



State of Oceans and Coasts MALAYSIA



Malaysia's National SOC Report (publication pending) provides information on the status of seas and coasts of Malaysia, including the national ocean economy; quantity and quality of resources the coastal areas; and the existing and potential uses of such resources. The report also aims to contribute

to the blue economy assessment and monitoring progress on the implementation of the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA), the UN Sustainable Development Goals (SDGs), other international agreements subscribed to by Malaysia, and related national laws and policies on oceans and coasts.

Malaysia's Ocean Economy in Context

Indicator	Available Information (as of 2017)
Land area ¹ (square kilometres or km ²)	328,550 km ²
Coastline ¹	4,675 km
Sea area ¹	63,666 km ²
Population ¹	31.6 million
Coastal population ¹	>60% of total population
Ocean economy ¹ (Gross value added or GVA, in constant prices)	US\$63 billion or 23% of GDP (in 2015)
Employment in ocean economy ¹	4% of total employment
Estimated value of coastal and marine ecosystem services ¹	US\$17.7 billion
Percentage of coastline with ICM ¹	5.72%
Marine protected area ² (percentage of territorial waters)	2.3%
Ocean health index (OHI) ³	65 (Malaysia ranks 133 among 221 countries and territories)
Gross domestic product ⁴ (GDP, in constant 2010 US\$ prices)	US\$296.3 billion
Human development index (HDI) ⁵	0.802 – high human development category—Malaysia ranks 57 out of 189 countries and territories
Gross national income (GNI) per capita ⁵ (at 2011 PPP prices)	US\$26,107
Access to safely managed water supply ⁴	92%
Access to safely managed sanitation ⁴	82%

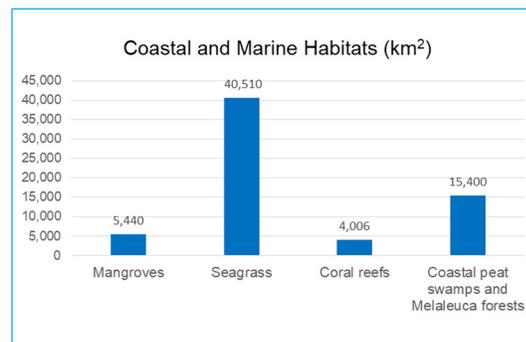
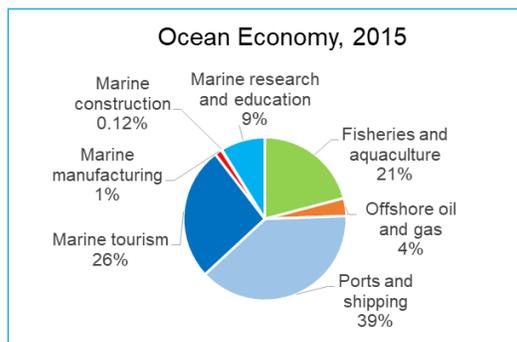
¹ SOC Report

² World Bank. 2017. *The Little Green Data Book 2017*; <https://data.worldbank.org/country/malaysia>

³ <http://www.oceanhealthindex.org/region-scores/scores/malaysia>

⁴ World Bank Open Data. Accessed from: <https://data.worldbank.org/country/malaysia>

⁵ United Nations Development Programme (UNDP). 2018. *Human Development Indices and Indicators: 2018 Statistical Update*. Accessed from: http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/SGP.pdf



