

REPORT OF THE 1ST MEETING OF THE SUB-GROUP ON THE ECOSYSTEM REPORT CARD

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SUMMARY

A Sub-group of the SC-ECO met to review the applicability and functionality of the Ecosystem Report Card (EcoCard) to be applied in ICCAT. The first meeting focused on understanding the process underway for developing and reporting the indicator-based EcoCard in ICCAT. Progress was compared against the five main stages recommended for indicator development, reporting and use. The discussions and recommendations of the Sub-group have been structured in terms of (1) progress and best practices, (2) challenges and actions that need further refinement, (3) gaps, and (4) opportunities and potential solutions, relative to each of the five stages.

RÉSUMÉ

Un sous-groupe du SC-ECO s'est réuni pour examiner l'applicabilité et la fonctionnalité de la fiche informative sur les écosystèmes (EcoCard) à appliquer à l'ICCAT. La première réunion s'est concentrée sur la compréhension du processus en cours pour le développement et la déclaration de la fiche EcoCard basée sur des indicateurs à l'ICCAT. Les progrès ont été comparés aux cinq étapes principales recommandées pour le développement, la déclaration et l'utilisation des indicateurs. Les discussions et les recommandations du Sous-groupe ont été structurées en termes de (1) progrès et meilleures pratiques, (2) défis et actions qui doivent être affinés, (3) lacunes et (4) opportunités et solutions potentielles, par rapport à chacune des cinq étapes.

RESUMEN

Un subgrupo del Subcomité de ecosistemas se reunió para revisar la aplicabilidad y funcionalidad de la ficha informativa sobre ecosistemas (EcoCard) que se aplicará en ICCAT. La primera reunión se centró en comprender el proceso en curso para el desarrollo y la comunicación de la EcoCard basada en indicadores en ICCAT. Los progresos se compararon con las cinco etapas principales recomendadas para el desarrollo, la comunicación y el uso de indicadores. Los debates y las recomendaciones del Subgrupo se han estructurado en términos de (1) progresos y mejores prácticas, (2) retos y acciones que necesitan ser perfeccionadas, (3) lagunas, y (4) oportunidades y posibles soluciones, en relación con cada una de las cinco etapas.

KEYWORDS

Ecosystem components, environment, fishing, marine debris, target species, bycatch species, food webs, habitats

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1. Introduction and objective of meeting

A Sub-group of the SC-ECO met online for two days (October 7th and 8th October 2021) to review the applicability and functionality of the Ecosystem Report Card (EcoCard) as a tool for monitoring the effects of fishing, environmental variation and climate change on ICCAT species and associated ecosystems, and its contribution towards implementing the Ecosystem Approach to Fisheries Management (EAFM) in ICCAT as requested in the SCRS strategic research plan and ICCAT Commission mandate.

The meeting addressed the TORs of the EcoCard Sub-group (Juan-Jordá et al. 2021), and specifically focused on TOR 2 which aims to “*Identify successes and lessons learned since its [EcoCard] creation as well as identify emerging concerns and inefficiencies, including the gaps, weaknesses, and strength in monitoring framework for the estimation of the indicators of different components as well as develop a proposal to improve monitoring systems required.*” However, elements of the other TORs were discussed as well.

Seventeen participants attended the meeting (Appendix A). The meeting agenda is shown in Appendix B.

2. Report Structure

In this report we use the five main stages recommended for developing and reporting ecosystem indicators, which are the main building blocks of the EcoCard. First, under section 3 of this report we present and briefly describe the five main stages for indicator development, reporting and use to provide context (Brown 2009, Biodiversity Indicators Partnership 2011). Second, under section 4 we map how each meeting agenda-points and presentations fit within the five main stages of indicator-development and reporting to provide further context. Third, under section 5 we summarize and structure the main discussions and recommendations of the Sub-group within each of the five main stages of indicator development and reporting. Fourth, under section 6, we summarize group discussions regarding the creation of documents and repositories to support Ecocard Development. Finally, we present a tentative agenda and work plan for a second Sub-Group meeting and cover other topics.

