





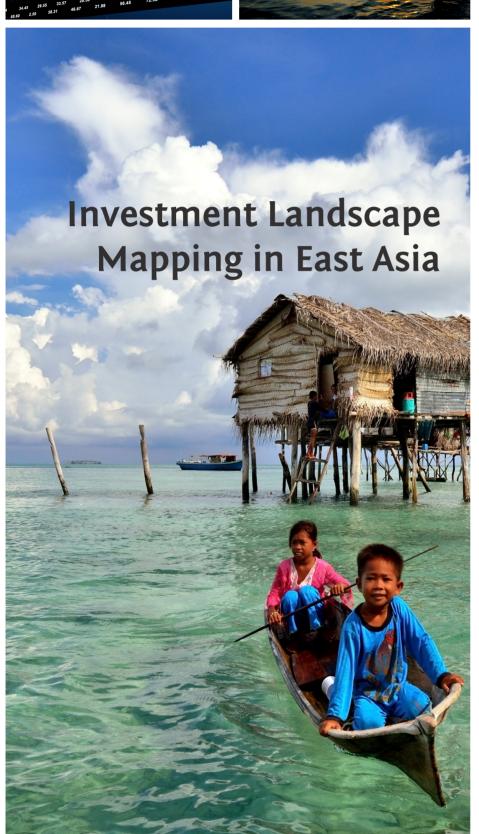
Prepared in collaboration with:



Integrated Coastal
Management and
Sustainable Development of
Coasts and Oceans

Executive Summary

November 2015









About the Research

This research paper seeks to understand and map current financial funding flows to integrated coastal management (ICM)-related sectors across the grants and investment capital spectrum. The range of funding comprises donors (both bilateral and multilateral), foundations, and corporate social responsibility initiatives at one end, and development finance institutions (DFI), corporations, impact investments and commercial investors, at the other. For recipients of financing, the destination of donor and private sector funding streams spans both coastal and environmental sectors generally, with particular focus on ICM.

The paper also identifies regional and country-level trends in ICM funding across ten related sectors, as recognized by Partnerships in Environmental Management for the Seas of East Asia (PEMSEA). The regional coordinating mechanism for the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), PEMSEA specializes in integrated coastal and ocean governance for the region.

Through a desk review of information and literature available in the public domain, the paper identifies the major funders, programs, areas of investment, types of investors, geographical preferences, and sizes of the investments deployed across ICM-related sectors in select countries of East Asia. The paper also analyzes the requirements, strategies, and expectations of investors and donors — as gleaned from information available in the public domain and Internet sources.

Guiding the research, a series of targeted questions refine the online searches to sharpen data collection and analysis:

- How are ICM initiatives currently funded? By whom and targeted to which countries?
- Which key programs channel resources for ICM? Into which key areas, initiatives, projects, and sectors?
- What criteria do investors and donors use to make funding decisions?
- Who are the major investors and what are the prominent funding vehicles used?

As pioneers and thought leaders in impact investing throughout the South and East Asian region, Impact Investment Shujoq (Shujoq) and its sister organization, Impact Investment Exchange (IIX), promote marketbased mechanisms to complement traditional philanthropy in addressing the world's most pressing social and environmental issues. Shujog/IIX rely on their depth of knowledge and experience in the impact investing space in Asia to identify opportunities to catalyze investment growth for ICM-related sectors.

As part of PEMSEA's regional knowledge management platform, the Seas of East Asia Knowledge Bank, this research forms part of a broader collaboration between PEMSEA and Shujoq/IIX to promote innovative financing mechanisms and impact investing to ICM and related sectors of sustainable development of coasts and oceans. A major focus of the regional knowledge management project will be on facilitating investment in ICM and blue economy through the use of specific knowledge products and services.

Executive Summary

Background

The coastal ecosystem across East Asia faces increasing threats that diminish the ecological health, environmental resilience and socioeconomic potential of such areas at the interface of land and sea. Available funds for ecosystem services and biodiversity remain small in comparison to the actual human cost of consuming, restoring, maintaining and managing such global commons. By some estimates, the financing gap exceeds at least US\$ 300 billion per year and may reach into the US\$ trillions.

