

Global fisheries sustainability: challenges and successes

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On behalf of the FAO Fisheries and Aquaculture
Department



Rome, 18-21 November 2019

Keynote lecture
Opening ceremony

@Manu_FAO
#sustainablefisheries

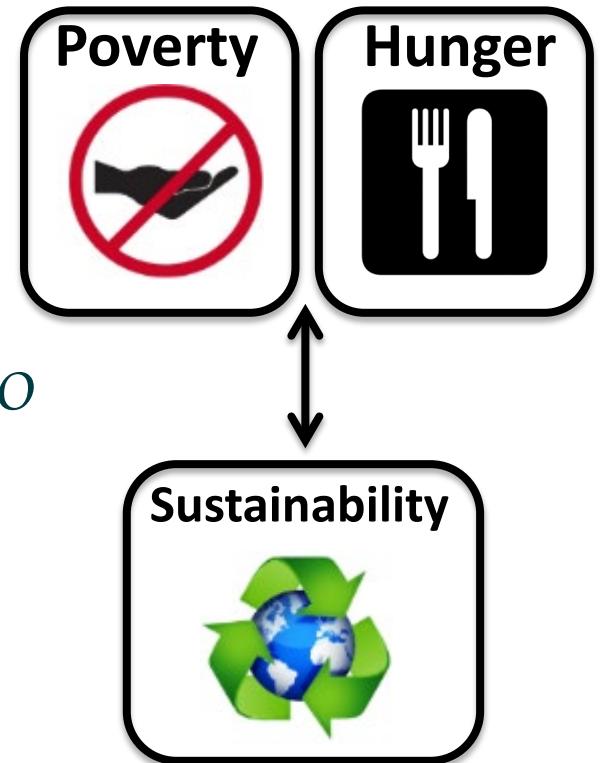
International Symposium on Fisheries Sustainability:
Strengthening the Policy-Science Nexus

THE FOOD AND AGRICULTURE ORGANIZATION OF THE UN



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Oct 1945, Quebec- 40 nations formed FAO



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1965 – COFI established



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1950 - The World Census of Agriculture

