

Marine Socio-Ecological Systems Symposium – MSEAS 2024

Tuesday Jun 4, 2024 / 01:35 PM - 01:50 PM



A social-ecological framework to navigate the impacts of cruise tourism on nature and local communities



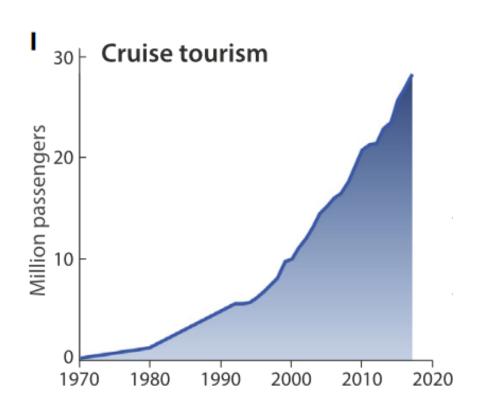




Cruise tourism: a fast-growing business

The Blue Acceleration: The Trajectory of Human Expansion into the Ocean

Jean-Baptiste Jouffray, 1,2,* Robert Blasiak, 1 Albert V. Norström, 1 Henrik Österblom, 1 and Magnus Nyström 1



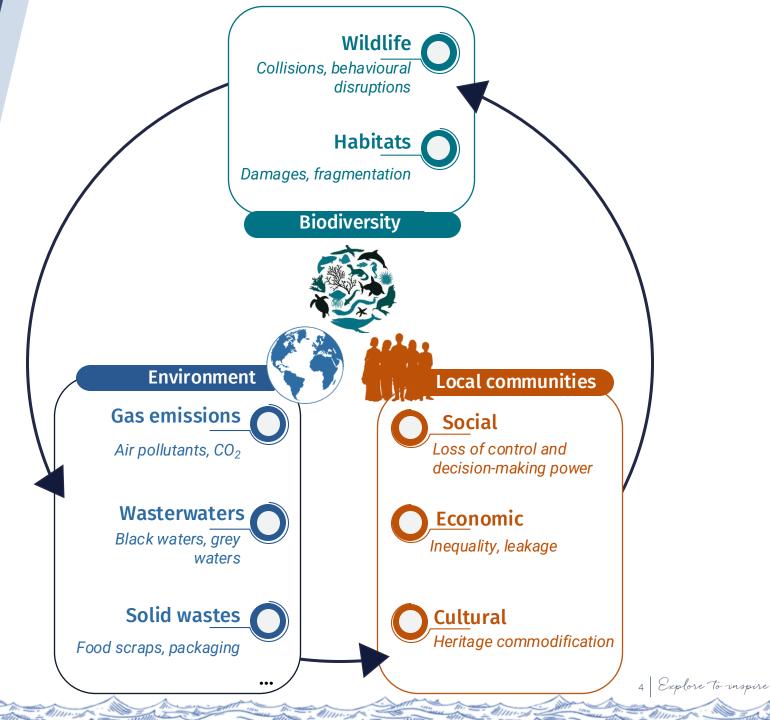


Source: CLIA Passenger Data, 2019 - 2021 and CLIA Cruise Forecast/Tourism Economics (December 2022)

Expedition cruises: cruising to remote, hard-to-reach places



The cruise sector can have far-reaching impacts on nature and people







Development of an integrated framework for the assessment of the environmental, economic, and socio-cultural impacts generated by the cruise tourism sector