Transitioning to Blue Economy

Ocean economy	Blue Economy Initiatives
<p>Fisheries and aquaculture</p> <ul style="list-style-type: none"> Marine fisheries: RM 8.785 billion (US\$2.1 billion) in 2015 Aquaculture production: 520,514 tonnes, with a value of RM3.47 billion (US\$829 million) <p>Pressures</p> <ul style="list-style-type: none"> increasing demand for fish; overfishing; safety and quality of fish products illegal encroachment of trawlers in coastal areas destructive fishing (fish blasting, cyanide use, push nets) 	<p>Sustainable fisheries</p> <ul style="list-style-type: none"> Management strategies: ecosystem-based fisheries; fish stock assessment; zoning schemes; gear-based licensing; control of fishing effort; closed fishing season; public water restocking programme; monitoring and enforcement; habitat rehabilitation Use of sophisticated computer-controlled systems e.g., dispense food automatically and uptake sensors to determine consumption rates Promotion of alternative livelihood: seaweed cultivation; ecotourism <p>Sustainable aquaculture</p> <ul style="list-style-type: none"> Agro-food Transformation Programme to ensure adequacy of fish and its contribution to the nation's food supply, increase revenues and make the agro-food entrepreneurs as competitive and sustainable business. Aquaculture Industrial Zone (AIZ) was set up as part of the permanent food production zones by the state governments
<p>Coastal and marine tourism</p> <ul style="list-style-type: none"> GVA: RM650 million (US\$155.3 million) Employment: 131,112 <p>Pressures</p> <ul style="list-style-type: none"> water pollution, waste disposal and inadequate regulations; litter and marine debris; haze problem 	<p>Sustainable tourism</p> <ul style="list-style-type: none"> Ecotourism: Club Med Cherating Beach in Pahang - use of sustainable local materials, solar power and energy-saving lighting; fishponds with natural filtration system; sea support for sea turtle sanctuary; nature conservation awareness campaign Marine parks (and other protected areas): established for the protection and management of the marine ecosystems; also provided income and livelihood Malaysian Tourism Policy which promotes ecotourism; National Ecotourism Master Plan: tourism destinations, such as forest reserves, wildlife sanctuaries, wetlands, and marine parks as well as historical and heritage sites have been gazetted as protected areas.
<p>Ports and shipping</p> <ul style="list-style-type: none"> GVA: RM949 million (US\$226.7 million) <p>Pressures</p> <ul style="list-style-type: none"> conversion of habitats; water pollution in ports; heavy metal concentration in water and sediments; shipping accidents; operational and accidental oil spills; emissions of greenhouse gas; marine invasive species 	<p>Sustainable ports</p> <ul style="list-style-type: none"> Green ports <ul style="list-style-type: none"> Johor Port: green port policy Port of Tanjung Pelepas and Westports in Port Klang received the Green Port Award from APEC Port Services Network (APSN) Initiatives: Fuel quality of ships in ports; energy, electricity and fuel saving; tackling oil and chemical spills; ballast water management; compliance with MARPOL; shore power to reduce emissions; environmental initiatives (beach clean-up, mangrove planting; adoption of marine sanctuaries; etc.) Port Safety, Health and Environmental Management System: Port Tanjung Pelepas received PSHEMS Level 1 Certificate of Recognition in 2006
<p>Water</p> <p>Pressures</p> <ul style="list-style-type: none"> nutrient enrichment through direct discharge of untreated domestic and industrial wastewater sediment runoff fertilizer and pesticide runoff sand mining tin mining solid waste management (SWM): some of the islands need to be upgraded since current capacities are lower than the solid waste generation rate. 	<p>Pollution reduction</p> <ul style="list-style-type: none"> Wastewater and septage management: Malaysia expanded the sewerage coverage from 25% in 1993 to about 70% in 2015, constructed sludge treatment facilities (for septage management or for those not connected to the sewerage system), increased the number of sewage treatment plants while upgrading the existing plants. Use of Marine Water Quality Index and monitoring of marine waters; to assess the status of water quality, detect changes and identify pollution sources; Island Marine Water Quality Monitoring Programme involving 60 stations around 40 islands; regular monitoring of rivers (927 stations located within 120 river basins)
<p>Pressures</p> <ul style="list-style-type: none"> resource overexploitation conversion to other uses oil spills illegal harvest of wildlife resources adverse effects from climate change (rising sea temperature, ocean acidification, etc.) conflicting policies: production vs. conservation 	<p>Habitat restoration and conservation</p> <ul style="list-style-type: none"> Mangrove planting Mangrove protected areas Coral reef restoration Coral transplantation Marine parks (e.g., Tun Mustapha Park in Sabah – largest MPA in Malaysia) Conservation financing (fees collected at marine parks to support maintenance cost and conservation efforts)
<p>Pressures</p> <ul style="list-style-type: none"> natural processes, such as typhoons, storm surges and coastal erosion 	<p>Climate change response</p> <ul style="list-style-type: none"> Renewable energy: Development of new areas e.g., OTEC, wave, tides energy National Coastal Vulnerability Index Implementation of the Integrated Shoreline Management Plan Adaptation measures