COLLABORATIVE PLANNING: 
TARGETED RESEARCH FOR IMPLEMENTING SDS-SEA

1.0 Background

1.1 In line with the development of the SDS-SEA Implementation Plan for 2017-2022, collaborative planning sessions with Country and Non-Country Partners were undertaken to consolidate ongoing and planned programmes and projects in the PEMSEA member countries and the EAS region over the next 5 years. The objective is to identify areas for cooperation and collaboration in line with the four major components (Priority Programs; Blue Economy Investments and Sustainable Financing of the SDS-SEA; Knowledge Management and Capacity Building; and Ocean Governance and Strategic Partnerships) and specific priority programs (Climate Change Adaptation/Disaster Risk Reduction and Management; Marine Biodiversity Conservation and Management; and Pollution and Waste Management) of the SDS-SEA IP.

1.2 As part of this consultative and collaborative process conducted from January to May 2017, the need for targeted researches/programs were highlighted as an important aspect in further enhancing SDS-SEA implementation in the countries as well as in addressing gaps and tapping new opportunities.

1.3 The following sections provide a summary of the research and technical support needs identified in the countries, as well as collaborative targeted researches that are ongoing and planned for 2017-2018.

2.0 Scaling-up of SDS-SEA/ICM Programs

2.1 For the development and implementation of local ICM programs, for example, scientific research and technical support needs identified include the following:

2.1.1 Risk and vulnerability assessment of climate change and the potential for impacts on different sectors (fisheries; aquaculture; ecotourism; coastal communities; livelihoods; infrastructure) and marine ecosystems (wetlands; coral reefs; mangroves; seagrass; beaches; other habitats), to enable mainstreaming of climate change concerns and adaptation strategies into local/national development and budget plans;

2.1.2 Economic valuation of ecosystem services, which can serve as input to policy formulation and decision-making for planning and development, marine spatial planning, regulations/zoning, investments, etc.;

2.1.3 Development of standard indicators for healthy and resilient habitats (e.g., coral reef, seagrass, mangrove), and methodologies for gathering and assessing data;

2.1.4 Pollution load assessment and total allowable pollutant loading development, to support the development of pollution reduction management and investment plans;
2.1.5 **Assessment of ecosystem carrying capacity** for integrated management of priority river basins and coastal areas to address nutrients and other priority pollutants, as well for economic development activities including eco-tourism, sustainable fisheries and aquaculture development; etc.;

2.1.6 **Scientific and socioeconomic assessments** to support development of sustainable fisheries management programs/EAFM, and assessing cost-effectiveness of different management interventions;

2.1.7 **Value-chain analysis, market surveys, value-addition** and other tools to support the development of sustainable and environment-friendly livelihood programs;

2.1.8 **Methodologies for integrated land and sea-use zoning** considering climate change impacts, and overcoming potential data limitations in local sites; and

2.1.9 **Monitoring, evaluation and reporting** of program outcomes, impacts and benefits, including integrated and cost-efficient approaches for environmental monitoring, and preparation of ecosystem-health report cards.

### 3.0 Current and Planned Targeted Research Collaborations

3.1 PRF has initiated and lined up for the next 2 years the following collaborations with some non-Country Partners and other institutions to address some of the research and technical needs of the countries and ICM sites in the region:

3.1.1 Conduct of a regional training workshop on the Ocean Health Index (OHI) on March 2017 together with Conservational International (CI) to consider the potential applications of the OHI system for assessing the current state of ocean health at the local, national and regional levels. Further work being planned to extend OHI as a planning and assessment tool at ICM sites in support of local SOC reporting (cf., 2.1.2, 2.1.3, 2.1.9)

3.1.2 PEMSEA and KMI (Korea Maritime Institute) mobilized a Regional Task Force (RTF) for conduct of training on Marine Spatial Planning (MSP) tool for the Verde Island Passage (VIP): (i) analyze the spatial characteristics of the VIP using available data and information; (ii) provide technical support in the conduct of training on MARXAN with Zones. PEMSEA and KMI will collaborate to extend the trainings to PNLC members and local government units in 2017 (cf., 2.1.2, 2.1.8).

3.1.3 PEMSEA and ROK MABIK (Marine Biodiversity Institute of Korea) initiated a joint project with the objective of developing research proposals through identifying research needs in biodiversity policies, programs and research for the vulnerable marine ecosystems in the region: Habitat and Species Research, Building Local Capacity, Strengthening MPA Management Capacity for Kampot-Phu Quoc and Timor Leste Coastal Area, respectively. The proposals will be submitted to funding agency for consideration (cf., 2.1.1, 2.1.3, 2.1.9).

3.1.4 Plymouth Marine Laboratory (PML) developed the research project “Blue Communities: Building capacity for sustainable interactions with marine...
ecosystems for health, wellbeing, food and livelihood of coastal communities”. PEMSEA will support as a regional coordinator to increase the research capabilities with appropriate stakeholder engagement and to apply research to identify ‘what works’ in fostering wellbeing, protecting both human and ecosystem health, and achieving sustainable development (cf., 2.1.2, 2.1.6)

3.1.5 PEMSEA will collaborate with PML on the project of “Addressing Challenges of Coastal Communities through Ocean Research for Developing Economies (ACCORD)”. The project aims to deliver vital scientific understanding about the marine environment that marine managers, financial investors and decision-makers require to plan, promote and encourage the sustainable development and protection of ocean assets supporting the Blue Economy in the EAS region (cf., 2.1.2, 2.1.6)

3.1.6 Bogor Agricultural University in Indonesia, a PEMSEA ICM Learning Center, in collaboration with St. Andrews University in the United Kingdom has jointly developed a research proposal on “Reducing conflict between nature conservation and economic development in maritime areas: Understanding the potential of payments for ecosystem services and integrated coastal management”. The project aims to assess the feasibility of implementing a Payment for Ecosystem Services (PES) scheme through capacity development in the field of ecosystem services assessment and valuation and in the design and implementation of PES and ICM schemes (cf., 2.1.2).

4.0 Actions requested of the Technical Session

4.1 The Technical Session is requested to consider and provide recommendations on the following:
   a. Potential areas/aspects where assistance to address the above research and technical needs of countries in the region is available, considering technical capacities, mandates, work programs and available resources;
   b. Other scientific and technical institutions that may be engaged;
   c. Key areas for targeted research in relation to key global and regional instruments, programs and commitments (e.g., UNFCCC, SDGs, Aichi Biodiversity Targets, etc.) at the local, national and regional scales;
   d. Mechanisms to facilitate collaborations among Country and non-Country Partners, and PEMSEA’s Network of Learning Centers, in identifying and developing collaborations on targeted researches; and
   e. Mechanisms to share and update progress on targeted researches identified/developed through the collaborative planning sessions.

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