3. Main stages in the development and reporting of an indicator-based EcoCard

This section describes the five main stages for developing and reporting indicators, which are used to structure the work and discussions for the EcoCard development (Figure 1). This structure is based on past work and good practice guidelines for indicator development, reporting and use (Brown 2009, Biodiversity Indicators Partnership 2011).

The first stage consists in agreeing and establishing the main purpose of the Ecocard tool, which includes setting the vision, main goals and objectives of the Ecocard and also identifying the target audience (Figure 1). This stage is important for establishing the general framework and keeping the focus of the work. Having a clear vision and purpose also helps guide the identification and scoping of ecosystem components (what needs to be monitored) and determining the scope of indicators to be developed.

The second step consists in adopting a specific conceptual model or framework to assist and guide the development of the indicator-based EcoCard (Figure 1). Conceptual models are used as tools for building and connecting sets of indicators. They are used as frames to provide structure for organizing, reporting and communicating indicators in a structured and meaningful way. The conceptual model most used for analyzing and reporting indicators in the context of producing environmental assessments is the Driver-Pressure-State-Impact-Response model, which allows to connect sets of indicators and understand links between Pressure-State and management Responses. Together, the first and second step establish the actions needed for setting the main purpose of the EcoCard and selecting and communication of adopted indicators.

The third stage consists of establishing the process for identifying and selecting the indicators and is followed by their calculation (Figure 1). This step is essential for the production of the indicators which need to be connected to the conceptual model and objectives of the EcoCard. A selection criteria also needs to be established to evaluate their validity and meaningfulness, sensitiveness and specificity to the underlying phenomenon (Brown 2009, Biodiversity Indicators Partnership 2011).

The fourth step establishes a mechanism/process for communicating and reporting the indicators and EcoCard to the target audience (Figure 1). This requires choosing the type and format of potential summaries, technical reports, and visualization products that best reach the target audience and effectively communicate the EcoCard.

The last step establishes a review process to ensure the work is open to challenge, discussion and modification so that it reflects the changing needs and emergence of new data or new issues to be considered (**Figure 1**).

It is important that all stages in the development of the EcoCard involve open consultation with managers, technical-experts and the developers of the indicators, the data providers, and the target audience, since feedback and adjustments are always part of the evolving process.

4. How the agenda points fit within the main stages of EcoCard development and reporting

The agenda prepared for the Sub-group meeting (Appendix B) aligns with the five main stages of indicator-development (**Figure 1**).

In agenda item 4, background was provided on the SC-ECO's efforts to implement the EAFM within ICCAT and the work related for developing and reporting the indicator-based EcoCard. The contents of the presentation covered all five stages of the EcoCard development shown in Figure 1, and provided background on the main purpose of the EcoCard, the conceptual framework to guide its development, the process to generate the indicators including their identification, selection and calculation, and the mechanisms to communicate and report the EcoCard to the target audience to ensure EcoCard continuity.

Agenda item 5 reviewed five of the 11 EcoCard ecosystem components that exemplify the issues encountered in identifying and developing indicators by the different groups developing them. This agenda point covered in depth step 3 of EcoCard development (Figure 1). The selected components were used as examples to learn how the work of each component (and group of assessors) have been evolving over time, in terms of setting objectives, using the conceptual model to guide indicator development, developing indicators, choosing from among the types of indicators, setting the scope of work and the scale of the analysis, and setting work plans. Each presentation had to address the following points:

- (1) Briefly state the current conceptual and operational management objectives for the Report Card component;
- (2) Following the DPSIR framework (driver, pressure, state, impact, response) describe the type of indicators being developed;
- (3) Describe the progress on indicator development to track progress towards the objective and current work plan;
- (4) Provide examples of how indicator are visualized and plotted to evaluate its effectiveness in communicating trends and state; and
- (5) Describe difficulties related to capacity, workload, data, methods, and collaborations that are limiting the group's ability to make progress with indicator development.

