



Global Targets Local Benefits

Setting the Sustainable Development Agenda for
the Seas of East Asia beyond 2015

16-21 November 2015

Special Event

**Roundtable: Investing in a Blue Economy
for Conservation and Impact**



The East Asian Seas Congress 2015
“Global Targets, Local Benefits:
Setting the Sustainable Development Agenda for the Seas of East Asia beyond 2015”
Da Nang, Viet Nam, 16-21 November 2015

Special Event

Roundtable: Investing in a Blue Economy for Conservation and Impact

18 November 2015

Convening Agencies

Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)
Global Environment Facility
United Nations Development Programme
The World Bank

Workshop Chair:

Mr. Leonardo Paat
Senior Environment Specialist
The World Bank

1. INTRODUCTION

1.1. The 5th EAS Congress, with the theme, “Global Targets, Local Benefits: Setting the Sustainable Development Agenda for the Seas of East Asia beyond 2015,” was delivered through three primary sessions exploring various aspects of sustainable development of coastal and marine resources. These sessions were complemented by a set of special workshops throughout the week, including a roundtable exploring the theme of Investing in a Blue Economy for Conservation and Impact.

1.2. Welcome remarks and an introduction for the roundtable were delivered by the Chair, **Mr. Leonardo Paat**, Senior Environment Specialist, The World Bank. Mr. Paat highlighted the unique opportunity that the roundtable afforded to bring together members of the investment community and others working to develop models and approaches for scaling up sustainable development of shared coasts and oceans. He shared that available funds devoted to protecting ecosystems and biodiversity overall remain short, with a gap anywhere from US\$ 300 billion per year to possibly trillions of US dollars. More investment is needed to protect and enhance critical coastal and marine ecosystems while contributing to sustainable development. There is no shortage of investment capital available, but significant challenges exist in developing projects and enterprises in the coastal and marine environment that are suitable for investment and align with investor expectations. He expressed that The World Bank is proud to be partnering with PEMSEA, as part of the project *Applying Knowledge Management to Scale up Partnership Investments for Sustainable Development of Large Marine Ecosystems of East Asia and Their*

Coasts, to build a regional knowledge management platform to help scale up investments. He concluded by encouraging participants to get involved and provide their feedback on the platform to help build a vibrant, sustainable coastal and marine investment pipeline in the region.

- 1.3. **Mr. Ryan Whisnant**, Head of Professional Services, PEMSEA, provided background on PEMSEA including the importance of integrated coastal management (ICM) and the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA) in the region. He explained PEMSEA's role leading the three-year World Bank project introduced by Mr. Paat and the work developing an online platform and related services to help facilitate investment in projects and enterprises that fall under ICM, or "blue economy", a concept that's gaining more and more interest in the region. He then shared the objectives of the roundtable:
 - a. Understand the current ICM investment landscape in East Asia;
 - b. Learn about various models for investment in sustainable development of coasts and oceans;
 - c. Learn about examples of potentially investable activities emerging from World Bank projects;
 - d. Demonstrate features and gather feedback on beta design of investment functionality in the online platform; and
 - e. Connect project managers, local government representatives and investment experts.

- 1.4. Mr. Whisnant shared PEMSEA's partnership with Impact Investment Shujog, a Singapore-based impact enterprise and impact investing advisory firm, to develop a report exploring the current financial funding flows to ICM-related sectors in East Asia, officially launched at the Congress and available at <http://www.pemsea.org/our-work/blue-economy>.

