## SUSTAINABLE COASTAL DEVELOPMENT, DUTCH EXPERIENCES AND VISION

Hans Heupink<sup>1</sup>,

Provincie Zuid-Holland, Manager Coastal Program Afd. Water, kamer D429, Pb 90602 2509 LP Den Haag, The Netherlands Email: h.heupink@pzh.nl

The province of Zuid-Holland has high ambitions to develop its coastal region in an effective, climate proof and sustainable manner. In provincial policy-documents a broad interpretation of sustainability is used: people, planet, profit; or more specific: social, ecologic, economic.

Measuring success in terms of sustainability is quite common on local-level and project-level. Zuid-Holland's coastal resorts received quality awards for their efforts in sustainable tourism. Every major project intervention in the coast is accompanied by monitoring and evaluation programs. On a regional level (for the coastal region of the province) however, it's more difficult to measure changes in sustainability. In a recent try-out with the scoring methodology of the "Sustainability Development Indicators" of the InterregIVb project SUSTAIN it turned out to be in particular difficult to find economic data specific for the coastal region. Data are mostly aggregated to regions where the coast is only a part of. The lack of specific economic data for the coast motivated the policy makers involved in the National Deltaprogramme, to start a research project on the "Power of the Coastal economics". This research reveals that most specific coastal economic sectors are dropping behind the national economic development, that the coastal population is older and that labour participation is lower than the average in the Netherlands. These are rather worrying figures for a region that the province regards as their "golden edge". Interventions are needed to keep the coast attractive!

Awareness of the situation is extra urgent because there are some essential changes coming into the Dutch coastal development policy. Until recently, coastal safety has been the dominant and determining factor in the Dutch approach to coastal development. This approach has led to specific, typical technical Dutch planning strategies for the coast. These strategies may be logical to the Dutch, but can obstruct views on other possible developments. And the question is how tenable the strategies are in the new situation.

In Zuid-Holland safety works include the nourishment of the coast by artificially raising huge amounts of sand both under water along the coastline, as well as on the beach, forming new rows of dunes. A recent innovative method is the realisation of the so-called Sand Motor: a manmade peninsula of sand, which will disperse along the coast for the coming 20 years, reinforcing the coast in a more or less natural way. This shift to working with nature rather than against it, is a new and important perspective for the Dutch coastal development. The Sand Motor represents a new way of looking at coastal defence methods where the interests of water safety are combined with those of ecology, landscape and recreation.

A secondchange in the Dutch coastal practice between past and future is that within a few years the major safety works will have been completed. Water safety of course continues to be an essential aspect in planning the Dutch coast, especially in the light of climate change and rising sea levels. However, till 2050 there are no new radical plans for major safety projects that will alter spatial conditions along the coast. Coastal protection will consist mainly of maintenance and management. This maintenance and management guarantees safety, but does not automatically address the demand for more space for recreation, better-equipped seaside resorts, nature reserves, etcetera, in the coastal zone.

In the densely populated province of Zuid-Holland a better integrated coastal design is required to improve the social, economic and ecological climate. Integrated designs should look at how the coast and coastal zone can increase its value, by a higher spatial quality in terms of landscape, ecology, economy, exploitation, tourism, cultural heritage, energy, and etcetera. In the quest to new designs and strategies the province involves professionals as well as citizens and local stakeholders.

An example of the professional involvement is the international coastal design workshop that Zuid-Holland initiated in June 2012 to explore different approaches of the coast and coastal zone with less emphasis on safety. The assumption was that examples of coastal development in other European countries could be beneficial to the Dutch coast. Will they lead to other, refreshing insights in a sustainable future of the Dutch coast? Will they lead to a higher standard or other form of spatial quality? What can Zuid-Holland learn from other regions and countries? Can the coastal strategies be redeveloped to higher standards by examples of other European practices with a different cultural background? The workshop delivered suggestions for new designs and refreshing insights about the strengths and weaknesses of the coast of Zuid-Holland. The relative cold climate hinders competition with warmer region for the number of international visitors. Surprisingly a lot of the current local strategies to build more of the same apartments, shops and marinas are pursuing exactly this competition. A more fruitful approach would be to strengthen still existing qualities like the quiet long stretch of the sandy coastline, the contrasts between the resorts and the natural areas and the natural areas.

In sub-regions of the coast a more bottom up orientated approach is going on. With citizens and local stakeholders, a common vision on green infrastructure and a business model for eco-system services in the dune and coastal area are being developed (Green Infrastructure for Tomorrow- Together - GIFT-T, INTERREG IVB-programme). Involving local knowledge and activating the energy of the local communities is essential for new successful strategies on a sustainable coastal development.