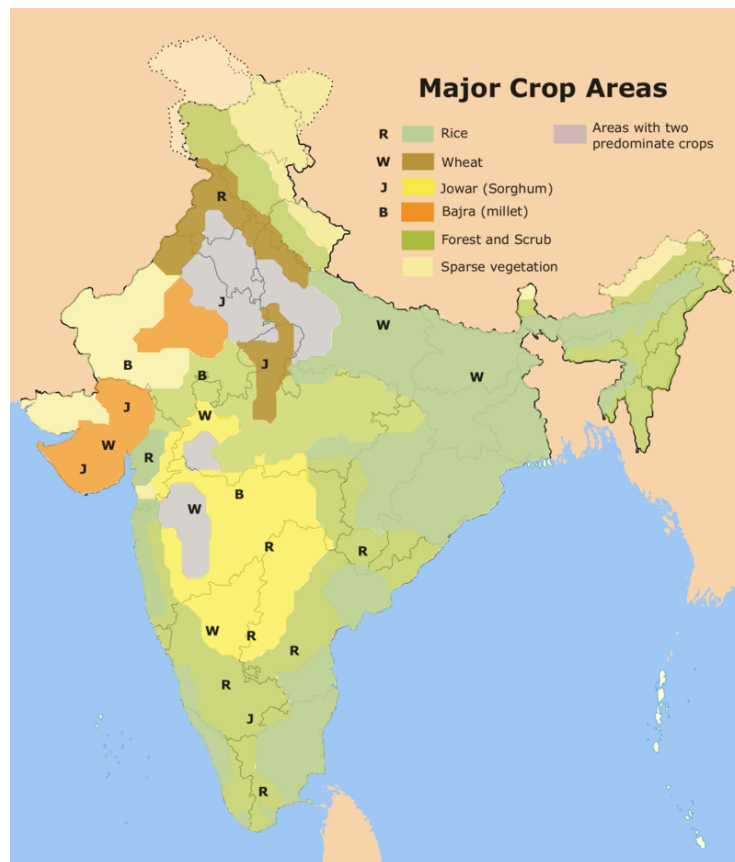


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India, Sustainable Agriculture

World Food Prize; Fixing the Hunger Globally

Fixing a global problem of the world will be no easy task. To fix the global issue of world hunger, the globe itself must look to a specific country. Our assignment restricted choosing industrialized countries. It didn't take much time at all for me to find a country. When provided with a list to choose from, I instantly went to Southern Asia and chose India. India became my first choice because I am familiar with this country. I have investigated India in the past, due to this I was already intrigued by the information. The second reason I chose India was because of India having an abundance of land to yield crops on.



When I was a younger student, I was an inexperienced researcher with less developed skills to really pull useful information from different sources. Now that I have decided to revisit India, I have uncovered many diversities within their country and culture. What I found from researching was that India would be a great candidate for the World Food Prize. It is the 7th largest country and holds more than a total of 60.5% agricultural land (“India Family Systems”, 2013). “India has 394 million acres of arable land,

second only to the United States” (“Agriculture in India”, 2011). In more depth, one farm is 2 hectares, which is around 4.9 acres.

India is a unique country when compared to most. I compared my research of India to my fellow classmates and found nothing that resembles the kind of family life of an Indian Family. What I found from my research is that an average small farming family in 2018 usually consists of 5 people. A Father, a Mother, and three children, ranging from 13-18 years of age. Most families of this size live in houses with mud floors. Their diet is scarce, living off of wheat, basmati, and rice. They obtain these goods from their own crops and sometimes local markets around their houses. Although their variety of foods is limited, usually they cook large assortments of dishes by liberally using different herbs and spices.

Seen from other data on the internet, most low developed countries do not have a luxurious home life, this is reflected also in the average Indian family. Due to low income, many families in India share homes with their relatives and extended family. Besides living with mud floors, only half of the population have a flushable toilet. They also lack a consistent supply of fresh water and electricity. Most families also do not have access to healthcare. Ones that do have access, have a difficult time affording it. A typical farming family of India requires that all members in the family work to have a sustainable living, sometimes this includes children losing the opportunity to attend school.