- 1.5. **Prof. Durreen Shahnaz**, Founder, Impact Investment Exchange (IIX) Asia and Shujog, delivered a keynote presentation on the findings of the report. Ms. Shahnaz shared that the economy in Asia is thriving, with the 3.4 million high net-worth individuals (worth over US\$100 million). Despite this wealth, over a billion people still live on less than US\$2/day. We also see impacts of coastal economic growth, including overfishing, disappearance of coral reefs, marine pollution, etc. The report identifies only US\$10 billion of investment into sustainable development of coasts and oceans in the region. This amount is not enough, and the need to change this narrative is urgent. More stakeholders must be involved than just the typical donor agencies. There must be a push for more innovative financing mechanisms, such as green bonds, debt-for-nature swaps and biodiversity offsets. We need to go beyond typical public-private partnership (PPP), ESG and corporate social responsibility (CSR) approaches. In this context, there has been an increased interest in impact investing, which considers social and environmental impact in investments. IIX and Shujog work to create social capital markets and better quantify the impacts of these investments, bringing investment language to development work and vice versa. These types of investment are needed to generate true financial sustainability of development work, beyond the life of a grant. Projects/enterprises must have the right structure, technical capabilities, etc., to bring in investors. Ms. Shahnaz concluded by suggesting that Asia is ready, and we can make SDG 14 a reality by tapping into the US\$1 trillion ready to be invested by 2020.

2. MODELS IN MARINE SUSTAINABLE DEVELOPMENT

- 2.1. Following the keynote, a panel of investment experts was invited to share various models and approaches to investing in coastal and marine resources.
- 2.2. **Mr. Kent Strauss**, Manager, Fisheries Research and Innovation, Environmental Defense Fund, presented strategic financing and investment models to achieve sustainable marine fisheries. Mr. Strauss shared EDF's work on models to recover fisheries while creating both financial and social return, and the important role that private capital can play in projects in creating financial viability and accountability. There are significant threats to fisheries, but according to EDF's models, with the right management approach fisheries can recover in a relatively short amount of time, with substantial upside in the region: 20% more fish in the water, harvest increase by 14% and US\$16 billion more profits. The cost of fishery management (e.g., enforcement, admin services) is far lower than the benefits, by a ratio of 10:1. Fishery transition projects should be launched with financial considerations in mind, following a framework and structuring investments to enable increased value and capture of financial returns. We need to look at different sources of capital and match activities that are suitable for the funding source. Individual projects (e.g., individual fisheries) can be highly risky but aggregating projects together can help to diversify risk.
- 2.3. **Ms. Justine Leigh-Bell**, Standards Manager, Climate Bonds Initiative, made a presentation on green bonds and the potential for investment in marine assets. Ms. Leigh-Bell started by emphasizing the potential for directing finance towards positive impact through bonds and the need for rapid change to address low-carbon technology (e.g., low-carbon transport, renewable energy) and climate resilience simultaneously. Trillions of dollars of investment will be required and should be thought of as investment, not cost. There's no shortage of capital, but the challenge is directing it to the right projects. They are expecting to see at least US\$35 billion in issuance of green/climate bonds by the end of 2015, some corporate, like Unilever. Investors need to understand that they don't take a performance hit by choosing a "green" product. Key benefits to the issuer of such products include investor diversification and reputational benefit. There is a need to ensure robust due diligence. Monitoring and transparency and annual reporting by the issuer on impacts and management of proceeds are critical for engaging investors. The Climate Bonds Initiative has a Climate Bond Standard and Certification Scheme to help scale the use of these types of bond products. Renewable energy is currently the heaviest focus, but they are seeing growing interest in transport and water. There are emerging opportunities in marine sectors including port infrastructure, sustainable seafood and waste management.
- 2.4. **Mr. Trip O'Shea**, Vice President, Encourage Capital, presented what the firm has learned as part of the Vibrant Oceans Initiative in preparing investment blueprints for transitioning to sustainable fisheries. Mr. O'Shea described government failure in providing public fisheries infrastructure due to funding constraints and political barriers, and the important role of private capital. Misaligned economic incentives, inadequate data management and a lack of transparency also contribute to persistent challenges with illegal, unreported and unregulated fishing. But based on historical data, when interventions take place, fisheries can rebound quickly. A public-private partnership (PPP) approach can

be applied to fisheries, where investment in distressed fisheries can result in financial upside tied to fishery recovery. In this scenario, the private sector commits up-front capital and assumes implementation and operating risks. As with any investment, early stage is higher risk. Encourage Capital is developing a PPP initiative in the Philippines targeting at least US\$20 million revenue generation through user fees along with tangible social and environmental benefits. Specifically, the initiative targets the port of General Santos City where there is an undervaluation of the tuna catch due in part to lack of catch data monitoring. Investments in port infrastructure upgrades, market operations and export linkages should improve the performance of the fishery. Common barriers to such investment include a financing gap in early stages of project development, lack of investible projects, difficulty in monetizing social/environmental benefits, difficulty in finding good local partners and a lack of investment track record.

