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Afghanistan, Factor 8: Water & Sanitation
Afghanistan: Research on Water & Sanitation in Afghanistan

Imagine living in a place where forty-two percent of the people are in poverty, and an additional twenty percent are at a very high risk of falling into poverty? Even further, imagine living in a family of eight, maybe even ten who only receives four hundred and ten dollars a year? The typical family size of a poor urban Afghan family is eight. The ideal composition of a poor urban Afghan family is ten (Mojumdar). The diet of the most common Afghan household is yogurt and additional dairy products such as dried buttermilk, cream, butter, onions, dried fruits, peas, and beans ("Culture of Afghanistan"). Getting an education for poor urban families in Afghanistan was basically up to the head of the household. If parents desperately want their children to attend school, they must make sacrifices and send them to the school closest to their home. If there's no school close, the child may go live with a relative near the school. If parents didn't want their children to go to school, they could teach their kids at home, or not at all ("Education in Afghanistan"). Majority of hospitals, doctors, and medical facilities were limited, underprivileged. Therefore Afghans had to depend on traditional practices that included herbs and animal products in curing any diseases or sicknesses anyone had ("Culture of Afghanistan"). The employment and wage for these poverty-stricken families are four hundred ten dollars per year. The way poor urban Afghans eat varies. Those Afghans could receive food sacks that would be distributed to them by food aid, or they would steal because they couldn't afford or reach any food (Cordesman). When gardening, most poor Afghans receive help from volunteers to start their garden, if they haven't gotten relief, they would not garden at all or receive additional support from someone close. Public gardens aren't usually a choice for poor urban Afghans (Blink-a). Significant barriers to improving agricultural productivity in needy urban areas are crop production and crop protection (Elsevier). "To improve employment opportunities in urban areas, WFP provides food, insecure people, and especially women and unemployed young men, with training to acquire new, marketable skills and improve literacy so they can earn a better living. Training areas include handicraft, plumbing, and others", says the World Food Program. To improve access to food markets and adequate nutrition, volunteers go out and help needy urban Afghans. Afghanistan is a very diverse and food-filled place, but minimal access to clean water has affected food resources, health care, diet, and education.

The factor discussed will be factor 8: Water and Sanitation. Water affects agricultural productivity by not having enough of it to make crops, which also causes low income for farmers who sell their vegetables. Water affects food availability by either having enough to give out to the people or not have enough and the people starve. Water affects the quality of the food because if they do not sanitize the water, it could harm the people who consume it. Sanitation affects agricultural productivity by allowing uncontaminated food to be composed and distributed. Sanitation affects household incomes depending on the family. If it is a farm family, the family would have more money because they would be selling and eating clean food. If it's an urban family, they would just be eating fresh food. Sanitation affects food availability by allowing decent portions of food to be given out. Hygiene affects the quality of food by only having good, clean food generated to the people. Water and Sanitation could be a good and evil cause of why families in Afghanistan do not produce enough food. It can be bad by not having enough to survive by and being eaten, which could lead to disease, or something more drastic. Water and Sanitation can be a good thing by allowing families to produce clean, pure products.

Water and Sanitation presently plays an important role when it comes to earning enough income to purchase food. In saying this, Water and Sanitation don't necessarily affect urban families as much as it does farm families. It affects farm families because if the family doesn't have enough water or clean water, then they wouldn't be able to sell crops to others to make money. Lastly, Water and Sanitation

cause poor urban families not to have access to adequate nutrition. Because poor urban families in Afghanistan don't have enough money to purchase crops, they eat things given unless they're blessed and have access to healthy, clean foods. At one point, Afghanistan was blooming with beautiful cities and abundant food and water supplies, but because of years of war, Afghanistan obliterated as a country.

