



Day 2: Emerging ocean economic sectors and related governance

Training Materials





Topic:

Main obligations under the Agreement and outstanding negotiations on subsidies that contribute to overfishing and overcapacity

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Fisheries Subsidies
Officer,
WTO**



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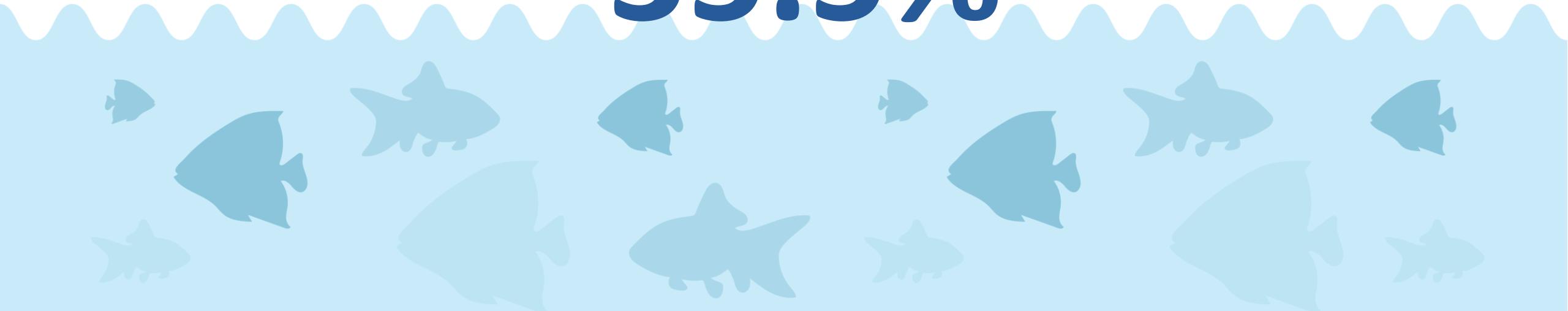
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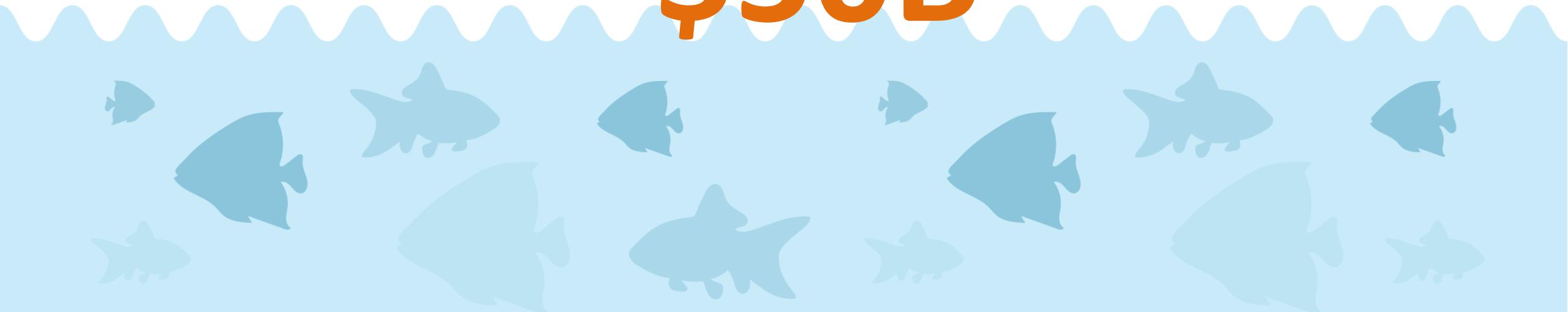
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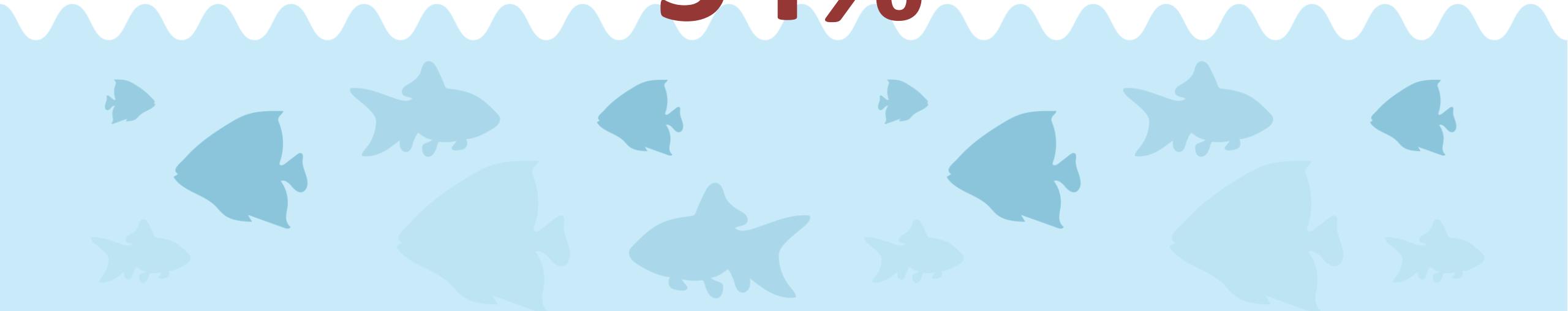
35.5%



\$50B



54%





SCOPE

Specific subsidies (as in ASCM Arts. 1 and 2), for marine wild capture fishing and fishing related activities at sea

S&DT

Due restraint for LDCs

Prohibitions



Subsidies to IUU fishing

2 years peace clause



Subsidies to fishing in the high seas outside RFMO competence



Enforceable through the WTO dispute settlement system



Final provisions

- › Exception for disaster relief
- › Disclaimers



Subject to termination clause

CROSS-CUTTING RULES

Institutional arrangements

Notification and Transparency

Technical Assistance

4 years instead of every 2 years (for LDC and developing Members with % of global capture $\leq 0.8\%$)

Targeted technical assistance and capacity building; Fish Fund



Other disciplines

Take special care and exercise due restraint when subsidizing:

- › Vessels not flying the subsidizing Member's flag
- › Fishing unassessed stock

Article 8: Notification and Transparency

- **Art. 25 ASCM notification requirements already apply!**

- Notification by the coastal Member after an affirmative IUU determination, *ad hoc* (Art. 3.3)
- No obligation to provide confidential information (Art. 8.8)

RFMO/A membership (Art 8.6)

- ✓ Legal establishing instrument
- ✓ Relevant area / species
- ✓ Status of managed fish stocks
- ✓ CMMs
- ✓ IUU rules
- ✓ List of IUU vessels

Implementing measures (Art. 8.3), including steps taken to implement prohibitions in Arts 3, 4 & 5

Description of fisheries regimes (Art. 8.4)

List of vessels and operators determined to have engaged in IUU fishing (Art. 8.2)

Upon entry into force

Within one year of EIF

Annually

As part of notification of fisheries subsidies under Art. 25 ASCM:

Type or kind of subsidized fishing activity (Art. 8.1(a)), and

Where possible (Art. 8.1(b)):

- ✓ The **status** of the fish stocks and the reference point used + if such stocks are shared
- ✓ Conservation and management measures (**CMMs**)
- ✓ **Fleet capacity**
- ✓ **Vessel/s name and I.D. no.**
- ✓ **Catch data** by species or group of species

- By 30 June of odd-numbered years (2 yr cycle)
- Every 4 yrs for developing country Members with an annual share of global volume of marine capture not exceeding 0.8%, and LDC Members



Topic:

**WTO Agreement on Fisheries
Subsidies Sustainable Development
implementation challenges and
opportunities, including on small scale
fisheries and coastal communities**

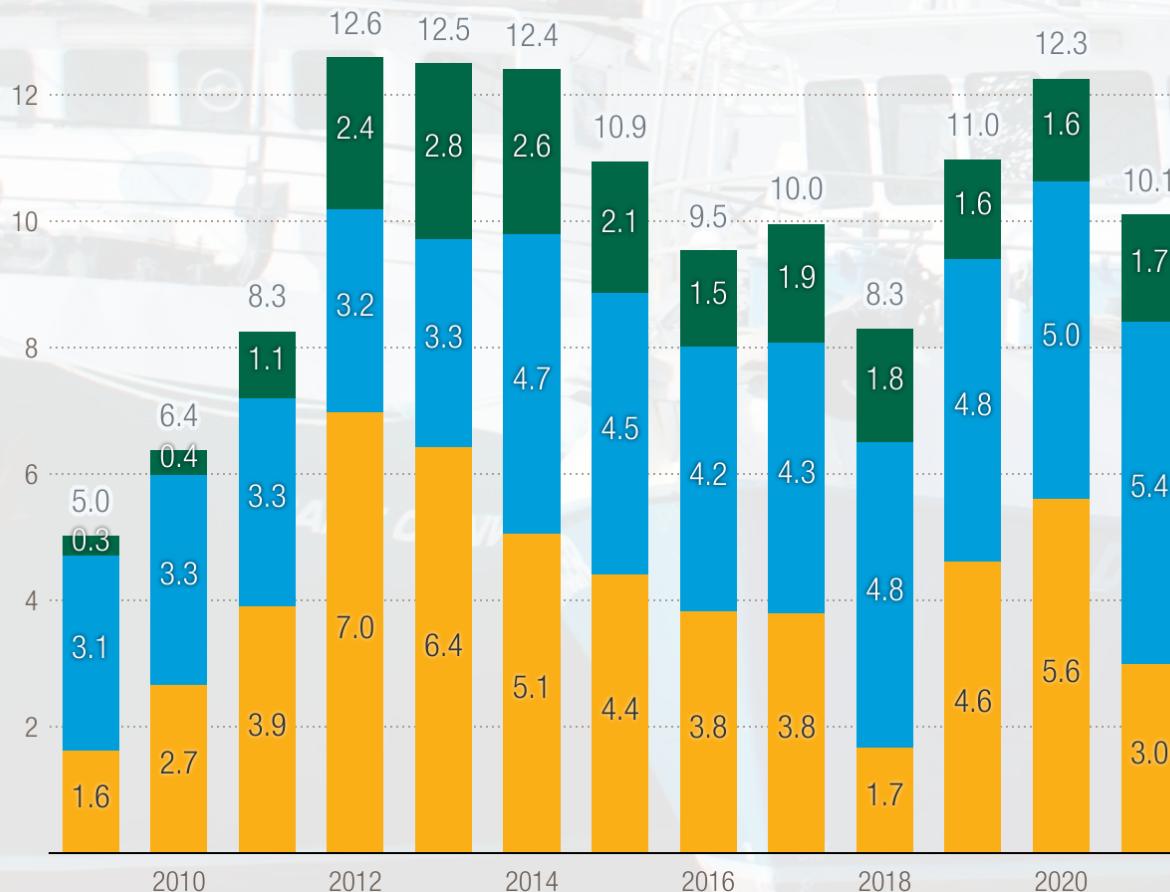
**UNCTAD
Division on International
Trade and Commodities**



Global fisheries subsidies totalled \$10.1 billion in 2021

Total fisheries subsidies, by economic grouping, billion \$, 2009-2021

China Developed Developing (excl. China)



Source: UNCTAD, 2025 based on OECD fisheries subsidies database, 2025

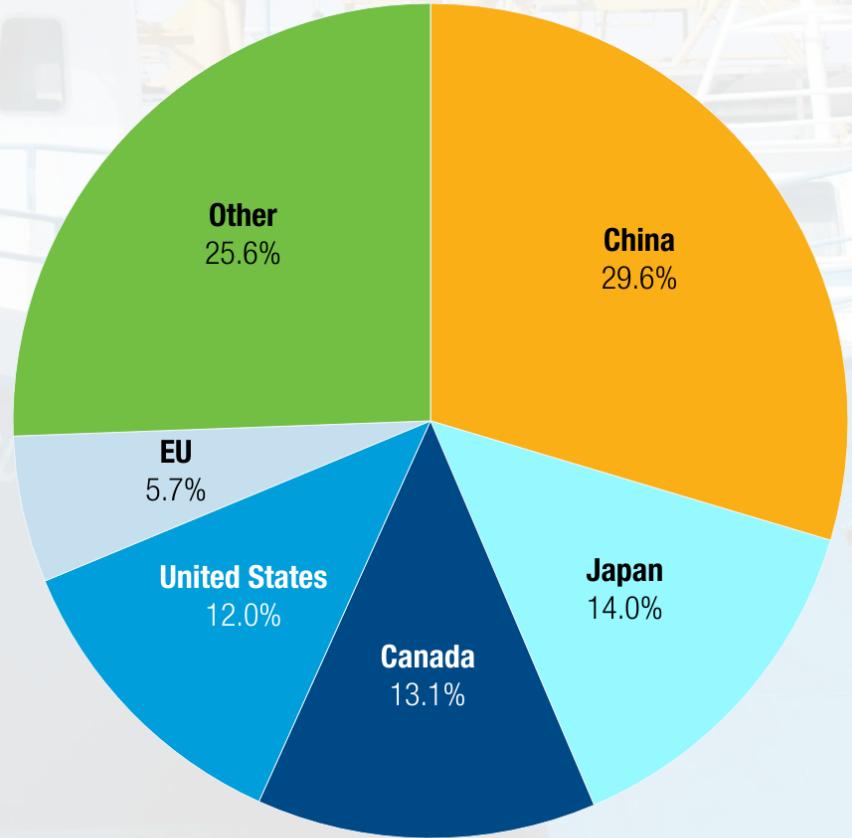
Note: Data for OECD economies + 13 other economies

Developed economies and China consistently maintain high levels of structural support, preserving a significant competitive advantage over the last decade

Levels of support have average about \$10 billion since 2021 with cyclical movements

4 countries account for 69 per cent of global fisheries subsidies

Share of global fisheries subsidies, 2021



Source: UNCTAD, 2025 based on OECD fisheries subsidies database, 2025

Note: OECD economies + 13 other economies. Subsidy measures explicitly mentioning "small-scale," "artisanal," "subsistence," "coastal," or vessel size limits (e.g., "<12m") are categorized as Small-Scale Fisheries (SSF). Policies without such specific references are grouped under Large-Scale/Unspecified. Small scale fisheries support Measures which include Aquaculture and inland fisheries are excluded.

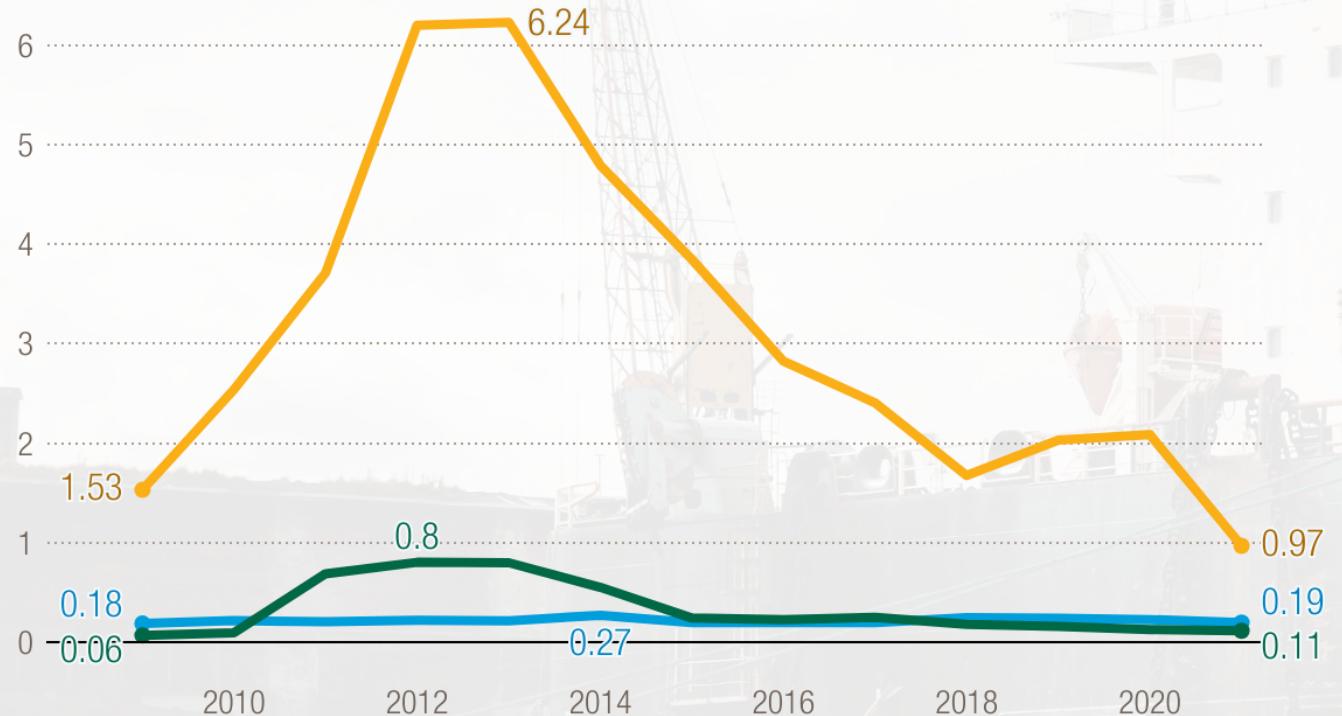
Global subsidies are sharply polarized: massive support is confined to a few industrial economies, whereas most developing nations account for a negligible share.

This persistent imbalance justifies the Agreement's Special and Differential Treatment (SDT) to ensure developing members can effectively transfer commitments & not be disproportionately burdened by new disciplines

There has been a sharp decline in harmful fisheries subsidies since 2014

Provisions of harmful fisheries subsidies by economic grouping, billion \$

— China — Developed — Developing (excl. China)



Source: UNCTAD, 2025 based on OECD fisheries subsidies database, 2025

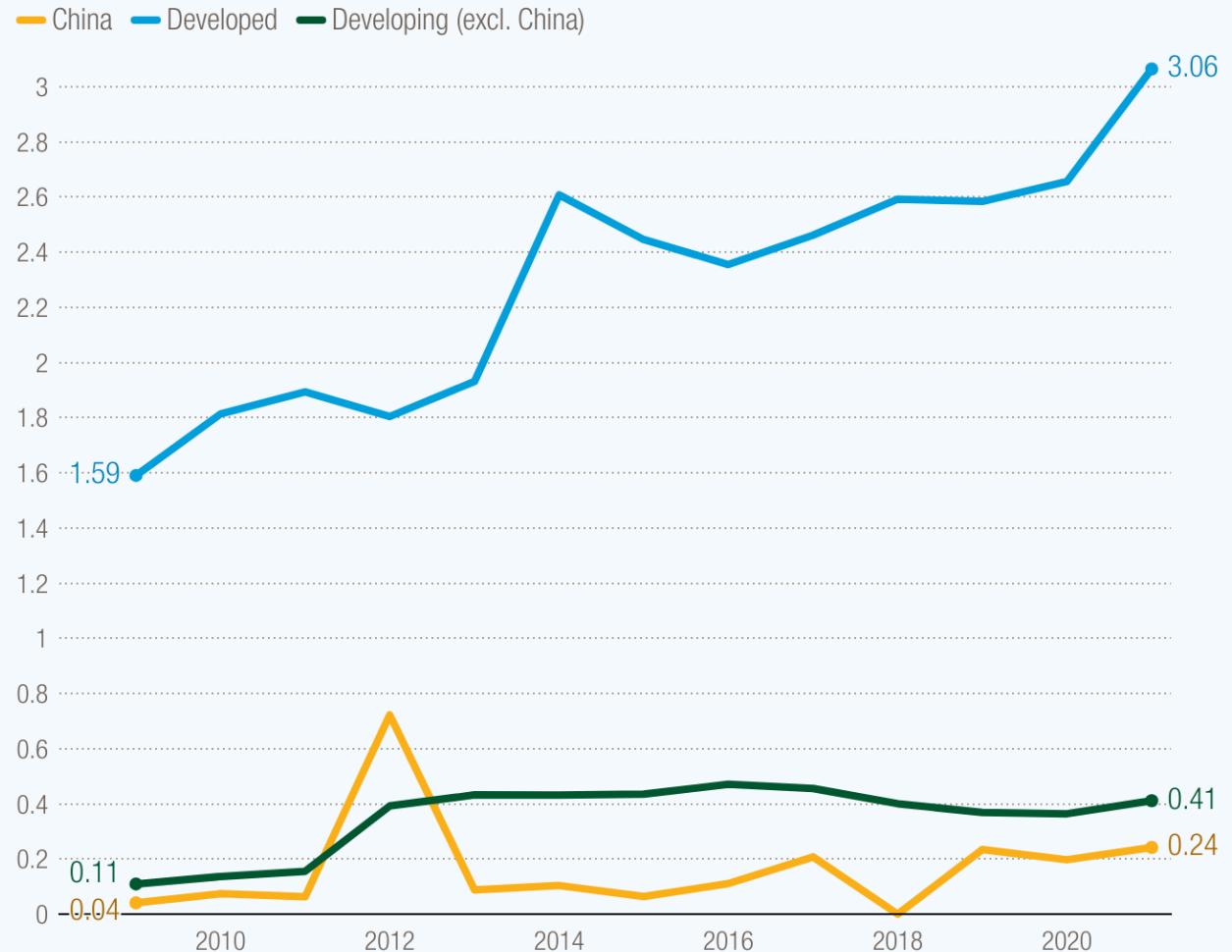
Note: Harmful subsidies: Subsidies classified as "High Risk" of encouraging unsustainable fishing based on OECD criteria (2025). This aggregation specifically includes: (i) support for vessel construction and purchase, (ii) support for vessel modernization and gear, (iii) support for fuel consumption, and (iv) support for access to other countries' waters. Data for OECD economies + 13 other economies.

➤ Harmful subsidies have dropped sharply since 2014, demonstrating a voluntary global shift away from unsustainable capacity-enhancing measures.

➤ The Agreement's core prohibitions (Articles 3, 4 and 5), confirming that phasing out support for IUU fishing and on fishing in overfished stocks is politically & economically feasible

➤ **No risk fisheries subsidies remain scarce in developing economies**

Trends of No risk fisheries subsidies by economic category, 2009-2021, billion \$



Source: UNCTAD, 2025 based on OECD fisheries subsidies database, 2025

Note: 'No-risk' subsidies according to the OECD classification, which include non-actionable general services, including management costs, monitoring, control and surveillance (MCS), and R&D, which are necessary for stock recovery and conservation. Data for OECD economies + 13 other economies.

➤ **Funding for essential management tools remains scarce in developing nations, creating a widening capability gap with developed economies.**

➤ **This underscores the necessity of Article 7 (The Fish Fund) to provide the specific technical assistance required to bridge this implementation deficit**



WTO Agreement on Subsidies and Countervailing Measures (SCM) (Art. 25)

Baseline subsidy transparency for all sectors

- Notify **all** specific subsidies
- Provide legal basis, form, amount, purpose, duration, beneficiaries
- Notify new or modified subsidies without delay
- Respond to Members' information requests
- Biennial full notifications
- "nil" notification applies

What's the subsidy?

BOTH

- *Regular notifications
- *Transparency duties
 - *Respond to information requests
- *Support surveillance & compliance
- *No prejudgment of legal status

NOTIFICATIONS



WTO Agreement on Fisheries Subsidies (FSA) (Art. 8)



Additional fisheries-specific transparency

- Stock status (where possible)
- Conservation & management measures
- Fleet capacity
- Identified beneficiary vessels
- Catch data
- Annual list of IUU-linked vessels
- Measures taken to implement the FSA
- RFMO/A participation

What does this subsidy do?



WTO subsidy transparency: From baseline to fisheries-specific

Opportunities: Fostering Sustainability, Fairness, and Development in Global Fisheries



Ending Harmful Practices & Rebuilding Resources

- IUU, fishing on overfished stocks & fishing in the unregulated High Seas
- Parallel implementation of the FAO PSMA (2010)
- Rebuilding depleted marine resources



Developing Countries & Fiscal Constraints

- Most developing countries do not have the fiscal space for providing fisheries subsidies, and less for unsustainable activities.
- Developing countries pay more on public debts interest than on health, education, food security or climate action.



Implementation Support

- SDT for developing countries & LDCs
- “Fish Fund” is assisting in **implementation readiness**
- Ocean economy support (UNCTAD)



Redirecting for Sustainability

- Encouraging **redirecting support**:
 - Stock / ecosystem management, sustainable
 - Small-Scale Fisheries (SSF) restoration, & sustainable fishing practices

WTO AFS Implementation Challenges & Future Considerations

Administrative & Capacity Burdens



➤ Particularly for LDCs without support.

Key tasks:

- Revise national legislation
- Upgrade data systems
- Manage WTO notifications (SCM & FSA1 + FSA2)



Moving from Adoption to Enforcement

➤ Fostering equitable outcomes requires **moving from rule adoption to robust enforcement.**

Regional Coordination & Capacity Gaps



➤ **Regional management coordination**, but uneven capacity among developing countries risks implementation gaps



FSA 2: Energy Transition & Climate Investment

➤ Negotiations should consider investment gaps:

- **Decarbonization:** Alternative fuels, engines & energy efficiency.
- **Adaptation:** Climate-resilient infrastructure.
- **Sustainability:** selective & smart fishing practices

Impacts of the WTO FSA on Small-Scale Fisheries and on vulnerability

Resource State & Recovery Potential



- **37% of stocks are biologically unsustainable** = harming local Fishers (FAO, 2024).
- Recovering depleted stocks can increase global marine catches by up benefiting SSF (UNCTAD, 2019)

Significance of SSF in Global South

- **95% of all fishers, live in developing countries, 90% engaged in SSF**
- Crucial for food security, nutrition, and livelihoods in the Global South (FAO, 2022).



Provisions & Industrial Fleets



- **The Imbalance:** Industrial fleets receive 80% of all subsidies, creating unfair competition (Schuhbauer et al, 2020).

- **The Correction:** Less support to IUU & overfishing & overcapacity will limit industrial expansion with reduced pressure on SSF. (UNCTAD, 2025)



Disaster Relief Subsidies (Art. 11)

- Except as provided in Art 3 & 4, **noting prevents granting a subsidy for disaster relief**, provided that the subsidy is:
 - Limited to Particular Disaster
 - Limited to Affected Area
 - Time-limited
 - Restoration to Pre-Disaster Level

Barbados NDCs 2025:

In 2024 hurricane Beryl destroyed 90% of Barbados' fishing fleet".



UNCTAD
Ocean Economy
Webpage



Thank you

LinkedIn Account





Topic:

**UNCTAD's Ocean goods and services
trade database as a source of country
trade profile self-assessment**

**UNCTAD
Division on International
Trade and Commodities**



Classification of ocean products

UNCTAD (2021) classification for goods, services and energy. 13 sectors (A-M), 52 subsectors.