2.5. **Panel discussion.** Following the presentations, **Mr. Duncan Leadbitter**, Director, Fish Matter, moderated a panel discussion including questions from the audience.

2.5.1. Ms. Carrie Anne Cadman from World Bank Indonesia emphasized that tangible impact and change happen at the national level, and without policy reform and an integrated vision, real change will be difficult. She posed a question to the panelists about the right level and timeframe for approaching these types of investments, noting that Indonesia has 15 years to “get it right” or else it will get “stuck” based on demographic and economic forces. The panel responded that we must take global models and engage national governments to influence policy.

2.5.2. Comments from the audience also highlighted the important impact of government failure and a lack of willingness among governments to try new things. The panel responded that there is indeed a need for national support for viable, long-term projects. Governments need to cooperate and work with communities.

2.5.3. Responding to a question from the moderator about mobilizing the interest (and wealth) of people in the region towards fisheries, Ms. Shahnaz suggested that we need a knowledge base and platforms for private capital to come in. We need to ask ourselves what we can do today that will allow for organizations to be investment-ready. In particular, how can we help get SMEs off the ground. There is strong demand from the investor side, but projects need to be investment-ready and investors need to know that they will see returns.

2.5.4. We need to catalyze this space so that the private sector can come in. But donor agencies can sometimes spoil the market. It’s critical to regularly reassess a donor’s role, and whether it’s time to step back.

2.5.5. Responding to an audience question, Mr. Strauss discussed the importance in EDF’s work of gaining scientific capacity by tapping universities and scientists, for example, in their fisheries work in Indonesia.

2.5.6. Ms. Leigh-Bell suggested that fisheries fall under investment in resilience and fisheries is a key area in developing standards work. More work is needed to be able to quantify the payback and meet the needs of investors.

2.5.7. The World Bank commented on the value of the new ICM investment report and suggested that government financing could be included in future research since the vast majority of blue economy financing come from governments. She added that the challenge in the blue economy space is monetization of benefits.

2.5.8. The panel concluded with Mr. O'Shea emphasizing that management of fisheries can be a tricky political issue (e.g., setting quotas). Ms. Shahnaz added that government can come in as a guarantor to help facilitate investments. Mr. Strauss suggested that we look at the tools we have, identify the gaps and bring these to the fisheries world.

3. EMERGING INVESTMENT OPPORTUNITIES IN SUSTAINABLE COASTAL DEVELOPMENT

3.1. Building on the discussion on investment models and approaches, a second panel delivered presentations on examples of emerging investment opportunities in sustainable coastal and marine development.

3.2. **Ms. Nguyen Thi Thu Hong** presented on behalf of **Ms. Le Thi Kim Phuong**, Head of the Foreign Economic Relations Division, Da Nang Department of Planning and Investment, Viet Nam. The presentation featured four investment proposals related to marine pollution management infrastructure in Da Nang. The first proposal involved investment in a sanitary landfill/energy conversion system using a PPP scheme. The second proposal covered upgrading infrastructure and capacity building for a municipal solid waste management system. The third proposal covered a sludge treatment facility, with current facilities outdated and incompatible with the growth demands of Da Nang. The fourth proposal focused on a wastewater treatment plant in the Hoa Khahn industrial zone, where the investment would be paid off over time through the water tariff. This was met with resistance in the community because it would mean increased water costs. The presentation concluded with a call for support for the proposals and investments in further project feasibility studies and implementation.