Agenda item 6 provided a review of the organization of ICCAT including the SCRS and its Panels and attempted to identify opportunities for collaboration, integration and effective communication of EcoCard results. The objective was to gather ideas to better link the EcoCard work with the work of the SCRS and the Commission and seek feedback and synergies with the Working Groups, SCRS, and Commission. In agenda item 7, the Sub-group reviewed the most recent EcoCard presented to the SCRS in order to consider the potential connections and synergies among the EcoCard components and determine if the current format optimizes workflow, communication, and functionality. Agenda items 6 and 7 covered in depth steps 4 and 5 of the EcoCard development (Figure 1).

Together, agenda items 4, 5, 6 and 7 aimed to foster discussions to address TOR 2 of the EcoCard subgroup with the goal of identifying (1) progress and best practices, (2) challenges and actions that need to be refined, (3) gaps and (4) opportunities and potential solutions in the EcoCard development, which we summarized below under Section 5.

5. Summary of the Sub-group discussions and recommendations for agenda items 4 through 7 (agenda item 8)

This section summarizes the main Sub-group discussions, and are structured in terms of (1) progress and best practices, (2) challenges and actions that need further refinement, (3) gaps and actions not addressed yet, and (4) opportunities and potential solutions in the process of EcoCard development and reporting.

Below we summarize each of these points for each of the main stages of the EcoCard development.

5.1 Stage 1. Establish the purpose of EcoCard (Vision/Goals/Objectives)

5.1.1 Progress and best practices

- The SC-ECO has made progress establishing a clear EcoCard vision and main purpose, being a communication and monitoring tool.
- SC-ECO has made progress defining the target audience of EcoCard, to be mainly the ICCAT commission.
- SC-ECO has made progress defining conceptual and operational objectives for EcoCard ecosystem components (with some exceptions).

5.1.2 Challenges and actions that need further refinements

- The scope including the main conceptual and operational objectives for some EcoCard components (e.g. habitat) may need to be reconsidered.
- The Sub-group discussed how the EcoCard development has been a bottom-up initiative from the SCRS and the lack of a formal request from the Commission to develop the EcoCard and its uses.
- The Sub-group suggested early involvement of the Commission in the process as well as a clear guidance from the Commission to further develop the EcoCard.

5.1.3 Gaps – actions not addressed yet

- The Ecocard vision and main purpose has yet to be reviewed and discussed through an elicitation of or consultation with the Commission

5.1.4 Opportunities and potential solutions

- The Sub-group recommended finding opportunities for consulting the EcoCard development with the Commission, in order to scope its expectations and needs, and establish a sense of ownership. It was recommended to find out the Commission's goals and objectives through a survey and to promote the work of the SC-ECO through back channels.
- The Sub-group recommended creating a "reference/guideline document" to better document the main vision/purpose of the EcoCard (among others, discussed in more detail below). This document will be a living document, which may be used in the Sub-Committee on Ecosystems and to inform potential newcomers on the EcoCard process, as well as to communicate in a more transparent way the whole process to the ICCAT community.

5.2 Stage 2. Design of the conceptual framework

5.2.1 Progress and best practices

- The SC-ECO has made progress establishing the use of a conceptual model (the Driver-Pressure-State-Impact-Response framework) to guide development of Ecocard and its ecosystem components

5.2.2 Challenges and actions that need further refinements

- The scope of some EcoCard components (e.g., habitat) are not well defined and may need to be refined and updated so the outcomes are more relevant to the goals and objectives of the Commission and more easily integrated into the processes of the SCRS.
- There might be some overlap in scope among several ecosystem components (e.g., environmental pressure, habitat) which will need to be addressed.
- The synergies and overlap in purpose among EcoCard components need to be better documented and addressed.
- There is ambiguity in the relevance of the socio-economic component of the EcoCard.

