

Conclusion

More than a year has passed since the Great East Japan Earthquake. But even after the disaster of that magnitude, the world goes on as always. However, livelihood in Japan will not be the same. The earthquake, tsunami, nuclear accident and radioactive contamination have forced to change the way of our thinking.

First, we realize how powerless we human-beings are in contrast of nature's power of the magnitude 9.0 earthquake and 40m tsunami which are extremely rare in any part of the world. For Japanese, however, this does not mean simply despair, rather inspires a sense of awe or respect for the power of nature.

Then we face the severe accident at the TEPCO Fukushima Daiichi nuclear power plant. What we had believed to be completely safe ended up falling apart in a moment. What had been expected to be under control did not work as expected, and as a result, a large amount of radioactive material got released into the environment. And decontamination efforts are needed as long-term challenges.

Some would say that it is not appropriate to compare these accidents and natural disasters to the issues facing the global environment. However, it is inescapable to conclude that we human-beings have been inclined to lose our sense of awe and respect to the nature, assessing current unsustainable situation such as; how we are using natural resources over the Earth's capacity enable to reproduce them; how we continue to impact onto the environment with GHG emission faster than the Earth's capacity of carbon fixation; and how we are causing irreversible damage in the Earth's biodiversity. These steadily human activities has damaged the Earth's environment, which is essential for human life and production, and our life is someday going to reach a tipping point of no return, though the catastrophe may not immediately occur as that of a natural disaster.

In Chapter 1, we looked at global efforts being undertaken in advance of the June 2012 Rio+20 conference, which is held for a twenty-year follow-up to the Earth Summit, to overcome the currently unsustainable situation facing the global environment.

In Chapter 2, we looked mainly at the efforts for disposal of disaster waste and decontamination of radioactive substances caused by the earthquake and the nuclear power plant accident. Also, in section 5 of Chapter 2, we reviewed the new nuclear power regulation and the framework, which reflects the conscience that there is no absolute safety and that we need to be prepared at ordinary time to respond even to serious emergency. Again, the emotion of awe is not the same thing as blind fear. With regard to radioactive decontamination and the disposal of disaster waste over a large affected area, it is important to promote public understanding of the scientific knowledge about radiation,

including the meaning of an equivalent absorbed radiation dose, without unnecessary fear in closely coordinated risk communication, unlike the approach of publicizing safety without enough information.

In Chapter 3, we focused on projects for promoting self-reliant society by evaluating and bringing out the best of natural resources which are varied from region to region. These efforts are in harmony with the nature, which has been utilized under indigenous and traditional ways in Japan. And the ways of our livelihood are refocused on, because social cohesion that exists in local communities has played an important role through efforts for the recovery from the disaster. It is expected that a change in awareness has occurred in the wake of the disaster, leading to people breaking free of old fashioned thinking and evaluating local natural resources, and serving as the core of community development which is in harmony with the regional environment. The Ogasawara islands was registered as the World Natural Heritage in 2011, and that encourage us because it means it has been recognized globally the value of natural resources and the efforts for sustainable use by residents living there. With the world currently in globalization - and perhaps because of it - many people feel sympathy to the efforts of residents to develop characteristics of the environment and community, which the people rely on, with a greater sense of identity. Such a lifestyle, which is centered on local communities, focuses on local issues as well as the global issues, and fosters global interaction via information and communications, is needed, so as to achieve life satisfaction and to strengthen relationship with society.

As the world becomes ever more complex, it becomes increasingly difficult to categorize countries into "developed" or "developing." The development of emerging economies like China and India is driving the new global economy, but at the same time, environmental impacts at the country level exceeds that of Japan because of the rapid expansion in GHG emission and the demand for natural resources. On the other hand, the per-capita GDP and GHG emissions of these emerging economies is far below the average level of developed countries, and these emerging economies find themselves in the paradoxical situation of pursuing development in order to improve the individual lives of their citizens while at the same time they have to reduce GHG. However, in order to make challenge against global warming, the whole world have to work together to reduce GHG emissions, and there is no avoiding this issue. The solution lies in green growth and green innovation. In other words, social growth with satisfied lifestyle can be realized by preventing an increase in environmental impact, and even by taking out the best power of the nature. A classic example of this is introduction of renewable energy.

Despite Japan's high level of technological development, we lag behind many other countries in implementation of renewable energy technologies. It is expected that renewable energy and energy saving technology should be effectively introduced with combination of the supply and demand sides, so that Japan can develop a world-leading technology especially in the Tohoku region. It is also a big challenge for green economy to cut back as much as possible on resource input, such as of rare metals, and instead promoting the maximized reuse of existing resources in society. It is also

necessary to develop indicators for assessing the degree of progress of the world and Japan on a green economy.

And with the aim of achieving the points discussed above, it is important that all stakeholders in Japan join and force to promote efforts which will allow Japan to come through this disaster stronger, more be satisfied, and feel pride of these. The efforts of Japan's local communities drive world-leading green growth, and we have to achieve a society with safety and security, both in terms of people's everyday lives and the long-term sustainability of environment.