

ESCAP Technical Paper

**Policy Options and Strategies  
for Effective Implementation of  
the Hyogo Framework for  
Action in Asia and the Pacific:  
Innovative Strategies for Flood  
Resilient Cities**

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**Author :**

Ms. Eva. G. Abal, Consultant  
Information and Communications Technology and Disaster Risk Reduction Division  
Economic and Social Commission for Asia and the Pacific  
United Nations Building, Rajdamnern Nok Avenue  
Bangkok 10200, Thailand

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Prepared by Eva. G. Abal \*

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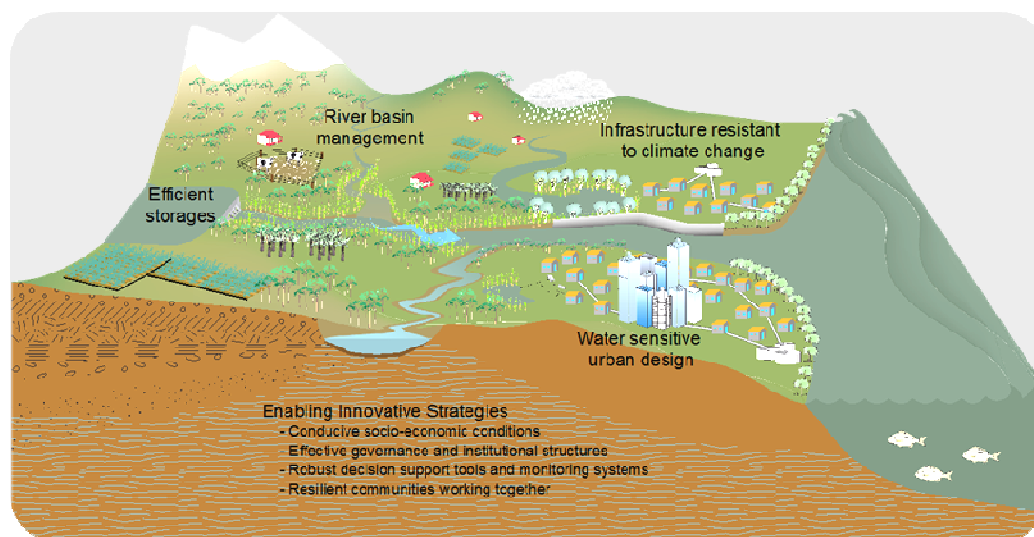
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**Author's E-Mail Address:** [escap-idd@un.org](mailto:escap-idd@un.org)

# **Policy Options and Strategies for Effective Implementation of the Hyogo Framework for Action in Asia and the Pacific: Innovative Strategies for Flood Resilient Cities**

An analysis and synthesis report



**ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC**

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For further information on this publication, please contact:

Mr. Xuan Zengpei  
Director  
Information and Communications Technology and Disaster Risk Reduction Division  
ESCAP  
Rajadamnern Nok Avenue  
Bangkok 10200, Thailand  
Tel: (66-2) 288-1601  
Fax: (66-2) 288-1085, 288-3012  
E-mail: [escap-idd@un.org](mailto:escap-idd@un.org)

## **PREFACE**

This report is an analysis of various studies and collaborative work undertaken by ESCAP on comprehensive frameworks of flood management including those for urban areas. The report comprises of four parts. The first part consists of an overview of issues and challenges in urban flooding which reviews socio-economic impacts of flooding on urban areas and identifies related issues and challenges in management of flood risks in the Asia-Pacific region. These experiences and good practices points to the need to formulate policy options and strategies for effective flood management to sustain economic growth and these increasingly more important economic centres as the focus of the second part which aims to synthesis experiences of recent developments of innovative strategies to form the basis for the formulation of possible frameworks for the development of innovative strategies for effective urban flood management. The third part consists of case studies of innovative strategies for effective flood management. Part four provides policy options derived from collaborative work on urban flood management and out comes from the regional consultation at the expert group meeting.

The report introduces the concept of ‘adaptive management framework’, which could be applied as a strategy to minimize urban flood related disasters. Application of the framework improves the understanding of the situation, effective use of resources and flexibility required to deal with varying socio-economic situations.

‘Transitioning towards water sensitive cities’ highlighted in this report is a framework which offers a window of opportunity for urban development planners to make informed decisions on investments, capacity development and institutional reforms, leading towards sustainable urban water management.

Based on the analysis of existing knowledge on urban flood management and out comes of the expert group meeting, the author presents a number options for effective urban flood management which can contribute to the implementation of the Hyogo Framework for Action in Asia and the Pacific, while identifying some key characteristics of flood resilient cities in the region. In the process of compiling this report, the author had used material from the expert group meeting on ‘Innovative Strategies for Flood Resilient Cities’ as well as from other published and unpublished papers in the areas of urban flooding, flood mitigation and flood resilient cities.

## ABSTRACT

The report reviews socio-economic impacts of flooding on urban areas and identifies related issues and challenges in management of flood risks in the Asia-Pacific region. These experiences and good practices point to the need to formulate policy options and strategies for effective flood management to sustain economic growth in these increasingly more important economic centers. To this end, the report reviews experiences of recent developments of innovative strategies and synthesizes them to form the basis for the formulation of possible frameworks for the development of innovative strategies for effective urban flood management.

The report also provides an overview, which draws attention to the severity of floods and vulnerability of cities in the Asia Pacific region. Further, it discusses the link between development and flooding in urban areas and emphasis the importance of managing risks in the face of climate change adaptations.. Use of the adaptive management framework approach and Integrated Water Resources Management are addressed as key constituents of mitigate urban flooding.

The report identifies the importance of an enabling environment which includes among others, governance, institutions and policy frameworks to mitigate disasters in general and urban flooding in particular. The report brings out case studies from the region to emphasis the importance of understanding different development scenarios in policy formulation for effective urban flood mitigation.

Finally, the report discusses the conceptual framework and implementation of 'water sensitive cities' as an innovative strategy for flood resilient cities. This is further strengthened by case studies of good practices for effective urban flood management using material from the expert group meeting on Innovative strategies towards flood resilient cities in Asia-Pacific and other research work conducted in the region.

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