



LME:LEARN Data and Information Management: Working Group Meeting and Training

Bali, 3 – 5 Dec 2019

Data and Information Management Guidelines for GEF LME Projects

To ensure sustainability of spatial and other project data and information in GEF LME projects



LME:LEARN DIM Working Documents



1. LME review and catalogue

Data and Information from The GEF Large Marine Ecosystem Portfolio - **Metadata catalogue of available GEF marine project data and information**

2. DIM Guidelines

Data and Information Management Guidelines for GEF LME Projects -To ensure sustainability of spatial and other project data and information in GEF LME projects

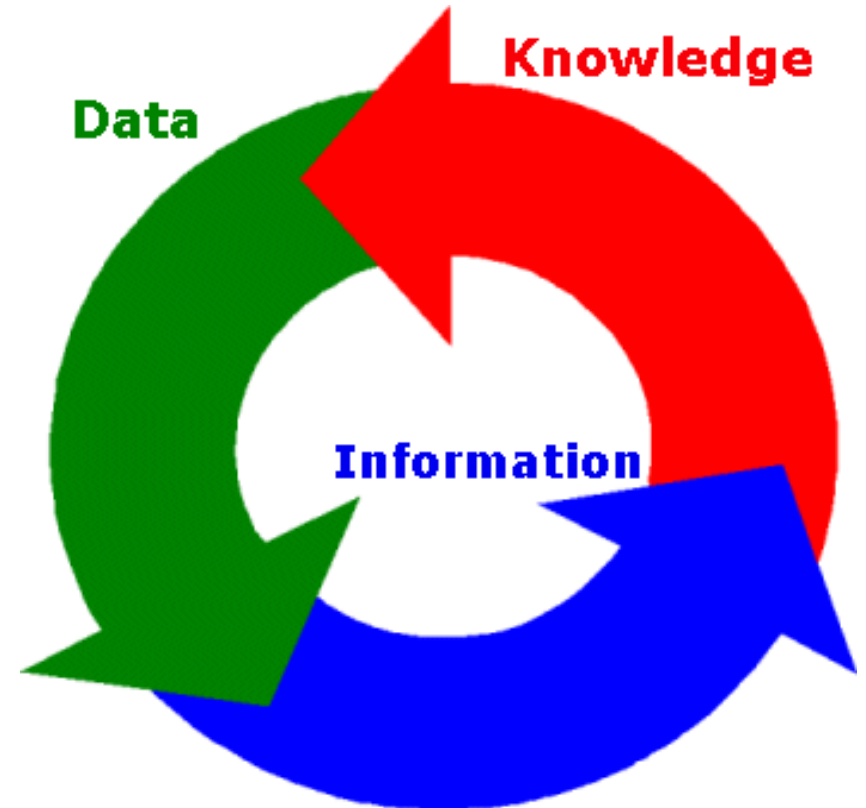
3. Common Indicators

Identifying Common LME Indicators - Towards common reporting and comparability between LMEs

DIM Guidelines

Towards a more harmonized approach to data and information

- Builds upon past DIM meetings;
- Review of LME projects data and information;
- IW:Science recommendations (2012);
- Scientific and Technical Advisory Panel (STAP) “Managing knowledge for a sustainable future” recommendations (2018); and
- UNDP Large Marine Ecosystems and Sustainable Development: A review of Strategic Management Processes and Goals recommendations (2017).



Guideline structure

Projects to develop and implement a data and information strategy on the use and management of data and information within the project, and in particular to ensure the sustainability of the project's activities regarding data, information and assessments beyond the project's lifespan.

Separates information management from data management into two objectives:

- **OBJECTIVE A: Ensure a systematic approach to make project information available online and on the IW:LEARN website**, including reports, assessments, lessons learned and experience notes, as well as communication products such as videos, newsletters/items, MOOCs etc.
- **OBJECTIVE B: Strengthen project data management and make information available** regarding the sources of data used for **TDA/SAPs, assessments and overall monitoring of the LME**, including agreed indicators.