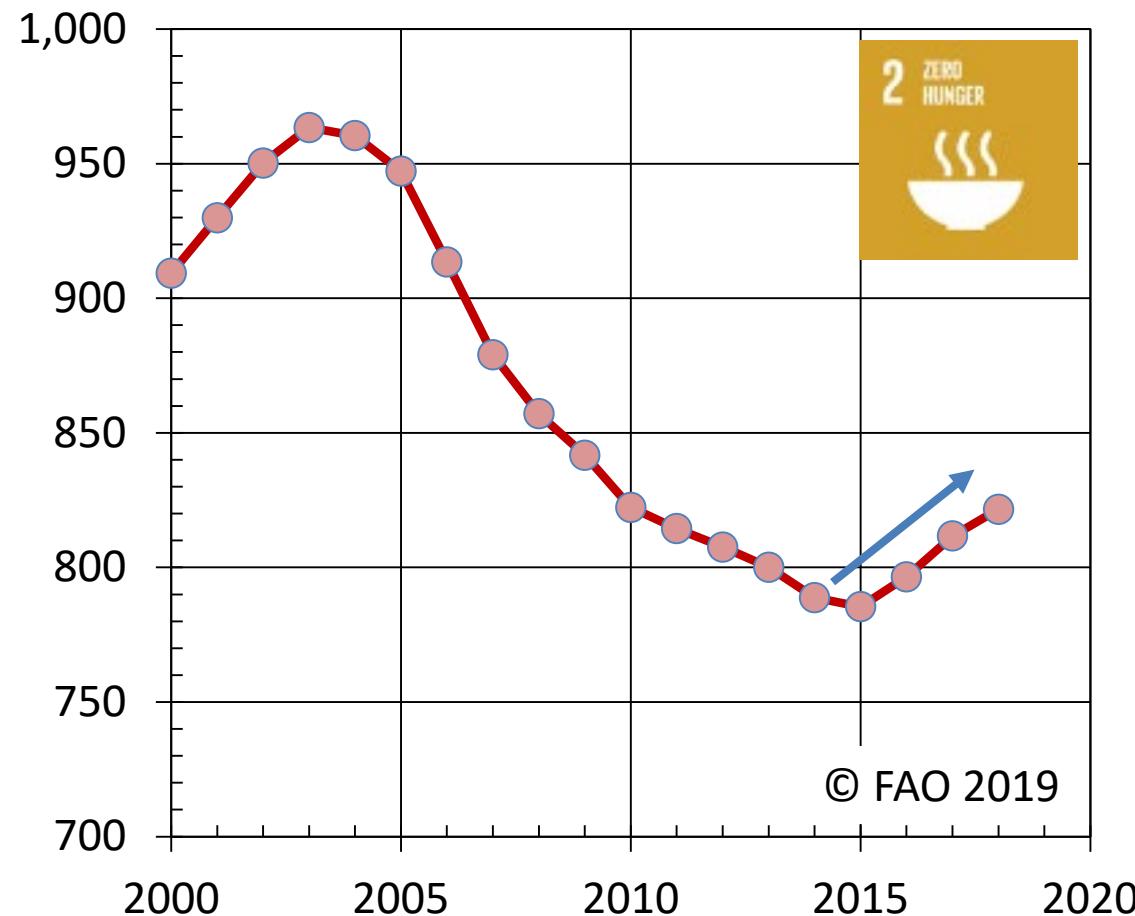
1951- Headquarters move to Rome



ENOUGH FOOD, BUT NOT MAKING HUNGER HISTORY

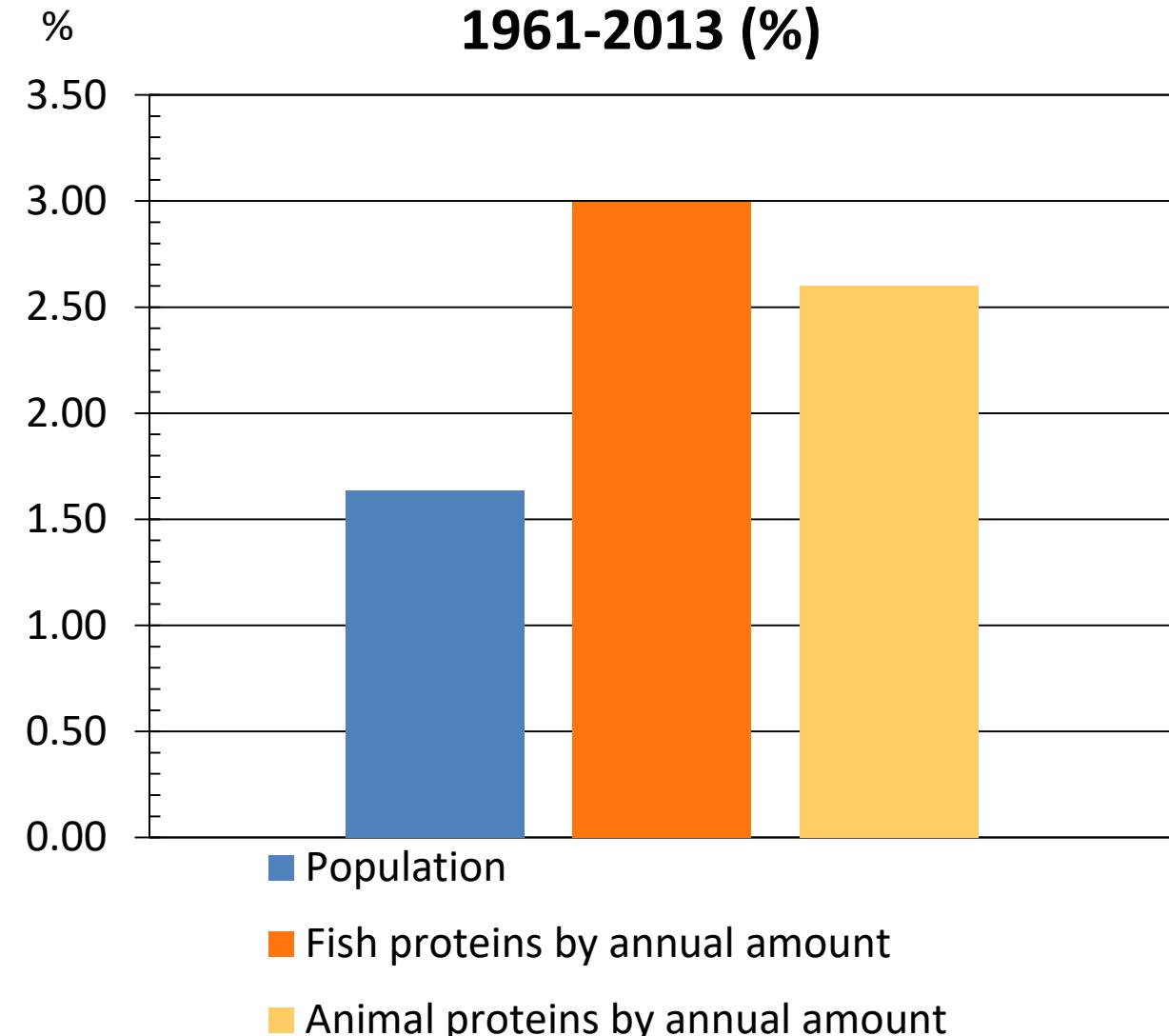


