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## **Using the “Sponsor a Plantation” Program to Improve the Sustainability of Palm Oil in Indonesian Smallholders**

In fourth grade, my mother and I attended a concert. During the intermission, we came across a booth for a program called “Compassion International” — a sponsorship program that allows families in the United States to make monthly donations to certain children in need. Families choose a child to make individual donations to. They could write letters to each other, forming relationships with people across the world no matter the family’s financial stability. My mom and I decided to sponsor Deya, a twelve year old girl from Indonesia. Thus, this led me to choosing Indonesia as the country I aspired to explore further.

Indonesia, the world’s largest country located in Southeast Asia, is home to a multitude of diverse and multicultural lands. From idyllic beaches to biodiverse rainforests, it is not much of a surprise to hear that this country receives around 16.10 million foreign tourist arrivals per year. Indonesia is an archipelago that lies between the Indian and Pacific oceans, containing a wide variety of unique geographical features including mountains, volcanoes, rainforests, and mangroves. There is plenty of cultural and ethnic beauty. They speak Indonesian and Javanese. Many Indonesians are also Islamic.

Underneath all of these eye-catching tourist attractions, however, lies larger hidden issues in desperate need of resolution. Indonesia is overpopulated, water-scarce, unhygienic and deforested. Tainted with disease and lack of resources, Indonesia is in an urgent state of crisis.

Indonesia is currently the fourth most populated country worldwide. With a population of around 273.5 million and a growth rate of 3 million per year, Indonesia accounts for about 3.47% of the world’s population. Unemployment, traditional customs, lack of contraception, lack of planned parenthood programs and lack of sex education are all major contributing factors to the increasing overpopulation of the country. Indonesia contains 67949 villages, 3542 subdistricts, 245 regencies, and 27 provinces.

There is an extremely uneven population distribution within the country. There is a large population imbalance between the urban and rural lands of Indonesia. 30% of the Indonesian population live in urban areas. 61% of the population is concentrated in the urban city of Java, where it is growing rapidly due to industrialization. On the other hand, rural areas are less densely populated. For example, islands Kalimantan and Irian Jaya account for 50% of Indonesia’s land, but have smaller population densities. This has a significant impact on those who actually *do* live in rural communities, since they do not have as much access to resources located in the urban areas of the country.

The capital of Indonesia is Jakarta, where the government is located. The Indonesian government consists of three branches, similar to that of the U.S. government. There is a legislative, executive, and judicial branch. The legislative branch consists of the upper house, the People’s Consultative Assembly (MPR), and the lower house, the People’s Representative Council (DPR). These two houses amend the national Constitution, appoints/impeaches the president, sets laws, budget, and performs general political oversight. The executive branch consists of a president (Joko Widodo), vice president (Ma'ruf Amin), and cabinet. Presidents serve 5 year terms, and can be reelected to serve a second one. The judicial branch consists of a Supreme Court (Mahkamah Agung), Constitutional Court, and other public, religious, and administrative courts. The Supreme Court is the final court, dealing with lower court disputes. The Constitutional Court decides if the government’s decisions are constitutional.

A typical Indonesian family consists of multiple generations living together in a single household. Children will still live with their parents – even after marriage. Extended family gatherings are also customary. Fathers serve the breadwinner role of the family, providing monetary security. Mothers serve as housekeepers and caregivers. They may also serve as breadwinners. If families own their own farms, they will maintain the farm together. They keep goats, chickens, pigs, fish, and ducks. They grow rice, cassava, sweet potatoes, peanuts and soybeans. People live in villages known as *kampungs*, where they share farming tools and equipment. Extra food is sold at markets known as *pasars*. They eat steamed rice as a staple, along with side dishes such as vegetables, soup, meat, and fish. Families will usually gather around the table and eat together using their bare hands. The average gross salary for Indonesians amounts to around \$13436 per year, \$1120 per month, and \$6.45 per hour.

Some of Indonesia's major crops include rice, cassava, cinnamon, rubber, vanilla, cocoa, nutmeg, coconut oil, and palm oil. Many of these industries are not sustainable, as farmers utilize "slash and burn" techniques in order to clear farmland to create plantations. Especially palm oil plantations.

