











GEF IW R2R/RSTC.7/WP.07

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# Seventh Meeting of the Regional Scientific and Technical Committee for the GEF Pacific Ridge to Reef Programme

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## **EU Funding Brief Concept**

Highlands to High Seas (H2H): Integrated (nexus) resource management and governance for climate resilience and sustainable development of Small Island and Large Ocean States

This document presents a brief concept that may potentially be considered for EU Funding, entitled, *Highlands to High Seas (H2H): Integrated (nexus) resource management and governance for climate resilience and sustainable development of Small Island and Large Ocean States (SILOS)* an integrated programmatic initiative outlining challenges, lessons, and proposed H2H Framework for implementation for the consideration of the Regional Steering Committee.

The concept is designed to expand the scope of the R2R concept based on the national and regional priorities that will realise local to global sustainable development benefits.

The Regional Steering Committee is invited to review and endorse the Brief Concept for co-development with national and development partners for co-implementation.

# **EU Funding Brief Concept**

Highlands to High Seas (H2H)<sup>1</sup>: Integrated (nexus) resource management and governance for climate resilience and sustainable development of Small Island and Large Ocean States (SILOS)<sup>2</sup>

Small Island and Large Ocean States or SILOS, face devastating impacts of climate change – sea-level rise and issues of sovereignty, ocean acidification and related impacts on biodiversity, increased droughts and water scarcity, coastal flooding and erosion, changes in rainfall that affect ecosystems and food production, and adverse impacts to human health (IPCC, 2014, 2018). Covering more than 30 percent of the Earth's surface, the Pacific Ocean is the largest water mass on the planet. With 2% land mass and 98% water, it is critical for SILOS to understand the interconnectivity of resources or ecosystems from ridge to reef – or from highland to high seas – to manage and govern their development sustainably and effectively with demonstrated local to global benefits.

#### **Towards Green and Blue Economies**

Coastal and Island developing countries have remained at the forefront of Green<sup>3</sup> and Blue<sup>4</sup> Economy advocacy, recognising that as small island and large ocean states, oceans have a major role to play in humanity's future and that the Green and Blue Economy, which are interconnected, offers an approach to sustainable development suited to their circumstances, constraints, and challenges.

Transitioning to sustainable green and blue economies is considered a critical pathway to achieving sustainable development. However, SILOS face constraints, including: small populations, limited resources, vulnerability to natural disasters and external shocks, and strong dependence on international trade. Their growth and development are often hampered by high transportation and communication costs, disproportionate expensive public administration, and infrastructure due to their small size, and little or no opportunity to create economies of scale. The vulnerabilities and challenges of SIDS were recognized in the Barbados Programme of Action, the Mauritius Strategy for Implementation, the RIO+20 outcome document, and the SIDS Accelerated Modalities of Action (Samoa) Pathway.

#### **Challenges**

1. The COVID-19 pandemic has brought unprecedented challenges to societies and threatened humanity and global resilience. All countries are challenged, but lower-income and developing countries are facing a more challenging situation than others due to their limited health infrastructure, limited financial and human resources, and limited capacity of governments to respond. Further, the interconnected nature of the COVID-19 pandemic crisis demands an integrated approach and coordinated action, which complicates decision making even more. Identifying the best set of policies and instruments to address COVID-19 challenges and aligning them with broader social goals will be critically important for sustainable recovery from the pandemic. The key practical challenge facing the policy makers of developing countries is how to

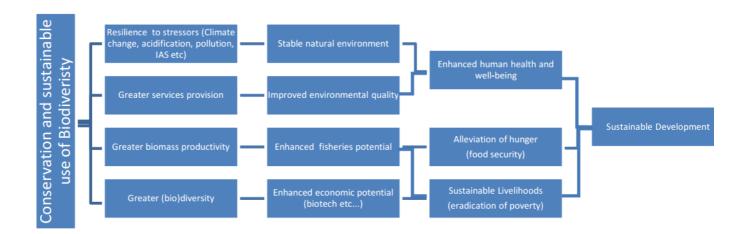
<sup>&</sup>lt;sup>1</sup> Intervention made by R2R at the 2019 Pacific Ocean Alliance received commendation by Ambassador Thompson and participants, highlighting the need for integrated approaches. In the POA Report PIFS Secretary General was quoted "from Ridge to Reef" and "from Highlands to High Seas" providing an expanded scope to reflect Leaders' priorities of the High Seas.

