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## Thailand: The Problem with Malnutrition and Conquering It

Have you ever been hungry? Around eight hundred forty-two million people in the world are undernourished who can probably relate (*cgiar.org*). The more people that are undernourished, the more the world will have to account for the percent of deaths from starvation. The general loss of food in East and Southeast Asia is due to the climate change. For example, in 1970 over twenty-nine thousand floods were recorded, (*cgiar.org*) most likely destroying crops. It is predicted that in 2030, the exposure to floods will increase to over seventy-seven thousand. Thailand, a country in Southeast Asia, is known for many things, like having a population of around sixty-seven million people and being the twentieth most populated country in the world. It is also known for its government, a constitutional monarchy with a leader known as Yingluck Shinawatra, ruling a land where ninety-five percent of the population believes in Buddhism. How does Thailand relate to people being undernourished? Thailand is one of the many countries that has people struggling with malnutrition, which is an illness, to where people are undernourished. Malnutrition is a big problem because it is causing many deaths, not only in Thailand but around the world. Malnutrition has many partners in crime, two are poor food availability and employment. The important things to acknowledge are Thailand's subsistence farm family. the malnutrition problem, and what can be done to help. If people help with malnutrition problems in Thailand, they could help save lives, give people a better chance to support their families, and help the growth of children.

A regular Thai subsistence farm family's diet often includes rice and they have less education because they do not stay in school that long. The typical family size is around 3.95 people per household agent.org throughout all of Thailand, however the farmers in Thailand have around five to six kids to help work on the farm. (Hawaii.edu. a website that studies education) "... many couples still believe that having large families is important to ensure family well-being and achieve economic security. But many other couples are having fewer children in belief that it will make possible a better quality of life..." It was also found (Hawaii.edu) that families with more kids receive less education. Thailand's education system is different from America's system, students in Thailand go through is public preschool, primary, secondary and then college. (Hawaii.edu) Smaller families have a better education than larger families, unlike the subsistence farm families. Most schooling for larger families includes children getting around six years of schooling, which means that most of the larger families' kids do not even get to secondary school; in fact, only twenty-five percent of children from larger families go to secondary school, showing that the other seventy-five don't go to school as much as a smaller family. Showing ultimately that subsistence farmers with big families do not get as good as education as a regular Thai family because the subsistence child would have to stay home to help grow crops to live off of. Furthermore most people in Thailand eat what they can grow, but the main source of food eaten in Thailand is rice, which is typically eaten with papaya salad, Thailand's main dish. Some other foods that are eaten there are jackfruit, papaya, mangoes, coconuts, fish, cassava, sugarcane, and palm oil. The most prominent crop, of course, is rice. The amount of rice in Thailand took up 59.29 percent of grown crops in 2008 (ec.europa.eu.)

Health care in Thailand is free, unlike America where you have to pay for it. The government pays for health care in Thailand. The Universal Health Care Act was established in 2002. This free health care has helped decrease the mortality trends and increase the Gross Domestic Product or GDP in Thailand,

(*who.int*.) The GDP per capita is one hundred thirty-five thousand, two hundred thirty-five *baht* (Thailand's currency), which is equivalent to four thousand, ninety-eight U.S. dollars.

Thailand's average farm size is three point six HU (housing unit/farm). Mostly private farm crops comprise of rice, corn, soybeans, cassava, sugarcane, rubber, and palm oil. "From 1971-75 to 2001-07, rice production has increased considerably from 14.23 million tons to 27.62 million tons at the rate of 3.06 percent per annum," (*agent.org.*) Subsistence farmers also raise fish, fruit and rice. Rice farming, for example, consists of growing rice in a wooden tray. However, the first thing to be done is hoe or plow to soften the ground, for an easier way of transportation. Then the rice is rolled to help grow. Then they measure the water level underground. Once the ground is dry, they harvest the land by grabbing rice sticks with one hand and slicing them with a sickle with the other hand. The next step for a farmer is the polishing rice stage. They wait for around four days for the rice to dry and then, using sticks with ropes or even their own hands, they hit the stalks of rice to release the grains.

Some obstacles to improving agricultural practices are employment, access to food, and fair nutrition. One of the struggles to improving agricultural productivity is "genetic improvement and postharvest technology," (*video on fao.org.*) With improvements on both, it will help provide more profitable alternatives. Employment could use some help as well; the living wage is 9,823 baht's, but most people are living on minimum wage, which is 7,800 baht. That is a 1.3x difference, states labourbehindthelabel.org. Why is it a struggle to get a living wage? Well, the government profits from minimum wages are lower and the countries are trying to compete. When citizens who have to live off of this wage try to protest to their bosses they get fired or, even worse, sent to jail.