The current status of Water and Sanitation in Afghanistan is inferior. Out of twenty-nine million people living in Afghanistan, only twenty-seven percent have access to enhanced water sources. Sadly, that percentage decreases when it comes to people in rural areas at a shocking twenty percent, the lowest in the world ("Afghanistan's Water Crisis"). Water and Sanitation are very severe in Afghanistan because the majority of the people don't have access to water, let alone purified water. The environment of Afghanistan is being degraded currently. This is because their framework has been damaged by the countless years of war. Women and the urban poor are particularly disadvantaged for a few reasons. Women are specifically disadvantaged because Afghanistan is a dominant male country. Urban poor are disadvantaged because they don't have access resources, and most of the time if they do have resources, they aren't healthy or good ones. Rural poor have a slight advantage since they can have connections to farming supplies, healthier food, and clean water. This helps them save money, gain nutrition in making and growing their food, and could give them a chance to make money by selling to others. Lastly, developing countries have a slight advantage. The cause of this is because if they're on the rise and everyone is on the same page about growing and getting stronger as a country, then they have no choice, but to go up.

Research shows that the trend for Water and Sanitation is staying the same. Studies display that there is no decrease in clean water, but there is also no sign of improvement in freshwater. Water and Sanitation is being measured by how much water is available to the people in Afghanistan. Water and Sanitation is also regulated by if the water is fresh and clean or harmful to consume. These measurements could indicate that the situation is changing, but for Afghanistan, particularly nothing has changed because the country is at an interlude. Possible change is possible for poor urban families in Afghanistan, but currently, there is no improvement in the Water and Sanitation crisis in Afghanistan.

Resolving the factor Water and Sanitation increases the amount of food because when more water is available, more food can be produced and issued out. Solving Water & Sanitation also helps the quality of food. This is because when water is open, it's best to have it sanitized, so the quality of it wouldn't be reduced, and diseases are more likely to be avoided. By resolving Water and Sanitation, this helps preserve the environment sustainably by having a positive impact on the health of the situation. Addressing Water and Sanitation would also help deal with the following problems; erosion, flooding, and polluted water (Irish aid.ie). Resolving Water and Sanitation leads to economic development and poverty reduction for various reasons. Addressing Water and Sanitation leads to economic growth because having clean, purified water boosts the economy by having more water storage capacity available. Resolving Water and Sanitation leads to poverty reduction because it prevents diseases which reflects in more healthy people being able to do productive things around the community. Fixing Water and Sanitation can also benefit women. To get basic Sanitation (pit latrines, toilets, etc.) and sometimes unclean water, women would have to wait until sundown. Because of this, women are at a high risk of being physically and sexually assaulted (lifewater.org). However, if clean water were available to them, they wouldn't have to risk going through those heartbreaking things. Lastly, Water and Sanitation benefit smallholder farmers. It helps them because if clean water is accessible, they will produce fresh crops, which would lead to more plants to sell and more healthy food being consumed.

Water Scarcity, Climate Volatility, Population Growth, Urbanization, Energy Demand, and Pollution all play a role in the effects of Water and Sanitation, the wellbeing of the average poor urban family, and the community in the decades ahead. Water Scarcity is the lack of sufficient available water resources to meet the demands of water usage within a region. First, Water Scarcity affects Water and Sanitation because if there is no water, then no water could be sanitized, and it could raise the death rate in Afghanistan due to the absence of water. Water Scarcity affects the wellbeing of the average poor urban Afghan family because again, if the water isn't available, then there's nothing to drink, and casualties could start to

