

# UNDERSTANDING URBAN DISASTER RESILIENCE THROUGH A MORPHOLOGICAL APPROACH: A CASE STUDY OF SETTLEMENT UPGRADING AND FLOOD RESPONSE IN BANGKOK

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## ABSTRACT

A city can be difficult to analyse. However, approaches such as urban morphology (the study of urban form) can assist with understanding what the city is by reflecting how urban form is influenced by interdependent social, governance and economic factors that contribute to building resilience. To illustrate how urban morphology can be used as an approach for understanding disaster resilience in cities, a case study of informal settlement upgrading impacted by a flood in Bangkok, Thailand is presented. A study of the Bang Bua Canal in Thailand's capital city is used throughout the paper to demonstrate how disaster resilience can be analysed by using four morphological layers. The paper identifies key dimensions of resilience within each morphological layer. The dimensions highlight patterns of social, governance and economic influence on the built environment. Generalisable lessons from using morphology as an approach for understanding disaster resilience include: that resilience can be a way of building upon the existing capacities of low-income neighbourhoods; the concept is a positive when it helps neighbourhoods 'bounce forward' and that, crucially, resilience can act as a bridge between development and disasters.

**Key words:** disaster, resilience, urban morphology, Bangkok, upgrading