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The Philippines, Factor 16: Education

The Philippines: The Impact of Education on Filipino Agriculture

A typical farming family found in the Philippines consists of a father, a mother and three to four children who live on the land, and depend on it for their survival not only for nutrition but for money as well. Many of the families who farm, are considered to be poor in the Philippines (<http://newsinfo.inquirer.net/>).

In 2011, NSCB secretary general Jose Ramon G. Albert said in the latest issue of Beyond the Numbers, "Farmers and fishermen are among the least paid workers in the Philippine economy with an average daily wage and salary of P156.8 and P178.43, respectively in 2011," noting their salaries are only higher than domestic helpers" (<http://www.philstar.com/>). Due to the fact that Filipino farming families have low income, their children can't enroll in school; this affects the nation due to the fact that the upcoming generation is lacking the knowledge that they need, it also leaves the families in the state of being poor which leaves them with no choice but to continue farming.

My idea is that, these families can receive more money by working together. I believe that if they purchase farmland together more will be produced through agriculture which will increase the flow of money into their lives. This will allow them to have enough money to purchase farming supplies and possibly enroll their children in school to get their education.

Education is beyond important, it is necessary! Education molds the mind of an individual, which causes them to affect their society either in a positive or negative way. It is a platform which is used to gain an important necessity that enables them to discover their full potential as a leader; this necessity is knowledge. Without knowledge, how can they grow as a leader? How can they use their influence on their society if they don't have the mindset to impact their nation, whether it's through their economic, political, or agriculture systems?

In the Philippines, education is strongly viewed as a primary avenue that will increase economic mobility. The Filipino government creates a large budget each year for education and guarantees that every Filipino has the right to quality education. Students who are less fortunate than others due to the fact that they live in poverty don't usually finish elementary and secondary level schooling. Some can barely afford to purchase school supplies, shoes, and clothing. They also can't pay for the small amount of tuition and fees for public schools that is required of them (<http://planipolis.iiep.unesco.org/>).

The Filipino people are very concerned when it comes down to education because it takes up a big place in their economy, culture, and most of all their agriculture. Education can be used to discover better ways to improve agriculture; more environment friendly pesticides could be made to decrease the chance of insects killing the agriculture, new treatments can be developed to treat current diseases as well as future diseases, and new ways can be introduced to improve the quantity of fruits that the plants will produce during harvesting. The fact that four million Filipino children and youth are out of school decreases the chance that any new research and ideas could be put to use when it comes to the Filipino agricultural system (<http://psa.gov.ph/>).

In the Philippines, farmers lose an average of thirty percent of their crops to pests and diseases every year. This affects the farmers' and the government's income, causing more money to be spent on growing crops than harvesting and selling them. Many families are affected drastically due to the fact that not

enough produce is provided in order for them to live; this causes the poverty, malnutrition, and death rates to increase in the Philippines (<http://psa.gov.ph/>).

To improve this problem, I believe the students in the Philippines along with, farmers, and the communities must be educated on how to produce more as well as how to treat the diseases and pests that attack their crops and animals, with eco-friendly pesticides. Teaching programs concerning the use of these pesticides should come from farmers who use them regularly. The equipment should be provided by the Filipino government and the teaching should be provided by sponsors such as Geosys, and Valley Irrigation.

The Philippines' agricultural systems can benefit from Geosys because they specialize in the use of drones. The drones can be used to measure the humidity in the air; this helps to decide whether the land will experience a drought. The drones can also be used to measure the land; this will give the farmers an estimate of how many crops they should expect from the land (www.geosys.com).

Valley Irrigation is another company that can help the Philippines with their agricultural problems. Valley Irrigation creates better ways of watering crops and better ways of growing them, they connect pipes to a big water source which carries the water to the agricultural areas. This allows many Filipinos who do not have a water source nearby to no longer worry about watering their crops (www.valleyirrigation.com). This also will take away the responsibility of the Filipinos who travel great distances to get water for the crops.

The teaching of educational and agricultural programs like these should be housed in schools, and community centers inside the country. The schools and community centers should be built by or close to farmland so that the students can get a hands on experience with the agricultural methods and equipment.

The funding should come from the Filipinos' government due to the fact that they create a high budget for education. These programs should be taught by individuals who are familiar with the companies, and the resources they need to get their task accomplished. If this is done, each upcoming generation will develop the mindset, and resources to create better farming techniques or improve the techniques that they are introduced to.

