



Food and Agriculture Organization
of the United Nations

The State of the World Fisheries and Aquaculture: Blue Transformation in Action

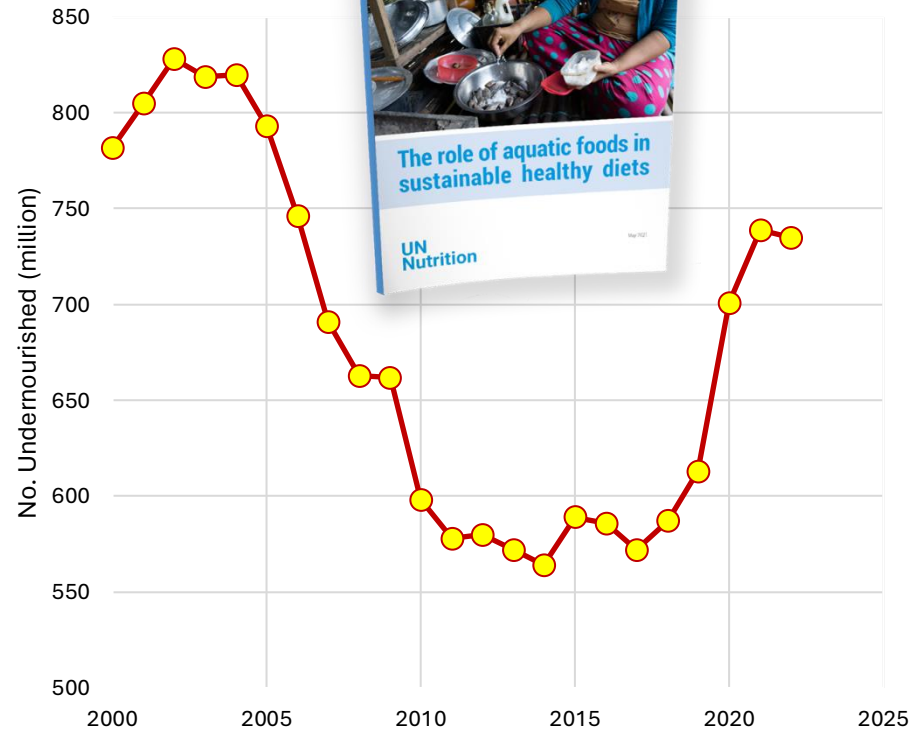
G20 Agriculture Working Group
11-12 June 2024, Brasilia, Brazil

Carlos Fuentevilla
Fishery Officer, FAO-UN

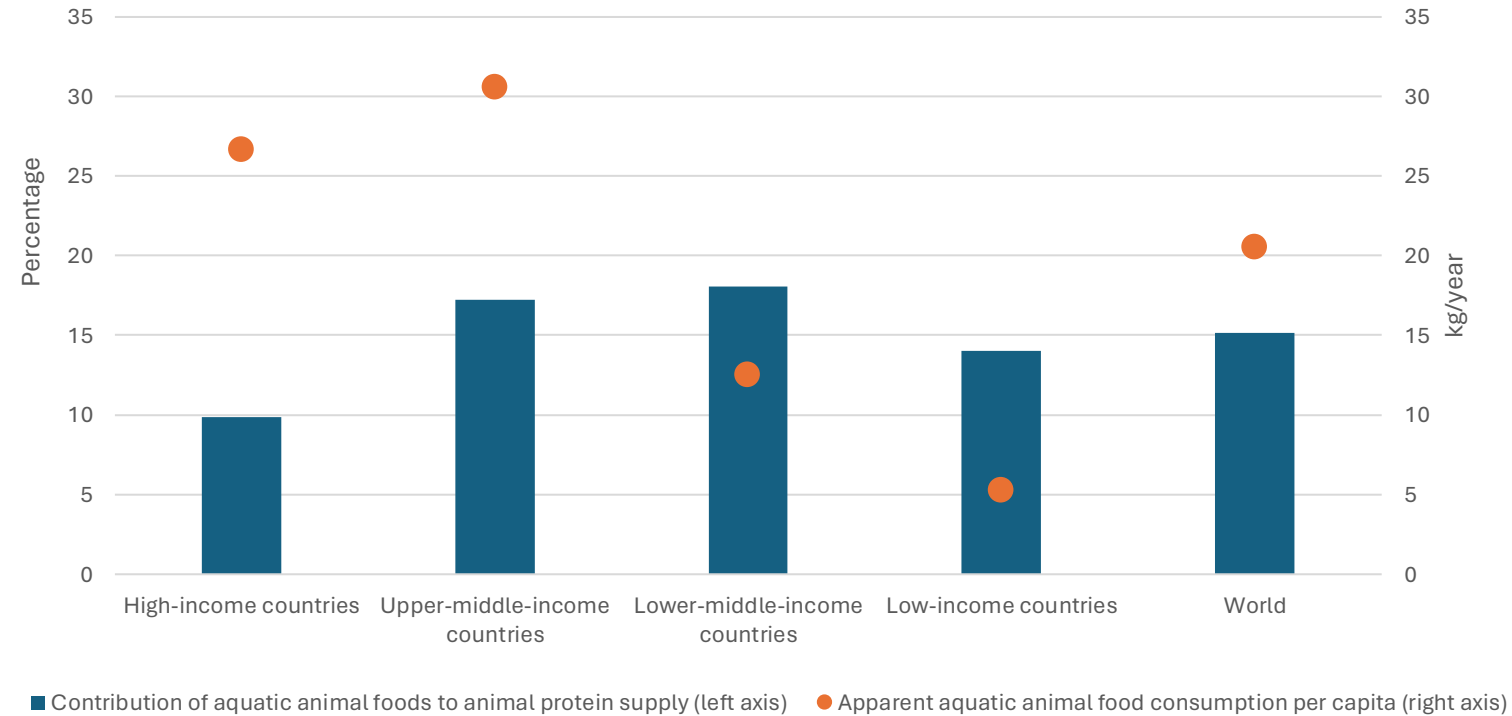




THE GROWING CHALLENGE TO FEED THE WORLD



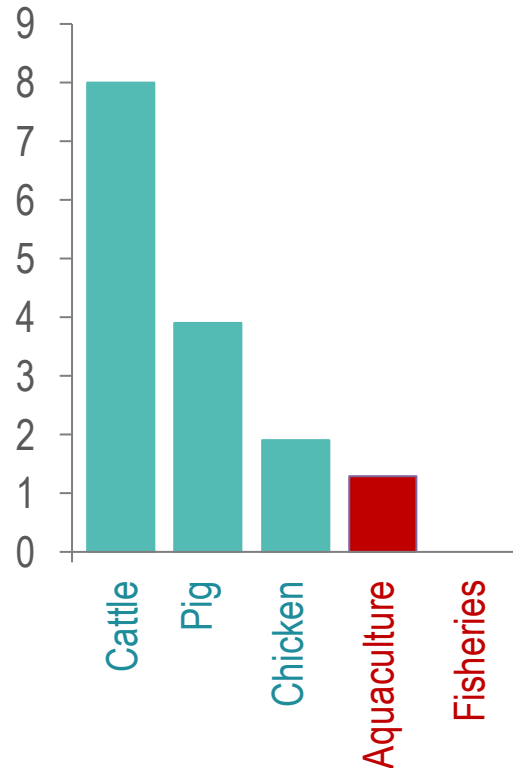
APPARENT CONSUMPTION OF AQUATIC ANIMAL FOODS & CONTRIBUTION TO SUPPLY OF ANIMAL PROTEINS, 2021





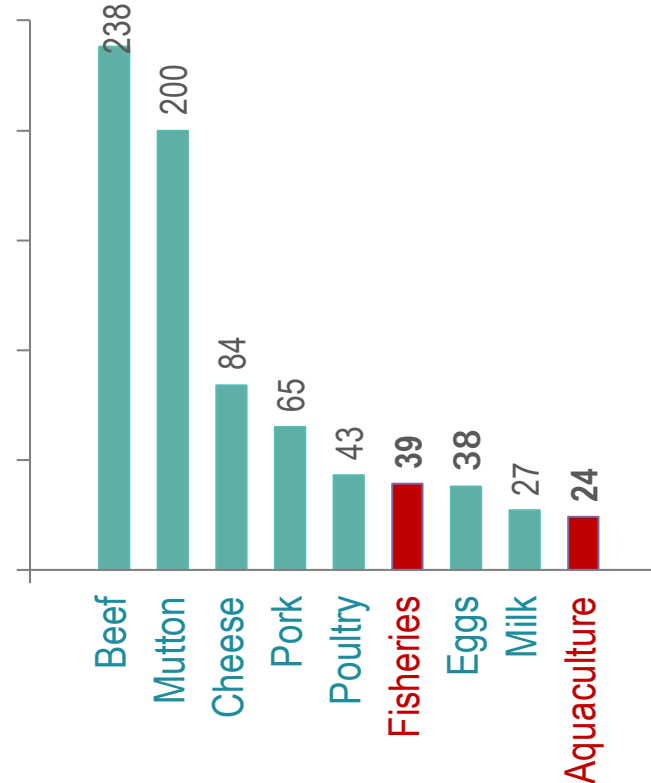
AQUATIC FOODS AS A SOLUTION

Conversion Efficiency
(kg feed/ Kg live weight)