Projects to develop and implement a data and information strategy on the use and management of data and information within the project, and in particular to ensure the sustainability of the project's activities regarding data, information and assessments beyond the project's lifespan.

Objective A. Information Management

Ensure a systematic approach to make available project information online and on the IW:LEARN web-site, including reports, assessments, lessons learned and experience notes, as well as communication products such as videos, newsletters/items, MOOCs etc.

Output 1. Long-term management of the project web-site, with access to all project reports and results

Output 2. Ensure availability of all reports and deliverables online

Output 3. Systematic sharing of key deliverables with IW:LEARN/LME:LEARN, GEF IWC and the Annual Consultative meeting of Large Marine Ecosystems and Coastal Partners.

Overall coordination with global and regional initiatives on the exchange and sharing of data and information, plus the use of common tools, monitoring and reporting mechanisms

Objective B. Data Management

To strengthen project data management and make available information regarding the sources of data used for TDA/SAPs, assessments and overall monitoring of the LME, including agreed indicators

Output 4. Assess the data needs to support the project activities and the sources of data

Output 5. Establish a science and data project group including scientists and key to support the project in terms of data gathering and management and assessments

Output 6. Identify and implement most appropriate available data management tools, guidelines etc.

Output 7. Incorporate indicators and establish long-term reporting mechanism in line with SDG's and other global commitment

Output 8. Support and strengthen key national and regional institutions in long-term data management, monitoring and assessments

Output 9. Ensure long term availability of data and integration into appropriate national and regional databases and GIS

DIM work session



Participants to fill out the sheet to address the ff. questions:

- What priority actions will your project take to improve on the delivery of the guidelines?
- What can you do to support other projects in the region?
- Write down actions to take on your worksheet (under “next steps”)

OUTPUT 1. Ensure long-term management of the project website, with access to all project reports and results (p. 12)

Recommendations:

- Project websites based on **GEF IW:LEARN website guidelines**, and taking into account good examples of project websites (see Table 1); and
- Project websites should be designed with **long-term sustainability in mind**, either to be developed within Executing or Implementing Agency website, or if self-standing, they should include plan for their long-term maintenance following project closure, and archiving on the IW:LEARN website archive.

Good practices and Tools (see report)

- ✓ GEF IW:LEARN website guidelines
- ✓ Good practices in website structure and good examples of project, executing/implementing agency and other websites

Table 1. Good examples of past and current LME project web-sites

Project Title	Web-site
REGIONAL PROJECTS	
Programme for the Agulhas and Somali Current Large Marine Ecosystems: Agulhas and Somali Current Large Marine Ecosystems Project (ASCLMEs) (GEF ID 1462)	http://www.asclme.org/
Implementation of the Strategic Action Programme (SAP) Toward Achievement of the Integrated Management of the Benguela Current Large Marine Ecosystem (LME) (GEF ID 789)	http://www.benguelacc.org/
Protection of the Canary Current Large Marine Ecosystem (LME) (GEF ID 1909)	http://www.fao.org/in-action/canary-current-lme/en/
Testing a Prototype Caribbean Regional Fund for Wastewater Management (CReW) (GEF ID 3766)	http://www.gefcrew.org/
Integrating Water, Land and Ecosystems Management in Caribbean Small Island Developing States (IWEco)	http://www.iweco.org/
Catalyzing Implementation of the Strategic Action Programme for the Sustainable Management of Shared Living Marine Resources in the Caribbean and North Brazil Shelf Large Marine Ecosystems (CMLE+) (GEF ID 5542)	https://www.clmeproject.org/
R2R - Testing the Integration of Water, Land, Forest & Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries (GEF ID 5404)	https://www.pacific-r2r.org/

OUTPUT 2. Ensure availability of all reports and deliverables online (p. 15)

Recommendations:

- All project documents, reports, experience and results notes, communication products etc., should be available online, easily accessible and with clear linkages to project outcomes, and outputs;
- Each report or document should have clear citation (year, title, author);
- If the project website is integrated into the executing or implementing agency web-site, project reports and deliverables should be distinct from other non-project reports and deliverables; and
- Projects should consider developing a bibliography of reports and deliverables in line with the projects results framework (example in Box 3), updated yearly and made available online and shared with IW:LEARN.

