

Myles Master  
George-Little Rock Community High School  
George, IA  
Philippines, Factor 6: Sustainable Agriculture

### **Implementing Urban Gardening in the Philippines to Solve the Lack of Continual Food Production**

Resolving the problem of malnutrition and unhealthy lifestyle by using sustainable agriculture is something that would greatly help the people of urban Philippines. First of all, families would be producing something healthy to eat. This would be a new concept to a lot of families because they are so used to buying cheap, unhealthy food from street vendors daily (Manila). Having healthy food to eat would likely increase the family's morale as a whole. Secondly, producing food would employ women and children among poor, urban Filipinos. Thirdly, if families could produce enough food, they would have another source of income by selling their crops to other nearby families in need.

The streets of urban Philippines can be a very dangerous place to raise a family. These streets are filled with crime, homelessness, and malnourishment. Adults are desperately trying to make enough money to support their families while children are exposed to drugs, gangs, and other criminal activity (Manila). Since these people have little money, their diets are usually unhealthy, and their living conditions are poor. This is overall a very unhealthy environment for a family.

People of urban Philippines are limited to a few, insignificant jobs. These jobs usually pay very little and do not cover the costs to afford basic needs. Many Filipinos living in poor, urban areas are living off of what is only about one United States dollar a day (Lah, K). This small amount of currency is not enough to afford any luxuries. It is not even enough to afford basic necessities. This causes many urban families to live off of junk food, which is easily accessible.

Junk food can mean a lot of different things. For some, it may be cheap, easy-to-cook noodles. For others, it may be something as revolting as food that was dug out of the trash. A specific example of this would be what Felipa Fabon does almost every night. According to Kyung Lah, a journalist for CNN, Felipa Fabon, a woman that lived in a very poor area of the Philippines, would frequently wait outside a nearby fried chicken restaurant and hope to find some edible leftovers. To do this, she would pay the garbageman to have access to the trash. Then, she would dig through the waste in search for some scraps of meat left by people that had eaten at the restaurant earlier. Once she gathered enough chicken, she would bring it home, clean it up as well as she could, and sell it in the morning to other poor people in her area. This recycled chicken is called "pagpag," and it is a very popular thing for poverty-stricken people to buy in the Philippines. The reason that they will purchase this meat is the families are very poor, so they cannot afford anything else. Promoting sustainable agriculture would really help the families of the Philippines that are extremely poor.

Since most Filipinos living in these poverty-ridden areas aren't able to provide enough food for their family, sustainable agriculture would be a great addition to their lives. Not only would it provide the individuals and their families with nutritious foods, but also, the families producing food would be able to sell their healthy crop to others in the community, rather than buying it from a vendor that sells junk food. A change from junk food to the nutritious food would greatly benefit families living in the urban Philippines. The first thing the people living in this area need in their diet is something of substance. They need something that will keep them full. A cheap and efficient vegetable is potatoes.

Potatoes are a filling food that is full of starch. A very convenient feature of potatoes is how easy they are to garden. All that is needed is a few small potatoes because potatoes form little sprouts on their skin. This means all that is needed for a garden of potatoes is to bury a few potatoes with sprouts at different levels in the soil. Not only is this simple, but it also can be compact. Using two large baskets, one completely sealed and one having lots of gaps, an individual or a family can create an efficient and effective potato farm (How to Grow Potatoes in a Container). First, the gardener places the basket with open gaps inside of the concealed basket. Then, the gardener fills this container with a small amount of dirt. Once the dirt has covered the bottom of the container, a few small potatoes with sprouts coming out of them are placed. These potatoes will act as seeds. After the “seeds” are in place, another layer of dirt is placed. After a few days, small sprouts will start to rise out of the soil. Once this occurs, more soil and more small potatoes are added. This process is repeated until the basket is almost filled to the top with soil. Now the gardener only needs to wait until the potatoes are ready to harvest, which is usually around three or four months (France, C). During these months, all that the gardener needs to do to maintain the potatoes is to water them regularly. Leaving them outside will do the trick because of the amount of rainfall the Philippines gets during the wet season. When three to four months has passed, the gardener is ready to harvest potatoes. To do this, they need to lift the basket with gaps out of the concealed basket to reveal the potatoes that are at the bottom of the basket, ready to be harvested. The gardener can now grab the potatoes from the basket, leaving a few behind to act as seeds. This basket can then be reused over and over again as a compact potato garden. This method of gardening potatoes would be very efficient for the slums of the Philippines because families don't have access to very many high quality materials, and wicker baskets will do the job for this garden. Something that is concerning to gardening potatoes is that the Philippines is the climate. The potatoes should be fine during the wet season, but how are they going to get water during the dry season when there isn't as much rainfall? If the gardeners live near a freshwater stream or a well, the potatoes will be fine, but if not, the amount of potatoes produced during the wet season should be enough to last the dry season.

