One Year After Fukushima: What Lessons Have Been Learnt in Northeast Asia?

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Interviewee

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Since the nuclear accident at the Fukushima Daiichi plant following the massive earthquake and tsunami in Japan on March 11, 2011, there has been much debate on regional cooperation over nuclear safety but few tangible achievements. Professor Jin-ho Jeon of Kwangwoon University discussed on the impact of the nuclear accident one year on and the progress of discussions on nuclear security. He also considered what needs to be done following the 2012 Seoul Nuclear Security Summit in respect of nuclear safety. The following is a summary of the main policy recommendations from the interview.

Q1: One year on from the Fukushima Daiichi nuclear accident, what has been the impact of this on Japan and the region? Have any lessons been learnt?

A1-1: "Since the nuclear accident, Japan has been seeking to change its policy of dependence on nuclear power."

• Already one year has passed since the Fukushima Daiichi nuclear accident. The 20km exclusion zone around the plant remains and will continue to be uninhabitable for the foreseeable future. According to a recent public opinion poll in Japan, eighty percent of the population is opposed to nuclear power. This widespread antipathy toward nuclear energy is even more astonishing if we consider that thirty percent of Japan's electrical power generation comes from nuclear energy, while renewable sources of energy account for no more than four percent. This sentiment shows the true impact of the Fukushima accident upon Japanese society.

A1-2: "Despite having promoted nuclear energy as the future, countries in the region will have to seriously reconsider whether to continue with such policies due to the impact of the Fukushima accident."

The Fukushima accident has several implications for the future of nuclear energy in the region. 1) Having strongly promoted nuclear energy as the way forward, China, Japan, and South Korea will have to seriously consider whether to go ahead with their planned expansion of nuclear power plants over the next decade in the face of public concerns. 2) If the government of the region consider that the development of nuclear energy is essential, they will have to address the concerns of how nuclear safety can be assured as well as consider new safer nuclear methods (for example, nuclear fusion instead of nuclear fission). 3) The countries in the region should also look at how they can share regional and international

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experiences in dealing with major nuclear accidents like Fukushima. 4) In terms of crisis management, governments should also look at how they can avoid the covering up of vital information during an incident and ways to facilitate the quick exchange of important data that is crucial for crisis management.

A1-3: "South Korea's energy consumption based upon nuclear power needs to change, particularly through improving the structure of high-energy consumption."

The Fukushima accident was a clear illustration that change is needed in South Korean perceptions on energy. South
Korea has promoted a policy of energy consumption which is solely focused on providing and obtaining energy for
industrial development. While South Korea's GNP has increased by about three times over the last twenty years,
energy consumption for industrial use has risen by about nine times. This massive increase demonstrates that
industrial development in South Korea has relied upon a massive amount of energy consumption. It is a good time
now to consider an industrial structure that will reduce large energy use. Discussions in South Korea should focus on
enhancing environmentally friendly energy sources and regulating energy consumption, as well as improving the
efficiency of energy usage.

Q2. What is the current state of cooperation on nuclear safety among Northeast Asian countries?

A2-1: "Cooperation among South Korea, Japan, and China on nuclear safety is still only at a basic stage."

A nuclear accident in East Asia would certainly have regional and international effects beyond any single country's borders. In spite of this implication, there has been very limited cooperation on nuclear safety among the countries of Northeast Asia. Given the fact that together China, Japan, and South Korea have plans for almost 150 nuclear power plants over the next decade, multilateral cooperation on nuclear safety should be considered a top priority. One year on, the Fukushima accident should still be seen as an opportunity to initiate discussions and facilitate cooperation.

A2-2: "The three nuclear powers in Northeast Asia should develop cooperation in order to respond more effectively to any potential future accident."

- Following the Fukushima accident, China, Japan, and South Korea reached a principle agreement to strengthen cooperation regarding nuclear safety. There has also been further cooperation through the Northeast Asia Nuclear Regulators Conference. However, the Nuclear Regulators Conference remains at a very limited stage of cooperation, focused mainly on nuclear technology.
- As countries in the region have only focused on the exchange of nuclear technology, efforts should be made to institutionalize state-level cooperation on nuclear safety in the following three areas: 1) sharing of information on the operation of nuclear reactors among China, Japan, and South Korea; 2) establishment of a specific process for responding to the initial stage of any nuclear accident; 3) a system for cooperation among the three countries during the time of a major nuclear accident should also be developed. Then, there should be the development and exchange of technology in order to prevent nuclear accidents under this cooperative framework.

Q3: What are the tasks for South Korea following the Seoul Nuclear Security Summit?

A3-1: "Nuclear safety should be established as the foremost principle in the management of nuclear power plants."

- Since the Fukushima accident, many countries are concerned about the issue of nuclear safety related to potential nuclear accidents rather than the threat from nuclear terrorism. In the future the Nuclear Security Summit should consider such concerns from member countries in order for the summit to endure. The ideal solution would be to hold a regular Nuclear Security Summit that embraces both nuclear security and safety.
- The issue of nuclear safety was discussed during the Seoul 2012 Nuclear Industry Summit, an event held alongside the Seoul Nuclear Security Summit. The concern though is that such discussion, which involves the nuclear industry, will only represent the industry's role and profit. TEPCO, the operator of the Fukushima Daiichi nuclear power plant, had been accused in the past of bad practices and was further criticized for a lack of transparency during the Fukushima accident. In South Korea, the cover-up of a recent blackout at the Kori nuclear power plant reveals that South Korea's nuclear industry could also repeat the mistakes of Fukushima. Thus, a declaration on putting nuclear safety as the foremost principle in operating nuclear power plants should be discussed at the next Nuclear Industry Summit.

About the Interviewee

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