

No water, No life

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Hello everyone. Today, I would like to talk about water, which is abundant in Japan at the moment, but we it is high time we started to pay serious attention to its fragile existence.

Sasebo City, where I live now, suffered from a water shortage for about half a year from November, 2007, to March, 2008. All dams in Sasebo City were at less than 60% of capacity, which was just enough for only 43 days of regular usage. Because of this severe situation, the City decided to reduce the water pressure to cut down on the amount of water usage.

My school dormitory, where I lived at that time, was not an exception. Facing a severe situation, the hours for taking a bath and using the washing machine were strictly limited, which caused us much inconvenience.

Fortunately, we had much rain in January and the decision to reduce the water pressure was ended in April. We were back to the normal, everyday water usage.

By understanding the importance of water, this experience led me to come across the phrase “Virtual Water”.

It is true that Japan is abundant in water resources. Basically speaking, our country has more than enough water resources to supply us with all of our needs for safe water. Under such a situation, even though we import mineral water for drinking from foreign countries for special market demands, the amount is not so much compared with to our total usage. But, do you know Japan is consuming more imported water than any other country in the world? At face value, this seems like a contradiction, but the key to understanding it is the concept of “virtual water”.

Virtual water is the amount of water needed to produce crops, raise domestic animals and produce industrial goods. Though it is difficult to imagine its existence when we have imported goods readily available, everything cannot be made without consuming at least some water. So, when we import things from foreign countries, we also import virtual water with them.

Here is one example. This calculation was done by Professor Oki at Tokyo University. Suppose I have one bowl of “Gyudon”, that is beef with rice, for lunch, which is my favorite. One bowl of Gyudon consists of 70 grams of beef, 120 grams of rice and some sliced onion. Now, how much water do you think is necessary to produce one bowl of Gyudon? The answer is 2,000 liters. Yes just for one bowl of Gyudon, we need so much water to produce it. In my case, when I have Gyudon for lunch, it means that I consume 4,000 liters because one serving is not enough. I need two helpings to become full!

As you know, Japanese food self-sufficiency rate is as low as 40%, which is the worst among developed countries. So, it is necessary to import much food from all over the world. This means that Japan consumes the most virtual water among developed countries. Though basically Japan is rich in water resources, we actually depend on so

much invisible imported water, or virtual water.

At present, water is one of the key issues that the international community has constantly been discussing. There are many countries which are suffering from water shortages and food shortages as a result. As world population grows, not only drinking water becomes scarce, but also water for cultivating crops or producing goods becomes scarce. Economically rich countries may be able to buy water as much as is necessary, but how about poor countries? Though Sasebo suffered from water shortages several times, fortunately nobody died directly as a result. As for the poor countries, however, there can be many people who literally die from a water shortage. Though Japan has an abundance of water resources, we should pay attention to the world situation regarding water, because we may have much to do with it, directly or indirectly.

Then, what should Japan do to help to solve the global water crisis? One solution is to raise our self-sufficiency in food production. If Japan produced as much food as is domestically needed, we could drastically reduce the amount of virtual water which we import from foreign countries. Regarding everyday life, we should always imagine how much virtual water we consume every time we eat something or use a product. Then, it will lead us to make an effort not to waste them. With an understanding of virtual water, we can start to save water and use it more carefully.

It is taken for granted that we have fresh water when we turn on a faucet. There is nothing we are inconvenienced by nowadays. Therefore, the Japanese people should realize how lucky we are and hope that people living in other countries will one day be in the same fortunate situation as well. Wherever we live, nobody can live without water. No water, no life!