Social importance of the North Sea

Baseline measurement for the Marine strategy framework directive (2010)

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Presentation content

- Background
- Research questions
- Selection of user groups
- Definition Social Importance
- Analytical framework
- Methodology
  - 20 Indicators, Baseline measurement and Assessment
  - Average Qualitative score of baseline measurement
- Conclusion
MSFD; Background of assignment

- To develop a strategy to realise a good environmental status (GES) of the North Sea ecological, economical, social and cultural interests need be taken in consideration.

- In the Marine Strategy Framework Directive (MSFD) a social analysis has to be conducted to provide social decision making information in three phases: 1) the initial assessment, 2) the establishment of environmental targets and 3) the programme of measures. The directive does not specify what is meant by a social analysis nor which social decision making information needs to be provided nor how this information should be produced.

- The Dutch Ministry of Infrastructure and the Environment translated this 1st phase initial assessment or 'baseline measurement' into “an analysis of the social importance of the North Sea”, which was carried out by LEI/Wageningen UR in 2010. (specifically not an economic analyses)

- The assignment was very constrained by budget and timespan.
Research questions

- Which indicators are suited to ascertain the social importance of the North Sea for the main users/user groups and coastal residents in the Netherlands?

- On the base of the selected indicators: what is the current social importance of the North Sea for the main users/user groups and coastal residents?
Selection of 3 main user groups of the North Sea

The report describes a baseline measurement of the social importance of the North Sea for

- coastal residents (coastal communities/municipalities)
- fishers (fishing communities/municipalities)
- recreational users in the Netherlands.

- Other user groups like sand, oil, gas extractors seem to have more an economic than a social interest in the North Sea. (Employment is an indicator in the economic analyses).
Definition of social importance of the North Sea

- The **social** importance of the North Sea refers to the relationship or connection between these users on the one hand and the North Sea and the marine environment on the other.

- So starting point is 1) social relationships between and within user groups and 2) their connectedness with the North Sea.
## Analytical Framework 1)

Values/Interests of a space in the North Sea

<table>
<thead>
<tr>
<th>VALUES</th>
<th>Economic</th>
<th>Social</th>
<th>Ecological</th>
<th>Cultural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility value</td>
<td>1a</td>
<td>1b</td>
<td>1c</td>
<td>1d</td>
</tr>
<tr>
<td>Experiential value</td>
<td>2a</td>
<td>2b</td>
<td>2c</td>
<td>2d</td>
</tr>
<tr>
<td>Future value</td>
<td>3a</td>
<td>3b</td>
<td>3c</td>
<td>3d</td>
</tr>
</tbody>
</table>


- **Social capital**: Quality social relationships on and between different levels and the possibility to arrange advantages / goals through these relationships.
Social values/interests of the North Sea

- **Social Utility value** is about equal access, fair division of costs and revenues; and participation in decision-making.

- **Social Experiential value** is about increase or decrease of sense of beauty and safety of and belonging/connectedness to the North Sea.

- **Social Future value** is about
  - transition and adaptation possibilities to future use and new social and cultural values and
  - social stability: the question whether user groups remain permitted to participate in the use of the NS.

- **Social capital**

- In this research the mobilization of social capital of user groups to maintain, improve and to make the use of NS more sustainable. (through choice possibilities in decision-making/participation and collective actions.)
Analytical framework 2)

Criteria for Social/interest values

- **Social Capital**
  - Social bonding; Social bridging (collective actions); Social linking/Participation in decision-making; Social cohesion

- **Utility value**
  - Access (to beaches and sea)

- **Experiential value**
  - Open space; Safety; Living environment; Cultural identity

- **Future value**
  - Inclusion/exclusion groups; Adaptation/sustainability

These criteria are necessary to find indicators in order to be able to answer the 1st research question.
Method 1) Steps

- **Conditions for selection of indicators**
  - representative; complementary to economic analyses; existing and reproducible data; relationship with marine environment and/or quality of the North Sea as an open space

- **Selection of indicators**

- **Baseline measurement** (value per indicator)

- **Assessment** (each indicator on a scale [compared to maximum value e.g. 100%])

- **Indication in 3 colours** (to visualize the contribution to social interest)

- **Average assessment**

- (Baseline study should be repeated after some years to measure differences and analyse these differences)
Indicators:

- Twenty indicators have been selected to reflect the current social importance of the North Sea. These indicators can be classified under the headings of utility value, experiential value, future value, and social capital.