Many Filipino farmers face the adversity of growing many crops that do not produce a high quantity of fruits. This affects the income of the farmers' because they give so much time, and money toward growing those crops. Scientists at Cold Spring Harbor Laboratory have found a set of gene variations that boost fruit production in tomato plants. Studies have shown that many plants have gene variations that can spark a change in plant production. I believe that it would be valuable for agricultural scientist in the Philippines to be introduced to this level of research and technology so that they can improve the plant production in the Philippines. Now if this level of research, and technology is introduced to the Filipino agricultural system, the farmers will receive a higher return from the agriculture, and the Philippines will have more crops available to sell within its country, and through its exports (<http://www.producegrower.com/>).

In the Philippines many uneducated farmers misuse their agricultural pesticides; seventy-two percent of the farmers spill the pesticides while mixing them, thirty-four percent of the farmers deposit the pesticides in damaged containers, and fifty-eight percent of the farmers improperly use the pesticides by spraying them in the wind. The misuse of pesticides not only affect the agriculture of the Philippines' but the citizens as well. Many people that misuse agricultural pesticides become exposed to toxic fumes and substances that enter the body through inhaling them, and exposure to unprotected areas of the body. The most prevalent symptoms of pesticide exposure are headache, muscle pain, cough, weakness of the body, eye pain, chest pain, and eye redness (<http://www.hindawi.com>).

The students should be taught on the importance, and severity of pesticides and treatments of agriculture. Teaching on how to use the agricultural pesticides correctly is beyond necessary. If this is done it will improve the agricultural growth within the country, which will eventually affect the citizens, and the economy of the Philippines for the better. When this is put into action, fewer plants will perish, more agricultural produce will be harvested, more mouths will be fed, and malnutrition in the country will be decreased, along with the death and poverty rates.

If the Philippines agriculture is looked over in the state that it is currently in, the nation will perish. Not only will it just affect their nation it will affect America and other nations as well. Many nations, including America, depend on the Philippines' agricultural exports such as grains, bananas, corns, pineapples, and a variety of fish, hogs, and cattle. Without those exports coming into our nation, many will be forced to spend more money on plots of land to grow those needed agricultural resources. If this happens, deforestation will become more of an issue for all the nations than it already is due to the fact that more land will be needed. To inform the rest of the nations about the Philippines condition, media sources, such as television and magazines, should be used to persuade them to provide funding to this nation.

Another significant issue that affects the agriculture of the Philippines is a numerous amount of toxic chemicals from the pesticides that are found in their water supply. The use of pesticides, fertilizers, and other agrochemicals has heavily increased since the 1950s. For example, the amount of pesticide sprayed on fields has increased 26-fold over the past 50 years. The chemicals don't rest in the fields that they are applied to. Some application methods – including pesticide being sprayed by plane – lead to pollution of valuable land, rivers, and wetlands that are used for drinking water (<http://wwf.panda.org/>).

Due to the fact that water management and irrigation technology are being handled inappropriately, pesticides and fertilizers also run-off from the fields they are placed into and flow into adjacent lakes, rivers, and wetlands, which become contaminated groundwater sources. These chemicals eventually end up in the marine environment and valuable marine agriculture such as; coral, muscles, and various fish that help regulate the agricultural process inside lakes, rivers, oceans, and other wetlands are then affected. Pesticides sometimes don't kill the pests that they are created to kill (<http://wwf.panda.org/>).

Valley Irrigation, can introduce the Philippines' to new concepts to improve their current way of disposing and depositing the pesticides. If introduced to new concepts on how to handle the pesticides, Filipino agriculture will be affected greatly because a fewer plants will perish from the misuse of agricultural pesticides.

Insects that are beneficial to the agricultural process in and around the fields can be poisoned or killed, as well as animals who also eat poisoned insects. Pesticides can also kill soil microorganisms which makes the soil unusable, causing agricultural growth to be affected. Some pesticides are also suspected of influencing the hormonal messaging system of the citizens and the wildlife, many can even remain in the environment for decades (<http://wwwf.panda.org/>). Education must be used so that the students, communities, and farmers know what pesticides will benefit the agricultural process instead of destroying it. If this action is put into place, the Philippines agricultural system will change as a whole by having more income as well as more produce.

The Philippines' agricultural system must not be overlooked! Action must be taken due to the fact that our country and many other nations depend on the Philippines for their agricultural resources whether it is used for personal, medical, or financial use.

Education must be improved in the Philippines, and it will be when we as nations make the decision to

help our fellow allies in their time of need. How can we unite when one of us needs help? We are here to depend on one another, so that we all can survive! We have many organizations, and technologies that the Philippines can benefit from. A change must happen in the Philippines, and it must start today!

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