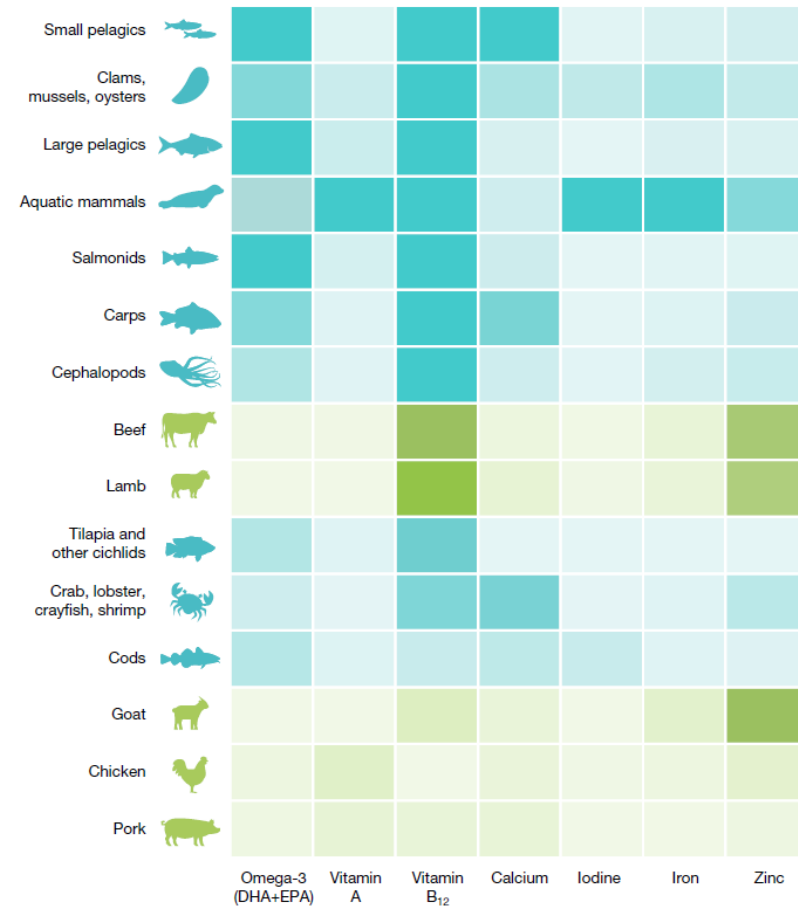
© Fry et al. 2018

GHG Emissions Intensity
(g CO2 eq./g protein)



© Petsko 2021

Aquatic Foods and Nutrition



© Golden et al, 2001



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BLUE TRANSFORMATION



[www.fao.org/documents
/card/en/c/cc6646EN](http://www.fao.org/documents/card/en/c/cc6646EN)



FAO BLUE TRANSFORMATION: VISION FOR AQUATIC FOOD SYSTEMS



OBJECTIVE 1

Sustainable aquaculture intensification and expansion

OUTCOME

Sustainable aquaculture production grows by at least 35 percent by 2030



OBJECTIVE 2

Effective management of all fisheries

OUTCOME

100 percent of marine and inland fisheries is under effective management, no IUU, livelihoods



OBJECTIVE 3

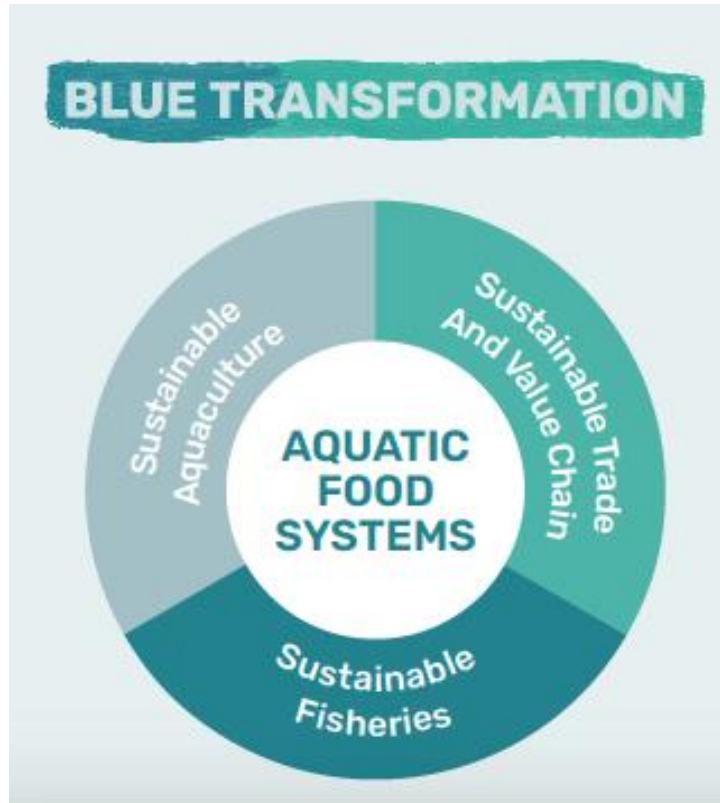
Upgraded value chains

OUTCOME

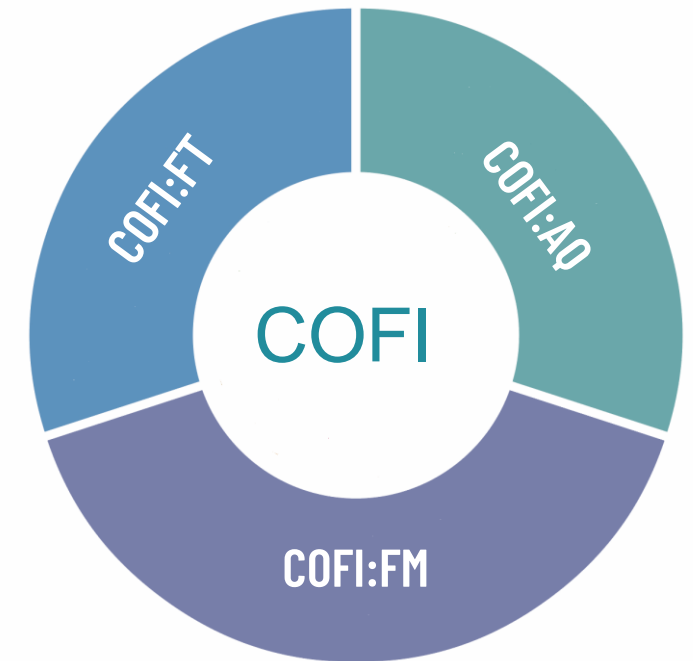
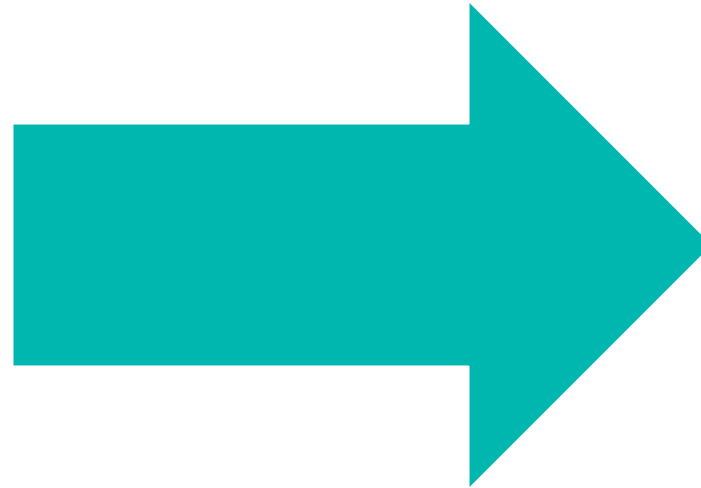
Loss and waste halved by 2030, more transparency and traceability, better market access, more equitable returns, higher consumption



