GOAL 14

Indicators

14.1.1

14.2.1

14.3.1

14.7.1

14.a.1

Indicator 14.1.1 – Definitions Part 1

Current proposal:

Index of Coastal Eutrophication (ICEP)

Inputs of nutrients (nitrogen, phosphorus and silica, in different forms) from rivers, and corresponding nutrient-ratio sub-indicator – ***consensus that it will not be operational for several years***

Replacement Proposal:

Chlorophyll-a concentration as an indicator of phytoplankton biomass

- Regional Seas Conventions and Action Plans: Core Indicator
- Widely monitored: HELCOM, OSPARCOM, MAP and NOWPAP

Indicator 14.1.1 – Definitions Part 2

Current Proposal:

Floating Plastic Debris Density

- Regional Seas Conventions and Action Plans: part of Core Indicator on Marine Litter
- Regional standardization of UNEP-IOC Guideline still required
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Alternative Proposal:

Quantification and classification of Beach Litter Items

- Regional Seas Conventions and Action Plans: Core Indicator;
- Regional standardization underway
- Widely monitored: HELCOM, OSPARCOM, MAP and NOWPAP
- Does not require extensive financial investment

Methodology – Timeframe - Agencies

Chlorophyll-a

- Collected by national monitoring mechanisms for Regional Seas Conventions Programmes (RSCP)
- In-situ sampling and remote sensing methodologies in place
- 2016 – Expert meetings with countries
- Co-ordinated report every 3-4 years.
- UNEP - IOC-UNESCO - Regional Seas Convention and Action Plans

Marine litter – beach litter items

- UNEP/IOC guideline - testing period has begun with UNEP, Regional Seas in close collaboration with IOC-UNESCO
- Co-ordinated global report every 3-4 years
- UNEP - IOC-UNESCO - Regional Seas Convention and Action Plans

Indicator 14.2.1- Definition

14.2.1 Proportion of national Exclusive Economic Zones managed using ecosystem-based approaches

- **National Integrated Coastal Zone Management guidelines and enabling legislation** adopted as Regional Seas Conventions,
- Standardized terminologies and definitions may be needed for inter-regional comparisons
- An incremental and spatially-explicit measure is under development to define ‘Ecosystem Approach’

Methodology – Timeframe - Agencies

Methodology Integrated Coastal Zone Management

- Existing national reporting methodologies in each region
- UNEP-Live for reporting national progress and lessons on marine spatial planning
- UNEP to support consolidated reporting for Core Regional Seas Indicator Set adopted 2015

Time Frame

- September 2016: Regional Seas Indicators Working Group
- Ecosystem Approach methodology: 12-18 months.

Agencies

- UNEP – IOC-UNESCO – FAO - Regional Seas Conventions
- Coordination with Multilateral Environmental Agreement reporting, notably Convention on Biodiversity Aichi Target 11

Indicator 14.3.1- Definition

14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations

- The Regional Seas Conventions Core indicator set includes **measurement of ocean acidification through Aragonite saturation, pH, or Alkalinity** and **annual mean seas surface temperature (25m below surface)**
- Definitions agreed through Global Ocean Acidification Observing Network (GOA-ON): Requirements and Governance Plan and Essential Ocean Variables within the Global Ocean Observing System (GOOS).Suite of representative sampling stations compiled through GOA-ON and GOOS
- **Impact on coral reefs** Global Coral Reef Monitoring Network (GCRMN) definition and survey design; every 4 years

Methodology – Timeframe - Agencies

Methodology

- UNEP and the Regional Seas Secretariats are compiling data across all regions

Timeframe

- Ocean acidification: ongoing assessment as part of GOOS and GOA-ON; ROPME and Caribbean already have reporting
- Global Coral Reef Monitoring: global report in 2020 and regional GCRMN assessments and regional databases: Caribbean 2014; Western Indian Ocean 2016; Pacific Islands and Eastern Tropical Pacific 2017
- **Agencies**
- Ocean acidification: UNEP will co-lead with IOC-UNESCO (GOOS and GOA-ON)
- Coral Reef Monitoring: UNEP in collaboration with ICRI, GCRMN, Regional Seas Conventions and Action Plans

Indicator 14.a.1- Definition

14.a.1 Proportion of total research budget allocated to research in the field of marine technology

- The definition of marine technology is described in the published IOC-UNESCO Guidelines on Transfer of Marine Technology

Methodology – Timeframe - Agencies

Methodology

- part of the preparation of the Global Ocean Science Report (GOSR) launched by IOC Member States in 2014
- Preliminary information gathered through national surveys
- Analyzed to quantify research investment, research capacity and infrastructure, in particular human resources and the facilities/laboratories/field stations, as well as special equipment

Timeframe

- 2016: baseline information through IOC GOSR
- Technical expert end of 2016/beginning of 2017 with aim of finalizing the indicator methodology and protocols for collecting data at national scale

Agencies

- IOC-UNESCO, UNEP, OECD, FAO and UNESCO's Institute of Statistics

Goal 14 Conclusions

- 14.1.1Proposed alternative indicators: Chlorophyll-a and Marine Beach Litter Items; both available in more than 50% countries and with standardized methodologies. Include asTier II
- 14.2.1 Methodology and reporting in place through Regional Seas Conventions. Revert to Tier II
- 14.3.1 Retain indicator but as Tier II under Regional Seas Conventions and Action Plans Core Indicator Set reporting. Revert Tier II
- 14.a.1 Retain as Tier III with IOC-UNESCO as custodian agency