## Sustainable post tsunami restoration of Aceh, Indonesia

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**Tsunami destruction Banda Aceh**, satellite images before and after the 2004 Tsunami. (photos: © United Nations Environment Programme © Digital Globe)

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## Summary

The Indian Ocean tsunami of 26<sup>th</sup> of December 2004 hit the Province of Aceh in Indonesia hard, causing massive casualties and destruction of houses and infrastructure. An Indonesian - Netherlands consortium (Sea Defence Consultancy) developed a strategy for coastal restoration focusing on sea defence, flood protection, multifunctional refuge buildings and a regional early warning system (EWS). Formulation of a restoration strategy in a post – disaster area faces many challenges. By adopting an integrated approach using the knowledge and experience of different disciplines, a coastal restoration strategy can be developed in which prevention and adaptation measures are combined. This comprehensive strategy integrated the results of vulnerability assessments, base-line surveys, modelling and flood mapping, to aid disaster management and raise public awareness. The consortium worked closely with local government, NGOs and local research centres in the formulation of the restoration strategy.

The strategy included a number of different guidelines and tools, which were adopted by national government departments. Sustainability is achieved by working with local governments and community. A series of consultations were organised during the different phases of the project. The strategy formed the basis for the formulation and design of infrastructure investment packages with a value of about US\$ 120 million. These are currently being developed and support the people of Aceh and Nias in the establishment of a safe habitable environment, enabling economic recovery and sustainable development.

## Indonesia



**Public consultation - Local Government and Community**: leading to demand-based, integrated strategies for a sustainable restoration of Aceh and Nias, combining four fields of activities Tsunami Early Warning System (EWS), Flood Management, Coastal Defence and Socio-economic issues and Institutional arrangements.



Sea Defence Consultancy (SDC): design for escape building (above), and constructed escape building in Banda Aceh (below). (source: SDC)