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Family Farming in India: Economic Program Reform to Eliminate Poverty

In today's economic world, subsistence farming has a seemingly small place. With an international economy emphasized by large businesses and corporations, the family farm appears insignificant and obsolete. Yet these farms house a large portion of the world's population, and some of the most impoverished. In subsistence farming, food is produced merely for survival rather than profit. However, natural disasters, unfit conditions and poor agricultural technology severely limit the success of such farmers, often leaving them with the inability to produce even enough for survival, much less enough to finance living costs and necessary medical and nutritional needs. In the rural areas where these farms are located, poverty's bi-products abound. Disease, malnutrition and poor living conditions are just a few of the affects of poor agricultural performance in subsistence farming. The difficult task of improving the ability of the farmers to provide for themselves is one marked by many factors. Agricultural research and technology abound, yet few subsistence farmers are aware of these advancements or how to apply them to their specific techniques. With ineffective farming techniques often come the depletion of sustainability and depredation of natural resources. Economic programs in the home country are often not consistent with the subsistence farmers' needs, and these agricultural issues are often disrupted by international policy or conflict within the country, health and nutritional crises, or social reform within the country such as urbanization or gender or cultural reform. The country of India is not without these struggles. Home to many subsistence farmers, agriculture is India's main profession. While struggling to move forward as a society, India faces the task of modernizing their large system of family farming and eliminating the poverty which plagues the profession.

The family farm exists as one of the most important factors in food production in India. Rural areas in the country are home to 73 percent of India's population, most of whom rely upon agriculture for their livelihood. Whole families run the farms and, because of the rural location, are less educated than their urban countrymen. While the country as a whole has a 59 percent literacy rate, the rate for rural areas is far less. Three main crop seasons (kharif, rabi, and summer) dominate the farm's production. Crops in the kharif season include, rice, jowar, bajra, maize, cotton, sugarcane, soybean and groundnut. Rabi crops include wheat, barley, grains, linseed, rapeseed and mustard. Rice, maize and groundnut are all grown in the summer. A typical family farm is about one hectare in size.

The region in which most subsistence farmers live is semi-arid and often contains little access to water. Only 48 percent of India's land is considered arable, with an even smaller percent yielding an adequate crop. Although agricultural advances such as irrigation technology exist, farmers often have no way of accessing this technology, or have no funds with which to purchase these often expensive drip-irrigation systems. Farmers also face the daunting task of transporting their produce to market; if a market is even available.

Because of the lack of irrigation systems or lack of funding, the crop produced by the family farm often is not marketable, or no surplus is produced for sale. Even if a market can be found to sell the produce to, the families often are producing only enough to support themselves, with no surplus available for sale. Central markets often do not exist in close enough proximity to the farmers. This leaves the farmer with the inability to make money needed to buy foods not directly produced on their farm or other dietary necessities, purchase medicine, and pay for the educational costs of their children or other living expenses. In severe cases, the lack of irrigation may cause the farmer to be unable to directly produce even enough food for his or her family's own survival.

The problem of little surplus and poor quality of crops has been studied by national and international relief systems, companies, and government institutions. The lack of surplus availability and actual sale of the farmers' surplus is evident in the basic labor statistics. While 60 percent of India's people work agriculturally, services remain the country's major source of economic growth, although having only a quarter of the country's labor force. The agricultural goods are not among major exports, showing the circulation of the products, and thus market, to be small. Twenty-five percent of India's population falls below the poverty line, suggesting a relationship between the high agricultural percentage and high poverty rate. While economic reforms have been put into place to improve the lives of the rural impoverished, the issue of unavailable technology and markets looms largely in the face of agriculturally progress and improvement of rural poverty.

While the state of Indian subsistence farming has remained unrelentingly bleak, new improvements implemented by international institutions such as International Development Enterprises India (IDEI) have focused its attention on making technology available to the farmers at the village level and making the technology affordable for the farmers. These institutions strive to bridge the gap between technological advances developed for the western world, and modify them to fit the specific lifestyle and farming method of the subsistence farmer. However, the efforts of a few organizations are simply not enough to vastly improve the production of the subsistence farmer. Many of these organizations are business oriented and therefore interested in profit and the farmer as a potential customer without the consideration of the best interest of the subsistence farming network as a whole. This provides a temporary fix and fails to establish progress and a foundation for future change. While these attempts have improved the lives and production quality of some farmers, nearly 60 percent of all farmers belong to a marginal category, farming less than .4 hectares of land, showing that perhaps the improvements are not as progressive as they may seem. India's farmers are as poor as ever and new solutions must be found.

