

Project Endorsement Form

1. PROJECT TITLE

Full title	Development of Integrated Coastal and Marine Spatial Planning (MSP) for Sri Lanka
Acronym	MSP for Sri Lanka
Website	N/A
Keywords (up to 10, describing the project research)	Indian Ocean, Remote Sensing, Sri Lanka, Ocean Space,
New initiative or continuing programme?	New Initiative

2. APPLICANTS

Lead applicant / Project Leader / key research contact person:

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Other key participants / research team leaders: (repeat as needed)

First name	N/A
Last name	
Role in the project	
Affiliation	
Country	
Email address	
Institutional or personal website	

N.B.: Please note that all these names and contact details will be added to the IIOE-2 membership database.

3. ABSTRACT– Brief description of the project: (1/4 page maximum)

This will be placed on the IIOE-2 Website after endorsement.

According to growing Sri Lankan Blue economy, the natural assets of ocean and coastal ecosystems will face unparalleled pressures. Competition for ocean space will increase when economic activities such as marine/ coastal aquaculture, renewable energy, and marine/ coastal tourism boost and generate added demand in ocean-related industries. Hence, there is an immediate need to manage Open Ocean and coastal areas more coherently and safeguard them against activities that undermine the basis on which ocean industries depend. Only a sustainable blue economy that fits within the boundaries of our ocean and coastal ecosystems is capable of supporting robust growth

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of ocean-related economic activities.

A sustainable blue economy calls for a strategic and integrated approach to planning the development of ocean and coastal ecosystems. Marine Spatial Planning (MSP) is increasingly gaining traction as a powerful instrument to put 'ocean space' on the sustainable development agenda and provide a breeding ground for new development paths towards a sustainable blue economy.

Few coastal districts of Sri Lanka have only land-based spatial planning, with the marine realm almost being neglected. The 'solution' is a novel approach to integrate land, coastal and marine ecosystems into spatial planning. For the overcome of the administrative obstacles need to develop strategy of data collection and most importantly, the discussion with various stakeholders of Sri Lanka. In parallel, need to prepare spatial analysis for coastal and marine areas of Sri Lanka. Ecosystem links and functions should analyse and mapped. Environmental and socio-economic profiles of Sri Lanka will identify and spatially project into a map based on each topic. After environmental and social profiles analysed, should be identified the main issues, root problems, spatial conflicts, causes for ecosystem degradation, poverty level, environmental protection efforts, management efforts, etc.

MSP brings together different stakeholders, such as industry, government, conservation, and recreation, and enables them to jointly make thoughtful decisions about how to allocate space among competing economic activities while protecting marine ecosystems. MSP works across sectors to encourage investments. It does so by creating more transparent rules and a more predictable investment climate. At the same time, it aims to ensure that human activities at sea do not further jeopardize the health of our oceans and seas. From a policy perspective, MSP is instrumental in implementing a strategic and integrated approach to developing a sustainable blue economy. And because our ocean connects to sustainable life at so many different levels, we should not underestimate the impact of such an approach. Ultimately, a sustainable blue economy not just helps us achieve SDG14 (Life below Water) but enables us to impact a broad set of SDGs.

The main output of the study is an integrated Sri Lanka Coastal Marine Spatial Plan, presented in a single spatial planning map. In the proposed integrated spatial plan of Sri Lanka, coastal and marine entities linked to the spatial allocation of economic functions both in land and marine areas.

Most of the information needed to prepare MSP is already available with the different institutes. Updating the already available information is required and limited numbers of field visits are required.

In order to ensure the protection of the Sri Lankan marine and coastal area, this project to develop a marine large-scale spatial planning template will:

1. Outline how large-scale marine spatial planning, including zoning, can be applied in the Sri Lankan marine and coastal area, to ensure protection management and sustainable uses of the sea as well as to minimize conflicting uses and harmful effects to the marine environment. The MSP should consider existing national and international legislations and regulations and existing GIS datasets.
2. Develop MSP using GIS as a data source and a set of tools/methods to demonstrate marine zoning in large-scale spatial planning. This includes collection of GIS data from institutions acting at international and national levels covering various plans and current uses.

4. LINKS TO IIOE-2 SCIENCE PLAN: (1/2 page maximum)

How do you anticipate your project to contribute to the IIOE-2 strategy and science delivery, with reference to which (either one or more) of the six IIOE-2 Science Plan themes that your project responds. Please state the specific issues and questions addressed by your project in the context of the IIOE-2 Science Plan themes and key issues.

