

Proposals for the settlement and revitalization of the urban climate change-related disaster vulnerability analysis system

1. Since the introduction of the disaster vulnerability analysis system under the 2011 revised guidelines for urban planning, Korea has laid out an institutional foundation for disaster preventive urban planning. The nation made disaster vulnerability analysis mandatory in January 2015 and mapped out guidelines in June 2016, in accordance with the amendment to the Act on Territorial Planning and Utilization.
2. The guidelines on urban climate change-related disaster vulnerability analysis and utilization set forth the scope of targets, the scope of applications, utilization methods, verification and educational institutions (the National Urban Disaster Preventive Research Center), as well as data management and support system.
3. It is estimated that of 161 nationwide municipalities, 58 are implementing the disaster vulnerability analysis system, 26 are due to implement the system, 32 are due to verify the system (26 in 2017 and 6 in 2018), and 77 have completed the system as of June 2016.
4. For the settlement and revitalization of the disaster vulnerability analysis system, it is required to improve accuracy of analysis results, work out proposals to enhance the application of disaster preventive urban planning, establish the analysis support system, as well as integrated platform for urban disaster preventive information, and prepare education system.

Policy recommendations

1. It is suggested to conduct research on the sophistication of analysis methods, including revising analysis indicators to improve accuracy of the disaster vulnerability analysis, changing the spatial unit for analysis, and reviewing disaster types.
2. To expand the application of the disaster vulnerability analysis to disaster preventive urban planning, it is necessary to standardize the business process, and make it mandatory to reflect the outcome of the disaster vulnerability analysis into urban development projects.
3. It is required to come up with the support system to efficiently perform disaster vulnerability analysis and share data, as well as establishing an integrated platform for urban disaster preventive information.
4. It is recommended to develop programs to foster professionals specializing in climate change related disaster vulnerability analysis and adaptation, and bolster education system to activate the

cooperative network of working level officials.

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