

# Example of NbS activities by the Private Sector: Blue Carbon Creation Support System “MobaDAS”

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# NIPPON KOEI

- ❖ One of the Largest Engineering Consulting Firms in Japan
- ❖ One-Stop Support for Development Projects in Japan and Overseas

**No.1 in Sales among Civil Engineering Consulting Firm in Japan**



**Operation in 160 Countries**

**Over 5,500 Orders per Year**

**For many years, the International Environment Department has delivered solutions to diverse environmental issues.**

Urban Environment Measures	Waste	Renewable Energy
Forests and Biodiversity	SDGs	Climate Change

**Mitigation Measures**  
 Joint Crediting Mechanism (JCM),  
 Measures to reduce GHG emissions,  
 carbon taxes, etc.

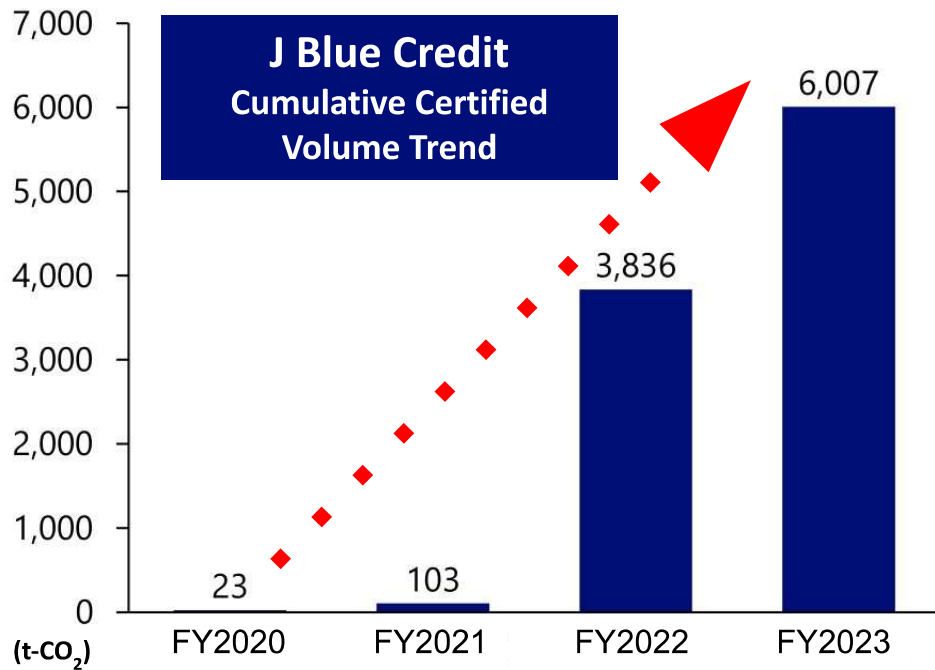
**Adaptation Measures**  
 Avoid and minimize damage by taking  
 appropriate measures against abnormal  
 weather and climate change