3.3. **Mr. Arnel V. de Mesa**, National Deputy Director of the World Bank-funded Philippine Rural Development Project (PRDP) presented the project's work and specific initiatives focused on seaweed Farming in Guimaras Province, Philippines. PRDP's primary objective is to increase the income of farmers and fishers by at least 5% annually while simultaneously conserving the environment. Under the project, provinces identify priority commodities with comparative advantage, and together with local government, they jointly develop business plans. The project utilizes PhP27.5 billion (approx. US\$572 million) in total loans, including money from national and local governments. Related to marine work, technology including geo-tagging and underwater cameras are applied to marine protected areas (MPAs). Programs include capacity

building and training assistance to fishers and construction of road networks connecting fishers and seaweed farmers to the market. The Philippines ranks third in the world in seaweed exports, and seaweeds were identified as an important commodity for PRDP, with the benefit of alternative livelihood that can reduce fishing pressure in MPAs. A PhP837,000 (approx. US\$17,000) investment proposal was developed for the municipality of Nueva Valencia for development of seaweed farming, targeting a 20% return.

- 3.4. Following an introduction to the World Bank-funded Philippines Climate Change Adaptation Project (PhilCCAP) by **Mr. Conrad Bravante** of the Foreign Assisted and Special Projects Office of the Philippines Department of Environment and Natural Resources, **Mr. Rene Benguerel**, Founder, Blueyou Consulting presented lessons in coastal community business models and sustainable private sector enterprise, based on experiences from the PhilCAPP project. Mr. Benguerel shared work that Blueyou conducted in assessing the feasibility of creating a sustainable, community-based abalone enterprise on Siargao Island, Surigao Del Norte, Philippines. Blueyou assessed a vertically integrated enterprise, including seaweed farming, hatchery, ranching, processing, and marketing. Currently, there are no examples of purely commercial abalone production operations in the Philippines. The assessment found that significant scale is needed before seeing adequate profitability (700,000 juveniles a year), a scale that is difficult to support in a remote area such as Siargao. An additional challenge is the seaweed required to feed the abalone in the grow-out phase of production (600-650 tons of seaweed), where it may make more economic sense to simply farm and sell the seaweed. Overall, the full operation is not a feasible investment. However, Blueyou suggested a phased approach beginning with seaweed farming and potentially phasing in abalone in pilot and scale-up phases, depending on future market conditions for abalone. Mr. Benguerel concluded with overall principles for developing such community-based enterprises, including the importance of aligning projects with a community's capacity and capabilities and the impact of investing early on in data management, feasibility studies, value chain analysis and risk analysis.
- 3.5. The final speaker of the day was **Dr. Mark Milstein**, Professor of Management and Director of the Center for Sustainable Global Enterprise at Cornell University. Dr. Milstein presented the approach to ecologically-informed business models being developed to support marine services and alternative livelihoods as part of the World Bank-funded Capturing Coral Reef and Related Ecosystem Services (CCRES) Project. The presentation highlighted the need for a multidisciplinary approach to address the complexities in marine investment, including marine sciences, systems dynamics, management science and behavior change. CCRES is developing tools for decisionmaking at pilot sites that could be useful for local governments, NGOs and development organizations. While ecosystem valuation is important, valuations don't ultimately prevent ecosystems destruction — local market dynamics really drive individual behavior as it relates to use of resources. The social/environmental mission must be aligned with a business objective to transform the economics of a destructive activity. In the example of mangrove charcoal, it's critical to segment the market and understand who is using mangrove charcoal and why, and what the long-term needs are. Will alternative raw materials be there to support the change, or will the burden shift to another resource (e.g., the upland forest)? These types of blue economy activities open opportunities for innovations and require sufficient rigor in problem solving.

3.6. **Panel discussion.** Following the presentations, an open discussion was conducted. Highlights from the discussion included the following:

3.6.1. There is a need for more detailed analysis of investments to convince investors of the value —not just in the social and environmental impacts but also financial returns. In the case of the Philippine Investment Board, proposals don't get past the first stage based only on social and environmental justifications.

