

Development Vs. Nature: Recalling Tohoku Earthquake

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JAPAN, a country known for its highly sophisticated technology, faced an unimaginable situation on the Friday of March 11, 2011 at 2:46 pm Japan Standard Time. It was the biggest earthquake in Japan's history, measuring 9 on the Richter Scale (7 shindo on the Japanese scale).

Great Tohoku Earthquake

This terrible earthquake, which hit the northeastern part of Japan, is known as the Great Tohoku Earthquake. It was the fifth most powerful earthquake in the world since the modern system of keeping records began in 1900. The earthquake instantly triggered powerful tsunami waves that reached up to 40.5 metres high.

It was later confirmed that the earthquake had killed about 16,000 people, injured 7,000 others, while 300,000 people had gone missing across 20 prefectures. Similarly, 128,000 buildings had totally collapsed, 273,000 buildings saw partial collapse, and another 748,000 buildings were damaged.

The earthquake and tsunami also caused widespread and severe structural damage in northeastern Japan, including heavy damage to roads and railways, besides starting fires in many areas. A dam also collapsed in the aftermath. Around 4.4 million households were left without electricity and 1.5 million without water. Above all, the tsunami caused a nuclear accident in the Fukushima Daiichi Nuclear Power Plant, and radiation from it affected hundreds of thousands of residents.

At the time of the earthquake, I was in a Nepali friend's room on the second floor of the Soshigaya

International House in Setagaya-ku, Tokyo and was about to take tea. The earth shook for about two minutes, and everybody was terrified. Later on, Japanese television reported what had happened in the Tohoku region. I began to reflect on the high technological development of Japan on the one hand and the power of nature on the other. I thought, will humankind ever overcome nature?

The then Japanese Prime Minister Naoto Kan later said that it was the country's worst situation in the 65 years since World War II. As the media reported about the terrible nuclear accident in the Fukushima Daiichi power plant, people were worried. Foreigners living in Japan were talking about going back to their countries. Some fellow Nepali colleagues and friends were also planning to return to Nepal. I didn't know what to do. I asked my Japanese friends, seniors and professors, but none of them suggested anything. In the end, I decided to leave, thinking that it would be of help to the Japanese government in saving power and food in that terrible situation. Since the Japanese government and people were focused on contingency management, I felt I should not be a burden to them.

While in Nepal, we stayed tuned to the Japanese TV channel, NHK, to learn of the situation there. After 20 days, I went back to Japan, as my classes resumed from the second week of April. Still Japan was suffering from frequent aftershocks. I realised that whatever the advances made in the field of development, no one could challenge nature. Nature is the most powerful thing in this world.

This crisis forced both planners and policymakers the world over to mull over what should be the main

goal of development - people's welfare in harmony with nature or pure physical advancement. This should be a great lesson to humanity in terms of the paradigm shift in development. The earthquake was a great experience, which could change the future of the world.

The new vision for development should include philosophical ideas with ethical values integrated into them. No one will disagree with the fact that we cannot change the geography and cannot control natural disasters, but we can reduce the effect and prevent great losses by using sophisticated technology wisely. If we can control the negative impact, we should use that technology, but if the negative impact is beyond man's control, we should avoid using it.

Are high-tech constructions such as nuclear power plants compatible with nature? Can they serve humanity or will they destroy human civilisation? Do we need those structures, which may harm this earth's very existence? What is the use of technology, which harms people's wellbeing? These questions need to be answered during the reconstruction of the northeastern region of Japan. Can the living conditions of the people be restored to the period before the nuclear accident?

Nuclear plants are man-made, and if they are not under the control of the maker and if they harm human civilisation, then why build them? Why can't we ban nuclear power? Why not develop and use other clean energy?

While constructing new structures, my point is that ethical values should be given high priority. The constructions should not go against the right of man to survive in this universe. Man-made structures

should not destroy humanity in any situation. If it does so, then it is better to think before than regret later.

The Chernobyl and Fukushima Nuclear disasters have proved the essence of the old proverb: "Science is a good servant but a bad master". We must learn lessons from the past and apply them in the present context so that civilisation progresses.

While restoring the devastated region, the planners should give a thought to the following questions. Is the technology suitable to withstand many big earthquakes and tsunamis? What would be the consequences in case of another devastating natural disaster? Is technology giving emphasis to the high developmental needs or better safety measures? What is the place for human values, ethics and environment in the new construction? Is there any space to restore family values? How do we avoid a mechanical lifestyle and restore highly inspirational ones? How can new construction promote people's happiness?

Natural way of life

In the process of development, the developed countries have lost their original rural culture, social norms and family values. Local traditions and cultures are very important for the identity of the people and places. Restoring social norms and ancient family values will make a place better, with a blend of development and cultural values. Preserving the environment and nature will definitely make the place better to live in and enjoy the natural way of life in a modern setting.

(The author received his PhD in Development Economics from the University of Tokyo in 2014.)