5.2.3 *Gaps – actions not addressed yet*

- None identified

5.2.4 *Opportunities and potential solutions*

- The Sub-group recommended creating and using the “reference/guideline document” to better document the conceptual DPSIR framework and how it is being used to guide the EcoCard development, and to describe the different ecosystem components being monitored in the EcoCard as well as their linkages within this framework.
- The Sub-group recommended adding a glossary in the guideline document to define key words and common understanding and use of the terminology.

5.3 *Stage 3. Identifying, selecting and calculating the indicators linked to objectives*

5.3.1 *Progress and best practices*

- The SC-ECO has made progress creating groups of assessors to work on developing the EcoCard components.
- The SC-ECO has made progress establishing the “rules of procedure” and a criteria for selecting and proposing indicators to monitor EcoCard components.
- The SC-ECO has made progress developing a protocol to be used for the adoption of new indicators that ensures they are valid and meaningful, sensitive, and specific to the underlying phenomenon, grounded in research, statistically sound, linked to objectives, etc.
- The SC-ECO has made progress on some EcoCard components in selecting, proposing and calculating indicators.
- The SC-ECO has made progress defining different types and purposes of indicators, including (1) indicators designed to encourage awareness and understanding about an issue and (2) indicators designed to inform decision-making and activate management actions.
- Best-practice – Each group of assessors has the latitude to define the scope of the work for their EcoCard component, yielding indicators specific to the issues, ecosystem processes, scales and regions unique to their component.
- Best-practice - Validation of indicators as a practice to determine whether the indicators are measuring what they are supposed to measure.
- Best-practice – Collaborations among several WGs (e.g., shark WG, WG on stock assessment methods, & Sub-Eco) have been established to support the EcoCard Development (e.g., shark ecosystem component)
- Best practice – Collaborations among the SubEco and external entities/projects (e.g., ABNJ Common Oceans) have been established to support the EcoCard Development (e.g seabird ecosystem component)

5.3.2 *Challenges and actions that need further refinements*

- Ensure that SC-ECO “rules of procedure” established over the years are clear, documented, and accessible.
- Ensure that the indicator selection criteria are clear, documented, and accessible.
- There is a need to curate relevant Sub-group decisions and material in one place.
- EcoCard group of assessors found that inter-sessional correspondence (by email) is not efficient.

- The EcoCard assessors found limited time during the annual SubEco meetings to have meaningful discussions and to discuss the progress in EcoCard development.
- EcoCard developers found data availability is hindering development plans.
- The spatial scale for developing indicators (e.g. ICCAT scale, regional scale, local scale) needs to be further explored and discussed since the spatial scale at which indicators are reported might differ depending on its objective and use.
- Indicators are often developed using data from a single fishery or based on the observer program of only one CPC which limits its interpretation and use.
- Lack of expertise for developing some indicators and ecosystem components (e.g., socioeconomic component).
- Lack of resources for developing indicators in ecosystem components.

5.3.3 *Gaps – actions not addressed yet*

- There is a need to establish a mechanism to communicate and consult with other WGs within the SCRS and the Commission about indicators and EcoCard development to match the indicators to the needs and priorities of the SCRS and the Commission.

5.3.4 *Opportunities and potential solutions*

- The sub-group recommended to create a “reference/guideline document” to document the rules of procedure and the indicator selection criteria for developing and reporting indicators used in the EcoCard.
- The sub-group recommended to create one “share point” (e.g. OwnCloud, web base, Splash page) to curate relevant documents.
- The sub-group recommended each group of EcoCard assessors (for all EcoCard components) to create a short-term plan including priorities.
- The sub-group recommended to find more opportunities for more frequent short meetings to advance EcoCard work.
- The sub-group encourages and supports specialized workshops (e.g., such as the joint-collaborative workshops organized by the SubEco) to share datasets among CPCs, increase collaborations, and support indicator development.
- The sub-group encourages to create synergies and collaborations with outside initiatives and projects to support indicator development
- The sub-group recommends raising deficiencies about data quality in the ICCAT formal datasets (e.g. Task I, Task II) using formal mechanisms established in the SCRS to the Commission.