Good practices and tools:

- ✓ Suggested types of reports and deliverables to include;
- ✓ Suggested example of bibliography

Box 1. Extract from the MedPartnership bibliography

Project Objective/Outcome	Indicator/target	Report Title	Country	Activity no	Type	Language	Author	Year	Web links
1.2 Integrated Coastal Zone Management (ICZM) PAP/RAC									
Regional legislation addressing ICZM, as mechanisms to protect the Mediterranean from biodiversity loss and pollution from land based sources.	Analysis and proposal for the harmonization of national legislation with ICZM Protocol (in Croatia)	ICZM Protocol and spatial planning - with special reference to Croatia	CROATIA	1.2.1.2	Report	English	PAP/RAC	2012	http://195.97.36.231/dbases/MAPLibraryHoldings/Medpartnership/FINAL REPORTS/Sub-Comp 1.2 ICZM/L.2.1 ICZM NAPs and IMF/ICZM Protocol - legal aspects/Legislation Croatia/ICZM Protocol and spatial planning_F.pdf
		Analysis of the Croatian legal framework in relation to the provisions of the Protocol on ICZM in the Mediterranean	CROATIA	1.2.1.2	Report	English	PAP/RAC	2012	http://195.97.36.231/dbases/MAPLibraryHoldings/Medpartnership/FINAL REPORTS/Sub-Comp 1.2 ICZM/L.2.1 ICZM NAPs and IMF/ICZM Protocol - legal aspects/Legislation Croatia/Analysis of Croatian legal framework_F.pdf
		Assessment of Impacts of the Ratification of the Mediterranean Protocol on ICZM on Croatian Legislation, with a Focus on Article 8	CROATIA	1.2.1.2	Report	English	PAP/RAC	2012	http://195.97.36.231/dbases/MAPLibraryHoldings/Medpartnership/FINAL REPORTS/Sub-Comp 1.2 ICZM/L.2.1 ICZM NAPs and IMF/ICZM Protocol - legal aspects/Legislation Croatia/Impacts of ICZM Protocol on CRO legislation_Art 8_ENG_F.pdf
		Studija procjene učinaka ratifikacije Protokola o integralnom upravljanju obalnim područjima Sredozemlja na hrvatsko zakonodavstvo, kroz odredbu Članka 8.	CROATIA	1.2.1.2	Report	Croatian	PAP/RAC	2012	http://195.97.36.231/dbases/MAPLibraryHoldings/Medpartnership/FINAL REPORTS/Sub-Comp 1.2 ICZM/L.2.1 ICZM NAPs and IMF/ICZM Protocol - legal aspects/Legislation Croatia/Impacts of ICZM Protocol on CRO legislation_Art 8_CRO_F.pdf
	At least three countries initiate/ratify the ICZM Protocol	Report of the Regional Workshop on harmonizing the national legal and institutional framework with the ICZM Protocol	REGIONAL	1.2.1.2	Report	English	PAP/RAC	2012	http://195.97.36.231/dbases/MAPLibraryHoldings/Medpartnership/FINAL REPORTS/Sub-Comp 1.2 ICZM/L.2.1 ICZM NAPs and IMF/ICZM Protocol - legal aspects/Regional Workshop/REGIONAL WORKSHOP REPORT_F.pdf
		PAP/RAC and MedPartnership - together for the implementation of the ICZM Protocol	REGIONAL	1.2.1.2	Paper	English	PAP/RAC	2011	http://195.97.36.231/dbases/MAPLibraryHoldings/Medpartnership/FINAL REPORTS/Sub-Comp 1.2 ICZM/L.2.1 ICZM NAPs and IMF/ICZM Protocol - legal aspects/PAP RAC Povh_MedCoast_F.pdf
		A contribution to the interpretation of legal aspects of the Protocol on Integrated Coastal Zone Management in the Mediterranean ¹	REGIONAL	1.2.1.2	Report	English	PAP/RAC	2012	http://195.97.36.231/dbases/MAPLibraryHoldings/Medpartnership/FINAL REPORTS/Sub-Comp 1.2 ICZM/L.2.1 ICZM NAPs and IMF/ICZM Protocol - legal aspects/Interpretation of legal aspects of ICZM Protocol_ENG_F.pdf
		Une contribution à l'interprétation des aspects juridiques du Protocole sur la gestion intégrée des zones côtières de la Méditerranée ²	REGIONAL	1.2.1.2	Report	French	PAP/RAC	2012	http://195.97.36.231/dbases/MAPLibraryHoldings/Medpartnership/FINAL REPORTS/Sub-Comp 1.2 ICZM/L.2.1 ICZM NAPs and IMF/ICZM Protocol - legal aspects/Interpretation of legal aspects of ICZM Protocol_FRA_F.pdf
		Installation de zones non-construitibles dans les zones côtières: Rapport explicatif sur l'article 8 - 2 du Protocole GIZC, Éléments à prendre en considération ³	REGIONAL	1.2.1.2	Report	French	PAP/RAC	2012	http://195.97.36.231/dbases/MAPLibraryHoldings/Medpartnership/FINAL REPORTS/Sub-Comp 1.2 ICZM/L.2.1 ICZM NAPs and IMF/ICZM Protocol - legal aspects/Installation de zones non-construitibles-art 8-2_F.pdf

