

A Study on Conceptualization and constructing a prototype of 'Public Housing Ratio"  
in post-disaster phases through a mixed method research

Ch. Kensuke OTSUYAMA (Research Center for Advanced Science and Technology, The  
Univ. of Tokyo, Project Assistant Professor)

[SYNOPSIS]

This study aims at conceptualizing the "public housing ratio" to identify ideal housing supply by government-oriented housing and market-oriented housing. In this research, a convergent design in *Mixed Research Method* that uses both quantitative and qualitative research, is selected. As a quantitative approach, the author employed a questionnaire survey of all households in Kesennuma City, Miyagi Prefecture, and semi-structured interviews to City government officers and residents in public housing were administered. In Kesennuma City, the ratio of public housing to the total number of households increased from 2% to 9% due to the development of disaster public housing. It was observed that the ratio of public housing remains high even if the relocation to disaster public housing from old stocks is promoted. The questionnaire survey showed that the reconstruction rate of detached houses in the relevant area decreased due to the inflow to the public housing from other areas. Furthermore, in the semi-structured interview, differences in travel distance and selection depending on age were observed, and it was pointed out that the organization of residents' associations could differ depending on the disaster public housing sites. Toward the conceptualization of the "public housing ratio", the disaster public housing development for future natural disasters is based on the premise of a mixture of private residential land and disaster public housing, and a mechanism to shorten the distance between the former residential land as much as possible. A challenge is the budget of acquiring land for public housing exceeds the assessed value of the target site. Therefore, one of the next steps would be expanding the possibility of plug-in disaster public housing by analyzing the cost-benefit of land acquisition cost and construction / development project cost.