

Introduction of "MobaDAS"

- A Tool Designed to Propose Suitable Locations for Creation of Coastal Blue Carbon Ecosystems -



17th Nov. 2025

NAKAGAWARA Hiroaki

International Environment Dept./ Private Sector Consulting Office, Nippon Koei Co., Ltd.

What is MobaDAS ?

Main Entities of Coastal Blue Carbon Ecosystems Creation

Private companies, local governments, and fisheries cooperatives

Aiming to develop more feasible plans for creating coastal blue carbon habitats!

- ✓ **Insufficient access to environmental information** related to the growth of blue carbon habitats
- ✓ **Uncertainty** about whether an area is **suitable for the growth of blue carbon habitats**

Proposed System

【 MobaDAS 】

Moba Data Acquisition System



Easier Access!!



Assessing the Potential!!



Getting the Comprehensive Env info.

Creating Coastal Blue Carbon Ecosystems

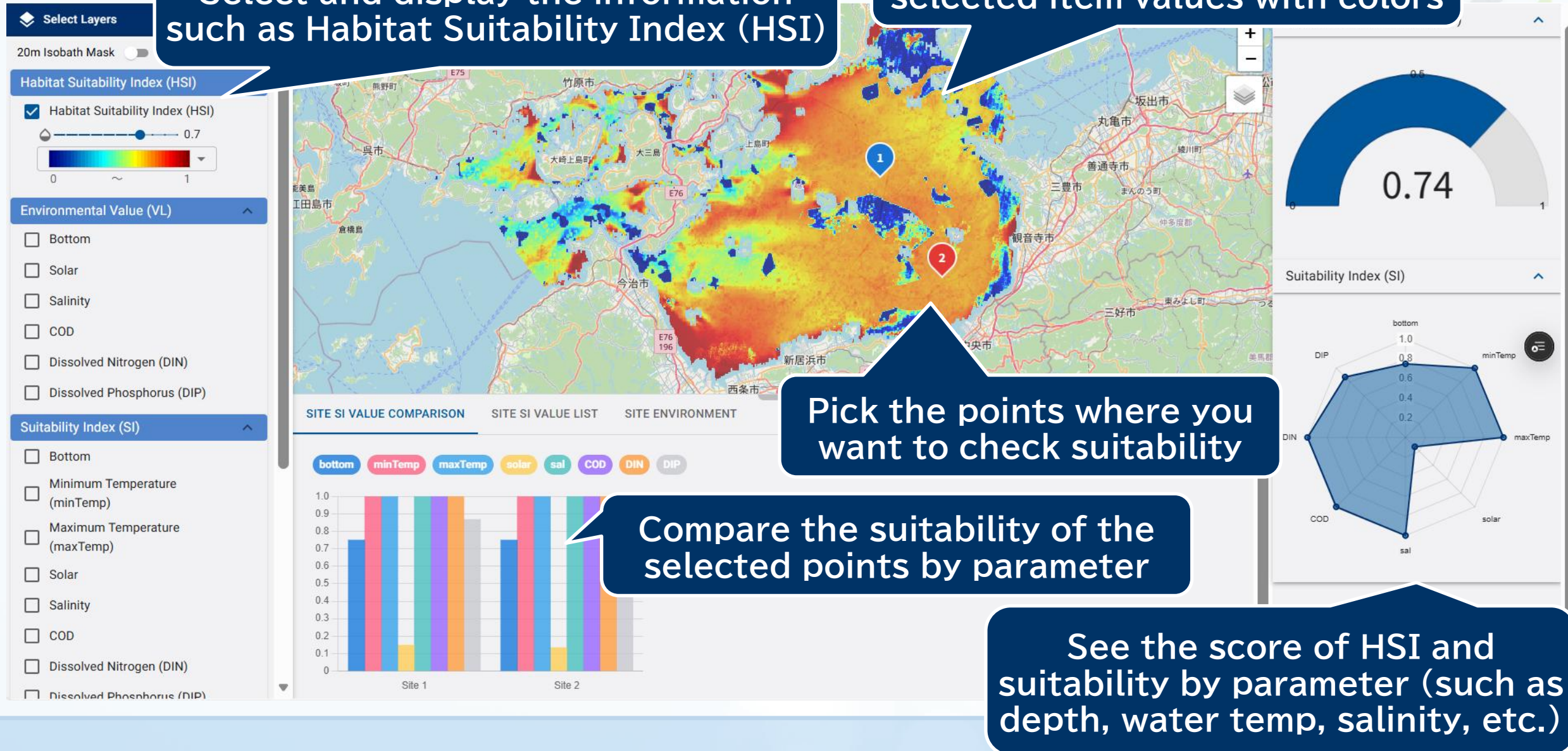
Realizing Abundant Oceans Decarbonized Society

User Interface

NIPPON KOEI

Select and display the information such as Habitat Suitability Index (HSI)

