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India: Improving Malnourishment Through New Food Programs

India is a nation of vast variety in it's topography, languages, and religions; however it suffers extremely from undernourishment in it's population. With India having the Himalaya Mountains and sandy beaches in it's topography, hundreds of languages spoken throughout the country, and four religions being born in India, it's hard to believe that so many people are struggling from undernourishment. Yet, the rural population of India is hit the hardest due to a lack of financial resources, high levels of illiteracy, and a poor education. To make matters worse, in 2007 the inflation rate started at 3.98% and rose to 6.7%, which made food and other items even more costly for the people across the land to afford (Rajan 5). To provide food security for the people living in the rural areas, the government needs to show the importance of letting everyone seek an equal education in order to have the proper qualifications for a well-paying job. In addition, the government needs to figure out a plan on how to lower the food inflation, help provide better paying jobs for the rural population, and to improve their school facilities for the midday meal programme to increase school attendance.

India has the world's second largest population at nearly 1.2 billion people, and it's continuing to grow approximately 1.4% annually ("India"). However, it is also home to twenty-five percent of the world's poor ("India: Overview"). The number of malnourished people in India alone is 237,700 people, which is approximately twenty-one percent of India's population ("Countries: India"). The Indian adults aren't the only ones suffering from this. For instance, with forty-three percent of the children under the age of five suffering from malnourishment, and of those children forty-eight percent suffering from stunting. Not only that, but more than half of all pregnancy women aged between fifteen and forty-nine years old suffer from anaemia, which is a low amount of red blood cells known as iron deficiency ("India: Overview"). In summary, those who live in rural areas often have poor health care due to a lack of health care and extremely limited social services. In conclusion, India desperately needs to figure out a way to stop this undernourishment from growing by adding more health care facilities in the rural areas.

Across the country of India, the people are divided into castes, which is the hereditary social class that the Hindus are born into. These castes divide people into groups such as rich and poor. There are many ways that these castes can affect the wealth of the people. For example, castes typically never intermarry with another caste, though this idea is growing slowly in urban cities. So when the Indians have their arranged marriages, they marry another within their class of wealth. This can become a problem due to the poor still remaining poor, and not having the same opportunities as the higher castes. Eventually it'll affect the education of the children. For instance, competition is already extremely high for education, since India has one of the largest education systems in the world with more than 250 universities and 3,000 colleges. However, there are a large number of "reserved seats" in education and government positions for the historically disadvantaged castes ("India"). This means that the rest of the children in the other castes have to highly compete for the "remaining seats." In addition, if the families are too poor to afford the proper education their children need, their children are often left illiterate. The children also may have to quit school and start work at a young age in order to help support their family, leaving them poorly educated. This too can lead to illiteracy. Approximately, 65.38% is the average literacy rate across India

(Rajan 4). Also, literacy rates are higher in urban areas than rural areas, higher for males than females, and higher for the wealthy than among the poor. Another staggering fact is that poverty is deepest in these scheduled castes and tribes of the country's rural population. For instance, in 2005, these groups accounted for 80% of the poor rural people ("Rural Poverty in India"). Now the parliament has the power to reassign a caste into another class, but they rarely do this. In summary, castes can harm the education of the children and it deeply affects the poverty level of the rural population.

Rural families also differ from urban families by the family size. For example, urban families are generally small, usually consisting of two children. However, rural families are much larger. Rural families tend to live with or near their extended families. Their households consist of several family units-parents, their sons, and the sons' wives and children. As each male in the family marries, he and his family are given a bedroom. The head of the house is typically the father, or oldest male. The mother, or oldest female, is usually then in charge of the household and kitchen. The daughters then assist their mother in household and kitchen chores ("India"). If the families are extremely poor, like rural families usually are, the children are often forced to find employment at the expense of their education, thus making their education fall farther behind urban children's education. However, having so many people living in a small area, it is hard for the rural families to be able to provide enough food and other necessities for them all.

