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Japan, Factor 17

The Japan Crisis

March 11, 2011 is a date that the citizens of Japan will never forget. On this date, over 27,000 people died or went missing, 146,000 homes and buildings were either partially or totally destroyed, and the overall cost of damage ranged between \$250 billion and \$309 billion dollars when a 9.0 magnitude earthquake struck off the coast of Japan and triggered a tsunami that crashed into the country's coast and swept over the northern part of the country. While the world watched, the disaster kept unfolding. As time went on and the public began to learn new information, the question "Could some of the aftermath have been prevented?" arose. That question still seems to hang in the air and as more and more statistics are made public, there is a possibility that answer to this question would be yes. I have chosen to write my essay over the country of Japan, and factor #17: Assisting vulnerable populations and improving the effectiveness of humanitarian relief and food aid in conflict zones and disaster sites. After the devastating tsunami that struck Japan in March of 2011, much aid was needed and a major relief effort was just about to begin. Even through all of the recovery processes, communities, farms, and family, will never be the way they were before the natural disaster.

Japan is an island that is part of East Asia and is located east of China, the Koreas, and Russia. The country's area is 145,902 square kilometers. The climate is cool temperate in the north and tropical in the south. Tokyo is the nation's capital and largest city with 36.507 million and 67% of the nation's population lives in urban society. With a mountainous and rugged landscape, agriculture is not very popular. However, Japan's economy is the third largest in the world and their major exports are cars, computers, and other electronic devices, with rice being the leading agriculture product.

In the country of Japan, the family size is relatively small. The average is around three or four members per family, including two parents and one or two children. In modern times, the grandparents are becoming less common living in the household, unlike a few decades ago. The majority of the population is educated and children are in school throughout the year. Due to lack of information and unreliable sources, the average income for a household is unknown.

On March 11, 2011, a 9.0 magnitude earthquake struck around 80 miles off the coast of Japan, causing a giant tsunami to hit the coast of Japan. Devastation was everywhere as cities and farmland was submerged and left in ruins. The world watched as Japan suffered from such a disaster. As the rescue efforts began, Japan had a number of other events happened that made the recovery just that more difficult. The country faced a nuclear crisis as the Fukushima Dai-Ichi Nuclear Power Station suffered meltdowns and leaked radioactive gas. This led to radiation being spread throughout the area and later found in Tokyo's water. While people were wondering if this part of the disaster could have been prevented, Japan's government had a change of authority. Yoshihiko Noda was elected as the new prime minister in August 2011, and replaced Naoto Kan who had failed to act upon the disaster of his country. Even though many relief efforts have made a positive impact on the county, many acts could have been handled better, and more acts could have been done to help with the recovery.

As soon as news about the earthquake and tsunami broke, many organizations drew up plans to help Japan and most importantly, the people who were affected by the natural disaster. One of those organizations was the famous Red Cross. The Japanese Red Cross accepted financial aid from the American Red Cross. Within the first 24 hours, the Japanese Red Cross sent their 62 response teams including 400 doctors, nurses, and support staff. The more than 300,000 people that were evacuated before the tsunami struck were housed in temporary centers such as schools and public buildings. Japan's

Red Cross provided first aid, relief items, and emotional relief to victims. As time went on, the Red Cross' efforts didn't stop. They helped rebuild temporary and permanent hospitals and helped fund appliances for newly built houses in the disaster zone. A year after the tsunami, the American Red Cross had gained and donated over 312 million dollars for the relief and recovery efforts of Japan.

The next step for non-governmental organizations such as the Red Cross would be to help the people of Japan be prepared for a natural disaster. This could include informing the public of what to do when disaster strikes, holding drills as if an earthquake had struck, and also helping the people make an emergency plan for their own home and family that they could rely on in the instance of a disaster. With tsunamis being unpredictable like earthquakes, it is hard to make a tsunami emergency plan when the only safety efforts would be to evacuate one's home. Overall, the people simply need to be ready for a disaster at all times.