PEMSEA mobilizes its Country and Non-Country Partners, donors and financial institutions to invest in an emerging blue economy across the seas of East Asia, whose coastal areas attract dense human settlements of over 1.5 billion people. Essential to this marketplace, ICM (which PEMSEA pioneered in the region) helps to address the governance of human activities affecting the sustainable use of goods and services generated by coastal and marine ecosystems. The sustainable growth of a blue economy closely aligns with conservation of ocean ecosystems. New funding options call for investments that balance financial returns with positive social and environmental impact that improves the health of coastal and marine areas.

This research paper aims to provide a high-level, macro landscape mapping of financial investments linked to ICM and sustainable coastal development activities. Investments in this respect refers to financial funding flows, whether through: (i) philanthropic donations given without return considerations; or (ii) capital in the form of debt, equity or its hybrid variations with some expectations of financial benefit. This investment landscape mapping looks to provide relevant partners and governments with a greater understanding of financial flows into ICM-related projects and initiatives, as well as the requirements and expectations of various investors, donor agencies and foundations across the grant and investment spectrum.

Research Methodology

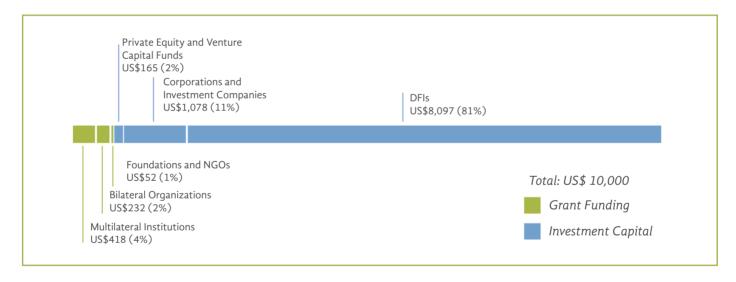
The investment landscape mapping relies on secondary research, with analysis and synthesis of existing reports, studies and other available market data. At one end of the spectrum, traditional philanthropy comprises donor grants derived from bilateral returns. The research focuses on eight countries receiving development assistance for scaling up ICM under the GEF/UNDP/PEMSEA project "Scaling up the Implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA)," including Cambodia, China, Indonesia, Lao PDR, the Philippines, Thailand, Timor-Leste, and Vietnam. The time-horizon for the study extends over a ten-year period (2005-2015). The year of funding reflects the initial timing of commitments, irrespective of time horizons for actual disbursements.

This paper focuses on charitable grants and financial resources invested in projects and initiatives in ICM-related sectors. To delineate the contours of ICM initiatives, PEMSEA classifies potential investments and donor interventions across ten focus sectors. For the purposes of this report, focus is given to funding flows that directly relate to coastal and marine ecosystems within these ICM-related sectors. The mapping exercise involves an exhaustive Internet search, collection, summary, and synthesis of publicly available information and datasets. Secondary sources derive from various online publications, including previous research reports, newspaper and magazine articles, journal content, press releases, and various websites of governments, donors, investors, foundations, and other funder sources. In total, the research references over 1,000 online sources. There are still gaps in the coverage, but the trends remain relevant.

Key Findings

- 1. Over the past decade, investments into ICM activities topped an estimated US\$ 10 billion in the countries under review. Across the investment landscape of ICM, investments with expectations of financial returns greatly outpace donor funding.
- ICM priorities for **donors** include: (i) enterprise and livelihood development; (ii) habitat protection, restoration, and management; (iii) fisheries and food security; and (iv) ICM development and implementation. In terms of investment geography, three individual countries absorb over half of all donor funding identified in the study: Indonesia, Vietnam and the Philippines. Focused on transboundary issues, regional programs across East Asia also receive significant donor funding.
- Areas of interest for **commercial investors** include: (i) water use and supply management; (ii) pollution reduction and waste management; and (iii) natural and man-made hazard prevention and management. Of the countries under review, ICM-related programs and initiatives benefit predominantly Vietnam, China, Indonesia and the Philippines.

