

Adaptive Architecture and Urbanism - A Study of Coastal Cities, Climate Change Problems, Effects, Risks And Opportunities for Making Sustainable Habitat

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Abstract : Climate change creating most dramatic and destructive consequences, the result is global warming and sea-level rise, flooding coastal cities around the world forming vulnerable situations affecting in multiple ways: environment, economy, social and political. The aim and goal of the research is to develop cities on water. Taking the problem as an opportunity to bring science, engineering, policies and design together to make a resilient and sustainable floating community on water considering existing/new technologies of floating. The quest is to make sustainable habitat on water to live, work, learn and play. To make sustainable energy generation and storage alongside maintaining balance of land and marine to conserve Ecosystem. The research would serve as a model for sustainable neighbourhoods designed in a modular way and thus can easily extend or re-arranged, to adapt for future socioeconomic realities. This research paper studies primarily on climate change problems, effects, risks and opportunities. It does so, through analysing existing case studies, books and writings published on coastal cities and understanding its various aspects for making sustainable habitat.

Keywords : floating cities, flexible modular typologies, rising sea levels, sustainable architecture and urbanism

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