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FPS Economy - Continental Shelf

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What is the role of the economy in marine management, i.c. sand extraction?

The extraction on the Belgian part of the North Sea is an example of a well-organized, closely monitored and intensely studied activity. The Continental Shelf Department is responsible for the management and organization of the licenses, and monitors the activities from all extraction vessels with a electronic monitoring system, organized by BMM Oostende. The ecological impact on the benthos is studied by ILVO since many years and the impact of the overall sand extraction on the seabed is monitored by the Continental Shelf department with multibeam echosounders since 1999. The long time series of detailed terrain models have revealed and established the non-sustainable character, the linear relation between the extracted volumes and the change in topography, and the local impact on the seafloor. Up to now, the national legislation limits the extraction to an arbitrary depth of 5 meters under the seabed model defined in 2005. The department is currently defining a new reference surface, based on the nature of the seabed, the geological structure and marine ecology. This new surface aims to further limit the negative impact of the extraction on the marine ecosystem. But, with the growing ecological constraints (Marine protected areas – MSFD), the future of the aggregate extraction on the Belgian part of the North Sea seems very unsure. Since more than a decade, the available volume of sand is rapidly decreasing, much more due to environmental regulation and pressure from other users of the marine space, than the extraction itself. This trend greatly limits the prospects of this economic sector. To secure a limited available resource in the future, a more balanced management policy is required that takes in consideration the economic and social importance of the sector.

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