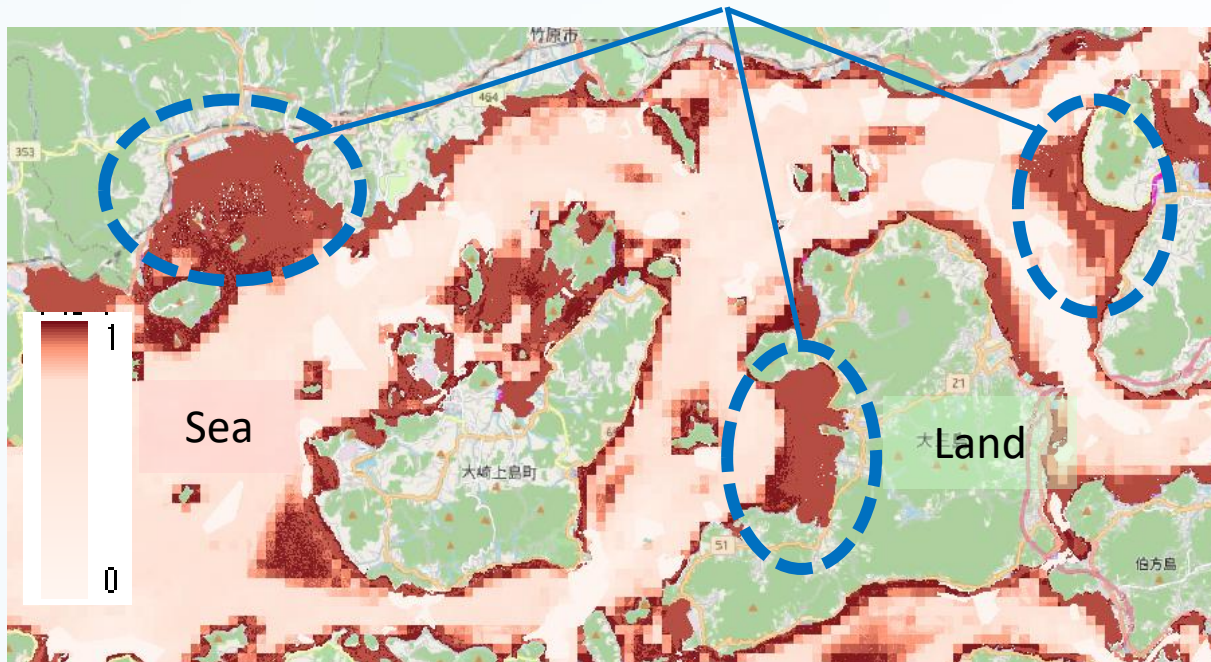
Visualize the distribution of selected item values with colors



[Trial: Sea Grass Beds] Seto Inland Sea

<Estimated Results>

High Potential



<Actual Distribution>



Zone for Demarcated Fishery Rights



FY2023: Distribution of Sea Grass Beds

出典：令和4,5年度瀬戸内海における藻場・干潟分布状況調査結果

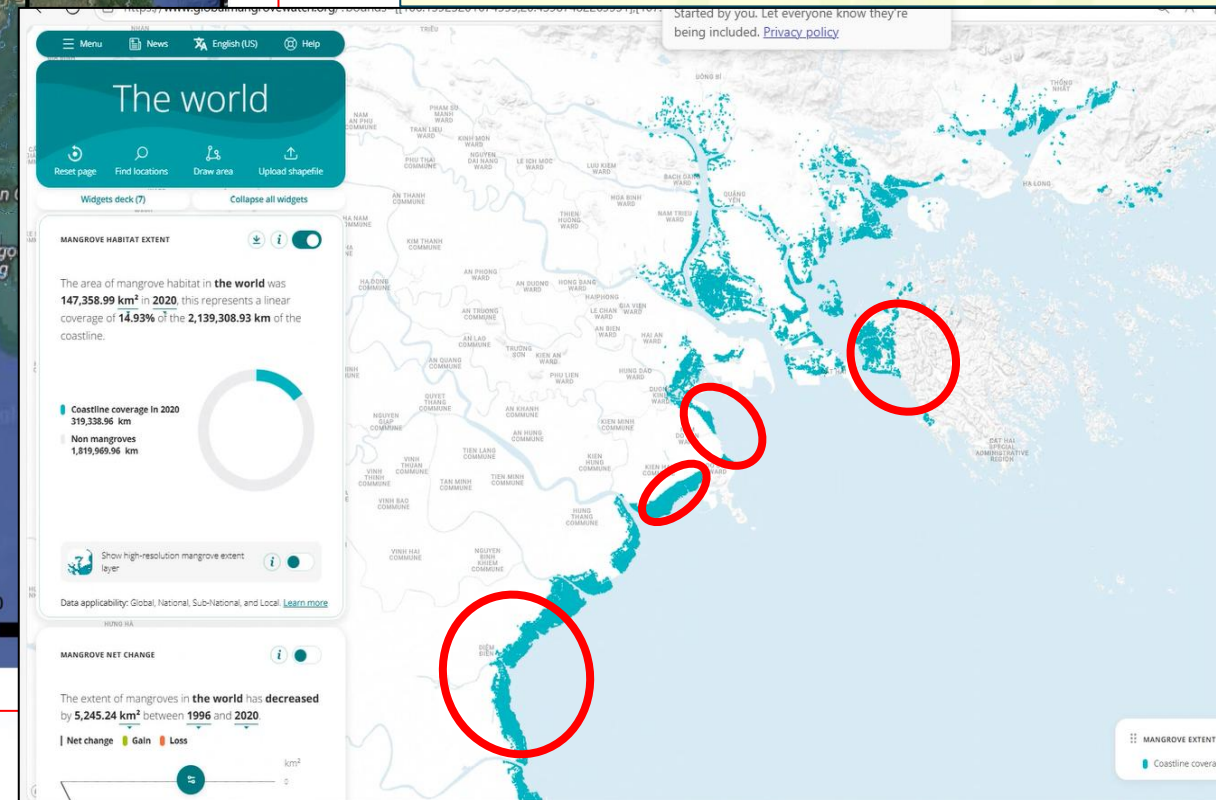
<Trial: Mangrove Forests> Haiphong, Vietnam

