more people could afford the agricultural products. Another bonus is if transportation cost dropped, prices might stay up giving a larger return to the ones who sent the products out. Changes to the transportation system would have benefits for everyone.

There are several different trends to look at to see if there is any change to the transportation system and the same trends affect families everywhere. One trend to use to measure change on the transportation system is kilometers of roads, railways, and waterways. Another trend that could be measured is amount and how fast the agricultural products are being shipped through the country. There has been a slight increase in the transportation system; the number of kilometers has increased a little bit along with the number of paved road kilometers. The cause of the increases in the kilometers is in the large amount of money (\$60 billion) the national government put toward the transportation system (\$60 Billion Toward Brazil). The situation for majority families all over the country hasn't improved, but for some, there has been a slight improvement in their lives. The trends that are used to measure change on the transportation system have shown some improvements, and some of the families around the country had improvements with their lives.

Improving the transportation system will increase food amount and quality, raise incomes, protect the environment, and benefit everyone. More food could be shipped faster if there were real roads, and if they

are safe to travel at speed. Food quality might increase if less time was spent shipping it through the poor transportation system. Incomes would be increased since money could be saved since shipping prices might go down with a better transportation system. Improvements to the transportation system could lead to economic development since material could be moved faster. Also poverty could be decreased with jobs that would be created to improve the transportation system and to maintain the transportation system. The environment would change by improving and expanding transportation system but the improvements would put more money into the infrastructure. Improvements of the transportation system could benefit women, small farms, and rural and city families. Benefits for the small farms would be reduced shipping cost increasing the returns from the products sold allowing more to be reinvested into the farm. Families would benefit from the improvements by getting a family member working on, maintaining, or expanding the transportation system. Improvements of the transportation system could increase food quality, help with income, protect the environment, and benefit the people in cities and rural areas.

Some other major issues like, climate change, population growth, and urbanization will have an effect on the transportation system. The climate will dictate where improvements can be done, and where locations will needed to be watched to keep fixing the transportation system. Also, the weather will determine how fast the work can get done. When the population grows, the transportation system will be strained with the higher amount of traffic and a great demand for more products to be moved quicker. With the higher amount of traffic, the roads in a bad condition will become worse with the increase of traffic, if urbanization increases at a high rate, the demand for food will be increased greatly, and the transportation system will need to be able to carry the extra load. Other major issues in Brazil might slow improvements and expanding the transportation system but make the transportation system a bigger issue.

To effectively tackle improving the transportation system is to start with what the system is there now and expand from there. The first thing that should be done is improve the roads and waterways that are being used now. The second step would be create more roads, put down more rails, and connect bodies of water together with canals. New and safe roads will connect all the communities together so towns can move material back and forth quicker. Railroads can be used to connect the larger committees together so larger amounts of material be moved quicker. The water ways will be used to ship products from the interior to large ports on the coast to be exported to other countries. My research is not complete but might get things rolling for improvements with Brazil's transportation system.

All the groups in Brazil will have to work together from the national government down to the local and town councils. The national government will probably have to put some money into the project of improving and expanding the transportation system. Also the national government will be making the decision of when, where, and who does the work. Local committees can help by telling the decision makers of where the best places for improvements and expanding are needed and direct people to the work sites to get hired. Local and the national governments will need to run fund raisers to have enough money to pay for the massive project. Some of the international research agencies are going to be needed to make sure the ground will be able to handle the weight of the new roads and railways. Also the researchers are going to need to make sure there are no endangered species in the area and if the new transportation system will disrupt an ecosystem or not. If all the different groups, governments, and research groups work together, they will make the deadlines they set and maybe save money.

Improving and expanding Brazil's transportation system will take a long time and large amounts of money but will be beneficial in the end. Some of the major benefits would be faster travel across the country, safer travel, and lower transportation prices. With the ability to move products faster, areas that need help can get help faster and food that is being transported won't start to rot when shipping. Also food will be fresher when it reaches market, so quality of food will be better for the consumer. Improving and expanding the transportation system will create many jobs for the unemployed to construct the roads, put rails down, and dig canals and waterways. Also there will be jobs after expanding the transportation

system as workers maintain the system and keep improving it and expanding. If there are faster and safer ways to get around, families might be able to send their kids to school and go to medical centers more often, not just for emergencies. Income would be increased due to the reduction of transportation cost will be reduced since travel will be faster and safer. Improving and expanding Brazil's transportation system will have a lot of benefits for the country and everyone through it from cities and towns to factory workers and farmers.

### Bibliography

"\$60 Billion Toward Brazil's Transportation System." *PNG Logistics RSS*. N.p., n.d. Web. 22 Mar. 2013. <<http://pnglc.com/60-billion-toward-brazils-transportation-system/>>.

"Brazil - Transportation and Communications." *Brazil - Transportation and Communications*. N.p., n.d. Web. 22 Mar. 2013. <<http://www.country-data.com/cgi-bin/query/r-1685.html>>.

"Brazil Facts." *National Geographic*. N.p., n.d. Web. 22 Mar. 2013. <<http://travel.nationalgeographic.com/travel/countries/brazil-facts/>>.

"Brazil's Chaotic Transportation Systems At Stake - The Role Of The Private Sector." *Council on Hemispheric Affairs*. N.p., n.d. Web. 22 Mar. 2013. <<http://www.coha.org/brazils-chaotic-transportation-systems-at-stake-the-role-of-the-private-sector/>>.

"Central Intelligence Agency." *CIA*. N.p., n.d. Web. 20 Mar. 2013. <<https://www.cia.gov/library/publications/the-world-factbook/geos/br.html>>.

"Encyclopedia of the Nations." *Transportation*. N.p., n.d. Web. 22 Mar. 2013. <<http://www.nationsencyclopedia.com/Americas/Brazil-TRANSPORTATION.html>>.

"Home - Rural Poverty Portal." *Rural Poverty Portal*. N.p., n.d. Web. 22 Mar. 2013. <<http://www.ruralpovertyportal.org/country/home/tags/brazil>>.

Kawaguti, Luis. "Brazil's Struggle to Cut Deaths on Chaotic Roads." *BBC News*. BBC, 19 Sept. 2012. Web. 20 Mar. 2013. <<http://www.bbc.co.uk/news/world-radio-and-tv-19623271>>.

"Still a lot to learn." N.p., n.d. Web. 22 Mar. 2013. <<http://www.economist.com/node/13782570>>.

"WorldCrops Brazil." *WorldCrops Brazil*. N.p., n.d. Web. 22 Mar. 2013. <<http://www.worldcrops.org/countries/Brazil.cfm>>.