Thanks to organizations like the Red Cross and many others, Japan's recovery has been coming along strongly. Huge amounts of rubble and debris have been cleared from many communities. Homes are beginning to be built again and people are starting to live in homes again, instead of relief shelters. Even a day or two after the disaster, Japanese people were resilient and of good spirits. Now, over a year later, people are somewhat going back to as much of a normal life as possible. Even in some communities that are lived in, there are piles of debris on the city blocks and little pieces of rubble embedded in the soil. Life is getting back to normal, but also will never be the same for citizens of Japan.

Even with all of the relief efforts that have done so well, there is one major issue still in many people's minds. Could the Fukushima Dai-Ichi Nuclear Power Station tragedy have been prevented? After the tsunami wave hit the nuclear power plant, the power supply and cooling of three reactors was disabled. Within the next three days, all three cores had been greatly melted. Because of the high radioactive releases, the accident was rated a seven on the INES scale (International Nuclear and Radiological Event Scale.) Even after over two months, it was still a struggle to control Fukushima's reactors. Because of these issues, there has been a major health scare through the public of Japan. Even though there have been very few cases of radiation-related health issues, there is a huge possibility of many to come in the future. Based on data from Japanese Ministry of Education, Culture, Sports, Science and Technology, there is a possibility that 40,000 new cancer cases could arise in the next 50 years from people who were in the 200 kilometer radius of Fukushima. Thanks to contaminated water from the leaks of the three cores, the exact number of people affected by radioactivity may never be known.

Referring back to the question, could this disaster have been prevented, as time goes on, it is becoming clearer that this wasn't exactly an accident. Since tsunamis are unpredictable, nuclear plants need to be ready and able to deal with the disasters when they happen. Some are arguing that a tsunami of such a magnitude as the one from March 2011 could not have been predicted, but insiders from Japan's nuclear industry said that there were warning signs for a larger-than-expected tsunami to hit Japan. The insiders also added that Tepco, the plant's operator, ignored the warnings and did nothing to equip the plant. Even though there are international standards to lessen the effects of tsunamis on nuclear power plants, Japan's nuclear regulator did not regulate those standards. If Fukushima would have learned from a nuclear meltdown in France and changed the designs, the plant could have lived through the tsunami. Also, Tepco and the Japanese government are both accused of downgrading the severity of the damage of Fukushima. The Fukushima accident should be a wake-up to Japan's government and nuclear industry and hopefully, if there's a next time, it will be prevented.

These and many other slip ups by authority could have made the entire tsunami devastation much less worse. Not only is the plant in a bad state, but farmland is ruined for years, and people are contaminated and could be for a while. In order for the Fukushima accident to have been prevented, the plant should have been up to date on regulations. The architecture should have been equipped with higher flood walls and generators on higher ground. Industries as potentially dangerous as nuclear power need to be

monitored extremely close to make sure all regulations are enforced in full and properly. The government also needs to be certain that the plants in their nation are running effectively and safely. Both need to work together to plan for instances such as the earthquake and tsunami on March 11, 2011 to insure the safety of the people within a certain radius of the plant, along with the rest of the country in case of a leak that could contaminate more than expected.

A countless number of people were affected by the Fukushima disaster, whether it was the workers, the residences forced to evacuate their homes and communities, or other random people who were contaminated by water or simply just breathing in air. As a way to take caution, the country of Japan needs to do constant tests for radiation. People must constantly be scanned and given proper medical attention if of course they have radiation in their system. Soil should also be tested multiple times to depict the level of radiation embedded in the ground. Treatments to decontaminate the soil such as spreading chemicals or planting crops or even trees to absorb the radioactive materials need to happen as soon as possible to prevent the “dead zone” from being over 25 years. Obviously the crops could not be consumed by living organisms, but they could be converted into ethanol fuel. With some more advancements in genetics, there could possibly be a plant of some kind that could absorb radioactive materials for soil and lessen the number of years that the soil could not be useful. For humans, treatment for radiation exposure is also crucial. Symptoms may include diarrhea, loss of appetite, and possibly seizures and coma. Tissue damage, early aging, cancer, and possibly death are also possible side effects of being exposed to radioactive materials. A salt, potassium iodide, is used as a treatment for radiation exposure and blocks the thyroid intake of radioactive material in the body. It can provide up to 24 hours of protection after the exposure, but for some, it may be too late. Potassium iodide can not cleanse the thyroid of the radiation; it can merely just protect it. The salt also does not protect other parts of the body. Advancements in medicine pertaining to radiation treatment would be a great help for the people of Japan.