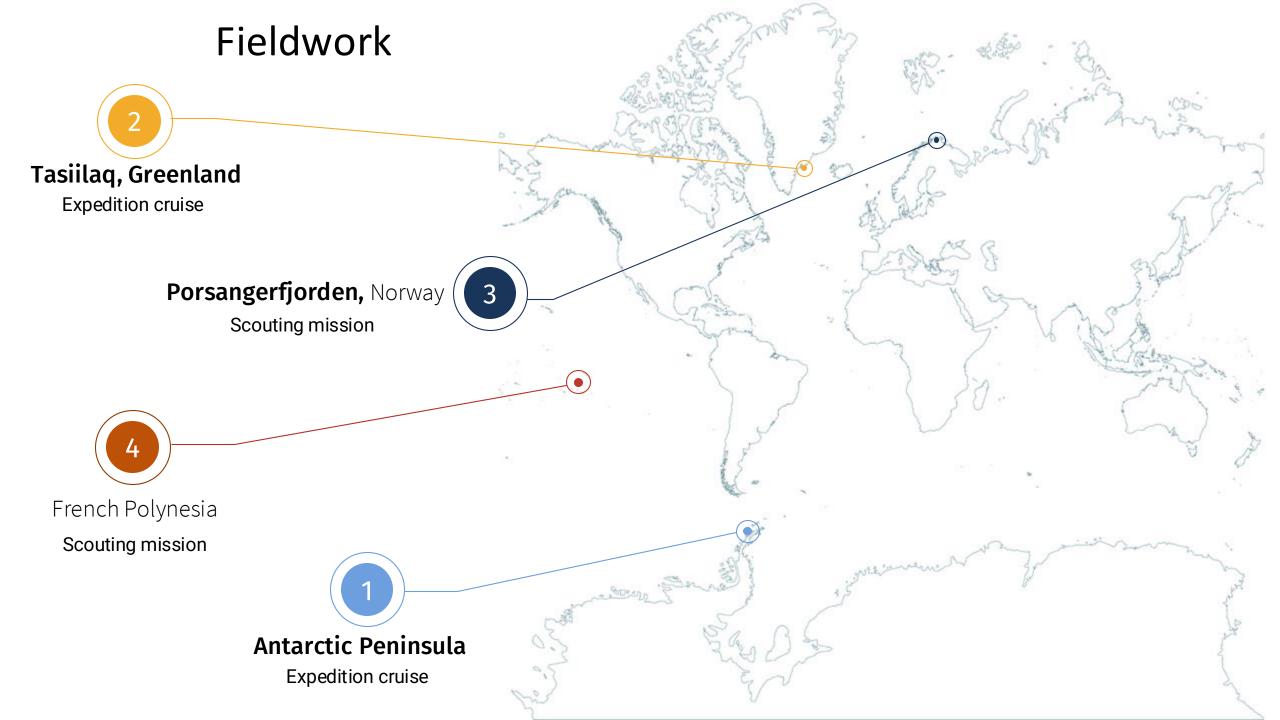
DEVELOPMENT OF INDICATORS

IMPLEMENTATION OF THE FRAMEWORK

CREATION OF A BASELINE DATABASE









Antarctic Peninsula

Expedition cruise

- Wildlife and seascape watching
- Activities in nature (kayaking, onshore excursions)
- Historical sites















Tasiilaq, East Greenland

Expedition cruise

- Visiting local communities
- Experiencing the indigenous culture and traditional activities
- Wildlife and seascape watching
- Activities in nature (kayaking, land excursions...)

Scouting missions









Collection of environmental, logistics, and social data to create new cruise destinations and itineraries

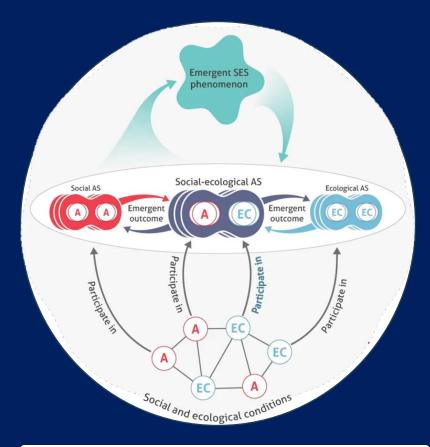






Tuamotu and Marquesas Islands French Polynesia

Social-Ecological Systems (SES)



