論 文 内 容 の 要 旨 Abstract of Dissertation

氏 名 Name WIJESINGHA DASANAYAKALAGE UDITHA AKALANKA DASANAYAKA

Natural disasters and climate change become the most common issues and the consequences are extremely diverse. In many parts of the world, landslides/earth slips had become a major type of disaster which is triggered due to natural and human induced reasons. Preserving and enhancing adapting capacity of locals to landslide disasters is a sustainable solution. Few villages are still sustainably surviving and dealing with the damages caused by landslides by adopting to local knowledge and subsequently, passing the knowledge to the next generations. The Policy-makers still rely on mitigation strategies based on scientific approaches. However, many scholars had emphasized the importance of incorporating local knowledge and related practices for disaster risk management. In that context, initially this study investigates the local knowledge in adaptation to mitigate the landslides disaster situations by studying a village in Sri Lanka which is located at the central region of Sri Lanka which is vulnerable for landslide disasters. Other than that rural depopulation in mountain communities is now well acknowledged as one of the salient challenges faced by Japan which made them more susceptible to landslide disasters with intense weather conditions. The degradation of the traditional culture due to the rapid depopulation in mountainous areas leads to the permanent disappearance of the best local knowledge for landslide disasters. Therefore secondly, this study attempts to investigate the community's landslide hazard knowledge in depopulating mountain communities in Japan. This study employed the field surveys, questionnaire surveys and semi structured interviews for data collection. Firstly, the analysis has been conducted for identifying the main components in local knowledge on landslide disasters. Based on the component's results, the questionnaire was developed to measure awareness on those components within the community. Finally, the cultural consensus modelling was utilized in discovering the cultural truths not in individual responses but the degree of sharing of these responses.

In addition, investigating social capital features and their influence on local knowledge transfer of landslide disasters is essential for preserving these valuable local knowledge systems. Thus, this study investigates the social capital features of two mountain villages in Sri Lanka since the communities residing in these villages have effectively adapted to landslide disasters. In-depth interviews and questionnaire surveys were conducted to collect data related to social networks and other social capital dimensions. Social network analysis was conducted to determine the structural dimensions of these communities, and text data coding was performed with the acquired interview data to analyze the cognitive and relational dimensions. Consequently, the

elderly group was found to be the dominant group in transfer of local knowledge within the networks.

Finally ,the research outcomes suggest how the local knowledge-based practices and the consensus of local knowledge had improved the level of disaster adaptation among the community members. The findings of the research indicate how the local knowledge-based practices had enhanced disaster adaptation level of the community. Moreover, the findings presented the influence and importance of social capital in preserving the local knowledge system of landslide disaster.