

Emma Johansen

Urbandale High School

Urbandale, IA

Madagascar, Malnutrition

Madagascar: A Proposition to Manage Malnutrition

Overview of Madagascar

Madagascar, the fourth largest island in the world, is over 1,000 miles long and 350 miles wide, and 250 miles off of the eastern coast of Africa (“Madagascar - Located in the Indian Ocean near Africa”). Malnutrition and childhood growth stunting is a major problem that runs throughout Madagascar. Nearly 50 percent of Madagascar's children are chronically malnourished and around one-fourth are severely malnourished (“Addressing Chronic Malnutrition in Madagascar”). Sitraka, a country in Madagascar, has the fourth highest rate of malnutrition (“A Ten-Year Program to Combat Chronic Malnutrition in Madagascar”).

Madagascar's population is over 25 million people with 37.8 percent of the population urban and 62.2 percent rural (“Madagascar Population (LIVE)”). The average family consists of four to five people (Madagascar Demographic and Health Survey 2003-2004, 2). Families live in a wide variety of house styles; some are rectangular and crowned with steeply angled roofs, others are made of bamboo and palm (Southall). Urban houses are either two or three stories with brick columns and steep tilted roofs, while rural houses are made out of mud or woven matting supported by poles (Southall).

Many villages within Madagascar only have access to small amounts of modern conveniences. Out of the 35 percent of households in Madagascar that have access to clean water, 74 percent are in urban areas and 28 percent are in rural areas (Madagascar Demographic and Health Survey 2003-2004, 2). Only 55 percent of households have access to toilets, of which 53 percent live in rural areas and 47 percent live in urban areas. Around 50 percent of the population uses pit toilets due to the lack of toilet facilities (Madagascar Demographic and Health Survey 2003-2004, 2). Only one-fifth of the households in Madagascar have access to electricity; 84 percent have access near the capital while 11 percent have access in rural areas (Madagascar Demographic and Health Survey 2003-2004, 2).

The normal diet of someone living in Madagascar consists of rice in broth or rice with a helping of meat: either boiled zibu, pork, chicken, or fish, as well as stew, curry, paste, or pickled fruit (Lonely Planet). The food is often cooked until tender by using French cooking techniques (Jones). Citizens obtain jobs consisting of fishing, forestry, mining, farming, and certain jobs in the oil and gas industry (“What Type of Jobs Are Available in Madagascar?”). The average yearly wage of someone living in Madagascar is very low at 981 dollars in International Currency (“Madagascar Minimum Wage Rate 2019”).

Madagascar's government consists of a republic ("Madagascar: Government"). The system is divided into three territorial parts, provinces, regions, and communes. The provinces and regions are governed by an elected head and the communes are split into either urban or rural and have elected administrations (Southall).

Madagascar is roughly 224,632 square miles of land ("Madagascar Population (LIVE)"). It is the fourth largest island with vast amounts of lowlands, dense rain forests, as well as grasslands ("Madagascar"). Madagascar has two seasons, the rainy season which is December through March and the dry season which is April through October ("Madagascar"). Its main crops include sisal, sugar cane, tobacco, bananas, maize, potatoes, corn, and oranges, while its main exports are coffee, vanilla, and cloves (Reporter). The average farm size in Madagascar is about 1.2 hectares, which is equal to about 0.0046 square miles.

Malagasy families have access to free primary and secondary schools from ages six to thirteen. Children study five years at primary school, four years in secondary school, and have the option to go the University. Southall and Dresch report, "Two-thirds of women and three-fourths of men are literate in Madagascar."

Malnutrition in Madagascar

Malnutrition has been a constant problem throughout Madagascar for years, causing problems in children's early lives. Developmental stunting in children results in many different negative consequences in these children's adult lives. Children who have faced malnutrition for more than a year and a half are consequently more likely to experience problems later on in their lives. Some of these problems include reduced labor market participation, decreased cognitive function, language and behavioral development, as well as higher rates of morbidity and mortality ("Addressing Chronic Malnutrition in Madagascar"). Many citizens of Madagascar cannot provide for themselves or their families as 92 percent live on just two dollars a day ("Addressing Chronic Malnutrition in Madagascar"). The problem of childhood stunting affects about half of the children under the age of five who live in Madagascar ("A Ten-Year Program to Combat Chronic Malnutrition in Madagascar"). In addition to the issue of childhood stunting, many animals are aggressively hunted at unsustainable rates because of the desperate need for food in Madagascar. Tenrecs, small mammals that resemble hedgehogs, shrews, or small otters, and carnivores are being hunted more often because they are great sources of protein ("Threats to Madagascar's Biodiversity and Ecosystems").

The malnutrition rates in Madagascar can be divided by rural areas as well as urban areas. Citizens who live in rural areas do not have ample access to many things such as electricity, clean water, man made roads and even toilets compared to those who live in urban areas (Madagascar Demographic and Health Survey 2003-2004, 2). Only 11 percent of rural areas have access to electricity which means that there is a lack of internet to find different foods with essential nutrients for a healthy diet (Madagascar Demographic and Health Survey 2003-2004, 2). It is much easier for citizens of Madagascar who live in urban locales to have access to more nutritious foods as well as access to most essential necessities for human survival.