5.4 ***Stage 4. Interpreting, communicating, and reporting the indicators and the EcoCard***

5.4.1 *Progress and best practices*

- The SC-ECO has made progress establishing a protocol for reporting and visualizing the indicators
- The SC-ECO has made progress establishing a mechanism for regular production and communication of the EcoCard to the SCRS (with the pilot EcoCard assessments – annually updated).

5.4.2 *Challenges and actions that need further refinements*

- The protocol for reporting and visualizing the indicators needs to be revised to allow more flexibility to report and visualize indicators (allow for temporal trends, spatial patterns, infographics, dashboard figures, etc.)
- The pilot EcoCard assessment prepared for the SCRS needs to be revised and widely consulted.

5.4.3 *Gaps – actions not addressed yet*

- There is a need to establish a mechanism to communicate and consult to other WG within the SCRS and the Commission the communication and dissemination strategy for the Ecocard in order to check if what

we are developing is fit purpose, check if the indicator are understood in the intended manner by the users, find feedback to improve the indicator presentation.

5.4.4 *Opportunities and potential solutions*

- The sub-group recommends communicating EcoCard purpose and its development in the Dialogue between Scientist and Managers meetings.
- The sub-group recommends communicating EcoCard purpose and its development in Commission Panels meetings (with a focus on Panel 4).
- The sub-group recommends taking advantage of the Species Group meeting of the SCRS to communicate EcoCard purpose and its development to other ICCAT WGs/SCRS.
- The sub-group recommends that CPC scientists discuss and inform their respective Commissioners the EcoCard development and purpose.
- The sub-group recommends exploring opportunities to connect the EcoCard work with single-species assessments and reports (e.g., linking EcoCard work in the Outlook Section of the single-species Executive Summary in the SCRS report)
- The sub-group recommends identifying relevant sections within the SCRS report (e.g. Outlook section) where to describe the relevance and increase the visibility of the EcoCard work. It was also recommended to provide an ecosystem perspective in the responses to the Commission.
- The sub-group recommends creating practical examples to show the benefits of the EcoCard (e.g., benefits of monitoring the environment, type of indicators to monitor environmental variability and its impact on tuna resources).

5.5 *Stage 5. Maintaining, reviewing, refining indicators and the Ecocard*

5.5.1 *Progress and best practices*

- The SC-ECO has made progress establishing a mechanism to review and refine indicators and to update the EcoCard during its annual meetings and through work that occurs intersessionally. This includes reviewing and responding to the recommendations of the newly created EcoCard sub-group.

5.5.2 *Challenges and actions that need further refinements*

- Difficulties have been identified to update annually adopted indicators (e.g., Socio Economic component)

5.5.3 *Gaps – actions not addressed yet*

- There is a need to establish a formal mechanism to review and consult on EcoCard development within the SCRS and the Commission.

5.5.4 *Opportunities and potential solutions*

- The sub-group recommended finding opportunities via SCRS meetings, Commission panels meetings and Dialogue meetings to open a consultation process to get feedback (e.g., surveys) and share advances in the EcoCard development and increase its visibility. It was suggested that CPC scientists discuss and inform their respective Commissioners about the EcoCard development and purpose to garner support for the work of the SC-ECO. It was indicated that the mandate of Panel 4 and the Tropical tuna Working group lend themselves well to the introduction of ecosystem-based advice and that the SCRS annual meeting is a good venue for meeting with officers of the SCRS. The Commission meeting provides some opportunity to convey recommendations related to the ecosystem to CPCs and the dialogue meeting between Science and Managers should, despite past experiences, be considered as a useful venue to obtain feedback on EcoCard development.

6. Summary of sub-group discussions regarding the creation of documents and repositories to support Ecocard Development (agenda item 9)

Agenda item 9 proposed two activities to support the EcoCard development, functionality and accessibility (TOR1).

