



# Development of data-base for sustainable community

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## Abstract

The purpose of this research project is to build a database at the neighborhood association and village level, use it as a support tool for deliberation by local stakeholders, and improve local self-governance capabilities. In addition, by analyzing information in regional databases, we extract objective information and knowledge about regional issues and characteristics and propose policies and measures to local governments and related parties. We will suggest this flow of knowledge accumulation by local stakeholders as a "regionalism model" and contribute to regional revitalization in Japan.

## Background & Results

Japanese society is experiencing a population decline, declining birthrate and aging population at a rate never before experienced by humankind, and an unprecedented concentration of people in the metropolitan area among developed countries. The flip side is the decline of local and regional economies and the loss of communities. The government has implemented various regional revitalization policies and invested a considerable amount of money, but the situation is still unchanged.

This project aims to propose a practical interdisciplinary methodology to promote "regionalism" (= regional autonomy, self-governance) advocated by economist Yoshio Tamanoi in the 1970s based on the working hypothesis that regional revitalization is structurally impossible with the method that has been led by Tokyo up until now.

Specifically, we will build a community-scale regional information database in Takashima City, Shiga Prefecture, and Totsukawa Village, Yoshino District, Nara Prefecture (Figure 1), and will enable local residents and outsiders to understand the current state of the region based on objective information. We will put into practice a framework for the process of deliberating on issues and verify its effectiveness (Figure 2).

To date, we have evaluated local resources and created a database for 204 local governments in Takashima City, Shiga Prefecture. First, analysis of regional data can reveal regional characteristics and issues. For example, from data from Takashima City, Shiga Prefecture, we could measure the type and severity of issues faced by the local government (for example, forests are in disrepair). Furthermore, statistical analysis has shown that the greater the social capital (connections and trust between residents) in a region, the less severe some issues become. This result holds even after removing the effects of regional convenience and demographic composition.

We are building a regional database in Totsukawa Village, Nara Prefecture, which has a different socio-economic situation. In the future, in addition to enriching and analyzing the database, we will also hold a series of workshops using local data as a support tool to deepen local understanding and discuss prospects. We plan to examine how this will affect autonomy and regional behavior.

## Significance of the research and Future perspective

There are few opportunities for residents and stakeholders to understand and discuss local issues and potential local values objectively. Additionally, there are only a few databases available at the spatial level, where human relationships in areas such as neighborhood associations and villages have a significant impact on people's lives. By building a practical model that uses regional databases as a support tool to stimulate self-governance capabilities, we can lead to solutions to the issues faced by Japan and local communities.

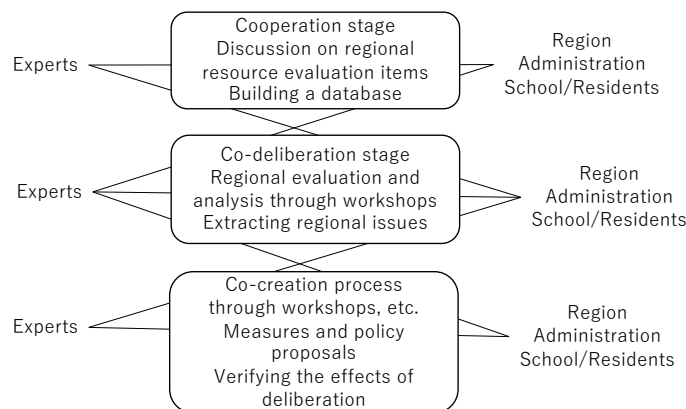


Figure1: Co-creation process of sustainable communities through construction of local resource database

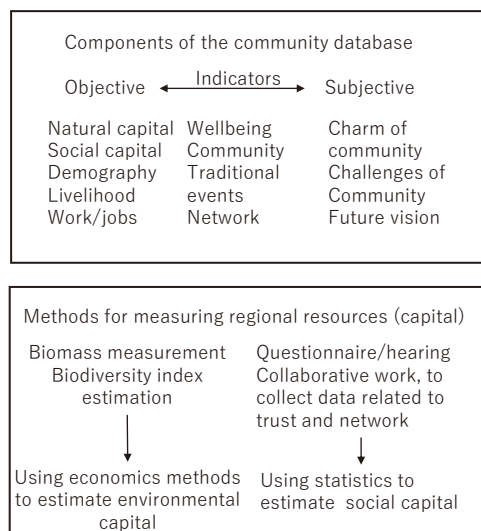


Figure 2: Regional database components and evaluation

Patent

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Keyword

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