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		Studija procjene učinaka ratifikacije Protokola o integralnom upravljanju obalnim područjima Sredozemlja na hrvatsko zakonodavstvo, kroz odredbu Članka 8.	CROATIA	1.2.1.2	Report	Croatian	PAP/RAC	2012	http://195.97.36.231/dbases/MAPLibraryHoldings/Medpartnership/FINAL REPORTS/Sub-Comp 1.2 ICZM/1.2.1 ICZM NAPs and IMF/ICZM Protocol - legal aspects/Legislation Croatia/impacts of ICZM Protocol on CRO legislation_Art 8_CRO_F.pdf
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OUTPUT 3. Systematic sharing of key deliverables with IW:LEARN/LME:LEARN, GEF IWC and the Annual Consultative meeting of Large Marine Ecosystems and Coastal Partners (p. 28)

Recommendations:

Projects to undertake the following on a regular basis, but at least once a year, prior to the Consultation Meeting on Large Marine Ecosystems:

- a) **Review of the IW:LEARN website project page**, to verify that all information is correct and submit any new reports and deliverables as appropriate (see Box 2);
- b) For projects in full implementation, **prepare a number of relevant experience notes**, and if the project is close to completion, **overall results notes** for submission to IW:LEARN;
- c) Prepare a **bibliography of project deliverables** in line with the project outcomes/outputs and **with links to all online reports/deliverables** and submit to IW:LEARN;
- d) Provide any other **key links to all project related web data and information resources**; and
- e) Projects to **contribute to the GEF IW Portfolio Results Archive**, a database of project results from ongoing and past GEF IW projects.

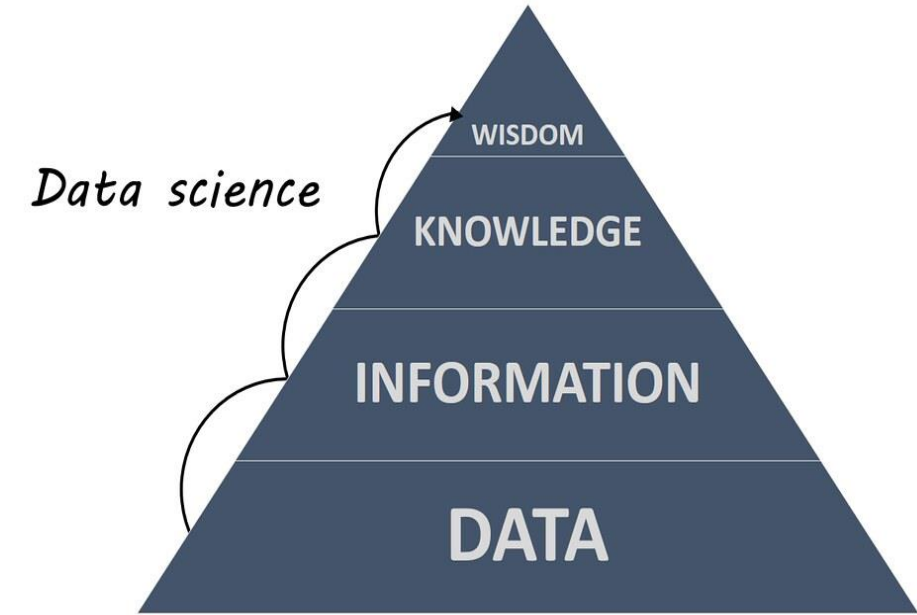
In preparation for GEF International Waters Conference (IWC) projects to consider in addition to the above:

- f) In addition to the preparation of communication material and active participation in the IWC, as guided by IW:LEARN, prepare a **brief report on the progress towards SAP implementation** (if applicable) and the relevant SDGs;
- g) **Completion of the Large Marine Ecosystem Scorecard** (at the start and towards completion of the project)

OUTPUT 4. Assess the data needs to support the project activities and the sources of data (p.23)

Recommendations:

- a) **Identify data sources to be used throughout project implementation** from local level monitoring, national, regional and global databases.
- b) **Develop an information and data management strategy**, including: (i) an assessment of available data and data needs for implementation of activities; (ii) identify corresponding gaps in data to monitor activities and possible data sources; (iii) Planned activities for the compilation of data through monitoring or through existing databases; and



Good practices and tools:

- ✓ Good examples of project, regional and global databases

OUTPUT 5. Establish a science and data project group including scientists and key stakeholders to support the project in terms of data gathering and management and assessments (p.26)

Recommendations:

- a) **Elaborate the main national and regional partners** to coordinate on data sharing and if appropriate establish agreements of cooperation on data and information sharing for the project (and beyond) including joint assessments; and
- b) **Establish a science and data project group** of leading scientific and socio-economic experts.

Good practices and tools:

- ✓ Different types of expert working groups established within projects, but limited information available online.
- ✓ To provide example ToRs of such as working group, with cooperation with regional organizations



OUTPUT 6. Identify and implement most appropriate available data management tools, guidelines etc. (p. 26)

Recommendations:

- a) **Identify good practices and tools** and elaborate how they will be incorporated into the project's activities

Good practices and tools:

- ✓ Initial list of IW:LEARN tools, global guidelines, online resources and training;
- ✓ Needs further inputs from DIM participants, projects and partners to ensure full list of all project and other good practices, tools, guidelines etc.



OUTPUT 7. Incorporate indicators for long-term monitoring and establish a metadata system for recording all data gathered and generated and make available online (p. 28)