Indonesia produces about 50% of the world's supply of palm oil each year, with plantations stretching across 6 million hectares. Palm oil is vegetable oil that comes from the mesocarp (pulp) of oil palm fruits. These fruits grow on trees. Palm oil can be found in various foods, cosmetics, soaps and shampoos. The palm oil industry employs 4.5 million workers. Palm oil production accounts for 1.5 - 2.5 percent of the country's GDP, and produced about 36,000,000 metric tons in 2016.

Although palm oil is largely used in today's age, the growth of this product is highly unsustainable. As Indonesian farmers create palm oil plantations, they utilize slash and burn techniques to mass-remove current standing forests in their path. In other words, these farmers burn rainforests in order to clear new land for palm oil plantations. 24 million hectares of rainforest was destroyed between 1990-2015. This process threatens animal species such as the pygmy elephant, tigers, Sumatran rhino and the Orangutan. Half of the Bornean orangutan population has been wiped out in just 16 years. In addition, it also produces an extreme amount of carbon emissions, contributing to global warming and climate change. It also dries out peatlands, making them more vulnerable to forest fires. From 2013-2020 71% of the tree cover was lost yielding 5.25 Gt of CO<sub>2</sub> emissions. Deforestation and plantation problems are huge issues due to poor palm oil plantation practice, destroyed critical habitats and endangered species.

*The destructive production of palm oil relates to food insecurity because farming land that was once used to farm rice paddies / peatlands have been dried out in order to plant more profitable oil palm trees. As a result, Indonesia has become more dependent on imported rice as a food staple. Many farmers have transitioned into the palm oil industry and depend on the industry for their livelihood. This issue mainly affects people who reside in rural areas of Indonesia. A growing number of workers have committed to farming palm oil in a more sustainable way. Growing plantations also destroys indigenous land.*

Throughout the world, laws were implemented with goals to improve deforestation. The Forest Code of Brazil, for example, requires Amazon landowners to keep 25-80% of their property under native vegetation. Farmers cannot cultivate more than 20% of their property. Although this law does sound promising, it is extremely difficult to enforce. Given that the Amazon is around 2.587 million mil<sup>2</sup>, it is hard for the government to manage all these Amazon landowners. Similarly in Brazil, the government Action Plan for Prevention and Control of Deforestation in the Amazon (PPCDAm), which prioritizes land use, monitoring and controlling environments, and creating sustainable production. There were 13 ministries which had direct contact with the President. These ministries created protected areas, created boundaries of indigenous land, and improved satellite monitoring. This created a significant decrease in deforestation of the Amazon.

The Roundtable on Sustainable Palm Oil (RSPO) is a current nonprofit organization dedicated to creating sustainable palm oil farming. With more than 5000 members, the RSPO consists of many different workers in the palm oil industry. This organization brings palm-oil stakeholders together to set standards for creating palm oil in a sustainable way. An example of an RSPO criteria mentions that plantations cannot occupy significantly biodiverse forests or fragile ecosystems. Farms that produce palm oil that comply with these standards produce Certified Sustainable Palm Oil (CSPO). 51% of RSPO certified palm oil comes from Indonesia.

Smallholder farmers are families that grow oil palm along with other crops. The family contributes the majority of labor. The farm is the primary source of revenue. The area of plantation is less than 50 hectares. 3 million smallholders around the world make money from palm oil. Compared to industrial plantations, these farmlands are small. However, they make up for about 40% of the total plantation area in Malaysia and Indonesia. Many of these smallholders lack education on growing oil palms, and often produce relatively low yields.

Currently there are palm oil companies that have partnered up with shareholder farmers. One of these companies is Asian Agri, a palm oil company committed to sustainability and community. They work side by side with shareholder farmers to provide them the education and resources they need to farm oil palm trees with sustainable farming practices. The company has set up biogas power plants that convert organic waste production processes into clean energy, specifically electricity for surrounding villages.

After researching solutions on palm oil sustainability I feel education and partnerships with shareholders is the most practical solution. Increasing funding for these programs would benefit both the environment and the small shareholder farmer.