India is steep in family and caste traditions. For many generations, India has been a culture based on the caste system where religious leaders are the hierarchy followed by government administrators, then the military, next the more educated persons (poets, artists, teachers, and doctors) then, finally, the laboring class. There have been many attempts to break out of this system, it was actually outlawed six decades ago and although progress is being made, the caste system is still a strong presence in India especially when it comes to marriage and politics (Sankaran, 2013). Persons of India are born into their position and remain there. For the laboring class, including farmers, it is hard to escape this caste system or make a better future for yourself or your family.

Many farms are bequeathed from generation to generation and they are small plots of land. The farmers are mostly uneducated persons, but they are proud of the fact that they own their own land. What happens is that these small farms do their own thing, they make just enough food to feed their own family. If they do make a surplus of crops they may make a profit but mostly he is at the mercy of those buying. In most cases, the farmer must sell their goods quickly or they will spoil due to lack of storage facilities. Another hardship is the travel to the market, small farmers are not always close to the marketplace and in most cases, walking is their only transportation.

India has not had a larger impact on world hunger because India cannot break free and grow. Being trapped in this caste system has kept India wallowing in poverty. For the small farmer, constantly working but making just enough to survive weighs heavily on your mind and spirit. As much as they try to escape their station, most are unsuccessful, so they do not try to better their situation or better their land.

The topic I chose for India was the problem of planting efficiency as it pertains to sustainable agriculture. As stated previously, India is the 7th largest country with tons of farm-ready land. Planting efficiency fits India as a problem because of the non-profitable culture of the Indian farmer. India, though they have abundant fertile land to farm, the way they have been farming is a downgrade from what stable farming

should be. India's people are unable to produce a healthy yield of plants, causing the low income of money when exporting goods. Not having extra money to reinvest in the farm causes India's people less updated equipment and lower quality seeds. This causes even more of a problem in producing vegetation. The low income has also had detrimental effects on affording irrigation, fertilizer, pesticides or the ability to eradicate disease. All together these problems create a breakdown of their economy as a whole.

"How bad it could it be?" ("Indian Bloggers", 2016) most citizens say on blogs. Well, India is made up of almost 400 million acres of farmable land, and almost one third of that land has experienced loss of crops due to erosion, another half of that soil is under the threat of termites eating through the crops because India cannot afford enough pesticides. Many agricultural bloggers post about, "India is trying to create a utopia too quickly for their own good" ("Indian Bloggers", 2016), this however is not the case. India is not at fault for their hardships, though they could have planned a bit better to keep up with their abundance of land, they have not had enough support from other countries. If their development becomes too low, all their farmable land will be a waste of space due to the fact that nothing would be changing the world today in a positive outcome. This is truly a shame because India could play a large role in ending world hunger. To dodge this tragedy, India must speak up on a global scale for help which could save their economy and our food crisis.

World Hunger has been an ongoing problem globally for many decades. Many scientists have investigated and developed solutions for the future to end this problem. However, most scientist solutions are complex and have not worked as predicted. I have created my own four solutions that could potentially end world hunger. Each solution revolves around the country of India but requires the cooperation of many for the plan to succeed. If these plans are implemented correctly, the world as we know it could change for the better.

The first solution planned out to end world hunger is to advance India, as quick as possible, into a leading country, in an economic sense. This plan will require the globe to hold a fundraiser to benefit India and improve their economy. The fundraiser will be overseen by the World Bank Group. The strengths of this plan lay behind the aftermath of the fundraiser. Once India has gained enough money to be recognized as an economically leading country, the money will then be invested in equipment needed to better farm their fertile land and pesticides to control their termite epidemic. After the right equipment is in place, the crop production of India should increase astronomically and have a large impact on feeding the world. This solution does come with its flaws such as any other theory does. The right leaders will have to be given access to oversee the purchase and distribution of equipment and eventually the sale of crops as corruption is always a fear. In addition, low-developing countries may start to question the fundraiser complaining that they also struggle for economic help.

The second solution planned to end world hunger is for multiple countries to send experienced farmers into India to provide educational assistance. This resolution would primarily teach the people of India how important their land is to the world as a whole and how to use their land to its full potential. Once these farmers are sent over to India, India will be able to effectively work on their fields by themselves and once again create efficient crop yields that could potentially have a huge global impact on feeding the world.

