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Madagascar, Malnutrition

### **Madagascar: Taking the Steps to End Malnutrition**

Madagascar is an island in the Indian Ocean off the southeast coast of Africa. It contains a population of about 27.7 million people. Where 37.86 percent of the population is urban and the other 62.14 percent is rural. Madagascar has a total area of land of 592,800 square kilometers. Within that land area is five regions: the East Coast, the Central Highlands, the Tsaratanana Massif, the West Coast, and the Southwest. The coastal areas tend to be warm, tropical, and humid, while the inland region has temperate conditions, and the South is primarily dry. While agriculture is important in Madagascar, frequent natural disasters make it inconsistent and hard to rely on, since 25 percent of the citizens live in areas prone to natural disasters (World Food Programme, 2021). Along with natural disasters, inadequate and limited resources lead to poor harvests, and food scarcity, leading to an increasing trend of malnutrition. Nevertheless, agriculture is still greatly relied on there.

Madagascar's average family consists of 4.6 people, varying from 4.7 in rural areas to 4.4 in urban areas, which averages slightly less than the world average of 4.9 people but more than the average family size in the United States of 3.14. These families' diet consists of mostly rice with little protein, vegetables, and fruits with it. Along with the lack of nutrition in food, 58 percent of the population does not have access to safe, clean water (US Aid from American People, 2021). For education in Madagascar, there are about 14.2 percent of kids that never attend school. Only 66 percent of kids finish primary school. While education there is free, it is low quality due to the shortage of food and water. This led to the 4.99 million illiterate adults and 1.7 million kids (as of 2015), which has been steadily rising since 2000 (Knoema, 2015). As for healthcare, it is free in Madagascar but people have very limited access to it. About 60 percent of the population lives more than 5 kilometers away from a health center, making it difficult to have quick access to aid (US Aid from American People, 2021).

Nearly half of the households in Madagascar live without sanitation facilities. Adding to that, 22.8 million people do not have a decent toilet (Water Aid, 2020). An overall 76 percent of the population live in poverty, compared to the 10.5 percent of the United States population (as of 2019)(World Food Programme, 2021). Accompanying the poverty rate, in Madagascar only 5 percent of the rural population have access to electricity, whereas about 60 percent of the urban population have access (Energypedia, 2020).

Although farming employs 80 percent of the people in Madagascar, the country still suffers greatly from malnutrition (International Trade Centre, 2018). As of 2020, there was a hunger index of 36, very severe

compared to some other countries (Global Hunger Index, 2021). Malnutrition in Madagascar affects people in almost every region. Also, the COVID-19 pandemic has only worsened the problem of malnutrition in Madagascar. Over half of the population struggles with malnutrition and food insecurity. It is a growing issue in Madagascar and has been for many years. In 2019 due to a lack of rainfall, 90 percent of their harvest failed, which caused 60 percent of their population to fall into food insecurity. Natural disasters are common in Madagascar, and they leave devastating effects and struggling people. Natural disasters are one of the main reasons why Madagascar struggles with malnutrition so much: between 1980 and 2010 Madagascar endured 35 cyclones and floods, five severe droughts, five earthquakes, and six epidemics (Action Against Hunger, 2021).

Malnutrition can cause anaemia, which is especially a problem there for women of reproductive ages. About 36.8 percent of women from ages 15 to 49 years old are affected by this deficiency in healthy red blood cells due to poor nutrition (Global Nutrition Report, 2020). However, little progress has been made to help this specific condition, but the overall problem for women, especially those who are pregnant, is malnutrition. Not only does malnutrition affect women, but for pregnant women, it could cause long-term effects for their child.

Malnutrition has an especially large impact on children in Madagascar. More than half of the children suffer from malnutrition (The World Bank, 2016), leading to 47 percent of children under the age of 5 years old being stunted, more than the average of Africa overall, being 29.1 percent (National Library of Medicine, 2018). That percentage of stunted children under 5 years old is among one of the highest in the world. Growing up not getting enough nutrition can cause permanent damage to the youth, creating long-term, irreversible struggles for them to live with for the rest of their lives, also, leaving them more likely to contract diseases like measles (Desrosier, 2019). Not only does it cause extra struggles but possibly even their deaths. About 44 percent of the childrens' deaths under 5 years old can be connected to malnutrition in Madagascar (UNICEF, 2020).

Malnutrition is an incredibly complex problem to attempt to solve but there are solutions. Cultivating more land for farming would work towards solving the twin problems of food scarcity and malnutrition. Surprisingly, even though farming is one of Madagascar's main occupations, only 5 percent of the land is cultivated (International Trade Centre, 2018). Cultivating more land, possibly to about 20 percent but leaving the preserved land untouched, would work towards lowering malnutrition rates. The more land they can use to farm the more food there can be for the local people, by setting aside a portion of every harvest to give to the locals or anyone suffering from malnutrition in Madagascar. The government would have to pay for the cultivation of the land, which could give more people jobs also helping the poverty rate there. Giving more people jobs of farming could allow them more money to buy more food, more nutritious food. Along with cultivating more land, they would need to plant various crops besides rice. Although rice would give them the food they need, it would not give them all the nutrients they need. Planting different crops with varying nutrients like tomatoes, onions, spinach, and peppers could help the malnutrition rate decline. It would take a lot of time, work, and dedication to get it going, as well as a lot of government cooperation as it would have to fund the cultivation of additional land. However, those

investments are vital in order to set the people of Madagascar on the road to an adequate food supply and proper nutrition.