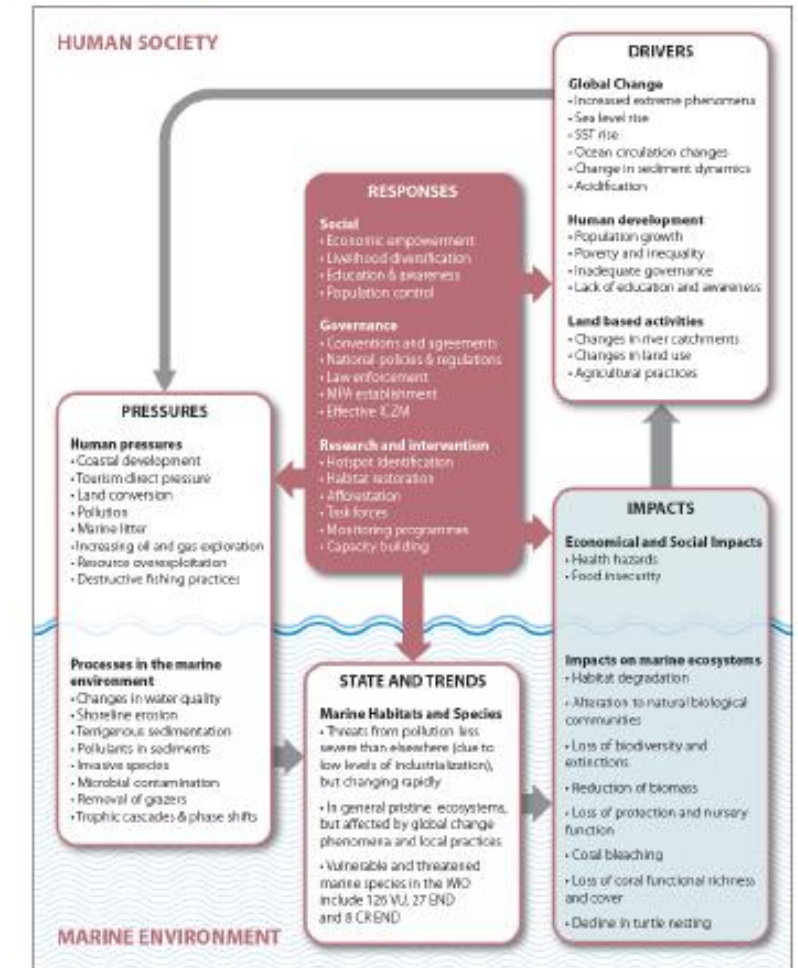
Recommendations:

- Ensure a core set of indicators are monitored and reported on to support the LME SAPs, SDGs and other key targets;
- An **agreed template for the recording of metadata**, (in line with other core reporting i.e. the SDGs) should be developed and should be completed as part of each activity and demonstration where data is gathered or generated, and be made available online and contributed to Regional Assessments.

Good practices and tools:

- ✓ See report on Common Indicators;
- ✓ Examples of meta-data storage (ASCLME) and some Regional Seas (OSPAR, HELCOM, Mediterranean)
- ✓ Issues to consider such as data may be at the national or local level, and issue of data being made publicly available.

Figure 3.1. Regional State of the Coast Report Diagrammatic summary of DPSIR analysis for marine biodiversity in the WIO.



OUTPUT 8. Support and strengthen key national and regional institutions in long-term data management, monitoring and assessments (p.29)

Recommendations:

- a) Elaborate **how the project will support national and regional organizations/institutions** with regards to coordinated monitoring and data gathering and enhanced databases; and
- b) Ensure close coordination between the **project and relevant national and regional organizations/institutions** towards a more systematic and comparable reporting of data to fulfil regional and global reporting requirements (SDGs etc).



Good practices and tools:

- ✓ Being done by many LME projects as part of capacity building and national actions but not reported;
- ✓ Need to further elaborate best practices in centralizing data

