The expert elicitation method for state of marine environment assessment and reporting



A Centre Collaborating with UNEP

National drivers for SoME reporting

- National need to understand and measure the state of marine environment to meet SDG's
 - Integration of indicators
 - Identify issues and knowledge gaps
 - Monitor consequences of policies and legislative actions taken
- UNCLOS Article 192 "States have the obligation to protect and preserve the marine environment."
- Participation in global and regional assessments — GEO-6
 - UN World Ocean Assessment
 - Regional seas

The approach

- **Expert Elicitation (EE)** knowledge and judgements provided by regional experts in a workshop setting (elicit = to draw out or bring forth, educe, evoke)
- **Broad knowledge base** The EE method uses conventional scientific data and knowledge and also captures unconventional and traditional knowledge
- **Workshop** is the centre-piece of the iterative assessment process; ideal for situations with limited resources and/or limited time
- **Outputs =** assessment of the state of the marine environment plus risk assessment
- Workshop procedures
 - Day 1 Plenary exercise to familiarise delegates with method
 - Day 2 Sub-groups, to input data to the matrices
 - Day 3 Plenary report-back to review/refine/agree; risk analysis

Post Workshop confirmation of participants' details: locating maps, data and documents identified during the workshop; peer review.

Workshop is <u>PART</u> of the process



Example of output (from Australia SOE 2011):



Examples of outputs





Figure 2. Median score and grade for the condition of all biodiversity parameters (habitats, species and species groups, ecological processes) in the Best10%, Most, and Worst10% places/occurrence in the South China Sea region. The uncertainty bar (derived across all the biodiversity parameters) represents an average level of confidence of 1.7 of a scoring unit.

Decision hierarchy

OVERALL STATE OF MARINE ENVIRONMENT (sum of data below)

Biodiversity

- Habitats
- Species

Ecosystem Health

- Physical and chemical processes
- Ecological processes

Pressures

• Human activities (marine industries) detrimentally affecting biodiversity and environmental values

Socioeconomic aspects:

- Environmental pressure posed by industry
- Employment, wages, taxes, education and training
- Cost/benefit analysis by sector

Data-driven (DD) versus EE methods

- Not mutually exclusive (EE method includes data where available and DD involves expert interpretation)
- Access data (eg. UNEP Live) during workshop
- DD approach is commonly beyond the means of developing countries (too expensive)
- DD time consuming but scientifically valid
- DD age of data used in reports (eg. OSPAR 2010 based on data from ~2006, USEPA 2008 based on data from ~2003, etc.)
- EE better reflects state as a snapshot in time

预览已结束, 完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5_15382

