Capacity Building: Hydraulics & Coastal Engineering

in Vietnam within an ICZM frame

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The strength of inner dike slopes cannot be tested on a small scale and tests have to be done on real dikes. Realistic overtopping volumes are simulated with a Wave Overtopping Simulator in the same way as is done in the Netherlands. (photo: G.J. Schiereck)

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Summary

Vietnam has a long coastline including two large river deltas and about 20 smaller estuaries in between. Much of the country is a "coastal zone". The need for education in coastal issues in Vietnam became evident. Two decades ago a coastal education programme between Vietnam and the Netherlands began. This cooperation resulted amongst other things, in the establishment of a coastal engineering education faculty at BSclevel at the Water Resources University (WRU) in Hanoi in the period 2001 – 2005. Staff members were trained and more than 50 BSc students graduate annually. In the second phase of the cooperation (2005-2009), the focus shifted to research in two fields: sea dikes and estuaries. In the framework of these two fields of applied research: MSc education and research in Hanoi and PhD training in Delft, the Vietnamese knowledge base of coastal engineering and ICZM is strengthened. Continuously increasing the educational level parallel with the strong economic growth is the desire of Vietnamese authorities. This will provide the answers needed to address global change in a sustainable way.



Coastal dynamics play an important role along the Vietnamese coastline. Here in Nam Dinh, part of the Red River Delta coast, complete villages have disappeared due to coastal erosion. (photo: G.J. Schiereck)



Laboratory wave flume: tests to study the reduction of damages of wave overtopping, by Vetiver grass. (photo: H-J.Verhagen)