This way of farming potatoes is very efficient and compact, but it requires the gardener to use a system composed of two baskets. This may seem like a problem, because the people living in this area may not be able to purchase the baskets that they need. However, creating this very simple system can be done using recyclable materials. In reality, these people are very good at finding ways to reuse things, so, they would most likely be able to find baskets that have been thrown out by others. If this is not the case, a local organization could host a drive asking citizens if they could spare any kind of containers for the benefit of the poor.

Another crop that the people of the Philippines should look into is beans. This vegetable is delicious, and it is packed with nutrients. A specific type of beans that would fare well in an urban garden in the Philippines is green beans. Green beans are easy to grow in a garden. They are also a vegetable that would be able to sustain the constant warm temperatures of the Philippines. After planting the seeds, gardeners will be able to harvest in about two months. Gardeners would be able to adopt more new vegetables to add to their garden as time goes on. Potatoes and green beans would be great starter plants.

Gardening is a good fit for the conditions of poor urban areas. The condition of urban areas of the Philippines is very poor because of the high crime rates, the lack of good paying jobs, and the lack of good living conditions. The run-down “trash cities” in the Philippines are places that need a lot of attention. These are the places that would greatly benefit from sustainable agriculture. More specifically, gardening would be a good way for these people to use their time and effort effectively in a collective effort toward a common goal. Of course, some people in these areas already garden, but many do not. These people are being left out on the benefits. Sustainable agriculture wouldn't fix all of these people's problems, but it would really help their health and

nutritional problems. Going from pagpag (garbage chicken) to fresh fruits, vegetables, and other plant foods would be an extremely positive change in these people's lives. Not only will mealtime be more pleasurable for these people, but it will be providing them with the right nutrients they need to go about their day-to-day lives. Sustainable agriculture is also providing a positive activity. The children of the poor, run-down area of the Philippines need this kind of an activity. Instead of focusing on things like gangs or drugs, children can learn more about gardening. They will not only learn about gardening, but they will also have to spend time working on it. They will have to plant seeds and tend to them daily. When the plants grow, the sense of achievement could greatly increase the community's work ethic and involvement in a positive activity.

Many other factors are tied to the poor, urban area of the Philippines. For example, education is something that is valued in the Philippines. The country as a whole has a very high literacy rate of about ninety-seven percent (Manila). However, there still is a high amount of children in poor, urban areas that choose not to go to school. Even if these children decide to go to school, they are usually stuffed in a crowded classroom with little one-on-one time with their teacher. This means, these students don't really have a lot of hands-on learning activities. As previously stated, children in this area are exposed to all kinds of negative influences. Implementing sustainable agriculture would give these children an opportunity to learn new things about plant science while reaping the benefits of operating a garden.