HSI Result Map (Trial)

$$HSI = \sqrt[n]{SI1 \times SI2 \times \sim \times SIn}$$

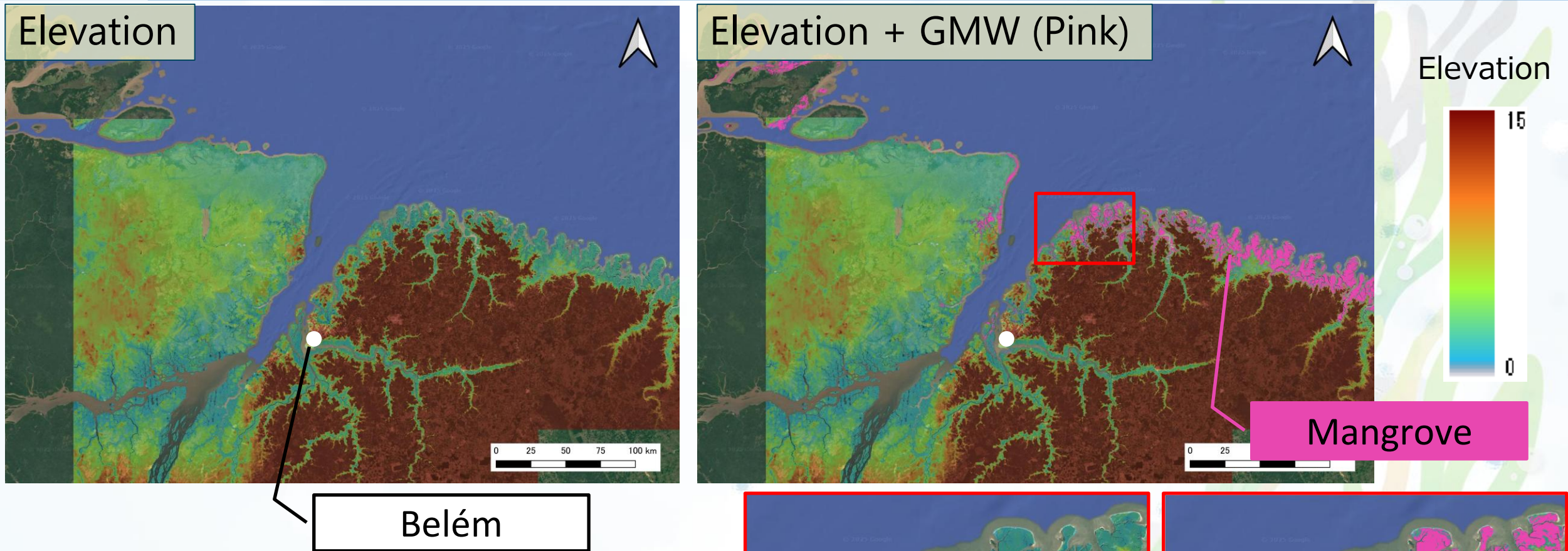


Global Mangrove Watch



Source: Delta DTM (elevation), Global Mangrove Watch (2020), etc.

<Trial: Mangrove Forests> Baía do Marajó, Belém NIPPON KOEI



- On the eastern side, mangroves are widely distributed across the low-lying coastal areas.
- While, on the western side, even in low-lying areas, the extent of mangroves is limited.



Obrigado pela atenção!