One activity included the development of a “reference/guideline document” to better document the process for developing the EcoCard, its current state and future plans. This document will be a living document to be used internally by the Sub-Committee on Ecosystems to keep track of work over time, to make easily accessible key information to the Bycatch and Ecosystems community, and also to outside groups with similar interests. It will help to document and communicate in a more transparent way the EcoCard process to the larger ICCAT community.

The sub-group discussed potential contents to be included in this document. This may include:

- a. a draft summary of the EcoCard vision, scope, goals, purposes and uses,
- b. a description of the conceptual model used to guide EcoCard development, including the ecosystem components and interactions that are worth monitoring and report on,
- c. a description of the overall process for the production and generation of indicators and best practices,
- d. a description of mechanisms in place for communicating and reporting the Ecocard to the larger ICCAT community including the Commission,
- e. a description of mechanisms used to review and consult on the whole process with the larger ICCAT community and Commission,
- f. curating the state of development of the EcoCard and its respective ecosystem components,
- g. short-term and long-term work plans, and
- h. the ongoing connections and synergies with other international projects and initiatives.

The sub-group discussed the benefits of creating this guideline document which includes (1) increasing the clarity about the process, (2) ensuring quality and transparency, (3) increasing visibility, (4) encouraging participation and engaging new people to participate, (5) regular communication and an iterative and open consultation process, and (6) assisting in keeping the process on track. Drawbacks were also discussed which are mainly related to an increased workload resulting from having to update this document over time. The Sub-group also discussed potential formats for this document, which included a formal report (ICCAT paper), a web-based product or both. The Sub-group recommended creating this guideline document as an ICCAT report, which eventually could be linked to the ICCAT website. While the Sub-group felt it was premature to produce the whole document it was proposed to create a draft framework and populate some of the elements in preparation for review at the next meeting of the Sub-group, if time permits.

Additionally, the Sub-group discussed the development of a repository on one platform to curate and manage EcoCard related documents, data, indicators and other products to increase accessibility. The sub-group suggested to follow how other WGs are doing is (e.g., SWO WG, BFT WG) which have used a Splash page to orient users to information.

7. Tentative agenda and workplan for second meeting (agenda item 10)

The sub-group proposed the following activities to be covered in the next sub-group meeting:

- a. Identify and discuss potential synergies and collaborations with outside international projects and initiatives to support indicator and EcoCard development.
- b. Undertake a scoping exercise to (1) review the objectives of each ecosystem component, (2) review objectives of EcoCard and each of each ecosystem components relative to the conceptual DPSIR model, (c) identify the attributes each component monitors, (d) identify synergies and overlap among the ecosystem components. The Sub-group also suggested creating a questionnaire to support the scoping exercise targeting the ICCAT community.
- c. Review a draft of the “guideline document” shared prior to the next Sub-group meeting.

- d. Review progress on the regular production and communication of the EcoCard to the SCRS (with the pilot EcoCard assessment-annually updated) and plan specific activities to obtain feedback from the Commission.
- e. Discuss how the ongoing case studies (e.g. Sargasso Sea, Tropical Atlantic) might contribute to EcoCard development.

8. Others topics

8.1 *Special requests of the Environmental Component group of the EcoCard*

The group of assessors working on the environmental component of the EcoCard requested support from the Sub-group to initiate a research activity involving collaboration with other SCRS WGs. The objective of this initiative consists in developing a heat-wave indicators which will be broadly relevant to understand the impact of heat-waves on a variety of species and will also require interaction with multiple WGs within the SCRS. The sub-group supported this request to initiate this activity, including the development of a work plan for indicator development and establishing collaborations.

8.2 *Ongoing international projects and initiatives that may contribute and support the development of the indicator-based EcoCard.*

The sub-group acknowledged several ongoing international projects and initiatives (listed below) which may contribute and support the developing of several indicators to feed the EcoCard process, and requested to dedicate more time during the second sub-group meeting to learn more about these projects and other relevant projects, to discuss potential collaborations and synergies.

