

Experience a big earthquake

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On March 11, 2011 a big earthquake hit the Tohoku area in Japan causing heavy tsunami damage. On October 7th, 2012, one year and 7 months later, I went as a volunteer to Kamaishi city in Iwate, one area which was hugely damaged by the earthquake and tsunami. Now, in Japan, unfortunately we don't have so much news about the various earthquake disaster areas as before. So, I thought the devastated areas are undergoing reconstruction as time goes on. But I was wrong.

This is a gym at an elementary school. Next to the school is the ocean. There is an 8 meter high wave barrier to protect them against tsunami. After the earthquake, the tsunami swept over the barrier, then, it swallowed the gym. You can see that there is a lot of debris on the beach. Of course, this is only a small portion of debris, and many other things drifted away over the Pacific Ocean. Big things like wood and parts of broken structures floating on the water were in the way for ships in the ocean. Plastic clips drifting on the water were eaten by birds and seals. This is a serious problem for the living things! After drifting, the debris reached beaches of other countries. Here is another big problem occurred. Debris removal is very difficult because the amount of the debris is huge and the area is wide. We can learn from this that not only the humans destroy the environment, but also nature can destroy itself. This is a building near our base where we stayed. The clock stopped at 2:46, the time the earthquake happened. As you can see now, there are still a lot of buildings which are not repaired.

The local people have not gotten over the disaster mentally. A lot of people are still suffering from the 記念日症候群. This is a new term used by the local people after the disaster. It is like this. Some people feel strong anxiety and have trouble in sleeping around 11th every month. Yes, the date is when that earthquake and tsunami attacked. I understood that they need more time and more continual help from others like us for them to recover. Until now I have spoken about the things I saw with my eyes and felt in my heart through my volunteer. Now Nanami Ito will talk about the disaster that she experienced. Please listen to her and share her experience.

My city, Urayasu is far from Tohoku area that had a big damage in the earthquake and tsunami. But there was a damage called Liquefaction. Do you know "Liquefaction"? It is a phenomenon that the ground turns into liquid from solid. Grains of sands are fixed close together on the surface and water is filled among the grains under the ground. However when the ground is shaken intensely by an earthquake, each grain on the surface gets apart and floats in the water. Then heavy sands sink and water comes out.

Look at this experiment. This water in the tank stands for the sea. I'm going to fill in the sea with the sand. Next, I put buildings on this land. This white light ball is for a manhole, and this long and big one is for a building which has the stable and deep foundations. This small and slim one is for a light or a pole. The last, this rock is for something heavy like a car. Then, I will beat this board to make shakes like an earthquake. Look! Light things like a manhole come up, and the heavy things sink under the land. Also, the light or the pole which doesn't have the strong foundations falls down. This is not exaggeration.

Look at these pictures. The last picture was taken in our school ground. We evacuated on the ground as soon as the earthquake happened. Suddenly, the ground cracked and water gushed out. It happened here and there in the ground. We had to move from here to there to avoid the floods and gradually the safe space got disappeared. I cannot forget the fear of Liquefaction.

At present construction against liquefaction is in process. First they dig holes in the watery parts of

the ground then fill the holes with dry soil to make the ground dense. This construction against liquefaction requires enormous money and time. Tokyo Disneyland near my city was forced to close as long as one month. However it is necessary to secure safe places for people to evacuate in the future disasters.

There were many other damages from the Japan East Earthquake. It took long time to restore the lifeline. One of the most severe damages in our lives was sewer destruction. It took one month to restore. During the restoration we could not take bath or use toilet at home, which was not good for health. There was also damage on economy. The value of land got lower. It is said the total damage of the earthquake was 16,900,000,000,000 yen. Can you imagine it?

Have you ever heard of liquefaction of the ground caused by an earthquake? Have you know that it affects a lot on our lives and economy? As for me, I did not have any knowledge about it at all. That's why I was so embarrassed and I did not know what to do. If I had any knowledge, I might have been calmer and taken different behaviors. So it is important to know this problem beforehand and think about what measures we can take to solve the problem. I think that the measures cannot be overdone. We should try as much as possible.

On the other hand, this problem shows us what human beings make cannot not be perfect. If we destroy nature to get any profit, only we could get would be retaliation. This is true with other things, not only with land liquefaction. Let us think together if development by destroying nature is the way to take or not.

Through the East Japan Earthquake, I experienced not only bad things but also good things. I realized the wonderfulness of the Japanese. In a gymnasium where I evacuated to live temporarily, there was some food delivered to citizens. Then there was a little child who failed in getting food. So I tried to share my food with him. Then another little child gave his one. When I saw it, I was surprised to know that a child had the heart of sharing. I think his behavior came from the spirit Japanese people have had since long time ago because Japanese think helping each other is very important.

When I was doing volunteer work there, I heard other volunteers tell the following words.

"There are 10 thousand people who are interested in volunteer work."

"Among them there are one hundred people who do volunteer work."

"Finally there is only one that continues the volunteer work."

I could join the one hundred people who volunteered to work. Now I want to be the only person who continues the volunteer work.

"The time marches on, but there is no recovery" as you can see. I recognized that the disaster-stricken area needs long term help for recovery, not temporary one. I think that an individual has very little power. But if you gather many individuals power and keep on doing, it will grow big! We are the people who can use this power to change the world.

Let's work together to change the world!