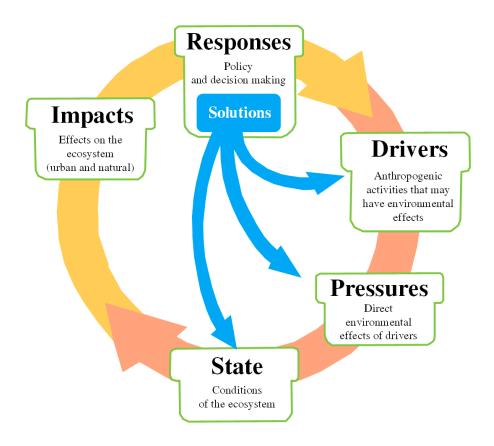
Capturing emergent phenomena in social-ecological systems: an analytical framework

Maja Schlüter¹, L. Jamila Haider¹, Steven J. Lade ^{1,2}, Emilie Lindkvist¹, Romina Martin¹, Kirill Orach¹, Nanda Wijermans¹ and Carl Folke ^{1,3}

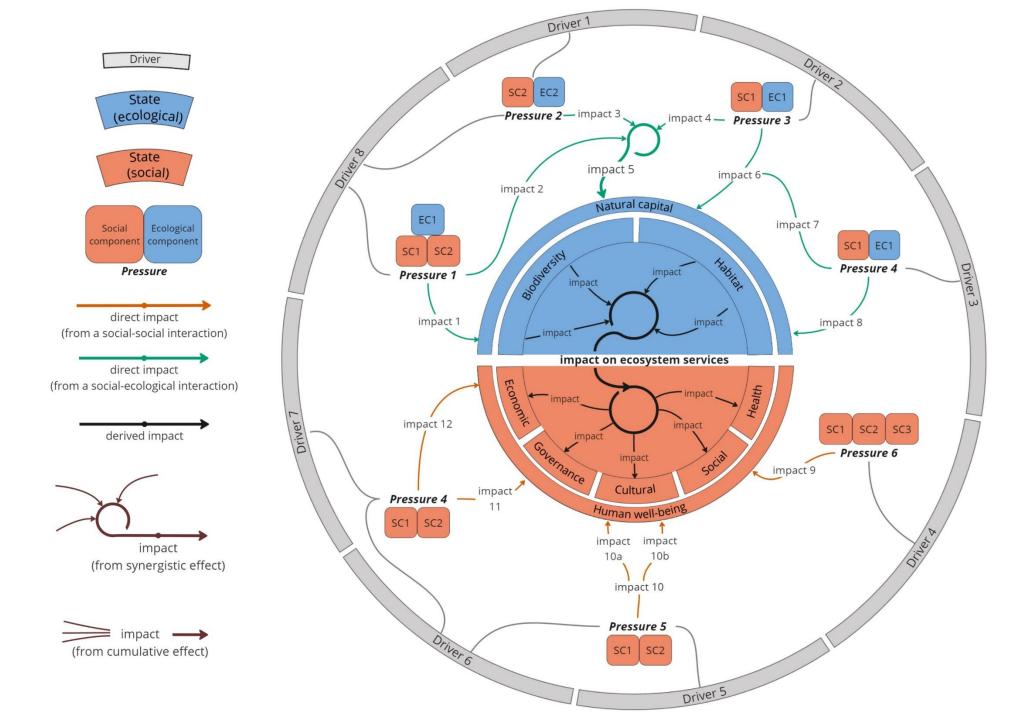
Humans as integral parts of ecosystems

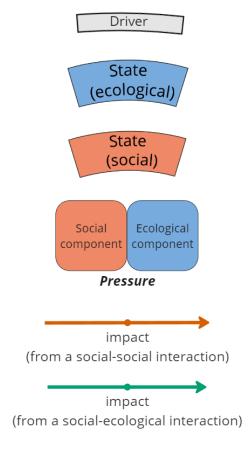
Link between environmental and social dynamics