- GEF Common Ocean II Project activity titled “Modelling the Impacts of climate change on global tuna fisheries to support development and implementation of climate adaptive EAFM plans”. The primary objective of the proposed work is to improve our current understanding of climate change impacts on global tuna resources, and will include a focus on: (1) Development of new global ocean forcings to inform tuna modelling; (2) Use of SEAPODYM to model the impacts of new ocean forcings on zooplankton, micronekton and other functional groups in the food web supporting tuna; (3) Use of SEAPODYM to model the impacts of climate change on tuna stocks; and (4) Dissemination of results, stakeholder engagement, and capacity-building.
- GEF Common Ocean II Project proposal activity titled “Enhancing education on and implementation of Ecologically Related Species seabird measures within CCSBT fisheries”. Under this proposal a seabird bycatch element is anticipated to begin in mid-2022. The seabird work will be implemented through CCSBT, and liaison with the ICCAT Sub-Committee on Ecosystems on ICCAT Conservation Measures would facilitate harmonisation with developments associated with the EcoCard components.
- "WMed Bluefin tuna project" is an EFBM joined research initiative to explore the links between environmental variability and the ecology of tunas, for developing new information and tools for their sustainability. The project provides capabilities for modelling and monitoring spawning and larval habitats, modelling early life survival and generate larval abundance indices. In this framework it also provides indicators of environmental variability in the Mediterranean spawning grounds which are integrated in the ecosystem report card.
- The Sargasso Sea is a case study in two projects namely; Le Fonds Français pour l'Environnement Mondial (FFEM) where it is contributing to hybrid governance to protect and manage remarkable areas on the high seas, and another for the Global Environment Facility (GEF) Common Oceans Sustainable Utilization and Conservation of Biodiversity in Areas beyond National Jurisdiction programme, in a project entitled Strengthening the Stewardship of an Economically and Biologically Significant High Seas Area. Under the FFEM project the tasks are to describe the dynamic Sargasso Sea features and their spatial-temporal variability related to physical, ecological and social-economic variables; review the data and information needs for an Ecosystem Diagnostics Analysis (EDA); analyse and synthesise existing research and information on physical, ecological and social-economic variables; and identify existing data gaps and areas for future research. Under the GEF project the EDA will be finalised and a strategic action plan developed

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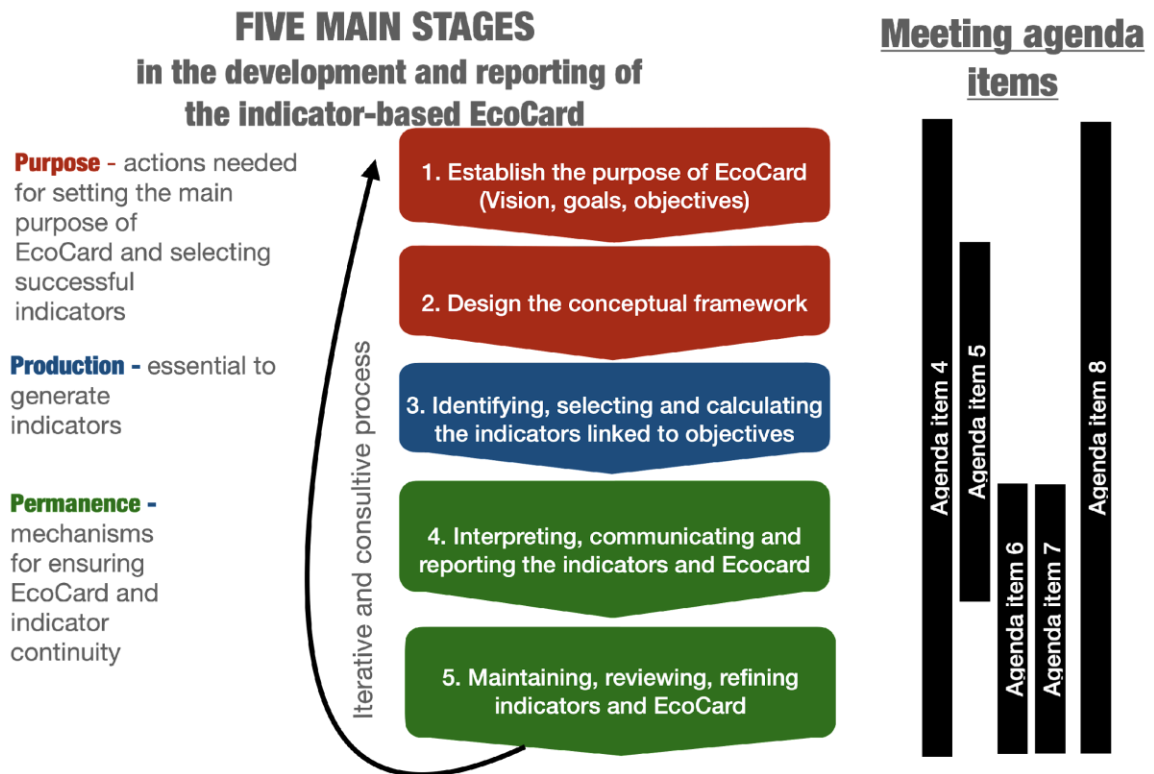