Another factor that goes along with sustainable agriculture would be decreasing the amount of malnutrition that the people living in poor, urban areas sustain. These people rarely have a decent healthy meal. Instead, they buy cheap food from vendors that lack healthy qualities. A small amount of pagpag and unclean water is an example of something that an impoverished person in the Philippines would be eating when mealtime comes around (Lah, K). One would think that this sounds like a disgusting thing to eat. Why would people be all-right with eating revolting, unhealthy meals almost daily? They have no choice. Many people living in the slums of the Philippines are living off of about fifty Philippine Pesos per day. In our currency, this is about one United States dollar per day (Lah, K). This isn't even close to enough to support a family. It is not even enough to support one person. Even though that amount of money may seem very small, some families are making even less money. With this measly amount of currency, families can only afford to buy cheap, unhealthy, and borderline disgusting food from local street vendors.

Sadly, a large reason that these poor places are the way they are is the amount of corruption that is in the government. Government officials are "bought," and often do not care about the citizens. The Filipino president, Rodrigo Duterte, is currently in a "war against drugs." By being in a war against drugs, he is actually condoning people murdering drug users or drug dealers (Woody, C). This is a form of vigilantism. Citizens that are not considered law enforcement are serving justice without being lawfully permitted to do so. The worst thing about this is it seems to be condoned by Duterte. This is not only harmful for the drug users and drug dealers, but it is also harmful for families living in the areas where people are being killed on the streets. One could just imagine how terrifying it would be if a group of armed men broke into his house, tied up and beat one of his family members, and took a family member away on a motorcycle. This is one of the most horrifying things that can happen to a family. This alone shows how much these families struggle in their daily lives.

Although the Philippine government has a fair amount of corruption, citizens can still use their vote to help the people living in the slums of the Philippines. The Philippines is a democratic republic consisting of three branches; Executive, Legislative, and Judiciary (Philippine Government). This government is similar to the government in the United States. If individuals were to come together and organize not only their votes, but the votes of the people living in the

slums, they would be able to vote people in office that are looking to help the people living in these slums. This isn't very realistic because of the corruption in the Philippines government, but it is still worth the effort because it is a peaceful solution. If organizing citizens' votes does not work, then citizens could look to other options such as boycotting businesses or services. If peaceful attempts at change are ineffective, then it may be necessary to result to military action. This is the least desirable option, so citizens should first exhaust peaceful ways of fixing their government.

It is obvious that poor, urban areas of the Philippines have many problems. Sustainable agriculture is a clear solution. As previously stated, sustainable agriculture will provide the people of these areas with delicious and nutritious foods, give them a positive future mindset, and it will provide them with another source of income.

What is being proposed is that people in poverty-stricken areas of the Philippines become involved in urban gardening. Since these people are very poor and quite possibly wouldn't be able to afford the materials to get a garden started, it would be more efficient to start a community garden. This idea may seem impossible. One may think that a community garden in this kind of area would just become run down and destroyed. However, the people of these small, run-down communities have a bond that many communities do not have. They depend on each other to survive. They purchase goods from one another, and they spend a lot of time together. This causes them to trust each other; they realize that they all have similar goals, and they are all just trying to get along.

One reason why this bond is so strong is the church. Most people of the Philippines are Roman Catholic. In their churches, they learn Christian values. The church helps poor communities by supplying children with a safe space, giving food to the needy, and giving children a better education. Since the church is already seen as a safe place, it would be a great place to host a community garden. At first, the garden would be small, but with support from the community and possibly other patrons, the garden would only grow. Community members would love this idea not only because it provides them with delicious and nutritious food, but it also gives them something positive to do in their free time. Once the garden starts to take off, gardeners would even be able to sell their portion of the produce for revenue. What started off as a hobby for these gardeners can turn into a source of income.

