Fukushima Dai-ichi and the Ocean: 10 years of study and insight Abstract Submission Form : Entry # 34

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Title

Fisheries and the monitoring inspection in Fukushima during 9 years

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Abstract Title (English, limited to 300 characters)

Fisheries and the monitoring and inspection in Fukushima during 9 years

Abstract (English)

A large amount of radionuclide was released into marine environment after the accident of the Fukushima Daiichi Nuclear Power Plant (FDNPP) on March 2011. Fisheries product was also contaminated by radiocesium (134+137Cs) through seawater and their food. Immediately, after the accident, the monitoring and inspection for the fish caught in Fukushima was conducted by Fukushima prefectural government, while fisheries in Fukushima were voluntarily stopped. The monitoring and inspection revealed safety of fish species that is not influenced by 134+137Cs contamination and immediately decreased 134+137Cs concentration. From Jun 2012, trial fishing (small-scale) was started with limitation of species, fishing area and fishing methods for investigation of reputation and promotion of fisheries products.

Total 240 fish species and 66,042 samples were inspected until November 2020. After the accident, there are no samples over the 100 Bq/kg (134+137Cs) that is Japanese shipping limit since April 2017 in the monitoring and inspections. After the nine years, 99.8 and 99.9% of the samples were under detection level (approx. 8 Bq/kg) in 2019 and 2020 (until November), respectively.

The monitoring and inspection revealed safety of fish species and there is no fish species restricted on the distribution that reached total 43 species since lifting a shipment ban on common skate (Okamejei kenojei) on February 2020. Fisheries in Fukushima also expanded with increasing target species from 3 to 217 species until November 2020. Trial fishing can also conduct in all fishing ground except within 10 km of FDNPP from March 2017. However, trial fishing production was 3,641 ton in 2019 and still about 14% of before accident level. After the nine years, difficulty of increasing the fishing production was appeared. One of the problems is that shipping system was considered to be changed during voluntary ban. Additionally, there are still harmful rumors. Safety concerns of fisheries product has to be solved and promotion campaign is more needed.

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Recently, specific discussion for the full-scale fishing like before the accident was started among fisheries industry members in Fukushima. The safety information is basic and important point to this specific discussion, and it is needed to continue to confirm safety of fisheries products for reconstruction in the future.