The improvement of these economic programs would vastly improve the life of the subsistence farmer. Through the establishment of central markets and increased availability and affordability of new technology, the farmer would be given a boost in self-sufficiency, rather than merely catered to. By fixing the root of the problem rather than glossing over it, a lasting change is put into progression. With the tools necessary to succeed and an economic system which supports the livelihood of the subsistence farmer, the farmers are able to build lasting success, rather than remain dependent upon charitable institutions. The achievement of this success must be placed in the hands of the people. With increased affordability of irrigation technology more farmers would be able to purchase the machines and thus apply them to their farming methods, increasing the quality and quantity of their crop. With an increase in quality and quantity in their crop, the farmers would then have the ability to sell their surplus to make money for dietary staples, medicine, and other living costs. According to the U.S. Agency of International Development, who assisted with the farmer's plight in the Maharashtra farming region, subsistence farmers who switched to cash crop farming have gained \$200 to \$400 additionally per year. The increase of central markets and the opportunity to sell their produce is also instrumental to the development of the subsistence farmer as a business profiteer. The increase in irrigation technology would help to increase the sustainability of the land, which is important as India's ever-growing population requires more and more usage of the already depleted supply of arable land. With the technology, less emphasis would be placed upon physical labor, which could only stand to improve the life quality of the many women, children and elderly who are forced to work the land.

National governments and other organizations could help to regulate prices of irrigation technology. Through monetary giving by the organizations, farmers could be able to afford these and thus improve the quality of their crop. Companies which sell these irrigation machines could give price reductions to the farmers to encourage production. Civic organizations could give financially to ensure the transportation of the farmers' produce merchandise. Companies who sell the irrigation machines could

promote their product through free educational courses which could inform the farmers about agricultural techniques, technology use, and outlets for their goods. Farmers could also be connected with urban outlets for their goods, creating a partnership of sorts between the subsistence farmer and urban commerce. The urban companies could finance the technology to improve the farmer's production and ensure personal security, and buy the farm's surplus produce. Therefore, under the protection of a financially secure benefactor, the farmer would survive and benefit financially, while the urban company would receive the produce it needs for retail.

The international community must work together to ensure the security and advancement of all peoples of all different backgrounds. Poverty related to subsistence farming is a grave problem in India, one which will not be bettered simply through charity. National governments, civic organizations, and the entire international community together can achieve this. National governments, which fund the United Nations, contribute in this way to poverty worldwide. Through this funding, the poor can be educated about the ways in which to conserve their resources and increase the sustainability of the land and resources. Increasing the availability of technology to the impoverished can also help to increase the sustainability. By educating now, a standard can be set for future generations.

While agricultural technology has advanced immensely during the last century, this technology is of little use to those who cannot afford it or to whom it is not made available. Even if the technology (such as irrigation to subsistence farmers in India) is made available, the farmers, due to their lack of education, lack the knowledge to adapt the technology to fit their agricultural methods and individualized crops and seasons. This predicament leads to the inadequate performance of subsistence farmers around the globe and the high poverty rate in their region. If poverty is to be eliminated, it is imperative to understand its motivating factors which influence the insecurity in food production.

Economic programs in the country of India have failed the subsistence farmer. The irrigation technology necessary to combat the arid region is simply much too expensive for the subsistence farmer to afford. This causes the farmers to produce a sub-par crop, challenging their ability to produce even enough to survive. The marketing infrastructure available to the farmers is also inadequate. Central markets which are available to sell to are rarely available, and even rarer is the event of surplus crop available for sale. If the subsistence farmers fail to provide for themselves even the most basic of foods, the financial provisions for other living costs are simply not feasible. Therefore, new technology and application of this technology must be delivered to the subsistence farmers of rural India. Not only can this be achieved through the partnership of an urban retail company with a group of subsistence farmers, but it encourages the productivity of the individual subsistence farmer. The government could offer tax reductions or funding to these companies who assist the subsistence farmers. When allowed to become self-sufficient and self-producing, the subsistence farmer is able to contribute to his or her own well-being, rather than being catered to by a charitable organization, which does little to advance and change the progression of subsistence farming.

The importance of finding solutions which will benefit not only today but the future as well is reflected in the solution. By giving the tools to the farmers themselves, a chance for future growth is forged. Not only can the farmer improve his quality of life by gaining financially, he can improve the lives of his family and children by allowing them to benefit from the knowledge of the new technology and carry it into the profession in the future. The face of subsistence farming could be transformed, rather than subsistent; farming could be financially beneficial, and poverty a figment of the past in the agricultural world. Farmers would be able to provide for themselves medicine, basic nutrition and education for their families.

While it is unrealistic to expect a complete change within the subsistent farming system, changes can be made which are immediately affecting the security of food production within India today. In order

for these reforms to take place, cooperation in the form of national governments and the international community must be reached. National government funding to the United Nations is vital, as the United Nations can contribute through relief organizations to the funding for irrigation technology as a preliminary step in the education of the subsistence farmers. As well as internationally, corporations must work together within the country. The partnership of urban companies with rural farmers is symbolic of the collaboration necessary for the advancement of the country as a whole. Although poverty exists stoutly in these rural areas, it is ultimately owned by the entire country. Outside aid can accomplish some, but reform must take place within the country. Although the enhancement of the economic programs will strengthen and improve the subsistence farming, it must be noted that this represents only one factor affecting the state of poverty in which many subsistence farmers live. Many factors exist, and it is imperative that all factors be studied in order to more fully understand the problem. Progress must be achieved in all of these areas, not limited to just one. While one possible factor was explored, other factors may be equally important in the progress or lack of progress in the elimination of insecurity which contributes to poverty.

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