Impact and Prospects of Releasing the Fukushima Contaminated Water (also Known as Daiichi ALPS Treated Water) - Implications for Korea

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On August 24, 2023, the release of Fukushima contaminated water (also known as Daiichi ALPS Treated water) began. Japan released a total of 23,400 tons of Fukushima contaminated water in three stages in 2023, a process that is expected to continue for more than 30 years. To date, the economic and diplomatic damage to Japan has not been significant, apart from some specific seafood products that are highly dependent on China and Hong Kong. In South Korea, negative perceptions and concerns have been high, but to date there have been no significant negative impacts, such as a decrease in seafood consumption or a drastic decline in travelers to Japan. However, the release of Fukushima contaminated water will continue for decades, and the direct and indirect effects of the release could lead to conflict between Japan and South Korea at any time. Even now, Korea’s situation is being compared to the responses of other countries, such as China. It is possible that Japan's request to increase imports of Japanese seafood to South Korea will lead to a conflict between the two countries in the future. Therefore, the South Korean government should actively identify and promote preemptive response measures for any possible situation.

To start with, it is crucial to set up a platform for continued discussions between Japan and the surrounding countries to make a ‘permanent agenda’ of the Fukushima contaminated water release issue at international meetings.

The release of Fukushima contaminated water is a common problem faced by all countries sharing the sea, and safely utilizing nuclear energy and preventing accidents is a global challenge for countries with nuclear power plants. To this end, we should consider this as a permanent agenda topic at international meetings, such as the Pacific Islands Leaders Meeting (PALM) held in Japan every three years since 1997, the Trilateral Nuclear Safety Top Regulators’ Meeting (TRM) held annually since 2008, and the East Asia Cooperation Forum held annually in South Korea since 2013. In the process, we should establish an international joint monitoring system and conduct environmental impact assessments, human
health assessments, safety inspections, and technological developments. Through this platform, Japan should demonstrate its responsibility to its neighbors and the international community by providing transparent and accurate information with sincere explanations. The neighboring countries need to urge Japan to continue these efforts. Furthermore, it is necessary to advance the discussion of the safe use of nuclear energy as a global agenda, including efforts to prevent and respond to nuclear accidents.

Second, mid- and long-term plans should be developed and institutionalized to keep track of the effects of Fukushima contaminated water releases, and contingency plans should be put in place.

While the Fukushima contaminated water release is not a bilateral political issue between Japan and South Korea, it is of particular concern to the South Korean people due to its geographic proximity. The South Korean government is now pursuing consensus with Japan and providing science-based information on the release of Fukushima contaminated water, daily in-person and written briefings, and testing for radioactivity in marine and seafood products. This is part of Seoul’s efforts to disseminate objective information and reduce public concern and social anxiety.

In addition, the South Korean government should create an organizational chart of their Fukushima contaminated water release response units and establish a public-private cooperation system. Also, the South Korean government should develop mid- and long-term plans, keeping in mind that the released contaminated water is expected to reach the coast of the Korean peninsula in 4-5 years. Although many other organizations in Japan, as well as the IAEA are conducting redundant inspections and monitoring the impacts of the Fukushima contaminated water, a long-term and stable institutional foundation should be secured, as the issue will last for decades. Furthermore, efforts should be made to establish contingency plans for any possible accidents. In addition, we should strengthen the cooperation system with relevant countries, such as China and the Pacific Islands.

Third, the South Korean government should minimize the "social conflict" caused by the release of contaminated water and return it to "social value”.

In South Korea, several government ministries and specialized organizations are providing real-time, science-based information on the release of Fukushima contaminated water. Also, measures are being taken to prepare the fishing industry for possible damage. These measures are necessary to enhance the health and safety of people, oceans, and fisheries, and minimize the negative impact of the release of Fukushima contaminated water. However, considering these measures will need to continue for decades, the financial burden may be significant. In
addition, we cannot overlook costs that are difficult to measure, such as the political, diplomatic, economic, and social controversies that have arisen.

Therefore, in order to minimize the anxiety of the people, the South Korean government must provide relevant information transparently, strengthen our response capabilities, and actively find ways to mitigate social conflicts caused by this issue. To this end, it is necessary to utilize the situation to expand our capabilities in ocean pollution prevention through the development of technologies for the stability of oceans and fisheries; to develop human resources in relevant fields; to improve the quality of human and environmental impact assessments; and to strengthen international cooperation systems.

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