ENHANCED ALIGNMENT AND DELIVERY



STRATEGIC VISION



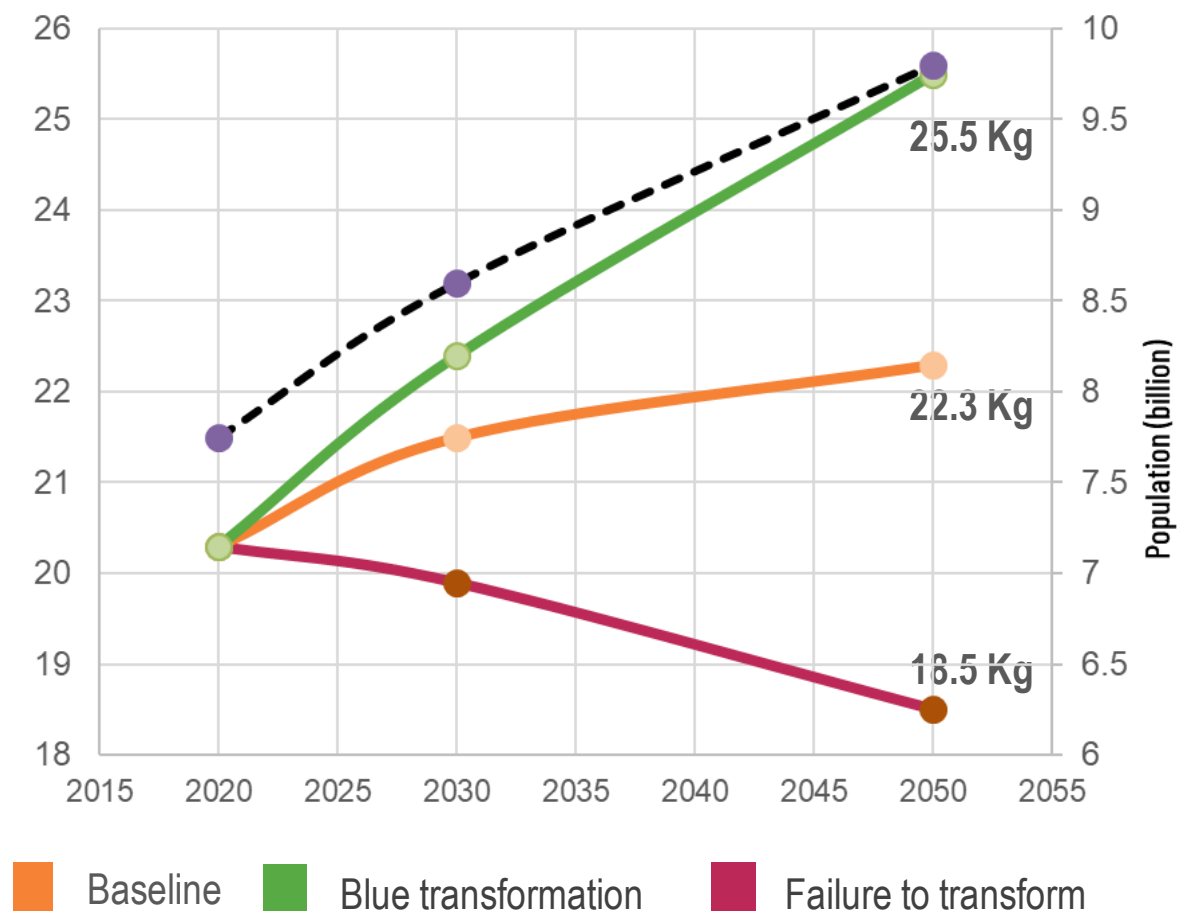
GOVERNING BODIES



WHERE WE NEED TO BE



Per capita consumption (kg/yr)
(Scenarios to 2050)



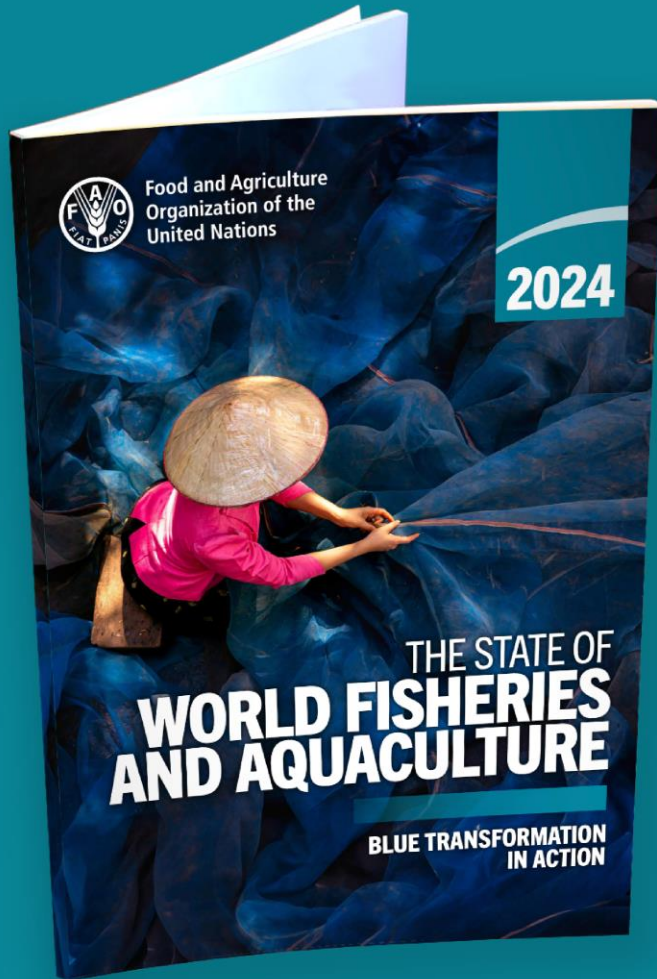


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#SOFIA2024

#Blue Transformation

2024



THE STATE OF WORLD FISHERIES AND AQUACULTURE

BLUE TRANSFORMATION
IN ACTION



BLUE TRANSFORMATION

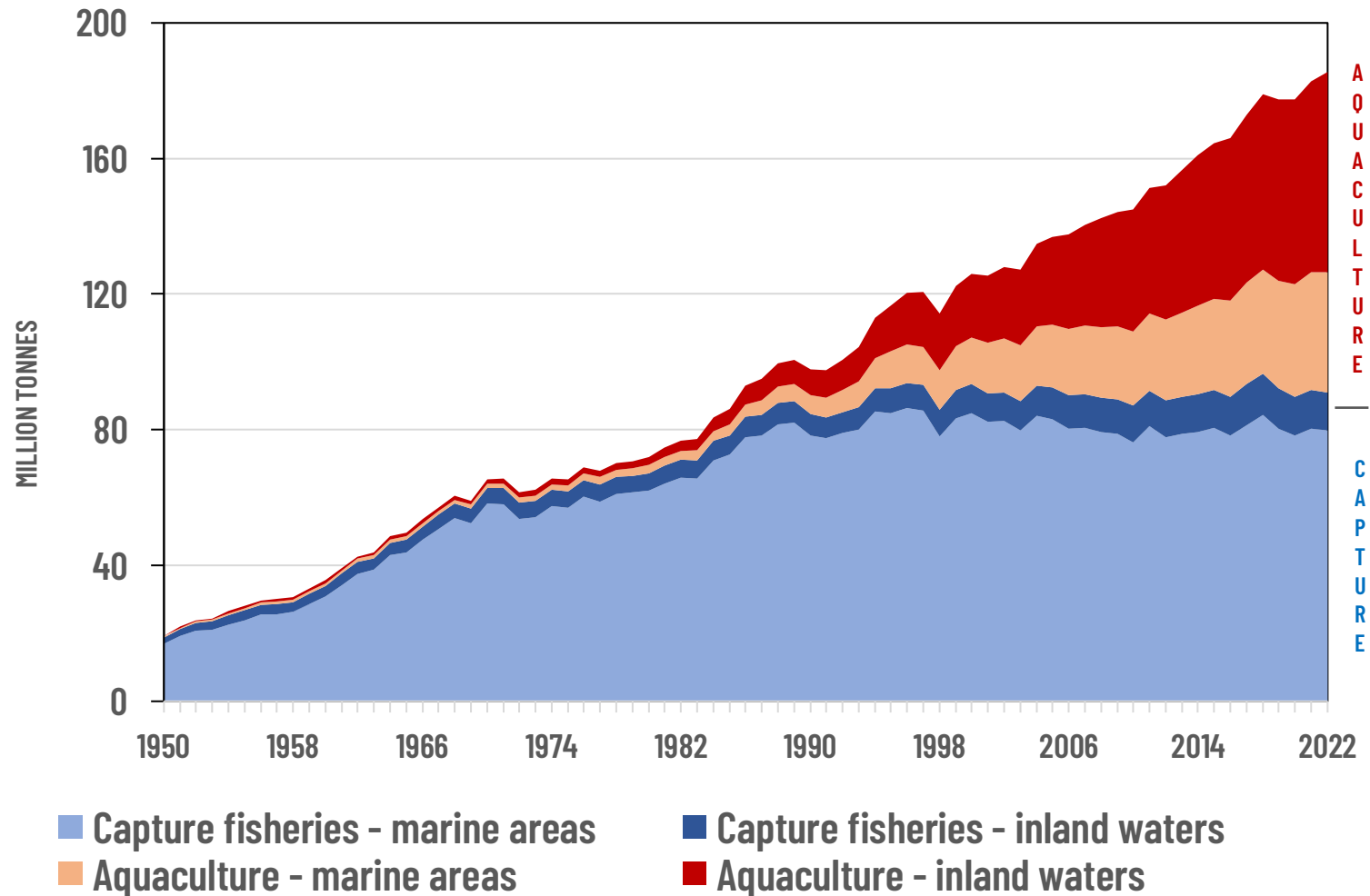
THE STATE OF
**WORLD FISHERIES
AND AQUACULTURE 2024** | BLUE TRANSFORMATION
IN ACTION