Theme 1: Human Impacts -

Present project address to minimize the degradation of marine ecosystems due to human impact and try to minimize conflicts between stakeholders of Sri Lankan EEZ due to inefficient spatial planning. Also, it evaluates present human-induced ocean stressors impacting the ecology of the EEZ Sri Lanka due to poor ocean spatial planning. Also, how these impacts affecting coastal populations and how it can be minimize using proposed MSP frame work.

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Main users and uses of the Sri Lankan marine space as follows;

- Commercial fishing: beach seines, purse seines, nets, trawls etc..
- Conservation areas: MPAs, Sanctuaries etc..
- Marine transportation- cargo vessels, cruise ships, ferries, liquefied natural gas, tankers
- Cultural and historic conservation
- Offshore oil and gas development (proposed)
- Offshore/ coastal aquaculture/mariculture
- Port and harbour dredging
- Port and harbour operations
- Recreation: boating/personal watercraft, scuba diving/snorkelling, wildlife watching, fishing
- Sand and gravel mining
- Scientific research
- Urban and resort areas
- Military operations
- Cables, pipelines, transmission lines
- Offshore renewable energy: tidal/wave and currents, wind farms
- Multiple use marine parks –underwater marine museum
- desalination plants

Therefore, intense conflicts between various stakeholders occurred due to intensive human economic activities in marine and coastal areas. Which resulted on degradation of biodiversity and ecosystems due to lack of legalized spatial allocation. Main objective of the present research is address on those issues.

5. INTERNATIONAL COLLABORATION(S):

Is the project part of a related multi-national activity? **NO**

If No, would you welcome international collaboration in your project? **YES**

6. REGION(S) OF STUDY

Provide a description of 'where' the research is to be conducted (for field based activities) and/or the region or regions to which the research pertains (you are encouraged to consider providing either the coordinates of the area of studies or the coordinates of the planned cruise tracks, as well as a figure as an addendum to your proposal).

Sri Lankan Exclusive Economic Zone of Indian Ocean Between 2° 33' to 11° 26' N and 77° 1' to 85° 13' E.

6. TIMETABLE OF THE PROJECT

Start date:
01st April 2021

End date: 31st December 2022

7. LINKAGES WITH OTHER PROJECTS / PROGRAMMES / INITIATIVES

Is the project part of a related national or multi-national activity?

If yes, provide the related activity title and website for reference, if available: No

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N/A

Is your project part of, or affiliated to, another SCOR, IOC or IOGOOS activity or project?
If “yes”, please indicate which activity or project: No

N/A

8. DATA MANAGEMENT AND SHARING

1. Will new data be collected as part of this project (yes or no?)

Yes

2.

contact information if any, of the person in charge of the data management from whom the metadata can be accessed by interested IIOE-2 stakeholders.

Please note that for all IIOE-2-endorsed projects, IIOE-2 will have developed its own metadata portal. Once the project is endorsed, the project leader will be asked to provide the metadata information of the project.

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3. Recognizing the need for an initial period of exclusive data use, would you be willing to provide timely access to all data generated under this project and associated metadata in accordance with relevant national and funding agency data sharing policies? **YES**

9. FUNDING

Please note that IIOE-2 strongly encourages funded/resourced projects. However, IIOE-2 may endorse projects yet to receive funding/resourcing if IIOE-2 endorsement can be clearly shown to significantly aid in prospects for funding/resourcing.

Has funding and resources to successfully achieve and undertake the project been obtained? Indicate the sources of funding and resources that have been approached and/or secured.

Project funded and resourced by the **Faculty Research Grants of the Faculty of Natural Sciences, The Open**

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University of Sri Lanka.

Grant Amount: SLR 8,42,000.00

10. BENEFITS FROM IIOE-2 ENDORSEMENT (1/4 page maximum)

Specify why you are seeking endorsement and how the activity would benefit from endorsement, and how the IIOE-2 SC could assist in the implementation of your project.

The Project aims to develop a common large-scale marine spatial plan which can be applied within the Sri Lankan EEZ, to ensure protection and sustainable uses of the sea. The integration of coastal and marine spatial planning addresses; Inefficiency of spatial planning processes where land and marine uses are treated separately and taking longer time and steps, intense conflicts between various stakeholders due to intensive human economic activities in land and marine areas, degradation of biodiversity and ecosystems due to lack of legalized spatial allocation.

