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Educating the Impoverished: Achieving Food Security in Brazil through Education

*“We must approach this as if it were vaccination campaign,
where the virus we want to kill is called illiteracy.”*
—President Luis Inacio Lula da Silva, September 2003 (BBC)

Brazil, the largest country of South America, occupies nearly half the continent. With a land mass of over 8.5 million square kilometers and a population estimated to be around 186 million people in 2005 Brazil ranks as 5th in the world for size and population (BBC). Mountains, plains, rolling hills, rainforests and coral reefs make the Brazilian landscape diverse and beautiful. The Amazon River, the largest river in the world, flows through Brazil along with a main tributary the Iguazu River. Due to the large rainforests, only about seven percent of the land is suitable for farming. Major Brazilian crops include cotton, soy beans, coffee, wheat, rice, corn, cocoa, citrus, and sugarcane. Commonly raised livestock consist of swine, poultry, and cattle. Aside from agriculture, Brazil also has a variety of natural resources: bauxite, gold, iron ore, manganese, nickel, phosphates, platinum, tin, uranium, petroleum, hydropower and timber. Despite its wide range of agricultural and natural resources, Brazil has major interrelated obstacles standing in the way of creating a better future for its people: poverty, hunger, and illiteracy. Twenty million people in Brazil are illiterate and most of the illiterate are share croppers, small land holders, temporary workers, or employees of farms. Most temporary workers' jobs are seasonal; therefore, workers have no steady income during the off season. As a result, children must work to help support the family and Brazil now has twice the number of children in its workforce than any other Latin country. Lack of financial means also prevents impoverished Brazilians from eating a varied nutritional diet. In the north, where poverty is at an extreme, approximately one quarter of children under the age of five are undernourished (World Bank). The cycle of poverty will continue and underprivileged Brazilians, especially in the north, may have even less food security in the near future than they currently do in the present unless steps are taken to make education accessible to every Brazilian.

Brazil's history of colonization and slavery has made for a widely diverse population and definitely defined social classes. The socioeconomic inequality creates a base for subtle discrimination in the areas of education, housing, and employment. Advancing up the social ladder has become virtually impossible due to the large gap between social classes. The upper class inhabits well organized neighborhoods, send their children to private schools, and have access to shopping malls and large supermarkets. The poor, on the other hand, either live in slums called favelas or in rural areas. The urban poor have lengthy bus rides into the central part of the city where jobs are located and those living in the country farm small parts of barren land or work on large ranches. Their children attend public schools with inadequate resources until eighth grade when they are able to seek employment. Because the favelas are easily avoided and neighborhoods are separated by economic rank, the poor have become invisible to the top sector. There exists virtually no middle class, the reason being that a small portion of the population controls a large portion of the wealth. Those who classify as middle class often times have close relatives who are still impoverished depending up on them to supplement what little government aide they do receive. This further inhibits the poor population from social and economic advancement. Surprisingly, even though Brazil has quite a bit of racial diversity, discrimination is relatively low. The first people to settle in Brazil were Portugese, but the Dutch soon colonized the country. Once Indian enslavement became difficult to enforce, Africans were brought over as slaves until 1850 when the British blocked the slave trade. After 1850 Italian workers replaced slaves and other Europeans began colonial plantations. Then, beginning in the late nineteenth and twentieth centuries, immigrants from Lebanon, Turkey, Syria and Japan began moving to the country. Despite the lack of discrimination, de facto

segregation has played a major role in the division between races and income. Naturally, because Europeans first owned the large plantations they possess most of the land and wealth, although occasionally intermarriage between ethnic groups occurs within the upper class (Country Studies).

Poverty has a heavy influence on the Brazilian culture. Financial resources are pertinent to achieving a healthy diet and receiving a good education, but neither a healthy diet nor adequate education is easily obtained by the Brazilian lower class. A traditional diet for lower class Brazilians consists of rice and beans and some lower income families also consume wheat, breads, and pastas provided by government subsidies. In some urban areas, employers attempt to improve employee diets by offering them meal tickets at restaurants, but this practice benefits only the workers and not their families. The rural farm laborers do not have the benefit of any similar program. Many of the urban workers benefiting from the program have large families. Households below the poverty line tend to have twice as many children as higher earning families, causing higher expenses at lower incomes furthering the cycle of poverty. The poverty cycle also prevents many Brazilians from owning farm land, which is quite expensive. The contrast of a nutritional diet versus a traditional diet also presents many problems for low-income Brazilian families. Traditional diets of rice, beans, and whatever meat is available results in many health problems that may be related to the nutritionally poor diets of underprivileged Brazilians. In urban areas many steps have been taken to improve quality of life, but little has been done for the poor of the country side because the problem is so extensive. For example, 89% of urban poor have access to safe drinking water whereas in the countryside the statistic drops to just 58% (Encarta). The poor in the Brazilian countryside mostly consists of small scale farmers, farm employees, and farm laborers. The northeast region contains the greatest percentage of poverty. If a child is born in the northeast, he most likely will earn half as much as a man in the southeast and he also has double the chance of remaining illiterate for the duration of his life, which will most likely be considerably shorter than those of his southern peers. A few prominent families in the northeast own large ranches taking up a majority of the land, but this area tends to be dry and suffers immensely from droughts (World Bank).