**WORLD FISHERIES AND
AQUACULTURE PRODUCTION
IS AT AN ALL-TIME HIGH**





TOTAL FISHERIES AND AQUACULTURE PRODUCTION 2022 = 223.2 Mt, A NEW RECORD



ANIMAL PRODUCTION = 185.4 Mt

Capture fisheries = 91.0 Mt ↑ 1.4%*
(12.4% Inland)

Aquaculture = 94.4 Mt ↑ 7.6%*
(62.6% Inland)

1ST TIME

ALGAE PRODUCTION = 37.8 Mt ↑ 4.1%*

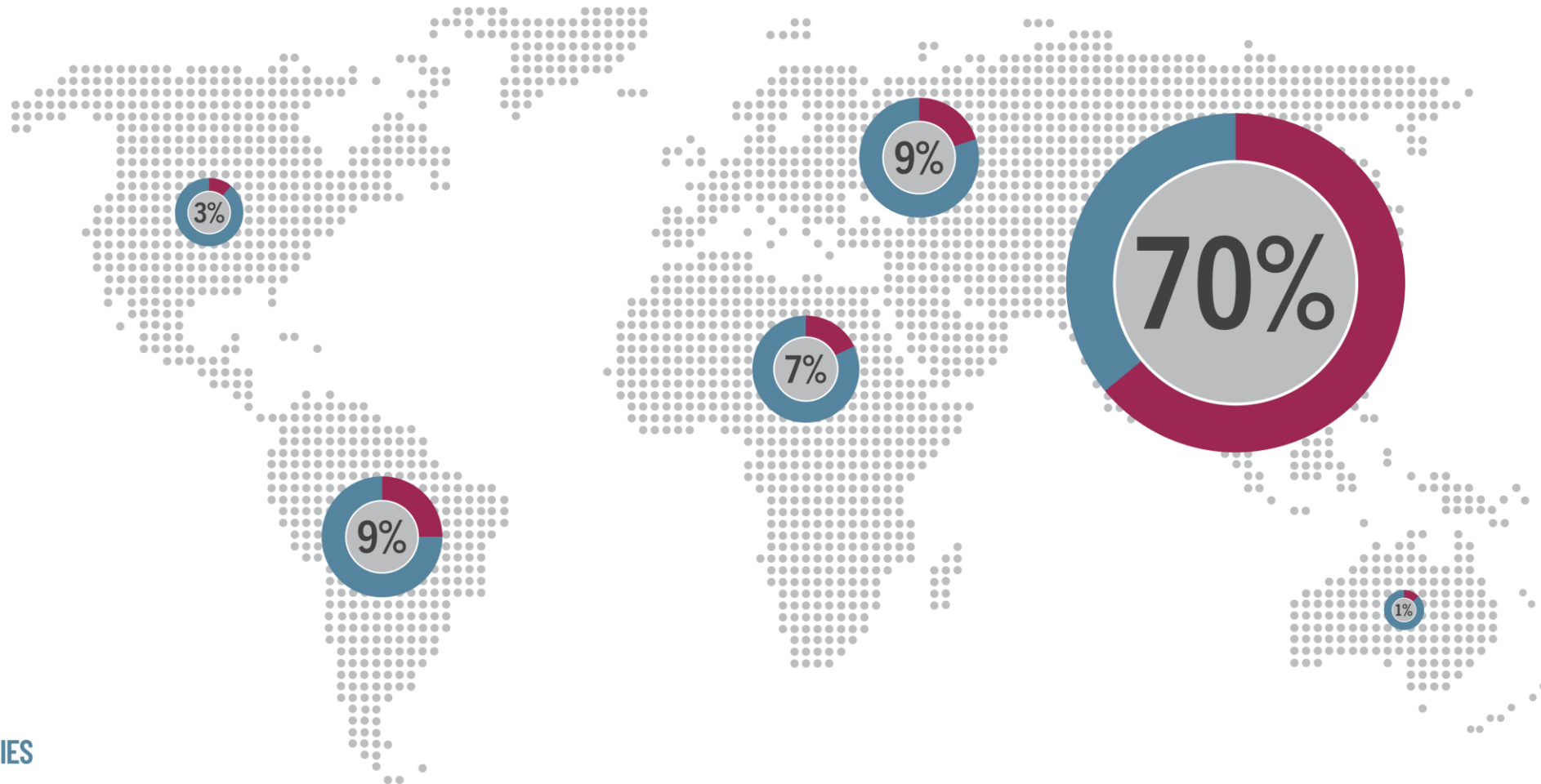
Biodiversity of Aquatic Production

3 600 spp

- **3 400** capture fisheries
- **730** aquaculture

* From 2020

WORLD ANIMAL PRODUCTION BY REGION IN 2022





BLUE TRANSFORMATION

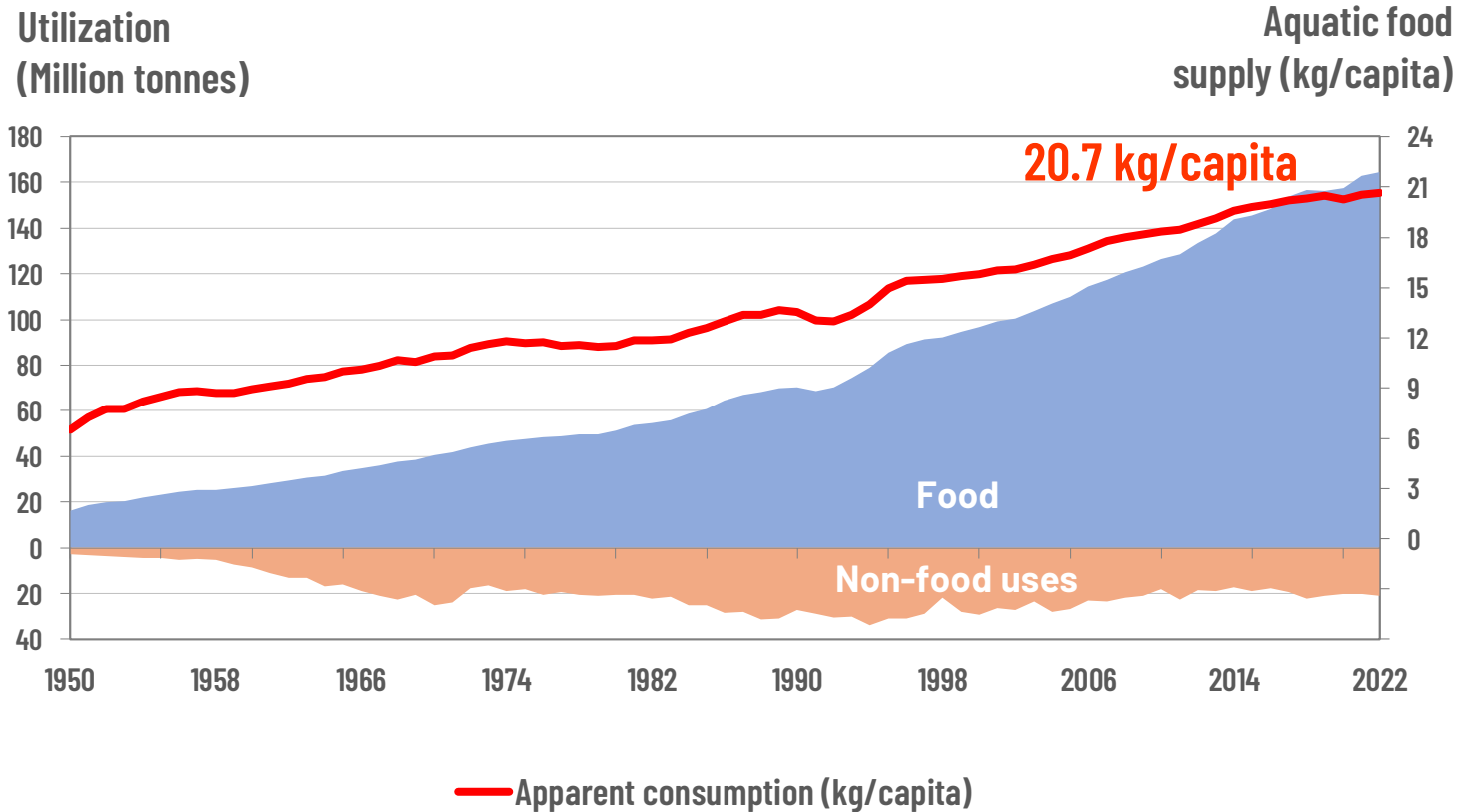
THE STATE OF
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**THE CONTRIBUTION OF
AQUATIC FOOD SYSTEMS TO
GLOBAL FOOD SECURITY AND
NUTRITION IS GROWING**