Another way a rural family differs from an urban family is by their home. For instance, a typical rural family's house is made up from bamboo, mud brick, stone, concrete or red bricks. It often lacks air conditioning, so on hot nights they will often sleep on their flat roofs to take advantage of the cool breeze. In addition, some rural areas lack running water, and they will have to use wells instead. In addition, rural families do keep a small garden, in which they grow produce to feed their families. However, a rural family size has increased, so having the same size of land as years before makes them still not be able to provide enough food for them all, even with a garden ("India").

A typical rural family will feed their family by doing jobs that work with agriculture or handicrafts ("Rural Indian"). However, this can lead to complications. Since the land available to each family has remained the same and the number of rural family members has grown, supporting all of them through agriculture alone is becoming difficult. These rural families are then moving to towns and cities in search of jobs, but these are also not always available partly because they lack the proper qualifications such as education. Those who end up finding jobs are usually low paying ("India"). For example, according to the Asian Development Bank, approximately thirty-one percent of the population has an income of less than one dollar per day ("Rural Poverty in India") and that 850 million people a day live on less than two United States dollars per day ("In the Name of the Law: India"). These low wages can lead to problems due to the Indians not being able to support their family by not being able to afford the necessities of life. This eventually leads to the rural families not able to afford the food they need to get the proper nutrition, and thus it can eventually lead to malnourishment.

If you live in the rural areas of India, you would typically work with agriculture as your job. The most common food grown across India is peanuts, rice, cheese, wheat, cotton, milk and sugarcane because India is the leading producer of those items. Other important crops that the Indians grow include grains, oilseed, jute, tea, and coffee ("India"). However, in the semi-arid tropical region there have been recurrent droughts. Due to these recurrent droughts, the Indians are having a shortage of water, and its impeding the

transformation of agriculture that the Green Revolution has achieved elsewhere ("Rural Indian"). These recurrent droughts then leave the rural families unable to produce the crops needed to support their family, thus making them unable to rely upon agriculture as they once did before.

The diet of a typical rural family is hard to specifically define because it changes depending on your culture and location. For example, if you lived in the northern India you would eat wheat bread, known as roti because the wheat bread is the staple food in that area. But the staple food throughout the rest of the country is rice. If you lived in southern India you could be found to eat idly which is a steamed mixture of ground rice and lentils, dosai which is similar to a crepe, made from ground rice and lentils, uthapam which is flatbread made from ground rice and lentils, idiyapam which is rice noodles, and pongal which is rice porridge. Indians also enjoy spicy food, so onions are often added. Also, in southern India, coconut is often used for flavoring. However, those who are very religious don't eat all the same food as others do. For example, a Hindu will not eat beef because they consider cows to be a sacred animal, and a Muslim will not eat pork or drink alcohol ("India"). In summary, the diet of an Indian family differs due to your culture, location, and religion so it's hard to name the specific diet of an average rural family.

Another contribution to the malnourishment across India, is the food inflation that started in 2007. What started out at nearly four percent rose to almost seven percent. This high cost inflation was at an average rate of five percent for fifty-two weeks preceding February 2007. This consisted of food such as wheat, pulses, edible oils, fruits, vegetables, condiments, and spices. In addition, as much as 39.4% of the overall inflation in whole sale price index (WPI) came from the primary group of commodities. This primary group consisted of the mineral subgroup at 18.2%, food articles at 12.2%, and non-food articles at 12% (Rajan 5). With those living in rural areas already living in poverty, barely able to provide food for their family, this high inflation rate made affording the proper food almost impossible.

