**Focus Area: SUSTAINABLE DEVELOPMENT AND INFRASTRUCTURE**
**Market Segment: COASTAL & MARINE TOURISM**
**Activities: ACCOMODATION, RESTAURANTS, SERVICES, TOURS, RECREATION, ENTERTAINMENT**

**SIC Codes:** 7990 (Tourism Services), 7999 (Amusement/Recreation) 9000 (Creative, Arts, Entertainment), 9329 (Other Facilities incl Marinas)
**Sector Score: 15**

**Sample Investments:**

- **Private:** Recreation facilities/services that preserve natural habitats
- **Public:** Establishing conservation & marine parks with pay-for-access model

1. **Relevance to ADB Ocean Action Plan? *(Score: Medium=2)***
   a. We believe this sector needs to be re-examined due to the conjunction of economic, social and environmental risks. Sustainability issues challenge the historically high priority given to Coastal & Marine Tourism in the region. Creating resilient communities means reducing dependence on tourism.
   b. There is a dynamic interface between Coastal, Land, and Marine Subsystems which are all interdependent. *(See Appendix, Figure 2)*
   c. Pre-Covid19 data for the region shows national tourism ranging from 3-12% of GDP, with projected growth to 2022 ranging from 4-7%. *(See Appendix, Figure 1 for selection of blue tourism data on East Asian nations)*. This projected growth is now unlikely. Ocean tourism, before COVID-19, was directly valued at $390 billion globally and comprises a significant portion of the GDP of many DMCs. See (3) below for current data and possible responses to Covid19 impacts.

2. **Positive Environmental Impacts*? (Score: Low=1)***
   a. Tourism has the potential to support positive environmental impacts, and to make these improvements self-sustaining: marine/coastal reserves, sustainable fisheries, mangroves, coral reefs and coastal rehabilitation. Impact investment vehicles and well-enforced regulations are needed to realise this potential.
   b. However, the industry record has not been so favorable. Hotels, resorts, food service and transportation are generally high carbon activities. Stresses on water and waste treatment systems are more than most communities can handle - creating irreversible damage in many cases. Travel is a high-carbon activity, whereas climate mitigation argues for less. Systems and behavior change on a very wide scale is required for tourism to deliver net positive environmental impacts.

3. **Positive Social Impacts? *(Score: Low=1)***
   a. Poverty: Tourism generates wealth via employment for many communities. Some activities (eg, locally-owned businesses) benefit the local community much more than others (eg, cruise ships, foreign-owned resorts). This high but flawed income dependence balances, to some extent, the externalities.

b. Gender: Women play an active role in tourism, although under-represented in management and ownership roles - as in most other sectors.
c. Covid19: Closing of travel and resorts in 2020 has resulted in big losses in the region (see APAC-Covid19 travel statistics). Poor populations are hardest hit by job loss, illness and death. Recovery is projected to be slow and difficult. Recovery funds could prevent furloughs by hiring people to restore coastal ecosystems, such as coral reefs and mangroves, given the massive return on investment that such ecosystems deliver to blue tourism. Stimulus funds could also keep workforces active installing sustainability upgrades in now empty hotels - drinking water stations to reduce plastic pollution and water treatment systems, for example - and training staff to diversify their sustainability skillset.
d. Negative social impacts of unsustainable tourism include health (disease transmission); loss of cultural identity to mass global standards; increased traffic in drugs, alcohol and prostitution; stresses on local infrastructure that reduce quality of life.

**4. Potential for Market Scalability? *(Score: Medium=2)***

a. Scalability depends on negotiating the national/local constraints of infrastructure needs together with environmental and societal protections. Several systems are proposed to advance sustainable tourism within these constraints.
b. DMCs must reflect on what levels of tourism are desirable: Beyond which point are there diminishing returns? What are the unintended consequences - to the environment and communities - of dependence on tourism versus other sectors for economic growth? What portion of infrastructure is devoted to foreign guests versus local needs? How can tourism be channeled to supporting marine conservation? Overdevelopment by the tourism industry has the same problems as other coastal developments, but often has a greater impact as the tourist developments are located at or near fragile marine ecosystems.