Some people in Thailand do not have very good food access because of the expense for food is high. Fifty-four percent of people are in poverty or on the poverty line, and people in poverty consume more than half of their own food they produce. It's tough to achieve adequate food nutrition as the costs increase in the production, which have increased in 1980 to 2007 from 17.58 thousand baht (equivalent to 509.56 US dollars) to 32.67 thousand baht (946.96 US dollars) states agent.org. When the food price increases, especially for the larger Thai farm families, it's going to be a struggle to feed everyone because they are not going to have enough money to buy the food they need.

Malnutrition affects food security in Thailand by affecting the agricultural productivity, household income, and food availability. Malnutrition causes Thai families not to produce enough food because it affects the individual's health mentally and physically, affecting the person's work performance and causing poor health. When, any, person is not healthy they cannot work as well. That causes them to earn less, so they cannot afford the proper food for themselves or their families. Malnutrition has stunted the growth of fifty percent of children under the age of five in 1982, states fao.org. Between 2000 and 2013, one-third to one-fourth of children in the world had stunted growth. Pregnant women are at risk as well because malnutrition could cause delivery problems, rates increased for growth, low birth weight, and perinatal mortality. Also, world-wide, ninety-nine million kids under age of five were underweight in 2013. South Asia's thirty-two percent of kids are underweight, but it has improved over time from fifty-two percent in 1990 to forty-three percent in 2000 to finally thirty two percent in 2013. So it is improving a little bit, by the percent of kids that are underweight, over time. Because of potential change of improvement in malnutrition, the rural farm family could be affected positively with the help of organizations providing more food to them. Unfortunately, malnutrition still affects the food security in Thailand agriculturally, with the household income, and with food availability.

Improving nutrition would help quality of food, preserve the environment, and lower poverty. Improving nutrition can help Thailand's health by making families more healthy and active. It would benefit women because they would not have to worry while they are pregnant about birth defects and such for their children. Improvement would also help children because then they wouldn't be lying around sick or hungry while working on the farm because their parents need help. Subsistent farm child. Without the worry of food can go to school and get a decent education. Improving nutrition will help the quality of food because the workers will have more energy to produce more food and take more time into making sure the food production process runs smoothly. Producing more food could potentially help the people environment. It would definitely help poverty because people would be able to work more and make more money. With longer work hours they will be able to gain more money. In Central Thailand, poverty went down from 32.9 percent in 1988 to 6.2 percent in 1996 according to fao.org because of all the small improvements, an example the expansion of diversified foods.

Other major issues that Thailand faces are climate velocity, pollution, and poverty. Climate velocity could affect Thailand for decades ahead due to the strong differences in climate. In some places in Thailand farmers worry about floods decreasing the amount of crops they produce or in other parts they worry about severe droughts that kill a variety of plants. Pollution is a problem that leaves one-third of Thailand's surface water with poor quality. The majority of the problem is that if polluted water is given to the crops it could decrease the amount of food produced, or worse, destroy them. Losing some of the pollution could help feed rural farmers, saving them from malnutrition. Poverty will be an issue that contributes to malnutrition, that is, people are poor and cannot afford to purchase the food they need.

Three potential solutions include worldwide involvement, biotechnology, and Feed My Starving Children (FMSC). Malnutrition can be solved by providing food to people who can't afford or access food, which of course either happens in one of two ways. One, citizens in the country need to get paid more money from their government or they're given food from organizations like FMSC. One local company that could help in Minnesota is Feed My Starving Children (FMSC) which allows people here and across America to help raise money to help get more food to people in places like Thailand. From example in Burma, people fled across the border like Steven, a refugee that FMSC helped, while his family was crossing the border three of his brothers were shot and killed. Another refugee that FMSC helped was Mei Sha he lost both his arms and eyesight trying to disable a bomb. After Mei Sha walked to the refugee village. When FMSC heard the stories they wanted to know how they could help. The responded FMSC got from the refugees was "Can you get us food?! If we did not have to worry about our meal we could rebuild our lives." FMSC response was bringing food next and after the three millionth meal FMSC. To get those organizations to work they need money/donations. The plan of attack should be to get more people involved. More awareness should be raised about the continuing malnutrition problem. People should make it more pronounced that there are still people with a malnutrition problem. Advertisers from food organizations like FMSC should start getting more commercials, advertisements, or donation locations. For advertisements there are some out there already but hardly enough to stop this problem. In continuation, a technology improvement could be biotechnology. "There are approximately one hundred forty million children in low-income groups in one hundred eighteen countries," (un.org) which has an idea of using biotechnology, a genetically modified crops to where it will provide bigger harvest to farmers. With this new technology creating golden rice which "contains three new genes -- two from the daffodil and one from a bacterium -- that helps it to produce provitamin A ... " which helps people who don't get enough vitamin A. This is just one out of a hundred new developments that are already being placed around the world. Biotechnology and the FMSC organization can help solve the problem of malnutrition worldwide. As for worldwide involvement, meaning the countries all around the world come together to solve this issue, it is not only