Aside from the church, there are many other organizations in the Philippines working to help the poor. One of these organizations is the Fairplay for All Foundation. Fairplay for All is a charity organization based in Payatas Philippines. It has been around since 2011, and, throughout its history, it has completed multiple, notable projects. It all started when the foundation was created. The organizers started by creating a football club and coaching the local children on weekends. As this went on, the organizers also began facilitating a drop-in center for the people of Payatas with a very small budget. This center was a safe space for kids in the community to eat nutritious meals, learn important skills, and play football. This facility isn't just run by members of the organization. Local mothers invest their time working at this facility by running the kitchen. This just shows how the community is actively trying to help foundations like this. In 2013, the foundation acquired another building to renovate. They turned this building into another bigger and better, drop-in center for the local children. In 2015 the foundation acquired yet another building. After renovation, this building became the foundation's own school. Currently, the Fairplay for All Foundation only continues to grow and improve (Fairplay for All Foundation). This organization and others like it are doing amazing work to help people of the Philippines, and it is very easy for individuals to support them. On Fairplay for All's website, there is an option to donate which helps the organization grow and do more great things. With the support of

individual donors and possibly other charity organization, the Fairplay for All Foundation could start up an urban gardening facility in addition to its other outreach efforts.

This solution is aimed to help the people in the urban environments of the Philippines, but some ideas would also help people living in rural areas. Many people living in rural areas of the Philippines are farmers. The two largest crops that these farmers grow in their fields are corn and rice (Philippines - Agriculture). These two crops are very important, but it would greatly benefit the farmers if they were to start a small garden of their own as a hobby. The farmers can try gardening using methods that were previously stated, like growing potatoes in baskets.

In conclusion, although the Philippines can be a great place, it has its problems. These problems affect different citizens in different ways. Most citizens are able to overcome these issues because they may have a stable income or they have a loving family to care for them; however, that is only most of the citizens. There are also the citizens that are fighting to survive in this country. These people live in run-down places. These people are eating chicken out of the garbage. These people may have little to no family left. They shouldn't have to suffer just because they were dealt a bad hand in life. Of course, there isn't just a magic solution that will fix everything, but sustainable agriculture or, more specifically, community gardening is a step in the right direction. Community gardening will give the families in this position grow something healthy to eat, provide positive activity participation, and contribute a small amount of income. Some who really need help the most are living in the slums of the Philippines.

### Bibliography

- Bouckaert, P., & Hancock, S. (2017, March 02). The Killing Squads: Inside the Philippines' 'War on Drugs' Retrieved March 14, 2017, from <https://www.hrw.org/news/2017/03/02/killing-squads-inside-philippines-war-drugs>
- Caring for Potatoes. (2008, June 23). Retrieved March 26, 2017, from <https://garden.org/learn/articles/view/571/>
- Fairplay for All Foundation. (2011). Retrieved July 26, 2017, from <https://fairplayforall.org/>
- France, C. (2010, March 01). Potatoes: how long to grow? Retrieved March 26, 2017, from <https://www.connexionfrance.com/Archive/Potatoes-how-long-to-grow>
- How To Grow Potatoes in Containers at Home in Garden or Indoors. (2016, December 20). Retrieved March 27, 2017, from <https://www.youtube.com/watch?v=1vUN9iKlyhl>
- Lah, K. (2012, May 1). 'Garbage chicken' a grim staple for Manila's poor. Retrieved March 14, 2017, from <http://www.cnn.com/2012/04/30/world/asia/philippines-pagpag-slums/>
- Manila. (2017). Retrieved March 14, 2017, from <https://www.compassion.com/philippines/manila.htm>
- Philippine Government. (n.d.). Retrieved July 26, 2017, from <https://www.philembassy.no/philippine-government>

Philippines - Agriculture. (2010, August). Retrieved July 19, 2017, from <http://www.nationsencyclopedia.com/economies/Asia-and-the-Pacific/Philippines-AGRICULTURE.html>

The Global Food Security Index. (2017). Retrieved March 14, 2017, from <http://foodsecurityindex.eiu.com/Country/Details#Philippines>

Woody, C. (2016, September 05). The Philippines' president has declared a war on drugs, and it's turned normal people into hired killers. Retrieved March 14, 2017, from <http://www.businessinsider.com/philippines-vigilante-drug-killings-2016-9>

Yap, D. (2016, March 18). 12M Filipinos living in extreme poverty. Retrieved March 14, 2017, from <http://newsinfo.inquirer.net/775062/12m-filipinos-living-in-extreme-poverty>