**5. Capacity for Innovation & Growth? *(Score: Medium=2)***

a. Innovation plays a role in sustainable tourism. In addition to improving efficiency, innovation will be required to meet the challenges of climate and shocks like the Corona pandemic. For sustainable tourism to be realised in systemic fashion, changes need to be made in food supply chains (more local), transport (fuel efficiency & emissions issues), energy efficiency of hotels and services, zoning and building codes.
b. As noted in (3) above, growth is limited by a series of local/national constraints. The addition of Corona and climate constraints has made tourism a more risky sector than previously imagined. Innovation in tourism data and management resources is also needed to improve transparency and decision-making.
c. Marine tourism generates a significant portion of the ocean economy. From 2013-2016, the number of cruise ships in Asia grew at a 12% compound annual rate, and this trend is likely to continue.

**6. Benefit from Regional Governance? *(Score: Medium=2)***

**a.** The marine environment, by definition, transcends national boundaries. Pollution - or improvements - of a marine ecosystem in one nation's Exclusive Economic Zone (EEZ) will impact the regional ecosystem, which makes marine/coastal tourism an

important sector for regional governance frameworks. Climate and pandemic risks also make increased regional cooperation an imperative.

**b.** However, the reality of local and nationally owned assets engaged by tourism often results in decisions made only through a local lense. The interests of multiple stakeholders need to be resolved on a regional basis where possible, especially for: MSP/coastal use plans, Regulations on waste management and habitat protection, Planning and licensing processes to prevent uncontrolled shoreline development and resource-use conflicts. *(see Appendix, Figure 3*)

**7. Opportunity for SMEs? *(Score: Medium=2)***

a. Eco-tourism has traditionally been the preserve of SMEs, and is a priority for sustainable growth. Reducing the footprint of tourism is a core value of sustainability that enables SMEs that deliver local and regional marine/coastal experiences. Data is difficult in this area due to fragmentation and minimal reporting requirements.

b. However, tourism SMEs depend on infrastructure and public services. Airports, marinas, water, sanitation, health, energy and transportation systems often cannot keep pace with the demands of tourism. The seasonal nature of tourism also creates uneven pressures and riskier cash flows than other sectors. Loss of capacity and bankruptcies from the Corona crisis, combined with destructive storms, are shocks from which some tourism SMEs may not recover.

**8. Attract Private Investment? *(Score: Medium=2)***

a. With OECD's strong forecast growth in global tourism to 2030, significant investment will be required to provide the accommodation, transport and other tourism-related services and infrastructure necessary to meet expected demand. Public budgets are limited, so private investment is needed on a large scale - especially for climate-resilient projects.

b. These needs are tempered by the risks noted above. Most private investment has come from tourism industry players with debt finance, requiring short-term payback and minimal compliance with sustainability guidelines. Risk-reducing investment vehicles are needed to address sustainable infrastructure needs.

## REFERENCES

*Towards Investment and Financing for Sustainable Tourism.* OECD Tourism Trends & Policies, 2018.

*APAC: Covid19 Impacts by Region.* Statista, March 2020

*Sustaining Tourism and increasing resilience through better planning coastal cities*, Development.asia/explainer