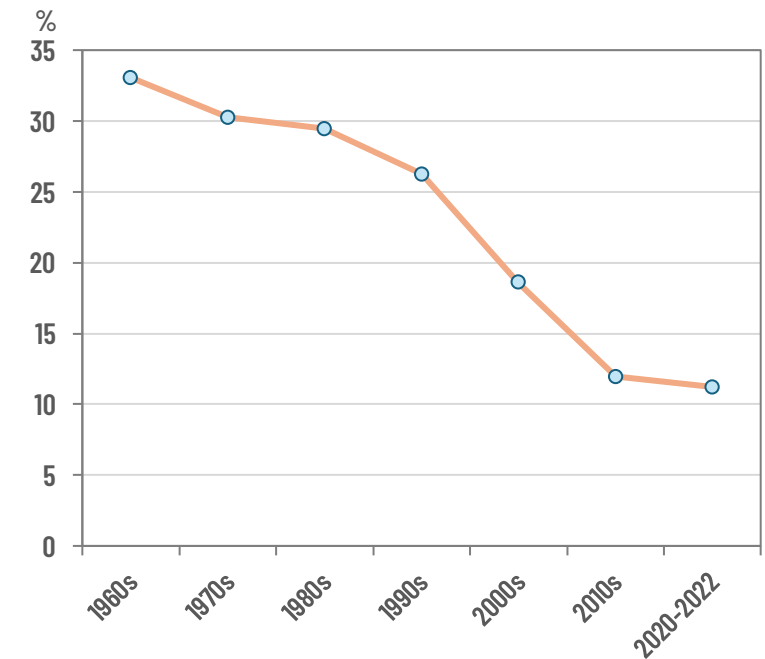




UTILIZATION AND APPARENT CONSUMPTION 2021 = 165 Mt, 20.7 kg/person



PRODUCTION NOT USED FOR DIRECT HUMAN CONSUMPTION



BY-PRODUCTS



34%
FISHMEAL



53%
FISH OIL

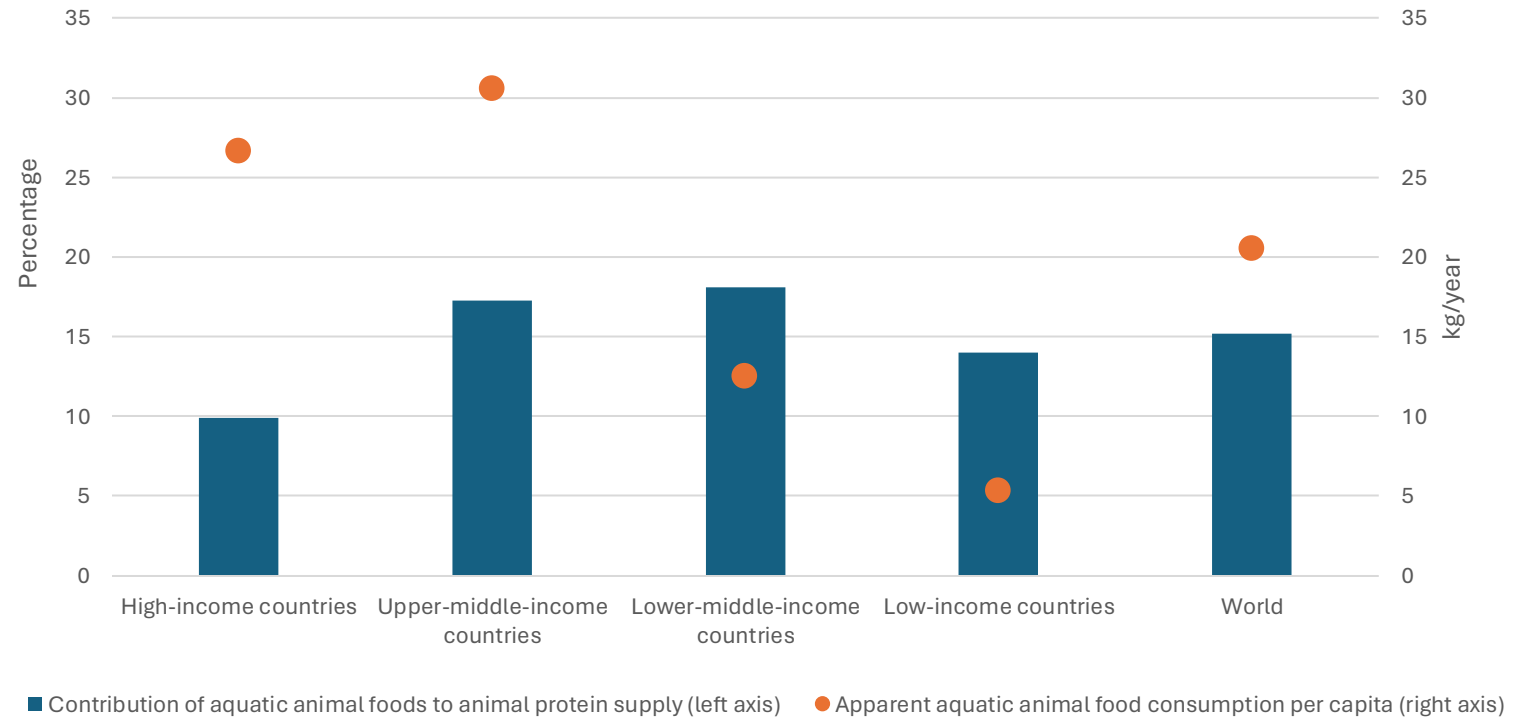


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AQUATIC FOOD AND NUTRITION



APPARENT CONSUMPTION OF AQUATIC ANIMAL FOODS & CONTRIBUTION TO SUPPLY OF ANIMAL PROTEINS, 2021





SUSTAINABLE AQUACULTURE

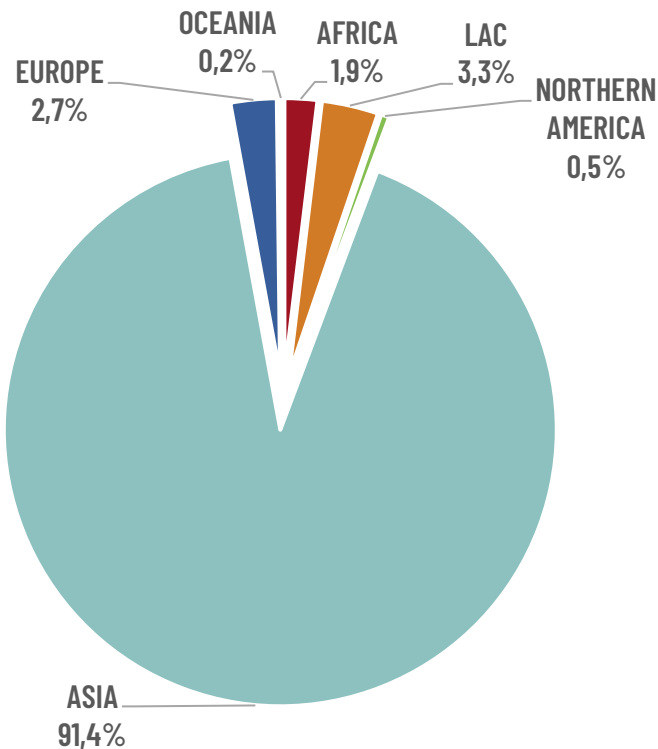
**AQUACULTURE HAS
THE POTENTIAL TO MEET
THE GROWING DEMAND FOR
AQUATIC FOODS**





WORLD AQUACULTURE PRODUCTION IN 2022 – 130.9 MT (94.4MT ANIMALS), A NEW RECORD

REGIONAL AQUACULTURE PRODUCTION

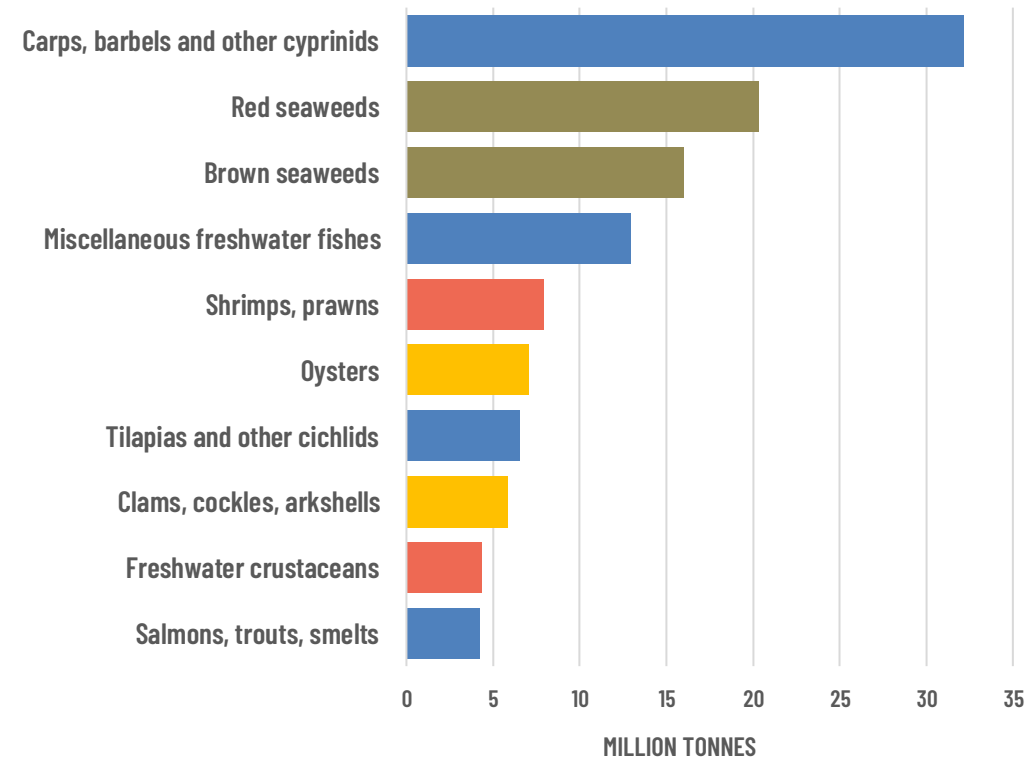


AQUACULTURE DEVELOPMENT

Growth 2000-2022 (%)

Africa	8.1
APR	
LAC	7.6 APR
N America	0.5
APR	
Asia	5.2 APR
Europe	2.5
APR	
Oceania	2.7
APR	