# Why Focus on Seagrass Beds?

## ◆ The Great Potential of Seagrass Beds

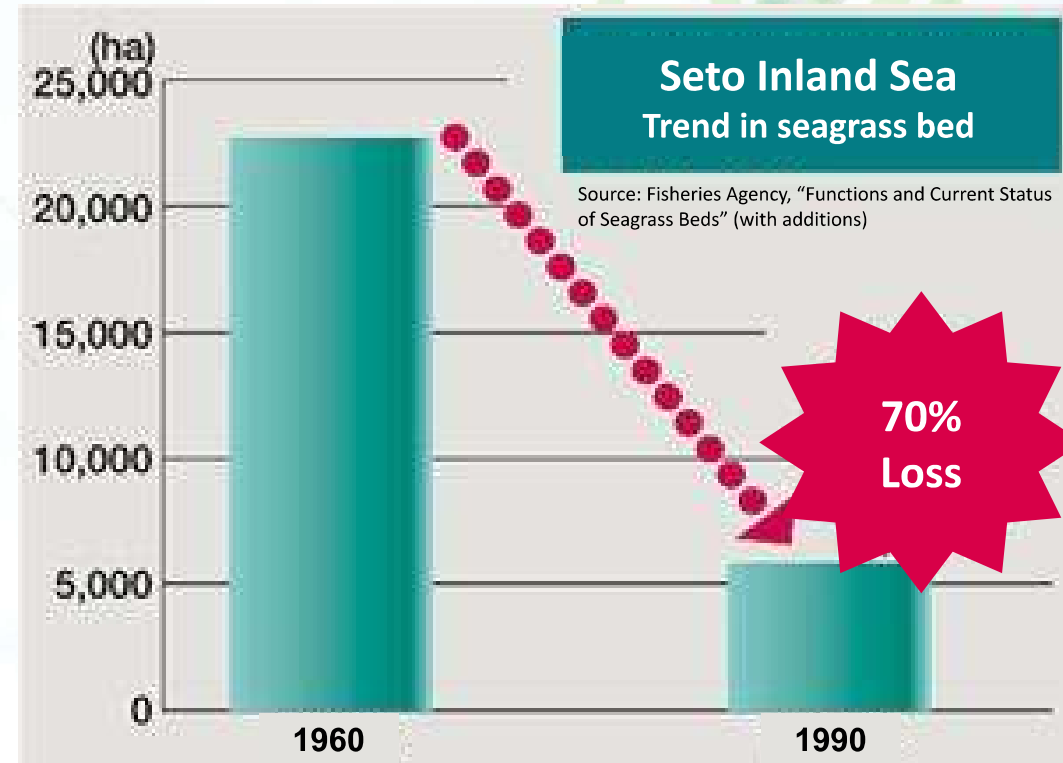
- **Blue Carbon (BC) : Key for Climate Change Mitigation**
- **Japan's Largest Source of BC: Seagrass/Seaweed Beds**
- **Rapid Growth in BC Credits** (\*Certified as GX League Eligible Credits)

Source: JBE Technical Research Association (with additions)



## ◆ Current Challenges Facing Seagrass Beds

- **A Vital Provider of Ecosystem Services**
- **Declining Domestically and Globally**



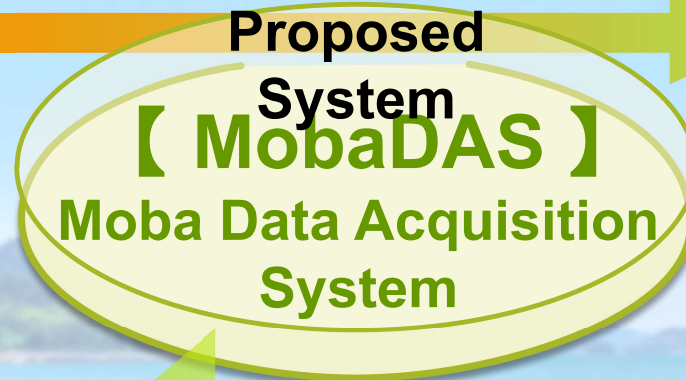
# What is MobaDAS ?

## 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**



Easier Access!!



Assessing the Potential!!



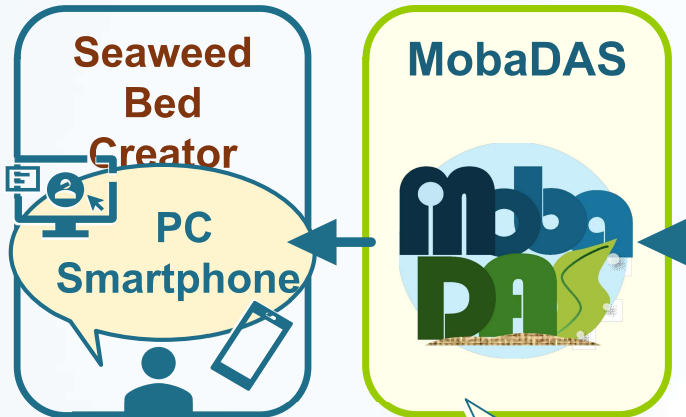
Getting the Comprehensive Env info.