*Metrics for Sustainable Tourism*. Verge Hawaii, 2018

*PEMSEA: State of Oceans & Coasts 2018*

*Toward Sustainable Tourism.* WWF

## APPENDIX

**Figure 1:** From *PEMSEA: State of Oceans & Coasts 2018*

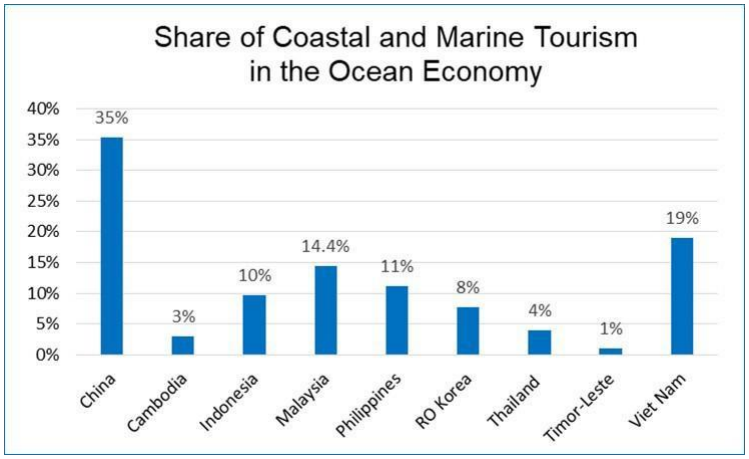


**Figure 2:** From *Development.Asia Explainer: Sustaining Tourism and Increasing Resilience through Better Planning of Coastal Cities*