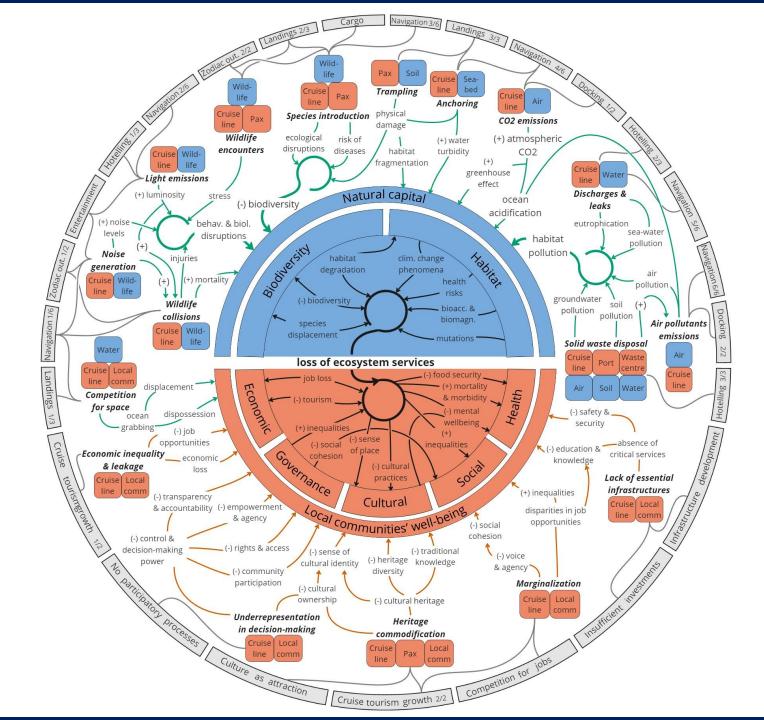
Driver Pressure State Impact Response (DPSIR)