3.6.2. In transitioning to alternatives (as in the case of mangrove charcoal), it is difficult to ask people to pay for things they previously got for free. Systemic poverty is a huge hurdle. Ask, "what's the alternative to those below the poverty line?" It is useful to differentiate poverty-reduction, community-based activities from profit-driven commercial enterprises, as they require different approaches. Not all social projects will be independently financially sustainable, and that's OK. But for community-based enterprises, value chain analysis should be applied to prove that individuals will benefit from the project. Any of these initiatives should have measurable impact.

3.6.3. Systems modeling should play a role. How might a proposed business impact other areas (e.g., social, cultural, political or environmental)?

3.6.4. What is the best way to leverage the role of government? Ideal scenario is to get better support from the government authorities for blue economy development, with an awareness in the government about the enterprise objectives. A lot of transformative work is needed here. Be honest with yourself about who has what role among multiple stakeholders.

4. SEAS OF EAST ASIA KNOWLEDGE BANK

4.1. Mr. Whisnant from PEMSEA provided an overview of the new Seas of East Asia Knowledge Bank (SEAKnowledgebank.net) as an online platform for helping to facilitate investment in projects and enterprises supporting sustainable development of coastal and marine areas. He walked the audience through the live beta functionality in the online platform and called for input and feedback.

4.2. Participants provided overall positive feedback on the platform and suggested further testing with investors. The platform was viewed as offering many potential opportunities, and specific suggestions were offered included linking the platform to crowdfunding and angel investors. The platform and its associated services could be useful as a resource to help guide projects and enterprises as they problem solve. For example, as the platform evolves, it could offer locally relevant information needed to develop investments like permitting and licensing, offering more transparency and shortening process time.

- 4.3. Participants agreed that the terminology (e.g., “project” vs. “investment”) is important and should be refined. The terminology used must resonate with both investors and those developing the investments. The question was also raised: How do people find the platform? Where does the engagement start? Remember that people will come to the platform with different intentions, levels of understanding, etc. It is helpful to ask, “what stage of development are you in (e.g., seeking help, developed but not investment-ready, investment-ready, etc.)?”

5. CONCLUSIONS AND RECOMMENDATIONS

5.1. Overall, the roundtable concluded that scaling up investment in ICM-related sectors will be critical for achieving sustainable development goals for oceans and coasts in the region. Investors recognize the potential in sustainable coastal and marine investments, but it is a nascent investment class with risks and requires further development of viable models. Government plays a key role in providing proper governance and establishing an enabling environment for investment in the region. There is no shortage of investment capital, but expectations must be aligned with investor requirements and more work is needed to prepare projects for investment. Help from experts and funding is needed to move projects from concept to feasibility. The Seas of East Asia Knowledge Bank can be a useful tool as an initial step for project developers and local governments to build an understanding of how to develop investments. More research is needed to understand ICM investments in the region and identify barriers and opportunities for addressing them. A good pipeline of quality investment projects would be an asset for a certain class of investors looking for opportunities in the region. Investment is complex, and an online platform can only do so much. Meetings, forums and other in-person services must be built around the platform to facilitate real investment.

5.2. **Recommendations.** The roundtable generated the following recommendations:

- 5.2.1. Further test the platform with investors and project developers, for example, by engaging with other World Bank-funded project to pilot beta version of the platform.
- 5.2.2. Develop a portfolio of service providers and funding options for moving projects from concept to feasibility, based in real business rigor as a foundation for long-term sustainability.
- 5.2.3. As part of platform design, consider ways that the platform can facilitate investment in small and medium enterprises in particular.
- 5.2.4. Develop in-person meetings, forums and other services for project developers and investors to complement the online platform.
- 5.2.5. Explore opportunities for supporting local governments in establishing an enabling environment for investment.
- 5.2.6. Engage PEMSEA’s networks, in identifying good quality potential investment projects.