<sup>&</sup>lt;sup>2</sup> SILOS first coined in Mangisi-Mafileo, F. (1 July 2021) Towards a Pacific Deep-Sea regional policy through the application of the Ridge to Reef concept. 11<sup>th</sup> MARE International Conference.

<sup>&</sup>lt;sup>3</sup> A green economy is defined as low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services.

<sup>&</sup>lt;sup>4</sup> According to the World Bank, the blue economy is the "sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem."

- prioritize policies and action to achieve the interconnected goals of managing the public health crisis, recovering the economy, and achieving environmental sustainability.
- 2. An important challenge is understanding the nexus between green and blue economies. The green, low carbon and pollution, resource efficient and prevention of loss of biodiversity. And the blue, focusing on sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem. Furthermore, the green and blue economy concepts challenges us to realize that the sustainable management and governance of resources will require cooperation and collaboration across borders and sectors through a variety of partnerships, and on a scale that has not been previously achieved.
- 3. A related core challenge is the de-coupling of socioeconomic development from environmental degradation. To achieve this, the Blue Economy approach is founded upon the assessment and incorporation of the real value of the natural (blue) capital into all aspects of economic activity (conceptualisation, planning, infrastructure development, trade, travel, renewable resource exploration, energy production/consumption). Efficiency and optimisation of resource use are paramount whilst respecting environmental and ecological parameters.
- 4. For SILOS, the Blue Economy approach recognises and places renewed emphasis on the critical need for the international community to effectively address the sustainable management and governance of resources in international waters by the further development and refinement of international law and integrated ocean governance mechanisms. Every country must take a shared responsibility to protect the high seas, which covers 64 % of the surface of our oceans and constitute more than 90% of their volume.
- 5. The natural world made up of the physical environment, its mineral components and biodiversity at all three levels (genetic, species, ecosystem) is intrinsically interconnected and the more diverse and productive the natural system, the greater the degree of interconnectivity. Hence the identification of issues is inherently an anthropogenic construct and depending on one's perspective may appear arbitrary. A case in point is the precursory role that the conservation and sustainable use of biodiversity has in enabling and realizing Green and Blue Economies, broader sustainable development, and poverty eradication. This is particularly true in developing countries where economies are more directly related to environmental exploitation.



# **Leveraging lessons from R2R:**

The SPC Pacific Ridge to Reef Regional Project and Regional Programme Coordination Unit has been implemented since 2015 and ends 1 March 2021. It is a GEF multi-focal area, multi-GEF agency and

multi-country initiative guiding the coordinated investment of GEF grant funding across its focal areas of biodiversity conservation, land degradation, climate change adaptation and mitigation, sustainable land management, sustainable forest management, and international waters. The programme was supported by SPC in areas of science-based planning, human capital development, policy and strategic planning, results-based management, and knowledge sharing.

While there have been rapid advances in assessments of ecosystem services (ES), a critical remaining challenge is how to move from scientific knowledge to real-world and real-time decision making. The Pacific R2R Programme offers key lessons from our experiences applying new approaches and tools for upscaling to a proposed H2H regional project:

- 1. Applying an ES approach is most effective in leading to resilient and sustainable development governance and management, as part of an iterative science-policy process;
- 2. Ecological production function models were trialled in one country (Vanuatu), and an important science gap exists in linking changes in ES to changes in livelihoods, health, cultural values, and other metrics of human wellbeing;
- 3. Challenges at different levels of coherence: strategic, conceptual, operation, institutional and financial at national, regional, and global levels;
- 4. Harmonized and simplified local to global governance and reporting frameworks and processes, and financing will strengthen coherence and capacity;
- 5. Strengthening governance mechanisms through the Community to Cabinet approach;
- 6. Formal accredited and informal training of local experts in the approaches and tools is important for building local capacity, ownership, trust, and long-term success and sustainability;
- 7. Development of platforms and mechanisms for knowledge exchange is critical to facilitate planning and policy processes;
- 8. Limited resourcing and capacity constraints.