The problem of illiteracy exists because the government has set no educational standards at the elementary level in Brazil, nor do the town schools receive sufficient government funding. As a result, the more impoverished a town is, the poorer the education the children receive. Women, men, and children are struggling to overcome this problem, but to little avail. Brazil, which is South America's leading economic power, and puts the majority of the money set aside for education into the secondary rather than the primary schools. Basic education in Brazil is left to the local government, so towns with impoverished people have poorer primary schools compared to communities financially better off. Government programs have a hard time reaching the poor due to the fact many do not meet proper documentation requirements. No single government agency in Brazil officially monitors the country's poverty trends and, as a result, statistics on Brazilian poverty are hard to find, thus making it more difficult for the government to design effective programs for federal aid. Impoverished women are also less likely to work outside the home due to the high cost of child care and inability to find low skill jobs. Education is especially vital to empowerment of women and the success of communities. Education allows women to work outside the home and bring a second income to the family in addition. Educated women are also more informed on family planning options. Education on family planning has already reduced family size since 1994 in urban areas. In contrast to Colombia and Mexico, two other predominantly Catholic countries, Brazil's government has not yet implemented a family planning program. Because of Brazil's laissez-faire government, private groups have taken on the responsibility to dispense birth control and educate people in family planning (WINN). Many of these problems can be solved through the education of not only men, but women and children as well.

The high rate of illiteracy among adults hinders the implementation of traditional mass education methods, such as public service announcements via newspapers. As a result, alternative methods must be employed. Many people from the northeast have migrated to the cities causing urbanization, but the city

employers have adapted and found ways to provide meal plans for workers almost like school lunches. Since most of the land in the northeast is occupied by large ranches, a healthy meal option could be implemented as well. The program would be structured similarly to the programs in the city. A program such as this could be funded by the government and modeled after both the urban program and the American government subsidized school lunch program. A healthier diet would help prevent sickness and improve job performance. Traditions are hard to break, but by educating low income Brazilians and adding fruits and vegetables to the rice and beans diet of rural workers through government programs the overall health of the impoverished northeastern Brazilians would be improved.

Farming techniques have a major impact on the quality of food grown. Slash and burn methods are more popular among small-scale farmers than among commercial farmers. First, the grower cuts all the brush in the area and lets it dry out on the ground. Then, the dead brush is set on fire to make room for the crops. Ideally, the next year the grower would move on and the brush would grow back naturally. With crops depleting the minerals in the soil, though, natural brush does not grow back nearly at the rate it would under other conditions. Deforestation has resulted because of this inadequate farming method and tragically, more plant and animal species native only to the rainforest are becoming rare as a result of this process. In addition to the depletion of species, burning rainforest areas release large amounts of carbon into the atmosphere further damaging the environment. Unfortunately, though, alternative methods to slash and burn such as effective crop rotation are not well understood. Cattle ranching contributes to the problem of deforestation as well because ranchers turn rainforest land into pastures for their animals. Brazilian ranches are run using similar methods to those used in western America where ranches consist of hundreds or even thousands of heads of relatively free-roaming cattle. Cattle ranching and small-scale subsistence farming are the two major causes of deforestation. Cattle ranching accounts for 60% and small-scale subsistence farming accounts for 30% together they are responsible for 90% of deforestation of the Amazon region in Brazil (Monagbay). Education must be given to these farmers and ranchers teaching them proper crop rotation allowing them to grow on land longer in order to prevent soil depletion.

Educating children remains the best way to begin a brighter future for the northeast region. 87% of children ages seven to fourteen attend school but this statistic drops rapidly with increase of age and few students graduate high school (World Bank). Education will prove crucial to solving the poverty issue in Brazil because a literate and educated person is better able to make good decisions and will have more job opportunities available. For the most part, the decrease in enrollment is due to the fact that students are needed either at home or to work outside the home in order to procure more income for the family. This problem must be solved from the bottom of the education system. More preschools for low income families would be greatly beneficial because when children begin learning before they enter grade school they are much more likely to continue succeeding in their education. The United Nations Food Programme and the Brazilian Government have been working together to establish goals to work towards in the educational system. The three main priorities of the program are to make schooling for seven to fourteen-year-olds mandatory, give adults access to education in order to eliminate illiteracy and increase access to education beginning at the kindergarten level. Among the various strategies to be implemented, the ones establishing minimum standards for education structure and teacher qualifications have the most emphasis places on them as do increasing community involvement(United Nations). Establishing minimum standards will make education more universal and equally attainable to children of varied incomes. Increasing community involvement will not only open up resources but instill a sense of pride in the citizens for their community's ability to learn and grow together, therefore increasing the importance of education to the community as a whole.

By combining efforts through educational programs, Brazil can move forward to eliminate poverty, illiteracy, and most importantly malnourishment. To solve these problems, organizations must start at the source of the problem by educating the children, who are the adults of tomorrow, beginning at

the preschool age and following through to higher education. Simultaneously educating the adults of today on effective nutrition, farming techniques, family planning and the importance of literacy programs will create higher living standards for lower class Brazilians. Once children stay in school and learn while they are there, doors open up to them. Even if they do not go on to high school, simply being able to read will enable them as adults to achieve a higher standard of living. Also, educating adult farmers on alternative land uses will not only decrease poverty, but help the environment as well. The end result of implementing these programs will be a healthier nation that will be, ultimately, more productive. The resources exist in Brazil to make it a more productive country, but the problem appears so expansive and daunting. With coordinated efforts between the government, private organizations and the people educating the impoverished and achieving food security for the future is entirely possible. This process requires time and effort on the part of government agencies along with private industries, but will provide Brazil a stronger working class and a brighter future. Because of the vast number of problems and people affected, programs battling this dilemma would best be initiated on a small scale to begin with. Eventually progressive changes to the programs will expand to a large scale effort across Brazil, especially in the northeastern region where the people are in dire need of assistance. An anonymous person once said, "You can give a man a fish and he will eat for a day, but if you teach a man to fish he will eat for a lifetime." By teaching Brazilians alternative farming methods and decreasing the illiteracy rate, it is more likely that Brazil will have secure food sources for many years to come.

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