

## **Socio-economic Resilience of Small-scale Fishermen in the South Baltic Sea: Shaping Governance for Sustainable Fisheries**

This research proposal aims to investigate the socio-economic resilience of small-scale fishermen in the South Baltic Sea region. Its main goal is to share knowledge and increase awareness on small-scale fishing communities in the South Baltic Sea by understanding how fishermen operate and adapt within the changing economic landscape. This will be done working closely with fishermen, to empower and raise awareness about the challenges faced by these communities. Furthermore, the parameters of the research cover small-scale fishermen in Poland and Germany that depend on the Baltic Sea's natural resources to make a living. The study will also examine the concept of "maszoperia" with regards to its relevance in today's fisheries governance. With this in mind, this project will explore how fishermen have adapted to these changes and consider their perspectives on the desired government support. The interdisciplinary methods of this study will encompass social, economic and environmental dimensions. The original data for this research will be collected by combining qualitative and quantitative methods, such as face-to-face questionnaires and transcribed conversations. In doing so, the outcomes of this project will highlight the importance of incorporating local knowledge and involving fishing communities in the governance of fisheries resources.

The preservation of the maszoperia lifestyle are crucial for maintaining the region's cultural heritage. However, the declining number of active small-scale fishermen poses a threat to the continuity of this knowledge and way of life. The challenges faced by fishermen in the region are; significant declines in fish stocks, degradation of aquatic systems, overcapacity in industrial fisheries, management mistakes, ageing small-scale communities, exclusion from decision-making processes, diminishing earning power, and the erosion of traditional cultural ties due to the influx of new industries and people. These challenges highlight the complex socio-economic and environmental issues faced by small-scale fishermen and the need for research and policy interventions that take into account their unique circumstances. The project will accommodate for these gaps, by scaling up knowledge for this sector and constructing a picture of small-scale fisheries in the Baltic Sea that is considered data-poor. As such the project aims to;

- Increase awareness about small-scale fishing communities in the South Baltic Sea by studying the operational and adaptive strategies employed by fishermen in response to changing economic conditions.
- Highlight the significance of including local fishers in the governance of fisheries resources and promote their participation
- Explore the concept of "maszoperia" from the past and investigate how certain historical organisational aspects can be applied to modern fisheries governance.
- Assess the potential of community-based fisheries management systems, rooted within local communities, to preserve traditional natural resource management institutions, local culture, and territorial identity.

In order to achieve these goals, face-to-face questionnaire surveys and interviews with small-scale fishermen in coastal towns across Poland and Germany will be conducted. The sample size is estimated to be between 550-600 in Poland and 200-300 in Germany, with targets of conducting at least 80 surveys in Poland and 30 surveys in Germany, with a minimum average of 10 fishermen per location. The surveys will utilise a Likert scale with values ranging from 1 to 5 to capture the knowledge, views, and attitudes of the fishermen regarding the analysed issues. Cause-and-effect models will be created using these survey responses to plot average responses.

To assess how fishermen's responses depended on the features of different locations, the project will use the Regression for Truncated and Censored Dependent Variables (Tobit regression) analysis. GRETL and Statistica software will be utilised for this purpose. Additionally, conversations with the fishermen will be recorded and translated using professional dictation and translation tools. Thematic analysis will be employed to interpret the transcribed data by extracting key quotations and provide narrative context to reinforce the survey results. In doing so, the project aims to shed a light on the socio-economic resilience of small-scale fishermen in the South Baltic Sea, ultimately empowering communities and shaping Governance for sustainable fisheries.