Assessing the Impact of Fisheries on Demersal Resources using Ecosystem-based Indicators.

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The problem(s)
• (Over)Fishing results to the reduction of target resources and generates discards due to high-grading (ecosystem).
• Major economic costs, loss of income and jobs (society).
• Fisheries mismanagement and the need to move from the conventional single species management to an ecosystem-based approach (policy).
• Fisheries policy is most effective when adaptive management processes are adopted, considering stakeholders' perspectives which ensures higher compliance (governance).

Aim
To support fisheries management in EU waters by using ecosystem-based indicators.

Study areas: Two Marine ecosystems – Two Fishery systems:
1. North Sea (ICES IVb & IVc)
2. Eastern Mediterranean/Aegean Sea (GFCM GSA 22)

Side - Tasks
Description of ecosystems
Description of fishery per ecosystem
Description of conservation aspects
Identification of groups of fishery-related stakeholders

Selection of Indicators
Using Pressure, State and Response Indicators to explore Ecosystem, Socio-Economic and Governance issues related to demersal fisheries in two study areas

Final Product: a suite of indicators for both ecosystems

What about Indicators?
• Indicators are tools that assist management.
• They can be single numerical metrics or combination of metrics, based on data collected and processed for a clearly defined analytical or policy purpose.
• Suites of selected indicators will be applied to the two areas.
• Power analysis will help identifying indicators needing shorter time series to respond.

Criteria
• Data availability
• Relevancy, robustness
• Sensitivity, responsiveness

Indicators & management scenarios’ evaluation

MANAGEMENT SCENARIOS PUT INTO OPERATIONAL MODELS

Suite of indicators
CONSULT
RESULT

UPDATED MANAGEMENT SCENARIOS

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