Grant Funding and Investment Capital to ICM-related Sectors, Select Countries, 2005-2015 By Donor Category, Estimates of Committed Funds, US\$ millions (% of total)

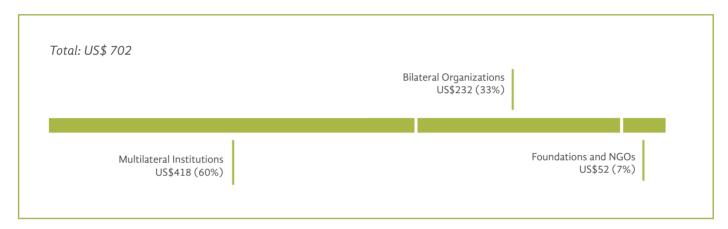


Grant Funding

- 2. Over the period 2005-2015, the countries studied in this report were home to over 420 donor-funded projects and initiatives from some 30 international donor organizations with grants in excess of US\$ 702 million of financial commitments.
- From the three donor categories, **multilateral institutions** provided more than half of all ICM-related funding. The size of committed funds from multilaterals amounted to some US\$ 418 million. Major ICM areas of interest include: i) ICM development and implementation; ii) enterprise and livelihood development; iii) pollution reduction and waste management; iv) habitat protection, restoration, and management; and v) natural and man-made hazard prevention and management. By size of committed funding, Global Environment Facility (GEF), the World Bank and the United Nations Development Programme (UNDP) together account for nearly all of this funding. Multilateral grants support regional projects across East Asia, as well as with the individual PEMSEA Country Partners.

- Funding from **bilateral organizations** reached upwards of US\$ 232 million. Sectoral areas of interest encompass: (i) ICM development and implementation; (ii) fisheries and food security; (iii) coastal transport; and (iv) natural and man-made hazard prevention and management. In absolute terms, the U.S. Agency for International Development (USAID) and Australia's Department of Foreign Affairs and Trade (DFAT) together account for over half of all these bilateral funds channeled to ICM-related sectors. Major destinations for ICM resources include the Philippines, Vietnam, Indonesia and Cambodia.
- Foundations and NGOs make up the smallest category of international funders, with a total commitment estimated at US\$ 52 million. Most of this funding is directed towards habitat protection, restoration and management close to four-fifths. By funding size, prominent private foundations include: the National Fish and Wildlife Foundation and the MacArthur Foundation.

International Grants to ICM-related Sectors, Select Countries, by Donor Category, 2005-2015 Estimates of Committed Funds, US\$ millions (% of total)



- 3. For most countries in this study, limited data and funding levels exist for specific ICM-related programs and initiatives from **domestic charities**. For ICM-related sectors, domestic grant funding remains relatively small, as with much of homegrown philanthropy overall. Nonetheless, the region boasts over 3.3 million high net worth individuals (HNWIs) increasingly linked to growing, individual philanthropic gestures. From available data, China and the Philippines boast arguably the most active domestic forms of charitable giving into ICM-related causes. As such, data on domestic grant funding in much of Asia likely under-reports actual charitable giving. Scalable, market-oriented solutions more and more attract the attention of Asian philanthropists. This approach may also apply to ICM-related sectors.
- 4. In terms of trends, multilateral institutions commit grants consistently on a yearly basis, with GEF typically the largest component. Across many projects and programs, donors tend to link efforts to strengthen coastal areas with environmental challenges like climate change and biodiversity. Bilateral funding more and more aligns with diplomatic efforts and takes on geopolitical considerations, as evidenced by DFAT absorbing AusAid. Specific bilateral trends in ICM (as with broader foreign assistance) reflect wider geopolitical considerations.

Investment Capital

5. In the last decade, countries analyzed in this report welcomed an estimated 111 ICM-related investments from 23 investors providing upwards of US\$ 9.3 billion in financial commitments.

