Food insecurity exists in every nation in the world today. However, two regions dominate the statistics of hunger: sub-Saharan Africa, with the highest percentage of undernourished people (approximately 30%), and South Asia, with the largest total number of hungry people (more than 300 million). While sub-Saharan Africa’s macroeconomic situation is just as bleak as its hunger outlook, South Asia is paradoxically experiencing outrageously high economic growth. How exactly is this occurring? For the most part, urban areas are reaping the benefits of free trade with the West and technological advances. Food insecurity remains a major issue in the cities, but at least there is active socioeconomic advancement. In certain parts of the countryside, hunger is a way of life. As of right now, residents of places like Bihar, India, and Sylhet, Bangladesh, have no path to food security.

South Asia is so diverse that no plan of action can possibly be comprehensive. Just the largest country in the region, India, has more ethnic groups and geographic diversity than entire other regions in the world. But India is uniquely placed with its political stability, strong overall economy, and earlier success in the Green Revolution to drastically reduce food insecurity. There are a vast number of suggestions for how to make this come about. Some of the most promising are to provide access to finance, improve infrastructure and institutions for marketing products, and address problems created by globalization/trade policy. The history of capitalism is one of increasing food security, and though some restrictions should be applied to trade, globalization can be transformed into a way of eliminating poverty across the world. Rural Indians could then enjoy the standard of living closer to that of their urban brothers.

This paper will examine what conditions are preventing rural Indians (primarily subsistence farmers, but also landless laborers) from having dependable access to food and how to change those conditions. Along the way, the Green (and Blue and White) Revolution will be discussed, the typical subsistence farm will be defined, and current trade policy will be critiqued. As noted above, the focus is on economic solutions, which include scientific, environmental, and educational components. But to see where India should go in the future, a look at where it has been in the past will be helpful.

The area that is now India began cultivating wheat and other grains around 9000 BCE. Rice was domesticated in China circa 8000 BCE, and the crop proved ideal for eastern India. As farming methods and infrastructure (irrigation, rice paddies) improved over the next ten millennia, India’s population made corresponding increases. Indian agriculture made the next step towards its current position in the 1700’s, when Europeans began to establish colonies in India. The United Kingdom eventually won out over its rivals and India was considered a British colony.

Under British rule, famine was a regular occurrence in India. This problem was by no means unique to South Asia; at this time, factors like weather and war made agriculture a hit or miss occupation. Minor progress was made during the colonial period towards large-scale food security: infrastructure expansion continued and more land was put under cultivation, but a growing population ate up all the food available. Despite having an economy based on agriculture, India as a whole was nowhere near food security when it achieved independence in 1947.

In the independent period, India recognized its food supply problems and began to address them. To predict what ways of increasing food security might work in the future, an understanding of what has already been done is essential. The first method of progress was a series of periodical government policy
announcements called the Five-Year Plans that continue to this day. These programs set goals for all sectors of the economy, including agriculture, and budget money to meet these goals.

The second method of increasing food security that has been tested is improved agricultural technology, in the form of the Green Revolution. William Gaud said in 1968, “These and other developments in the field of agriculture contain the makings of a new revolution. It is not a violent Red Revolution like that of the Soviets, nor is it a White Revolution like that of the Shah of Iran. I call it the Green Revolution.” He was referring to a profound change in what Indian farmers (among others) grew and how they grew it. The three most important improvements dealt with higher-yielding varieties of crops, increased use of fertilizers, and widespread water management. Two other lesser known revolutions in agriculture occurred in recent Indian history: the Blue Revolution and the White Revolution. The former dealt with fishing, while the latter improved the state of dairy farming by connecting independent milk producers with buyers.

The Green Revolution has a contradictory legacy. On one hand, it shows the power of biotechnology in reducing hunger. But on the other hand, the hundreds of millions of Indians still hungry is a testament to how much more work needs to be done. And the fact that the Green Revolution’s advances still haven’t arrived to parts of India hints that other routes to food security need to explored. More and better types of rice and other grains will help India, but many Indian farmers are not even taking advantage of the existing better varieties of crops. This should be kept in mind when discussing how to reduce food insecurity anywhere, but especially India, the country most affected by the Green Revolution.

Another profound change in India’s position in the world relates only indirectly to agriculture, but deserves mention nevertheless. With every passing year, India becomes more interconnected with the global economy, for better or worse. This has led to incredible income inequality and a sense that India’s economy is sound, so everyone must be doing better. On the other hand, the more integrated India as a whole becomes with the rest of the world, the easier it is to access the rural areas of the country. And now that the Indian government has some money to work with, formulating plans for how to improve rural quality of life can be much more far-reaching.

Non-profit organizations are very interested in India and her hungry. Non-profit groups like The Bill and Melinda Gates Foundation and foreign organizations like USAID are doing their best to resolve the hunger crisis in India. Some organizations do this by financing biotechnological work. Others go another path, by stepping in during crises with food aid. Each organization is different, and all of them are reducing hunger in India in some way or another. The resources and position of these organizations will be invaluable in eliminating hunger in India and should not be overlooked.

As mentioned above, the focus of this paper is on the food insecurity of subsistence farmers in India. Now that the important points of Indian history have been covered, the current position of the average Indian subsistence farmer needs to be examined. This paper will look at one rural family in a state like Bihar, one of the poorest states in India and one that showcases the problems common to all.