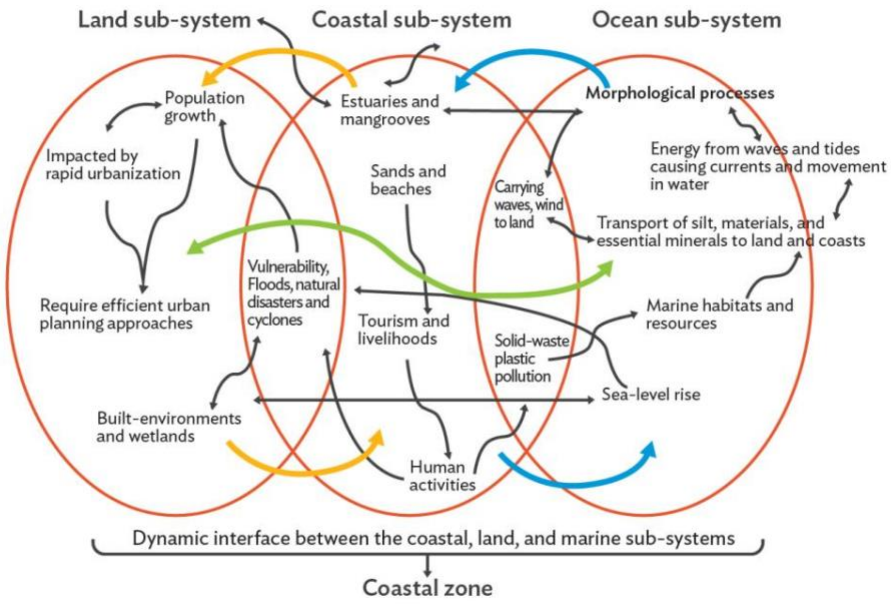

**Figure 3:** Ibid, Development.Asia. *Systems of Systems in Blue Economy Management*

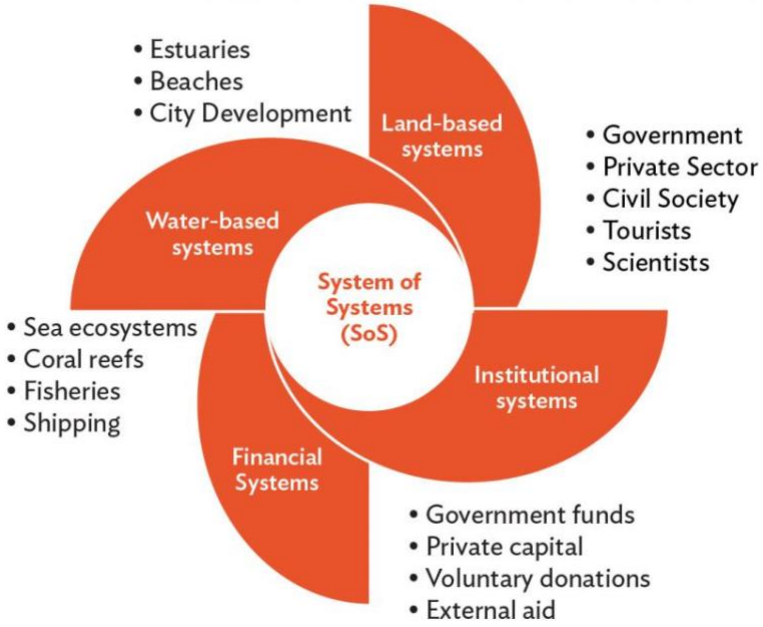


**Figure 4:** Ibid, *PEMSEA.*

| Country | Ocean economy (2015) | | Value of ecosystem services (US$) | Blue Economy Focus | Protecting Ocean Health for Blue Economy | | |
|---|---|---|---|---|---|---|---|
| | (US$) | Share to GDP | | | MPA (% of territorial waters) | ICM (% of oastline) | Initiatives |
| **Cambodia** | 2.39 billion | 16% | 200.42 million–583.42 million | Ecotourism<br><br>Sustainable ports<br><br>Revolving fund for to support supplemental livelihood and micro-enterprise projects to reduce fishing pressure | 0.50% | 100% | Sihanoukville: coastal use plan and zoning scheme, beach management, MPA in Koh Rong islands, wastewater treatment system, community-based solid waste management system, mangrove rehabilitation<br><br>Protected areas in the coastal provinces |

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|---|---|---|---|---|---|---|---|
| **China** | 959.04 billion | 9.50% | 150 billion | Sustainable tourism<br><br>Green ports and shipping<br><br>Marine renewable energy<br><br>Sustainable aquaculture: marine ranching<br><br>Biodiversity conservation/MPA networking<br><br>Artificial reefs; zoning for coastal sightseeing and fishing; and marine ranching for aquaculture, breeding of benthic fish, etc.<br><br>Marine biotechnology<br><br>Coastal wind power as alternative, renewable source of energy<br><br>Solar energy/pollution reduction<br><br>Desalination and reuse of brine | 5.40% | 29% | Multi-functional Sea Use Plan: zoning scheme, environmental user fees<br><br>Ecological Remediation Project of Mangrove Forests in Southern China, and Chinese Tamarix Forests in Northern China |
| **Indonesia** | 182.54 billion | 28% | 105.4 billion | Ecotourism and MPAs<br><br>Green ports: PT Terminal Teluk Lamong<br><br>Sustainable fisheries<br><br>Development of the Ciletuh-Palabuhanratu Geopark in Sukabumi Regency through ICM | 5.80% | 47% | Mangrove restoration and coral reef rehabilitation<br><br>PROPER program: awarding and recognition system for industries complying to pollution regulations<br><br>National Action Plan on Plastic Waste Management, 2017-2025 |