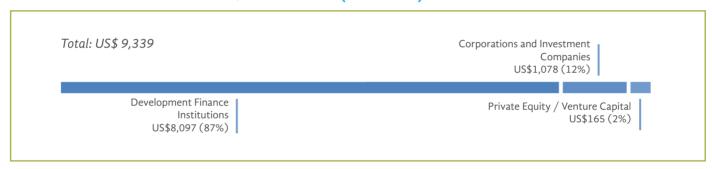
• Of the three investor categories, **DFIs** dominate ICM-related funding by a wide margin. Their ICM investments reached an estimated US\$ 8.1 billion. The sectoral interest of DFIs include: (i) water use and supply

Investment Landscape Mapping in East Asia

management; (ii) pollution reduction and waste management; and (iii) natural and man-made hazard prevention and management. In absolute terms, the World Bank, Asian Development Bank (ADB), and Japan International Cooperation Agency (JICA) together account for almost all of these DFI funds. Major destinations of DFI investments include Vietnam, China and Indonesia.

- Providing some US\$ 1.1 billion of financing, the second ICM investor type consists of **corporations and investment companies** taking equity stakes. Focused on only the Philippines and Vietnam, these investors tend to make one-off investments in ICM projects. Investors committed funds to a variety of private sector enterprises and initiatives in the ICM sphere, including seafood processing companies, desalination and waste treatment technology, ecotourism initiatives and coastal energy projects.
- A nascent investor group in ICM across East Asia, **private equity and venture capital funds** began making initial investments into the sector only within the last five years. Total investments reach an estimated US\$ 165 million for the countries under review. Private equity activity in the ICM sector remains fairly limited so far. Yet, the recent emergence of a number of fund vehicles with a focus on investing in marine ecosystems and aquaculture indicates their interest in playing a more prominent ICM role, going forward.

Investment Capital to ICM-related Sectors, Select Countries, by Investor Category, 2005-2015 Estimates of Committed Funds, US\$ millions (% of total)



6. Related to ICM sectors (for coastal transport), **port investments** receive large capital infusion and continuous upgrades, particularly for a region heavily reliant on world trade. Individual investments typically exceed US\$ 100 million. Over the past decade for the countries under review, the research identifies 26 projects to have received investment capital in port-related, coastal transport activities. These deals sum to an estimated US\$ 19 billion. In the near future, more port developments will continue to attract private equity investments for capital expansion and facilities upgrades.

Notable Trends

- 7. In ICM-related sectors for the countries studied, **impact investing** remains largely unrealized. Impact funds continue to be formed, but the research points to no discernible investment commitments. A very small percentage of such investors have either made investments (or plan to make in the near future) in conservation across East Asia. Investors in conservation largely seek opportunities in North America and Europe. Harnessing the power of entrepreneurship, innovation and capital for public good, impact investing offers new and creative financing options for ICM projects and an ocean-based blue economy at local, national, and regional levels.
- 8. Impact investors globally are recognizing both the financial and social impact potential of **fisheries**. Realizing this opportunity, several initiatives aim to channel impact investments towards the fisheries sector. Leading donors are playing their part by increasing awareness and calling impact investors to action. The sector is now primed for impact investments with several new funds, as well as traditional impact investors becoming increasingly more involved in the sector.

- 9. With the increasing attention being paid to the potential of conservation finance and sustainable fisheries and aquaculture, the universe of investors active in ICM is likely to continue growing. **Notably missing from the ICM investment landscape in East Asia, so far, are large institutional investors** (traditionally pension funds, endowments, and insurance companies), family offices and HNWIs. Institutional investors tend to be risk-averse in their investment strategy and their hesitance to commit to ICM projects could possibly be due to the relatively uncharted nature of the East Asian ICM landscape as a destination for private investment.
- 10. In the ICM sectors, the **public-private partnership** (PPP) financing model has produced mixed results. Experience from PEMSEA points to the following issues: (i) credible and sustainable cost-recovery mechanisms; (ii) procurement process; (iii) tensions in central-local government relations; and (iv) local capacity and public awareness of PPP models. More integrated and comprehensive approaches and studies are needed to package and promote PPP projects in ICM sectors, and a number of barriers still exist to establishing more successful PPPs.
- 11. Investors frequently cite **difficulties in sourcing high-quality investable deals** as an important factor in preventing them from actively participating in the ICM sectors. This issue confronts the broader impact investing space overall. A lack of track record, few examples of successful investments, capriciousness of local politics, issues of rights and tenure, and untested revenue models have all conspired to limit the potential of ICM, even from the most patient of private capital.
- 12. The recent emergence of climate investment funds, development impact bonds, debt-for-nature swaps, payments for ecosystem services, biodiversity offsets, and revolving loan funds, among others, point to **creative mechanisms** that can scale initiatives for sustainable coastal and marine ecosystems. To make full use of innovative financial mechanisms, ICM projects and related initiatives look increasingly to adopt market-based approaches to complement existing public resources, philanthropy, and foreign aid. Yet, such a transformation remains at an early stage of development and requires a catalyst to take ICM projects to the next level.

