Abstract

[Project Information]

Project Title :	Public Acceptance Assessment and Consensus-building Framework for Final Disposal Outside Fukushima Prefecture and for Future Design Use in Areas for Surrounding Areas
Project Number :	JPMEERF22S20930
Project Period (FY) :	2022-2024
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Keywords :	Final Disposal Outside Fukushima Prefecture, Public Acceptance Assessment, Consensus-building Framework, Stakeholder engafement

[Abstract]

Radioactively contaminated soil and waste generated within Fukushima Prefecture will be transported to an interim storage facility. According to the Technology Development Strategy for Volume Reduction and Recycling of Contaminated Soil from the Interim Storage Facility, final disposal outside the prefecture is to be completed by 2045. To support this goal, studies are needed not only on technical aspects - such as volume reduction technologies and management methods - but also on socio-economic dimensions.

The aim of this study is to assess the public acceptability of various disposal and recycling options and to develop a consensus-building framework that will facilitate smooth and equitable decision-making regarding the final disposal of contaminated soil outside the prefecture, as well as the future design of reconstruction areas around the interim storage facility. The framework incorporates intergenerational perspectives and addresses environmental, social, economic and multidimensional equity considerations unique to this issue.

In sub-theme 1, we conducted a postal survey, an online survey, an international comparative online survey and semi-structured interviews to assess the public acceptability of disposal scenarios and to identify key indicators prioritized by different stakeholders. Scenario analysis using a multi-criteria evaluation method was also carried out through interviews and workshops with urban citizens, municipal officials and rural residents. In addition, we conducted a qualitative analysis to explore the underlying mechanisms that influence stakeholder acceptance.

We also conducted interviews and workshops with local residents to extract key elements of the

regional heritage - such as local history and collective memory - in the reconstruction areas surrounding the interim storage facility. The data collected was transformed into digital content and a methodology was developed to identify and organize key elements.

In sub-theme 2, we conducted social research activities, including citizen participation workshops and game-based experiments, to assess the effectiveness of these formats as platforms for constructive dialogue and to evaluate consensus-building processes that incorporate multidimensional fairness. Aiming not only to address fairness from a normative perspective, but also to provide empirically based evidence, we achieved all of our initial objectives and gained additional insights that were not anticipated in the original plan.

Based on these findings, we developed and proposed a consensus-building framework that integrates multidimensional fairness with environmental, social and economic considerations. The framework consists of 14 key elements and practical recommendations.

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This research was performed by the Environment Research and Technology Development Fund (JPMEERF22S20930) of the Environmental Restoration and Conservation Agency provided by Ministry of the Environment of Japan.