Study on people's lives at seawall construction sites before the Great East Japan Earthquake

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Purpose

After the Great East Japan Earthquake, large-scale seawalls were constructed throughout the coastal areas. They improved the safety and brought about changes in the lives of residents in the coastal areas where they had been living before the disaster. There were negative reports that the sea was no longer visible in areas where seawalls were built. More consideration should be taken to their lives when constructing seawalls.
The purpose of this study is to clarify the lifestyles of the people who lived near the construction site before the disaster and to take more appropriate consideration of their lives in preparation for the construction of seawalls in the future.

Design/methodology/approach

In this study, we used the memory data of the residents recorded when we carried out the restoration support activities called the "Lost Homes" Project (LH). The LH project is to bring back the memories of the lost city and pass them on to the next generation by holding workshops to create a 1/500-scale model of disaster-stricken cities. We held workshops (Town of Memories Workshop, TMWS) using the models and interviewed many residents about their lives before the disaster. As a result, we were able to obtain much information on their lives before the disaster.

The target areas of this study are the Unosumai district of Kamaishi city and the central urban area of Yamada Town in Iwate Prefecture. (see Fig. 1). These two districts are where embankment-type seawalls have been constructed. There are two main types of seawalls constructed after the Great East Japan Earthquake: embankment type and upright type. Since the embankment type requires a larger area of land, it may have a greater impact on the lives of residents. In our initial analysis, we extracted data within 50m from where seawalls are currently being constructed in the two districts. Next, by organizing and classifying the data extracted for each area, the characteristics of their lives before the disaster in the vicinity of the seawall construction sites were clarified.

Findings

61 memories were recorded in the vicinity of the seawall construction site in the Unosumai district. According to them, before the disaster, these areas were

freshwater marshes, and people enjoyed the activities such as fishing, swimming, and winter skating.

222 memories were recorded in the vicinity of the seawall construction site in the central urban area of Yamada town. According to them, before the disaster, there were many houses and facilities for fisheries and seafood processing, and popular festivals (traditional events) were held.

Originality
Some of the studies and practices on the seawalls of the Great East Japan Earthquake are related to the local industries, tourism, landscapes, and natural environment considerations, in the construction areas. In addition to these, this study indicates the need to take into consideration the 'leisure activities' and 'traditional events' in the construction area.

Research limitations/implications
Further case analyses are needed as this study analyzes only two areas of the many seawalls that have been constructed. Further investigation is required as no post-construction surveys have been conducted.

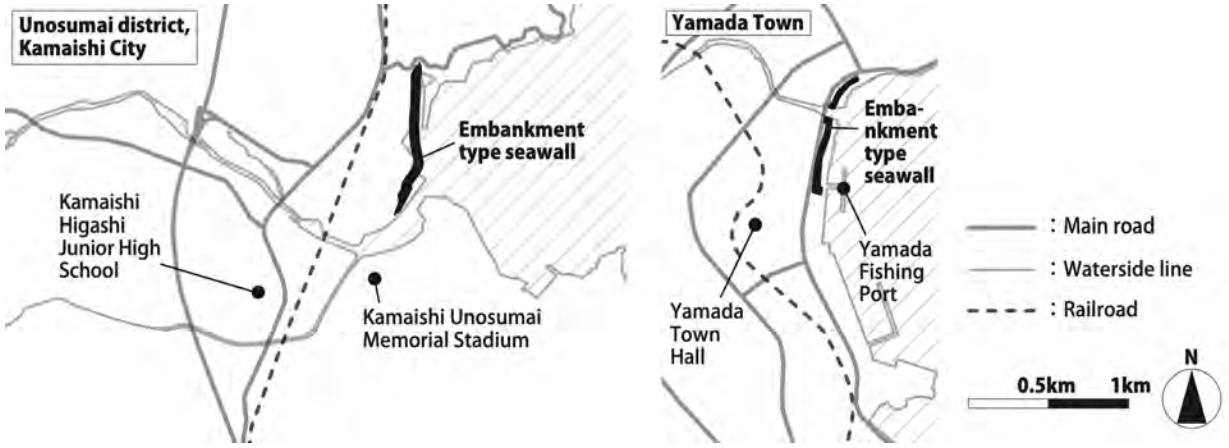

Fig1. Map of the research area

Keywords
The Great East Japan Earthquake; Seawall; Life; Memory.