happen. Finally, Water Scarcity affects urban communities, decades ahead by not providing enough water for the entire population of Afghans. Climate Volatility is the long-term prevalent weather conditions of an area, determined by latitude, position relative to oceans or continents, or altitude. Climate Volatility affects Water and Sanitation because if there are a series of droughts, that could lead to water scarcity. Climate Volatility affects the wellbeing of the average poor urban Afghan family because it could cause dehydration among the people if it's too hot, and there's no water. Lastly, Climate Volatility affects urban communities' decades ahead by determining if they'll have water or not, due to tremendous amounts of rain, or droughts. Population Growth is the growth of all people inhabiting a country, city, or bothered specified place. Population Growth affects Water and Sanitation because if there are too many people and not enough water, then deaths could start to rise due to lack of water. Population Growth affects the wellbeing of the average poor urban Afghan family because again if there are too many family members, all the water and food could not get to everyone. Finally, Population Growth affects the community decades ahead by basically determining how many people will be alive during the time. Either the community would be overpopulated, or it would be just right. Pollution is the presence in or introduction into the environment of a substance or things that has harmful or poisonous effects. Pollution affects Water and Sanitation because if too many harmful components get into the water, that makes the water unsanitary. Corruption affects the wellbeing of the average poor urban Afghan family by a straightforward yet devastating reason. It affects the family because Pollution increases the chances of heart attacks, breathing problems, and irritation in the throat (Renewable Resources Co). Lastly, Pollution can affect the same community decades ahead by determining their health. If Pollution stays around for an extended period, then lung cancer, congenital disabilities, heart diseases, and many more dreadful things could happen to the future people of that community (National Geographic). Energy Demand is the term used to describe the consumption of energy by human activity. Energy Demand rarely affects Water and Sanitation since its primary water source is The Hindu Kush mountain range. Energy Demand doesn't change the wellbeing of the average poor urban Afghan family simply because they don't have energy. Even though the families do not have other energy sources, they do use the sun to grow crops and obtain food. Finally, Energy Demand affects poor urban Afghan communities' decades ahead by giving them hope for the future that they may one day get better and more energy resources. Urbanization is the process of making an area more urban. Urbanization affects Water and Sanitation because it consumes a lot of water. Urbanization affects the wellbeing of the average poor urban Afghan family because Urbanization takes up a lot of water, food, and land. In ending, Urbanization affects the future decades ahead in poor urban communities' determining if the area will be controlled by Urbanization or not.

Recommendations on how to effectively address Water and Sanitation to improve the food security of the average urban Afghan family in Afghanistan are; create wells in areas that need them most, conserve food that isn't used right then, and make sure people have jobs and transportation to get foods that aren't close by. Wells would provide underground water that usually isn't available and now make them available. Conserving food would help save food that isn't being consumed at the moment. Making sure people have jobs and transportation would make it easier for families to have some of the necessities that they may need. These recommendations would not only help the main problem, food security, but it could also put an end to the question of Water and Sanitation. A few Sustainable Development Goals that are recommended to solve Water and Sanitation are Zero Hunger, No Poverty, Clean Water, and Sanitation, Partnership to Achieve the Goal, and Responsible Consumption and Production. All five of these Sustainable Development Goals play an essential role in improving and solving the Water and Sanitation problem in Afghanistan. Associated policies suggested to explain Water and Sanitation are a limit on how much food and water is given out to each family (meaning only so much can go into a household), and officials, volunteer groups, and leaders of the country ensure that clean food is given to each underprivileged family. Two technologies recommended to solve Water and Sanitation are a Sustainable Water Filter and a Rainwater Harvester. The Sustainable Water Filter would help solve Water and Sanitation by cleaning any unclean water that is needed for consumption. The Rainwater Harvester would help improve Water and Sanitation by collecting as much rainwater as possible to filter and give out. Both technologies work hand in hand to solve the problem of Water and Sanitation. Sustainable water filters and rainwater harvesting are appropriate technologies to solve the problem water and sanitation. This is because rainwater harvesting is simply just collection any water from rain, snow, sleet, and any other

