

## Fact Sheet 13 Knowledge Cluster Building in the South of Vietnam

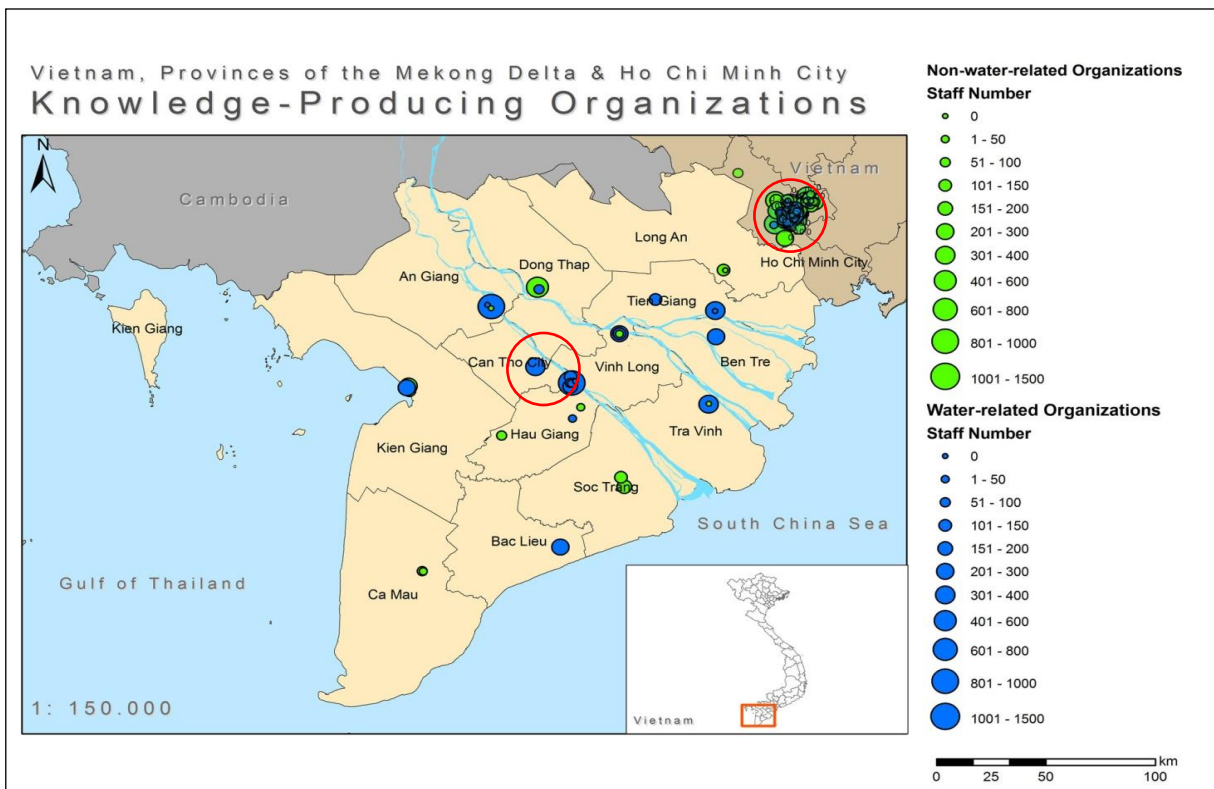
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Knowledge constitutes an important factor for the development of sustainable solutions and for water resources management in the Mekong Delta. One significant aspect in this regard is how knowledge production is being organised.

Looking at the south of Vietnam, Ho Chi Minh City (HCMC) represents one of Vietnam's major emerging knowledge clusters, followed by the much smaller cluster of Can Tho City in the Mekong Delta. Knowledge clusters occur as a result of policy decisions, the availability of well-educated people, the accessibility of infrastructure and the presence of knowledge-producing organisations such as universities, colleges, research institutes, government research agencies and knowledge-intensive companies.

Forming clusters of knowledge-producing organisations and industries in certain regions increases productivity and enables innovation due to ready access to shared infrastructure, technologies and skilled employees. Moreover, clusters bear the opportunity for organisations to compare and enhance their practices by sharing ideas and experience. This not only prevents the duplication of research activities but also drives innovation. In the same way that economic activities tend to cluster, knowledge-producing organisations exhibit similar trends in respect to research and educational activities. By focusing on the innovation capacity of organisations, knowledge clustering contributes to the economic growth of a region in the longterm.

### Knowledge-Producing Organizations in Mekong Delta Provinces and Ho Chi Minh City



Ho Chi Minh City and Can Tho City were identified as major agglomerations of knowledge-producing organisations. The method of GIS-based mapping took the geographical proximity of knowledge-producing organisations such as universities and research institutes as the determining factor (see map). The map shows the spatial distribution of knowledge-producing organisations and their personnel for Ho Chi Minh City and the Mekong Delta.

#### Knowledge Clusters in Ho Chi Minh City



Photograph: T. Bauer (2009)

In previous studies, cluster building focused mainly on economic sectors such as seafood or textile clusters. The research visualised spatial patterns based on data sets concerning the density of firms, employment numbers or company turnovers. In contrast, this research focused on the water sector as a multi-disciplined field of study. The map classifies knowledge-producing organisations according to the density of organisations, staff numbers and their activities related to the water sector.

Based on the concept of Integrated Water Resources Management (IWRM), respective Vietnamese knowledge-pro-

ducing organisations are in charge of developing concepts, methods or information systems in order to respond to the occurring global and national challenges with which Vietnam is confronted. Further, companies are necessary for the design and application of new technologies in the field of water resources management. Embedded in a knowledge-producing milieu, all organisations benefit from exchanging experiences. Innovation processes will occur rapidly due to knowledge spillovers between research institutes, universities and respective companies.

For the investigated region, Ho Chi Minh City and Can Tho City, both play a major role in Vietnam's effort to build a knowledge economy. The cities turned out to be predestined areas for fostering the development of water-related research and education clusters. This is due in part to the given proximity of knowledge-producing organisations and to the fact that it goes back to the pressing necessity to respond to water-related problems and hazards in the region.

#### Further Reading

BAUER, T. (2011) *The Challenge of Knowledge Sharing – Practices of the Vietnamese Science Community in Ho Chi Minh City and the Mekong Delta*. Hamburg, Muenster, London: LIT-Verlag. (forthcoming)

EVERS, H.-D. & T. BAUER (2011) *Emerging Epistemic Landscapes: Knowledge Clusters in Ho Chi Minh City and the Mekong Delta*. In Menkhoff, T., Evers, H.-D., Yue Wah Chay & Eng Fong Pang (Eds.) *Beyond the Knowledge Trap-Strategizing Knowledge as an Engine for Asia's Growth*. World Scientific Publishing, New Jersey, pp. 239-276.

Tatjana Bauer studied Southeast Asian Studies at the University of Bonn, and obtained her PhD from the Center for Development Research (ZEF), University of Bonn. She has done extensive field research on knowledge governance in Vietnam.  
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