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Philippines, Factor 20: Farm to Market

### **Roads in the Philippines: Connecting a People Divided by Hunger**

The Philippines is a place of exquisite beauty, a place of open coastlines and dense forests where people are known for their abundant smiles and warm hospitality. White beaches, rolling hills, volcanoes, and mountains adorn the landscape. Rice fields paint countrysides a brilliant green, and people in marketplaces or on the street laugh and smile together. To outsiders and newcomers, life in the Philippines might seem effortless and joyful. For a small portion of the population, this is the case. But the majority of Filipinos lead the unseen struggle of a life of poverty. Urban high-rise apartments give way to slums and then to fields. And though these rice fields may seem to hold an abundance, they do not produce enough to feed a large and growing population. Families take great pains to provide food for guests, for parties and celebrations, and other special occasions, but when the guests leave or the party ends, the façade fades, and there is not enough food or money to provide for the hosts. Many millions of Filipinos live in poverty and starvation. There is a great need for increased stability in food supplies and a more even distribution of wealth throughout the nation's population. This can be accomplished in part through the building of roads.

With a complicated past of ownership by both Spain and the United States, plus a Japanese occupation during World War II, the Filipino government is only just beginning to stabilize (Tope 25). Almost every president since WWII has had his or her term or terms marred by political unrest and scandals that have shaken the people's confidence in their leaders (Tope 30-31). And the Philippines desperately needs a strong government. With only one doctor per 1,000 people (as compared to 2.45/1000 in the U.S.) and a child underweight status of 20% (as opposed to 0.5% in the U.S.), there is much need for a government or other influential body that can stimulate crop production within the country and bring in additional supplies from outside the country as needed (Philippines CIA, United States). Instead of aiding rural farmers, widespread corruption and scandals among government agencies have robbed many millions of farmers of much of their due profit. Twenty percent of the population falls beneath the poverty line--70% of which is rural farmers and fisherman--and there is a 15% unemployment rate (Filipino, Philippines CIA). The high poverty rates lead to massive slums, spread of disease, human trafficking, environmental destruction, and many other issues that further stress a government struggling to remain stable (Philippines CIA, Tope 49).

The Philippines is an archipelago bordered by the China Sea to the west, the Celebes Sea to the south, and the Pacific Ocean to the north and east. Its total land area is slightly larger than that of Arizona, with a population of over 100 million people (Philippines CIA). The Philippines is 18.2% arable land (Philippines CIA). When compared with the arable land-to-population ratio of the United States, this would leave the equivalent of one-third of the U.S. population to be fed from the equivalent of 3.5% of the United States' total cropland area (Philippines CIA, United States). Obviously, there are many mouths to feed in the Philippines and not much land on which to feed them. Rice is the staple of the diet, served at almost every meal and prepared in thousands of different ways. It is the first food every child learns to cook because it is the food he or she will consume most of in his or her lifetime (Tope 122). Food is central to Filipino society. Essentially every contact with someone outside of one's family calls for food.

An urban family in the Philippines, perhaps living in Manila or Cebu, can expect to live quite well. Food from imports and local farmers is available in streetside markets and fast-food restaurants liberally distributed throughout the cities. Children in the city can expect to attend school for eleven years and possibly move forward in higher education. Parents can earn high wages of about \$9.00 USD a day,

which often allows them to be able to pay for their children to attend private schools and commute to school by bus. Families in the city average 2-3 children. The families eat primarily rice, often served with assorted vegetables and fish (Skog 24, 27).

In rural areas, families are much larger than those in the cities, with an average of six children. Often multiple generations will live together, with the grandparents, children, grandchildren, and great-grandchildren all living in the same home or in a series of homes built on the same piece of land (Skog 35). In many cases, all these people will be needed to either work a family farm or somehow otherwise obtain the funds necessary for survival. Parents and older children work together to support themselves, their children or siblings, and their grandparents. Children still go to school, but may walk many hours to get there; they also tend to drop out after about eight years rather than staying for the entire eleven years of offered public school because they are needed to earn money for the family. Parents tend to earn lower wages than in the city, about \$4.00 USD a day, and often earn that wage through working other people's farms or through factory work or industrial labor. Families still eat mostly rice with assorted vegetables and fruits, but meat is a rarity and afforded only at special occasions (Skog). With this kind of diet, poor Filipinos are prone to suffer from protein deficiencies (Protein, Romualdez). Because they cannot afford the meat or other protein-rich foods that they need, they become weak and more susceptible to illness, impairing their ability to work and earn money. This creates a positive feedback loop of starvation and poverty.

