



PEMSEA

# Seas of East Asia Knowledge Bank

Applying Knowledge Management to Scale up  
Partnership Investments for Sustainable Development  
of Large Marine Ecosystems of East Asia and  
their Coasts



WORLD BANK GROUP

Local governments, development projects and others can...



PREPARE FOR ICM INVESTMENTS

# Scaling Up Investment in Integrated Coastal Management and Blue Economy

With no shortage of investment capital seeking impact- and conservation-focused investments, investors still struggle to find high-quality opportunities, particularly in the emerging space of coastal and marine conservation investment.

The SEA Knowledge Bank includes features supporting the identification, development and sharing of sustainable and investment-ready projects and enterprises in coastal and marine areas.

Based on extensive research of the investment landscape in East Asia, the needs of government and projects developing investments and the expectations of the investment community, the platform supports a range of project and investment focus areas, including Coastal Transport, Ecotourism, Energy, Fisheries, Habitat Protection, Pollution Management and Water Supply.

The platform provides a jump-start in understanding the enabling environment for investment, identifying investment gaps and opportunities and assessing the investment-readiness of projects through easy-to-use online assessments.

Investors, which may include private impact investors, foundations, development organizations or others, can better understand the investment landscape in East Asia, browse a database of potential investments and learn more about specific investments, including supporting documents such as business plans, investment proposals or feasibility studies.

## Investment-readiness Services

The SEA Knowledge Bank helps to identify and provide preliminary assessment of potential investments, but investment is a complex process that cannot happen strictly online. The platform is complemented by offline services supporting investment-readiness, including value chain analysis and development of business and investment models. Regular investment forums further assist in connecting investors with investment opportunities.

Investors and funders can...



FIND ICM INVESTMENT OPPORTUNITIES

## 1 Understand the Benefits of ICM Investment

Coastal management issues cut across sectors — e.g., the aquaculture sector, if not properly zoned, could affect ship navigation routes and tourism sites. The conventional, sectoral management approach, which addresses these challenges separately on a sector-by-sector basis, is typically not sufficient for solving complex problems in coastal areas.

Integration and coordination of various coastal and marine management efforts is the major objective of the integrated coastal management (ICM) approach. ICM addresses the governance of human activities affecting the sustainable use of goods and services generated by coastal and marine ecosystems. This approach overcomes the limitations of conventional sectoral management through the following:

- Facilitating better understanding of the uniqueness of the coastal resource system. Through an integrated management approach, ICM reminds the various stakeholders that diverse sectors are involved in ensuring coastal areas' sustainability, since their collective activities affect the overall ecosystem. In contrast, single-sector management often fails to consider the various impacts of multiple uses of coastal resources.
- Integrating ecological, social and economic information. This ensures that management strategies formulated under ICM are responsive to the multiple users and uses of coastal resource systems.
- Promoting identification, approaches and cooperation among users and beneficiaries to address complex development issues. Through coordination, coastal management efforts by various stakeholders are not duplicated or conflicting, ensuring a more efficient and effective management system.

ICM helps local governments to achieve social and economic development targets in a number of areas—pollution reduction and waste management, food security and livelihood management, water use and supply management, habitat protection, restoration and management, and natural and man-made hazard prevention and management.

### Pollution reduction and waste management in Xiamen, China

The Xiamen livelihood bank became a model for ecological and economic success. Three cycles of ICM implementation have provided increased access to the beach and seas for leisure and tourism, cleaner skies and bays for residential real estate, a venue for industries and a home for rich biodiversity. Every dollar invested in ICM has returned seven dollars in economic benefit to the city.

## 2 Establish Enabling Environment for ICM Investment

1. In what country are you located?

2. Is there a coastal profile and risk assessment completed and available to the public?

- No  
 Partial  
 Complete

3. Is there a coastal strategy and/or management plan adopted by the local government and available to the public?

- No  
 Partial  
 Complete

## 3 Discover ICM Investment Gaps and Opportunities

### ICM Development and Implementation

A well thought out integrated coastal management (ICM) program forms the foundation for the sustained health of ecosystems, communities and economies in coastal and marine areas. Examples of investment in ICM program development you might consider include:

- ICM System Certification
- Development of a coastal strategy and implementation plan, including mainstreaming into local development plans
- ICM baseline assessments (e.g., strategy, status of coasts, socioeconomic conditions, livelihoods)
- ICM capacity building, marine ecosystem education, stakeholder engagement and coordination
- Marine spatial planning (practice and technology), integrating land and sea use zoning into local development planning
- Integrated river basin management including assessment, stakeholder engagement and capacity building

