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The Rise Out of Malnutrition in India

India: whether it's the bright saris or the exotic smells of spices, there is always something beautiful to experience. India is a very diverse nation, with a multitude of different, interesting aspects that reflect the country. India is known for its intricate architecture and beautiful culture, but it is also a country in which part of the population experiences significant despair and hardship. A good portion of the nation's people live in poverty, with individuals and families having to worry about how to obtain food or keep their shelter on a daily basis. Because many people often do not get the right amount of food, their bodies lack the adequate nutrients needed to be healthy. Although the rate of malnutrition has been decreasing in India over the last several decades, the problem is so severe that we must try to do everything we can to continue this decrease. Malnutrition is a prominent problem in India, caused by issues related to distribution of food and poverty. In addition, poor sanitation, lack of diverse food sources, and lack of access to education all contribute to malnutrition. The best solution to better address this issue is to restructure distribution and economic security programs in India.

Growing up with an Indian heritage, my family's yearly trips to India to visit my grandparents have always been treasured. Coming from an upper class family in India, the problem of malnutrition did not affect us directly. However, from an early age, I remember noticing the extreme poverty along some of the city streets, and I had exposure to the poorer parts of India at times. Even though poverty exists throughout India, I remember how much worse it would be when our drive would take us down a more rural route. It would be a normal thing for malnourished mothers with small children to lightly tap on our window at a stop light, hoping desperately that we would give them some money to help feed them and their children. As the years have gone by, I have grown accustomed to this happening frequently, and continue to wish that they will find food to help sustain them and their families.

An average family in India consists of about 4.3 people with an average income of 44,901 Indian rupees (approximately 610 American dollars) (Nooreyezdan, 2016) (Jha, 2021). Although this may seem like a fairly low wage, this average does not even represent the extreme wealth gap that exists. The reality is that "close to 69 per cent of Indians earn less than US \$2 a day" (Singh, Pandey, 2013). It is clearly difficult for families that earn this much a day to acquire nutritious food.

An important part of Indian culture is cooking. Staple dishes include different types of curries, rice, breads, and lentils, which contain proteins, vitamins, and carbohydrates (How Healthy is Indian Food, 2020). Although many Indian families are able to acquire the quantity of food they need, they are not able to get the quality of food they need and must rely too heavily on staples like rice. Rice does not provide balanced nutrition, and diets high in rice can lead to issues such as diabetes and heart disease (Izadi, Azadbakht, 2015). Many people are dying as a result of not getting the needed nutrients their bodies deserve.

Urban areas of India possess more wealth than rural India; this imbalance is because of the unequal societal factors that are present. Because of these societal factors, there is a clear difference in the standard of living between the urban and rural parts of India (S, 2011). Government data has shown that "the estimated urban income per capita in terms of Net Value Added is 98,435 rupees, compared to 40,925 rupees in rural areas" (Sharma, 2019). One way this gap can be seen is in the amount of amenities that are available in a household in each area. In urban areas, houses are more likely to be equipped with

amenities such as adequate flooring and toilets. These differences lead to an increased rate of malnutrition in rural areas compared to urban areas. Overall, though, approximately 40% of households consist of mud, grass, or bamboo (Kulshreshtha 2020), and 53% of households lack a toilet (Lakshmi, 2015). Without certain amenities, the poorer parts of India are more susceptible to certain diseases because of the lack of sanitation.

The wealth gap in India also influences access to education. For those in the middle and upper class who can afford it, education is a huge part of a child's life. For the poor, data shows that 32 million children have never been to school (32 Million Indian Children, 2019). In fact, children in poverty tend to spend their days trying to access clean water and nutritious food for their families (India Today).

India shares about 15% of the global hunger issue, thus resulting in the national issue of food insecurity (India). In a study done in 2017, 68% of child deaths under five years old are caused by malnutrition (Ahuja, 2019). Malnutrition can result in impaired cognitive ability, stunted growth, and a poor performance in academics, all of which impact them for the rest of their lives (Prado, Dewey, 2014). This underlying problem has become a leading cause of death for children in this country (Ahuja, 2019).

Another evident problem is that because pregnant women are not getting the necessary nutrients that are needed for their babies to grow and be healthy, more and more children are being born with nutrient deficiencies, and are malnourished at birth (Women's Nutrition, 2021). According to UNICEF, it is clear that pregnant women who are malnourished give birth to an already malnourished baby, and that "[t]his cycle of malnutrition promotes an unhealthy lifestyle for many Indian families who are living in poverty" (Singh, Pandey, 2013).

Malnutrition also makes diseases more deadly. Even when malnutrition was not the direct cause of death, a "disease was lethal because the child was unable to fight back due to malnutrition," according to Victor Aguayo, chief of Child Nutrition and Development at Unicef-India, (qtd. in Singh, Pandey, 2013).

Primarily because of the extreme differences in terms of wealth, status, and class, the lower class does not have access to the proper nutrition that their bodies need. Because they do not have enough money to buy nutritious food, many buy from small markets. Oftentimes, these markets do not sell clean food, resulting in poor sanitation and disease, which also plays a big role in adding to the problem of malnutrition. In fact, "The most important aspect is sanitation. Most children in rural areas and urban slums are constantly exposed to germs from their neighbours' faces. This makes them vulnerable to the kinds of chronic intestinal diseases that prevent bodies from making good use of nutrients in food, and they become malnourished" (Singh, Pandey, 2013). In the slums and rural areas, Indians are especially at risk of being exposed to high amounts of germs in their food, water, and air. According to UNICEF, "Poor sanitation and contaminated water cause 80 percent of the diseases afflicting rural India, and diarrhea is a leading killer of children younger than 5" (Lakshmi, 2015). Because of all of these factors, India is hoping to find ways to solve this issue.