TOP AQUACULTURE GROUPS





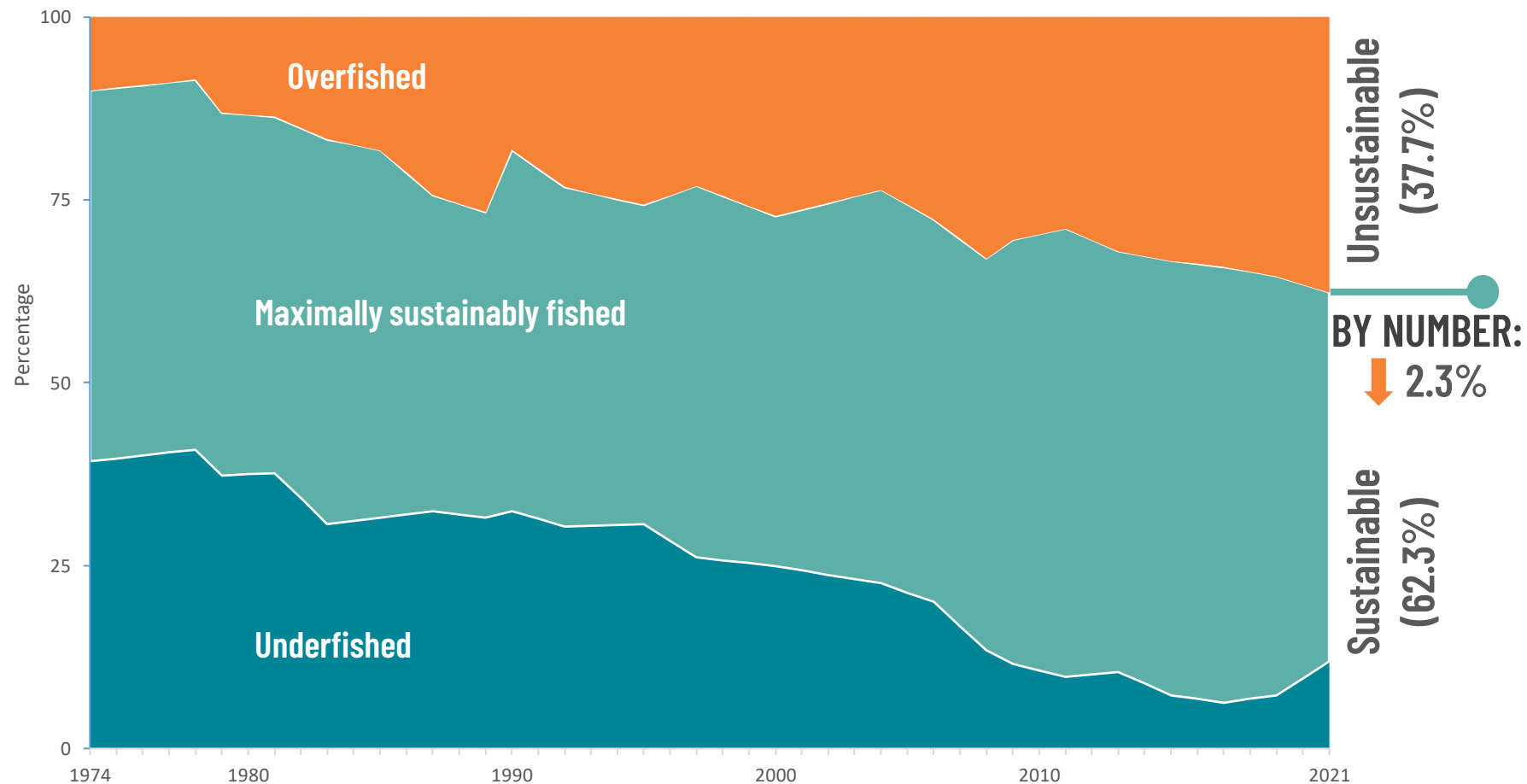
SUSTAINABLE FISHERIES

**MARINE CAPTURE: VITAL.
PRODUCTION GLOBALLY
STABLE, BUT SUSTAINABILITY
REMAINS A CONCERN**

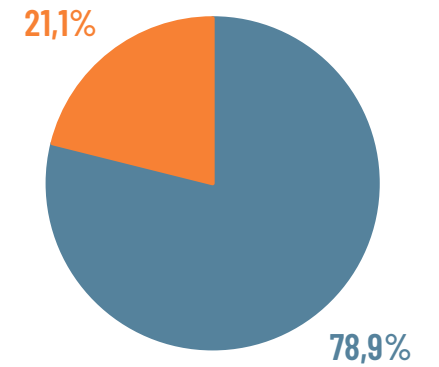




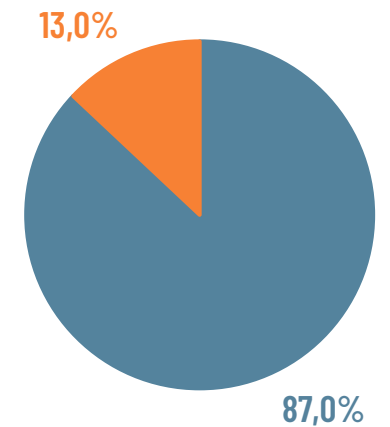
GLOBAL TRENDS IN THE STATE OF THE WORLD'S MARINE FISH STOCKS, 1974-2021



TOP-10 SPECIES

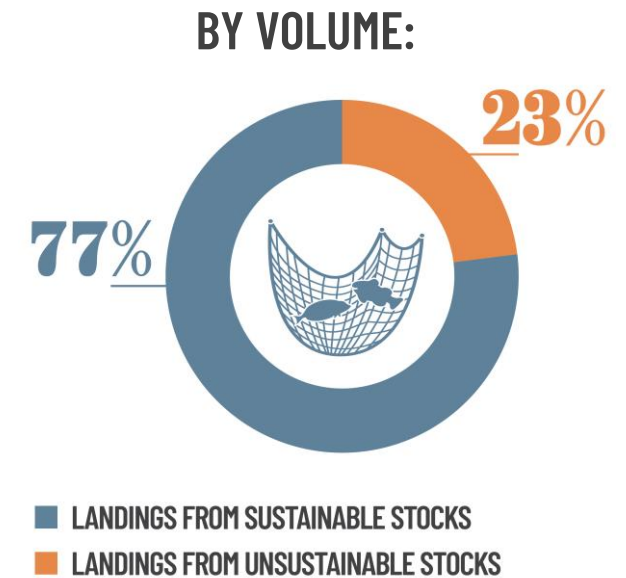
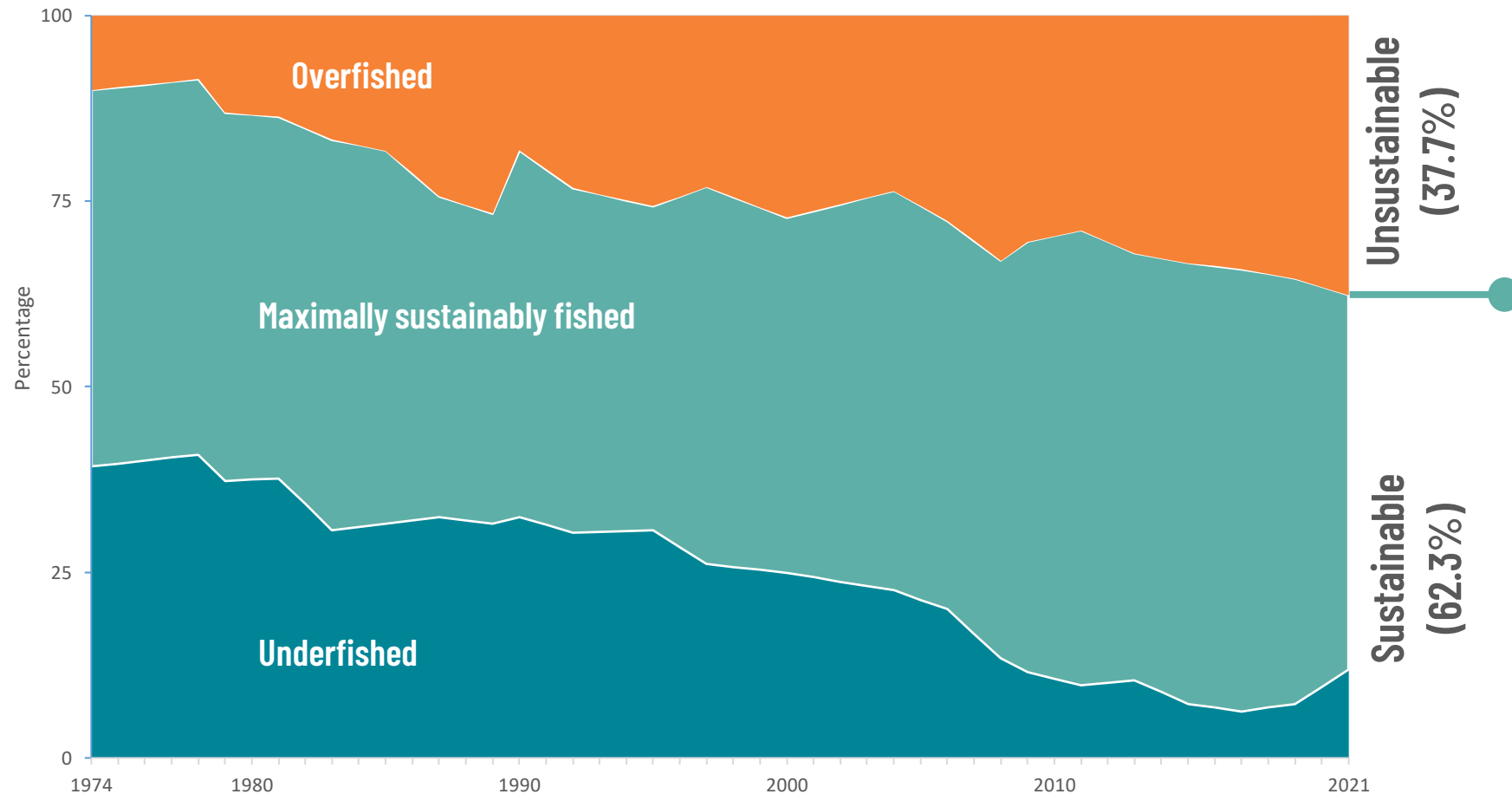


MAJOR COMMERCIAL TUNAS





GLOBAL TRENDS IN THE STATE OF THE WORLD'S MARINE FISH STOCKS, 1974-2021





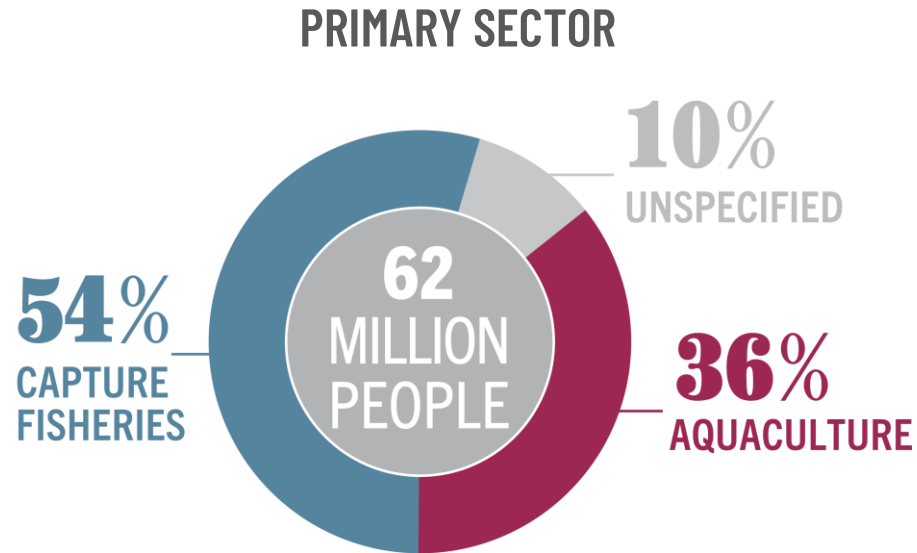
SUSTAINABLE VALUE CHAINS

**AQUATIC FOOD SYSTEMS
ARE ALSO CRUCIAL
FOR LIVELIHOODS, TRADE
AND SUSTAINABLE DEVELOPMENT**





SECTOR INCREASINGLY IMPORTANT IN PROVIDING EMPLOYMENT



+ SECONDARY SECTOR

600 MILLION PEOPLE

Primary and secondary sector (post-harvest),
subsistence and their dependents.



62% WOMEN IN THE SECONDARY SECTOR

* refers to the portion of the data for which disaggregation by gender is available (~ 60% of the data)



SECTOR INCREASINGLY IMPORTANT IN CONTRIBUTING TO LOCAL ECONOMIES

TOTAL FIRST SALE VALUE ~
USD 472 BILLION, NEW RECORD



AQUACULTURE
USD 312.8 billion
11%



CAPTURE FISHERIES
USD 159.0 billion
11%

STATES AND TERRITORIES
THAT TRADE IN THE SECTOR ~ 230

TRADE VOLUME AND VALUE
(Aquatic Animals)