So many people in India are left undernourished due to a lack of education, financial resources, and the high food inflation. But what can we do to help fight back against this malnourishment in India? Well there can be many different possibilities. For example, in the state of Madyha Pradesh, the World Food Programme sought to stop anaemia by fortifying the 'atta,' which is wheat flour, with iron grounded into flour and micronutrients ("Fortified Wheat Flour Keeps Tribal Children Healthy"). Those who live in the Teh Village suffered extremely from severe anaemia and low life expectancy due to extreme poverty and a poor diet. However, in December 2010 the Sahariya tribe started having the fortified 'atta' in their daily diet. The Sahariyans now feel healthy, and their children are not suffering from ill health as much anymore. We need to make a strategy on how to make available this iron flour and micronutrients to all those who are suffering extremely from poverty in the rural areas. By doing that, they can all receive a better nutrition than before. We need to be able to help fortify the everyday foods that the rural people eat in their home with this iron flour and micronutrients, so it is more readily available in other foods as well. Not only that, but we need to convince all the states of India to support this program and to participate in it, not just Madyha Pradesh.

There are many actions that need to be done to improve the conditions that the people of India are suffering with. One of the ways to help improve their life, is to give them all a strong education. Education highly needs to be improved to those who live in the rural areas. As I've mentioned before, many are forced to drop out and get a job in order to help support their family. They also don't receive as high as an education as urban families because of the high competition. However, the government does

provide free public school, and children mostly from ages six to fourteen attend. But because these families live in rural areas, there is a lack of schools nearby in the rural areas for the children to attend. If they are fortunate enough to be able to attend one of these public schools, the cost of school supplies may be to expensive so the kids don't go to school. In addition, if they decide to go to secondary school after primary school, only forty-nine percent females and fifty-nine percent males are enrolled ("India"). Another problem is that the few schools in the rural areas often have poor facilities (Rajan 15). So due to these reasons, many children in the rural areas lack the proper education they need, and this will lead to more problems when they become adults and lack the skills they need for a better job. So we need to figure out how to improve the quality of the education in the free public schools, that way the Indian students will be able to compete with the urban Indian students for jobs in the future someday.

In 1925, India first ventured into a mid-day meal program, and over the years it has evolved as it has learned more from its past mistakes (Rajan 10). This program was first created to help provide nourishment to the children who were malnourished, and in September 2004 they made more changes by requiring the meals to have at least three-hundred calories and between eight to twelve grams of protein (Rajan 13). For instance, in 2004, the children who lived in the states of Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh, and West Bengal, approximately seventy-seven percent of the students were malnourished (Rajan 15). In 2003, there was a survey conducted around India schools who had this mid-day meal program. Many people agreed that a well devised school meal could contribute to the advancement of the elementary education, child nutrition, and social equity, but that a badly devised plan would do more harm than good. Some programs across the country provided well-cooked meals and this program improved an increase in school enrollment (Rajan 16). This would lead to benefits such as an education to those kids and food to keep them healthy. However, other areas struggled with this mid-day meal program. They had a lack of materials, such as poor infrastructure facilities which consist of the cooking shed, water supply, and utensils. In addition, some meals were repetitive, not offering enough variety, and other meals made some children feel sick due to the unsanitary infrastructure facilities (Rajan 15,16). This mid-day meal program does have many benefits to the children who are suffering from hunger and it should continue. In order to become a more successful program, India just needs to support all the schools in getting the proper infrastructure facilities. If they aren't able to give the mid-day meal program all the supplies it needs at the schools, it would be best to close the mid-day meal program at that school. India wants to help the children get the nutrition they need, but they have to be careful about not doing more harm than good with this mid-day meal program.

With the population of India continually to grow 1.4% annually, hunger and poverty are continuing to rise in India as well. With rural families suffering from a poor education, many aren't able to get the proper paying jobs they need in order to support their family. Other contributions to the high hunger and poverty rate include a lack of financial resources, the high inflation rate that started in 2007, and the recurrent droughts. India needs to desperately figure out a way to combat the increasing hunger and poverty rate. A few ways they can help decrease the malnourishement is by fortifying the wheat flour with iron and micronutrients all across India, not just in Madyha Pradesh. India also needs to strengthen the mid-day meal program, giving the schools the proper infrastructure facilities they need in order to encourage school attendance and to fight malnourishment in the children. By doing these steps, more students will get a more proper education, thus enabling them to better able to compete for jobs in the future.

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