So what makes the difference between the relative wealth and food security of the city residents and the frequent poverty and starvation of the countryside residents? One of the primary problems manifested in the Philippines is the lack of physical infrastructure. The government imports large amounts of rice and other grains every year, but these are not distributed beyond the cities (Philippines CIA). In the cities, roads are generally paved and buses, taxis, or other vehicles are available for transporting people and goods (Skog). But when the pavement ends at the outskirts of the city, transportation by vehicle almost ceases (Tope). The food and textiles needed so desperately by the poor are stopped by the inadequacy of physical infrastructure outside the city. People in rural areas must walk many miles and hours to reach the nearest marketplace, or even their nearest neighbors. Lack of supplies leads poor sustenance farmers to give up their own farms in order to work for other farmers who sell crops for profit when their small farms cannot raise the necessary food or profit to feed a family (Skog). This particular problem, as noted by writers for the Asian Development Bank, further widens the gap between rich and poor, because when crop prices rise, the net income of the farm's owner increases while the net income of the workers decreases, leading to a continuing cycle of poverty (Ali and Pernia). In 2011, the average age of Filipino farmers and fisherman--the main food providers of the country, and the poorest of the Philippine population--was 57 years (Alave running). Studies show that the reason behind such a high age is that today's youth are recognizing that their parents and grandparents were farmers or fisherman and are poor—and have been for their entire lives. Therefore, children are opting to leave the Philippines or travel from rural areas to urban areas in search of more lucrative employment (Alave running). This has created a shortage in farm workers and poses a threat to future production.

A typical Filipino farmer owns 2.5 hectares or so of land and gets comparatively low yield (Alave mechanized). To illustrate just how low, researchers have compared the 3-6 ton yield per hectare of corn in the Philippines to average yields of 9-10 tons per hectare in Argentina (Subido). In addition to this, farms in the Philippines are among the lowest in mechanization in all of Southeast Asia, using the equivalent power of one small electric fan per hectare (Alave mechanized). Other countries, such as Vietnam, Thailand, and Japan, all use much more power per hectare and greatly increase their yield in doing so. They also work their fields in a fraction of the time that they would without mechanization, allowing them to work other jobs when they aren't farming and therefore earn more income (Alave mechanized).

Increasing physical infrastructure in the Philippines could help correct or alleviate these issues. Building more roads in the Philippines would allow imports of food and other supplies to reach the rural people and would allow their goods to be sold in the more populated areas of the country. Planning and construction of these roads would involve employing engineers and construction workers, among other occupations, therefore promoting jobs in higher education by requiring skilled engineers and urban planners, and, if the government so chose, giving jobs directly to the rural poor by paying them to do manual labor for the project (Ali and Pernia). After the roads are built, many rural poor could continue to be employed in maintenance and upkeep of the roads and also in transporting goods. Increasing physical infrastructure would lead to enhanced access to medical facilities; help during and after storms and other disasters; military accessibility; food production, preservation, and transport; and so forth.

Rural families, especially rural women, make money by weaving, cooking, or selling their produce (Tope). Having roads would allow them to transport their goods to market easily and more frequently. This would raise their status as they begin to make more money and provide more for their homes and families. An additional income would hopefully allow for more food, increasing the health of women as they prepare for childbirth. Currently, many infants in the Philippines are born underweight due to malnutrition of the mothers, which severely endangers both the mothers and the children (Philippines CIA, Miller and Spoolman). Raising the status of women could be the key to pulling the nation out of poverty for good; as they feel more important and valuable, they will seek out higher education and be able to raise the next generation with higher expectations and greater skill (Miller and Spoolman).

Another challenge of the current infrastructure is that muddy and flooded roads inhibit travel during the rainy season, and mudslides and flooding kill hundreds of people every decade. For example, a flash flood in December of 2011 killed over 450 individuals, and rescue efforts were greatly impeded by washed-out or nonexistent roads (Flash). Flooding is a possible problem from May to October, a full six months when travel can be impeded by weather and rescue efforts may be needed (Climate). In addition, an average of 20 tropical weather disasters ranging from depressions to typhoons hit the Philippines every year, causing no small amount of damage (Climate). Much of this damage could be corrected much more quickly than the current rate if roads were available to transport goods. If the government were to replace dirt roads with permeable pavement and buffer zones, there would be a decreased risk of mudslides (Miller and Spoolman). Also, paved roads could act as landing pads for helicopters and routes for supply trucks or rescue caravans that carry the people to safety. There is a Red Cross presence in the Philippines, but rescue and relief efforts are only effective if the people needing aid are accessible (Flash).