Undernourished people (Million)

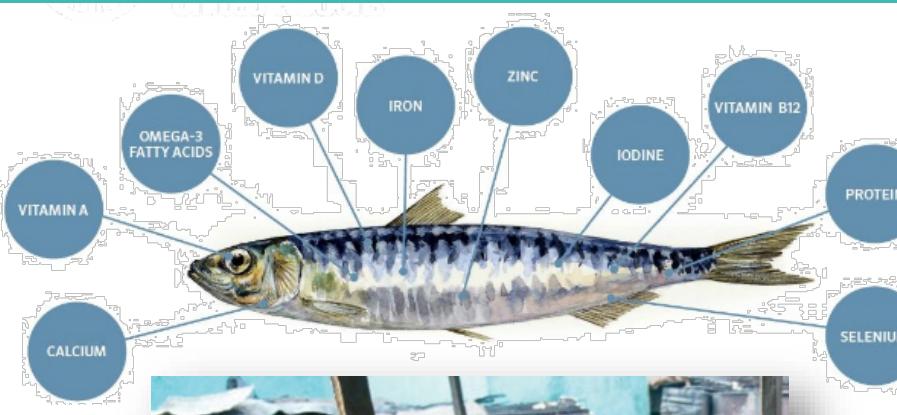


2 billion experience moderate or severe food insecurity

Global annual growth rate 1961-2013 (%)



