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Jordan, Factor 9: Water & Sanitation

Water & Sanitation in Jordan

Jordan is a country located in the Middle East region of the world. The country is surrounded by the countries Syria, Iraq, Israel, and West Bank. “Almost 2.5 million refugees have fled Syria to date (up from 550,000 in January last year), and 600,000 of them have settled in arid and water-impooverished Jordan”. The country is currently composed of slightly 6.5 million. Most inhabitants of Jordan are originally refugees (National Geographic magazine). It has been estimated the country’s population will reach 11 million by the year 2050 (“Jordan Department of Statistics”). This large increase will allow issues to arise. Many issues may include: malnutrition, human diseases, and water & sanitation problems. Today, I would like to discuss water & sanitation problems in Jordan. Jordan is a country that has many different flaws. The country consists of a large amount of people who struggle day by day. There has been a large increase in population over the years. The rapid increase has caused water and sanitation issues to arise. Therefore, those two issues have caused a limited amount of healthy food, clean water, and enough supplies for the country to have access to.

Jordan has one of the best water treatment and delivery systems. Unfortunately, with the growing population it is more difficult to deliver safe water. Being that Jordan is the fourth driest country in the world, people who live in this area will encounter severe conditions. Conditions may include water being used more by an industry or facility than by people who need it in their homes. When these conditions arise they will be the product of the water shortage.

The Highlands and the Jordan Valley are the supply water sources for Jordan. Jordan’s water is distributed between 4 different sectors. The four sectors include: agriculture, municipal supplies, industry, and tourism. While each sector obtains a certain amount of water, there is a purpose. The sectors stretching from agriculture to tourism each bring in a profit for the economy. The profit helps Jordan’s economy overcome some of their water and sanitation problems.

Ordinary citizens are put into the municipal sector. The municipal sector takes 30% of Jordan’s water. The level of water lost through theft and leakage in municipal water supply (non-revenue water) is estimated at about 44% (MWI) (Jordan) (n.d.). The sector applies to people using water in their homes. Water is being used no matter if citizens are bathing, washing dishes, doing laundry, etc. The main problem with the municipal sector is the increased population. More people simply mean more water is being used. Although population increase is a problem in Jordan right now, it is somewhat helpful. Jordan is a tourist attraction waiting to happen. The tourism sector counts for 1% of Jordan’s water use. More than 4 million people visit Jordan each year. The amount of visitors is a necessity when it comes down to extra money entering the country.

Industries such as businesses and companies are grouped in the industry sector. The industry sector takes in 5% of Jordan’s water. The different industries use water wherever/whenever it is needed. The list of different ways a jobsite can use water can go on and on. Even though Jordan is losing water through the industry sector, the country is also gaining. Jordan is gaining products that are made in the companies and businesses. The products made can then be traded to other countries or sold for profit.

The agriculture sector uses 64% of Jordan's water. While it uses 64%, it adds 3% to Jordan's gross domestic product (MWI). The sector generates tax revenue off of the MWI ("Nation Master"). It also ensures and contributes to part of Jordan's food security. Agriculture may receive additional water through water reclamation (NationMaster).

"Everybody's been taking water from the Upper Jordan because everybody needs it," said Clive Lipchin, director of the Center for Transboundary Water Management at Israel's Arava Institute (*National Geographic* magazine). Recycling efforts may involve extra water use. It is estimated 58 million cubic meters of recycled water, equivalent to about 8 percent of total agricultural water demand ("Jordan Department of Statistics"), was used in agriculture in 1996. It has been found that even more water is being used now. Geographers and scientists have found more ways to distribute water. The issue comes in when they found the quality of Jordan's groundwater basins decreased due to contamination. Often there are a lot of pesticides and insecticides used in agriculture to protect the plants.

The overuse of chemicals, along with waste being improperly disposed, caused the quality of water to decline. Therefore, Jordan had no choice but to treat wastewater. Treated wastewater supplies about 50% to the middle and southern parts of Jordan's agriculture sector ("NationMaster"). Along with treating waste water in the Jordan area, Jordanians can learn how to desalinate water. Desalination is the process of getting clean water from bodies of salt water. In order for the desalination process to work, the Jordanians must learn another process known as forward osmosis. Forward osmosis involves a substance to move from an area of low concentration to an area of high concentration (Rosenberg). This process will be best suited for Jordanians to use because it requires a low amount of energy while cleaning the water.

The rural communities lack water security because extreme amounts of water are being used. The high percentage of water being used is not a good sign for farmers in Jordan. A large amount of water that is used will not allow the farmers to make a profit. Most farmers in Jordan make approximately \$4.47 daily. This small amount is not a good amount for a farmer who has other people living in his or her home. The average size of a rural family is about 6 members. This number may seem low to some, but it is a large number when being compared to how much money is being brought into the home. This is a severe problem in the society and Jordan's farming section.

