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Developing Food Security in Afghanistan

Food insecurity in Afghanistan has become increasingly worse in recent years as the growing population and influx of refugees have greatly strained the developing economy. It is estimated that nearly one third of the population struggle to provide food for themselves and their families. Unless action is taken now to improve living conditions and food security, the consequences could be disastrous for millions of Afghans without consistent food supplies.

In recent decades Afghanistan has been rocked by war, civil unrest, and natural disaster. Despite recent improvement in food security, approximately 33% of the population, estimated to be roughly 34 million (July 2017), suffer from food insecurity. This can be attributed to the natural disasters and conflict that have affected this region in recent years. 76.7% of employed workers are in agriculture and major exports include fruits, wheat, wool, and nuts. According to the World Bank collection of development indicators, 58% of the land is cultivated, yet the farms are an average of 1.34 hectares (3.31 acres). For comparison, an average farm in America is 434 (1072.44) hectares. These farms are often maintained by families with little external assistance. Many of these subsistence farmers struggle to provide food for their families, much less produce excess to sell for profit. This is directly related to the environment as much of the country's food is dependant upon adequate farming conditions and crop yield which are most heavily influenced by nature. This region is prone to natural disasters, and in recent years drought has limited food production greatly. The lack of food available has become an increasingly drastic issue as an influx of refugees greatly increased the dependency ratio of an already growing country. Additionally, it limits the potential for growth by restricting education as children are expected to work rather than attend school. Only 34.3% of adults and 51.7% of children are literate. Even fewer females are literate with a shockingly low literacy rate of 17% for women. The percent of children in primary school has decreased by more than 50% since 2011-2012. Due to increased financial burden, children must work rather than attending school, thus they have a limited skill set and are unable to earn as much as they would with more schooling. This has a cyclical effect as they would then become dependant upon their children to help provide for the family.

Obstacles preventing recovery in Afghanistan include natural disasters, conflict and subsequent displacement, ineffective institutions, and limited assets. Afghanistan's food supply has been severely limited in recent years by drought, which in turn, limits the number of people that can work on any given farm. This not only decreases farmer's profits, but increases unemployment and limits what can be grown in the next season as reserve seeds are typically used as a food source when the crop return is poor. Conflict further reduces the availability of food as agricultural production and markets are interrupted. This is greatly worsened when those most affected by food shortage

become refugees, fleeing in search of better living conditions, as it further strains the economy of the receiving region. The influx of refugees has greatly impacted the Afghan population as they have trouble providing for themselves, thus adding additional strain on the economy and any relief efforts. Equally troubling are situations in which farmers are forced to flee their homes to avoid conflict, abandoning their farms, as the land may not be put to use again thus reducing already limited food, and leaving them with no means to support themselves. Weak institutions whether political, social, cultural, or administrative, contribute to poverty and food insecurity because without internal support systems, it is nearly impossible for the country to recover. Additionally, limited resources are a very important factor when considering the state of the country as continued conflict steadily exhausts assets. Finally, the population plays a crucial role in the food insecurity in Afghanistan. The nation's population has increased greatly in recent years which means the population is very young. Many relief and recovery plans do not fully account for the impact this extreme growth has had on the nation and how it will continue to affect growth or decline in future years.

Food insecurity is a complex issue though for the most part it can be attributed to rapid urbanization and changing demographics, conflict, limited natural resources and resource degradation, and natural disaster. Afghanistan's population has grown very rapidly in recent decades and this is predicted to have a profound negative impact on food security unless action is taken to prevent it. Afghanistan is heavily dependant upon agriculture as a main source of employment. As the population grows and ages, it will become increasingly difficult to find employment which would prompt migration to other regions where employment opportunities are higher. Both increased family planning, and promotion of employment opportunities, especially in rural areas could be beneficial in preventing outmigration. Additionally, an ageing population can have a profound effect on older farmers who do not have the resources or knowledge to invest in newer technology, or learn new farming practices to increase returns, and thus are unable to compete with the profits of younger more educated farmers. Urbanization has demonstrated a profound effect on agriculture as well. According to a report from the Food and Agriculture Organization (FAO), urbanization changes food consumption trends which in turn affects job opportunity and agriculture. As urban wages increase, it becomes more affordable to buy prepared foods, such as fast food and store-bought food, thus increasing the number of job opportunities in the preparation of food away from farming directly. Urbanization is directly linked to the increasing population size because as the population grows, more people move from rural to urban areas in search of work and housing. One of the most important and complex causes of food insecurity is conflict. It is so complex because there are often many underlying issues that create an environment in which conflict thrives. There has been a direct correlation between natural disaster and violence and both serve as a contributing factor in all recent famines. Conflict also arises in regions with weak governance and competition for limited resources. Often rural areas are most impacted, and subsequently food shortages worsen as farms are cut off from the resources necessary to produce food. Additionally, farmers are frequently displaced from their land or their crops are destroyed as a war tactic. On average, more people die from famine as a result of conflict than direct violence. This is made even worse for women and girls as they are