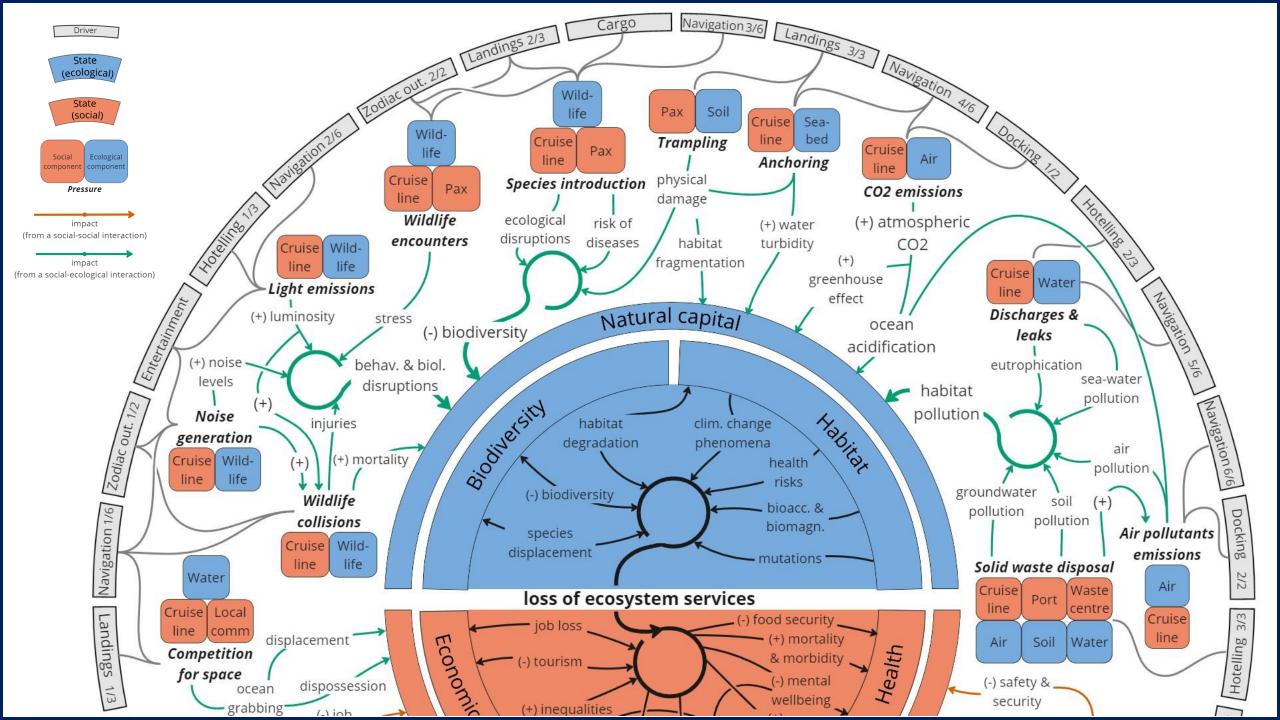


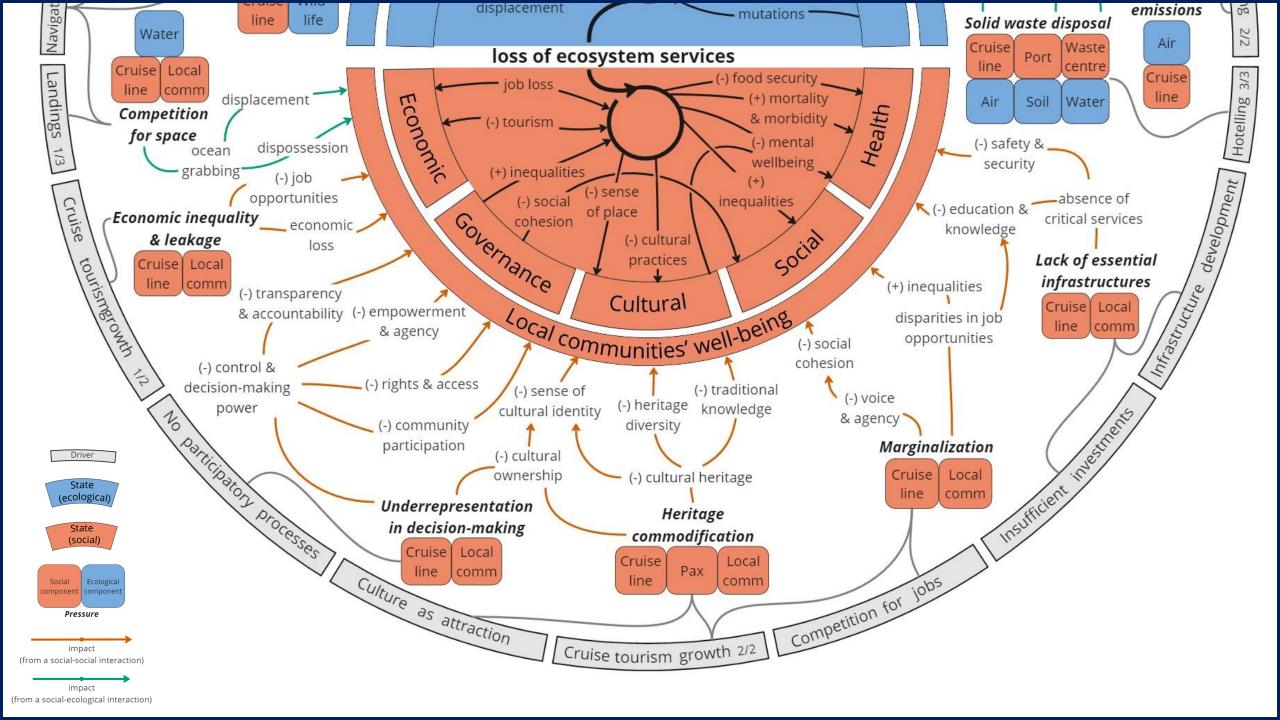
Understand the interactions between human activities, their impacts on environment and society and the potential responses to those impacts



