Urban resilience design to tackle with climate change for sustainability

At the same time of fast urbanization in the world, climate change has brought with the tremendous impact on urban area, which is most directly and severe. It is very important to carry out the researches on urban resilience design to tackle with the climate change for sustainability. Based on the analysis of the progress of resilience research in the world, the objectives of urban resilience design were put forward in this paper, i.e. under the impact and pressure of climate change, the city still can maintain its basic function, structure, system and status by adjusting and controlling its social, economic and technical system. And, the connotation of the urban resilience design was also provided from the following aspects including (1) Infrastructural resilience, (2) Institutional resilience, (3) Economic resilience and (4) Social resilience. The methodology of urban resilience design was employed in this paper such as the evaluation framework of resilience design, evaluation modeling, building of evaluation indicator system and evaluation of urban resilience by taking the city of Shanghai, China as an example. Accordingly, the key areas of climate change resilience were identified and comprehensive countermeasures including the eco-zoning, eco-planning of resilient city for urban sustainability were put forward as well.

Biography

Xiangrong Wang is currently the Director and Professor of the Center for Urban Eco-Planning and Design in the Department of Environmental Science and Engineering and he is also the Deputy Director of Yangtze River Economic Zone of Fudan University in Shanghai, China. He also serves as the President of the Shanghai Ecological Society and the Deputy Chairman of the Urban Ecological Commission within the Ecological Society of China. In addition, he is a Member of the Shanghai Senate, a Member of Shanghai Municipal Science and Technology Commission, the Chair of Environmental Science and Greening Division of Shanghai's Municipal Construction Commission, an Executive Member of IUCN-CEC. He is currently focusing on his research in the areas of urban ecology and planning, climate change and urban ecosystem research, environmental policy and management, vegetation ecology and natural conservation and environmental assessment and planning. He has published 22 scholarly books and 170 academic papers.

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