- They can be linked with initiatives of one or more groups of users. For each indicator a maximum value has been ascertained, which is applied as a reference for the assessment. The assessment has been indicated by three colours: green (high score), orange (middle score) and red (low score). Finally, with this method, the social importance has been qualified.

- Based on existing recent (<2011) data, via literature and internet research.
Indicators: Social capital in yellow: criteria

- Measurements of the indicators show that most coastal and fishing communities in the Netherlands have a degree of social cohesion between average and relatively high. The fishing community of Urk shows the highest degree of social cohesion in the Netherlands.

- Nine coastal communities (out of the twenty-seven coastal communities in the Netherlands) participate in cleaning up litter from the beaches. (bonding and bridging/coll. action)

- A group of 36 fishing vessels have recovered litter from the North sea. (bonding and bridging/ coll. action)

- Judging by participation in decision-making, it becomes clear that in addition to scientists, environmental organisations, users and other stakeholders, the government in particular is present on a large scale. The sport fishing user group is not represented at the 'Good environmental condition' workshops. (participation/linking)
# Social Capital

<table>
<thead>
<tr>
<th>Social significance</th>
<th>Criteria/ general</th>
<th>Indicators</th>
<th>Study year</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social capital</td>
<td>Social cohesion</td>
<td>Connection with the neighbourhood - In coastal communities - In fishing communities</td>
<td>2008</td>
<td>Average to high</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bonding and bridging</td>
<td>Collective actions - Number of municipalities that collected litter on beaches - Number of vessels that collected litter in sea</td>
<td>2009</td>
<td>9 municipalities of 27 &gt;9,347 pieces of litter</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linking</td>
<td>Proportion of participation of representatives of groups in MSFD implementation Proportion of representatives of user groups/others</td>
<td>2010</td>
<td>Government 4 Research 1.1 Environmental 0.7 Users 2.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2/77</td>
</tr>
</tbody>
</table>
Indicators: Utility value

- At least twenty-five beaches in twenty-seven coastal municipalities are accessible for the disabled.
- In 2010, 99% of the fishing areas on the Netherlands Continental Plate (NCP) were accessible to fishermen.
- The accessibility of the housing market in coastal communities is partly determined by the fact that, based on the Dutch Valuation of Immovable Property Act, the average value of real estate in coastal municipalities is higher than the average value for the Netherlands as a whole.
## Utility Value

<table>
<thead>
<tr>
<th>Utility value</th>
<th>Access</th>
<th>Year</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Access to beaches for the disabled</td>
<td>2010</td>
<td>Minimum 25 beaches of 27 municipalities</td>
</tr>
<tr>
<td></td>
<td>Access to Dutch fishery areas</td>
<td>2010</td>
<td>99%</td>
</tr>
<tr>
<td></td>
<td>Value of real estate in coastal communities</td>
<td>2008</td>
<td>€277,000 (20% more than average)</td>
</tr>
</tbody>
</table>
Indicators: Experiential Value

- The negative impact on ‘open space’ experience is highest for the presence of drilling platforms and second highest for the presence of wind turbines and high-rise buildings on the coast. *(open space/beauty)*

- In 2010, forty five beaches in 25 of the twenty-seven coastal municipalities were awarded the Blue Flag, an international label indicating that the beaches and seawater were clean and safe. *(safety)*

- Nearly all residents of coastal and fishing communities are satisfied with their living environments.