The IIOE-2 endorsement will benefit for dissemination of the findings/ maps for the reduction of spatial conflicts among stakeholders in Indian Ocean, leading to improved multiple-use of the coastal zone. Also share expertise on same disciplines to Potential improvement of capture fisheries production, hence improvement of local fishermen income leading to poverty reduction.

Also, IIOE-2 platform will be benefited for the disseminate an outline for large-scale spatial planning and zoning of the Sri Lanka, Recommendations for new, more integrated management approaches in order to implement spatial planning in Sri Lanka covering issues of governance, data and decision support tools.

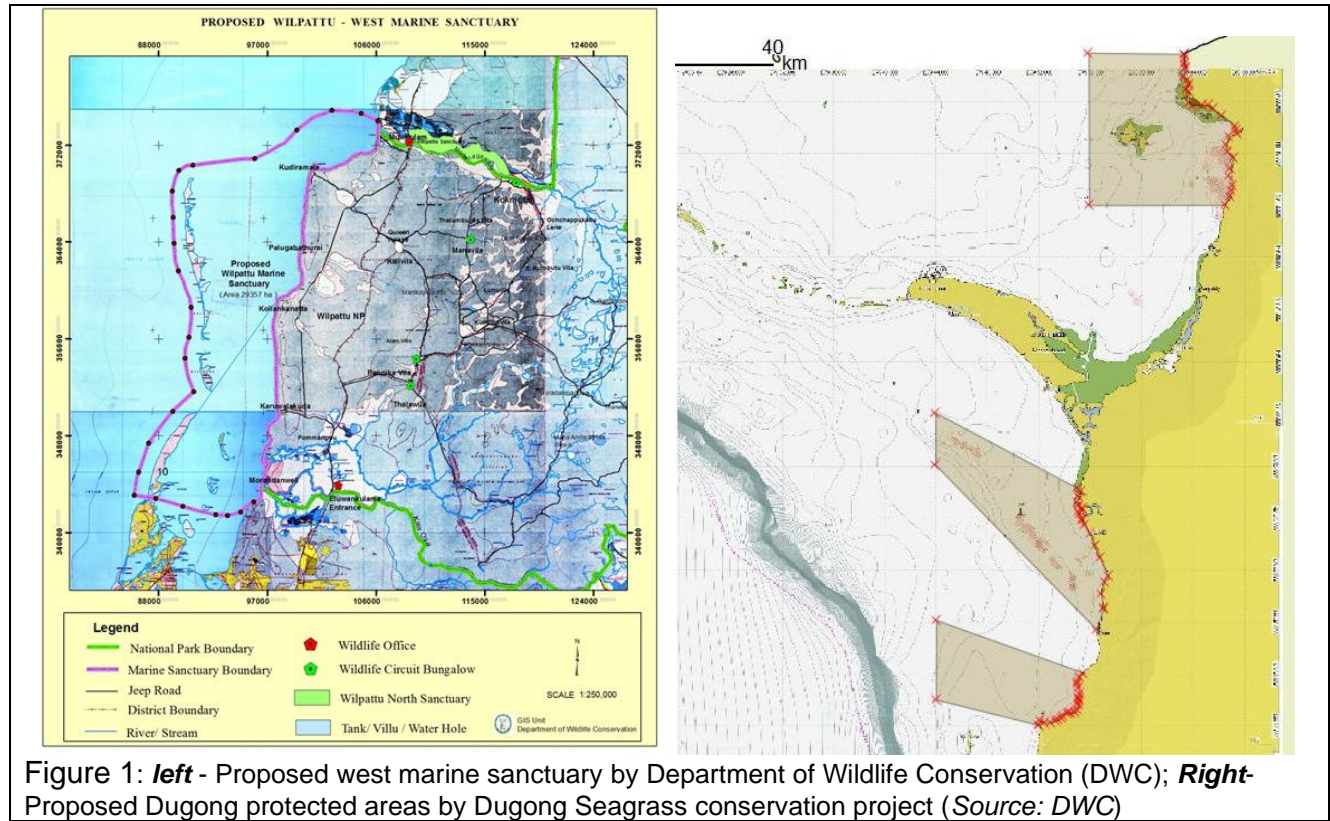
11. OPTIONAL: OTHER COMMENTS/INFORMATION/MATERIAL (length and detail may be at the discretion of and as deemed necessary by the applicant)

Please feel free to provide any other comments, information, or materials that you feel relevant to your proposal for the IIOE-2 Steering Committee's information and benefit. You may provide this as general information or provide the additional comments/information/materials as relevant to any of the specific Sections above.

