A Study of Decontamination Plans and Activities for the Improvement of Living Environment and the Revitalization in Fukushima Prefecture

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[SYNOPSIS]

Fukushima prefecture was contaminated with large amounts of radioactivity by the Fukushima Daiichi nuclear power plant accident caused by Tohoku-Pacific Ocean Earthquake of March 11, 2011. Environmental restoration by decontamination of radioactivity is currently the most important issue in Fukushima. The first part of this paper explains its aim: the systematic examination of the present situation and problems of decontamination plans and activities in Fukushima prefecture. The second part provides a brief overview of the state of radioactive contamination, gives a basic explanation about radioactivity, science and daily life, and presents the issues related to the legal framework of the Act on Special Measures for Radioactive Materials. The third part discusses the present situation and problems of decontamination plans and activities in 52 out of the 59 municipalities, that is, all municipalities except the seven designated as Decontamination Special Area throughout the administrative area. It points out that the progress of decontamination varies depending on types of land use, and that most municipalities recognize that the national government's fast decisions about where and when to construct intermediate storage facilities, the securement of enough temporary storage, and the review and improvement of ways and technologies of decontamination are necessary to promote decontamination activities. The fourth part shows the process and the dose reduction effect of decontamination in Onami District of Fukushima City and discusses residents' consciousness about decontamination. Although decontamination of almost all the houses in the district had been already finished, radiation dose has not been still below 0.23μSv/h (1mSv/y) because of radiation from surrounding environment of houses such as farmland or forests that have not been decontaminated and limits of the decontamination methods indicated in the national guideline, and many residents have been forced to live their life with anxiety and long for continuous decontamination of radioactivity and thorough compensation for damages in particular. The fifth part presents several future research subjects, for example, continuous study about present situation and problems of decontamination plans and activities.