

Study on Community Planning for Disaster Risk Management
considering with Social Capital and Local Resources

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[SYNOPSIS]

From the experience of the disasters in the past, we realized importance of self-help and mutual-help, and limit of infrastructure. The importance of the disaster prevention plan in the community base like a district is pointed out from problem of localization of the disaster and wide area of the municipality by the municipal merger. In the past disaster, familiar resources in the region such as well, spring water, field and cauldron were helpful, and Social Capital has worked to rescue and saying something evacuation of residents.

Therefore, this study evaluated social capital and local resources in disaster prevention point of view, to clarify the strengths and problem of the region for the purpose of support of disaster prevention in the district. And it summarized methodology of the disaster prevention plan of a district by residents, specialists and local government using the concept of CAPD cycle and risk communication.

In section 2, the causal relationship between the elements with disaster prevention was structurized based on the information acquired from the literature documentation and hearing in Okatu, Tatugou-town, Kagoshima which is a real stricken area, using Interpretive Structural Model method and KJ method. In section 3, the cognitive relation between the neighborhoods was quantitatively investigated as evaluation of social capital for Tonaki-village, Okinawa which is a depopulated old age island region. As a result, although the depopulated region generally have strong connection between the neighborhood, it was shown that is not necessarily right. Furthermore, it proposed six methodology of matching of supporters and vulnerable people considering cognitive relationship between neighborhoods in two situations [weekday daytime, and night-holiday]. In section 4, it created the GIS database about distribution of the disaster prevention resources in the region, such as a well and a field. It was shown that utilizing disaster prevention resources in the case of the annual event in the district contributes to a prior disaster prevention activity as an example Tonaki-village. In section 5, intended for all the district, Kunigami-village, Okinawa, it created a pre-risk assessment map that summarized an exposure and the surveyed physical vulnerability such as road width and wooden houses in each district. In addition, it held workshops and district watching with residents, specialists and local government in Yona, Kunigami-village. As a result, the hazard map of the district has been updated on the map include finer disaster prevention information. Furthermore, the subjects, the measures plan, and the strength of the district which only residents know have been extracted, and objective setting in the district of next year was able to be performed. These results are considered to be Check, Action and a part of Plan in CAPD cycle, it is useful as support of the disaster prevention plan of a district. In addition, it was shown that a pre-risk assessment map is useful as a risk communication tool. In the future, it is necessary to examine the formulation and implementation of the disaster prevention plan of a district.