## ACSS WIO MARITIME SECURITY SEMINAR 2025

# MADAGASCAR

Conflicts over marine fisheries will increase as fishing pressure, climate change, and IUU fishing impact stocks. The following summarizes the conditions that contribute to the risk of fisheries conflict in the next five years. Data and analysis are available at OceansFutures.org.

COUNTRY AT A GLANCE	
Population <sup>1</sup>	28,915,653
GDP per capita² (USD)	\$520
EEZ SIZE <sup>3</sup> (KM <sup>2</sup> )	1,200,330
MPAs in EEZ⁴ (% of total EEZ)	1.3%
Disputed⁵ EEZ border?	Yes

## IUU FISHING

#### **Compliance with RFMO obligations**

Higher scores are assigned to countries more frequently reported as being noncompliant with RFMO flag-related obligations.



#### Vessels on IUU lists



Number of vessels the country has on lists of IUU vessels maintained by RFMOs.

Mandatory vessel tracking for commercial seagoing fleet

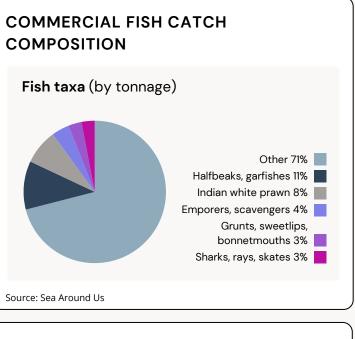
Have a National Plan of Action on IUU

Source: IUU Fishing Index

Historical conflict intensity

Very low<sup>6</sup>

Source: Uppsala Conflict Data Program



22%

## SEAFOOD DEPENDENCE

Protein derived from seafood or fisheries products compared to total animalderived protein consumed, per person.

Source: UN Food and Agriculture Organization

## INTERNATIONAL FISHING VESSELS

#### Foreign fishing presence: 2017-2020

Seychelles, China, Greece, Malaysia, Taiwan, Japan, Reunion, South Korea, France, Spain, Mauritius, Portugal



**Foreign fishing effort** 98,296 hours

### CATCH TREND

Percent change in fish catch, projected forward five years.

Source: Ocean Health Index

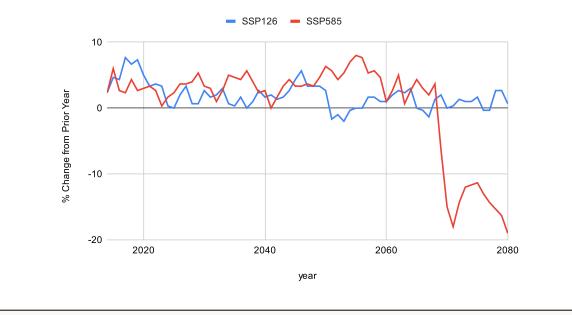
#### 92nd percentile

Source: Global Fishing Watch (percentile is compared to hours of foreign fishing in all EEZs of the world, averaged over 2017-2020)

## **PROJECTED CHANGE IN FISH STOCKS**

The Dynamic Bioclimate Envelope Model (DBEM) simulates the impact of climate change on exploited fisheries. It simulates changes in fish stock "spatial population dynamics that include population growth, movement and dispersal of adult and larvae, and the the ecophysiological effects of temperature, oxygen and acidity on body size, growth, mortality and reproduction" (Cheung et al., 2013; Tittensor et al. 2021). The model accounts for changes in net primary production (NPP) that will impact fisheries stock abundance and distribution. The model simulates changes based on scenarios from the IPCC's Shared Socioeconomic Pathways SSP126 (an optimistic sustainability scenario assuming significant reduction in greenhouse gases) and SSP585 (a fossil fueled development scenario assuming minimal reduction in greenhouse gases).

0.01%



'Human population size of the country in 2022. Source: United Nations Population Division

<sup>2</sup>The gross domestic product of a country, per person. Source: International Monetary Fund

<sup>a</sup>The area of a country's exclusive economic zone (EEZ). EEZ defines the space over which a sovereign state has exclusive rights over its marine resources, including fisheries. Source: Sea Around Us

<sup>4</sup>The percentage of area within an exclusive economic zone containing a marine protected area. Source: World Database on Protected Areas

<sup>5</sup>The presence of a formally disputed international maritime border in an exclusive economic zone. Source: Marine Regions database.

<sup>6</sup>Deaths due to events of organized violence, normalized by population. Source: Uppsala Conflict Data Program.



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