However, with the help from the (USDA), United States Department of Agriculture, this problem has slightly been adjusted. Many farmers now have the opportunity to get a little help from different programs. Programs offered by the (USDA) are federally funded programs. The programs set out to help American farmers learn interesting and helpful facts about improving their farming capabilities. In fact, the USDA's Farm Service Agency (FSA) provides a recover relief known as an "emergency loan" to help recover from extreme weather conditions. Although Jordan is not in America, maybe this option could well worth trying.

Lack of water & sanitation brings the cost of food and waste borne diseases. If the family gets the disease it will call for medical attention. Medical attention is a risky cost in Jordan. Most of the health facilities are overcrowded. When a person goes to the doctor in Jordan they have to encounter the fact that they may not get to see the doctor that day. Some of the sick may even see the doctor, but not receive full medical attention. The fact of not being treated at a treatment center is a waste of time. Everyone rich or poor should have the opportunity to be fully examined and checked up on when he or she goes to the doctor. The government can step in and provide medical records for patients that may not already have access to them.

Since money is a key issue in Jordan, the government can start getting more involved in the communities. Government officials can provide ways to bring in other countries to help get clean water for the Jordanians. Visitors helping bring in items can also donate. Donations and food drives can be held to provide people living in Jordan an opportunity to have items they may not be able to afford. Children will be able to eat a fresh meal when they are hungry and there's no food at home. Kids will also have the option to get supplies for school, if their parents can't afford it.

The government can also step in and set up a way for people in Jordan to have access to libraries with computers. Access to the internet may not seem useful for a developing country, but it can end up being a great outcome. Computers can help promote higher learning. It will also give people the opportunity to explore new things. New things that can be explored on the internet can range as far as finding out about health benefits, places to receive donations and much more. Many unemployed citizens will also have the opportunity to find jobs. Access to cellphones will also be helpful considering there will be a better way to communicate. Cellphones will allow people to use them whenever they need to. In case an emergency happens, they will be able to use their phones.

"Overcoming the crisis in water and sanitation is one of the greatest human development challenges of the early 21st century," [United Nations Development Programme p.1]. The factor water & sanitation is a very touchy situation. It has been a tough time period for the Jordanians. They have to live with these problems every day. They have to deal with unsanitary places, water, and everything else. Most of the citizens hope for improvement in their communities. They hope the government will step in and help make a difference. Lately, the governmental forces have been improving.

Government officials have been trying to come up with different ways to help Jordan. Some officials had the idea of creating a way for a free source of internet. Hopefully, when enough money is donated for the libraries they can provide solar panels to generate free Wi-Fi (BigThink). I believe this is a great idea considering most people in Jordan cannot afford internet and computers to use. As stated earlier, access to internet will allow people to discover what's going on around the world. It will also allow people in Jordan to set up different online accounts. Communication is a big factor in the world now and if people join different accounts, it is a high chance they will be able to express themselves and find new friends in different places. The new friends that are made can then provide ways that one can use to uplift his or her community. The country will then be able to receive aid for investments in the water sector, accounting for about 30% of water investment financing (MWI) (Jordan) (n.d.).

Although aide from another country is a big help in some situations, Jordan needs help itself also. Citizens in Jordan cannot only depend on help from others. The citizens can start accounts that will help them raise money. A simple fundraiser can be set up to earn money that will go towards the country's focus points. Water and sanitation are two major issues in Jordan. If enough money is raised they can buy supplies to hire help. Hired help can figure out how to resolve the water issue.

The agriculture sector benefits from reduced interest loans. The ACC is a government corporation currently funded through the Central Bank of Jordan. ACC stands for Agricultural Credit Corporation. The government has decided to privatize the ACC, allowing it deposit accounts, withdrawals, and other financial services. The corporation aims to provide seasonal and medium-term and short-term loans to farmers with occupational purposes. Farmers may obtain credit from the ACC or from commercial banks. Loans provided by the ACC are at discounted interest rates. They are also free of commissions and fees. Therefore, many farmers obtain loans from the ACC. The cost of ACC loans varies with the amount and the term of the loan. The smallest developmental loans cost 6.99 percent, while borrowers of more than 50,000 paid 8.80 percent (Agricultural Credit Corporation).

In conclusion, the farming section depends on safe materials. Safe materials can include the following: good fertilizer, clean pipes, and etc. The Jordanians are depending on clean water and materials. In order for the communities in Jordan to successfully gain access to these materials are from help provided by the government. Sanitation can be resolved by simply gaining access to clean water. In order for the citizens to get the clean water, the government should help get new supplies such as pipes. The issue of water & sanitation can easily be resolved through simple actions.

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