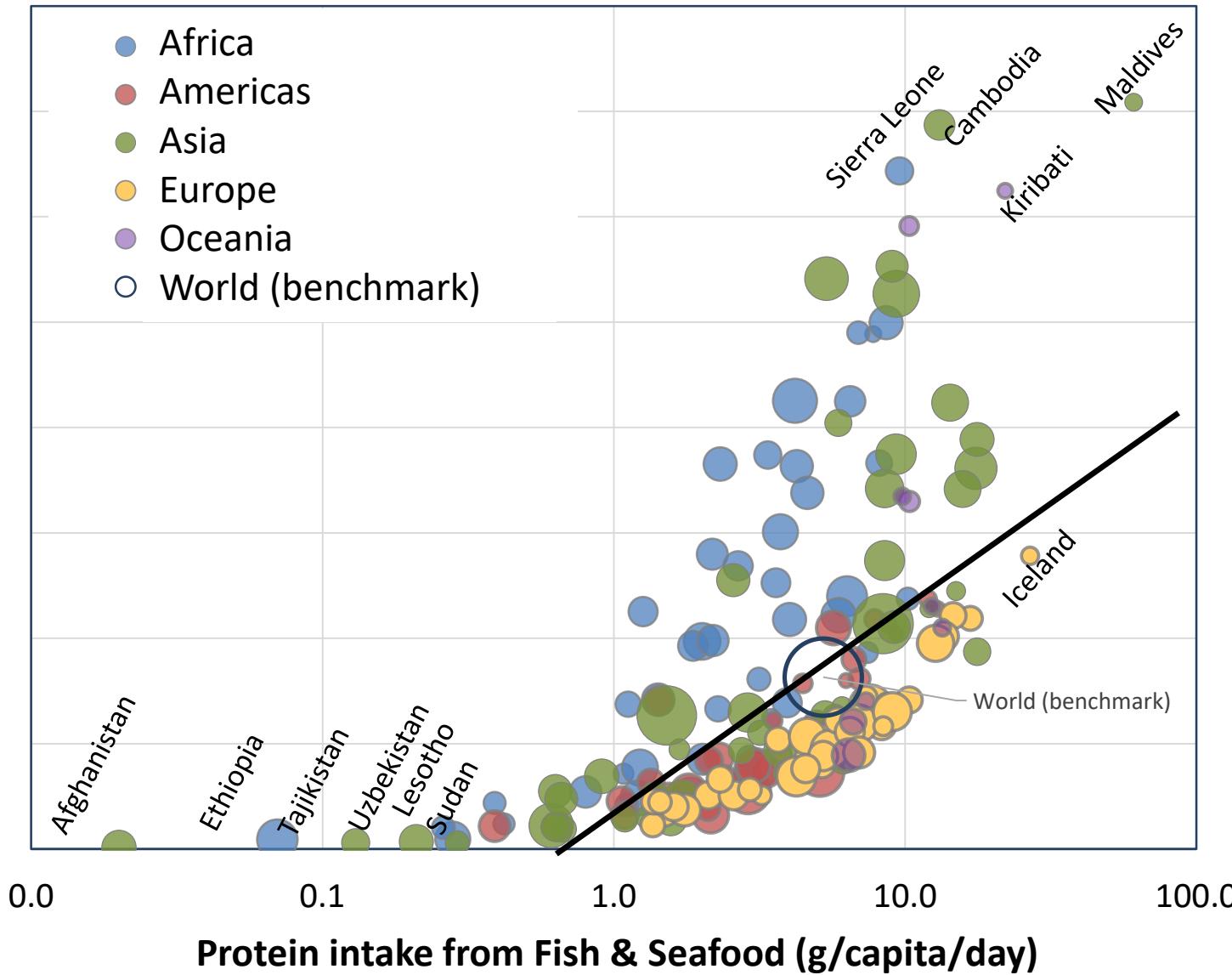
SEAFOOD - NUTRITION OF FOOD DEFICIT COUNTRIES