For goods, 5 sectors, 604 HS codes

For services, 5 sectors, use of EBOPS classification

Excludes

- Non-oceanic goods: freshwater species
- Intrinsically unsustainable sectors: oil and gas

The classification sectors are as follows:

- A.** Marine fisheries
- B.** Aquaculture and hatcheries
- C.** Seafood processing
- D.** Sea minerals
- E.** Ships, port equipment and parts thereof
- F.** High-technology and other manufactures not elsewhere classified (NEC)
- G.** Marine and coastal tourism
- H.** Trade in fisheries services
- I.** Maritime transport and related services
- J.** Port services, related infrastructure services and logistical services
- K.** Coastal and marine environmental services
- L.** Marine research and development and related services
- M.** Ocean energy and renewable energy

TOWARDS A HARMONIZED INTERNATIONAL
TRADE CLASSIFICATION FOR THE DEVELOPMENT
OF SUSTAINABLE OCEAN-BASED ECONOMIES



Trade databases

- **Ocean goods and services trade databases**
- **Data indicators:**
 - Value, growth rate
 - Revealed comparative advantage
 - Product concentration
 - Market concentration
 - Ocean exports/imports per capita
- **Data visualisations**

▼ Trade in ocean goods and services

Ocean goods trade: value and growth, individual economies, annual (analytical)



Ocean goods trade: trade and growth, estimated global and regional aggregates, annual (analytical)



Ocean goods trade: trade per capita, individual economies, annual (analytical)



Ocean goods trade: trade per capita, estimated global and regional aggregates, annual (analytical)



Ocean goods trade: Revealed comparative advantage index, individual economies, annual (analytical)



Ocean goods trade: Revealed comparative advantage index, estimated global and regional aggregates, annual (analytical)



Ocean goods trade: Theil index indices of exports and imports of products, individual economies, annual (analytical)



Ocean services trade: value, growth and per capita, annual (analytical)



➤ Policy relevance

- Research and analysis
- Technical assistance and capacity building
- Consensus building: Informs multilateral discussions e.g. 5th UN Ocean Forum and 3rd UN Ocean Conference



Policy Insights

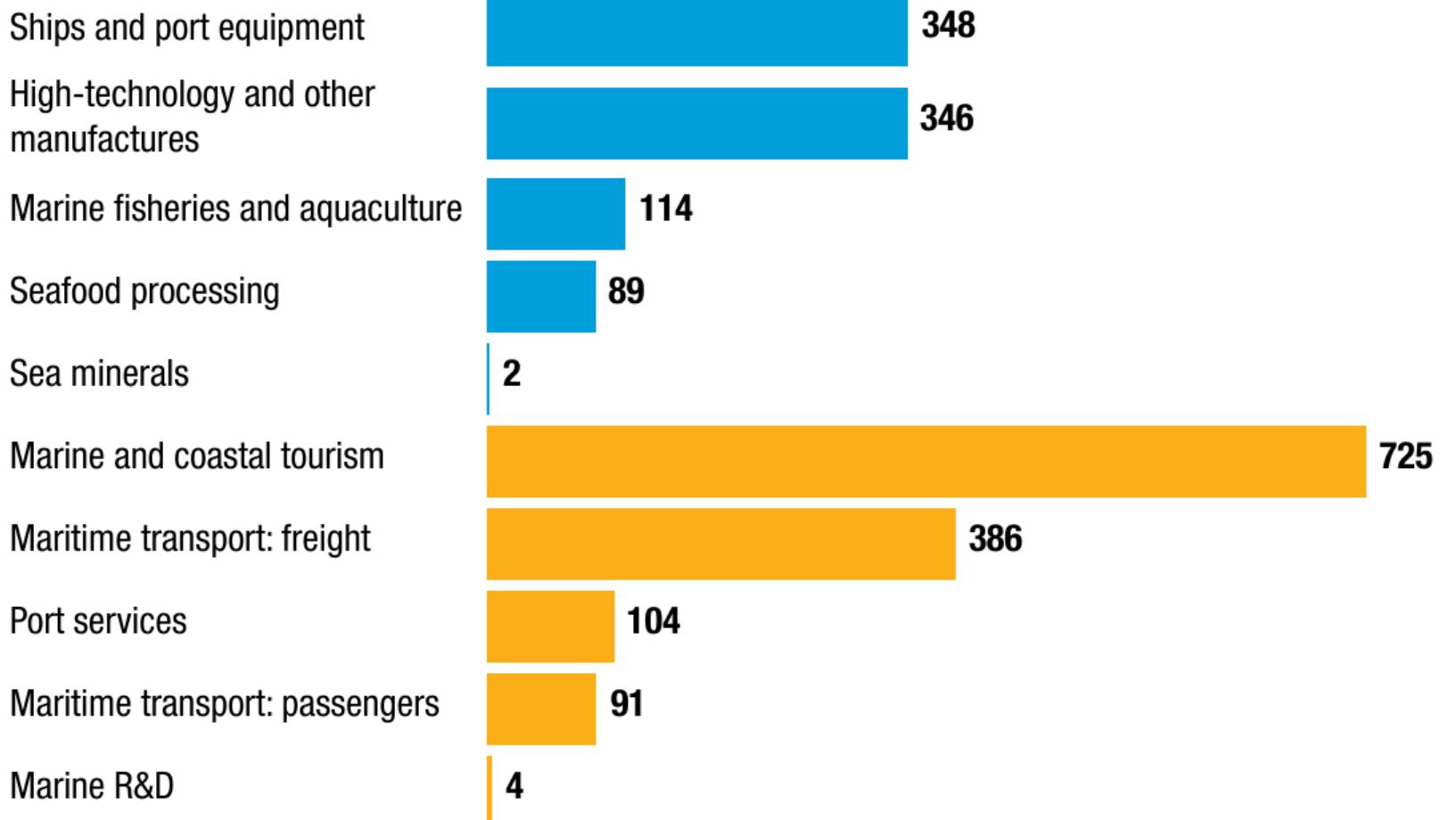
**Sustainable ocean economy:
A key and fast-growing sector at risk**

KEY TAKEAWAYS

- The ocean economy offers critical opportunities to enhance food security, value addition, connectivity and economic diversification.
- In 2023, global ocean trade reached \$2.2 trillion (\$1.3 trillion in services and \$900 billion in goods), representing about 7 per cent of global trade.
- Global ocean trade is increasingly threatened by climate events, sea level rise, biodiversity loss, overexploitation of marine life, and plastic and other forms of pollution.
- UNCTAD calls for improved ocean economic governance and data collection, climate-adaptive and resilient marine infrastructure, the promotion of sustainable South-South trade, and scaling up blue finance and sustainable marine-based innovations.

Ocean services represent 60 per cent of total ocean trade
Exports per category of ocean-based goods and services, 2023, billion \$

Goods Services



Source: UNCTAD. 2024. Ocean Trade in Goods and Services Database

Total ocean trade reached \$2.2 trillion in 2023, of which \$1.3 was services

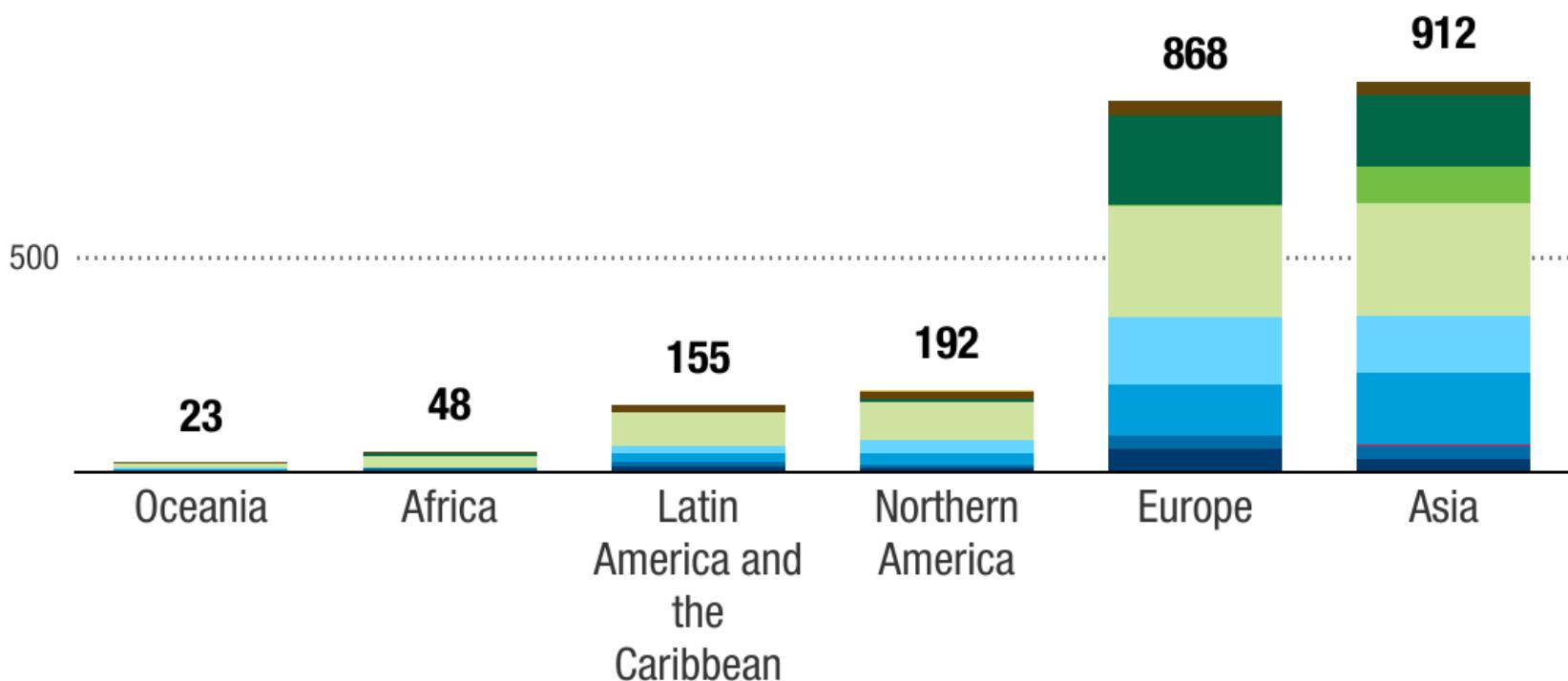
77 per cent of ocean goods exports are manufactures



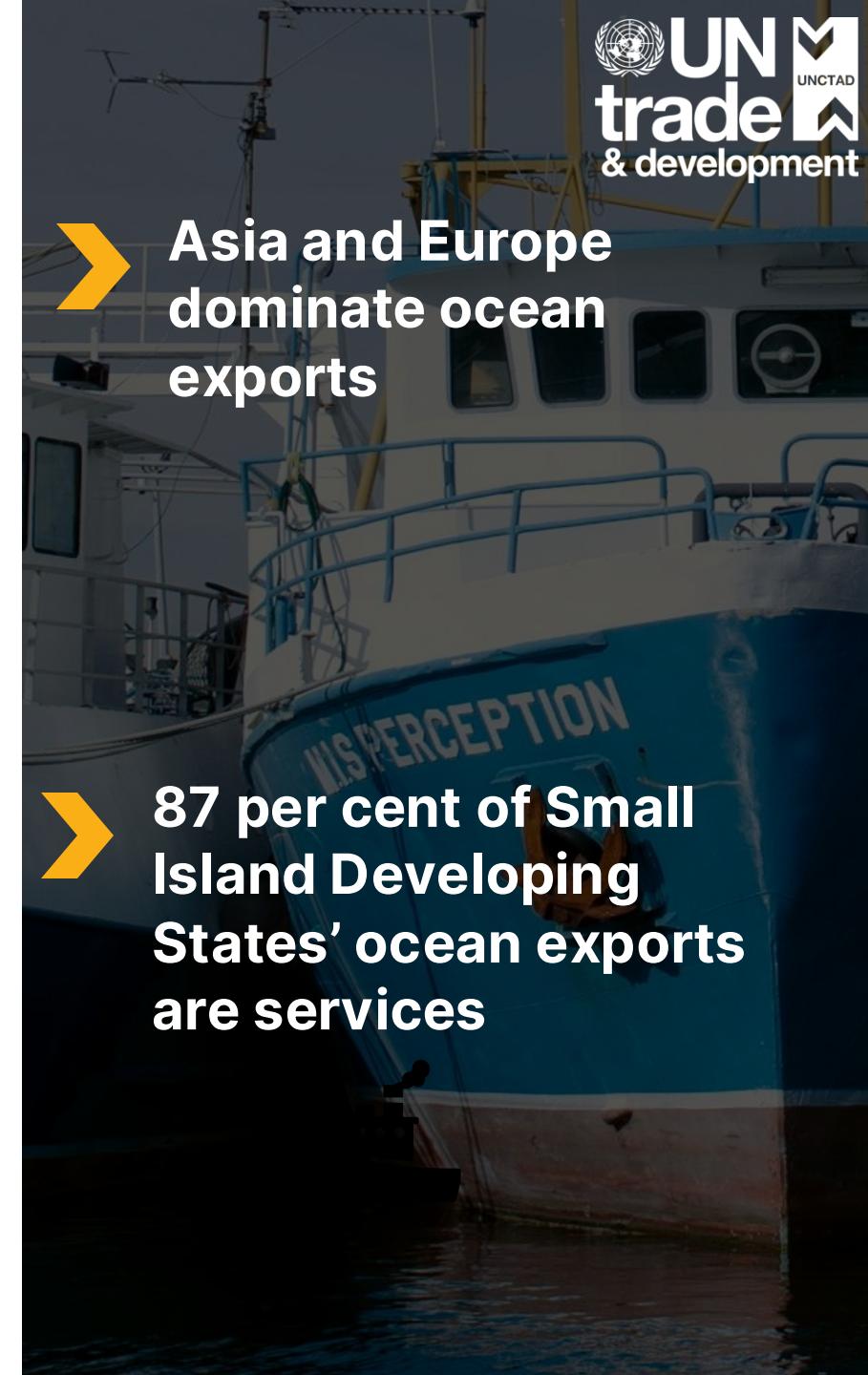
Europe and Asia account for over 80 per cent of ocean goods and services exports

Exports of ocean goods and services by region, 2023, billion \$

■ Marine fisheries, aquaculture and hatcheries ■ Seafood processing ■ Sea minerals ■ Ships, port equipment and parts thereof ■ High-technology and other manufactures ■ Marine and coastal tourism
■ Maritime transport and related services: passengers ■ Maritime transport and related services: freight
■ Port services, related infrastructure services and logistical services ■ Marine research and development and related licenses



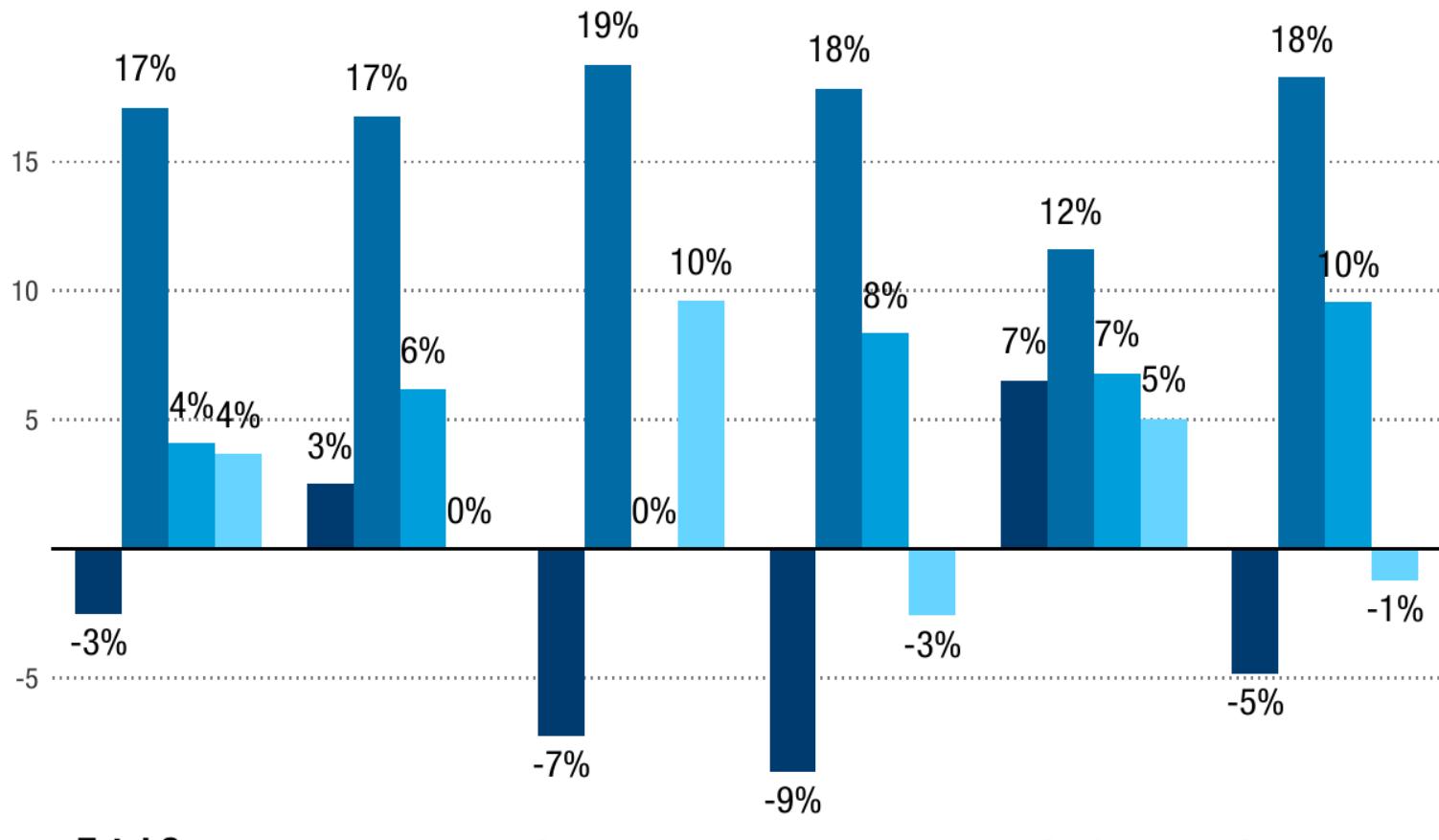
Source: UNCTAD. 2025. Ocean trade in goods and services databases



Ocean goods trade grew by 4 per cent in 2023, driven by a 10 percent growth in ships and port equipment

Growth rate of ocean goods trade sectors

2020 2021 2022 2023



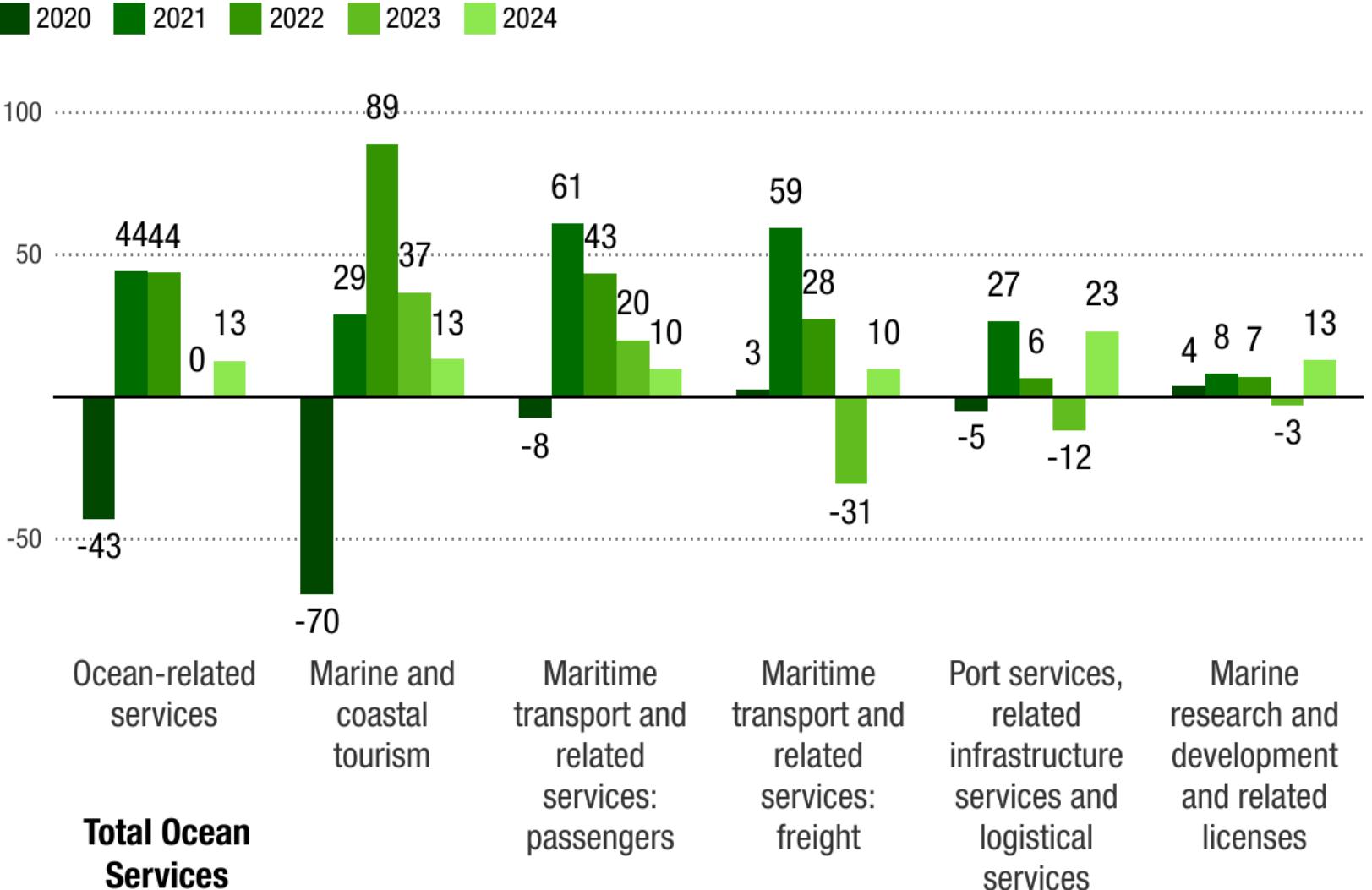
Source: UNCTAD. 2024. Ocean Trade in Goods Database

Trade in ocean
goods grew by 4% in
2023

Export growth was
driven by ships and
port equipment (10%)

Port services trade grew by 23 per cent in 2024

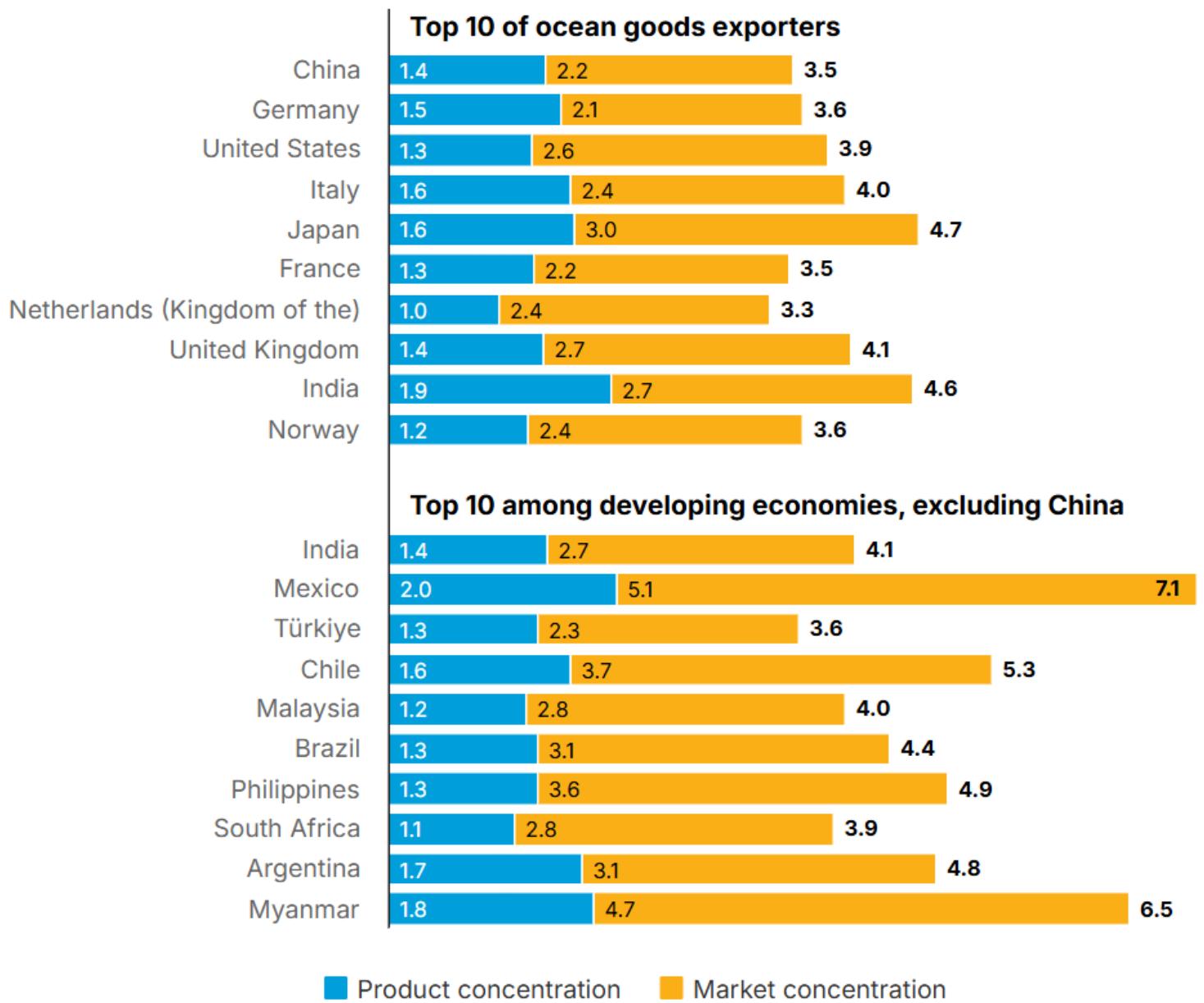
Growth rate of ocean services trade sectors



Source: UNCTAD. 2024. Ocean Trade in Services Database

➤ Trade in ocean services grew by 13% in 2024, driven by port services (+23%)

➤ International coastal and marine tourism recovered pre-COVID-19 levels in 2023, and grew by 13% in 2024



UNCTAD databases include indicators that can inform policy



Developing countries' ocean exports are often concentrated by product and market



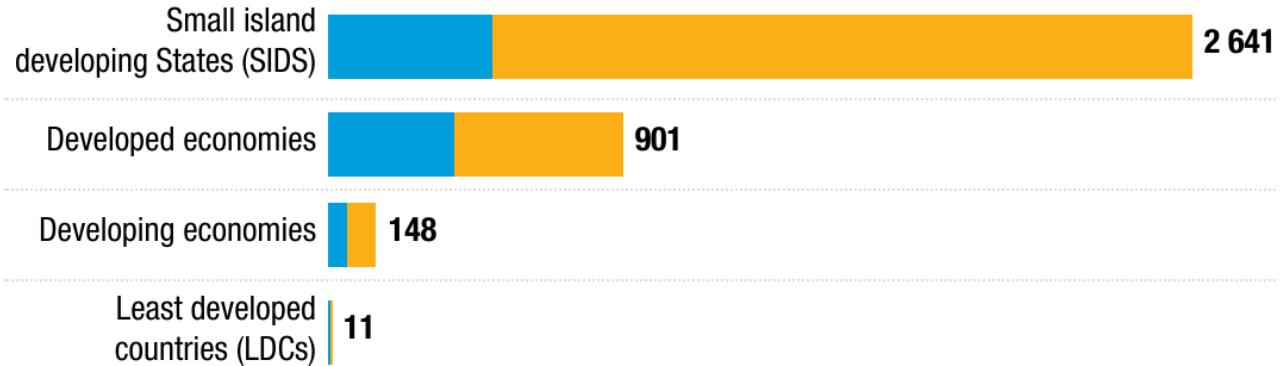
Small island nations' ocean exports are 10x higher per capita than the global average

