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Philippines, sustainable agriculture

Lack of Sustainable Agriculture in the Philippines

The Philippines is located on the southeastern side of Asia, near Asiatic Mediterranean. The country is surrounded by five bodies of water; the South China Sea to the west, the Pacific Ocean to the east, the Sulu and Celebes Seas to the south, and the Bashi Channel to the north. The Philippines has a population of around 113.5 million people as of February 2023, with approximately 47.5% of the population living in urban environments (Worldometers). As of 2022, the average family size was 4.1 people per household (Esri Demographics). In 2018 the average income was PHP 313,000/year or USD 6,231.27, however, the capital region had a slightly higher annual income average at about PHP 460,000/year or USD 9,157.78 (Payscale). Nearly 34% of land in the Philippines is used for agriculture (Philippine Statistic Authority). Due to the terrain, the country has many tropical exports such as sugarcane, rice, coconut, and bananas. Additionally, fruits and nuts have been large exports in recent years (Statista Research Department). Additionally, the livestock industry is also quite impactful in the Philippines. Statista Research states, "In 2021, domestic pork consumption was at 10.66 kilograms per capita and was forecast to reach over 14 kilograms in 2031. To meet growing domestic consumption demands, livestock farmers have been increasing the production volume of various meat types." Despite this many families still struggle to find food, leading to malnutrition and other varying issues.

Food is an essential part of Filipino culture and is often a cornerstone of family life. The Philippines is known for its diverse and flavorful cuisine, which reflects its history and geography. In the Philippines, families typically get their food from several sources. Many families rely on traditional markets or "palengkes" to purchase fresh produce, meat, and seafood. These markets are usually held in the early morning, and vendors sell a wide variety of ingredients that families use to prepare their meals. Additionally, many families also purchase food from supermarkets, which offer a wider selection of products and often have more convenient operating hours. Once families have acquired their ingredients, they prepare their meals using various cooking methods. One of the most popular methods is "lutong bahay" or home-cooked meals. This method involves using traditional cooking techniques that have been passed down from generation to generation. It is common for families to prepare dishes such as adobo, sinigang, and kare-kare, which are all popular Filipino dishes that use a variety of ingredients. Another popular cooking method is grilling or "ihaw." Filipinos enjoy grilling meat, seafood, and vegetables and often gather around the grill for a social gathering. This method of cooking is often associated with special occasions and is a popular way to celebrate with family and friends.

In the Philippines, typical families face numerous barriers that hinder their ability to earn a living and access nutritious food. These barriers can have a significant impact on the health and well-being of families and their ability to thrive. One of the major barriers that typical families face in the Philippines is the lack of job opportunities and low wages. Many families struggle to earn enough income to meet their basic needs, such as food, housing, and healthcare. This can lead to financial insecurity and poverty, which can have negative impacts on physical and mental health. Another major barrier is the limited access to nutritious food. Many families in the Philippines live in areas where there is a lack of affordable and healthy food options. This can lead to malnutrition and other health problems, particularly among children. Additionally, inadequate healthcare and education systems can also pose barriers for typical families in the Philippines. Limited access to healthcare can lead to untreated illnesses and diseases, while

a lack of education can limit opportunities for upward mobility and economic stability. The barriers that typical families face in the Philippines are complex and multifaceted. Addressing these challenges will require a coordinated effort from governments, non-profit organizations, and other stakeholders to create sustainable solutions that promote economic stability, access to nutritious food, and improved healthcare and education systems.

The Philippines is a democratic country with a presidential system of government. The President is the head of state and government and is elected every six years. The country's political system has been heavily influenced by its history, which includes colonization by Spain and the United States, as well as periods of authoritarian rule. The current political climate in the Philippines has resulted in several issues, including economic inequality and poverty, which have a direct impact on the country's food systems. As mentioned, the Philippines has a mixed economy that is heavily dependent on agriculture, with over a third of the population employed in the sector. However, despite the importance of agriculture to the country's economy, many farmers in the Philippines still struggle to make a living due to a lack of government support and investment. The government's focus on other sectors of the economy, such as manufacturing and tourism, has resulted in a neglect of the agricultural sector, leading to low productivity, poor infrastructure, and inadequate access to credit. One of the most significant issues facing the Philippine food system is the high rate of food insecurity and malnutrition. According to the Food and Agriculture Organization (FAO), around 2.4 million Filipinos are undernourished, while 30% of children under five are stunted due to malnutrition. The lack of access to nutritious and affordable food is a major contributor to this problem, with many Filipinos unable to afford a balanced diet. Another issue facing the Philippine food system is the lack of regulation and oversight in the food industry. The country has a weak food safety system, with inadequate testing for contaminants and limited enforcement of food safety regulations. This has led to a high incidence of foodborne illnesses, which can be particularly dangerous for vulnerable populations such as children and the elderly. This is precisely why safer, sustainable food options are needed.

