

Amphibious Housing: From Autonomous To Planned Climate Change Adaptation

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Abstract

The literature on climate change adaptation distinguishes between autonomous adaptations, which are adaptations implemented without a conscious recognition of why the adaptation is needed, and planned adaptations, which are implemented in a manner that recognizes the role of climate change in driving the need for adaptation. Many areas of the world impacted by flooding have a history of autonomous adaptation, such as housing stilts or relocation, to help safeguard health, wellbeing and property from flood related damage. Amphibious housing, one such originally autonomous climate change adaptation, presents further potential as a planned adaptation, and is currently and will be implemented in a planned manner in various locations globally. This highlights the need to further examine the complex process of applying an originally autonomous adaptation in a planned fashion. There is an opportunity to learn from this transformation from autonomous to planned adaptation, and this learning process can improve the overall climate change adaptation process both for amphibious designs and in general. This is particularly important in situations where autonomous adaptations originally developed in one region (e.g. amphibious housing in the Mississippi Delta), will be applied in a planned fashion in other regions (e.g. Mekong Delta). This paper reviews the general advantages and disadvantages of autonomous and planned adaptation. Advantages and disadvantages may take many forms including improved or diminished adaptive equity, loss of hidden adaptations, and/or improved economic efficiency of the adaptation process. The goal of this review is to create a lens through which the transition of an adaptive strategy from autonomous to planned can be viewed that will allow for a clearer understanding of what is lost or gained in such processes.

Keywords: climate change; autonomous adaptation; planned adaptation; amphibious housing; flood risk reduction

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