Ocean exports value, dollars per capita, 2023

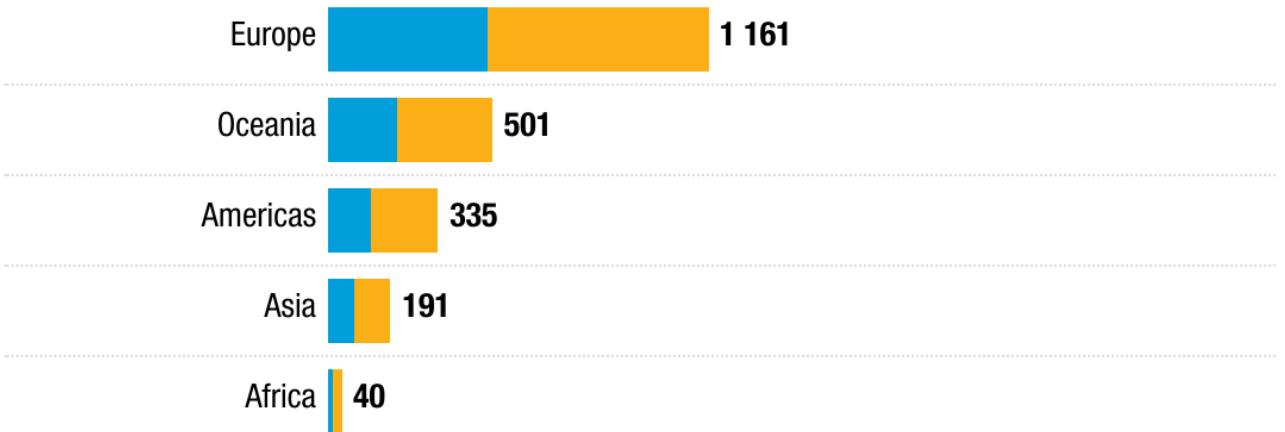
Goods Services

World  273

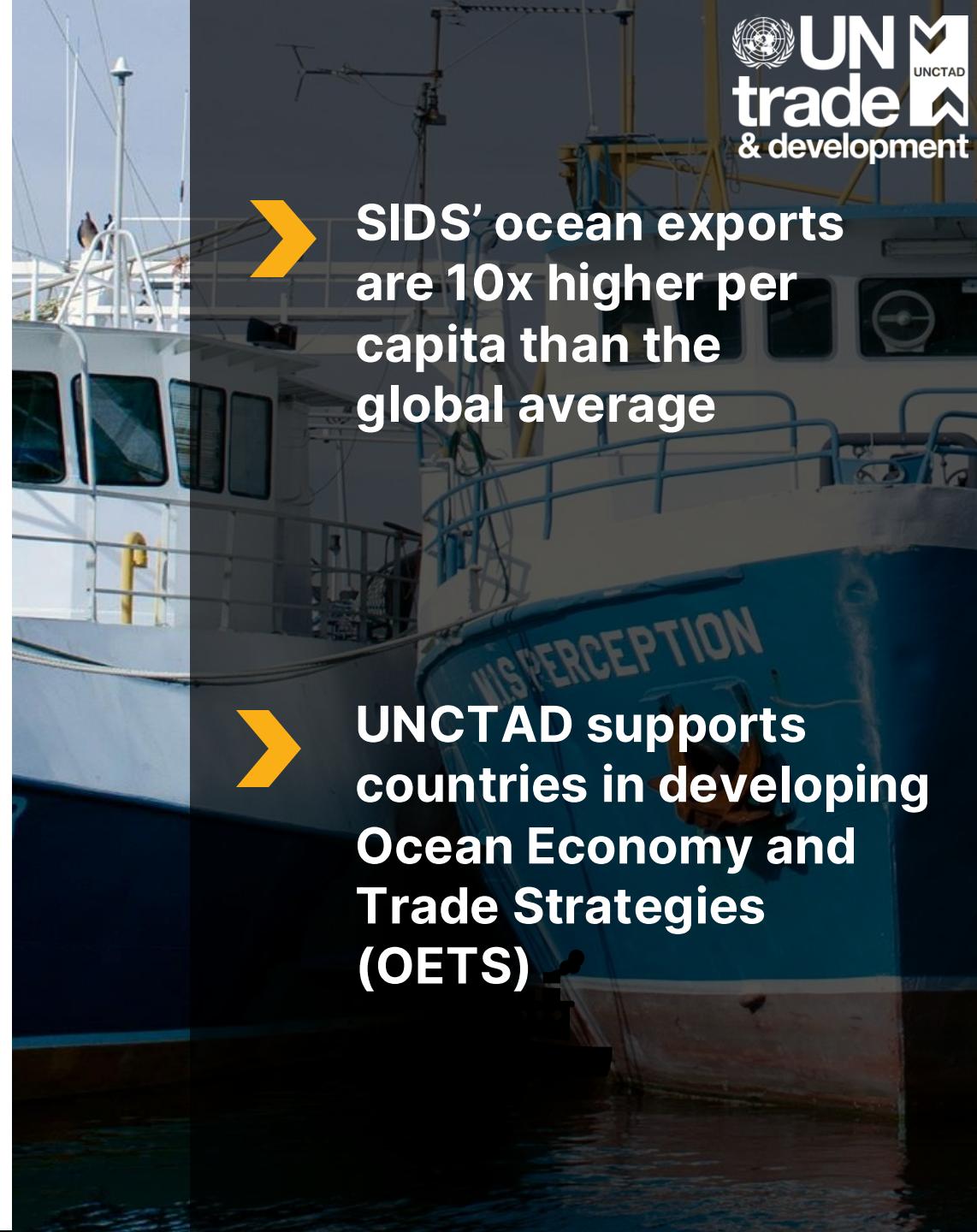
Development status groups



Geographical groups



Source: UN Trade and Development (UNCTAD), UNCTADstat.



SIDS' ocean exports are 10x higher per capita than the global average



UNCTAD supports countries in developing Ocean Economy and Trade Strategies (OETS)



Topic:

**The new FAO
methodology on stocks
measurement and
management**

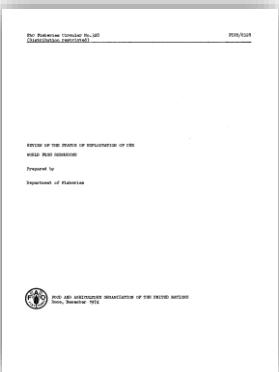
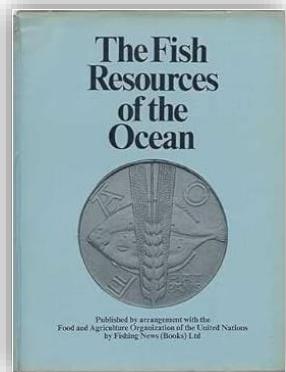
**Rishi Sharma,
Senior Fishery Officer,
FAO**





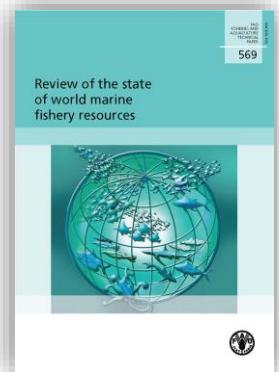
1971

1974

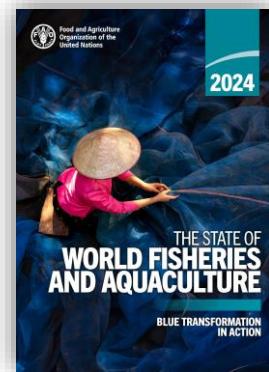


2005

2011



2024



2025



Reference list

146

Reference list

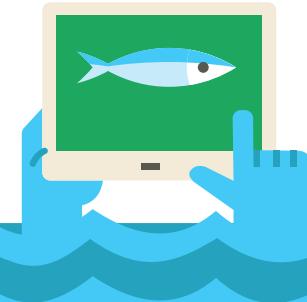
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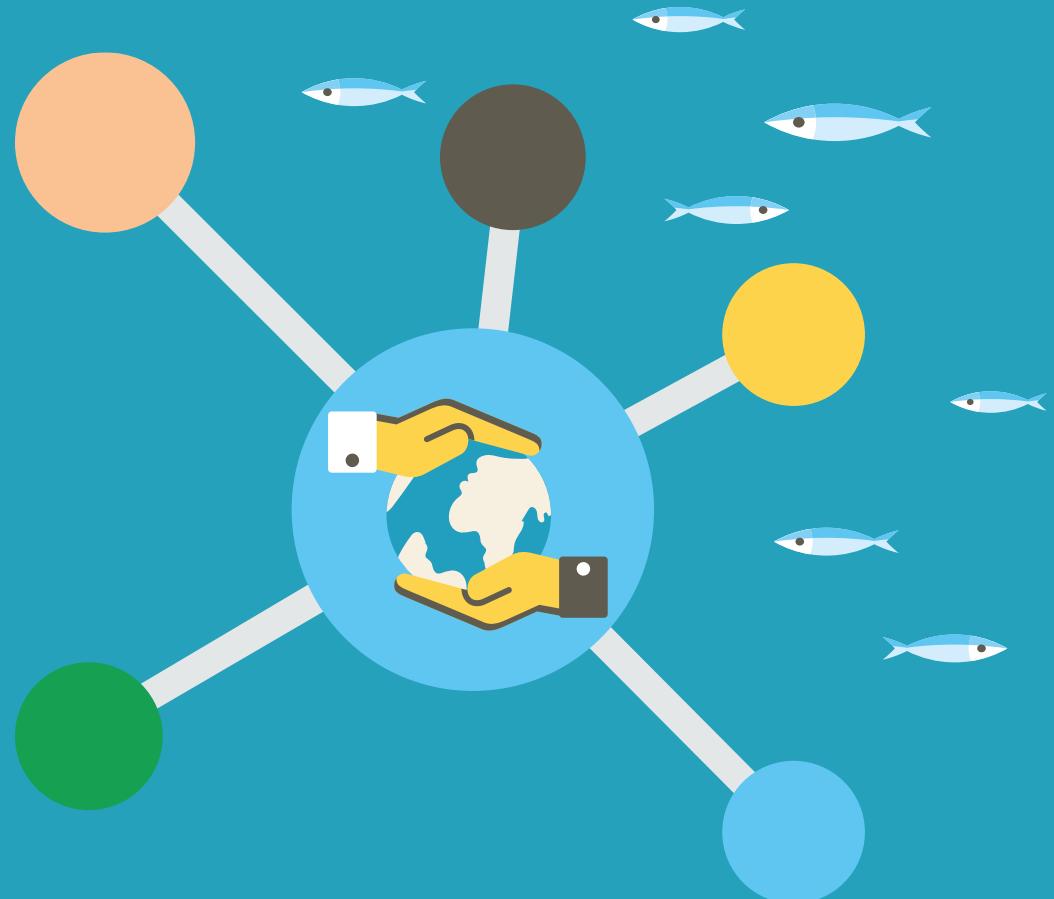
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UPDATED METHODOLOGY

IMPROVED RESOLUTION AND TRANSPARENCY

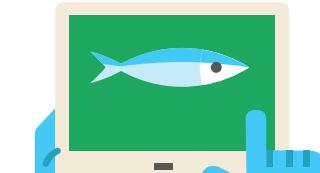
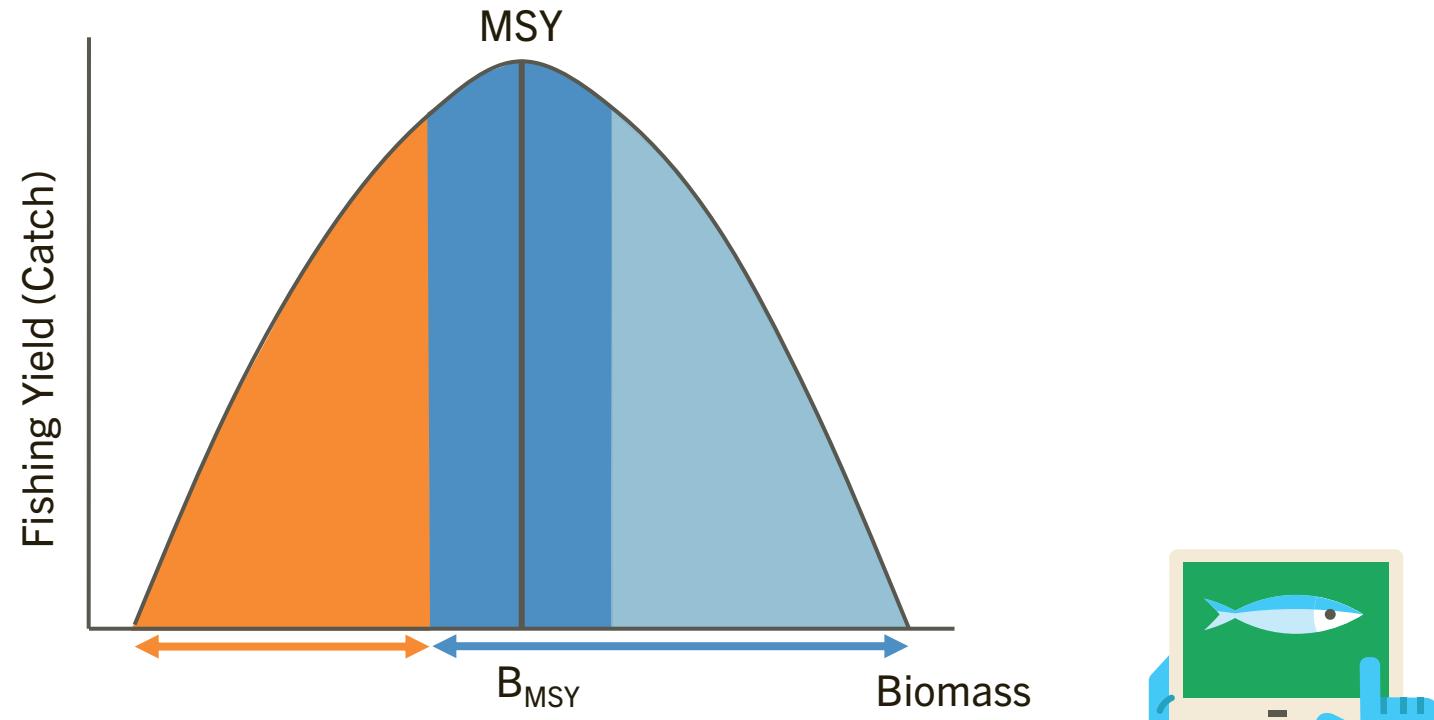


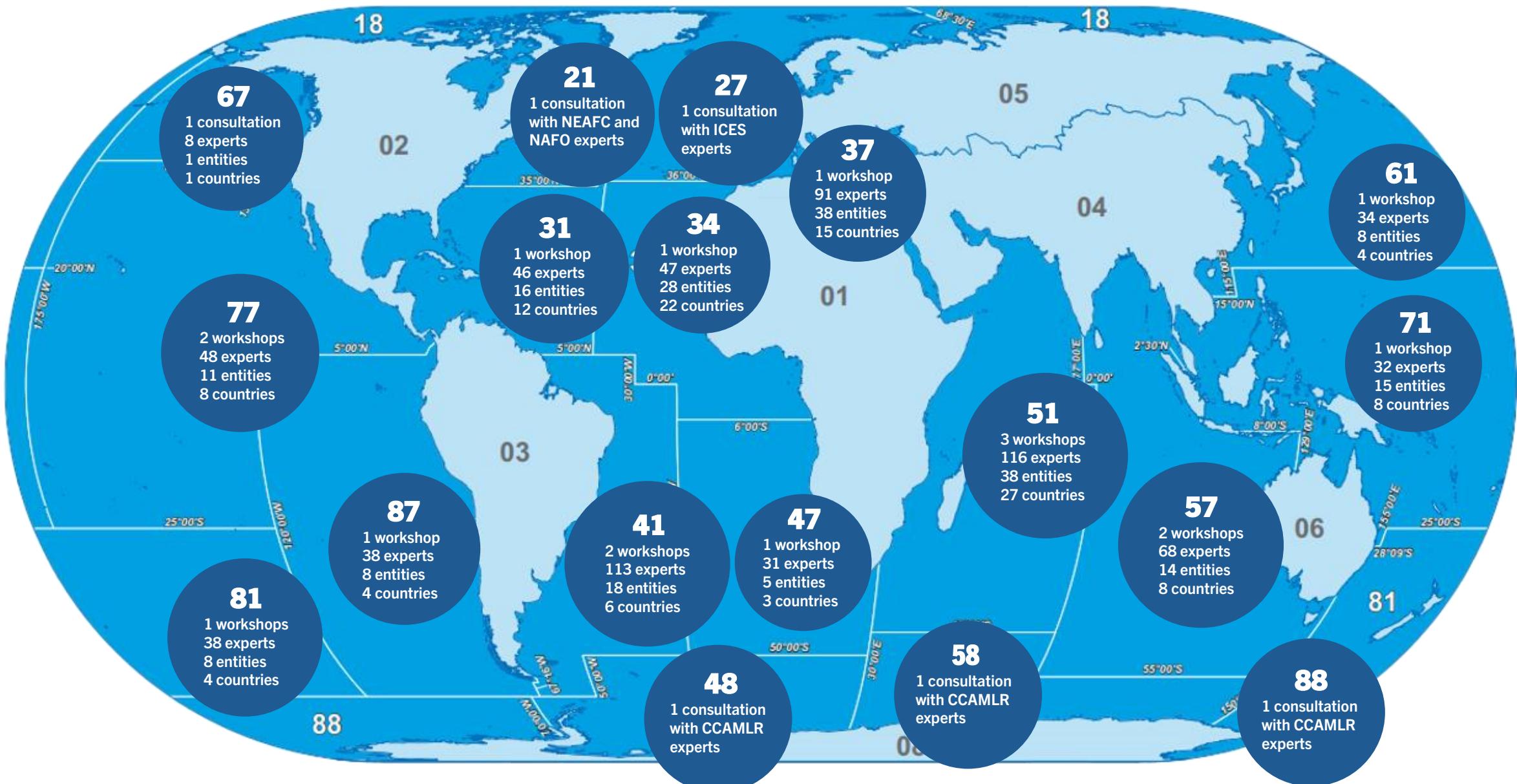


CLASSIFICATION OF GLOBAL STOCKS (1974-2021)



- Underfished ($B > 1.2 B_{MSY}$)
- Maximally Sustainably Fished ($1.2 B_{MSY} < B > 0.8 B_{MSY}$)
- Overfished ($B < 0.8 B_{MSY}$)







SOFIA Global Fish Stocks Status Monitoring

A synoptic evaluation of what a regions fish stock status maybe, as well as an overall indicator of how the global state of fish stocks is progressing with respect to MSY-based reference points.

Improvement should include: (1) better/updated coverage of global fisheries; (2) more accurate / precise assessments; and (3) more transparent frameworks and reports.

DATA

ASSESSMENT

REPORTING



Elements necessary to produce current estimate

Indicator: % stocks fished at biologically sustainable levels

Process: 4 steps

1. Select sample of stocks (reference list of stocks)
2. Collect/collate data for selected stocks
3. Apply methodology for stock status classification
4. Compute indicator (% stocks at biologically sustainable levels)



DATA RICH INCREASED COMPLEXITY

Tier 1

Stocks with a formal assessment considered scientifically sound & reliable: Status derived directly from **assessment bodies**.

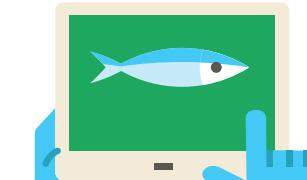
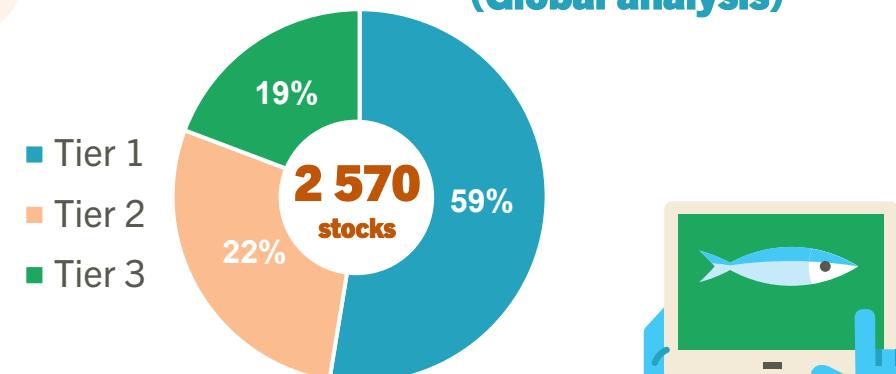
Tier 2

Stocks with catch data and other supporting information such as an index of abundance or effort. Status inferred by **surplus-production type models**.

Tier 3

Stocks with some data, knowledge, and information available, combined with a peer-review process. Status is determined using a **weight-of-evidence approach**.

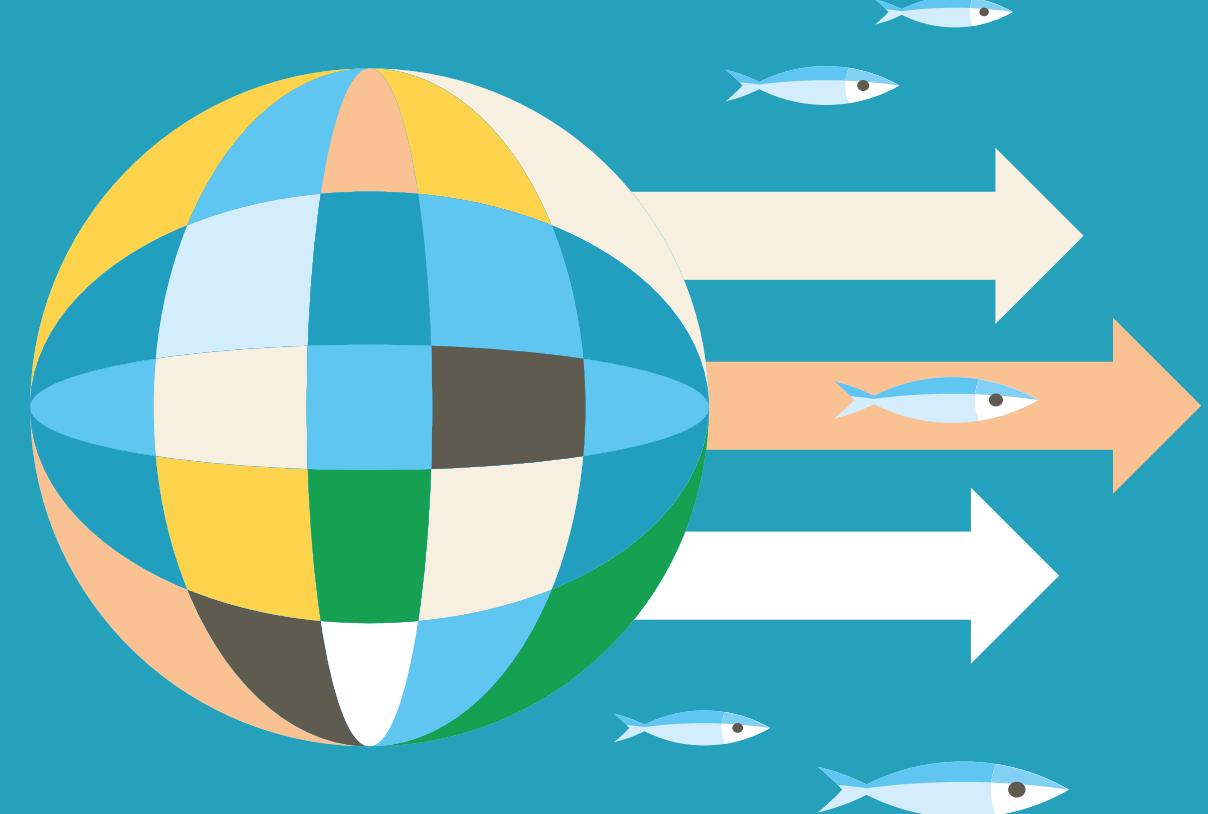
Assessed stocks by Tiers (Global analysis)





