Ecosystem goods and services (EGS)

Recommendations:

The Committee is invited to:

i. **Discuss and provide** clear advice on the MTR recommendation that the project should adopt an ecosystem goods and services framework as the foundation of its scientific and technical approach.

ii. **Consider** the implications if any of the following options in responding to the MTR recommendation on EGS:

   - a. Agree with the recommendation, but not to the extent where a EGS framework is a better choice than the DPSIR framework;
   - b. Disagree with the recommendation if the intention is to replace the current DPSIR with EGS
   - c. If resources allow, support implementation of both DPSIR and EGS frameworks focusing on opportunities for strengthening the scientific approach, while avoiding duplication of effort on indicators.

     For instance, support for the testing and training on EGS approach and EGS valuation through current pilot projects and JCU training.
Introduction:

1. Recommendation 5 of the MTR states that “the project should adopt an ecosystem goods and services framework as the foundation of its scientific and technical approach by:
   a. Integrating ecosystem goods and services;
   b. Integrating an EGS approach/ context as the basis for all relevant project activities including for R2R planning, mainstreaming and policy;
   c. Testing an EGS and valuation approach as the entry point in a limited number of appropriate demonstration projects that have yet to commence or have recently commenced (subject to country needs and buy-in);
   d. Commencing basic training on ecosystem goods and services (including valuation) for national capacity building, including considering a dedicated module on this topic as part of the ongoing post-graduate training delivered through an appropriate institution (subject to resource availability).”

2. This paper presents a range of options to inform discussion and requests that the Committee review the MTR recommendation in light of the suggested options. It also seeks a decision by the Committee on a preferred choice moving forward with a framework or approach supporting the science-policy interface including R2R planning, mainstreaming and policy reforms.
The DPSIR Framework

3. The Driver Pressure State Impact Response (DPSIR) Framework is an internationally recognised and implemented approach to understanding and communicating the natural resource situations of an area or country. The approach is inclusive of the natural system, the human values and practices, and prevailing political and governance structures.

4. It is important to closely review and assess the current DPSIR Framework in light of the MTR recommendation and provide technical advice based on the options suggested below.

5. The R2R Regional Project Unit (RPCU) conducted extensive research into the various approaches used internationally to produce national or state-level State of the Environment and State of the Coast reports. Typically, these reports follow the DPSIR framework or some variation of it. Notable among these were the Australian State of the Environment Reports, and the SPREP-led national State of the Environment Reports.

6. In June 2017, the RPCU convened a workshop where regional experts in various disciplines were able to compile a list of indicators that are common across the region and internationally for understanding the full system of natural resources, human activities and values, and the governance structure in which they both exist and operate. The R2R Regional Steering Committee at its second meeting in Nuku’alofa, Tonga in July 2017 endorsed the characterization of the pilot sites in each of the 14 countries using the RapCA methodology.

7. The R2R DPSIR approach to preparing a State of the Coast report involves assessing 22 indicators that describe the governance, socio-economic and environmental characteristics of a country. Data will be collated for the pilot site and other relevant national level data from different Government agencies and project reports.

8. In some countries, there will be gaps in recent data. To supplement this data shortfall, a field survey (RapCA) will be organised to collect primary data, socio-economic, governance and environmental at the IW R2R Pilot Site. Other parallel activities may be undertaken to gather baselines, for example, an extensive literature review and discussions with project managers of other related projects that are implemented in the country. For instance, the Pacific Ecosystem-based Adaptation to Climate Change (PEBACC) project implemented by SPREP and members, and the Commonwealth Marine Economies Programme for the Pacific funded by the UK Government and implemented by Centre for Environment Fisheries & Aquaculture (Cefas), UK Hydrographic Office (UKHO) and National Oceanography Centre (NOC).

9. Information on some indicators may already be available in documents held in national agencies, reports published by development partners, or reports of national projects implemented by regional agencies and international/ local NGOs. Prior to the commencement of any fieldwork, there needs to be an exhaustive literature survey conducted in country by the national project manager to determine information gaps. Some data gaps may be filled during the RapPCA exercise, and some by the national STAR projects, while others may be beyond the scope of the project.