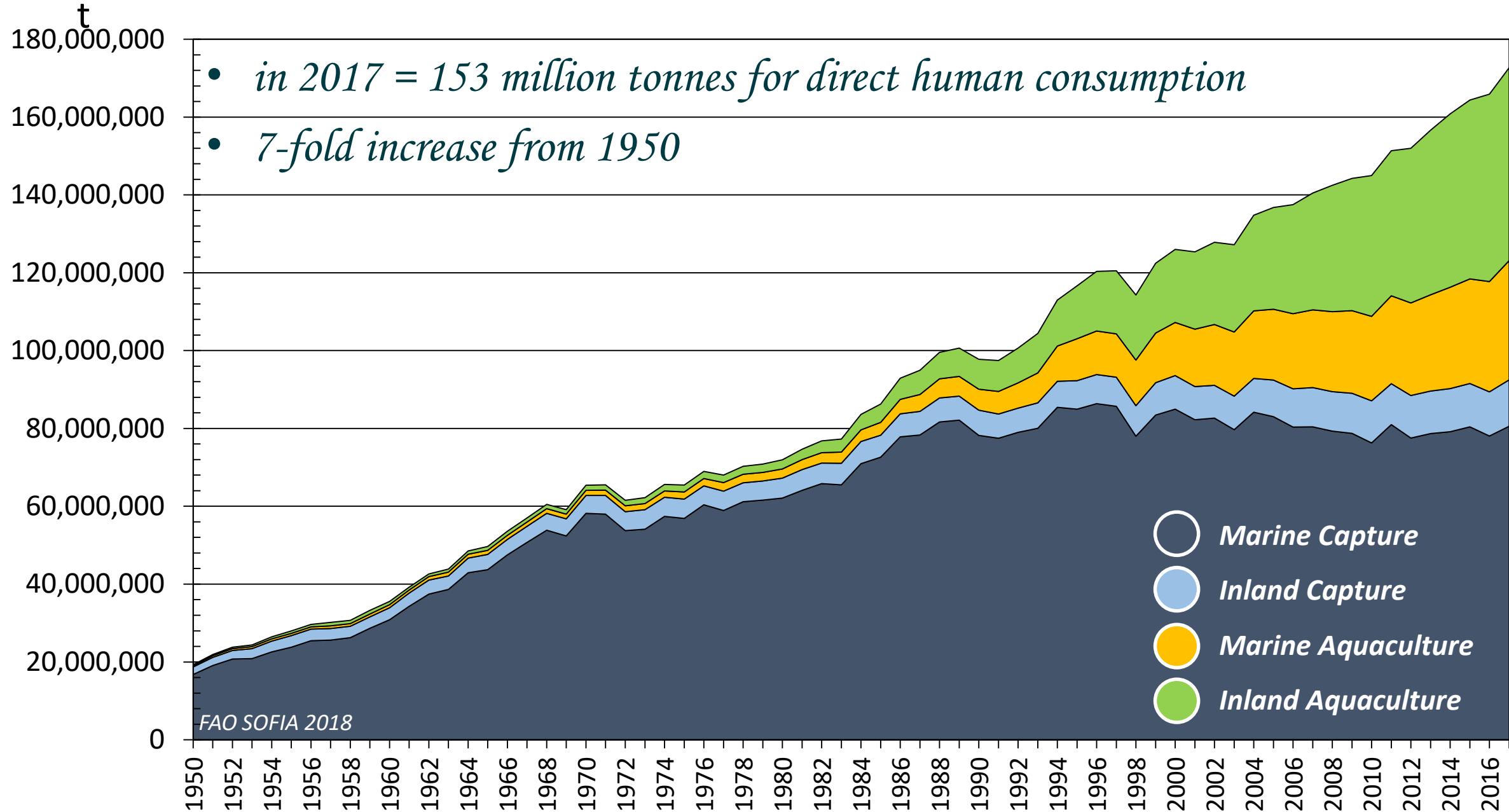
Fish & seafood / Animal protein in diet (%)

© FAO 2013 data

- Africa
- Americas
- Asia
- Europe
- Oceania
- World (benchmark)