This solution sounds quite easy to pull off however it has its downfalls like all solutions. If this solution is discussed with India, they may take it as an insult towards their education and culture. Another problem

of this solution would be India becoming selfish upon being so productive. India could start to make outrageous deals and demands in selling and exporting food. Something similar happened in 1973 when the Organization of Petroleum Exporting Countries, OPEC, monopolized oil productions. During this time, the US was dependent on foreign oil. OPEC did not like the US involvement in the Arab Israeli war and stopped shipping oil to the US and other nations. “Eventually, the price of oil quadrupled, causing a major energy crisis in the United States and Europe that included price gouging, gas shortages, and rationing” (OPEC, 2015). If India becomes as power fumed as this company once was, it could turn the world into bankruptcy or further into the depths of a food crisis.

The third idea to end world hunger is to reinvent the farming culture in India. Basically, small farms should be grouped into a cooperative. By coming together and helping each other and creating a unified larger farm, the land will be more manageable. Creating a cooperative can standardize the crop, standardize the manpower and increase productivity. The larger land will also allow for use of mechanized equipment to be more efficient. For a young farmer, learning to use mechanical equipment can turn a rural worker into a skilled worker providing more employment opportunity in the future. By pooling their resources, the co-op will experience less expense, higher yield, higher profit and a larger customer base. Overall, combining farms will reduce expenses and increase profitability. (“Agricultural Cooperatives”, 2018) Another benefit of a co-op is the mutual support of one another and the diminished competition (“Cooperative Farming”, 2012).

We see this type of co-op working in organizations around the world. A strong example would be DFA, Dairy Farmers of America. Dairy Farmers of America share their land, share their plants, share their work and share their profits. By being a part of a cooperative, DFA members know there is always support and help when they need it and there is always a market for the milk they produce. The cooperative system bases profit on production and promises that as a farmer you will “get back even more than you put in” (Dairy Farmers, 2018). The drawbacks of this solution come from the pride of culture in India. Most farmers don’t want to share or give up their land, it is all they own and all they know. It’s their family, their heritage, their birthright and their legacy.

The fourth and final solution planned to end world hunger could change the dynamic of the globe as a whole but could end up being the most extraordinary idea. India would be making many sacrifices in this solution but will be repaid later as their economy grows throughout the years. India would have to give up parts of their land and lease it to other lower developed countries, like Chad or Angola, that have experience in farming. This could be such a dynamite idea because it would be fixing three problems in one process. First, India would not be put under tons of stress trying to cultivate their entire land mass. Second, the amount of crops would increase because there would be an increase in the amount of farmers working on the fields. Third, these less developed countries will all have a chance to rise above their low developed economy. This idea would be called “**LEASE EXTRAORDINAIRE**”.

For this solution to be successful, citizens of India would really have to really support this idea and work together as a country because the potential effects of giving up land to other countries means that the population of the re-mapped India would increase. The smaller land area and increased population of the very tribal people could potentially lead to fighting. This would be detrimental to India’s economy as a civil war destroys land, resources and costs much money. War also creates bad feelings for generations. Another potential effect is that the land may never truly be returned to India. Boundaries may get lost in the exchange and India may be driven off the world map as a whole due to so many new cultures invading their space. But, if India can stay strong and united together to retain its identity, I believe the outcomes

outweighs the risks.

This paper has been eye-opening for me. Though I researched India as my main selected country, I still investigated and did background research on different countries and their struggles. I use the word eye-opening heavily because of this. I am embarrassed when I think of how many times I have opened the fridge and remarked, “We have nothing to eat”. I now know what an insult that is to those with a real reason to say “we have nothing to eat”. Also I have become more attentive to commercials on television asking to donate food to different countries. In the past, I just ignored those commercials. Actually, they made me feel uncomfortable, they show a dirty child, hungry and crying; how dare they show me that and ruin my time when I am trying to relax, eat my chips and watch TV. Every time I see a billboard for donations on the street I can now visualize all the pictures I have seen and all the articles I have read in detail on how the images on that billboard really exist.

Overall, the global population is in crisis due to world hunger. For decades, scientists and geographers have been working to find a solution to end this problem. After writing this paper, I believe the answer lies inside of India. India can develop and grow and produce more food, increase their own economy, better the lives of their own citizens, and better the lives of citizens around the globe. Nothing starts without possibility and there are possibilities in India.

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