Existing Solutions

One major project that has been created to help this crisis is the Emergency Support to Critical Education, Health, and Nutrition Services Project, which is also known as PAUSENS. PAUSENS was partially created to alleviate some of the negative impacts brought forth by a severe drought which affected the population of Madagascar's health on a nutritional level ("Projects & Operations"). This was a multi-year project that established community nutrition sites, systematic household visits conducted by nutrition agents, as well as the distribution of nutritional supplements to children and pregnant women ("A Ten-Year Program to Combat Chronic Malnutrition in Madagascar"). Many families used high impact nutrition programs, intervention, or monthly growth and nutrition monitoring sessions to try to improve their overall health ("Addressing Chronic Malnutrition in Madagascar").

PAUSENS was approved on November 29, 2012 and lasted through July 30, 2017, at a cost of around 65 million dollars ("Projects & Operations"). PAUSENS was a large-scale project of combating malnutrition over about five years. It is one of the first projects to look at the impact and cost effectiveness of different levels of counseling, nutrition programs, and large-scale child growth monitoring ("Addressing Chronic Malnutrition in Madagascar"). Following the conclusion of PAUSENS, the government began exploring ideas to decrease the chances of childhood stunting in young children who are more at risk of developmental problems ("Addressing Chronic Malnutrition in Madagascar").

The World Bank has used PAUSENS as momentum and building blocks for various new projects that will be used in over a ten year time period ("A Ten-Year Program to Combat Chronic Malnutrition in Madagascar"). As stated in the article, A Ten-Year Program to Combat Chronic Malnutrition in Madagascar, "Targeting close to 75 percent of under-fives, this program will first be rolled out in the eight regions in the country with the highest stunted growth rates, before being gradually expanded to 15 regions." This program is made up of many different phases and has been designed in way way that will try to diminish the amount of stunted children in the newly targeted regions by 30 percent in ten years (A Ten-Year Program to Combat Chronic Malnutrition in Madagascar"). It will grant priority to the phases that encourage the use of good nutritional health for a child's first two and a half years of life. As a result this program will have a positive impact on a child's ability to learn and grow in life (A Ten-Year Program to Combat Chronic Malnutrition in Madagascar").

Many projects have been introduced to test intensive counseling, liquid based nutrition, and early childhood stimulation ("Addressing Chronic Malnutrition in Madagascar"). Some families use high impact nutrition programs, intervention, or monthly growth and nutrition monitoring sessions ("Addressing Chronic Malnutrition in Madagascar"). In other countries micronutrient supplements have been used to improve the effects of malnutrition. These supplements have helped wipe out iodine deficiency and dramatically reduced maternal anaemia. Some of these supplements are used as liquid-based micronutrient supplements and have cost on average 200 million dollars per year ("5 Ways to End Malnutrition").

Malnutrition can affect the overall health of an entire village; child stunting can lead to problems in adulthood. Those problems can lead to hardships in finding job opportunities and the earning of money. If an adult does not have the money or skills to obtain the things needed to stay healthy, their health will

diminish. If their health diminishes, they will have a hard time providing for their families. In turn their own children will follow in their footsteps into those hardships that have already occurred once.

Proposal of a Solution

Malnutrition has been a problem in many countries like Madagascar for a long time; solving this crisis with a project like PAUSENS would greatly impact and improve this problem in many of these countries. To solve this problem, I would set up locations throughout the country of Madagascar to provide access to professionals who can provide support to combat malnutrition: nutritionists and family counselors. Nutritional supplements would be available to low-income families at these locations. Professionals would provide counseling and resources to those who struggle to provide for their families. There would be three to five of these locations spread throughout Madagascar, providing nutritional help and advising. I would apply for monetary assistance in the form of grants from The World Bank. The Madagascar Nutrition Office and the Madagascar Ministry of Health would be partners to help with providing or recruiting staff for local services, such as counselors and nutritionists. The World Bank may provide technical assistance to help with fundraising across the world. All funds, whether grants or raised funds, would be used to help fund the shipment of food as well as the transportation and living expenses for volunteer nutritionists and counselors who will visit periodically to oversee the program. These volunteers will provide training to local citizens who will then become the local “experts”. These citizens could be paid a stipend from either grants or raised funds and can provide supervision to those families who need extra help and/or referral to other services. Madagascar’s government will help to fund and publicize these locations and the amount of supplies available per family. Community members can have jobs in delivering supplements to homes of families. Celebrity endorsement worldwide would provide not only publicity to the effort, but also the potential for additional funding and donations.

There are some challenges that could occur during this project. One challenge is the availability or willingness of people who are willing to volunteer to help other families in the area. Another is simply access to food and food sources. The climate may prove difficult for local gardening efforts and the raising of livestock. Volunteers would need to be trained in hunting and fishing techniques and how to grow fruits and vegetables within their climate in order to train other citizens. If conditions allow, some initial livestock, such as chickens or goats, could be provided to explore the option of raising livestock for eggs, milk, etc. As food products become more available, they could receive training on how to make inexpensive and nutritious meals as well as how to get the needed vitamins and proteins within an everyday diet. The final challenge for this project is ongoing funding. In order for this project to succeed it would need not only grant funding, but also ongoing support, through donations and publicity, from humanitarian organizations as well as private donations. This proposal could greatly help other countries who have similar challenges of childhood malnutrition as well as malnutrition in adulthood.

By addressing this problem of malnutrition and child stunting in Madagascar, we can help solve malnutrition and child stunting across the globe. We can provide access to nutritional supplements, nutritional counseling and support, technical skills for hunting, fishing, and gardening, and local expertise. People will get the education they need to stay healthy and develop skills to improve their overall lifestyle. In adulthood, children will be in good health and they will teach their own children how to avoid malnutrition, even during hardships.

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