70.0 Mt

LIVE WEIGHT EQUIVALENT

USD 192.0 billion

IN VALUE



19% INCREASE IN VALUE
FROM PRE-COVID



BLUE TRANSFORMATION

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IN ACTION

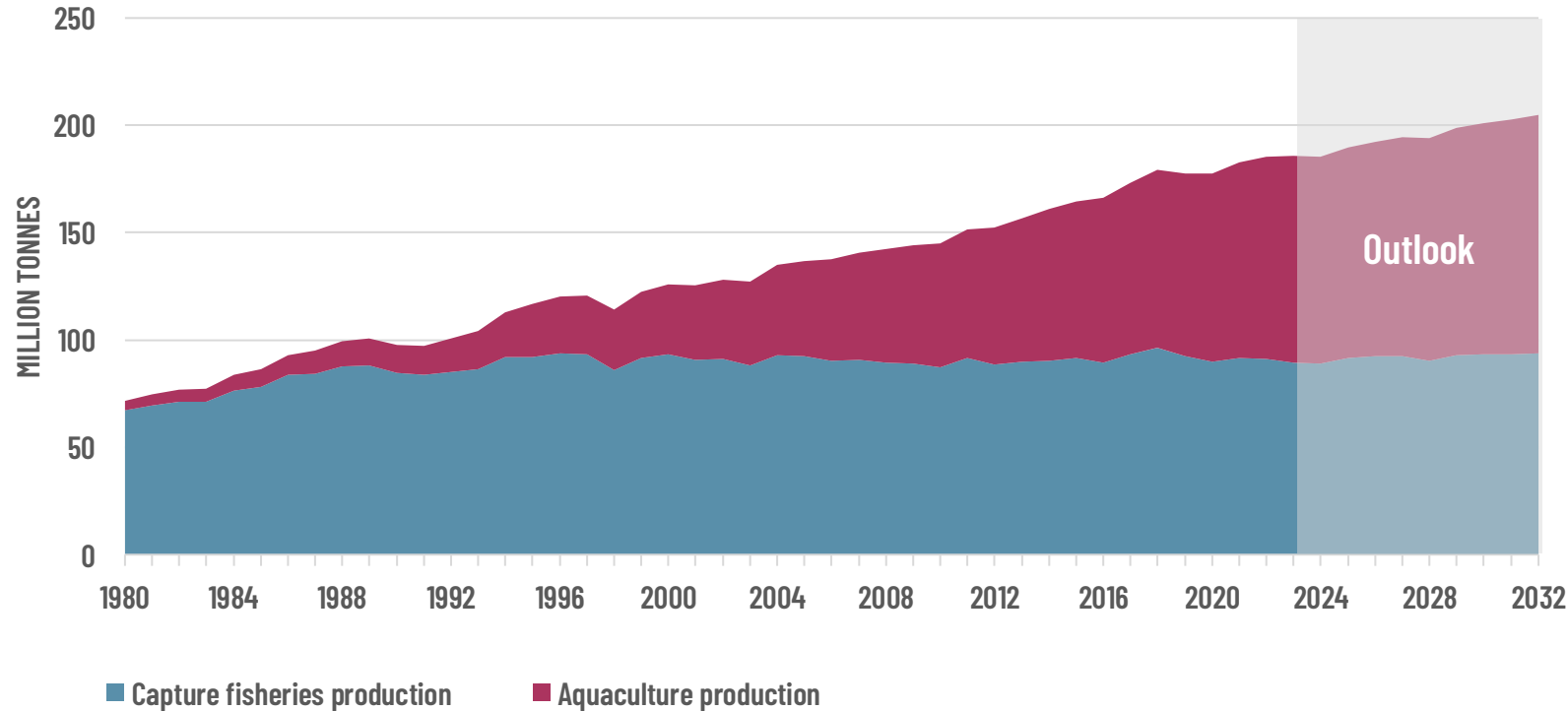
**MORE IS EXPECTED FROM
AQUATIC FOOD SYSTEMS.
WE MUST ENSURE FURTHER
GROWTH IS SUSTAINABLE,
IMPACTFUL AND EQUITABLE.**



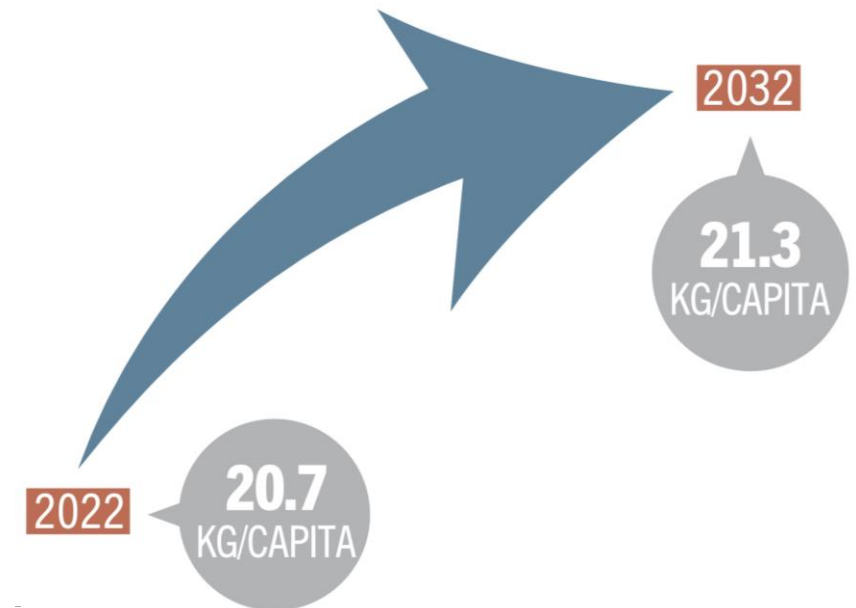


PRODUCTION OF AQUATIC ANIMALS EXPECTED TO GROW BY 10% BY 2032, TO REACH 205 Mt

WORLD FISHERIES AND AQUACULTURE PRODUCTION OF AQUATIC ANIMALS 1980-2032

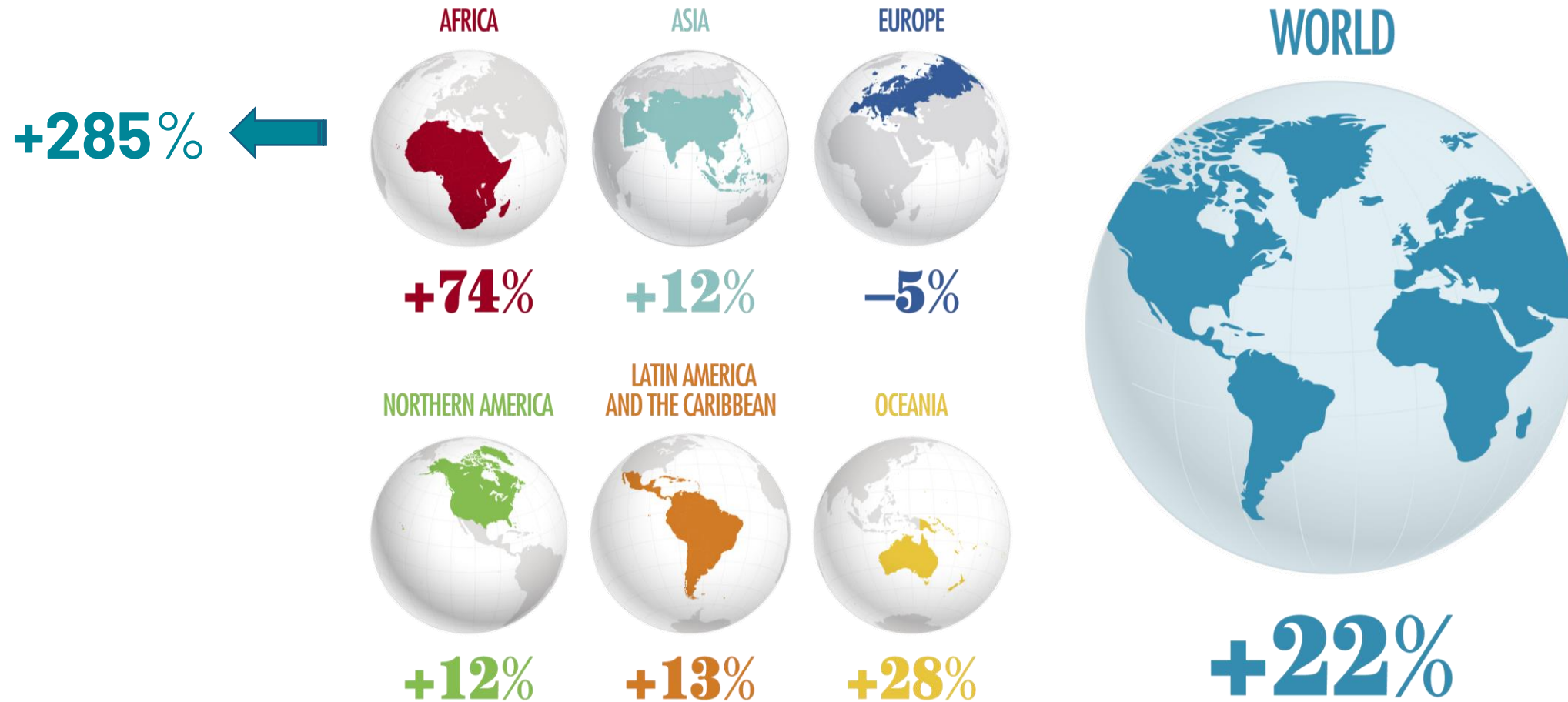


APPARENT CONSUMPTION OF AQUATIC ANIMAL FOODS





NEED FOR GROWTH IN AQUATIC ANIMAL SUPPLY BY REGION BY 2050*



* Supply needed to sustain 2022 per capita consumption by region.

THANK YOU