Figure 1. The five main stages used in the development and reporting of the indicator-based EcoCard (Brown 2009, Biodiversity Indicators Partnership 2011) and their relationship to the meeting agenda items (see agenda items in Appendix B).

APPENDIX A

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APPENDIX B

Agenda for Webinar

Day 1

1. Opening, adoption of the Agenda and meeting arrangements
2. Review of the TORs of the EcoCard Subgroup
3. An overview of the components of an EAFM plan with special focus on the purpose and potential uses of the EcoCard
4. History and progress towards developing the ICCAT Ecosystem report card including the origin and development of its main framework, the process for adoption of objectives, indicators and rules for indicator reporting, past interactions with SCRS and the Commission, development of the indicator checklist, case studies and collaborative efforts (MSC, SSA, FAO)
5. Review of experiences developing indicators for Report Card components. Each presenter will:
 - Briefly state the current conceptual and operational management objectives for the Report Card component
 - Following the DPSIR framework (driver, pressure, state, impact, response) describe the type of indicators being developed.
 - Describe the progress on indicator development to track progress towards the objective and current work plan.
 - Provide a visual of the current version of the indicator to evaluate its effectiveness in communicating trends and state.

- Describe difficulties related to capacity, workload, data, methods, collaborations that are limiting the group's ability to make progress with indicator development.

Report Card component talks

- 5.1. Alex Hanke – Retained assessed species
- 5.2. Rui Coelho – Non-retained sharks
- 5.3. Sachiko Tsuji - Seabird Bycatch
- 5.4. Sachiko Tsuji – Socioeconomic
- 5.5. Eider Andonegi– Foodweb
- 5.6. Diego Alvarez – Environmental

Day 2

6. Presentation on how the organization of the SCRS and Panels affects communicating Report Card results, relevance, and its development. A discussion of ideas to better link the EcoCard work with the work of the SCRS and Commission and seek feedback and synergies with the Working Groups, SCRS and Commission
7. Review pilot EcoCard and the connections and synergies among the EcoCard components to determine if current format optimizes workflow, communication and functionality
8. Wrap-up of point 4-7 agenda points. General group discussion to highlight successes and lessons learned since the Report Card was created and highlight emerging concerns and inefficiencies, including gaps, and weaknesses of the Report Card as an ecosystem reporting product [Maria José –30min group discussion]
9. Discuss the creation of documents to support EcoCard development, functionality and accessibility (i.e. TOR 1)
10. Discuss work plan and agenda for second meeting.
11. Other matters