### Coastal Transport

Providing safe, reliable transportation that minimizes impact on the environment is critical for economically and ecologically sustainable development of coastal areas. Examples of coastal transport infrastructure investment you might consider include:

- Safe, secure and reliable transportation services for tourists (e.g., ferry service and piers)
- Roads-to-market roads
- Large-scale port development, including safety, health and environmental management program
- Port Safety, Health and Environmental Management (PSHEM) System Certification

### Ecotourism / Sustainable Tourism

Beyond traditional tourism, ecotourism / sustainable tourism considers the health of the local environment and communities and provides a differentiated experience for tourists. Examples of ecotourism / sustainable tourism investment you might consider include:

- Marine sanctuary programs and facilities (e.g., watching/buying of birds, turtles, mangroves, dolphins, whales, sharks, rays, etc.)
- Recreational programs and facilities (e.g., surfing, sailing, snorkeling/SCUBA, cave trekking, fishing, historical tours, etc.)
- Ecotourism services skills development (e.g., boat operators, hospitality services, hygiene and sanitation standards)
- Sustainable / eco tourism certification

## 4 Improve Investment-Readiness Capacity

### Business Model Viability



Based on your score, the viability of your project/enterprise business model should be assessed in more detail. Areas of focus should include:

- Identifying the end user for your product/service
- Analyzing their ability/willingness to pay for your product/service in more detail
- Ascertaining the size of your customer audience and expected growth demand for your product/service
- Understanding significant trends for your industry over the next 3 years

### Market Competition



Based on your score, the competition appears to be favorable for your project/enterprise. However, your organization may consider efforts to further strengthen the competitiveness of the project/enterprise. Areas of focus could include identifying:

- Ways of differentiating your product/service from the competition
- Ways of reducing or phasing your start-up capital requirements and/or fixed costs

## 5 Prepare ICM Investment Project Profile

Project Title: \_\_\_\_\_

Description: \_\_\_\_\_

Development Objectives: \_\_\_\_\_

Contact Details:

Project Contact Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_

## Investment Profile

Contact Details:

Project Contact Name: Ulverson Trinitobala

Email Address: ulverson@wrihub.org

Phone: +63 920 928 8762

Description: For the Municipality of Nueva Valencia, annual income of a fishing livelihood is estimated at PHP 75,635.00. Fishing is not considered an income-generating endeavor. However, Pangasinan as an island bar in range, almost 90% of its population depends on the sea for living. Farming of seaweeds is considered as the most environmentally sound, sustainable, profitable and productive form of livelihood among the coastal communities. The Municipality of Nueva Valencia considers one of the top producers of seaweeds in the Province with Pangasinan as the main source of raw dried seaweeds. The coastal area surrounding the island bar is geographically blessed for seaweed culture and was declared as a Marine Culture Zone of the Municipality. The only constraint was the lack of capital to support production.

Development Objectives: The main objective of the enterprise is to increase the annual income of the members by 31%.

Expected Start Date: Monday, February 15, 2016

Duration: 5 years

## 1 Understand the Investment Landscape

As you consider potential investment in East Asia, basic questions may arise around the overall investment landscape in particular countries. To help answer those questions, the SEA Knowledge Bank provides summaries of policies, procedures, national agencies and more guiding and enabling investment in each country.

The basic version of the SEA Knowledge Bank focuses on four countries: China, Indonesia, the Philippines and Vietnam. Additional countries will be added in the SEA Knowledge Bank as they become available.

Policies, procedures, organizations and state government agencies change regularly across multiple countries, so we welcome your input and updates on these investment landscapes at info@seaonline.org



## 2 Find Investment-Ready Projects

Project Title	Location	Category	Total Investment	Expected Start Date
Pangasinan United Farmers' Association's Seaweed Production and Marketing Enterprise %	Pangasinan, Nueva Valencia, Comintin, Philippines	Enterprise & Livelihood Development, Fisheries & Food Security, Natural Resources, Restoration & Management	636,864	February 15, 2016
Seaweed and Shrimp Treatment Facility in Da Nang City %	Da Nang City, Vietnam	Energy, Habitat Protection, Restoration & Management, Pollution Reduction & Waste Management, Water Use & Supply Management	91,665	March 01, 2016
BACAMA Cooperative Integrated Seaweed & Aquaculture Farming %	Batangas City, Del Carmen, Sargan, Sargan Del Norte, Philippines	Enterprise & Livelihood Development, Fisheries & Food Security, Natural Resources, Restoration & Management	205,000	January 04, 2016

