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India: Alleviating Food Insecurity, One Book At A Time

Despite only being a third of the size of the United States, India, home to approximately 1,407,563,842 individuals, is one of the most densely populated countries of the world (Data). While its beautiful beaches and high end infrastructure make up much of the tourism in India, many middle and low class citizens continue the struggle to put food on the table. Regardless of obtaining the title for the largest producer, consumer, and importer around the globe, 200 million Indians are malnourished (Food, National). With food insecurity remaining a widespread concern, change is crucial in the education system.

India is a sovereign, socialist, secular, democratic, republic with a parliamentary form of government and a multiparty system. While the President is the constitutional head of the country, the Prime Minister, a part of the council of Ministers, acts as the head of the Government to advise the President. Under the constitution, India has 28 states and 8 union territories responsible for upholding law and order through a high degree of autonomy. These states and union territories also have individual councils of Ministers with the Chief Minister as the advisor of the Governor, or the head of the state (National).

Located just north of the equator in the continent of Asia, India's differing climates and beautiful geography are what makes the country unique. With weather ranging from extreme cold in the heights of the Himalayas and scorching heat in southern regions, the environment varies from state to state. Monsoons and flooding are common during the rainy season and the humid, tropical climate remains persistent throughout the rest of the year. (CountryReports).

Even with a relatively small average farm size of about 1.33 ha in the year 2000, India remains the largest producer, consumer, and exporter of milk, jute, and pulses around the world (Our, Food). India's emergence as a major Agri-exporter in crops like rice, wheat, sugar, and a plethora of fruits and vegetables has been a significant contributing factor in the country's GDP.

Due to the cultural variety in India, the day in the life of an average 4-member household looks different depending on their state of origin. While an early morning breakfast in Andhra Pradesh might consist of a warm crispy dosa dipped in vegetable-rich sambar, rice-based puttu with chickpea curry would be more common for a family from Kerala. In general however, the nation's excessive consumption of calories, saturated fats, trans fats, simple sugars, and salt have led to an unhealthy rise in conditions like obesity and diabetes (Coronary).

When it comes to malnutrition, education plays a large role. A high school education and a post secondary degree significantly impact an individual's chances of acquiring a career that pays a livable wage, especially in a developing country like India. Additionally, education provides more nutritional awareness and helps increase knowledge about healthy eating habits and what foods aid the functioning of the human body. According to a survey conducted in Pakistan, the country with the third highest population facing malnutrition, around 42% of mothers and 29% of fathers were uneducated (Khattak).

When addressing the constant battle of food insecurity in India, it can quickly be observed that the state of Kerala remains the clear outlier compared to the rest of the country. Though Kerala is a prominent part of India and has many similar cultural aspects to other states, a key difference presents itself: education. While Kerala boasts the lowest child malnutrition rates in the country and a near 100% adult literacy rate,

only 52% of the adult population in the rest of the nation is literate (Yale). While many factors like poverty, discrimination, backward thinking, and lack of infrastructure add to this issue, the latest trend for richer families to send their highly educated children to other countries leaves India with fewer competent minds (InfinityLearn).

This brain drain can significantly impact the economies of third world countries especially. While richer, immigrant-popular countries like the United States and Canada gain more members in their working class, the lack of innovators in developing countries hinders the growth of goods and services. This wealth gap makes poorer countries face more difficulty in allowing their schools and universities to prosper, which in turn adds to the cycle of uneducated civilians who are not able to provide for their families (Ahmed).

With new technology and increasing access to travel, brain drain is only increasing, even in Kerala. Though the value of education in Kerala should be applauded, this mass migration affects the nation as a whole and is lessening the ability for India to thrive as an independent country. New tech companies and business startups brought up by distant relatives continue to inspire many Indians to try and find a home away from home with a 2021 survey claiming that 59% of the population moved abroad for their careers (Simon). As this trend only continues to gain popularity, India must learn to stand on its own two feet again.

Though the lack of human resources caused by this issue is less prominent in urban areas due to an overall higher population, rural communities continue to suffer (National). With less healthcare workers, social workers, and most importantly, educators, the already undereducated nation is left with less resources to provide knowledge and awareness.