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GLOBAL OVERVIEW

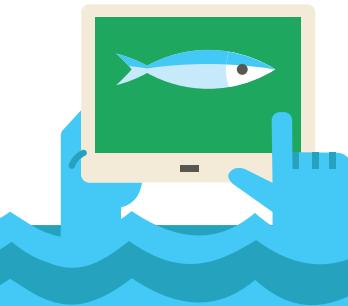
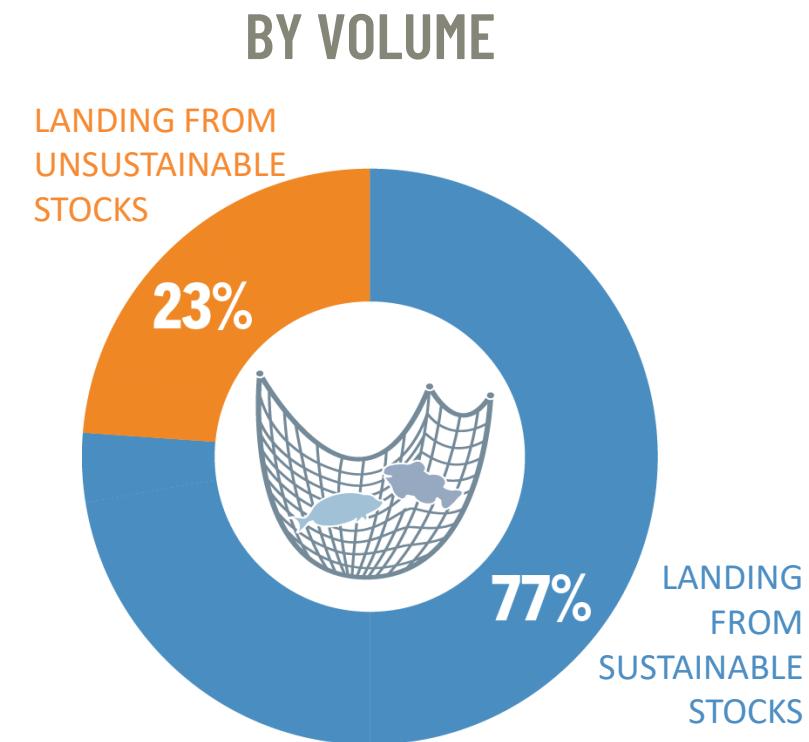
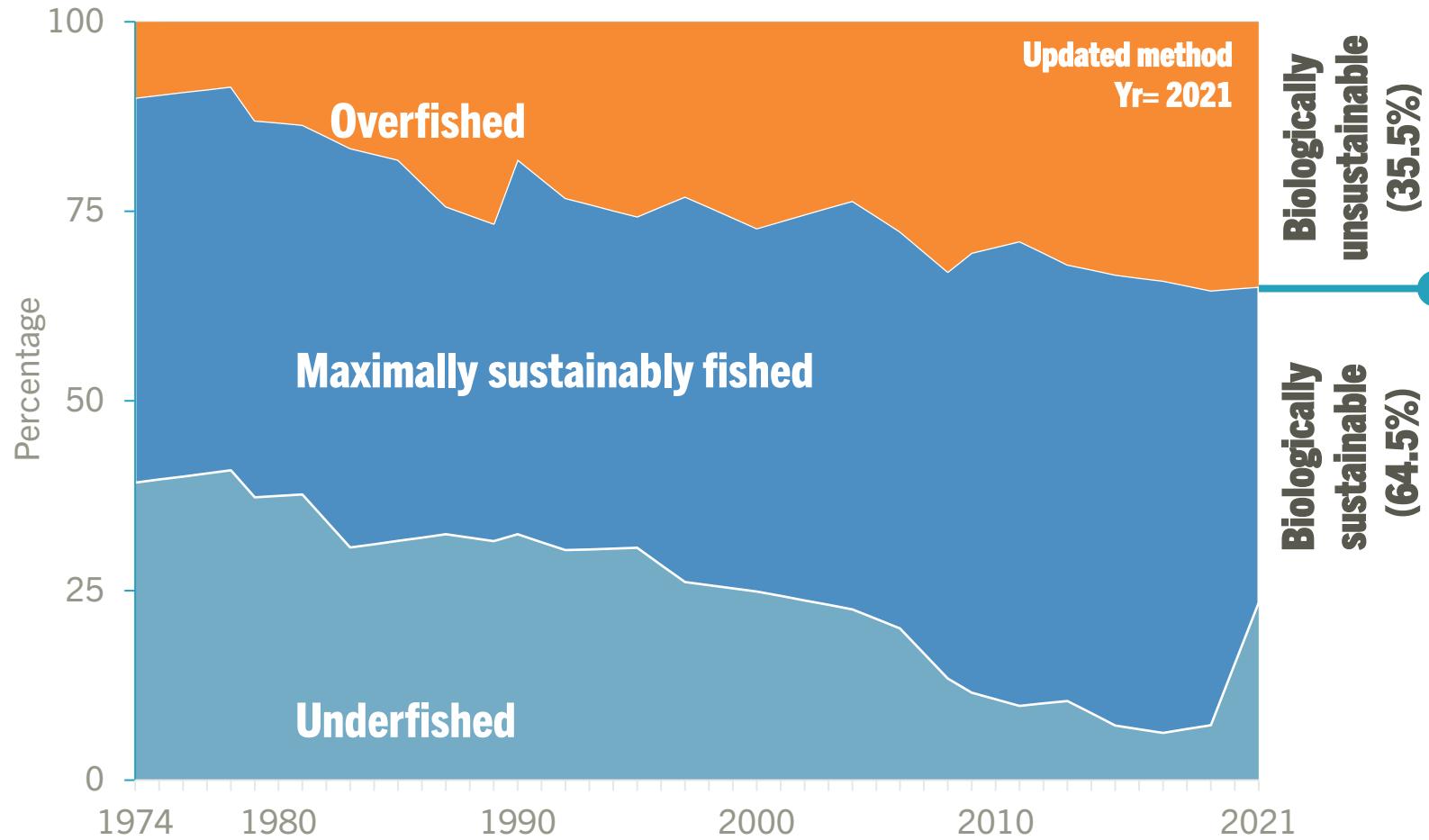




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GLOBAL TRENDS IN THE STATE OF THE WORLD'S MARINE FISH STOCKS

1974-2021

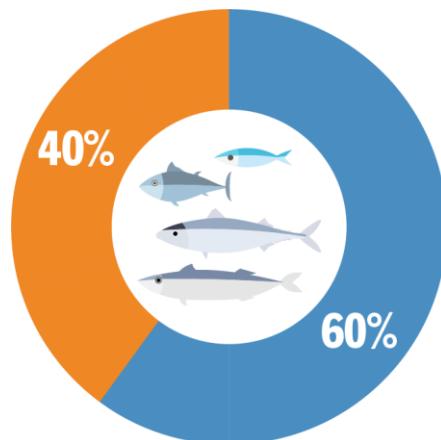




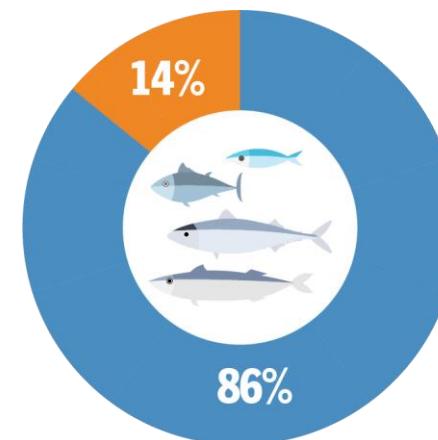
SUSTAINABILITY OF KEY COMMERCIAL SPECIES

TOP-10 SPECIES

BY NUMBER

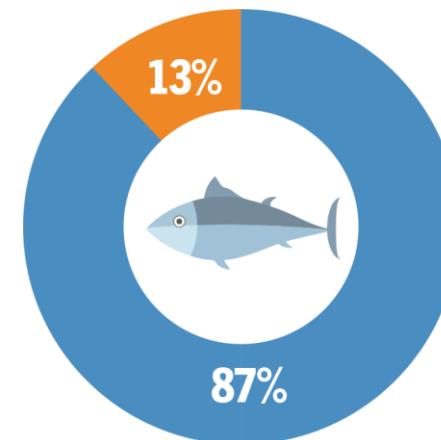


BY VOLUME

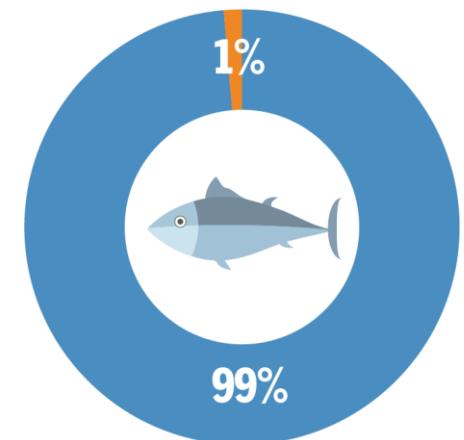


TOP COMMERCIAL TUNAS

BY NUMBER



BY VOLUME



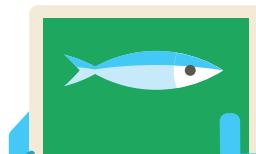
Stock status:



Biologically sustainable



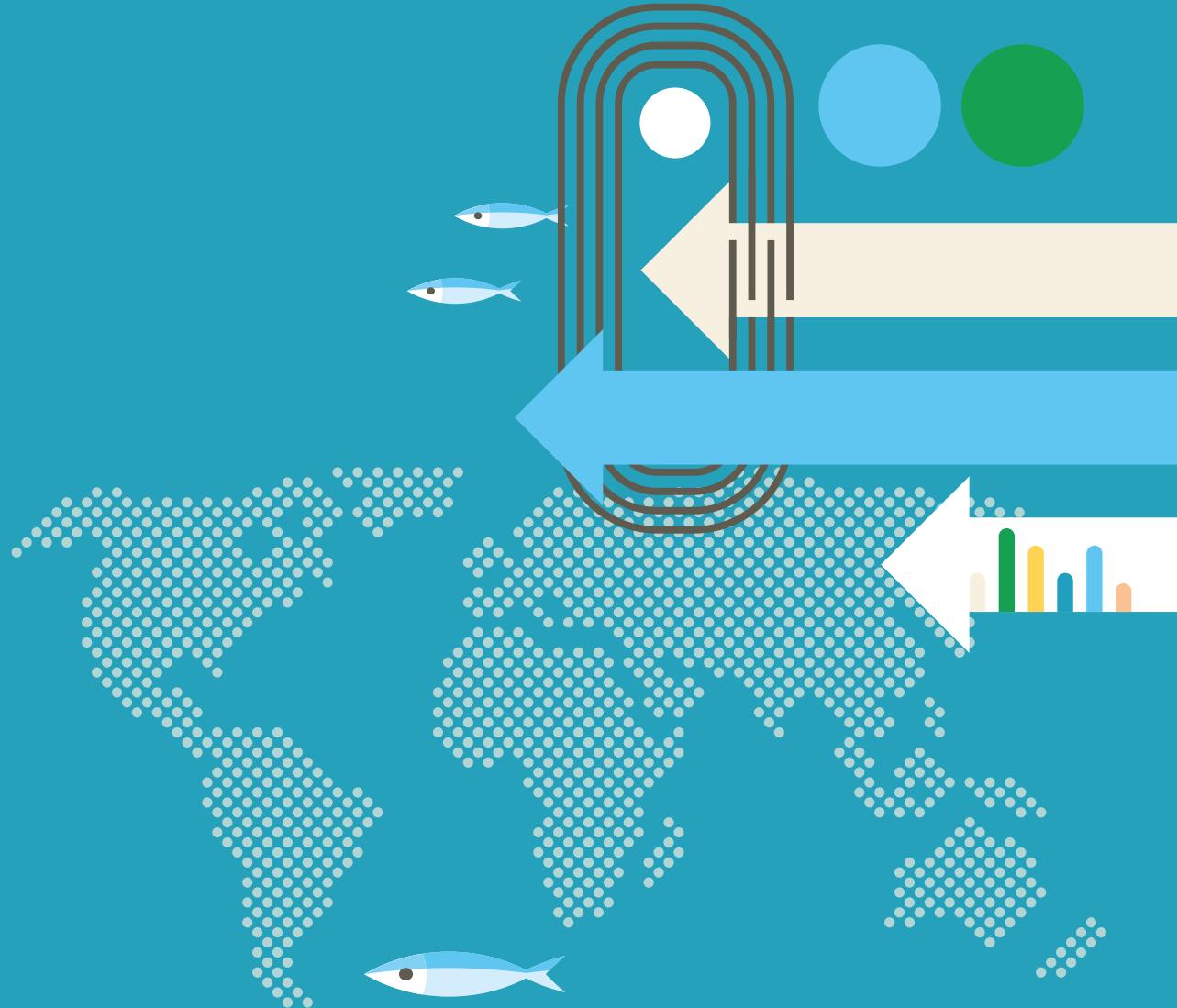
Biologically unsustainable





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REGIONAL OVERVIEW



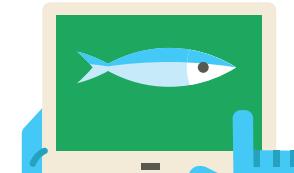
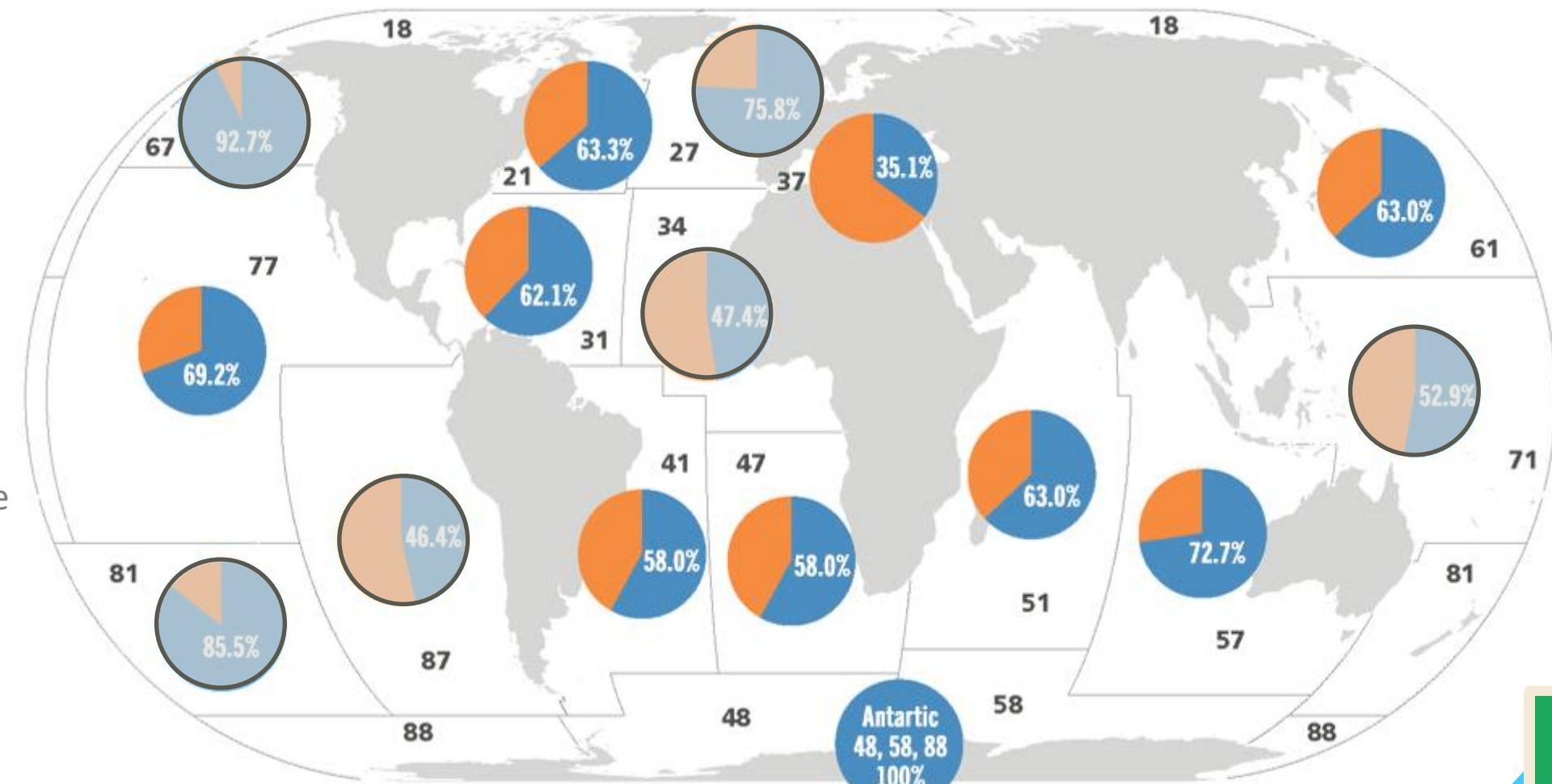


STATE OF MARINE FISH STOCKS BY FAO MAJOR FISHING AREA

2021

Stock status:

- Biologically sustainable
- Biologically unsustainable

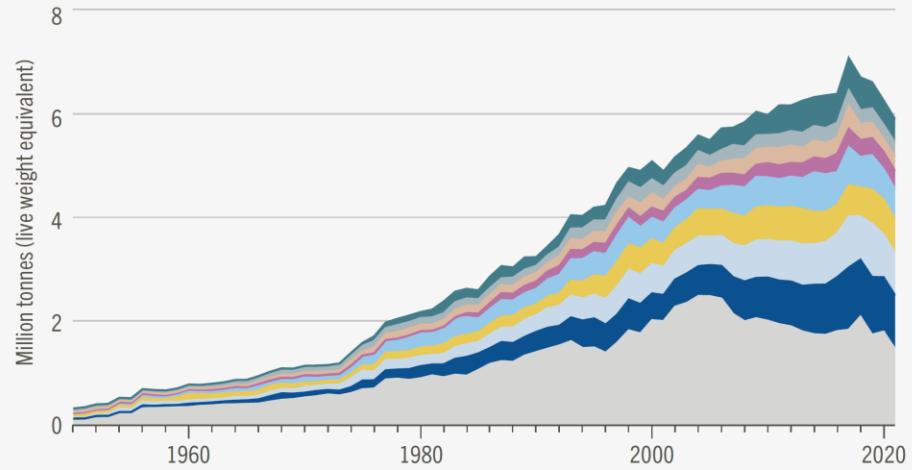


LANDINGS IN ASIA PACIFIC REGION

FAO data, 1950–2021

Area 57

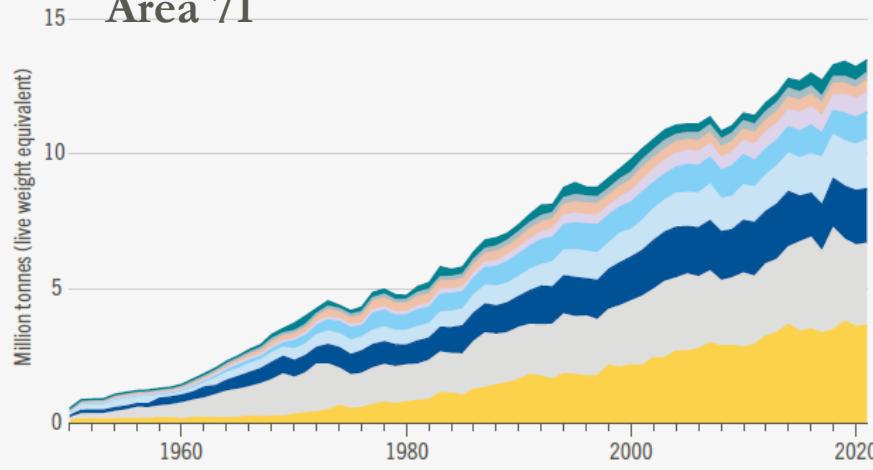
- Other aquatic animals, excluding fish
- Other fish
- Shrimps, prawns
- Shads
- Herrings, sardines, anchovies
- Tunas, bonitos, billfishes
- Miscellaneous coastal fishes
- Miscellaneous pelagic fishes
- Marine fishes not identified



SPECIES COMPOSITION

- Other aquatic animals, excluding fish
- Other fish
- Shrimps, prawns
- Squids, cuttlefishes, octopuses
- Herrings, sardines, anchovies
- Miscellaneous coastal fishes
- Miscellaneous pelagic fishes
- Marine fishes not identified
- Tunas, bonitos, billfishes

Area 71

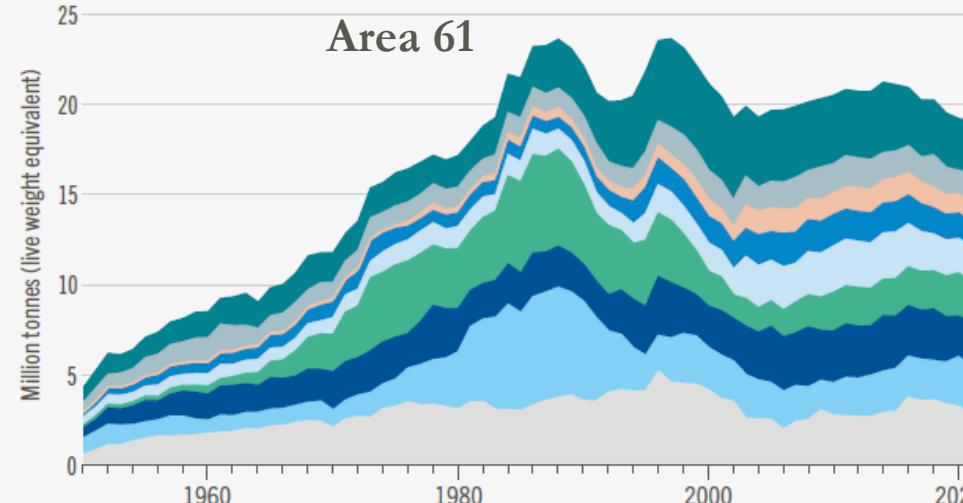


Data refer to aquatic animals, excluding aquatic mammals, crocodiles, alligators, caimans, sponges, corals, pearls and algae.

SPECIES COMPOSITION

- Other aquatic animals, excluding fish
- Other fish
- Shrimps, prawns
- Miscellaneous demersal fishes
- Miscellaneous coastal fishes
- Cods, hakes, haddocks
- Miscellaneous pelagic fishes
- Herrings, sardines, anchovies
- Marine fishes not identified

Area 61

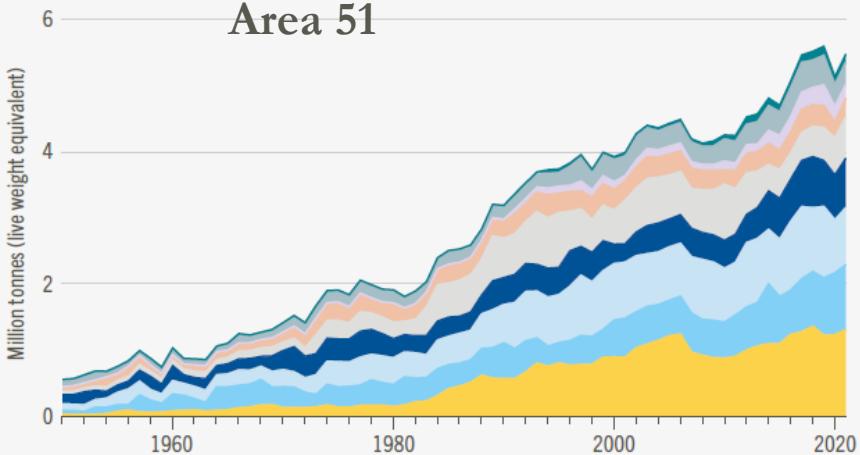


Data refer to aquatic animals, excluding aquatic mammals, crocodiles, alligators, caimans, sponges, corals, pearls and algae.

SPECIES COMPOSITION

- Other aquatic animals, excluding fish
- Other fish
- Squids, cuttlefishes, octopuses
- Shrimps, prawns
- Marine fishes not identified
- Miscellaneous pelagic fishes
- Miscellaneous coastal fishes
- Herrings, sardines, anchovies
- Tunas, bonitos, billfishes

Area 51



Data refer to aquatic animals, excluding aquatic mammals, crocodiles, alligators, caimans, sponges, corals, pearls and algae.

THE HUMAN ELEMENT/FOOD SECURITY/LIVELIHOOD ISSUES

Area 61

FLEET SIZE AND COMPOSITION FAO estimate, 2021

Active vessels ~448 000



FAO estimate, 2021

■ Non-motorized: 2%
■ Motorized: 98%

EMPLOYMENT FAO estimate, 2021

Fishers (primary sector/fishing) ~2.6 million



■ = 100 000 PEOPLE

Area 57

FLEET SIZE AND COMPOSITION FAO estimate, 2021

Active vessels ~522 000



FAO estimate, 2021

■ Non-motorized: 22%
■ Motorized: 78%

EMPLOYMENT FAO estimate, 2021

Fishers (primary sector/fishing) ~3.5 million



■ = 100 000 PEOPLE

Area 71

FLEET SIZE AND COMPOSITION FAO estimate, 2021

Active vessels ~1.8 million



FAO estimate, 2021

■ Non-motorized: 26%
■ Motorized: 74%

EMPLOYMENT FAO estimate, 2021

Fishers (primary sector/fishing) ~4.8 million



■ = 100 000 PEOPLE

Area 51

FLEET SIZE AND COMPOSITION FAO estimate, 2021

Active vessels ~407 000



FAO estimate, 2021

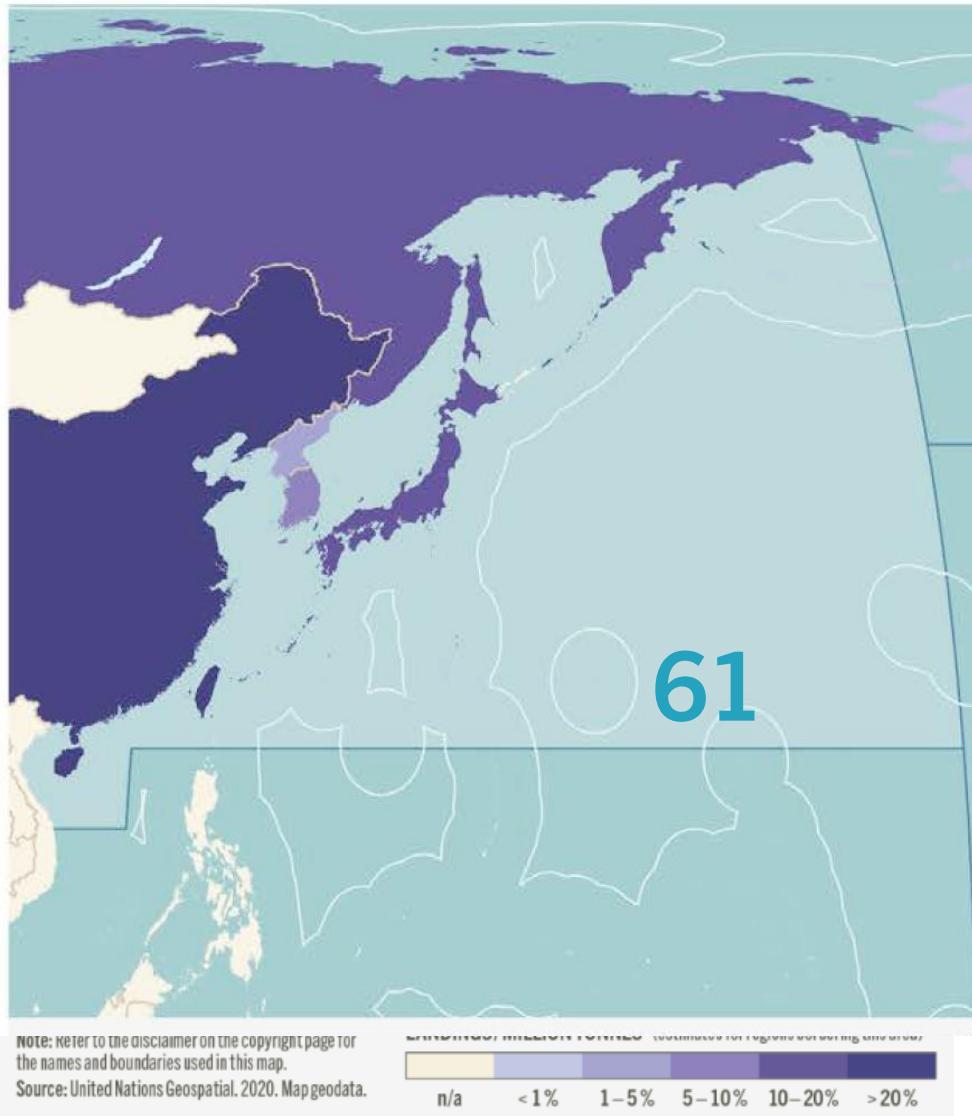
■ Non-motorized: 39%
■ Motorized: 61%

EMPLOYMENT FAO estimate, 2021

Fishers (primary sector/fishing) ~2.9 million



■ = 100 000 PEOPLE



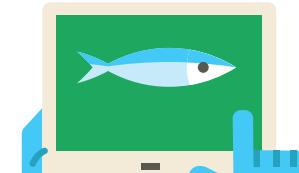
STATE OF THE STOCKS AREA 61

FAO estimates 2021

Tier	No. Stocks	Sustainable (%)	Unsustainable (%)	Landings from Sust. Stocks (%)
1	56	57.1	42.9	
2	36	72.2	27.8	
AVERAGE	92	63	37	73.7

