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Text Mining Analysis of the Reconstruction Plans after the Great East Japan Earthquake

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Abstract : On March 11, 2011, the Great East Japan Earthquake occurred off the coast of Sanriku, Japan. It is important to build a sustainable society through the reconstruction process rather than simply restoring the infrastructure. To compare the goals of reconstruction plans of quake-stricken municipalities, Japanese language morphological analysis was performed by using text mining techniques. Frequently-used nouns were sorted into four main categories of “life”, “disaster prevention”, “economy”, and “harmony with environment”. Because Soma City is affected by nuclear accident, sentences tagged to “harmony with environment” tended to be frequent compared to the other municipalities. Results from cluster analysis and principle component analysis clearly indicated that the local government reinforces the efforts to reduce risks from radiation exposure as a top priority.

Keywords : eco-friendly reconstruction, harmony with environment, decontamination, nuclear disaster
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