Despite significant progress in reducing global hunger in recent decades, millions of people continue to go hungry every day. One of the main causes of hunger is the lack of sustainable food systems, which leads to food insecurity and malnutrition. According to the Food and Agriculture Organization (FAO), approximately 690 million people suffer from hunger globally, with the majority of them living in developing countries like the Philippines. In addition, about 2 billion people suffer from malnutrition, which can lead to a range of health problems, including stunted growth and cognitive impairment. The lack of sustainable food systems is one of the main drivers of hunger and malnutrition around the world.

One of the main challenges facing sustainable food systems is climate change. Rising temperatures, changing rainfall patterns, and extreme weather events can all have a significant impact on crop yields, which can lead to food shortages and price spikes. In addition, climate change can also exacerbate water scarcity, which can further reduce crop yields and increase food prices. As a result, vulnerable communities that rely on agriculture for their livelihoods are often the hardest hit by the impacts of climate change.

Another factor that contributes to the lack of sustainable food systems is land degradation. This can occur due to overuse of land, deforestation, and unsustainable agricultural practices. Land degradation can reduce soil fertility, which can lead to reduced crop yields and food shortages. In addition, land degradation can also lead to soil erosion, which can further exacerbate the impacts of climate change. Water scarcity is another significant challenge facing sustainable food systems. As the world's population

continues to grow, the demand for water is increasing, while the availability of freshwater resources is declining. This can have a significant impact on agriculture, which accounts for around 70% of global freshwater use. Water scarcity can lead to reduced crop yields, food shortages, and increased food prices, particularly in regions that are already vulnerable.

Sustainable agriculture in the Philippines is a critical issue that is gaining attention from government agencies, non-profit organizations, and farmers themselves. As mentioned the country is primarily an agricultural nation, with the majority of the population relying on farming for their livelihood. However, the current agricultural practices in the Philippines are unsustainable, leading to soil degradation, water pollution, and loss of biodiversity. Sustainable agriculture, on the other hand, is a method of farming that aims to provide food and other agricultural products while preserving the environment, promoting biodiversity, and maintaining the economic viability of small-scale farmers.

The Philippines has a long history of agriculture, with farming being the primary source of livelihood for millions of Filipinos. However, the agricultural sector is facing various challenges, such as climate change, soil degradation, and water pollution. These challenges are caused by unsustainable farming practices, including the use of chemical fertilizers and pesticides, monoculture, and overgrazing.

Sustainable agriculture is the key to addressing these challenges. Sustainable farming practices aim to improve soil fertility, reduce the use of chemicals, conserve water, and promote biodiversity. Some of the sustainable agriculture practices that are being implemented in the Philippines include organic farming, agroforestry, and the use of traditional farming methods.

Organic farming is a method of farming that relies on natural inputs, such as compost and manure, to improve soil fertility and control pests and diseases. Organic farming also reduces the use of chemicals, which can harm the environment and human health. The Philippine Organic Agriculture Act of 2010 promotes the development of organic farming in the country. The law provides for the promotion, development, and regulation of organic agriculture in the Philippines. It also establishes the National Organic Agriculture Board, which is responsible for setting standards and guidelines for organic farming.

A new organic farming program would most likely aim to reduce chemical pesticide and fertilizer use, improve soil health, and increase yields. Additionally, the program should give farmers some incentive to make the major switch to organic farming. There would also need to be new regulations and policies put into place. For example, an organization to verify farmers' systems would be needed. This much-needed shift, however, would be quite expensive, to negate this cost the organization can apply for grants, subsidies, or low-interest loans. This program would lead to healthier foods, increased biodiversity, improved food security, and even new market opportunities; with organic foods in ever-increasing demand.

Agroforestry is another sustainable agricultural practice that involves the integration of trees, crops, and livestock in a farming system. Agroforestry has several benefits, such as soil conservation, carbon sequestration, and biodiversity conservation. The Philippine government has implemented several programs to promote agroforestry, such as the National Greening Program. The program aims to plant 1.5 billion trees on 1.5 million hectares of land by 2022. The program also provides livelihood opportunities for communities living in forested areas.

The purpose of a new national agroforestry program in the Philippines would be to enhance soil and usable land, further encourage biodiversity, and would also have economic benefits to farmers. The program would provide training exercises and important information to farmers about agroforestry techniques and tree species selection. The program could even help to regulate and monitor progress, in addition to organizing community nurseries. This program could potentially add hundreds of thousands of dollars to the Philippine economy by increasing timber production all whilst enhancing the land. This program could be funded through government grants, community contributions, or low-interest loans.

Traditional farming methods, such as the use of indigenous knowledge and practices, can also contribute to sustainable agriculture. Indigenous farming practices are often based on a deep understanding of the local environment and the use of natural resources in a sustainable way. These practices can be passed down from generation to generation and provide long-lasting benefits.

The implementation of these sustainable practices may take some time. It might be beneficial to start off small and work up to larger-scale practices. Many people will most likely be skeptical of the meticulous use and implementation of these solutions but the results will hopefully lead to governmental and societal change for the better.

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