

Just 10 years ago, on March 11, 2011, a huge earthquake of magnitude 9 and a tsunami of up to 14 m struck the region of eastern Japan, including Fukushima Prefecture. It is said to be the largest earthquake recorded in Japan and the fourth largest in the world since the beginning of 20th century. To date, about 16,000 people have lost their lives and up to 470,000 were evacuated at the most difficult time.

Japan has received offers of support from 163 countries and 43 international organizations around the world. Of course, we also received warm support from Ukraine. I would like to express, first of all, on behalf of Japan and its people, our sincere gratitude to the people of Ukraine and other countries around the world for their support to Japan.

For 10 years after the earthquake, the Government of Japan and its people have been working on the reconstruction of the affected areas of this historic disaster. It's a huge amount of work, and I don't think I have enough time to talk all about it.

So today, let me talk about what I believe are the most important issues, namely reconstruction of the affected areas and the safety of nuclear power generation, focusing basically on how we approached the issues, what kind of results we achieved, and problems we still have.

First and foremost, I would like to make one point clear. I mentioned earlier that about 16,000 people lost their lives, but most of them were killed by the earthquake and tsunami, and no one died directly due to the nuclear accident at the Fukushima Power Plant. A report by the United Nations Scientific Committee released in May 2013 also confirmed that any increased radiation-related health effects were not recognized and that the most important health effect was on mental and social well-being, related to the enormous impact of the earthquake, tsunami and nuclear accident ”.

One of the biggest challenges for the government was how to restore livelihoods of the people in the affected areas. Immediately after the accident, the government set up the "Reconstruction Countermeasures Headquarters" for the initial work urgently needed for the disaster-stricken area, but at the same time the Government also hurried to develop the legal and organizational framework, and budgetary basis for the reconstruction of the disaster-stricken area.

In June 2011, the “Basic Law for Reconstruction from the Great East Japan Earthquake” was enacted, including the establishment of the Reconstruction Agency as an administrative body in charge of reconstruction of the affected areas.

The government has also set up a special budgetary account for reconstruction of the East Japan to provide a wide range of support to infrastructure building such as roads, housing, schools and other public facilities, or re-establishment of industrial basis, and some direct support for the lives of residents in the disaster area.

For securing the necessary expenditures of all these projects, the budget for reconstruction over the past 10 years has totaled about 32 trillion yen (320b \$), which means that in average about 0.5% of

Japan's GDP has been invested every year. This does not include the costs required for decommissioning the reactor or for compensation for the accident to be provided to the affected residents.

Since such a huge budget cannot be covered by existing revenues alone, the government has decided to impose a new extra tax increase targeting income and corporate tax, which accounts for 40% of total expenditure for the reconstruction projects. There was no major public opposition to such a tax increase. In addition, since the reconstruction of the disaster area is the responsibility of the state, and not of the local government, all the reconstruction projects were covered by the national budget and not borne by the local government.

What we learned as very important for the reconstruction of the region was how we can set up the vision of the future of the region. Through the efforts so far, the value of agricultural production has recovered to 90% of that before the earthquake, and the value of manufactured goods has become even higher by 3% than that before the earthquake. The economic growth rate of Fukushima Prefecture from 2010 to 2018 was 8.1% on average, and 19% in the neighboring Miyagi Prefecture.

However, what the local residents wished to achieve was not just returning back to pre-earthquake situation or living standards. What many people wanted was not a return to the past, but a hopeful future. Taking all this into consideration, currently, Fukushima is planning to lead the future industry of Japan, and under the name of "Innovation Coast Initiative", we are focusing on industrial development such as decommissioning research and development, robot research demonstration, information dissemination base, environment recycling, hydrogen renewable energy and so on.

Now, about the safety of nuclear power station. Following the huge earthquake and the accident at the nuclear power plant, the Japanese government shut down all 54 nuclear reactors that were in operation in Japan at that time. The purpose was to reexamine the state of nuclear regulation used so far, formulate new installation standards, and permit only nuclear power plants that meet the right requirements to operate.

In September 2012, a new Nuclear Regulatory Commission was established, and in July 2013, a new regulatory standard for nuclear power plants was adopted and application for restarting the operation of the suspended nuclear power plants started.

In this case, special attention was paid to the separation of the regulatory body of the nuclear plant from that which promotes the use of nuclear energy. Based on this principle, the Nuclear Regulatory Commission was established under the Ministry of Environment as a separate entity from the Ministry of Economy, Trade and Industry, which promotes the use of nuclear energy.

However, it is not easy for the residents around the nuclear plants to make a quick decision to accept the restart of the operation of nuclear plants. Furthermore, since it is extremely difficult to predict earthquakes, it takes rather a long time for the members of the regulatory commission to decide on

the restart of nuclear power plants that have been temporarily shut down.

So as of now only 9 out of 54 nuclear reactors which operated at the time of the earthquake have been allowed to operate, and 24 are to be decommissioned. Taking into account that 54 nuclear power plants were covering 25% of Japan's total power generation before the earthquake, Japan's power supply over the past 10 years has been extremely difficult, and so we have been making a lot of effort for energy saving in cooperation with private companies and citizens. Also liberalization of electricity market contributed to relative increase in other power sources such as renewable energy and thermal power generation.

Finally, I should tell you that the decommissioning work of the Fukushima nuclear power plant has not completed yet. However as for the radiation dose in the field, the average in Fukushima City dropped from 1.33 $\mu\text{Sv} / \text{h}$ at the time of the accident down to 0.31 in 2014, and further to 0.15 in January this year. Nowadays, there are many cities of other countries where you can observe radiation levels that exceed those measured in Fukushima.

I will stop here and finally let me tell you that I believe that it is unfortunate that both of us had a disaster but it is fortunate for us that we can learn each other. We would like to continue to cooperate.

Thank you very much.