Creating Coastal Blue Carbon Ecosystems

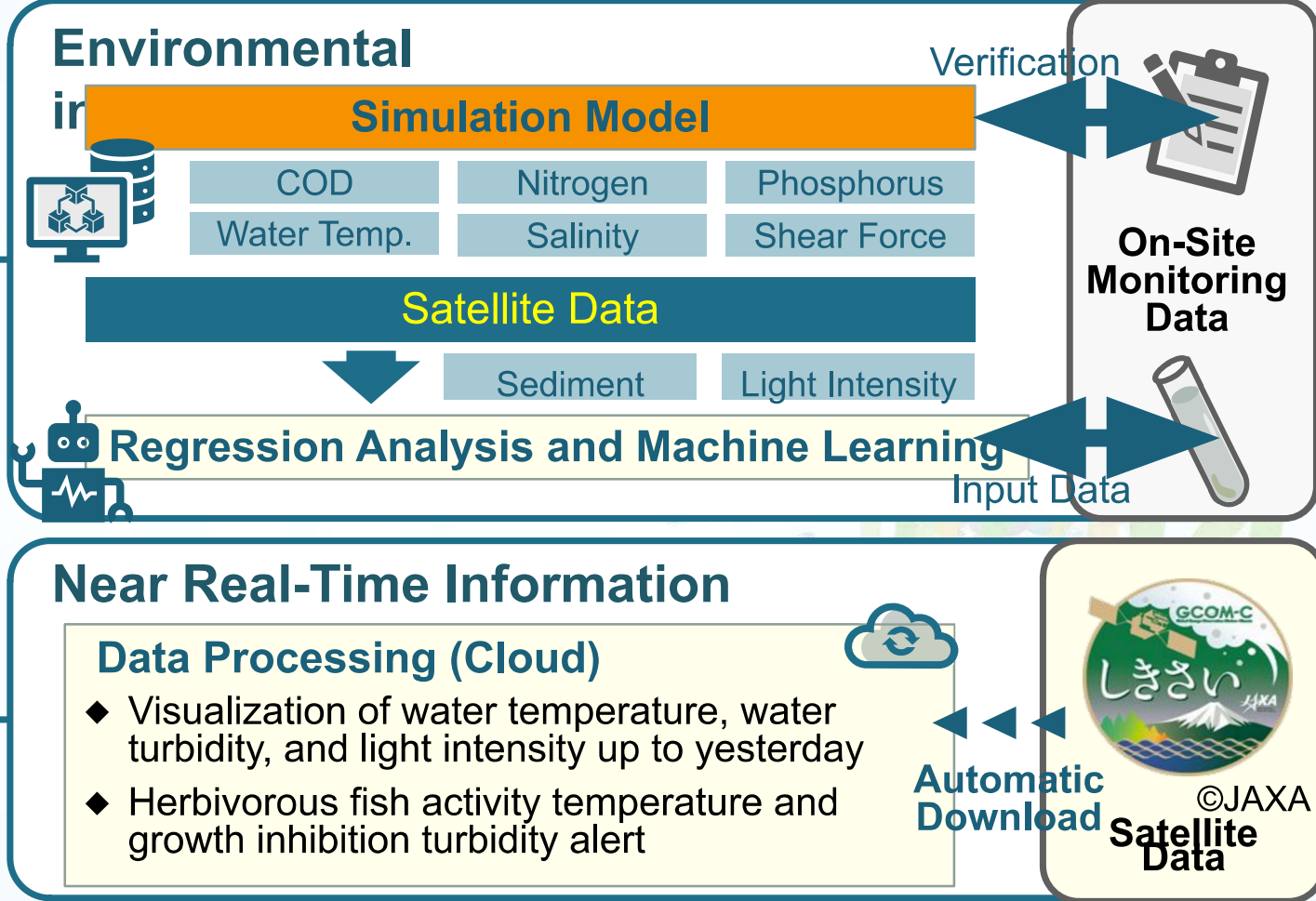
Realizing Abundant Oceans Decarbonized Society

# Input Data and Methodology

## Input Data and Methodology



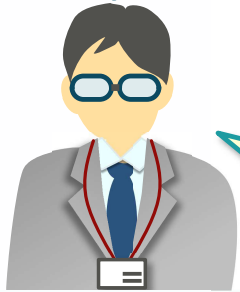
- ◆ Output of blue carbon growth suitability
- ◆ **Real-time information** useful for daily blue carbon management





# Interview Results with Potential Users

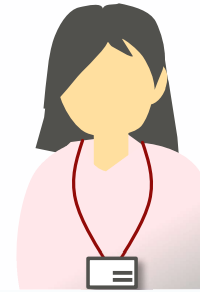
## Municipal Staff



City S

Centralized access to seagrass-related information would greatly support restoration efforts.