## 3 Connect with Project Developers and Investors

## 4 Measure Impact



## The Seas of East Asia (SEA) Knowledge Bank ([seaknowledgebank.net](http://seaknowledgebank.net))

The SEA Knowledge Bank is a knowledge platform for policymakers, implementers, planners, investors and other concerned stakeholders to scale up the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) and the Integrated Coastal Management (ICM) implementation at the regional, Large Marine Ecosystem (LME) seascape, national and local levels. The platform provides access to a comprehensive collection of lessons learned, best practices and other relevant content on coastal ocean governance and management. A number of priority knowledge products and services are accessible through the SEA Knowledge Bank, including an e-library, ICM solutions (help desk) with online access to communities of practice and PEMSEA support networks, directories, a web-based State of Coasts reporting system, a marketplace for projects and moderated forums.



### SOC Reporting System

A tool to assist local governments in assessing the progress and benefits of Integrated Coastal Management (ICM) implementation. The State of the Coast (SOC) also allows local governments to document and measure the effectiveness and impacts of policy and management interventions in support of sustainable coastal development, and evaluate progress towards local, national and international targets for sustainable development.



### Network

PEMSEA Support Networks establish functional communities of practice (CoPs) to build awareness and encourage stakeholder commitment to local needs and project initiatives. These networks provide services and assistance to local governments, private sector and other stakeholders, enabling more sustainable management of coastal and marine resources.



### Good Practices

These knowledge products showcase the success and lessons learned from various ICM programs and projects, which can be adopted for the sustainable use of our coasts and oceans. Sharing of exemplary or “best” practices can support the development and scaling of sustainable solutions addressing ICM and sustainable development challenges.



### Solution Exchange

These special discussion forums are designed to generate solutions to real-world challenges experienced by local government. Members can post questions and receive answers from experts or share knowledge to formulate new solutions. Membership is open to local government officers whose work involves preparation of local policies or development of ICM investment plans, programs or projects.



### Library

A complete library of ICM materials, including focused access through a search engine and filtered navigation, based on criteria, subject matter and common problem areas in ICM development and investment experienced by local governments.



### Capacity Development

The SEA Knowledge Bank platform includes capacity development services such as workshops and leadership forums in partnership with PEMSEA's regional network of local governments and major events including Xiamen World Ocean Week, the East Asian Seas Congress, the GEF IW:Learn and other partners in the region. These activities are designed to engage local chief executives and policymakers in the application of knowledge products and innovative tools to better appreciate the value of ecosystem services, approaches to reducing threats, scientific input to decision making and facilitation of investments.



### Directory

If you are an organization or an individual who provides ICM services, or if you are a financing or investment organization which supports ICM projects, PEMSEA invites you to join one or more of its directories. Local governments and projects seeking assistance can utilize this regional directory to find expertise and support on ICM and investment in sustainable development of coasts and oceans. PEMSEA invites organizations and individuals providing ICM services and financing to join a directory on the SEA Knowledge Bank.



### Certification

PEMSEA's Certification Services are designed for local governments and port operators seeking a recognized standard for sustainable management of coasts and port areas. PEMSEA offers two certification systems, along with a formal certification for ICM professionals. Certification offers benefits including recognition for application of best practices and assurance to businesses and investors of proper governance, and therefore reduced risk.

## Developing a Community-based Investment Model for Aquaculture on Siargao Island, Philippines

PEMSEA is providing services to The World Bank Philippines Climate Change Adaptation Project (PhilCCAP) on Siargao Island, Surigao, Philippines to develop a business plan and investment model for community-based sustainable aquaculture. Through its activities on Siargao, PhilCCAP identified abalone ranching and seaweed farming as candidates for investment as self-sustaining activities beyond the life of The World Bank project.

PEMSEA evaluated the feasibility of investing in an abalone hatchery and grow-out activities in one community on Siargao. Examining factors such as operational capacity, production volume, market prices and cost of goods sold, modeling revealed that an abalone hatchery and grow-out on its own would not be financially sustainable. However, an integrated seaweed-abalone operation could provide a more viable enterprise.



Based on the initial findings, PEMSEA is assisting PhilCCAP in creating a business plan for community-based seaweed production around Siargao – recommending high-value species, building an operating model, evaluating supply chains and identifying suitable markets. Based on the business plan, an investment model including environmental and social impact will be developed for presenting to investors through the SEA Knowledge Bank and future regional investment forums.



### PEMSEA Resource Facility

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