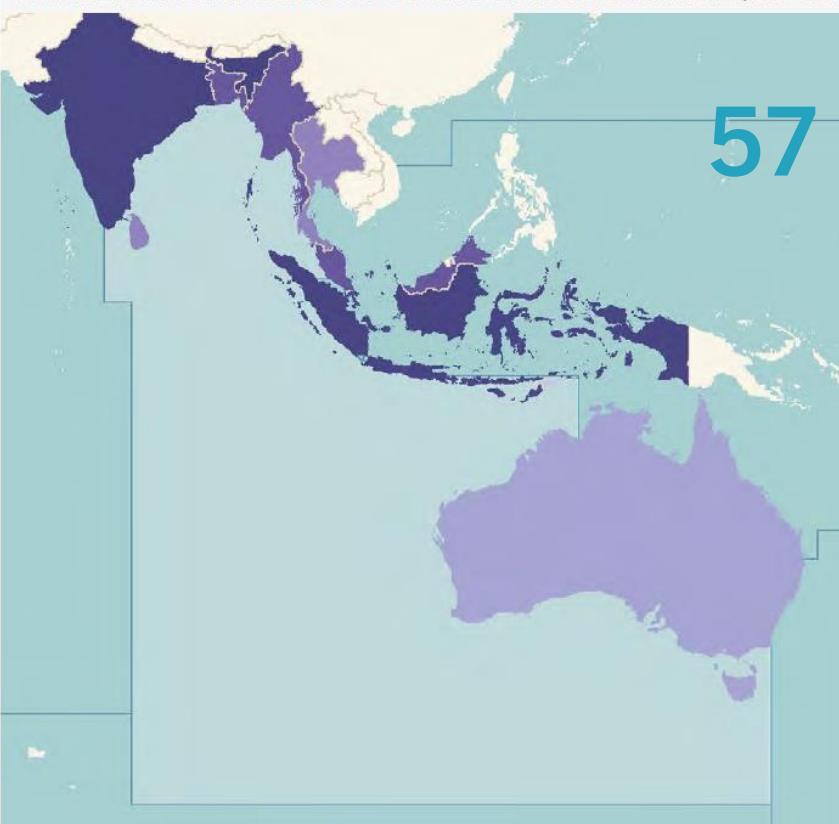
→ Tier 1 worse off
 → <50% of landings from sustainable stocks

→ 36.5% of landings not assessed



STATE OF THE STOCKS AREA 57

ESTIMATED LANDINGS (MILLION TONNES) FOR REGIONS BORDERING THIS AREA FAO data, 1950–2021



FAO estimates 2021

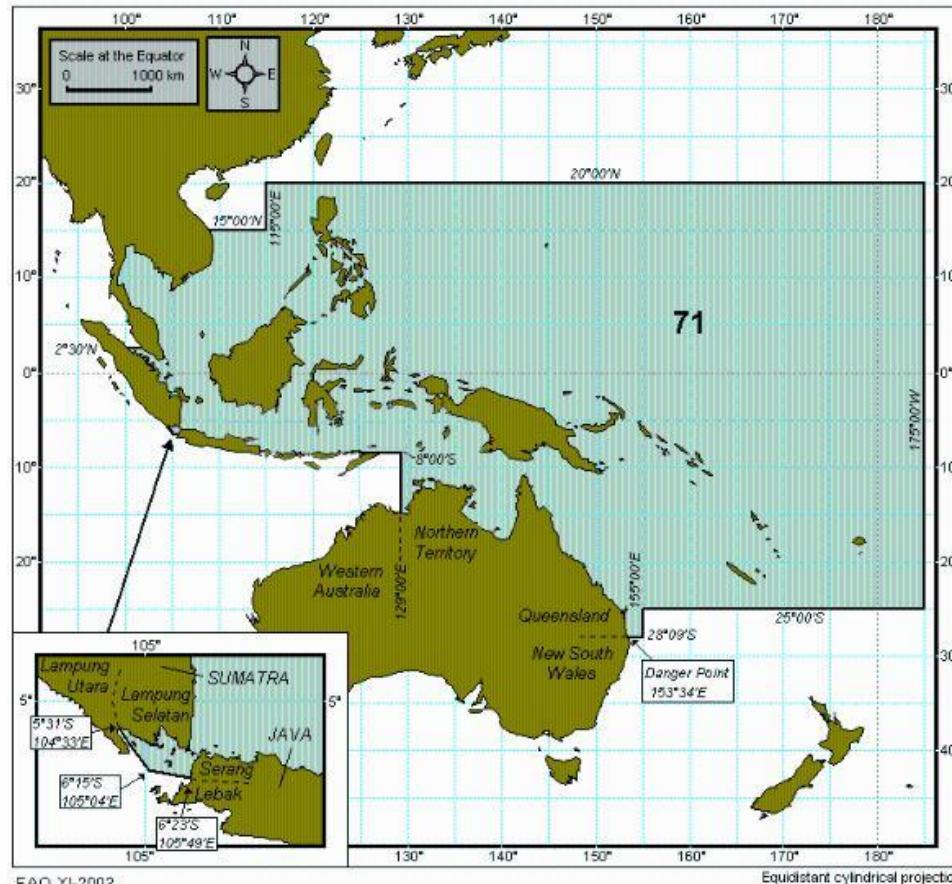
Tier	No. Stocks	Sustainable (%)	Unsustainable (%)	Landings from Sust. Stocks (%)
1	193	63.6	36.4	
2	96	89.6	10.4	
3	19	84.2	15.8	
AVERAGE	308	72.7	27.3	82.9

- Tier 1 worst – No management
- Most stocks are OK in Tier 2 and 3
- >80% of landings from sustainable stocks

- 32.4 % of landings not assessed
- Biased high, reality evident from Myanmar surveys



State of Stocks Area 71

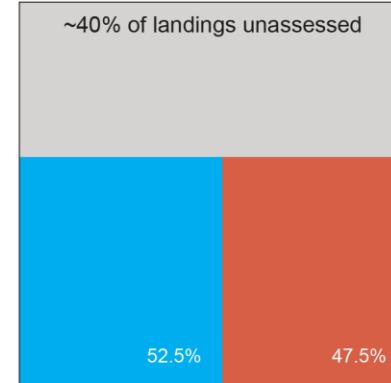


Tier	No. Stocks	Sustainable (%)	Unsustainable (%)
1	24	83.3	16.7
2	51	29.4	70.6
3	190	54.7	45.3
AVERAGE	265	52.5	47.5

2021 Data

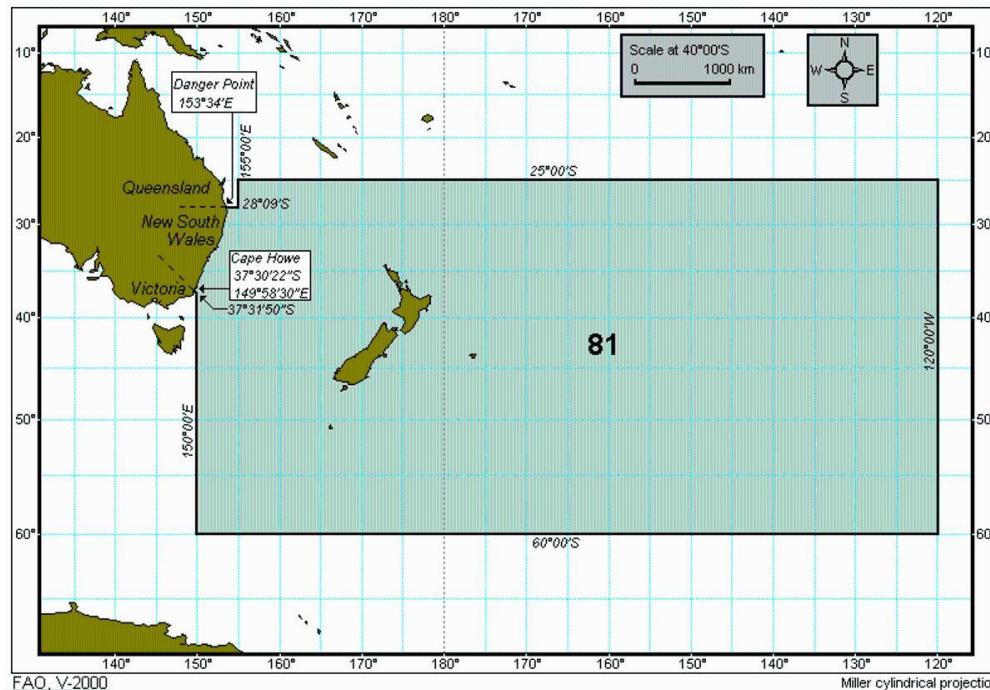
STOCK STATUS (reported landings)

Updated methodology



2021 Data

State of Stocks Area 81

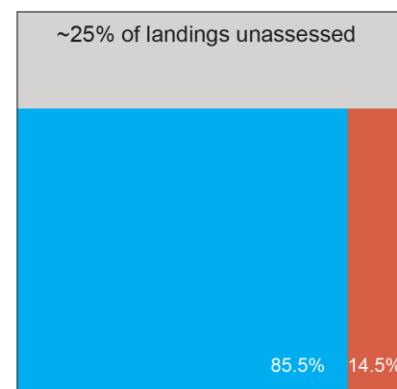


Tier	No. Stocks	Sustainable (%)	Unsustainable (%)
1	71	84.7	15.5
2	17	76.5	23.5
3	77	88.3	11.7
AVERAGE	166	85.5	14.5

2021 Data

STOCK STATUS (reported landings)

Updated methodology



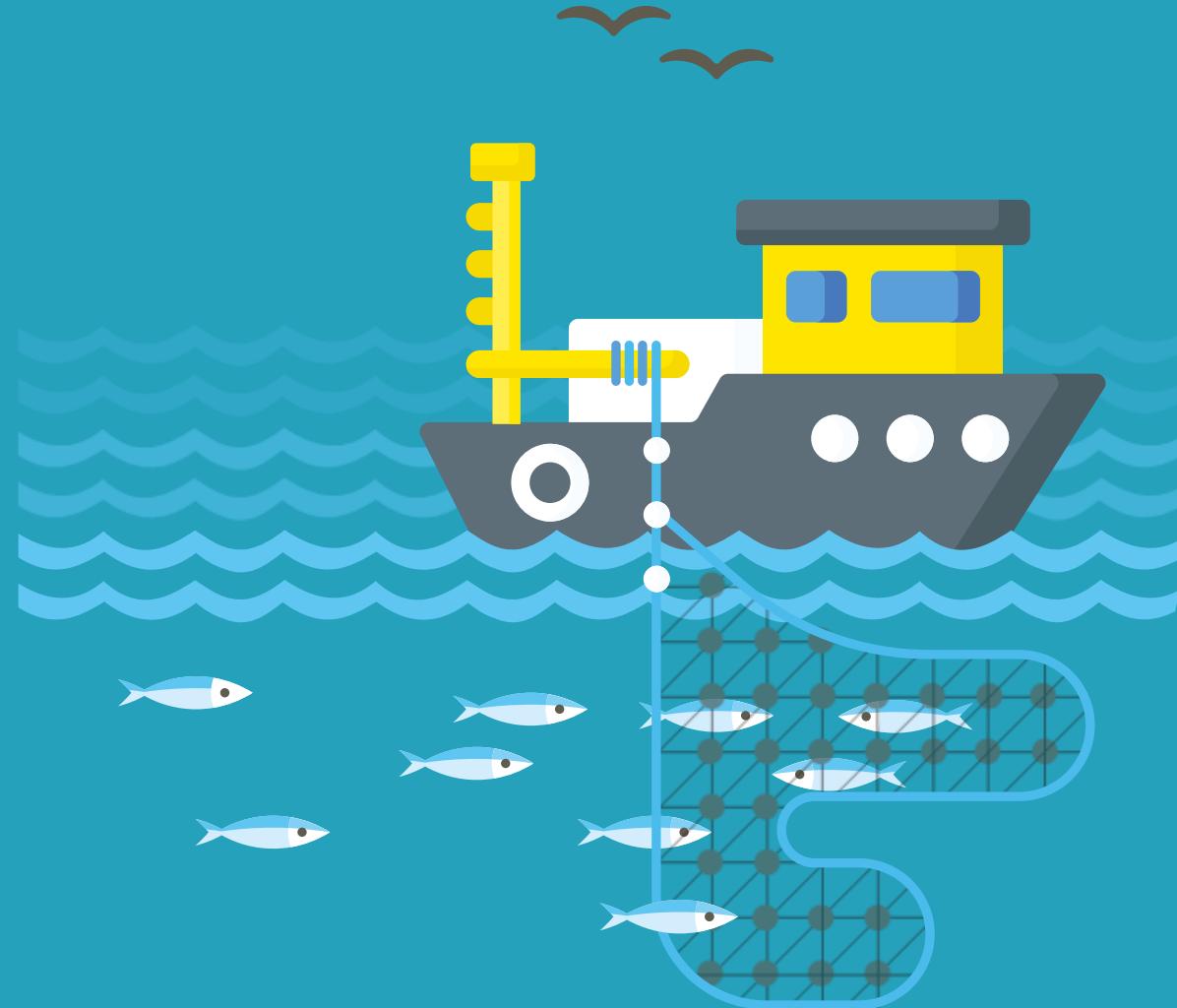
2021 Data





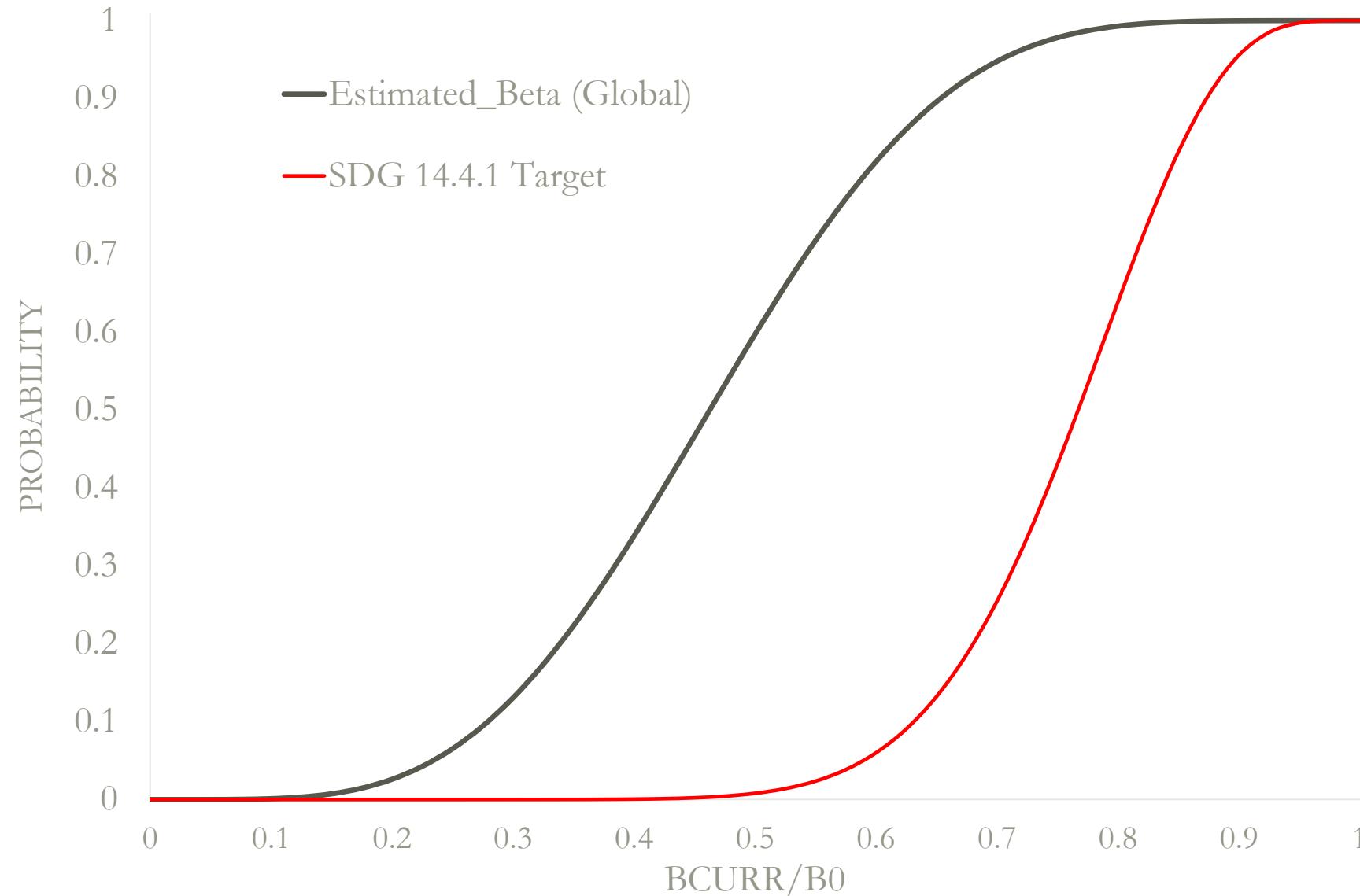
Food and Agriculture
Organization of the
United Nations

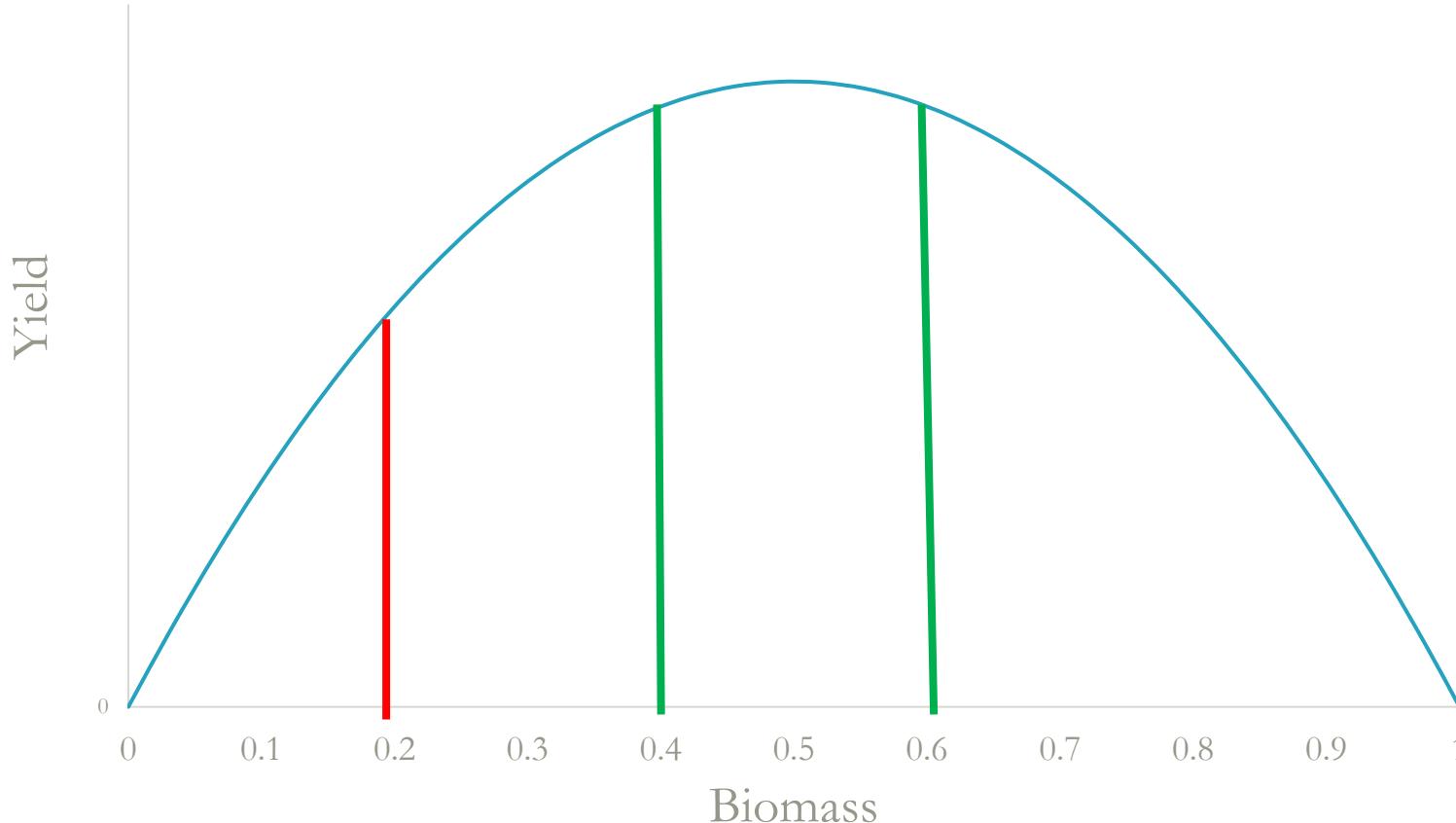
TAKE HOME MESSAGES





The gist of all Areas and ~2570 stocks % below 0.4B₀





- A majority are above or around the target RP.
- Minority are below Target RP
- 3% are below Limit RP
- Loss in Yield can be significant in some areas.
- In general though we are optimizing goals for food security.
- If we change the targets to SDG targets; we will invariably lose yield due to underfishing; contrary to Food Security needs.



Some take home messages on differences

- The difference between the estimates of overfishing between the update and old method is marginal (0-15% dependent on area).
- However, with the new baselines being added more stocks are in the underfished category (bycatch stocks that are managed and new stocks that are new fisheries that are largely resilient species (small pelagic stocks)).
- SDG targets are largely unachievable and are in contrary to food security goals (MSY and precautionary approach targets).
- Unless we have perfect management (impossible in a natural system with large Process error); we will invariably lose yield if we push populations to the right-hand side of the CDF.



TAKE HOME MESSAGES

Blue Transformation in action



FAO's 2025 Review is the most **comprehensive and participatory global assessment** of marine fish stocks ever conducted, reflecting advances in science, technology, and inclusive knowledge, and embodying FAO's commitment to **Blue Transformation**

Effective fisheries management

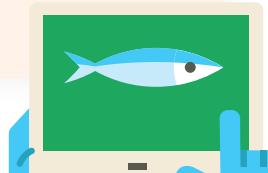


As global fisheries assessment and management tools evolve, **effective management remains the best conservation measure**. FAO is ready to support countries and promote strong regional and international cooperation to ensure the **long-term sustainability of marine resources**

Food security, nutrition and livelihoods



Marine fisheries are critical for global **food security, nutrition and economic development**, particularly for vulnerable communities, and must be managed sustainably to maintain their **vital contribution to ending hunger and poverty**



How does this relate to Trade?

Key Statistics on Fisheries and Aquaculture Sector in

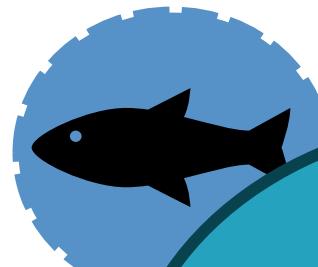
2022



223.2 million tonnes in 2022, fisheries and aquaculture production reached an all-time high.

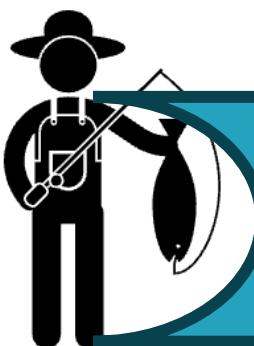


USD 472 billion Record value of trade in fisheries & aquaculture shows its global economic impact.



