Options for socio-economic developments in the trilateral Wadden area

This study provides an overview of the recent demographic and socio-economic developments in the entire trilateral Wadden region at the very detailed spatial scale of municipalities bordering the Wadden Sea. We find that the area suffers from population decline and an aging population due to selective migration processes. As a result the potential labour force is declining. The number of jobs in the Wadden region is declining and unemployment is relatively high. The regional economic structure of the trilateral Wadden area is very divers and differs substantially from the national economic structure. However, also within the Wadden area there are substantial economic differences over space between the islands and the coast, but also between neighbouring municipalities within the coastal areas. For a vital regional economy economic development should be targeted to activities that do not have a negative effect on the ecosystem and can be employed at an economic and spatial scale that fits with the natural environment and requires the type of skills and jobs of the inhabitants. Our analysis shows that within sectors like agriculture, fishing, tourism and personal and business services there are many types of activities that fit within these limitations to foster a vital regional economy in the Wadden region. In addition to that, jobs can be created farther away from the coastal zone as long as these jobs are created in urban areas within a reasonable commuting distance. Large scale industrial activities in the Wadden area should be discouraged and if necessary only be allowed in the present industrial zones if the potential damage to the ecosystem is manageable. Based on these pressures and management challenges, insight is needed in the combined ecological and socio-economic (valuation) system of the whole Wadden Sea in order to design science-based management support systems and monitoring. The essential characteristics of this approach are strong interdisciplinarity and require a focus on aspects of scale and cumulative processes to keep track and manage the impacts of autonomous processes and human activities on the unique natural values of the Wadden UNESCO World-heritage site.