Going along with more farming, more local markets for the people in Madagascar would be beneficial. This would create more local, easy access markets for people to get fresh food from local farms to the people and places in the more isolated, struggling areas or even crops and food from farms further away transported to little shops or places for people to easily get the food and nutrients they need. Of course, the prices would have to be lower for some time so people can afford the food they need to prevent malnutrition, but the idea of more places like local markets would benefit everyone, getting the people in need food, nutrients, vitamins, and more to prevent malnutrition and its effects. Because Madagascar is a relatively poor and not very developed country, making the markets more local and common would make getting food easier for families. Families wouldn't have to go as far since the roads aren't very good. Which is another step towards ending malnutrition in Madagascar.

More imports or more reliance on other countries for imports of food and crops could be a short-term solution to the increasing rate of malnutrition. Madagascar has to start somewhere, and it is not an easy process, so getting aid from other countries would be beneficial for the start of their journey to end the high rate of malnutrition. Many countries, such as the United States and China, overproduce food and create massive amounts of waste. About 40 percent of the food in the United States is wasted, which could go to other countries to help with food scarcity and malnutrition. Although those countries may be dealing with their own problems, Madagascar's problem could be easily helped while not taking the focus from internal problems. If other countries decide to help, selling at reasonable but low prices to where Madagascar could buy the food may be difficult. As Madagascar is a poor country, being able to buy imports would be a challenge, especially since many other countries will not want to lower their prices and reduce their profits. But, if compromises are made, it would be a good start to ending the malnutrition in Madagascar. Although for the long term self-sufficiency would be the ultimate goal, while still importing outside food in case of sudden harsh weather. There are many variables when it comes to relying on other countries for food but nevertheless it would help to have the food from other countries for a start.

Putting more food in schools could help the children grow up without having to worry about malnutrition. School breakfasts or school lunches would be beneficial. Since many families can not afford good food or to keep their family well-nourished, feeding kids at school saves money for families and they would not have to worry for the kids. The children there are the next generation of Madagascar, so feeding them and making sure they are healthy should be one of the top priorities. There are many easy and quick meals and snacks that are nutritious and would be helpful for the children throughout their days and lives. The easiest way to make sure most of the children get good and healthy food is to do it at schools. Another addition that could be made to schools is teaching the kids about the issues at hand. Teaching kids about malnutrition makes them more aware of what is happening and what they could possibly do to help prevent it in their home and country. Also, teaching the kids about farming could help make farming in the future more reliable and helpful for the common people, which could help the malnutrition rate decline.

Many solutions to the malnutrition problem would take some sort of government intervention. The government would have to take part in funding the beginning of the solutions like helping create the farms or buying food from other countries. Everyone's cooperation is key to making solid long-lasting solutions. Without the government, most of the reasonable solutions become more difficult, especially for the poor, isolated, struggling parts of Madagascar. The government would also have to be in charge of distributing the food fairly, making sure the parts of Madagascar that are struggling the most with malnutrition get the help first but at the same time making sure every region gets the aid they need. Malnutrition is a collective problem and helping one part will not solve the bigger problem in the end. This is more of a challenge than it may seem because Madagascar is still developing and is already a poorer country than most. Asking the government of a not fully developed country to take a large part in helping end the malnutrition is a lot but as organizations and programs try to help and the concerns of the citizens of Madagascar, the government's attention could be reached and their support could be gained too.

Madagascar does not just need any food. They need food with good nutrients, vitamins, supplements, and all the types of foods that will reduce malnutrition. Fruits, vegetables, and nutrient-rich grains would be the ideal foods to try and get to the people struggling. Diets need to be balanced and mixed with a variety of foods. Getting only unhealthy processed foods would not fix the problem or might even create new problems. This is why farming would be such a good idea. Although the plants might not give all the nutrition people need, it would surely be a good start. Also, getting animal meat like chicken, pork, beef, or fish could be a good addition to their diets. It would give the protein and many good nutrients that could help fix the malnutrition. Even without the meat, however, a vegetarian diet could still work well to get rid of malnutrition as long as there is enough variety of foods that are plant-based products, fruits, vegetables.

Once a great deal of effort is put in and the focus is directed correctly, the malnutrition rate in Madagascar can start to drop and stay low. Children will grow up healthy and would not be stunted or have to live with as many health issues. Pregnant women would not have to worry about their babies and if they are getting enough nutrients. Everyone in Madagascar will be healthier and stronger once healthy, nutritious food is available and affordable. But support is going to be needed to get the solutions working. Many organizations would greatly help with the process of getting rid of malnutrition or may already be in progress with helping out. The United Nations World Food Programme, US Aid from the American people, and Action Against Hunger are all organizations that provide support for vulnerable areas like Madagascar. They work to help the countries and communities within them with many problems including malnutrition. Organizations like those would be key for funding, taking action, making progress and, most importantly, helping the people of Madagascar.

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