20.7 Kg

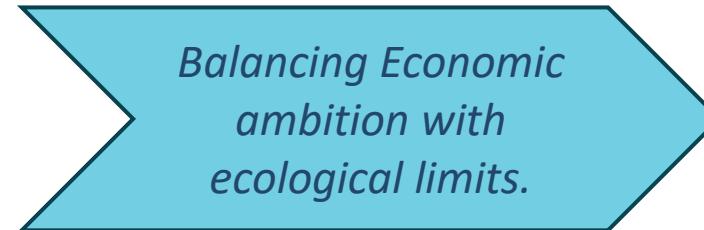
average annual availability of aquatic animal foods per capita indicates its global dietary importance



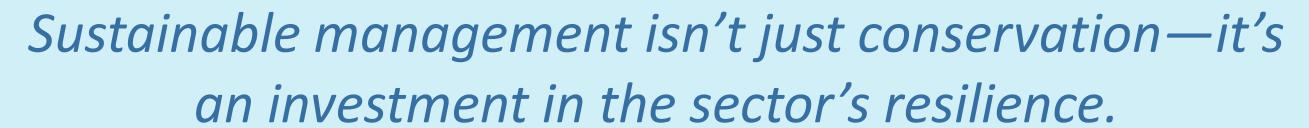
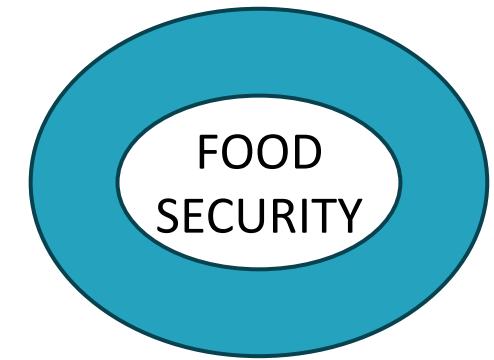
62 million persons employed globally in primary production alone

Aquatic products continue to be one of the most traded food commodities, involving over 230 countries and territories

Interlinking Environment, Trade, and Social Inclusion in Fisheries & Aquaculture

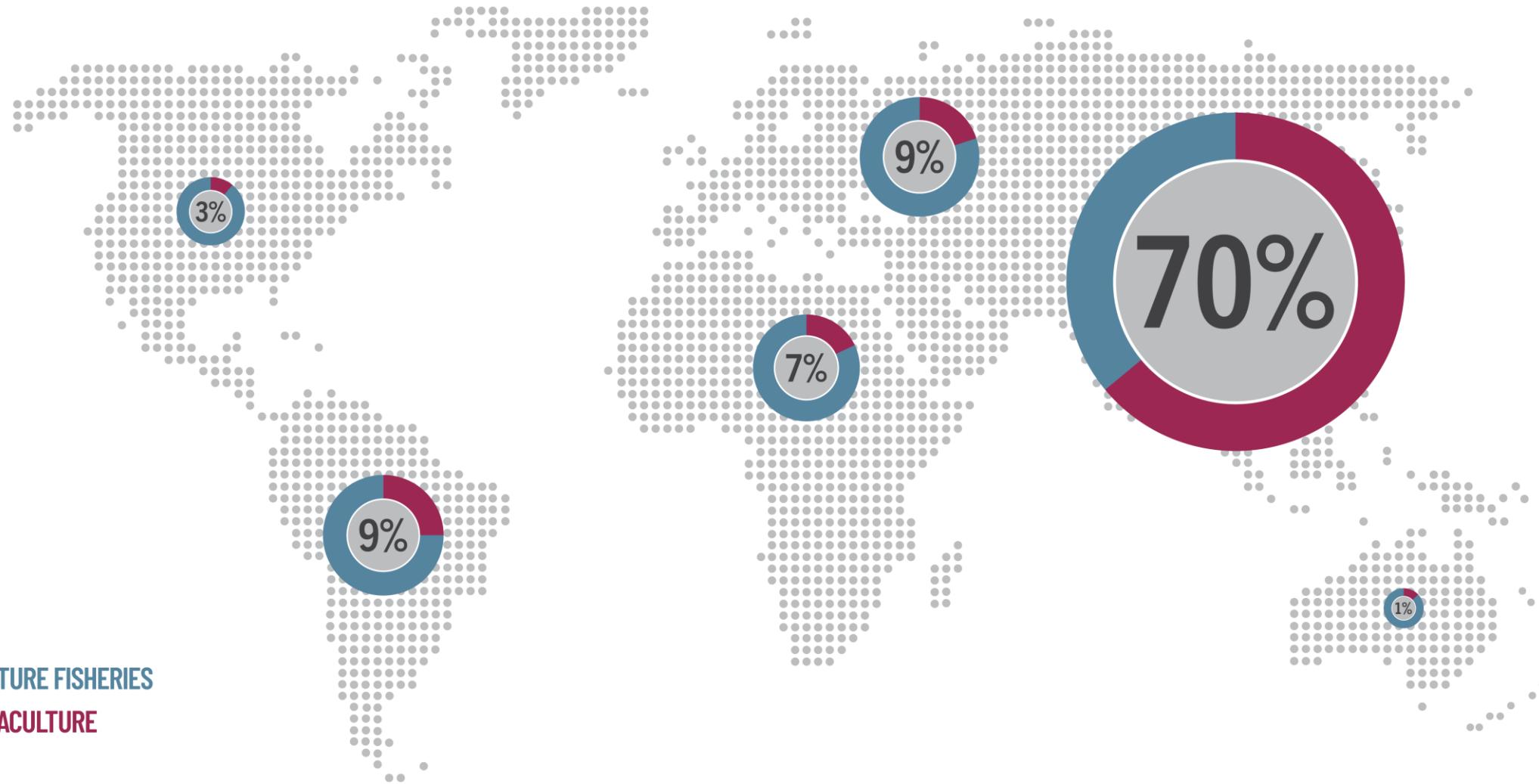


*Balancing Economic
ambition with
ecological limits.*



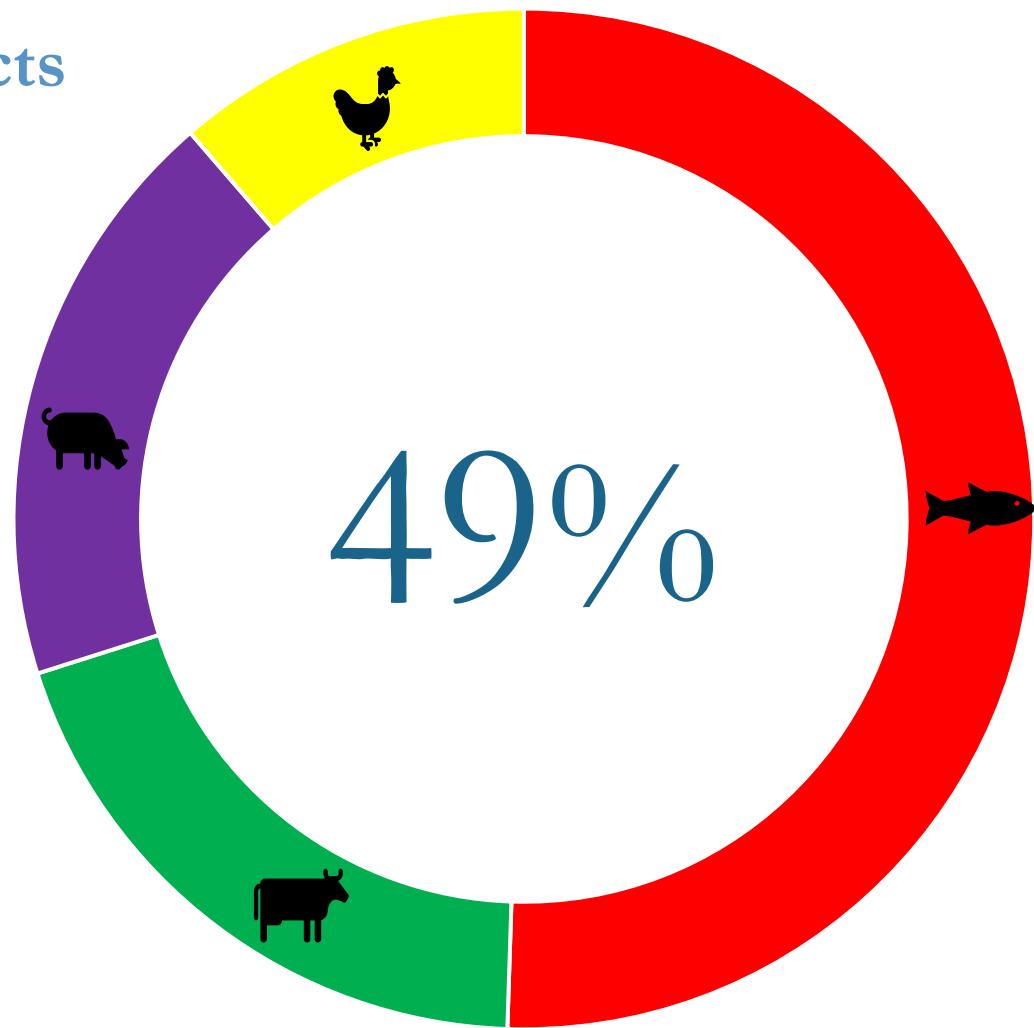
*Sustainable management isn't just conservation—it's
an investment in the sector's resilience.*

World Aquatic Animal Production By Region In 2022



Comparing Trade of Aquatic Products (Global Exports in USD) with other Animals

Trade in Aquatic Products comprises
49% of the total traded animals





**SCAN THE QR CODE
TO ACCESS THE REPORT**



THANK YOU!





Topic:

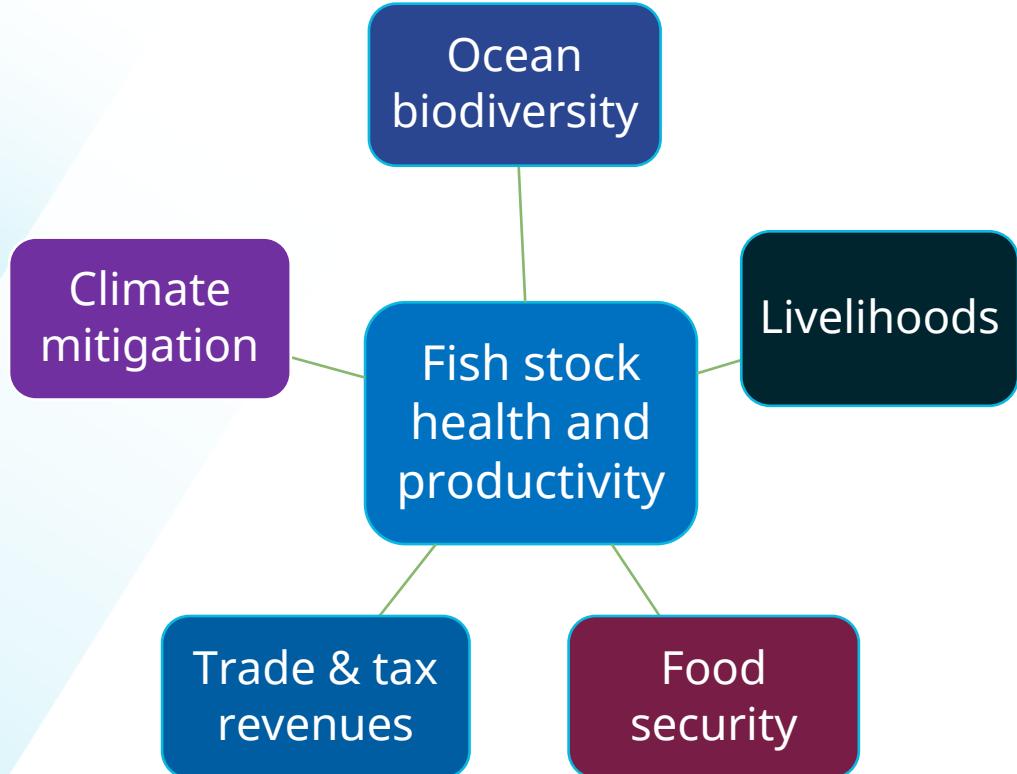
**OECD recommendations
on eliminating
Government support to
IUU fishing and
estimates on fisheries
support data**

**Lorena Rivera Orjuela,
Policy Analyst,
OECD**





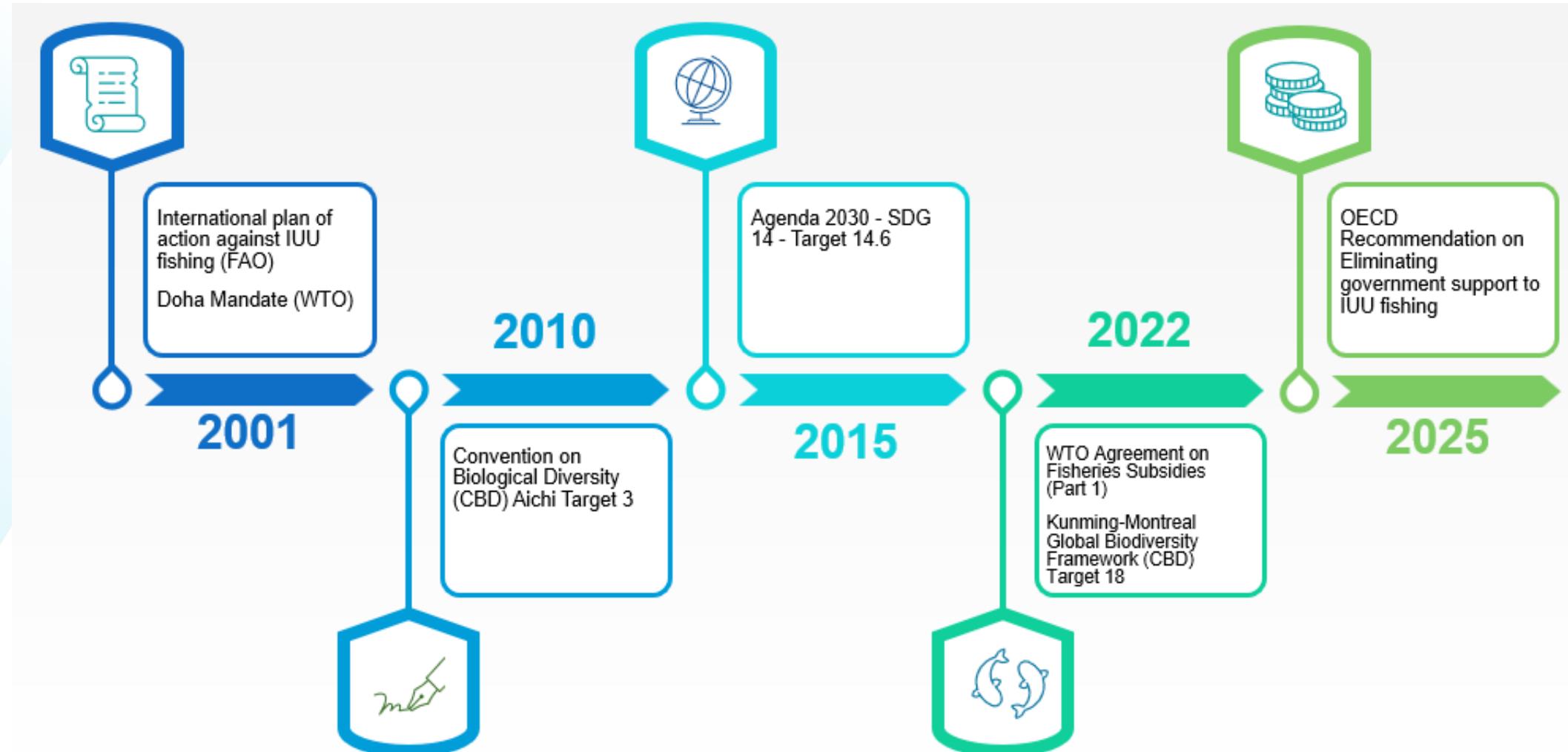
IUU fishing is a serious threat to everything fisheries can offer to societies



- Weakens sustainable management strategies and complicates the stock assessments that underpin it
- Generates unfair competition over resources and in markets
- Deprives governments of important tax revenue
- Threatens food security and food safety
- Sometimes associated with conflicts and criminal activities



Fighting IUU fishing by eliminating harmful subsidies: time for action





What do we know about fisheries support?

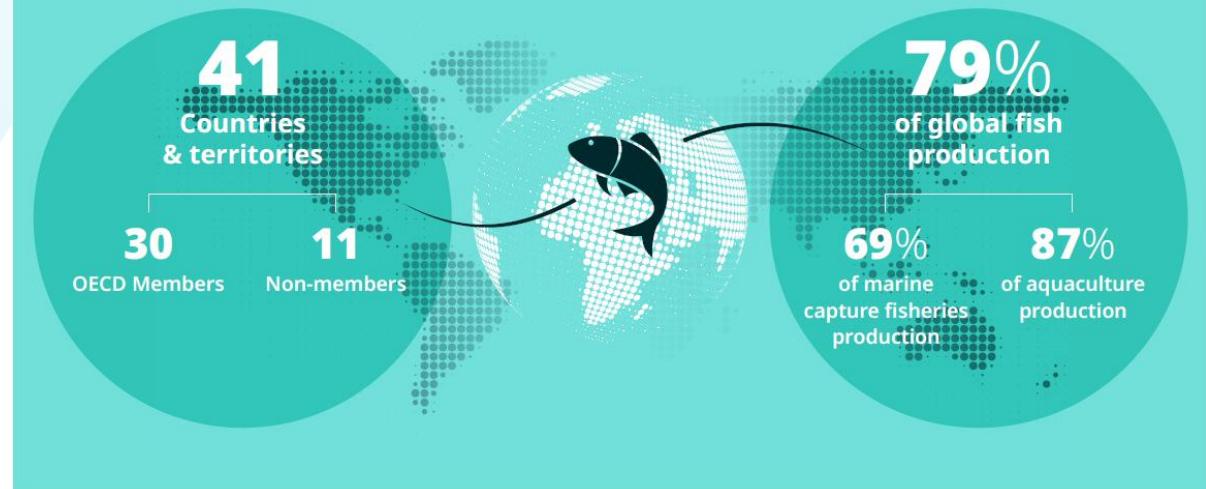
Fisheries in the OECD and beyond

Fisheries performance – Sustainability – Climate Change

Better policies for better fisheries

Management – Government support

The OECD Fisheries Support Estimate Database covers:



OECD Review of Fisheries 2025



Government support and risks of encouraging unsustainable fishing

Policy support type

- Vessel construction & purchase
- Vessel modernisation & gear (capacity enhancing)
- Fuel
- Access to infrastructure
- Access to other countries' waters
- Preferential insurance

- Vessel modernisation & gear (safety & environmental impact)
- Infrastructure construction & modernisation
- Fisher income
- Buyback of vessel or licence

- Education & training
- Marketing & promotion
- Research & development (other than stock assessment)

- Stock assessment
- Monitoring, control & surveillance
- Fisheries management
- Environmental maintenance

Risk of support encouraging unsustainable fishing

HIGH RISK

LOWER RISK

By directly affecting fishing costs and benefits, the policy could directly lead to increased fishing capacity and overfishing.



The actual risk of doing so can be mitigated by the policy context

MODERATE RISK

LOWER RISK

By indirectly affecting fishing costs and benefits, the policy could indirectly lead to increased fishing capacity and overfishing.



The actual risk of doing so can be mitigated by the policy context

UNCERTAIN RISK



LOWER RISK

The policy could result in high, moderate or no risk.



The actual risk of doing so can be mitigated by the policy context

NO RISK

The policy could contribute to very managed and does not present any risk



Policy context

Three key elements determine how much the policy context can mitigate the risk of overfishing posed, these are:



Ineffective ————— Management ————— Effective



Overfished ————— Stock health ————— Underfished

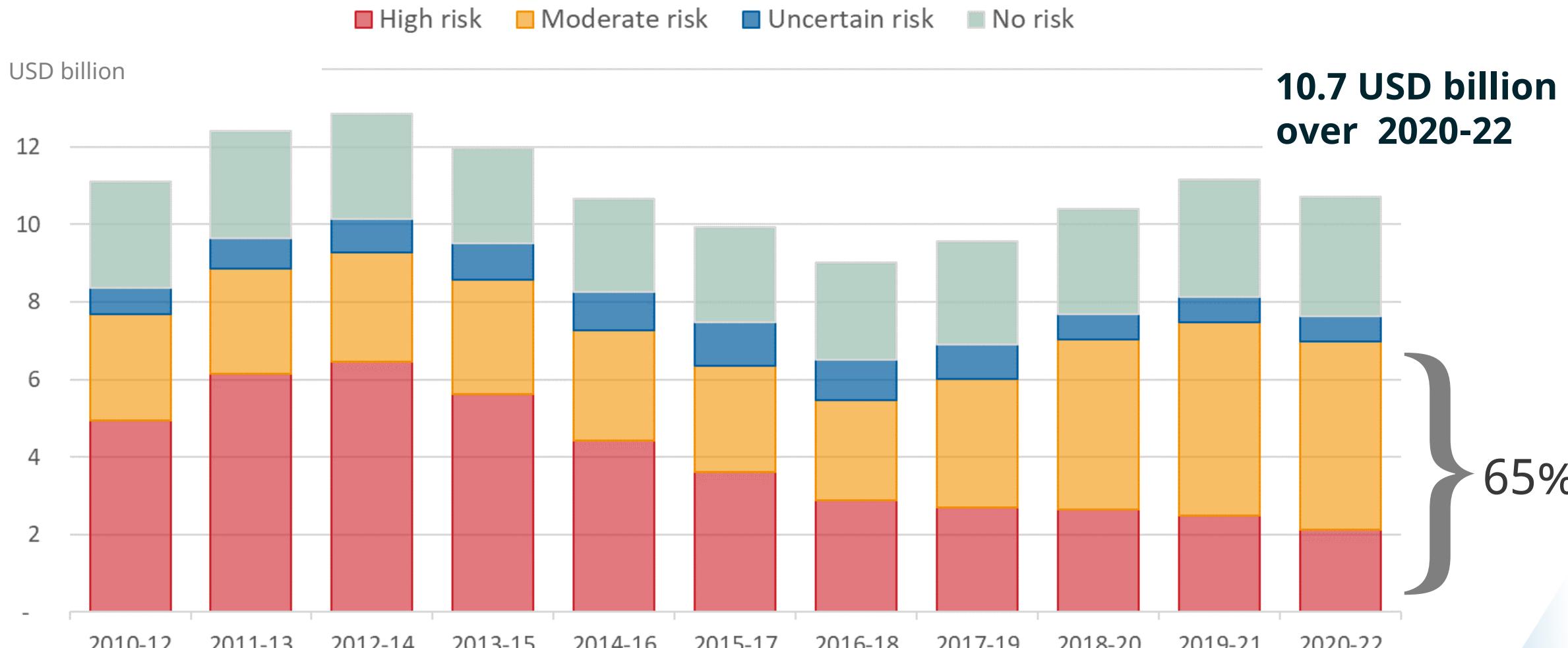


Ineffective ————— Policy design ————— Effective



Support to fisheries by risk of encouraging unsustainable fishing

Total for the 41 countries covered in the OECD Review of Fisheries 2025



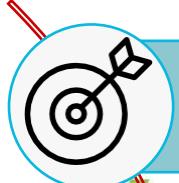


New OECD legal instrument offers concrete guidance to cut support to IUU fishing

“ ”

Recommendation of the Council on
Eliminating Government Support to
Illegal, Unreported, and
Unregulated Fishing

OECD Legal
Instruments



Target support to sustainably managed and effectively controlled fisheries via eligibility criteria
>> Vessels flagged to the supporting economy >> Holding an authorization or legal right to fish



Do not grant or maintain fisheries support to fishing or fishing-related activities **occurring outside the jurisdiction of a coastal State and outside the competence of a RFMO/A**



Adopt specific mechanisms to exclude from fisheries support, withhold fisheries support and withdraw fisheries support from owners & operators of vessels found to have engaged in IUU fishing



Encourage information sharing on IUU fishing determinations within domestic authorities and through relevant international and regional organisations



Spend public money wisely: investment in management and enforcement to mitigate risks of IUU fishing



Global action

- The OECD Recommendation is **open for adherence** to non-OECD countries
- Concrete action for implementing **SDG 14 and CBD Targets**
 - UNOC commitments and NDCs
- Guidance for **Official Development Assistance** programmes and other co-operation and development support initiatives
- Enhance and complement effective regional and global cooperation





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OECD Review of Fisheries 2025





Topic:

**Subject matter,
objectives, scope and
main obligations under
the BBNJ Agreement /
Preparatory COP
Committee work and
negotiation of modalities
for its entry into force**

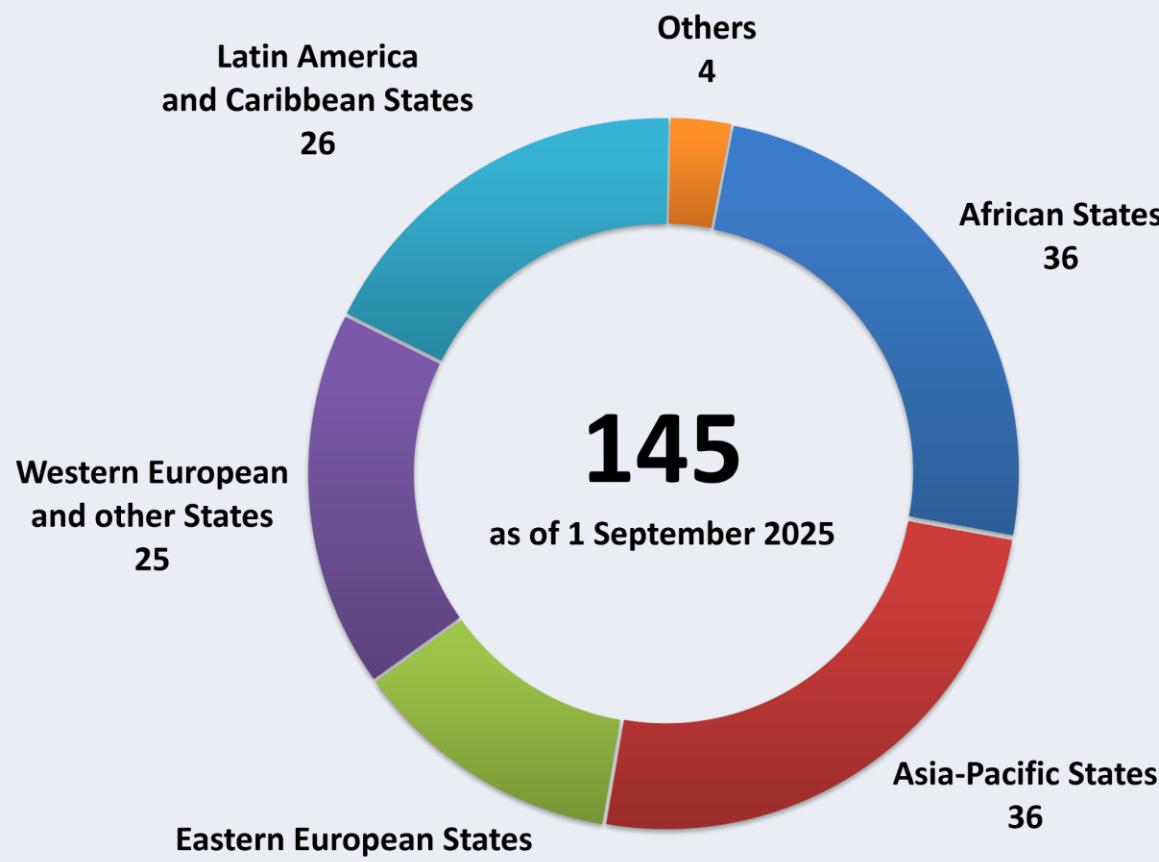
**Charlotte Salpin,
Senior Legal Officer,
UNDOALOS**

What is in the Agreement?