Some systems are already in place, but unfortunately, these programs are currently not the most efficient at addressing these problems. In 2013, the Indian government implemented the National Food Security Act (NFSA), which had a goal of providing all Indians with food security (Varadharajan 2014). This was done through a process where the Indian government would buy food from farmers at a minimum price, which would then be bought by certain families using ration cards. Although this Act was put into effect to help many undernourished families, there are many problems that occurred with it: Corrupt buyers, ineligible ration cards, and a lack of variety for balanced nutrition are just a few of the factors that need to be changed to create successful distribution programs (George, McKay, 2019). India's PDS (Public Distribution System) is also not able to fully distribute the food to the rural population who desperately needs it the most. The National Center for Biotechnology Information (NCBI) says that "[d]espite a

number of significant, system-wide changes over recent years, high levels of corruption and leakage continue to plague the PDS." (George, McKay, 2019). To be able to properly help India's suffering and malnourished population, a better distribution system should be set in place. Because their population is so high, it is not surprising that it is hard for the government to provide an effective form of distribution. In addition to this, studies and records show that there is enough food for India's population, but a large amount of it is being wasted (George, McKay). "Each of these studies suggested that the PDS was not working effectively, with large amounts of food not reaching the intended recipients, and significant wastage resulting in high costs for limited benefits" (George, McKay). It was estimated that for every 5.43 kilograms of PDS rice that was supposed to be distributed by the government, approximately 1 kilogram reached its destination (George, McKay). In addition, for every 8.21 kilograms of PDS sugar that was supposed to be distributed, approximately 1 kilogram reached its destination (George, McKay).

To best help India's malnourished population, the Indian government should shift its authority of food distribution from the PDS to the hands of local food security and delivery programs that work together to address the needs of specific communities. These proposed programs should be more productive at getting food distributed to where it is needed because it will be easier to accomplish smaller, specific goals compared to one big national goal. For example, one program could be focused on a rural area in India, while another may be focused on an urban area. This will allow a more efficient method of distributing the food to all of India's population. The implementation of these distribution programs does not necessarily mean that the Indian PDS should be taken away, but the more programs in place, the more people will be helped. Delivery methods also need to be restructured as another obstacle to food distribution is the inaccessibility to certain regions. Issues such as "lack of accountability of government officials in remote and sometimes inaccessible regions" lead to "the poor delivery of state programmes to these people" (George, McKay, 2019). To specifically address this issue, there needs to be an emphasis on targeting the rural communities and assigning specific distribution programs to each of the targeted rural areas. Because these distribution programs will be assigned to specific rural areas, it will be easier to focus all of their efforts on getting to that region.

Food waste is another distribution issue that needs to be addressed. Programs should keep a steady and strict count of the amount of food delivered and stored in order to reduce waste, misplaced food, and corruption. Designated representatives from each program should track malnutrition rates to see what specifics of the distribution programs are helping or hurting, succeeding or not, in order to adjust processes and resolve issues. Additionally, the food which is being distributed should consist of a diverse diet to provide balanced nutrients.

In addition to programs specifically devoted to distributing food, there should be an increase in the number of economic security programs implemented to provide resources and food to poorer families. According to The Hindu Newspaper, "The nutrient-adequate diet costs \$2.12 a day. This is more than the international poverty line. If a person with income just above the poverty line spent her entire daily expenditure on food (ignoring fuel, transport, rent, medicines or any other expenditure), even then she would not be able to afford the nutrient-adequate diet" (Swaminathan, 2020). In the Indian states of Kerala, Tamil Nadu, and Himachal Pradesh, extreme improvement in malnutrition rates has been seen as a result of heavy investments in programs similar to economic security programs. It is "[n]o surprise then that despite being regularly warned that this approach isn't 'sustainable', Kerala, Tamil Nadu and Himachal keep expanding the reach and quality of public services. Tamil Nadu, for instance, recently launched potentially pioneering schemes of maternity entitlements, community kitchens, and even nursing rooms at bus stands (Mohan, 2016). In order for these economic security programs to work, they should each have specific goals to accomplish, just like the distribution programs. In America, we have seen these programs effectively work to reduce poverty and malnourishment. For example, "[p]overty fell from 26.0 percent in 1967 to 14.4 percent in 2017 by this measure. Most of the improvement came from economic security programs" (Trisi, Saenz 2019). These economic security programs will help decrease

the malnutrition rate because they will allow for the poverty-stricken population to afford an adequate variety of food distributed by partner programs.

The money to fund these programs would essentially come from increased taxes on the upper class. Of course, this idea will not be favorable among the upper class, but it is clear that this is what needs to be done when there are 189.2 million undernourished people in India (Hunger in India). The tax money would go to funding programs and buying quality food, which would then be distributed through the smaller local distribution programs. Because of the severity of malnutrition in India, the solution using taxpayers' money will be presented to the government beforehand to help convince the government to raise taxes. If the solution using tax money cannot be achieved, further funding related to loans from other countries can be pursued from India's allies, including the United States, Israel, and France. The fact of the matter is that in order to be able to solve this problem, we need to take multiple steps to be sure that the malnourishment rate decreases, with a greater emphasis on helping the rural parts of India.

One can't resolve India's malnutrition problem with a single act; the best way of helping the people and significantly decreasing the malnutrition rate is to use several methods. The implementation of more distribution programs will help to eliminate wasted food, lost food, and corruption. This will also help to target India's rural areas. The food being distributed should consist of diverse and nutritious options. Specific economic security programs will help to decrease the poverty rate and provide assistance to poorer families in India. Working together, these programs will be extremely effective at making a real-world impact and decreasing malnutrition in India and, perhaps, other countries as well.