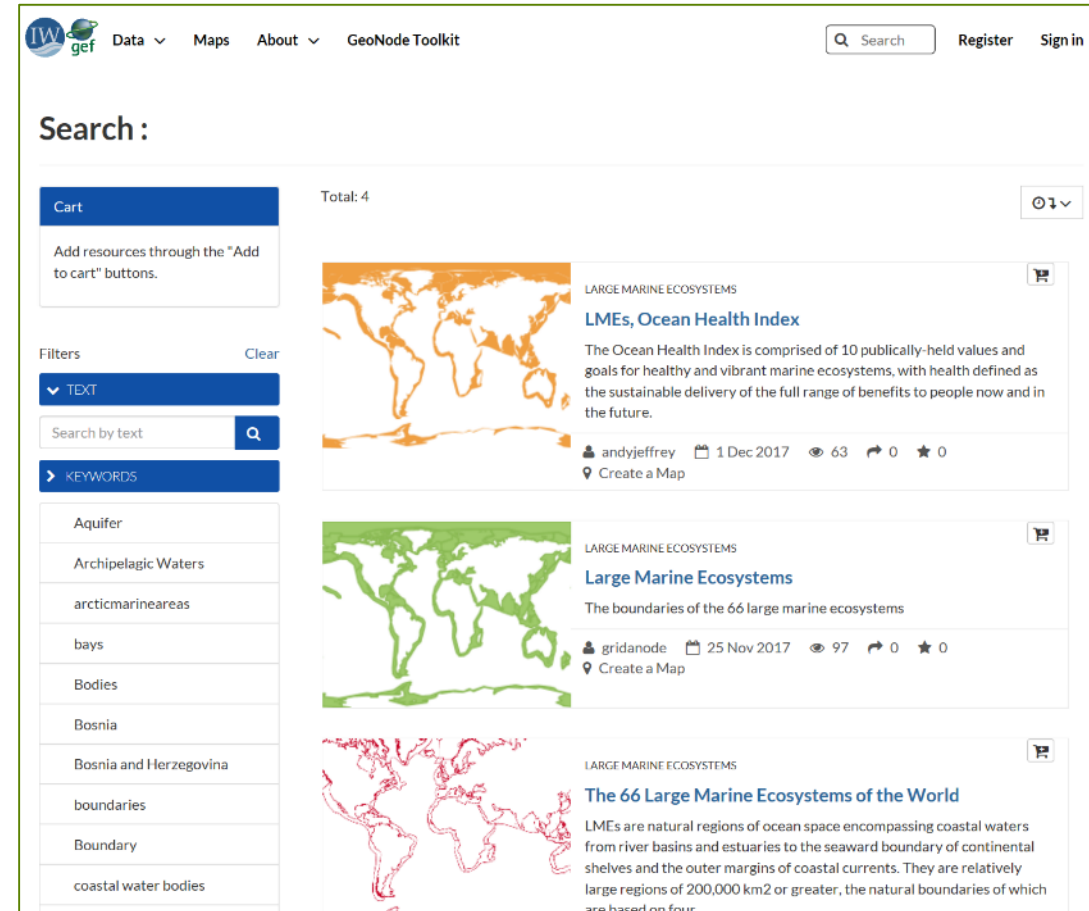
OUTPUT 9. Define an approach to ensure long-term availability of data and integration into appropriate national and regional databases and GIS

Recommendations:

- Ensure integration of **data and information in relevant national/regional platforms** that will be **sustainable** beyond the project's duration;
- Upload GIS data to the GEF IW project spatial data** (<http://geonode.iwlearn.org/>);
- Ensure that the **project contributes to a long-term monitoring and reporting of SAP targets and SDGs**, and if required update SAP targets and indicators to be closely aligned with the relevant SDGs as well as other global reporting requirement.

Good practices and tools:

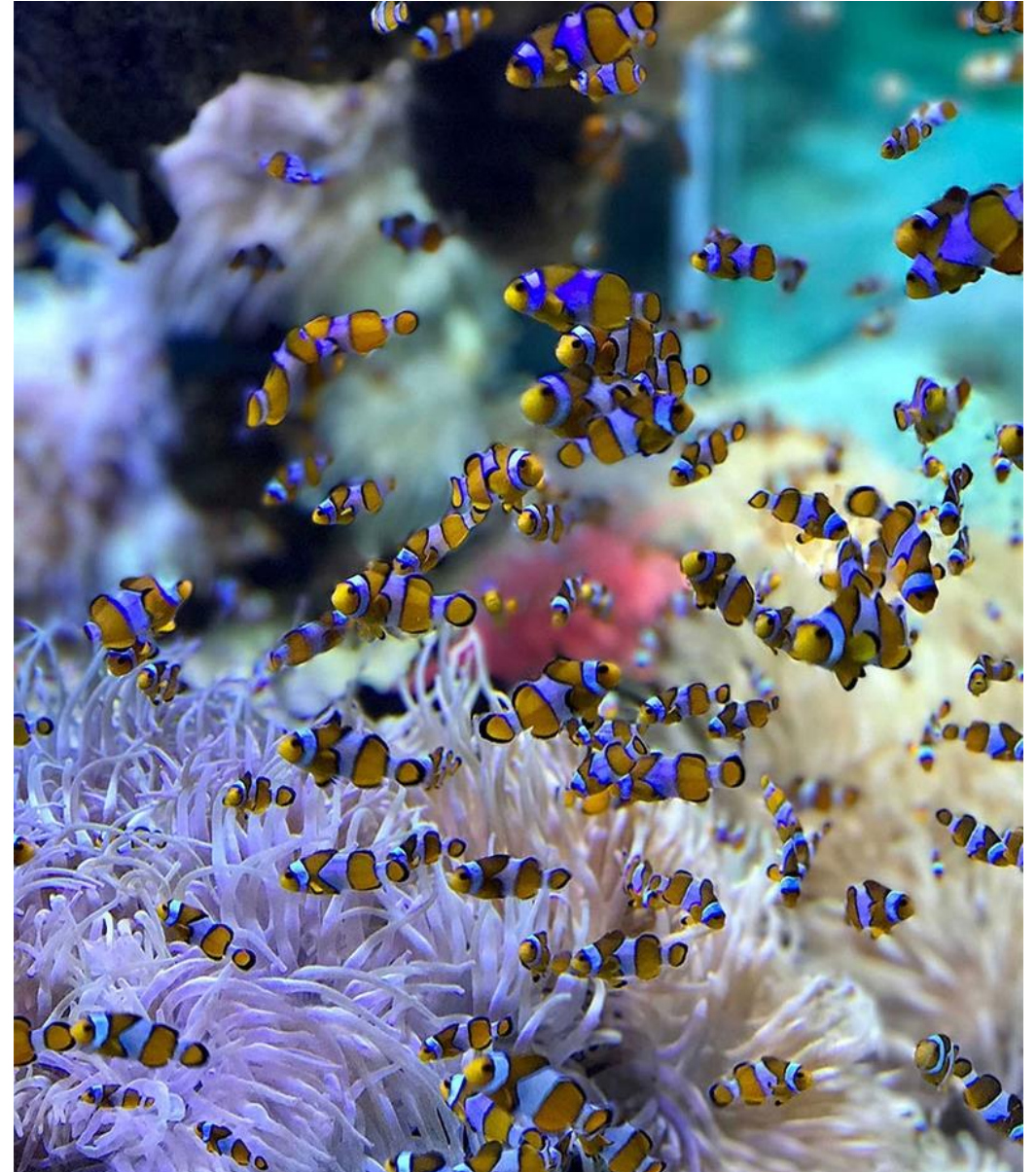
- ✓ Regional/Global databases in Tables 3 and 4
- ✓ GEF IW project spatial data guidelines and training



The screenshot shows the GeoNode Toolkit interface. At the top, there is a navigation bar with links for Data, Maps, About, and GeoNode Toolkit. A search bar is located on the right. Below the navigation bar, the search results are displayed. On the left, there is a sidebar with a 'Cart' section and a 'Filters' section. The 'Filters' section has a 'TEXT' filter selected, and a search box with the text 'Search by text'. Below the search box, there is a 'KEYWORDS' section with a list of keywords: Aquifer, Archipelagic Waters, arcticmarineareas, bays, Bodies, Bosnia, Bosnia and Herzegovina, boundaries, Boundary, and coastal water bodies. The main content area shows search results for 'LARGE MARINE ECOSYSTEMS'. There are three results displayed, each with a world map thumbnail and a title. The first result is 'LMEs, Ocean Health Index' by andyjeffrey, dated 1 Dec 2017, with 63 views and 0 likes. The second result is 'Large Marine Ecosystems' by gridanode, dated 25 Nov 2017, with 97 views and 0 likes. The third result is 'The 66 Large Marine Ecosystems of the World' by gridanode, dated 25 Nov 2017, with 97 views and 0 likes. Each result has a 'Create a Map' button.

Next steps?

- ✓ Review and final comments to DIM Guidelines included, especially with regard to additional good practices and tools to be included
- ✓ LMEs to consider incorporating relevant outputs and recommendations into their workplans (as appropriate)
- ✓ Next phase of IW:LEARN to continue DIM work considering recommendations





THANK YOU