Problem Statement: inefficient spatial planning, degradation of ecosystems and conflicts between stakeholders

Different uses and proposed activities of the Palk Bay and Gulf of Mannar area given in figure 1-2 as an example.

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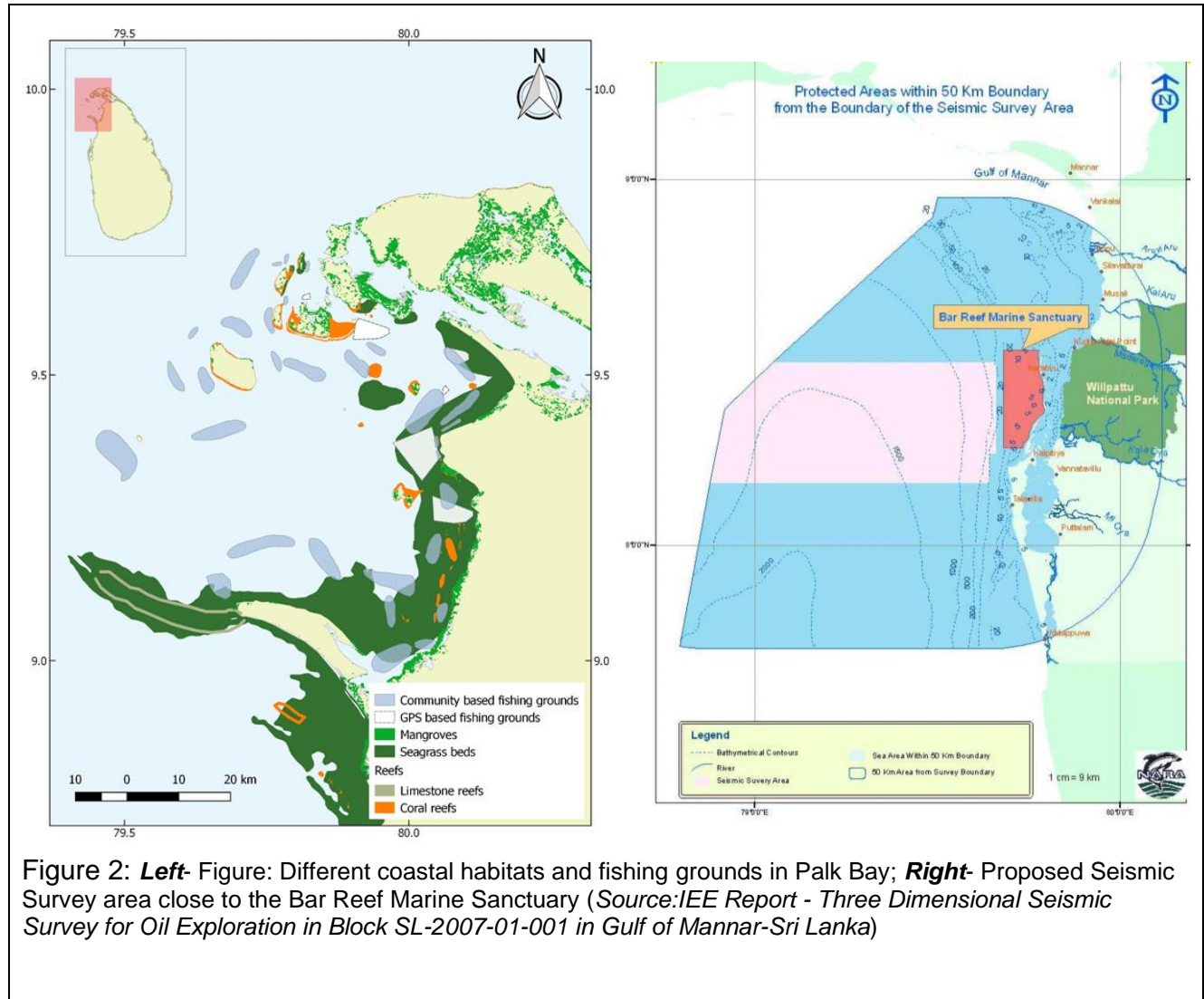


Figure 2: **Left-** Figure: Different coastal habitats and fishing grounds in Palk Bay; **Right-** Proposed Seismic Survey area close to the Bar Reef Marine Sanctuary (Source:IEE Report - Three Dimensional Seismic Survey for Oil Exploration in Block SL-2007-01-001 in Gulf of Mannar-Sri Lanka)

Dr. D.D.G.L. Dahanayaka

(Signature of the PI)

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