form of water. Then that water could be filtered out and cleansed by the sustainable water filters taking out things such as mercury, chlorine, bacteria, zinc, etc. That would leave people with safe and fresh water to drink. The people who bear the responsibility of funding the solutions to the problem would be myself and other non-profit organizations. Together we could raise money and awareness, so people would understand the reality of this serious problem. Following this, companies would sponsor us and associations, and communities would pitch in and help us fund the various tasks. An investment needed to be made to address Water and Sanitation are wells. Wells are a shaft sunk into the ground to obtain water, gas, or oils. Wells would be a fantastic investment because any underground water not available would then be possible because of the investment in the wells. A Practice that should be started to improve Water and Sanitation is getting more volunteers out to Afghanistan to help them retrieve more food. This is because, with more people helping, this could help the poor in Afghanistan get items that they don't have access to (clean water, food, pit latrines, etc.). Lastly, two local projects in Afghanistan that could be scaled up successfully are The Hunger Project and the WASH Project. The Hunger Project was created to improve Sanitation and clean water in rural and urban areas. Their vision is a world where every woman, man, and child leads a healthy, fulfilling life of self-reliance and dignity. Their mission is to end hunger and poverty by pioneering sustainable, grassroots, women-centered strategies and advocating for their widespread adoption in countries throughout the world. This project will help with improving sanitation facilities by granting toilets and latrines that flush sewer to a safe enclosure (rotaryserviceblog.org). The WASH (Water, Sanitation, and Hygiene) Project was started in 2007 by UNICEF (United Nations International Children's Emergency Fund) to reduce the spread of waterborne diseases in poverty-stricken countries. UNICEF supports the Ministry of Rural Rehabilitation and Development's rural water supply and sanitation program to provide clean drinking water to communities that rely on rivers, streams, wells, boreholes, and traditional ponds, as well as to those whose water systems have been destroyed or fallen into disrepair. This project will help the community of poverty-stricken Afghan families by providing more clean access to water supply and more ways to gather safe, filtered water. The Hunger Project is suitable for this problem because their main purpose and goal is to end world hunger, just as we are doing. The WASH Project is also suitable for this problem because their one and only goal is to improve Water and Sanitation in developing countries. Other organizations that are currently working in Afghanistan are Afghan Relief Organization, International Rescue Committee (IRC), and U.S. Agency for International Development.

In conclusion, Water and Sanitation is a severe problem in Afghanistan. Dirty water, water scarcity, unsanitary pit latrines, not enough water, and no access to toilets all play a role in the main problem of food security. The effects of Water and Sanitation are a raise in deaths, crime rates, waterborne illness, and many of the poor average Afghan farm families. The present status of Water and Sanitation is inferior. Only twenty-nine percent of Afghans have access to clean water and adequately sanitized facilities. Currently, Water and Sanitation is very severe. Improving Water and Sanitation may take a while, but studies show that there could be a possible decrease with the problem Water and Sanitation. Right now, there is no change in the factor. Improving Water and Sanitation would lead to healthier people, lower crime rates, and could improve the economy. The role ordinary citizens can play is in encouraging their government to play an active role in this problem is to form peaceful protesting groups. By forming these groups it would be brought to the governments attention that they have a serious problem in front of them and something needs to be done. The appropriate role the community should be playing is helping hands towards one another, sticking together, and building each other up during their times of hardships. This is because if everyone there is in poverty and requires help, everyone should help each other and be a team working together. It would make no sense to tear each other down and not help when everyone is going through the same thing. Ordinary people have a role in developing and spreading new technologies. Communities could come together and for ideas designs for new technologies that best suit the problem. Barriers that make it difficult for the government to help solve the problem Water and Sanitation are, an 18-year ongoing war with the US, security of civilians, and political instability. The government can overcome these barriers by bringing it to the Presidents' attention that Water and Sanitation and even the country as a whole cannot advance if these obstacles don't get fixed first. The appropriate role the national government should play is to make sure the people eligible have jobs, ensure that all local places are properly sanitized, and make sure that all households have enough food to feed every single person in

that particular home. This is mandatory because if people don't have jobs and sit around and be lazy, the country could never improve, so the best solution is for the government to ensure that every eligible person in each household should be working in a job of their choice or a position close to it. The national government should provide properly sanitized local facilities because the people in the communities should be able to enjoy those places without them being dirty and unclean. Finally, the national government should make sure that that all people in each household is fed because no one at any place, at any time, should go to sleep hungry. The national government should have a passion for these things so their citizens can have the best experience at their place of living. The appropriate role of corporations and other organizations should be going out and giving the people a few things that they need, but lack. This is a vital role because stuff they can't afford and things the government doesn't give can come from the organizations. They would play a position that no other category could ever cover, and the fantastic thing about it is that they do it from the kindness of their hearts. Without the roles of these organizations and corporations, communities would fail to have some of the things they have such as tips on starting gardens, extra food, even extra love and support from people who live under different circumstances than them. All of these roles implement the discussed recommendations positively. For the underprivileged communities to ever see progress, the national government, organizations, corporations, and other groups all have to work together and get the job done for the enhancement of the country. Finally, urban families should be involved in implementing these recommendations by again, working together and making sure each family is striving to better themselves.

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