Leveraging off these key lessons, the proposed H2H regional project will also consider the segment of the High Seas. One of the outputs from R2R implementation was a policy paper on Pacific Deep-Sea regional policy through the application of the Ridge to Reef concept, and key considerations in developing a full concept would consider transboundary risks, spatial conflict, and regional policy responses.

# **Proposed H2H Framework and application**

Ultimately, the integrated H2H Framework and its effective application proposed to strengthen local to global coherence, consensus building and cooperation, coordination and collaboration for regional resilience, security, and well-being. The framework refocuses and emphasizes on managing and governing the nexus, and expands the scope beyond the reef, to areas beyond national jurisdiction – High Seas.

linking short and long-term goals, mapping the interactions of different policy options, and assessing anticipated consequences and cross-sectoral implications. This will enable policy makers to prioritize policy choices and allocate limited resources in such a way that they are directed toward actions that generate synergy and co-benefits, have multiplier effects, and achieve interconnected solutions for health, the economy and environment. As a holistic approach, it considers:

Policy and Governance drivers:

Biophysical and Environmental (natural resource degradation, climate change, disease vectors etc)

Innovation and Research (technology, infrastructure, innovation etc)

Economic and Market (livelihoods and income, markets and trade, land tenure etc)

Political and Institutional (governance frameworks, institutional support, conflict)

Socio-cultural (social norms and traditions, gender, youth etc)

Demographic (urbanization, aging, migration etc)

## Availability - Access - Utilization - Stability - Agency - Sustainability:

Systems supporting production (land to ocean ecosystems)

Demand/Supply Chain (sustainable consumption and production and resource efficiency, trade, processing, marketing)

Behaviours (consumption and production, awareness and education, choices)

Health and Nutrition (food and water quality and safety)

#### **H2H Proposed Outcome:**

Resilience to climate change and improved human security and well-being for sustainable development of SILOS

## **Intermediate Outcomes:**

Integrated management and governance from H2H Harnessing equitable solutions for enhanced and balance ES provision

#### **H2H Innovation Science Knowledge Action Pathways:**

# Pathway 1: Research (Science) - Partnership

Spatial prioritization and quantification of ES delivery from H2H

Harmonization and simplification of governance frameworks and strengthening frameworks

- Results produced
- Published
- Disseminated

# Pathway 2: Change Knowledge

- Awareness and Understanding
- Stakeholder engagement on different ES positions
- Stakeholder differences are made transparent, mediated and negotiation

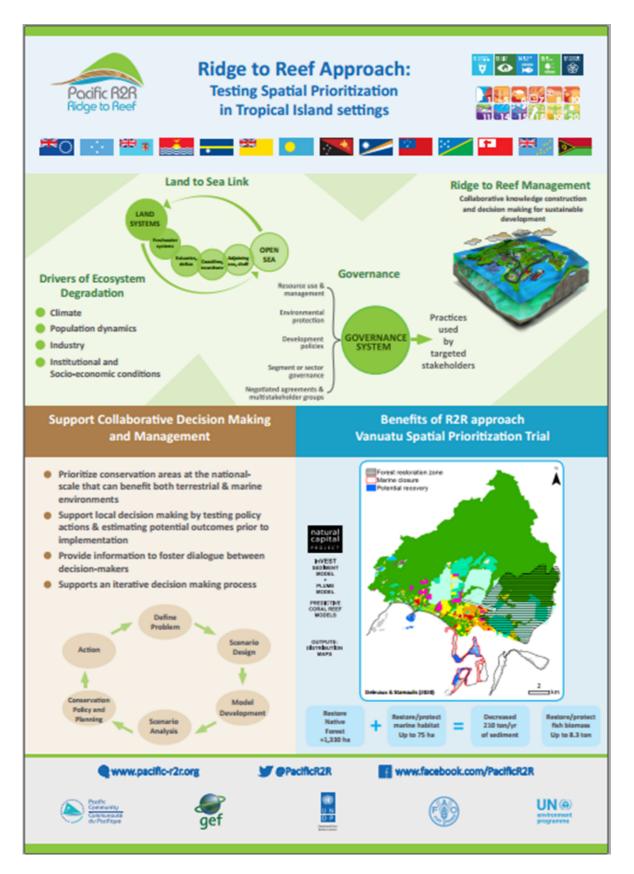
# Pathway 3: Generate Action (Behaviour Change)

