

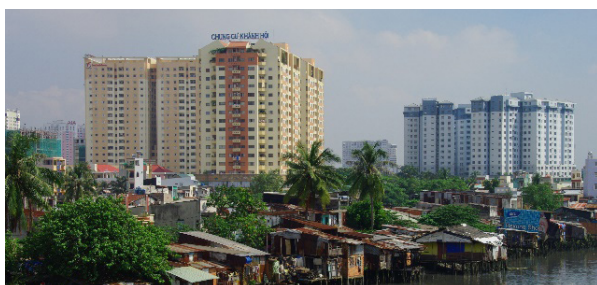
DECIDER – Decisions for the integrative development of flood risk mitigation strategies

Client II – International partnerships for sustainable innovations

As a result of intense urbanization processes and the effects of climate change, the IPCC has warned of a rapid increase in the flood risk for coastal megacities, especially in Asia. Ho Chi Minh City, Vietnam's economic engine and largest city, is a serious example of this. Global comparison shows that it is one of the most severely affected coastal cities in the world. With the aim of developing and implementing sustainable adaptation paths, the German-Vietnamese project "DECIDER" creates an integrated assessment of future risk trends at the interface between climate change impacts, urban growth and socio-economic upheaval as well as a comparative assessment of potential measures for reducing flood risk.

Adaptation paths: a long road ahead

Floods are becoming an increasing problem for the sustainable development of cities and regional economies. In Vietnam and especially in the greater Ho Chi Minh City region, the forecast increase in pluvial and fluvial flood events, coastal storms and sea-level rise is a cause for concern. Faced with these increasing risk trends, as well as deep climatic and socio-economic uncertainty, the Vietnamese authorities and other stakeholders are struggling to develop, analyse and evaluate appropriate and workable adaptation measures. While various options are currently being discussed by the authorities in Ho Chi Minh City, the decision-making process is hampered by significant knowledge gaps and a lack of practical planning aids.



Social spatial disparities, growth and flood risks in HCMC.

The goal of "DECIDER" is the knowledge-based design, evaluation and implementation of dynamic adaptation paths in the context of increasing flood risks in changing rural-urban systems. The project uses Ho Chi Minh City and its hinterlands as a pilot project. However, it also aims to transfer results, methods and instruments to other coastal cities shaped by similar pressures of adaptation such as Bangkok, Dhaka or Jakarta.

"DECIDER" develops and tests innovative methods for estimating future risk paths. Not only does it take future changes of flood hazards into account, but it also considers urban growth and thus the exposure of future infrastructure as well as changing patterns of social vulnerability. This is done by combining qualitative scenario methods with quantitative modelling. Alongside this, the project also develops and tests innovative and integrative methods for the multidimensional evaluation of different adaptation options. These are designed to go beyond conventional and short-reaching concepts such as purely economic cost-benefit calculations. Aspects of social acceptance, political feasibility or environmental compatibility are increasingly being represented in order to find long-term solutions for adaptation governance.

Transdisciplinarity and usable knowledge

"DECIDER" relies on transdisciplinary cooperation between Vietnamese and German partners. One of the project's major priorities is the integration and development of previously eclectic points of view on established adaptation options such as large-scale solutions such as dikes vs. decentralized measures at the building level, green vs. grey infrastructure, formal vs. informal adaptation mechanisms. The project will provide a coherent framework for the comparative analysis and evaluation of the strengths and weaknesses of different options. The evaluation methods and results will be transferred to a decision-making support tool. Information about adaptation options has never before been compiled in one place. Instead, stakeholders act on the basis of their own logic. Synergies or conflicts between specific adaptation measures are, as yet, largely unknown. The decision support tool (DST) is designed to help flood management and urban planners, policymakers,

consultants and non-governmental organizations to design adaptation pathways by providing and evaluating information on (future) flood hazards, vulnerabilities, possible adaptation options, their legal frameworks, impacts, costs and possible synergies and conflicts.

Cooperation with users

To ensure its long-term use, the DST is to be developed in cooperation with future users such as public authorities, companies and civil society. “DECIDER” will also facilitate the use of the DST in other cities that face similar adaptation pressures. Appropriate measures are to be taken during the project to specifically promote this transfer. This way, “DECIDER” can make a lasting contribution to the successful reduction of flood risk in coastal cities all over the world. The project thus supports the achievement not only of global disaster reduction objectives, but also of climate change adaptation and, ultimately, sustainable development in general.



Flood in Ho Chi Minh City.

Funding initiative

Client II – International partnerships for sustainable innovations

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