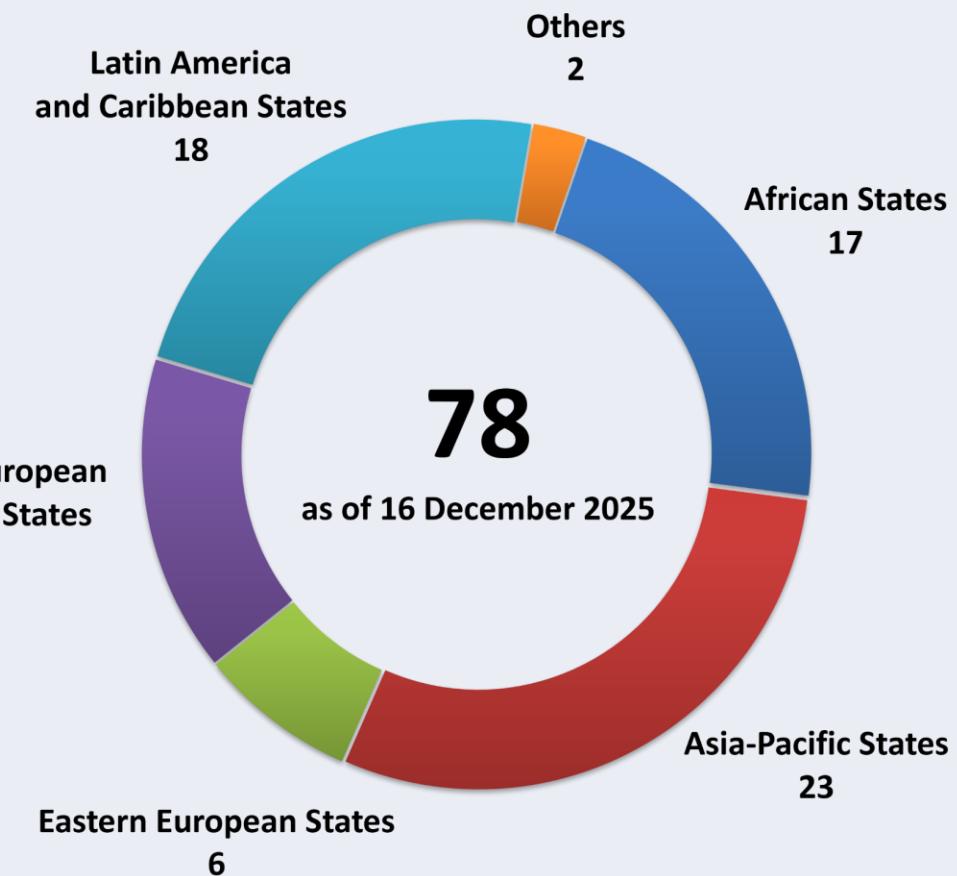
**What is being done to prepare
for entry into force and
implementation?**



Current status of the BBNJ Agreement



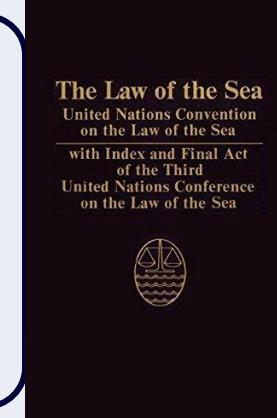
Signatories



Ratifications, approvals or acceptances

The "UNCLOS family" - *Implementing Agreements*

United Nations Convention on the Law of the Sea



**Agreement relating to the
Implementation of Part XI
of the United Nations
Convention on the Law of
the Sea of 10 December
1982**

**Agreement for the
Implementation of the
Provisions of the United
Nations Convention on the
Law of the Sea of 10
December 1982 relating to the
Conservation and
Management of Straddling
Fish Stocks and Highly
Migratory Fish Stocks**

**Agreement under the United
Nations Convention on the
Law of the Sea on the
Conservation and
Sustainable Use of Marine
Biological Diversity of Areas
beyond National Jurisdiction
(BBNJ Agreement)**

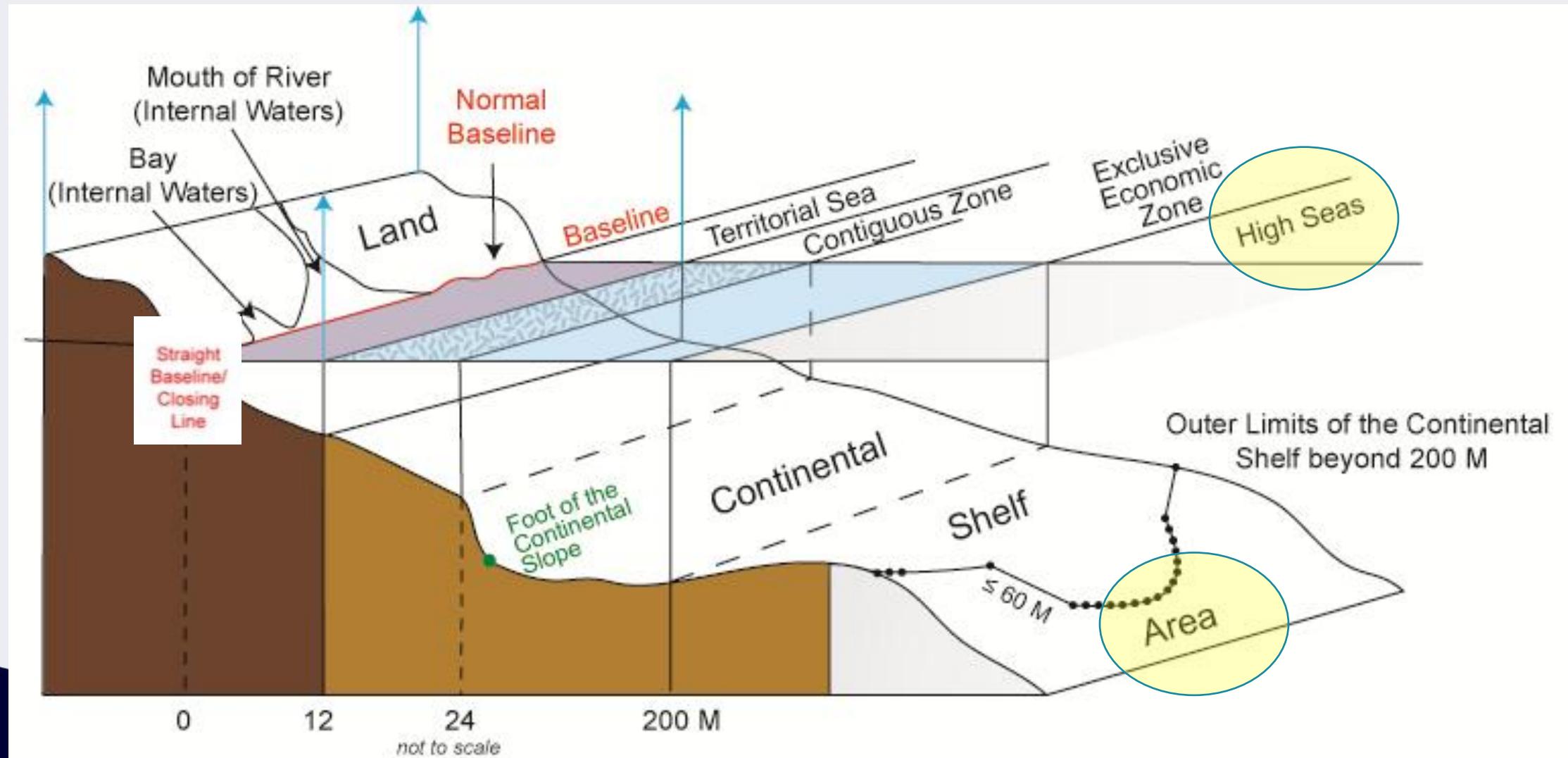
BBNJ Agreement: third implementing agreement to UNCLOS

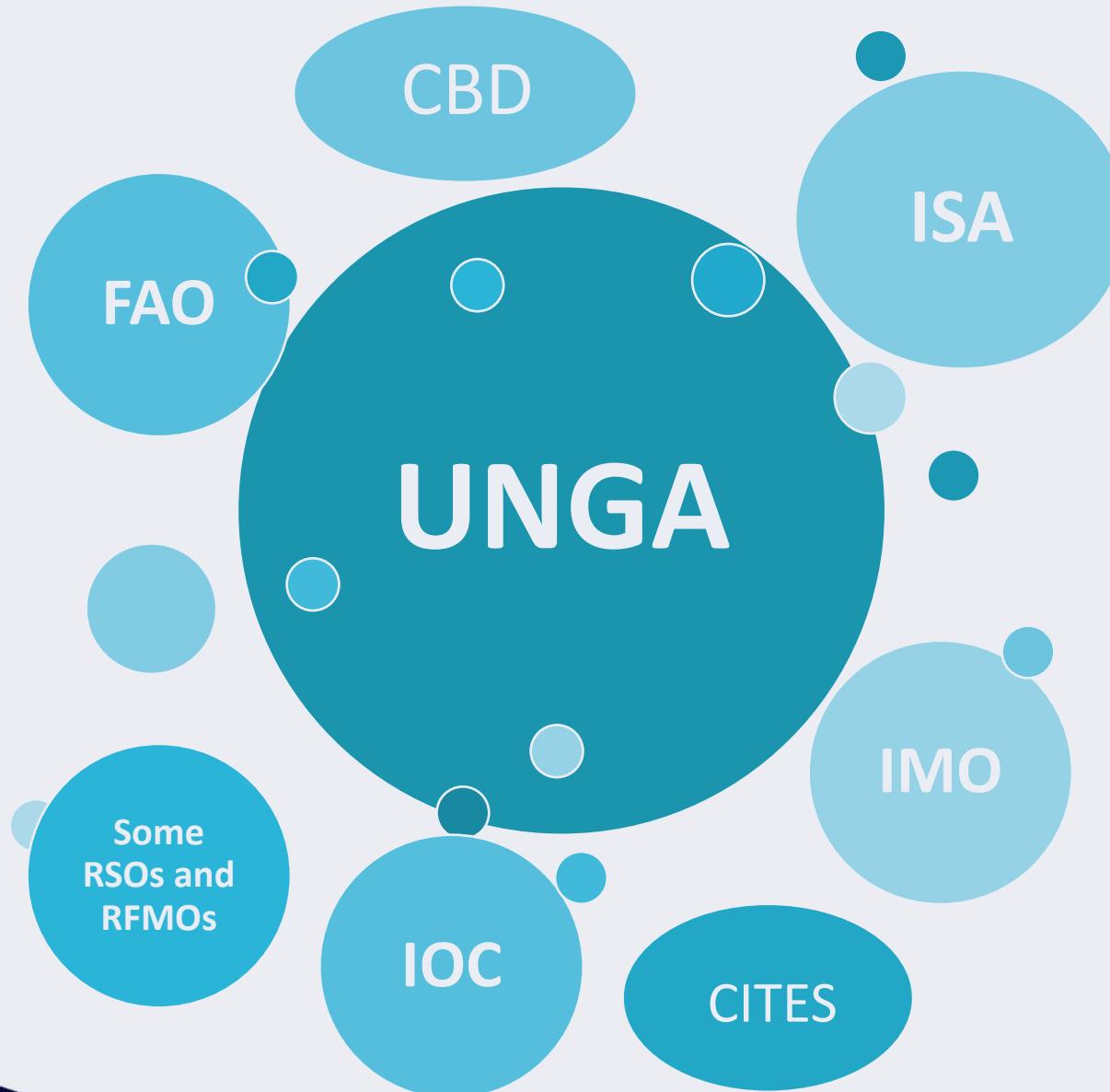
- Consistency with UNCLOS
- Not prejudice the rights, jurisdiction and duties of States under the Convention
- Legal status of non-parties to UNCLOS not affected by the Agreement



UN World Oceans Day Photo Competition
@simonbiddie

Maritime zones – overview

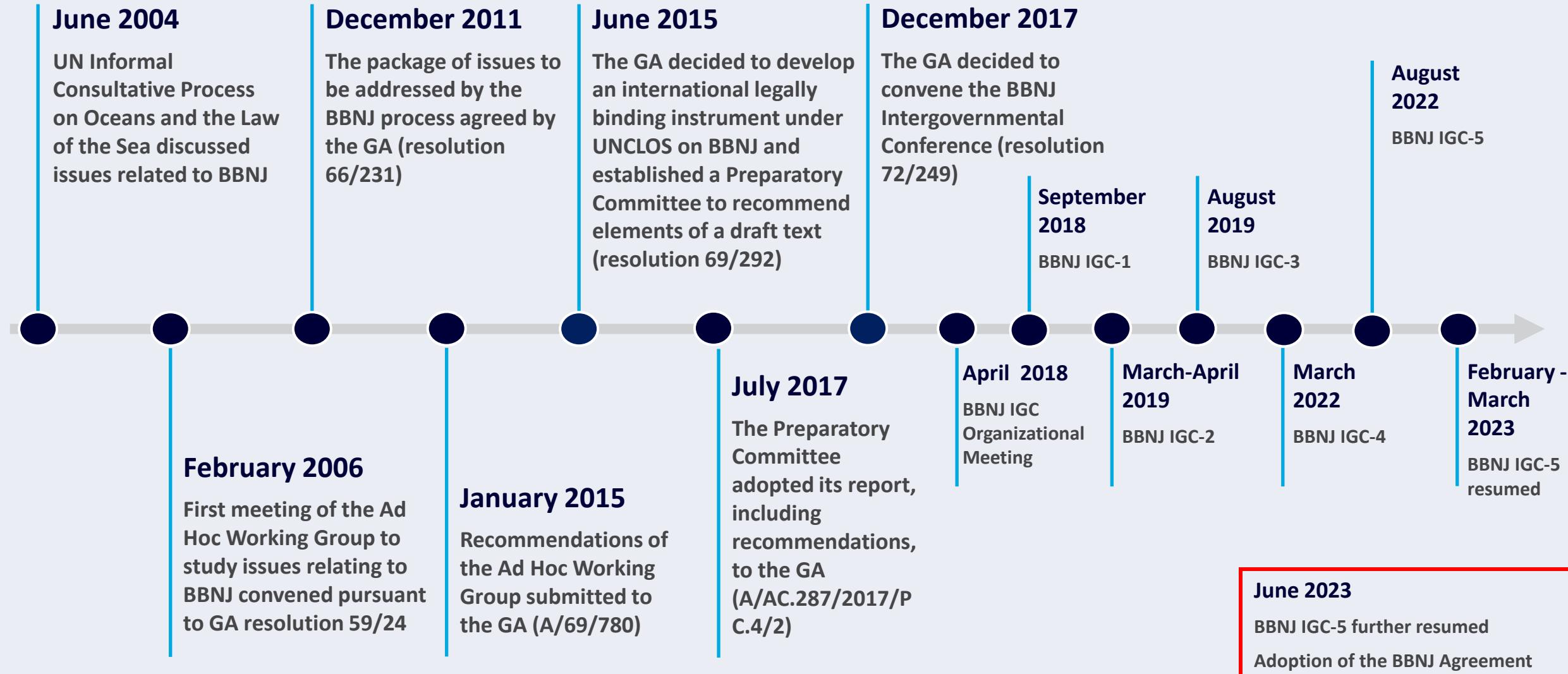




... where several sectoral organizations have competence

... where there was no overall cross-sectoral coordination mechanism

BBNJ Timeline



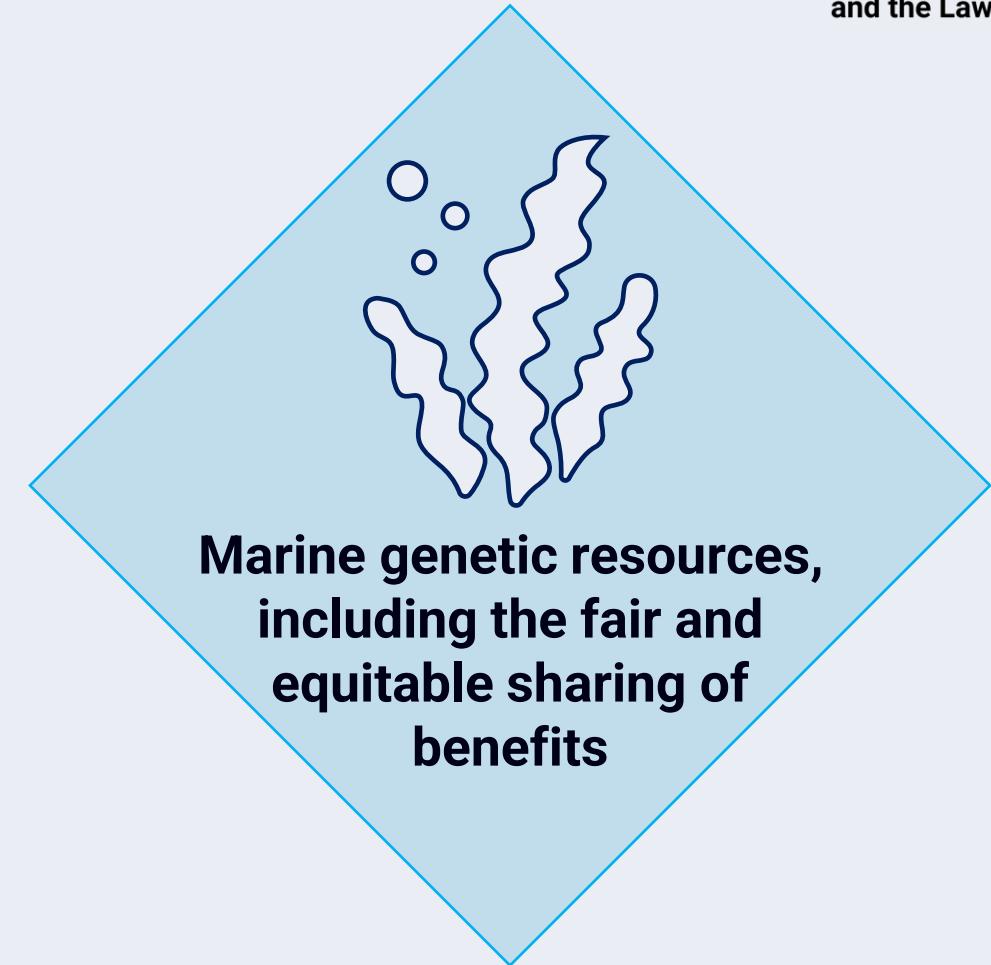


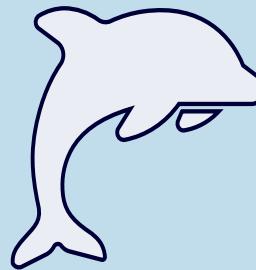
What is in the Agreement?

- ❖ A package of issues
- ❖ Cross-cutting issues
- ❖ Some noteworthy features (e.g. IPLCs)

Highlight of Parties' obligations

- Take the necessary legislative, administrative or policy measures
 - Notification
 - Deposit in repositories and databases
 - Free PIC of IPLCs
- Share monetary and non-monetary benefits
- Submit reports to the ABS Committee





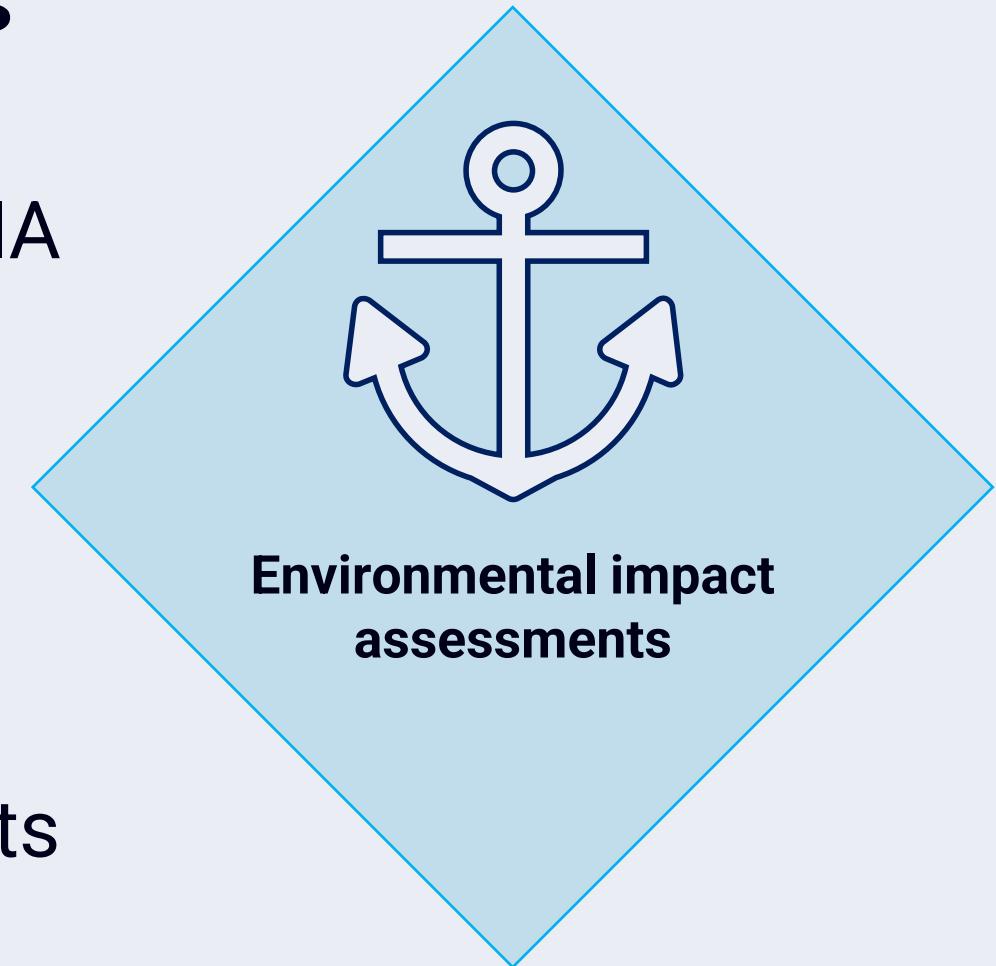
Measures such as area-based management tools, including marine protected areas

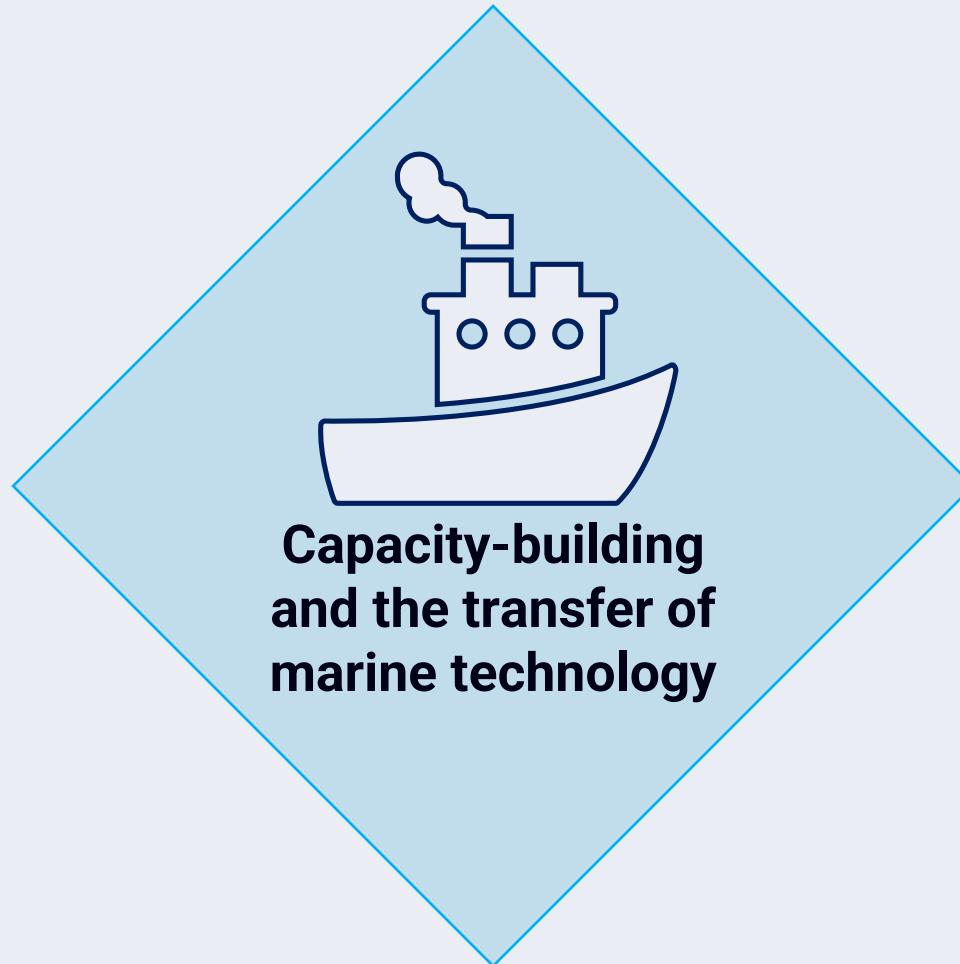
Highlight of Parties' obligations

- Consult and collaborate with relevant stakeholders
- Ensure that activities are conducted consistently with the decisions on ABMTs, including MPAs.
- Promote the adoption of measures within relevant IFBs
- Report to the COP

Highlight of Parties' obligations

- Ensure that an EIA is undertaken
- Preparation and publication of EIA reports
- Public notification of planned activities
- Monitor authorized activity and report on impacts
- Make available monitoring reports





Highlight of Parties' obligations

- Cooperate in CB&TMT and provide resources
- Give full recognition the special requirements of developing States Parties
- Promote and encourage conditions for TMT
- Submit reports to the CB&TMT Committee

Cross-cutting issues



- Preamble
- General provisions
- Institutional arrangements
- Financial resources and mechanism
- Implementation and compliance
- Settlement of disputes
- Non-parties to the Agreement
- Good faith and abuse of rights
- Final provisions

General provisions



Relationship with other relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies (IFBs)

- Not undermine relevant IFBs
- Promote coherence and coordination with relevant IFBs

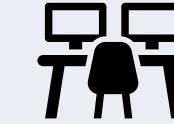
International cooperation

- Cooperate under the Agreement, including through strengthening and enhancing cooperation with and among relevant IFBs
- Endeavour to promote the objectives of the Agreement when participating in decision-making under other relevant IFBs

Institutional arrangements



Conference of the Parties (COP)



Secretariat



Scientific and Technical Body



Access and Benefit-Sharing Committee



Clearing-House Mechanism



Implementation and Compliance Committee



Capacity-Building and Transfer of Marine Technology Committee



Finance Committee

Next steps





Entry into force: 17 January 2026



First meeting of the Conference of the Parties: to be convened by the UN Secretary-General no later than one year after the entry into force of the Agreement

BBNJ Agreement Preparatory Commission

❖ **Established by UNGA Resolution 78/272 of 24 April 2024**

The Commission:

- Shall **prepare** for the **entry into force** of the BBNJ Agreement and the **convening of COP1**
- **Open** to all UN Member States, members of the specialized agencies and parties to UNCLOS, as well as observers
- **Meetings:** 2 sessions held in **2025** + at least one session in **2026** (23 March – 2 April)
- **Decision-making:** after 20 September 2025, the taking of decisions by the Commission shall only be by States and regional economic integration organizations that have signed the Agreement or have ratified, approved, accepted or acceded to the Agreement

BBNJ Prep Com Programme of Work

Governance issues

- Rules of procedure for COP*
- Terms of reference, modalities for the operation and rules of procedure for subsidiary bodies (ABS Committee, CBTMT* Committee, Finance Committee, Implementation and Compliance Committee*, STB*)
- Selection process for members of STB* and other subsidiary bodies
- Arrangements for functioning of the secretariat*
- Reporting requirements
- Arrangements to enhance cooperation with relevant IFBs

Issues pertaining to the operation of the CHM

- **Modalities for the operation of the CHM, such as:**
 - a. Type, architecture and functionalities of the platform
 - b. Process for generating the "BBNJ" standardized batch identifier
 - c. Modalities to facilitate the matching of CB needs with the support available and with providers for the TMT
 - d. Terms of cooperation with relevant IFBs

Financial rules, and financial resources and mechanism

- **Financial rules governing the funding of the COP, the secretariat and any subsidiary bodies***
- **Arrangements with GEF to give effect to provisions on funding***
- **Operationalization of provisions on financial resources and mechanism**, e.g. [subject to further consultations]:
 - a. Establishment of the voluntary trust fund
 - b. Arrangements to give effect to provisions on the special fund
 - c. Scale of assessed contributions



Office of Legal Affairs
Division for Ocean Affairs
and the Law of the Sea

Thank You



@undoalos



@undoalos



undoalos



doalos@un.org



Topic:

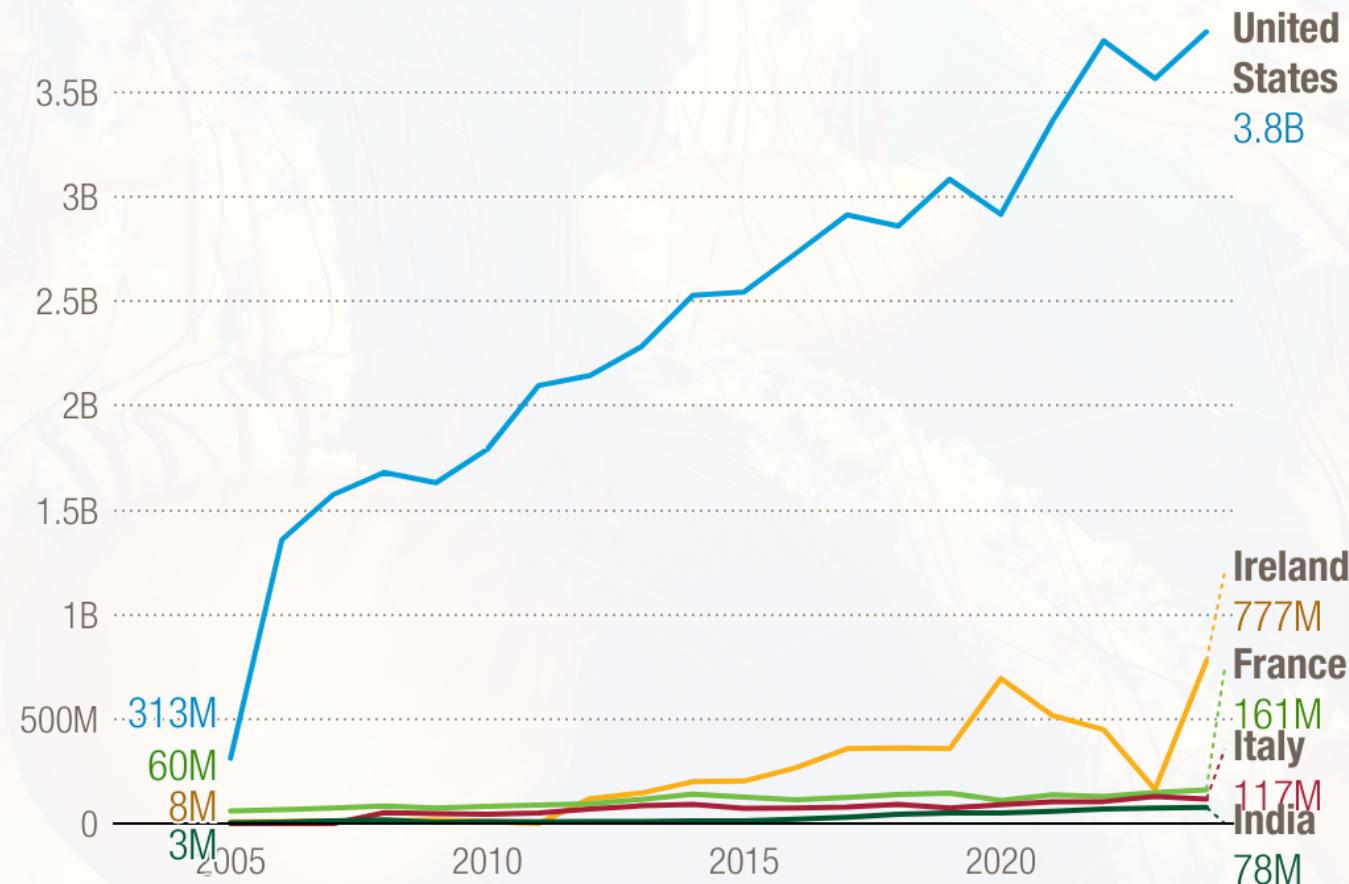
**Trade-related aspects of the UN BBNJ
Agreement: provisions on marine
genetic resources and access and
benefit sharing**

**UNCTAD,
Division on International
Trade and Commodities**



➤ The US dominates exports of marine research and development services

Top 5 exporters of marine R&D services, 2024



Source: UNCTAD. 2025. Trade in ocean services database

Note: Based on available data reported by countries. UNCTAD ocean services trade methodology

➤ The US and other high-income economies dominate exports of marine R&D.