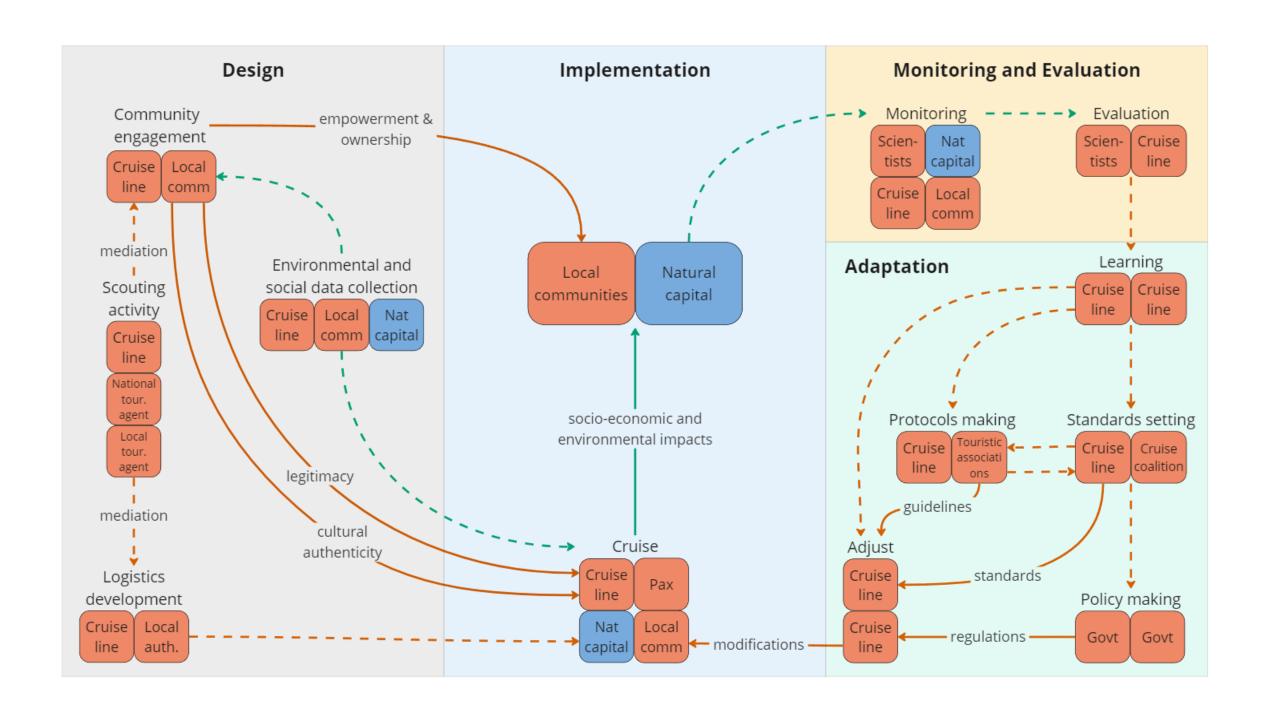








Domain	Category	Driver	Pressure	State	Impact	Indicator	Variable	Response
				Climate	Climate change		Volume	Transition to cleaner fuels, such as liquefied natural gas (LNG) or biofuels (BioLNG)
Environmental	Physical	Navigation	CO ₂ Gas emissions	patterns	Ocean acidification	Carbon footprint	per voyage	
Envi								
Local communities	Local economy	Limited control over develop- ment	Economic inequality	Income distribu- tion	Economic impoverish- ment			
						Revenue distribution	% of cruise tourism income retained within the community or locally reinvested	Encouraging partnerships between cruise operators and local communities that prioritize fair and equitable benefit-sharing, including revenue-sharing agreements
		Power imbalances	and leakage	Ownership				
				of local enterprises				





flavio.picone@cnrs.fr

flaviopicone@hotmail.com