Another benefit of building roads could be the increase of technology and the spread of information. Currently, the Philippines is one of the highest countries in the world in cell phone usage, but electricity does not usually extend beyond city borders (Skog 31). Building more and better roads would open doors for increased electricity and cell phone usage. If this occurs, it could easily increase the capacity of the farmers to improve their production, by allowing them to learn about new methods and products that could help them in their fields. For example, private companies or the government could give classes to farmers on farming and then give loans for tractors, allowing the farmers to increase their yield and decrease their time spent in the field. This would allow farmers and their children more time to attend school to train for better jobs, such as nursing or engineering, or to do other jobs that can increase their income, such as making items to sell or working on road maintenance. In addition to increasing yields and therefore incomes, new technologies could help to protect the environment of the Philippines. Protecting the environment in the Philippines is imperative to its farming success as a means of ensuring soil quality, pest control and balance, and stable climate. Practices such as conservation tillage could prevent rain forest degradation and also help to slow the effects of water pollution and other environmental issues.

The U.S proved during the Great Depression that a financially crippled country could work its way out of poverty. The well-known and -accepted Rahn Financial Curve theorizes that there is an optimum amount

of government spending to encourage and support a strong economy and business growth, including government spending in the form of paying citizens for labor. Such spending would be beneficial to the economy (Rahn). In the United States, President Franklin Roosevelt organized men into companies of workers in part of a plan called the New Deal during the Great Depression, giving them a way to earn a paycheck and therefore feed their families. United States citizens still benefit from the labor performed by these men employed in government programs in the form of many parks and roads. The Philippine government could implement a plan similar to Roosevelt's to both feed families and increase the physical infrastructure of the country.

Another specific example of roadways leading to an increase in economic health is Canada. Like most countries, Canada depends upon its roads for communication, transportation, and social infrastructure. Prior to WWII, however, Canada had very few well-developed roads, and many of those developed roads were destroyed during the war (Gilchrist). After WWII, Canada began to put money into building roads and discovered that it was a catalyst for economic growth. Building roads led to an increase in urban development and rural development—including the transfer of goods to and from rural farms (Gilchrist). Sound engineering has made Canada's roads strong and durable, and taxation and fines for traffic violations have provided enough funding to maintain and improve roads constantly (Gilchrist). Studies in other countries besides Canada have shown that building roads creates a reduction in poverty levels, proving that Canada is not the exception (Ali and Pernia). If the Philippine government was to implement taxes devoted to supporting road construction and maintenance, and colleges and universities were to create or expand engineering programs to suit the unique terrain and weather of the Philippines, a road system as strong as Canada's could be created, and with the same benefits.

Though the government of the Philippines is doing many things to help pull its people out of poverty, improved transportation is a crucial step in helping the rural poor. The Philippines has already committed and set goals to improve its road security and decrease vehicle-related deaths and injuries through its involvement in the United Nations Economic and Social Council (Transport). This has required the government to set aside a portion of its budget for road maintenance and upgrades, and to work with the United Nations and private companies to promote safe practices on roadways. The Philippines could expand this plan to include the building of additional roads in strategic areas to reach rural marketplaces and farms. There is also money from the Asian Development Bank being devoted to transportation and trade in the Philippines, providing additional funds necessary to continue building roads (Philippines and ADB). Also, the government can make greater strides towards programs like President Roosevelt's New Deal, organizing labor companies and paying its citizens to increase their physical infrastructure. The government and private companies can promote the construction and use of roads by advertising local products and by buying hand-made fabrics and foods from rural areas and transporting them to the cities or to tourist hotspots to be sold. This would not only establish trade routes that could be used for getting food and other needed supplies to the rural poor, but would also give many poor families a needed source of additional income and would help to preserve the traditional crafts of the Filipino people. The U.S. can help in this effort by using money through the USAID organization to plan and build roads, as well as providing necessary funds and training to the Philippine people (Philippines: Disaster).

Currently, the situation of poverty in the Philippines is slowly improving, but the slow progress is far too costly. Every day lives are lost to starvation as the people wait for change. The government is putting forth some effort to improve roads, but in order to raise its people out of poverty, the Philippines will need more roads, more effective transportation, and a greater infrastructure, allowing the people to communicate, pull together, protect one another, and share together in the wealth of a nation with much to offer.

The Philippines is indeed a land of sharp contrasts. Its many natural beauties and wonders compliment each other as to enhance the beauty of the differences they have. But poverty next to excessive wealth

holds neither beauty nor justice. As the Philippines continues to work towards decreasing its poverty levels and increasing the equality of its people, it will experience a stronger and more stable economy, an overall wealthier nation, and a country that is truly a land where everyone has a reason to smile.

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