assigned roles as caretakers in addition to limited access to resources, services, and decision making processes. This inequality often leaves them in the center of volatile situations. This is further worsened as men are often called upon to fight which strains the labor force, especially agriculture, and increases women's burdens as they are expected to support both farms and families until the fighting ceases. Conflict is more prone to occur in regions affected by natural disasters which are becoming both more frequent and more powerful, which has been connected to recent climate change. It is predicted that in the future droughts will worsen significantly. This is most likely to affect livestock while floods and storms would affect crops more. Natural disasters negatively impact food security greatly, and it becomes cyclical as food insecurity then worsens the impact of natural disasters. Additionally, on average more women are killed as a result of natural disaster than men. It is necessary to control disaster risks in countries primarily dependant upon agriculture as it is estimated that emergency aid in the wake of a disaster is 7,700% more expensive than the costs of preventative measures. This will be crucial moving forward as natural disasters are predicted to coincide closely with conflict in the future. Conflict is also drawn to regions with weak governance thus an important factor in preventing such conflict is providing support for governments with limited resources. Afghanistan suffers greatly from limited natural resources and resource degradation which has a tendency to become cyclical. Overexploitation of natural resources not only deteriorates the environment, but increases competition for remaining resources. This then causes overuse of the remaining, and much more limited resources and the cycle is repeated. Action must be taken to reduce depletion of the environment and maintain remaining resources. One way to do this would be to refocus efforts on more effective agricultural methods. Livestock production has the potential to become a larger and more sustainable source of income and food in Afghanistan. Common livestock there includes cattle, sheep, goats, donkeys, camels, horses, and poultry. There have been decreases in livestock numbers in recent years due to conflict and drought, and additional challenges are posed due to shortage of feed, and medication. A project launched in Kenya with the intent to promote sustainable development in the dairy sector has introduced new feeding and husbandry practices to 600,000 farmers, 25% of whom are women. It is estimated that the project can be scaled up to reach 18 million households while still providing 180,000 jobs in the dairy sector and combating soil erosion and carbon dioxide emissions. These conclusions were reached by analysis of farming techniques in order to determine those which were the most effective, and encouraging innovation with inexperienced farmers. If similar efforts could be made to find the most efficient feeding and husbandry techniques in regard to Afghanistan's population and resource base, livestock could have potential as a more profitable sector of employment. Additionally if similar analysis could be applied to farming practices, it could potentially increase profit while preventing further resource degradation which has already become a prevalent issue throughout the nation. Deforestation in Afghanistan has been consistently worsening as trees are removed to increase farm land. If more efficient farming practices and technology were introduced, it may reduce deforestation as the existing farmland would be more productive, and if it were sufficient to provide for the country's population, the need for any further expansion would be reduced. Given that drought has been a major contributor in food insecurity recently, and droughts are expected to worsen in future

years, the introduction of drought resistant crops has the potential to combat food insecurity in the future. If implemented, this could significantly help the nation recover from the overuse of natural resources.

Another, ne of the most significant factors limiting the availability of food within Afghanistan is the farming of the poppy plant, the source of opium. The production of opium is a criminal activity but is is still a very popular cash crop because there is little action taken to prevent it by local governments as, despite a public stance against it, it is a useful source of income for farmers looking to provide for their families. Poppy development has increased fairly consistently over the past twenty years and according to the UN Office on Drugs and Crime, the area of farmland dedicated to poppy cultivation in Afghanistan increased 10% in a single year between 2015 and 2016. Poppy production has increased dramatically in the northern region though the south has more than twice the amount of farmland dedicated to poppy cultivation than any other region. In addition to increased acres of poppy cultivation, the farmland itself is effectively producing more per acre than ever before. Because of this, more opium is being produced than consumed which makes it even more globally available and less expensive. The Helmand province still has the highest rates of poppy cultivation. The issue with this is that with high unemployment and poverty rates, a large percent of the population turns to drugs, and unlike in the United States and other first world countries they do not have access to expensive replacement treatments so they rely on persuasion and therapy. This is highly ineffective and of the few who are lucky enough to receive treatment, the majority return to drug usage. Opium production is also an issue because the farmland dedicated to poppies could otherwise be used to produce food for sale at markets, though it is not nearly as profitable for the farmers, making poppy farming a more common choice. Finally, this problem is nearly impossible to solve so long as the demand for opium is maintained because it is such a profitable crop for farmers who would otherwise be unable to provide food for their families. Though stricter regulations and more action taken against poppy cultivators might decrease production, the solution to this issue depends primarily on other countries which are the source of the demand.

If action is taken now to prevent further resource degradation and conflict, there is great possibility for recovery and increased food security in Afghanistan. As the population continues to grow it is essential to provide sufficient employment opportunities, encourage sustainable and efficient farming techniques to maximize the potential of limited farmland, and prevent overuse of limited remaining resources. Additionally it is crucial for developing countries to prepare for natural disaster in order to limit negative impacts when it does occur. Combating these issues now can lead to the improved lives of millions currently struggling for food.

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