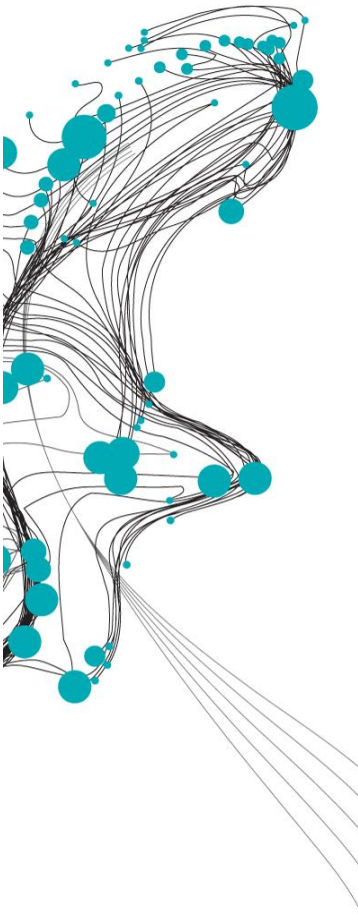


# Stakeholder perspectives on the effects of beach hut development along the Dutch coast

A qualitative study to assess scenarios for the preservation of important coastal dune functions



Beach hut constructions (figure 1) along the Dutch coastline are on the rise. This type of development brings controversies between various stakeholders as some stakeholders support this development for financial reasons while others anticipate deterioration of coastal dune functions such as flood protection, nature and recreation. These differences in perception create an environment in which coastal managers are unable to properly respond in terms of regulations for the management of beach hut development. Therefore this study aims to investigate how the different perspectives regarding beach hut development that are held by the different actors influence the actions taken by the governmental institutions. To this end I elicit the perspectives of relevant stakeholders.

For this study, stakeholders relevant to the development are identified and interviewed to obtain information about their perception of the coastal dune system. The information is used to structure the system with its complexities according to each stakeholder, i.e. mental modelling. To structure the complexity of the system means that different aspects of the coastal dune system are identified and linked together to understand how the system behaves when certain actions are taken. For this purpose, a mental model construction technique was applied in the form of Causal Loop Diagrams (CLDs). With the CLDs the links between different aspects within the system are visualized (figure 2) and the probable causes of dune function deterioration can be identified. Ultimately, the CLDs are used as a tool to create a scenario in which all of the dune functions remain preserved, which is the goal for coastal managers.

The study was focused on the coastal region of Zeeland as beach hut development in this region is taking place in close proximity to nature protected areas and dunes with flood protection function.

The results showed that Zeeuwse Milieufederatie and water board Scheldestromen have concerns that the nature conservation efforts are inadequately enforced, which contributes to the deterioration of the nature function within the system. To reach a system scenario in which all of the functions are maintained, season length for the placement of beach hut constructions should be maintained or even shortened, and nature conservation policy requires bolstering. Also capping the financial benefits of developers can also lead to a balanced system scenario.

Although the accuracy of this analysis may be limited, due to a lack of involvement of certain stakeholders and a quick validation process, the results of this study gives insight to the coastal managers on how policies and actions influences other aspects of the coastal dune system.

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Figure 1: Beach huts along the Dutch coast

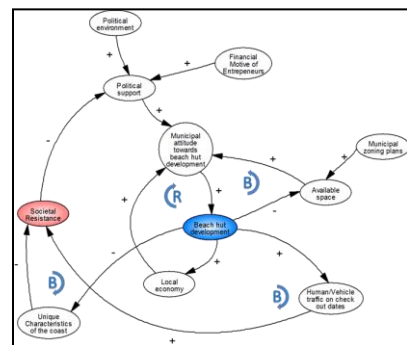


Figure 2: Mental model of the municipality