The typical subsistence farming family has six members, living off of one hectare of land. This astounding fact shows the huge problems to be overcome. Even if rice yields were increased 50%, or farmers were taught the very newest of farming practices, the small area would mean hunger would still be an issue. The land is usually flooded and planted with rice, which is also the family’s main food source. Since this is subsistence farming, any income the family may have is earned off the farm, through manual or unskilled labor. None of the family members have more than eight years of education and it is possible none of them are literate.
Barriers to improving agricultural income for the typical farmer are numerous. He is unable to grow cash crops, because he does not have the savings to feed his family for the year it takes for the new crops to grow. In the Western world, the solution to this problem would be simple: borrow the money. But in poor areas, there is just no money to be had, and the farmers in question have no collateral to speak of. Therefore, they have no choice but to grow crops that they can consume directly.

Even if he did manage to grow some type of cash crop, he would need to figure out how to get it to the world market. Since most of the farmers in his area are subsistence farmers like him, the infrastructure and markets to sell his cash crops do not exist or are not available to him. But the subsistence farming lifestyle produces insufficient food for his family. The only other route open to him is to sell his land and move into a city, like thousands of other Indians have in the last decade. This option results in a whole new group of problems that lie outside of the view of this paper, the problems of the urban poor.

So what can be done to give subsistence farmers the ability to provide their families with enough food? Food-secure Indian farmers do exist. The fundamental difference between a food-secure farmer and a food-insecure farmer is that the former grows cash crops and the latter grows crops to eat directly. Some of the most widespread cash crops in India are rice, pepper, and cashew nuts. Whatever type of land a farmer owns, from semi-arid to a rice paddy, has a corresponding cash crop.

Notice that the reasons why cash crops are not viable can all be eliminated through governmental and non-profit effort. Many individuals in the developed world would be glad to lend money to a family in need, to enable the transition to cash crops. This would not even be charity; the borrowers could pay back what they owed over the course of several years. The pairing of lenders and borrowers is the perfect role for a non-profit to play. Instead of a corporate middleman taking a percentage, the resources and ingenuity of an organization like The Gates Foundation could be put to work.

This idea, to make small loans to people that have no access to other finance, is known as microcredit. It originated in Bangladesh in the 1970’s. Originally, only the bravest of non-governmental agencies were involved with microcredit, but it has proven so successful that commercial banks are starting to enter the market. However, non-profits are still the best option for the poor, as they have experience and are looking out for their customers. One organization called the National Bank for Agricultural and Rural Assistance already operates in India with the backing of the Indian government.

The non-profit organization Kiva Microfunds uses a new and effective method of microcredit. Using the communication power of the internet, lenders can find individuals in developing countries to lend to. As mentioned earlier, people in the United States would love to have such a personal connection when trying to make a difference in the world (just witness the success of Save the Children). Also, Kiva claims it has a loan repayment rate of 99.7%, so assistance rather than charity is being given out. Kiva does not yet operate in India, and it currently controls a miniscule part of the whole microcredit market, but it and other organizations like it could revolutionize the face of finance.

The next barrier to be torn down is that of getting the products to market. India desperately needs infrastructure improvement, not just in the countryside, but also in the cities. Fortunately, more and more tax revenue is coming in every year. This money could be put to best use by investing in the economy, to ensure steady growth in the future and even growth in the present. In addition to the role of the government, corporations are required for the conversion to a cash crop rural economy. By creating a product to sell rather than to consume, farmers would harness the power of globalization for their benefit rather than loss. Instead of being hurt by high food prices, they would gain from them. And new practices and technology would be available as soon as they were discovered to farmers who are part of a world market.
Yet another benefit of cash crops over rice is their environmental impact. The paddy method of growing rice produces large amounts of methane. While it is difficult to grow rice without this side effect, other crops can be grown in organic or eco-friendly ways. Care will have to be taken to ensure that as more land comes under cultivation and farming grows more intensive, environmental concerns will be addressed. This is an issue not just for India, but also the world; either the earth has enough resources to support the current human population or it does not.

The current trend of globalization as well as the overall trend of history points to the ultimate goal of food security being achieved some time in the future, but with the right action now, the process can be accelerated greatly, avoiding immense amounts of needless human suffering. The three entities that are necessary for Indian subsistence farmers to enter the economy of cash crops are the Indian government, non-profit organizations that operate in both the Western world and India, and corporations.

India has had agriculture for the last ten thousand years. Up until the last century, regular waves of famine swept the country. Since the Green Revolution, that cycle has been replaced with a dichotomous system: the Indians who participate in the global economy are generally food secure, while subsistence farmers and others who are not able to experience the benefits of globalization are persistently hungry. One way to eliminate this hunger is for the farmers to enter the economy, by having a cash crop to sell.

What prevents subsistence farmers from converting their land to cash crops is a lack of capital and an inability to reach a market. India is the perfect testing ground, since all three aforementioned kinds of organizations already operate there. With a combined effort on this path to food security, the three types of organizations can work together to transform the rural Indian economy into one without hunger. If this process proves as successful in reality as it looks on paper, it just might be the way to eliminate food insecurity across the entire world.
Works Cited