ANNEX 1
LIST OF RESOURCE PERSONS

Mr. Leo Paat
Senior Environment Specialist
The World Bank

Prof. Durreen Shahnaz
Founder
Impact Investment Exchange Asia / Shujog

Mr. Kent Strauss
Manager, Fisheries Research and Innovation,
Environmental Defense Fund

Ms. Justine Leigh-Bell
Standards Manager
Climate Bonds Initiative

Mr. Trip O'Shea
Vice President
Encourage Capital

Mr. Duncan Leadbitter
Director
Fish Matter

Ms. Le Thi Kim Phuong
Chief of Foreign Economy Division,
Da Nang Department of Planning and
Investment

Mr. Arnel V. de Mesa
National Deputy Project Director,
Philippine Rural Development Project

Mr. René Benguerel
Founder & Managing Director,
BlueYou Consulting / Meliomar

Dr. Mark Milstein
Clinical Professor of Management and Director,
Center for Sustainable Global Enterprise,
Cornell University

Mr. Ryan Whisnant
Head of Professional Services
PEMSEA

Ms. Antonia Reyes
Analyst
PEMSEA

**ANNEX 2
WORKSHOP PROGRAM**

Time	Activity/Presentation	Speaker/Panelist
Part 1	Investing in Coasts and Oceans in East Asia	
1030 – 1035	Welcome remarks and introduction from Chair	Mr. Leo Paat Senior Environment Specialist, The World Bank
1035 – 1045	Overview of the World Bank project <i>Applying Knowledge Management to Scale up Partnership Investments for Sustainable Development of Large Marine Ecosystems of East Asia and Their Coasts</i>	Mr. Ryan Whisnant Head of Professional Services, PEMSEA
1045 – 1110	Keynote: Investment Landscape Mapping in East Asia for ICM and Blue Economy	Prof. Durreen Shahnaz Founder, Impact Investment Exchange Asia / Shujog
1110 – 1210	Plenary: Investment models in marine sustainable development Strategic financing and investment models to achieve sustainable marine fisheries Green bonds and the potential for investment in marine assets The Vibrant Oceans Initiative and investment blueprints for transition to sustainable fisheries	Mr. Kent Strauss Manager, Fisheries Research and Innovation, Environmental Defense Fund Ms. Justine Leigh-Bell Standards Manager, Climate Bonds Initiative Mr. Trip O'Shea Vice President, Encourage Capital
1210 – 1230	Panel Discussion	Moderator: Mr. Duncan Leadbitter Director, Fish Matter

Time	Activity/Presentation	Speaker/Panelist
1230 – 1400	Lunch break	
Part 2	Emerging Investment Opportunities in Sustainable Coastal Development	
1400 – 1530	<p>Marine pollution management infrastructure in Danang, Vietnam</p> <p>Seaweed farming in Guimaras Province, Philippine Rural Development Project (PRDP)</p> <p>Lessons in Coastal Community Business Models and Sustainable Private Sector Enterprise: Abalone production in Siargao Island, Surigao Del Norte, Philippines Climate Change Adaptation Project (PhilCCAP)</p> <p>Developing ecologically-informed business models to support marine ecosystem services and alternative livelihoods, Capturing Coral Reef & Related Ecosystem Services (CCRES) project</p> <p>Q & A</p>	<p>Ms. Le Thi Kim Phuong Chief of Foreign Economy Division, Da Nang Department of Planning and Investment</p> <p>Mr. Arnel V. de Mesa National Deputy Project Director, Philippine Rural Development Project</p> <p>Mr. René Benguerel Founder & Managing Director, BlueYou Consulting / Meliomar</p> <p>Dr. Mark Milstein Clinical Professor of Management and Director, Center for Sustainable Global Enterprise, Cornell University</p>
1530 – 1600	Introduction to investment features in the new SEA Knowledge Bank	Mr. Ryan Whisnant Head of Professional Services, PEMSEA
1600 – 1615	Coffee break	
1615 – 1700	Q & A, discussion and design input for further development of SEA Knowledge Bank investment features	Mr. Ryan Whisnant Head of Professional Services, PEMSEA