- In 2009, eight maritime museums jointly welcomed 552,050 visitors with a Dutch Museumkaart pass, but this is still a decrease in visitor numbers as compared to the year before. *(cultural identity/belonging)*
<table>
<thead>
<tr>
<th>Experiential value</th>
<th>Connection to North Sea as an open space</th>
<th>Detriment to North Sea as an open space</th>
<th>2008</th>
<th>drilling platforms -2.6 wind turbines -1.9 coastal high-rises -1.3 marinas -0.3 blue algae -0.6 Foreshore +0.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection; Cultural identity</td>
<td>Number of visitors to 8 maritime museums</td>
<td>2009</td>
<td>552,050 (decrease compared to 2008)</td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td>Number of Blue Flag beaches</td>
<td>2010</td>
<td>45 beaches in 25 municipalities</td>
<td></td>
</tr>
<tr>
<td>Living environment</td>
<td>Enjoyment of residence for coastal residents</td>
<td>2006</td>
<td>satisfied or very satisfied &gt;84%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experience of neighbourhood for coastal residents</td>
<td>2006</td>
<td>comfortable or very comfortable &gt;86%</td>
<td></td>
</tr>
</tbody>
</table>
Indicators: Future value

- At present, the involvement of fishermen and recreational participants in the Marine Protected Areas (MPAs) is approximately 97%. (inclusion/exclusion/social stability)

- In terms of the future value of ‘adaptation/transition’, four fisheries are currently certified as sustainable by the Marine Stewardship Council (MSC), and four more fisheries are in the process of obtaining their MSC certification.

- In addition, more than 150 shops, restaurants, and processors in the Netherlands are MSC Chain of Custody certified. (adaptation/transition)

- A small proportion of the Dutch fishing fleet has adopted more environmentally friendly fishing techniques than the traditional fleet. (adaptation/transition)

- Six Dutch coastal municipalities (out of twenty-seven) have received a European Quality Coast Award, which means that sustainable tourism is possible in those communities. (Adaptation/transition)
<table>
<thead>
<tr>
<th>Future value</th>
<th>Adaptation/Transition</th>
<th>Number of Marine Stewardship Council (MSC) certifications</th>
<th>2010</th>
<th>4 fisheries (66 vessels of 590)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of MSC certifications in progress</td>
<td></td>
<td></td>
<td>4 fisheries</td>
</tr>
<tr>
<td></td>
<td>Number of MSC Chain of Custody certifications</td>
<td></td>
<td></td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>Proportion of traditional to environmentally-friendly fishing techniques</td>
<td></td>
<td>2009</td>
<td>Traditional/environmentally-friendly 3.5/1</td>
</tr>
<tr>
<td></td>
<td>Number of Quality-Coast Awards</td>
<td></td>
<td>2010</td>
<td>6 coastal communities of 27</td>
</tr>
<tr>
<td>Social stability/Involvement</td>
<td>Number of Marine protected areas</td>
<td></td>
<td>2010</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>97% still accessible</td>
</tr>
</tbody>
</table>
Average qualitative score baseline measurement to answer question 2

- Social Capital: + + - - - -
- Utility value: + + -
- Experiential value: - + + + -
- Future value: + - +/- +/- - -
Conclusion

- **General:** The North Sea is of major social importance if the North Sea and its beaches remain relatively accessible for groups of users now and in the future, on the condition that the environmental quality, safety, and experience of the North Sea as an open space is at least not lessened, and preferably improved. If the accessibility, environmental quality, safety, or experience of the North Sea were to deteriorate or decrease, this would have a negative effect on its social importance.

- On the basis of the scores of roughly twenty indicators, the current social importance of the North Sea for coastal residents, fishermen, and recreational users in the Netherlands is 'average' on the measurement scale applied.

- Any measures taken under the EU Marine Strategy Framework Directive (MSFD) to change the environmental state of the North Sea would also affect its social importance.
Thank You