Recommendations

- 13. **Awareness building** efforts are needed, targeting both the wider investment community and impact investors in particular. Proponents of coastal and marine projects need to build greater awareness about the potential financial, social, and environment impact of ICM-related investments through established case studies, authoritative research, events and conferences. Investor education around: (i) the urgency and need for ICM investments; (ii) awareness about both the financial returns and social impact, (iii) initiatives that highlight a pipeline of potential deals; and (iv) innovative financing and partnership mechanisms in ICM could help catalyze impact investments in the sector.
- 14. Many ICM-related projects seeking investment capital in East Asia are at the early stage, with proof of concept still developing. **Incubator and accelerator services** or technical assistance programs helping promising ICM-related enterprises to become investment-ready could also generate a healthy pipeline for investors interested in sustainable development of coasts and oceans. **Investment-readiness support** can strengthen ICM-related projects to meet the expectations of impact investors. Such investment readiness services can provide a point of entry for ICM-related projects to open doors to the wider investor community.
- 15. A **knowledge management platform** can help identify gaps and barriers to investment in coastal and marine sustainable development. PEMSEA is developing a Seas of East Asia Knowledge Bank, which can facilitate investment in ICM and a blue economy through the use of specific knowledge products and services.
- 16. The mapping exercise only begins to sketch the broad outlines of the investment landscape for ICM. Large gaps in knowledge and understanding of investor trends remain, requiring strategic use of primary research to

expand upon these initial findings. This paper offers a starting point to explore ways to scale up investments in ICM-related sectors. With more research, the knowledge gap in the investment landscape for ICM can narrow, providing meaningful data to inform investment decisions from donors and private investors alike. A research agenda should include in-depth primary data collection, interviews with ICM project proponents and surveys with investors, donors and policymakers on ways to strengthen sustainable development of coasts and oceans.

The paper begins to chart the landscape of investments in ICM and thus deepens the conversation around efforts to scale investments in ICM-related sectors. The first step in this dialogue involves identifying gaps in understanding, which this paper starts to address. But more such efforts are needed. To succeed and scale, ICM-related activities require a broad and detailed landscape of investment flows that connects ICM project proponents with relevant investor networks.



Impact Investment Shujog

A registered charity incorporated in Singapore, Shujog deploys additional staff in Bangladesh, India, China and the Philippines. Shujog's mission is to strengthen, deepen and expand the impact that social enterprises (SEs) and other inclusive organizations create in their communities. Activities aim to magnify the impact of SEs; scale the quantity of successful Asian SEs moving into the expansion stage; and broaden the knowledge base of the SE and Impact Investing space. Shujog offers a number of programs to transform the niche sector to a more mainstream industry for both investors and enterprises.



Partnerships in Environmental Management for the Seas of East Asia

PEMSEA is an intergovernmental organization operating in East Asia to foster and sustain healthy and resilient oceans, coasts, communities and economies across the region. Through integrated coastal management solutions and partnerships, PEMSEA works with local and national governments, international development organizations, companies, investors and research institutions towards sustainable development of coasts and oceans in East Asia.

To download the full report and references, please visit www.pemsea.org/our-work/blue-economy. For more information and to get involved with PEMSEA's blue economy work, please contact us at info@pemsea.org.