

Hanoi University of Natural Resources and Environment in collaboration with Delft University of Technology and Utrecht University would like to invite you to attend:

Guest Lecture Dr. Maarten van der Vegt

Thursday October 10th, 14:00-15.30

Room B702, Hanoi University of Natural Resources and Environment

Content:

Developments and challenges in the Mekong Delta: Insights from the Rise and Fall project

Dr. Maarten van der Vegt*, Utrecht University

In this presentation Maarten will give an overview of the main findings of the Rise and Fall project, with a focus on the dynamics of the estuarine channel network. The Vietnamese Mekong Delta (VMD) is facing several challenges for the coming decades. He will discuss three of these. First, due to overextraction of groundwater resources there is salinization of the groundwater. Second, the combined effects of groundwater extraction and loading due to buildings causes fast subsidence. Present day subsidence rates are much larger than sea-level rise rates. Lastly, upstream dam construction and sand mining in the main channels causes channel bed and bank erosion. Due to this the tidal range increases, causing increased flooding risks, and salt water intrudes further upstream. It is expected that in the coming decades the effects of groundwater extraction and the sediment deficit in the system are having a larger impact on water quality and safety than climate change and sea-level rise have. These insights call for a good water and sediment management in the delta.

* Dr. Maarten van der Vegt holds an MSc in Meteorology and Physical oceanography (2001) and a PhD in coastal morphodynamics (2006). Since 2007 he is working as an Assistant Professor at the department of Physical Geography at Utrecht University, the Netherlands. He studies the dynamics of tidal deltas and barrier coasts, with a focus on the effect of tides on, for example, salinity intrusion and morphological evolution. His research area spans from the Dutch delta and Wadden Sea to deltas in China, Indonesia and Vietnam. In the last 5 years he was involved in the Rise and Fall project, in which he led the research on salinity dynamics in the estuaries of the VMD.