One major issue that seems to always come up in relief efforts for natural disaster sights is getting enough food aid and getting it all distributed. Some of the time the problem is not getting enough food, but getting it to all of the people that need it. It seems as though a lot of the relief materials in general are withheld from the needy for some sort of reason. If there are materials waiting to be used, why is it such a problem to get them to people? People need to be specifically assigned the job of distributing the food and materials so the excuses of no people were able to help is not an acceptable one. Before distributing the materials, the organization should make a plan drawing out all the areas that need aid and how they are going to reach each area. Planning is a critical part of having successful relief aid after a disaster and having the organizations know ahead of time what exactly they are going to be doing will increase the amount of relief aid that reaches the victims. Also, the relief materials need to be arriving in a constant stream so there aren't surpluses and then shortages a little amount of time later. In summary, the relief efforts need to be planned for all types of natural disasters before hand and be planned out in their entirety. Room for errors needs to be slim to none, and volunteers and supplies should be planned for ahead of time and in surplus.

A Japanese family of four may have been living in a small community in the northern part of the country. Before the tsunami, the children would have been attending school while the parents worked at their jobs making ends meet. After the disaster, their home may have been swept away and all of their belongings would have been lost. The four, suspecting they all lived, would have gone to a rescue shelter until a housing arrangement was put into place. As relief efforts advanced, the children would go back to school as the adults would look for new jobs. Life may return to a normal swing of things, but the emotional and mental toll of the tragedy may be every lasting. Counseling and therapy should forever be provided to those who have had to deal with traumatic disasters as a tsunami, to both the adults and the children.

Factor #17 would not damage or cripple the abilities of the countries agriculture industry. Especially after natural disaster, better humanitarian relief and food aid would help the citizens get back up on their feet

quicker than otherwise. The faster the people feel that they are back to their original lives, the faster the nation as a whole will get back to normal.

The earthquake and tsunami that hit Japan in March of 2011 was a huge tragedy in itself. Factors such as the Fukushima accident and relief aid issues just added on to the severity of the disaster. Natural disasters are something that happened everyday, so it is puzzling as to why there are major problems like these. The relief aid obviously needs to be ready at all times, in the correct amounts needed, and include people that are helping with the relief. Natural disasters aren't something that should surprise a nation too much. It is something that they should expect and be ready to handle when the time comes. This includes industries, such as nuclear power, being fully equipped to take on the disaster. The failure of this can result in major trauma to the country and its people, as seen in the Japan disaster. Humanitarian relief can only do so much if the countries leaders aren't doing their job of initially protecting their people from hazards. The leaders need to step up and do their part before they put any blame on the people involved with disaster relief. Since Fukushima was not properly prepared for a tsunami the scale of the one that hit Japan in 2011, the country and the people are now going to suffer for many years to come. Hopefully, other countries will learn from Japan's mistakes and make sure all of their nuclear plants are regulated properly for any type of natural disaster that is possible in their area.

Japan has made major strides in the recovery process since the tsunami. Cities are being built from the ground up, communities are coming back together, and people are beginning to return to normalcy. Even though there were instances where it could have been better, humanitarian relief helped the Japanese community immensely. Japan will never be the same way they were before the tsunami, but hopefully, they can come back better and stronger prepared for the future.

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