a problem in Thailand, all over the world there are people who are undernourished. The governments across the world should come together by the United Nations they work to have peace, security, stability and protect human rights. Creating the problem of malnutrition as a more identifiable topic, by advertising, to the United Nations and displaying that malnutrition is a growing problem. The United Nations would be a great way for the world to be involved because the United Nations which consist of almost all the countries in the world. The United Nations could help by sending more food out to places like Thailand. The United Nations is not the only way either, governments could set laws to decrease cost for foods or to have food shipped around the world. The government could even set laws to advertise this problem more, to the citizens. Helping with the problem of malnutrition could be as simple as ordinary people donating to the cause or raising money for organizations.

Organizations are mainly important to expand and symbolize human rights and help rural farmers. The World Food Program helps people with malnutrition as well. One of their goals is to even to help improve the food access. They also contribute to rebuilding rural, agricultural, and fisheries potential. However it does not necessarily help Thailand, most likely because of the cost and supplying food is difficult, though it has seventy countries it does help. The key to all of the organizations throughout the world is that they need to keep expanding to help people. United Nations, helps with "human rights." Being able to get the amount of food a person needs is a human right. Another recent organization was created in 2002 called GAIN. "GAIN supports public-private partnerships to increase access to the missing nutrients in diets necessary for people, communities and economies to be stronger and healthier," (gainhealth.org) GAIN also has already helped 667 million people including pregnant women and children so they can get a better access to nutritious foods. By investing in these organizations by either gathering money from government's with excessive money for example the United Nations or donations towards the organizations from citizens in a region with a stable government. You could not ask a person who is undernourished themselves or in poverty to donate they are the ones the organizations would be trying to help, that would be diminishing the purpose, donations should be done in places where people have expendable money for example places like the United States of America. The typical Thai rural farm families would be positively affected by the change of more food; they would be healthier and able to work more, and this idea could save a lot of lives as well as represent human rights. Not only of the lives of just the rural farmer, as stated before there are refugee camps and communities that would be greatly affected with more food, creating more jobs and making more money. Overall, expanding these organizations could not only make Thailand a better country, yet as well make the world a better place to live in.

Thailand is a country that has people struggling with the problem of malnutrition, and the important thing to acknowledge would be Thailand's subsistence farm family, the malnutrition problem, and what can be done to help. A subsistence farmer may have a hard lifestyle with poverty, like poor employment wages, and climate change nevertheless they still deserve to get the nutrition they need. After all having a good nutrition and being healthy is a human right, especially if organizations and people are working for not only Thai citizens, however as well as working for a good nutrition all over the world. Malnutrition is a serious issue in Thailand and there are many ways we can solve the problem, threw biotechnology and organizations including FMSC. What the organizations advisors need to do is strengthen the number of commercials advertisements and donation locations. Thailand's malnutrition problem is just deficiencies compared to the world full of people with the problem of Malnutrition. A lot is being done in Southeast Asia, but eleven percent of that population is still undernourished. Malnutrition can affect a country poorly as well as cause them to lose two to three percent of their Gross Domestic Product because of the reduction of iron, iodine, and zinc. Feed My Starving Children (FMSC) has already started to help people in Thailand. Though FMSC is not the only successful organization, as stated above, The World Food Programme has been known for helping people with malnutrition.

their goals is even to help improve the food access. GAIN was created in 2002, however it was estimated that it has already helped 667 million people. GAIN also help pregnant women and children get a better access to nutritious foods. Imagine what these organizations could do with more donations and money from the people. The important thing is still to acknowledge Thailand's subsistence farm family and the malnutrition problem, however the main focus for the world should be the solution.

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