- Alternative choices based on ES framework
- Plans, Policies, and legislation consider ES impacts
- New/Reform governance and finance mechanisms

# **H2H Preliminary Logical Framework**

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Component	Details
1	SPC, Education/Research Institution and local decision makers partner to co-develop ecosystem-based science to inform land-sea integrated planning
H2H Ecosystem	and sustainable development in a changing climate using the ES approach of spatial prioritization:
Services Science	
	1. Problem definition and management questions:
	- What is the supply of key ecosystem services in the region?
	- How will climate change affect the delivery of these ecosystem services?
	- Where should we invest in mitigation and adaptation measures to maximize multiple benefits across land & sea?
	- What policies and legislation do we need to conserve and sustainably use ES?
	2. Scenario Design:
	- Co-design future scenarios to assess climate change (e.g., sea level rise, storm surge, change in rainfall, increased temperature) and policy
	actions
	3. Model Development
	- Define the ecosystem services to be considered (e.g., sediment and nutrient retention, water quality, water yield, coastal vulnerability,
	tourism/recreation, habitat quality, fisheries and aquaculture, red & blue carbon etc).
	- Collect data, process, and model scenarios.
	4. Ecosystem service trade-off analysis (in biophysical and social-economic terms): using optimization tools to inform equitable (gender/culture)
	decision making in the local policy and global initiatives (e.g., SDGs, Aichi Post 2020, Paris, Sendai [see C3]) contexts.
	5. Data sharing and visualization: Design data viewers to share results and discuss policy implications while considering data sharing agreements
2	- In partnership with Education/Research Institution develop an accredited Training of Trainers (ToT) course on the Natural Capital approach and
H2H Capacity	H2H. Potential cross credit/upgrade to Masters degree.
building	- Outputs from the training will include designing policy briefs and reviews, presentation to regional and international conferences, and
	workshops to exchange knowledge.
	- Design and implement local citizen science initiative
3	Local to global governance: Understanding the social, science, policy and legal interface through harmonizing and simplifying Highlands to High Seas
H2H Integrated	integrated planning, policy, legal frameworks, and governance mechanisms.
Governance –	
management,	- Establish national H2H steering and coordination mechanism and Technical Working Group (Youth and Gender)
Policy and	- Review of global, regional, national policy frameworks, harmonize with recommendations for simplification (link to C1)
Planning	- Review legal regime interaction with recommendations for harmonization
	- Review governance institutions and mechanisms with recommendations for strengthening and alignment – local, national, regional, and global
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	<ul> <li>Valuation studies (link to C1)</li> <li>Integrated Governance: Strategic and Action Plans</li> </ul>
4 H2H Knowledge Management, Communications, Advocacy and Behaviour Change	<ul> <li>Behavioural, social science and design thinking for adoption and sustainability.</li> <li>Developing a strong KM modality through the establishment of national and regional platforms for managing information and sharing of H2H best practices and lessons learned. Creation of H2H Network, a Knowledge Management Platform including key knowledge tools and products for effective sharing of information and.</li> <li>Facilitates planning and policy processes and the adoption of H2H Management and governance practices supporting sustainable livelihoods and climate resilience in SILOS.</li> <li>Participation at international conferences</li> </ul>
5 Regional Coordination	<ul> <li>Establish a Regional Project Coordination Unit</li> <li>SPC science/technical working group coordination (country participation)</li> <li>Inter-CROP coordination committee (SPC, SPREP, USP, FFA, SPTO)</li> <li>Regional Steering Committee (Operational Focal Points, Planning Focal Point, Finance)</li> <li>Annual Knowledge and Learning Exchange</li> </ul>



Pacific R2R: Testing Spatial Prioritization in Tropical Island settings poster was selected by the IPBES Secretariat to showcase at the IPBES Stakeholder Days at the margins of the 8th Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Thursday, 03 June, 2021 - Wednesday, 09 June, 2021.

The IPBES is an intergovernmental organization with a 132-country membership, established to improve the interface between science and policy on issues of biodiversity and ecosystem services. It is intended to serve a similar role to the Intergovernmental Panel on Climate Change-IPCC.

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