## Municipal Staff



City K

Wanted to create a Restoration Potential Map to support grassroots restoration activities.

## Seagrass Creation & Maintenance Manager



Company N

Helps streamline site selection surveys, reducing costs significantly.

## Seagrass Restoration Technology Provider



Company O

Placement of restoration blocks relied on intuition; data-driven decisions would be highly beneficial.

# Path to Commercialization and Monetization

**NIPPON KOEI**

## Consulting Services

- Plan for Seagrass Bed Creation Projects
- Implementation of Maintenance and Management Plans, etc.

Contribution



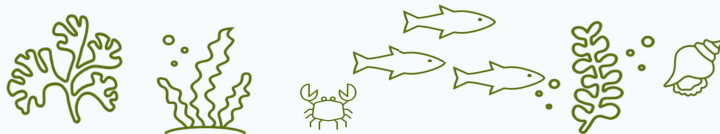
More Conveniently!  
More Affordably!  
More Reliably!

- ✓ Operation and Maintenance of MobaDAS
- ✓ Customization Support



### 【Natural Resources】

(Seagrass beds, Fishing grounds, Landscapes, etc.)



Investment and Maintenance



Expansion of Nature resources

### 【Seaweed Bed Creation Entities】

(Municipalities/Fisheries Cooperatives, Private Companies, NGOs, etc.)



Creation and Maintenance of Seagrass Beds



CO<sub>2</sub>

2

【Credit Purchaser】  
(CO<sub>2</sub> emitters, etc.)



Carbon offsets, etc.

Blue Carbon Credits



# Commercialization Roadmap

**[Commercialization - Profitability]**

**MobaDAS ver1**

- Field Application

**MobaDAS ver2**

- Increased Adoption
- Monetization

**MobaDAS ver3**

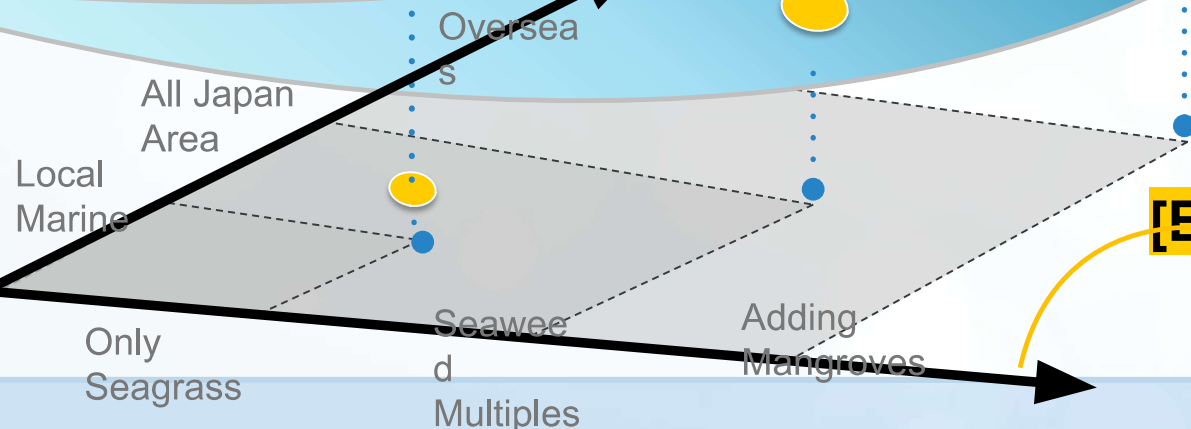
- Global Brand Power
- Improved Profitability

**[Customer Expansion]**

= Expanding the service areas provided

**[Enhancing Value Proposition]**

= Improved functionality and refinement



*“Growing through Synergy”*



***NIPPON KOEI***

The logo for NIPPON KOEI features the company name in a bold, italicized, blue sans-serif font. Below the text is a thick, blue, curved underline that tapers at both ends.