

Flood damage and risk assessment for Ho Chi Minh City

FLOOD RISK IN HO CHI MINH CITY

Ho Chi Minh City (HCMC), located in the delta area of the Saigon and Dong Nai rivers is Vietnam’s largest city and an important economic, trade, cultural and research centre of the country. With its seaport lying at an important intersection of international maritime routes, HCMC is situated at the heart of South-East Asia and has become a traffic hub for the region and an international gateway.

Urban flooding has become a wide-spread phenomenon and a major concern in Ho Chi Minh City in recent years that has been accompanying the city’s rapid growth. Especially since the mid of the 1990s, the amount of flooded locations, flood frequencies and flood duration has steadily increased and has caused substantial economic and social losses, such as damage to infrastructure and assets, water pollution as well as traffic jams.

Given its distinct topographical location in the low-lying delta area as well as the projected changes in climate and urban expansion, flood risk is expected to further increase, putting a major pressure on the city’s development.

As the vast majority of the growing population will settle in low-lying and thus unfavorable areas, millions of people could be at risk of flooding.

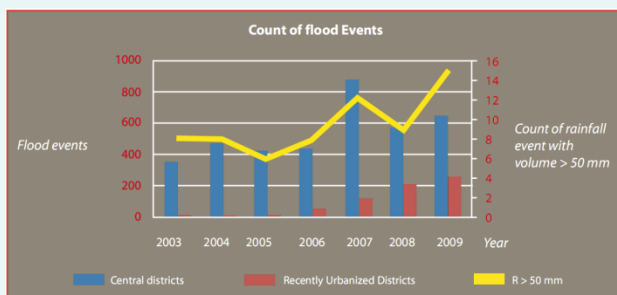


Figure 1: Count of flood events in HCMC

APPROACH

To gain further insights into potential flood damages and risk, a cooperation with the HCMC University of Technology is currently being established. Aim of the cooperation is to develop a flood damage model for HCMC.

The model shall be used to estimate current and future flood damages and risk, taking both socio-economic developments and climate change into account. Moreover, it shall provide insights into the effectiveness of various adaptation strategies.



Figure 2: Urban flooding in HCMC

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