Although India's youth has the most potential and are provided the best access to education, opportunities for the elderly are often overlooked. Older, less fortunate, individuals who were not able to get sufficient education due to family circumstances or financial issues are not given any opportunities to become educated on topics like healthy eating or how to be financially stable. Additionally, the divide in importance of education between men and women is presence even within younger generations. While families are becoming more modern, many traditional households still uphold the belief that the future of a woman lies in the kitchen. Restricting access to schooling and forcing them to do housework, women who are not able to be financially dependent on a life partner struggle to make ends meet.

Although there are many existing solutions that combat the global education crisis in other countries, they do not always take everyones' needs into account. A common resolution for the lack of education is allowing all public school students access to technology (Rehorn). This was a common practice in many schools in the United States and became implemented in more schools worldwide after the 2020 pandemic. Through bringing awareness to healthy food choices, improving the overall quality of general knowledge by using resources from around the world, and providing a variety of job opportunities for younger generations to earn a living from, introducing tech proves to be an innovative idea. However, popularizing this idea in India and making the government pay for devices for each student will take away from taxpayer dollars while also causing a need for additional teaching on how to use technology in a safe manner.

In order to combat this ongoing crisis, India implemented the Sarva Shiksha Abhiyan (SSA) in 2001, a national program to help promote education for young girls and children from disadvantaged backgrounds (Fathima). Through improving adequate infrastructure in schools, quality of education, increasing enrollment, and prioritizing equality, SSA strives to promote education for all children. However, the significant changes produced by the program did not obtain the expected improvement in education due to conflicts like ineffective spending by administration and the continued favoritism towards private schools (Chaudhry).

In order to combat the overarching crisis of malnutrition through improved education, India should implement education programs for the older working class. Similar to school for children, these programs will have teachers in order to assist adults between the ages of 30 and 60 who did not have access to an education growing up in order to make a living for themselves and learn about concepts like nutrition and financial stability. With a four-year progressive curriculum, the elder education system will provide adults with basic knowledge in a year's time while allowing more passionate individuals to continue their education for a couple extra years.

Through a partnership between the Indian government and other non-governmental organizations (NGO), the elder education system will be in good hands. The government should be a part of this system similarly to how it is a part of the education of the youth, as knowledge should be valued for students of all ages. However, in order to prevent the corruption that is often encountered by government organization members, NGOs can help manage the program better through this equal divide in power.

Schooling for children is already expensive, hence leading many to wonder where the funding for the project should come from. The government, who should be involved in the management of the program, should also fund a portion of the project since the improvement of education should always be a priority at the government level. However, many multinational companies have individual goals to help in non-profits. A group of many multinational organizations should be the main financial contributor to the program since many of them have individual gains in assisting in other organizations, and supporting an increase in education will increase the number of working class individuals in the long run.

The government should have the responsibility of upholding values of equality and respect throughout these systems to encourage participation. However, civilians should be less dismissive and be willing to make the best out of such opportunities. It is crucial for older generations to not be afraid to address their lack of education and be willing to accept help in a community surrounded by others in the same boat.

The only policies needed to make this project a smooth sailing idea is to hold the adults accountable to the same values that children are held accountable in elementary school, whether that be using your manners, respecting others, or valuing the resources available. As long as this system is run the same way the current education system is run, issues should be minimal.

While cultural norms of training women simply for house work and undermining their educational value remains common in many rural areas, nutritional awareness is especially applicable for mothers. Well-educated parents plant the value of knowledge in the minds of their children, helping make an impact on the gravity of education on the younger generation. It is important for future mothers to know that the well being of their child depends on them and that systems like this will be open to support them, no matter the situation.

This project can be sustainable in the same way schools are sustainable. Though some of the money may be coming from tax dollars, a majority of the funding comes from other companies that can have personal benefit from donating to charities. Building schools can cause more environmental damage, and since many Indian schools are in session starting at 8 a.m., these classes can be held in the same spaces starting at 4:30 a.m. in a way that will not interfere with the education of the children or with typical work hours.

Many illiterate adults in India fear embarrassment when seeking help and by normalizing adult education systems, education can become a common practice. Through spreading knowledge about nutrition and opening up new jobs within the adult education system (teachers, organizers, etc.), more adults can have the ability to earn a living wage and feed themselves and their families nutritious meals. By opening up these job opportunities within the nation, India can reduce brain drain as well, meaning that more

educated individuals are able to stay within the country borders. Overall, this system can help families of all sorts stay healthy and can help India become more independent.

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