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|---|---|---|---|---|---|---|---|
| **Malaysia** | 63 billion | 23% | 17.7 billion | Marine parks and ecotourism<br><br>Green ports<br><br>Sustainable marine aquaculture<br><br>Sustainable fisheries: stock assessment; management strategies, e.g., zoning; gear based licensing; fish sanctuaries; monitoring and enforcement<br><br>Alternative livelihood: seaweed<br><br>cultivation; tourism | 2.3%* | 5.72% | Wastewater and septage management<br><br>Climate change response: National Coastal Vulnerability Index study; Implementation of the Integrated Shoreline Management Plan; Adaptation measures |
| **Philippines** | 11.81 billion | 7% | 17 billion | Sustainable fisheries: working with seafood producers and processors for conservation of blue crabs and swordfish<br><br>Sustainable tourism: National Ecotourism Strategy and Action Plan(2013-2022); Zero Carbon Resorts; Green Fins program (Green Fins program: involving diving operators<br><br>in coral reef monitoring and conservation); MPA/tourism branding; marine and coastal heritage sites and parks<br>Green ports; shore-based power supply using renewable energy; shore reception facilities<br><br>Marine biotechnology and new medicines<br><br>Coastal wind power as alternative, | 12% | >20% | Sustainable fisheries: amended Fisheries Code; ecosystem approach to fisheries management; 10-Year Plan of Action to address IUU fishing; registration of fisherfolk, fishing vessels and gears;; closed season<br><br>for sardines and small pelagics; ban on<br>sargassum and black corals<br>Ecosystem and biodiversity conservation: Mangrove and Beach Forest Development Project; coral reef rehabilitation; SmartSeas Program; MPA Network for sea turtles<br><br>National Sewerage and Septage Management Program: national government will provide subsidies to local governments of |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | renewable source of energy<br><br>Biodiversity-friendly enterprises for coastal communities | | | up to 50% of capital cost<br><br>Various cost-effective technologies applied in the wastewater and septage treatment facilities |
| **Thailand** | | 30% | 36 billion | Low carbon tourist destination project in Koh Mak, Trat Province: Using alternative energy, waste management, and preserving traditional way of life<br><br>Green Fins program: involving diving operators in coral reef monitoring and conservation<br><br>Bor Hin farmstay in Amphor Sikao, Trang province: ecotourism, mangrove reforestation, Seagrass Seeding Bank<br><br>Crab Bank Sri Racha, Chumporn and Surat Thani: includes education, stock assessment and<br><br>co-management with fisher communities | 5.2%* | 5.46% | Mangrove rehabilitation<br><br>Laem Phak Bia Project in Phetchaburi province: simple, natural, and low cost wastewater and waste treatment models ideal for Thai communities |

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|---|---|---|---|---|---|---|---|
| **Timor Leste** | 1.97 billion (in 2015) | 87% | 5.25 billion | Sustainable fisheries and aquaculture: integrated system for tilapia, milkfish, etc.<br><br>Sustainable port (under construction) | 3.8%* | 34.10% | MPAs: 3 MPAs in Atauro (Vila, Adara, Varuana); 5 MPAs in Nino Konis Santana National Park; new sites in Bobonaro; locally management MPA in Manatuto<br><br>Mangrove rehabilitation<br><br>Wastewater treatment using low-cost technology<br><br>Solid waste management: Ecobank and<br><br>Green School program; landfill in Dili<br>Used oil management |
| **Viet Nam** | 38.23 billion (in 2015) | 21% | | Climate smart aquaculture | 1.8%* | 40.30% | Mangrove restoration in Ca Mau and Tien Giang province (GCF)<br><br>Biodiversity conservation to respond to climate change (UNDP)<br><br>Green growth for 28 coastal provinces in Vietnam (UNEP) |

MOVEMENT OF PEOPLE

# TOURISM

Tourism receipts in Asia grew to **$368** billion in 2017

**5.4%** GROWTH

## GROWTH IN INTERNATIONAL VISITOR ARRIVALS

**Intraregional**

**8%**

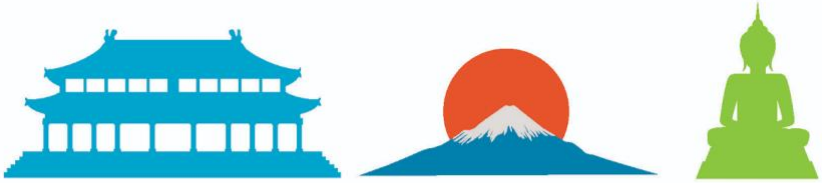
2017
319.6
MILLION

**Extraregional**

**7.2%**

2017
87.9
MILLION

## MOST POPULAR DESTINATIONS FOR ASIAN VISITORS



People's Republic of China
**118** million

Japan
**25** million

Thailand
**25** million