My proposal would be to implement a “Sponsor a Plantation” program. Similar to other nonprofit organizations such as Compassion International (sponsor a child) or Rainforest Concern (sponsor a rainforest), groups of U.S. participants would be able to sponsor a small palm tree plantation. The sponsorship program will be facilitated through a series of well thought out steps, which are included below:

First, a plantation would have to qualify as a “smallholder” to receive certification. The criteria for qualification can be found [here](#) (page 10). Some of the qualifications include: the total area of their oil palm production area is less than or equal to 50 hectares (ha), and they are free to decide how to use the land, what kinds of crops to cultivate, and how to care for them (organizing, managing and financing the land). Once plantations are qualified, they will be registered into a website for sponsorship eligibility. Independent smallholders must join a group of other smallholders who also want to receive certification.

A website will be created similar to those of [Compassion International](#), [Adopt an Orangutan](#), and [Rainforest Concern](#). Through the website, participants in the program would be able to select a plantation they would like to support. The home page of the website will feature an array of separate individual profiles of each plantation in need of a sponsorship, each with a picture of the farmer on their plantation. When a profile is selected, the page will feature the following: how long the farmer has been waiting for a sponsorship, information about the farm (ex. how large it is, where the farm is located), and how the sponsor’s money will go to support them. There will also be a large “DONATE” button, which allows the family to claim the plantation they would like to sponsor.

Next, sponsors must agree to support the plantation through monthly donations of a suggested amount.. Since 1 US Dollar is equivalent to around 14,889.46 Indonesian Rupiahs, sponsors from the US would not have to give a substantial amount of money per month to provide sustainable support for Indonesian

family plantations. Sponsors would also have the opportunity to write letters of support to the family they decided to donate to.

Finally, once funds have been donated to the Indonesian farmers, they will be utilized to support their practices. Money that comes from the sponsorship would go towards providing programs, education and resources to smallholder palm tree farmers, giving them access to the resources they need to create plantations sustainably. This project could be led by RSPO, as this organization already supports smallholder plantations.

RSPO smallholders must recite a short declaration that expresses their commitment to their responsibilities. Next, they will complete training. The precise form of instruction needed will change depending on the needs of each smallholder. The group manager is in charge of seeing to it that smallholders get access to the training. In light of this, the group manager will evaluate the group members' training needs upon admission. Training resources can be found [here](#).

Currently, the RSPO leads a couple of successful programs for smallholder individuals. One program, known as the RSPO Smallholders Trainer Academy, teaches small plantation farmers methods of sustainable palm oil practice. Once farmers complete these programs, they are awarded a certificate. Funds donated from the "Sponsor a Plantation" program go towards an individual plantation, providing tools, books, pens, materials, and providing better management practices to those farmers.

Additionally, the RSPO Smallholder Support Fund has provided independent smallholders with access to financial assistance (RSSF). The RSPO also offers tools and training resources specifically geared toward smallholders, such as the RSPO Smallholder Trainer Academy, to assist autonomous smallholders in their efforts to move toward sustainability and livelihood improvements (STA). The RSPO also provides access to videos and apps such as HCV for SH. The RSPO Smallholder Support Fund has provided independent smallholders with access to financial assistance (RSSF). Sponsorship money could go towards RSSF.

Money that is derived from our sponsors could also be used towards creating pamphlets that are aimed at educating these smallholder farmers about the risks of their practice. These pamphlets would include information about the dangers of palm oil, including how slash and burn techniques can quickly create a barren environment.

The RSPO organization possesses a multitude of standards that they look at in order to classify a palm oil plantation as sustainable. RSPO separates their standards into three categories and classifications: principles, criteria and indicators. Principles are general statements about values that smallholder plantations should pledge to abide by. These declarations serve as the general structure. Criteria are the specific steps that the smallholders would take to achieve results. Indicators specify the behaviors that each smallholder member and the group must exhibit to meet the requirement. A list of criteria can be found [here](#).

Palm oil farming in Indonesia is a highly environmentally destructive process while contributing to food insecurity. In spite of this, with the "Sponsor a Plantation" program, donors from all over the US will be able to help Indonesia achieve a goal of more sustainable farming practices. It takes a village, one plantation at a time.

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