



ASSESSING COASTAL CULTURAL ECOSYSTEM SERVICES AND THE ASSOCIATED BENEFITS BY PPGIS SURVEY IN LATVIA AND ESTONIA

1. Challenge/problem addressed

How to assess the recreational use of the coastal areas and the associated perceived human well-being benefits in a way that enables integration of the social values into decision-making.

2. Main scale of governance involved: local / regional / national / international

International (scale of the study) + national (scale of the practical use)

3. Description of what and where was done

A PPGIS survey on the use of coastal cultural ecosystem services (CES) and the associated human well-being benefits was conducted within the frame of the Interreg project MAREA in 2021. The main aim of the survey was to collect data on the recreational use of the coast, including the perceived well-being benefits people gain from the recreational visits (linkages between human well-being and CES), as well as perceived coast's suitability for various recreational activities. The survey was conducted in two countries: Latvia (led by Baltic Environmental Forum – Latvia) and Estonia (led by University of Tartu). In order to reach as wide audience as possible, the survey was developed in four languages: Latvian, Estonian, English and Russian. For the distribution method, a mixed approach was selected (online and face-to-face).

During the surveying process, 1414 individual responses were collected (810 in Latvia and 604 in Estonia), in a wide age range from 12 y.o. to 82 y.o. The surveying process was done by own resources, without involvement of an outsourced surveying company.

Later on, the survey data were used to generate maps on the use of coastal cultural ecosystem services in Latvia and Estonia, as well as to create modelled suitability maps that spatially demonstrated coastlines' suitability for various recreational activities based on preferences stated in the survey and actual environmental data sets. Such information is crucial when it comes to coastal planning. The data from the Latvian survey currently are being integrated in the interim evaluation and updating of the Latvian National Maritime Spatial Plan until 2030 and the Long-Term Thematic Plan on Coastal Public Infrastructure Development.

The success story of this survey was strongly linked to two main aspects:

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- The efforts that were put into the distribution of the survey – it was distributed through many channels, including social media, NGOs, state organisations, municipalities, face-to-face events (leaflets with QR codes) and also face-to-face surveying by the sea.
- The careful consideration that was given to the formulation of the survey questions in a way that is easy-to-understand for various groups of society.

4. What sectors were involved?

NGOs, science, in co-operation with state organisations, municipalities

5. Which target/interest groups / stakeholders were reached?

Recreational seaside users in Latvia and Estonia

6. What methods were applied?

- Public participatory GIS (PPGIS survey)

PPGIS is a map-based survey method that allows participants to provide both geographic and non-geographic information. In comparison to other social methods, surveys allow more people's opinions to be sought in a shorter period of time and the data obtained is easier to quantify.

The online PPGIS survey was developed in ArcGIS Survey123 platform.

- Face-to-face social survey (paper surveys)

The content generated for the online PPGIS survey was translated also to the “traditional paper survey” format for the purposes of the face-to-face surveying that was done in several coastal locations in each country. This was done mainly with the aim to reach the older seaside users. During the face-to-face surveying, also leaflets with QR codes were used for those persons who preferred participation in the survey by using their smartphones/tablets.

7. Lessons learned

Social survey, especially PPGIS survey, is a valuable method when it comes to quantifying social values in a way that is relatively easy to use in practice, including MSP related issues where social aspects are often neglected due to lack of national scale data, methodological issues and other problems.

Main practical lessons learned during the MAREA survey:

- Key to a successful PPGIS survey: as-brief-as-possible and as-simple-as-possible survey content and right distribution channels.
- When it comes to social surveys of any kind, target group must be carefully defined – it will affect the conclusions we can draw based on the results.
- In cases when one wants to draw conclusions on a national level, it is crucial to allocate financial resources for outsourcing a surveying company as ensuring representative respondent sample on a national level is almost impossible without the help of a professional surveying company.
- Outsourcing the surveying process helps saving a lot of time. As demonstrated by this example, successful PPGIS surveys without outsourced help are possible, however, this approach can become highly time consuming. Although in theory PPGIS surveys allow reaching many respondents in a short time period, the experience in MAREA project showed that in reality distribution of survey in order to reach wide enough audience takes a lot of time.
- Involvement of local municipalities, NGOs and other relevant institutions in the distribution of the survey is an effective way how to increase the visibility of the survey and the participation rates.
- Online PPGIS surveys are not suitable for everyone. In order to reach the older generations, use of traditional paper surveys should be considered.

Although in this example the PPGIS method was used on a national/international scale, it can be applied to all planning scales.

8. To which Multi-level Governance steps this valuable practice contributes?

9. Links to further information about the practice/case

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About MAREA project: <https://www.bef.lv/projekti/marea-en>







Social survey
 PEOPLE'S FAVOURITE SEASIDE
 PLACES AND ACTIVITIES
 IN ESTONIA AND LATVIA



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Map of the use of CES in Latvian coastline: University of Tartu

The rest of visual materials: Baltic Environmental Forum – Latvia