➤ Most economies do not yet report data for marine R&D exports

➤ Developed economies and China lead in academic publications on marine genetic resources

Leading institutions in publications on general marine biodiversity

France

French National Centre for Scientific Research
Ifremer
Sorbonne Université



China

Chinese Academy of Sciences
Ocean University of China
Institute of Oceanology
University of Chinese Academy of Sciences



Japan

The University of Tokyo
Hokkaido University



United States

NOAA National Marine Fisheries Service
University of Washington



Australia

University of Queensland
James Cook University



Brazil

Universidade de São Paulo



Source: UNCTAD. 2025. Based on Oldham et al. 2025. Study on 'Marine Genetic Resources' Market Value and State of the Art of Commercialisation of Related Products in the Context of the BBNJ Negotiations
Note: Publications up to 2023

➤ Scientific knowledge is concentrated in developed economies and China

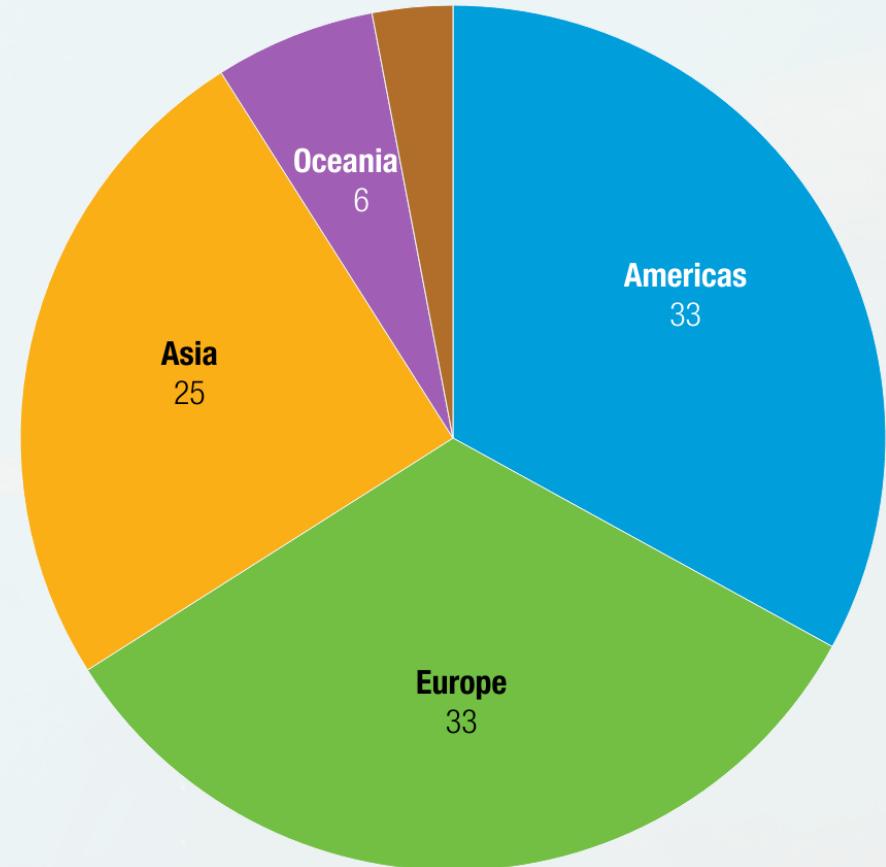
➤ Open access and joint research with academic institutions in developing nations are needed to accelerate knowledge transfer and capacity building

- Africa accounts for only 3% of global marine genetic resources publications, highlighting a severe lag in scientific participation
- Support is needed for capacity-building and investment in research infrastructure.

➤ Africa only accounts for 3 per cent of academic publications on marine genetic resources

Share of total publications on general marine biodiversity by UN region

■ Americas ■ Europe ■ Asia ■ Oceania ■ Africa



Source: UNCTAD. 2025. Based on Oldham et al. 2025. Study on 'Marine Genetic Resources' Market Value and State of the Art of Commercialisation of Related Products in the Context of the BBNJ Negotiations
Note: Publications up to 2023

► **Applied R&D and patent filing for marine organisms are dominated by a few multinational corporations in the US and Europe.**

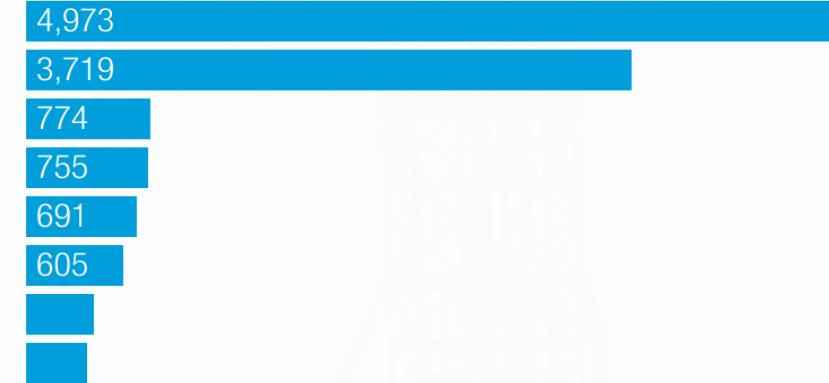
► **In most cases, technology transfer as specified in the BBNJ will require incentives for private sector patent holders**

► **Applied research on marine organisms is led by firms from developed economies**

Top patent applicants by first filings related to marine organisms

► **United States**

Monsanto Technology 4,973
Pioneer Hi-Bred International 3,719
Stine Seed Farm 774
M.S. Technologies 755
University of California 691
Harvard University 605
Dupont
Agrigenetics



► **Germany**

BASF (Badische Anilin & Soda Fabrik) 1,126
Bayer Cropscience 700
Bayer 459



► **Denmark**

Novozymes 1,011



► **Netherlands**

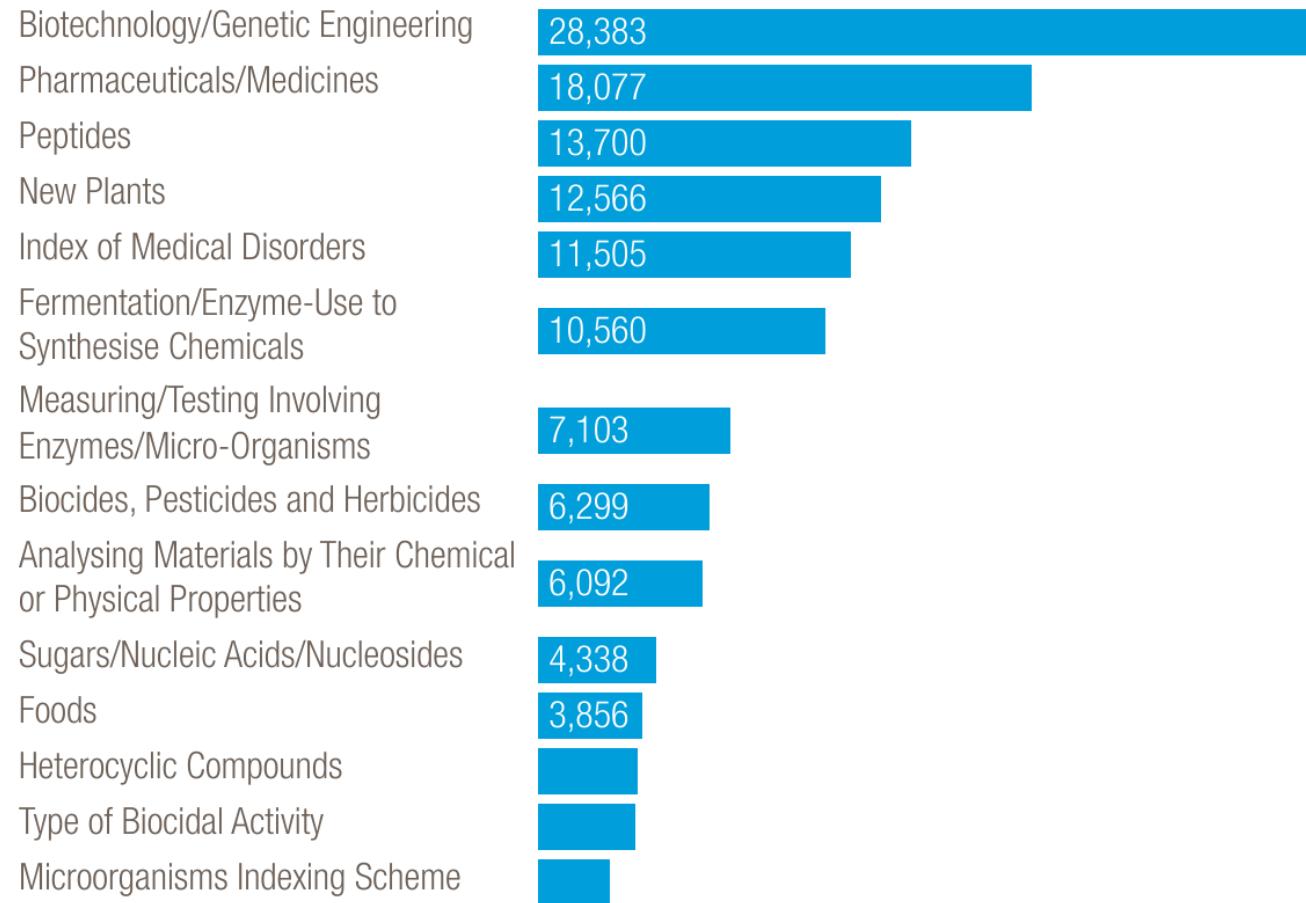
DSM IP Assets (Dutch State Mines IP Assets) 616



Source: UNCTAD. 2025. Based on Oldham et al. 2025. Study on 'Marine Genetic Resources' Market Value and State of the Art of Commercialisation of Related Products in the Context of the BBNJ Negotiations
Note: Patent filings up to 2023

Biotechnology and healthcare are the leading applications of research on marine organisms

First filings for marine organisms, International Patent Classification



Source: UNCTAD. 2025. Based on Oldham et al. 2025. Study on 'Marine Genetic Resources' Market Value and State of the Art of Commercialisation of Related Products in the Context of the BBNJ Negotiations

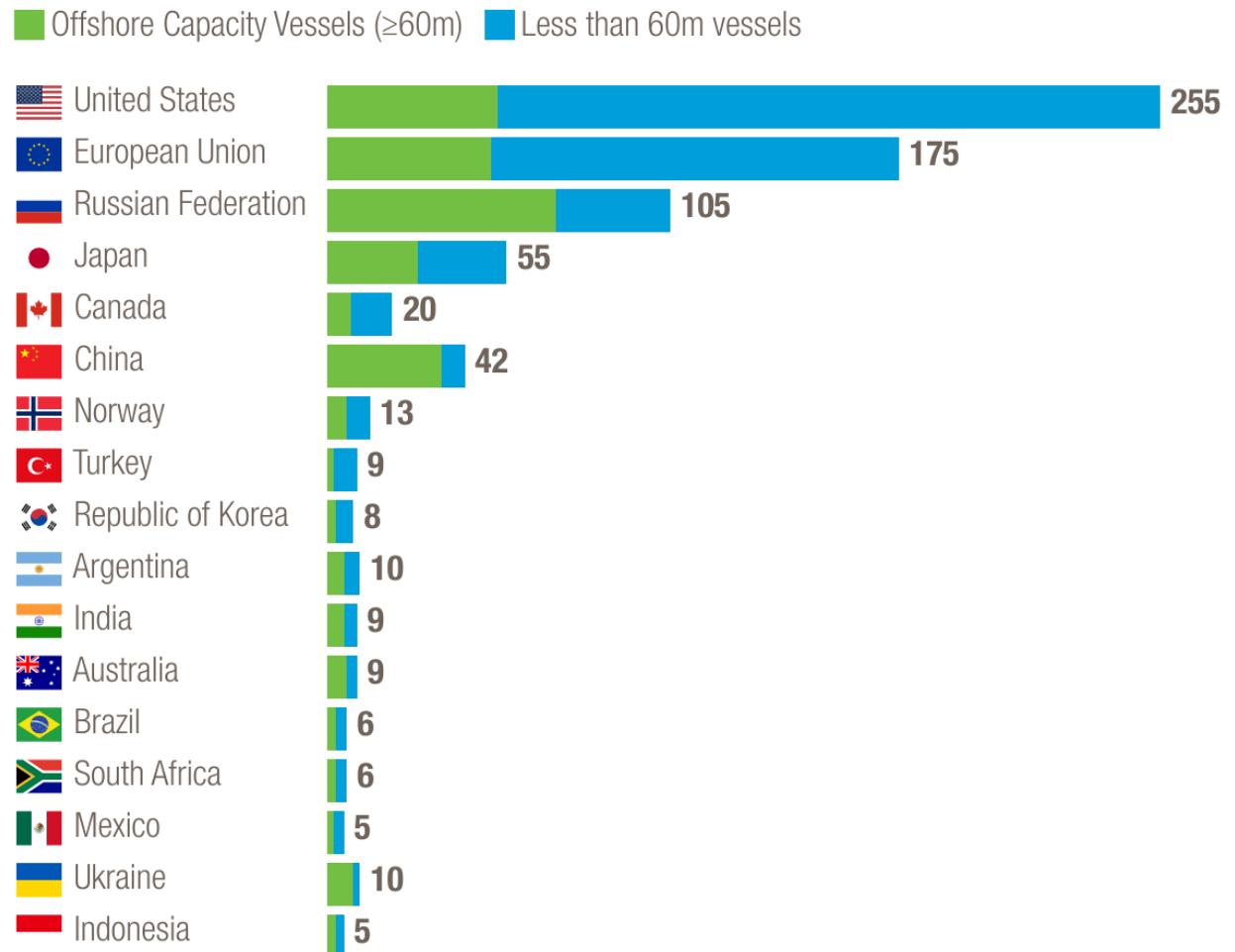
Note: Patent filings up to 2023

→ The utilization of marine genetic resources is concentrated in high-value, knowledge-intensive industries like biotechnology and pharmaceuticals

→ Benefit-sharing design requires flexibility to accommodate both the long-term, high-risk nature of drug development and cycles of other bio-industries (food and cosmetics)

➤ Developing economies have relatively less capacity to conduct offshore marine research

Estimated number of research vessels, selected countries



Source: UNCTAD desk research (2025) and UN (2021). The Second World Ocean Assessment Volume II (drawing on data from International Research Vessel Database).

➤ Large research vessels essential for high seas-seabed exploration are concentrated in the global North, although developing nations with few physical means of access

➤ Sharing physical access through joint cruises and onboard opportunities for developing country scientists is needed.



The Biodiversity, genetic resources, associated traditional knowledge and ABS Puzzle

The Convention on Biological Diversity (1992)



WHO Pandemic Agreement: Pathogen Access and Benefit Sharing provisions (PABS) (2025)

WIPO Treaty on Intellectual Property, Genetic Resources, associated traditional knowledge (2024)

UN BBNJ Agreement (2023):

The BBNJ Agreement provides a state-of-the-art ABS mechanism for MGR in ABNJ that would be further developed by subsequent COPs



FAO treaty on Plant Genetic Resources for Food and Agriculture (2004)

The Nagoya Protocol on ABS (2010)

Global Biodiversity Framework: 2030 Targets



BBNJ Agreement: Key Concepts – MGRs, DSIs, and Scope



Definition & Scope of MGRs

"Any material of marine plant, animal, microbial or other origin containing functional units of heredity of **actual or potential value**"



Inclusion of Digital Sequence Information (DSI)

The inclusion of DSIs provisions is groundbreaking.

The BBJ J Agreement applies to "activities with respect **to MGRs and DSIs on MGRs.**" This is groundbreaking.

There is not a definition of DSIs in the BBNJ Agreement. In the CBD context it is usually understood as "**data derived from dematerialized GRs**".



No Retroactive Application

It applies not only to MGRs collected **after** entry into force but also extends to the "utilization" of MGRs and DSIs collected/generated **before** entry into force, **unless a Party makes a written exception**

BBNJ Agreement: Links with Fisheries and Aquaculture



Fishing and fish (as a commodity) is excluded from the scope of the Part II

Except where such fish or other living marine resources are regulated as **"utilization" (R&D) :**



Regulated by specific BBNJ provisions



Fishing is covered in all other Parts of the BBNJ Agreement
Particularly clear under **Part V: Capacity Building & Transfer of Marine Technology**

- **Increasing cooperative links** between regional institutions
- North-South and South-South collaboration
- collaboration among regional seas organizations &
- **regional fisheries management organizations** (Annex II, ix)



Potential value of MGR for food, non-food and aquaculture purposes



We farm about **600 aquatic species & harvest over 1800 species** (FAO, 2019)



60 to 80% of the world's biodiversity is found in the oceans (French Republic & Ifremer, 2025)



Between **0.7–1.0 million marine species** (Appeltants et Al, 2012)

BBNJ Agreement: Link with Intellectual property right

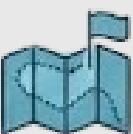
Definitions of inventions and patentability criteria



"Discoveries" and isolated genes/ biochemicals as inventions?



Patentability criteria (novelty, inventive step & industrial application / usefulness)



Territoriality principle

No IP provision in the BBNJ Agreement

Patent filing and granting can be the direct consequence of the "utilisation" of MGRs



If MGRs or DSI are subject to "utilization" (including commercialization), **Parties must notify the CHM** of results (publications, patents products) along with batch identifier

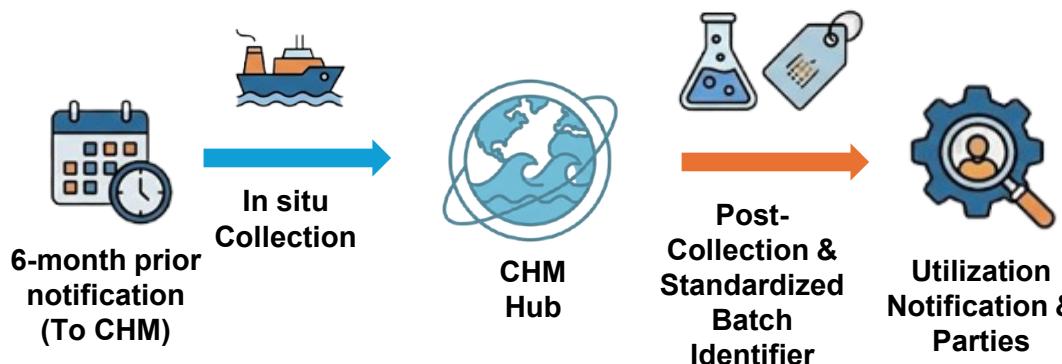
Complementary transparency and enforcement mechanism within the IP system



The WIPO treaty on GR and associated Traditional knowledge (TK) (2024) creates an international obligation for patent applicants **to disclose the source or origin of GRs and associated TK in patent applications**, regardless of where they were found.

BBNJ Agreement: ABS Framework

Transparency & Traceability Systems (Clearing-House Mechanism - CHM)



Fair and Equitable Sharing of Benefits (Art. 14)

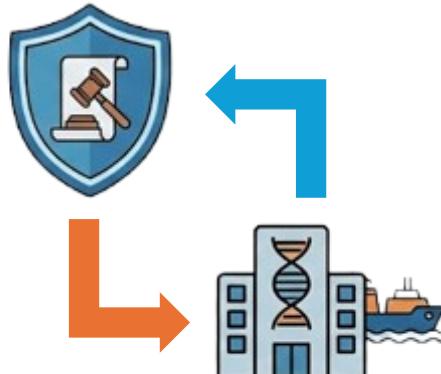
Non-monetary benefits



Monetary benefits

- Initial benefit sharing modality (Developed Parties make annual contributions (50% of their assessed contribution) to the special fund upon entry into force)
- Future arrangements (to be decided by future COPs)

Obligations of States



States to take necessary legislative, administrative and policy measures to ensure required notification & Benefit sharing obligations by all actors in relation to marine genetic resources

ABS Committee



- Responsible for establishing benefit-sharing guidelines and ensuring transparency
- With representation from developing countries

UNCTAD
Ocean Economy
Webpage



Thank you

LinkedIn Account





Topic:

Implications of the BBNJ Agreement for commercial shipping

**UNCTAD
Division on Technology
and Logistics**



➤ Introduction

- The BBNJ Agreement aims to act as a **catalyst for multilateral collaboration**.
- **Shipping** is one of the most important activities taking place in the High Seas but **not specifically referenced in the Agreement**
- **BBNJ Agreement may have implications for shipping lanes and operations.**
- Interactions between the **international legal framework for maritime transport**, including conventions for the **protection of the environment** and the provisions and general **objectives** of the Agreement.



Part I: General Provisions

The Agreement has been drafted as **to not create normative conflicts**.

- ▶ **Art 5(1) and (2): Relationship between frameworks**

This Agreement shall be interpreted and applied

- ▶ *in the context of and in a manner **consistent with the Convention** [UNCLOS](...)*
- ▶ *in a manner that **does not undermine** relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies and that promotes coherence and coordination(...).*

- ▶ **Art 8(1) and(2): International Cooperation**

*Parties shall cooperate (...) including through **strengthening and enhancing cooperation with** (...) and **among** (...)*

- ▶ *Parties shall endeavour to **promote**, as appropriate, **the objectives** of this Agreement **when participating in decision-making** under **other** relevant legal instruments, frameworks, or global, regional, subregional or sectoral bodies.*

Part III: Area-Based Management Tools

International Maritime Organisation (IMO) already has processes to protect marine environment and biodiversity of certain areas from **shipping activities**

PSSA		Special Area
Legal basis	IMO Convention +A. 982(24)	MARPOL Convention +A.927(22)
Proposed	Member State(s) of the IMO to the MEPC	Contracting Party/ies of MARPOL 73/78 to the MEPC
Approved	IMO (Sub) Committee or General Assembly	MARPOL amendment (tacit agreement procedure)
Restrictions to shipping	Associated Protective Measures	Restriction of discharges allowed under Annexes
Where	Within and beyond a State's territorial sea	Maritime zones of state(s) or (semi)-enclosed sea

Particularly Sensitive Sea Areas (PSSAs)
Special Areas under MARPOL 73/78

- Any new measures under the Agreement should **respect existing measures/ competence** of other organisations (Art 22 (1)(b) and (c)).
- Would they **require revision** after the entry into force of the Agreement?
- New Area-Based Management Tools could require adjustments of existing **shipping routes** → IMO has **exclusive jurisdiction** in the designation of routeing and reporting systems for shipping.
- **Close engagement** with and cooperation with the IMO would be pivotal **to avoid shipping/supply chain disruptions**.

Part IV: Environmental Impact Assessments

Parties are required to **conduct an EIA** for all *planned activities* (...) that 'could **cause substantial pollution of or significant and harmful changes to the marine environment** in areas **beyond national jurisdiction**' (Art 28 (1))

Exception 1: when the activity has a **minor or transitory effect** on the marine environment (Art 30(1)).

Are the effects of shipping only transitory?

- Underwater Radiated Noise (URN) and [IMO Guidelines](#)

Exception 2: when the potential impacts (...) **have been assessed** in accordance with the requirements of **other relevant legal instruments** or frameworks(...); (Art 29 (4)).

Do other assessments ensure the same level of protection to biodiversity as the Agreement?

- [London Dumping Convention 1972 and 1996 Protocol](#)

Rule: when the effects of the activity are **unknown or poorly understood** Art 30(1)).

What are the effects of new materials and technologies on biodiversity?

- Alternative fuels
- Automation in shipping
- See [RMT 2025](#)

Part V: CAPACITY-BUILDING

- Small Island Developing States OR Big Ocean States?
- Disproportionate size to their Exclusive Economic Zone and neighbouring High Seas
- Acting as **trustees for the international community** for the enforcement of environmental regulation in the High Seas
- Funding for activities(Art 44, Annex II)

✓ to strengthen **national regulatory frameworks** for **the implementation** of the Agreement.

✓ to further **education and training in policy and governance.**

