The situation of radioactive contamination in crops after five years of FDNPP accident

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Tokyo electric power company’s Fukushima Daiichi Nuclear Power plant (FDNPP) accident affected a large area of Eastern Japan by the fallout of radioactive cesium. In 2011, more than 8000 ha of agricultural field was restricted planting and the area decreased about 2000 ha by the end of 2014. Two major protocols have been applied to the agricultural field, one is decontamination of field mainly by surface stripping method but it results a huge amount of radioactive waste of soil and biomass (more than 2,000, 000 m3). The other method is applying sufficient amount of potassium to the soil before conventional fertilization. The problem is that it is not able to decide the termination of applying excess amount of potassium to the field. Furthermore, as some plant species seems to have higher transfer factor, it makes the radioactive cesium content of the harvest higher than the standard limit in food (100 Bq/kg from April 2012, in Japan). Several countermeasures have been tried to encounter these problems. In the presentation, present situation of Fukushima area which have been affected by radioactive materials and how the agriculture has been reconstructed after the FDNPP accident.

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