10. Data collected through the RapCA and secondary data collection will be used to develop a Pilot Site Diagnostic Report that may include all the 22 indicators mentioned above, as applicable. The Island Diagnostic Analysis (IDA) process takes a whole-island approach in understanding underlying causes of critical environmental problems, the activities and industries involved, the agencies responsible, and R2R reforms necessary to address the problems. The IDA process also identifies other priority sites where R2R interventions are required. This process results in an Island Diagnostic Report.
11. Three processes and products inform the production of the State of the Coast report, a national planning tool. These are the Pilot Site Diagnostic Report, the Spatial Prioritisation Model and the Island Diagnostic Report. The State of the Coast report will in turn inform the development of a national Strategic Action Framework for Integrated Coastal Management, a key deliverable of the R2R programme.

Analyses of Options

12. The RPCU underlines the importance of the MTR recommendation to adopt an EGS framework, which arises from concerns raised in the MTR report over bias towards natural sciences over socio-economic, governance and institutional strengthening and reforms. The MTR also raised concerns that the indicators established under the DPSIR framework may not be fit for purpose in delivering on the project’s objectives and targets.

13. It is important to note that there is always opportunity to improve and strengthen approaches and methodologies developed for the purpose of delivering on certain objectives. This holds true in consideration of the DPSIR and EGS frameworks, and there is an opportunity to explore ways whereby the two can be used by the project in parallel, or merged to improve efficiency and deliver good results. A choice between the two frameworks may be entirely dependent on both technical rigor and the practicalities of the circumstances and the environment evolving around their application.

14. Given this, it is perhaps wrong to suggest that EGS should be the foundation of the project scientific and technical approach. On the one hand, this undermines the current approach of using the DPSIR framework, which works well, and the 22 indicators selected are representative of the core areas of governance & administration, socio-economics (including cultural aspects), and environment (focusing on water quality and habitats). On the other hand, the EGS can still be implemented where appropriate particularly in areas of EGS valuation and training.

15. Adoption of an EGS framework has significant implications for the IW R2R workplan and budget. It is important that the Committee discuss technical aspects of testing an EGS framework and valuation approach as the entry point in a limited number of newly-started demonstration sites as part of overall science-policy interface in policy reforms. The Committee should also provide advice on the option of basic training on EGS and valuation for national capacity building as dedicated module in current JCU training or other alternatives.

Conclusion & Recommendations:

16. Key to the discussion is not so much whether or not EGS is better than DPSIR or vice versa, rather the aim is to evaluate if either approach delivers appropriately in supporting scientific and technological aspects of the project.

17. Equally, it is important not to lose focus of the broader objective such that the R2R concept provides for the protection of ecosystem goods and services. Therefore, the approaches should seek to identify and mitigate the threats and root causes in order to minimise or avoid impacts on the environment.

18. Alternatively, there are implications if the environmental threats and the associated roots causes are not addressed effectively immediately or over time. The impacts on the environment particularly worsening situations of ecosystem goods and services, and the benefits supporting community resilience and improved-livelihoods will not be realised.

19. The paper recommends that the Committee:-
i. **Discuss and provide** clear advice on the MTR recommendation that the project should “adopt an ecosystem goods and services framework as the foundation of its scientific and technical approach.”

ii. **Consider** the implications if any of the following options in responding to the MTR recommendation on EGS:

a. Agree with the recommendation but not to the extent where EGS framework is a better choice than the DPSIR framework;

b. Disagree with the recommendation if the intention is to replace the current DPSIR with EGS; and

c. If resources allow, support implementation of both DPSIR and EGS frameworks focusing on opportunities for strengthening the scientific approach while avoiding duplication efforts on indicators.

   For instance, support for the testing and training on EGS approach and EGS valuation through current pilot projects and JCU training.