FISHERIES PRODUCTION: OUTPACING POPULATION GROWTH



MARINE FISHERIES – GLOBALLY STABLE, HIGHLY VARIABLE NATIONALLY



INLAND FISHERIES – CRUCIAL TO LIFD COUNTRIES



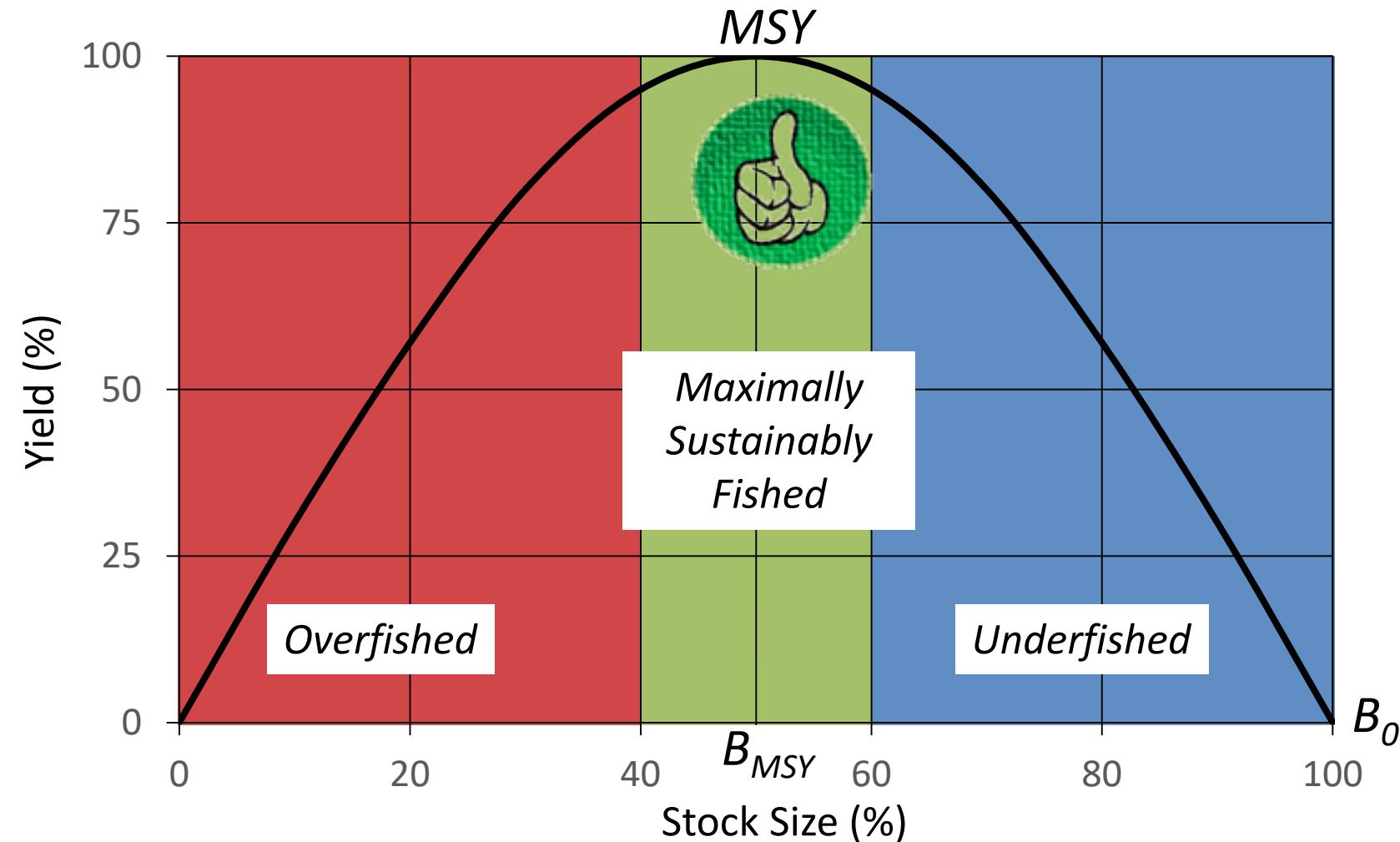
ESTIMATING FISH STOCK STATUS



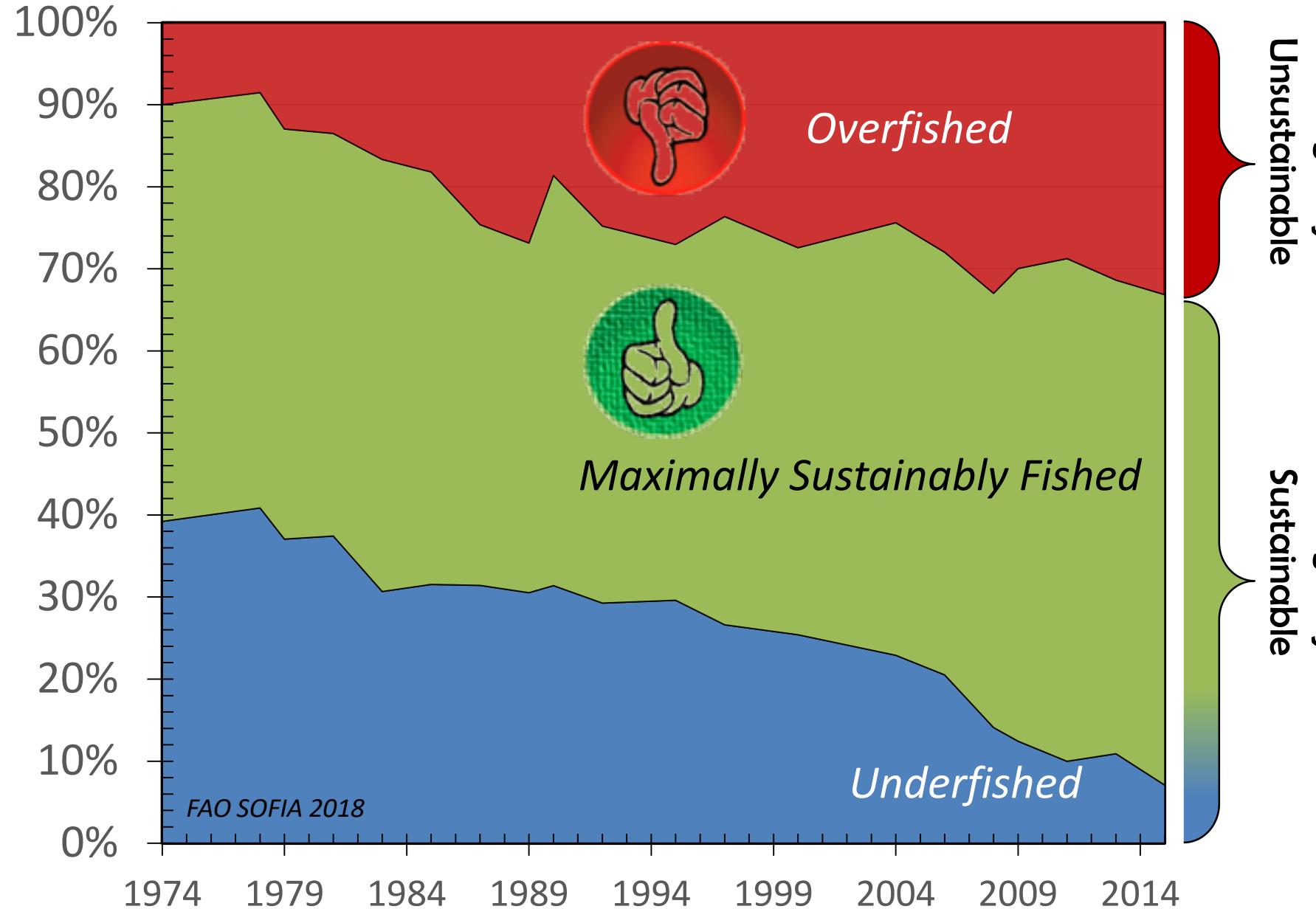
- Based on ~450 stocks
- Reflects ~75% landings



(UNCLOS, 19821): "...State(s) must set an allowable catch, based on scientific information, which is designed to maintain or restore species to **levels supporting a maximum sustainable yield (MSY)**."



MOST STOCKS SUSTAINABLE- A GROWING NUMBER ARE NOT



Bad + Good ≠ Worse

DIFFERENTIAL TRENDS DEVELOPED/ DEVELOPING REGIONS

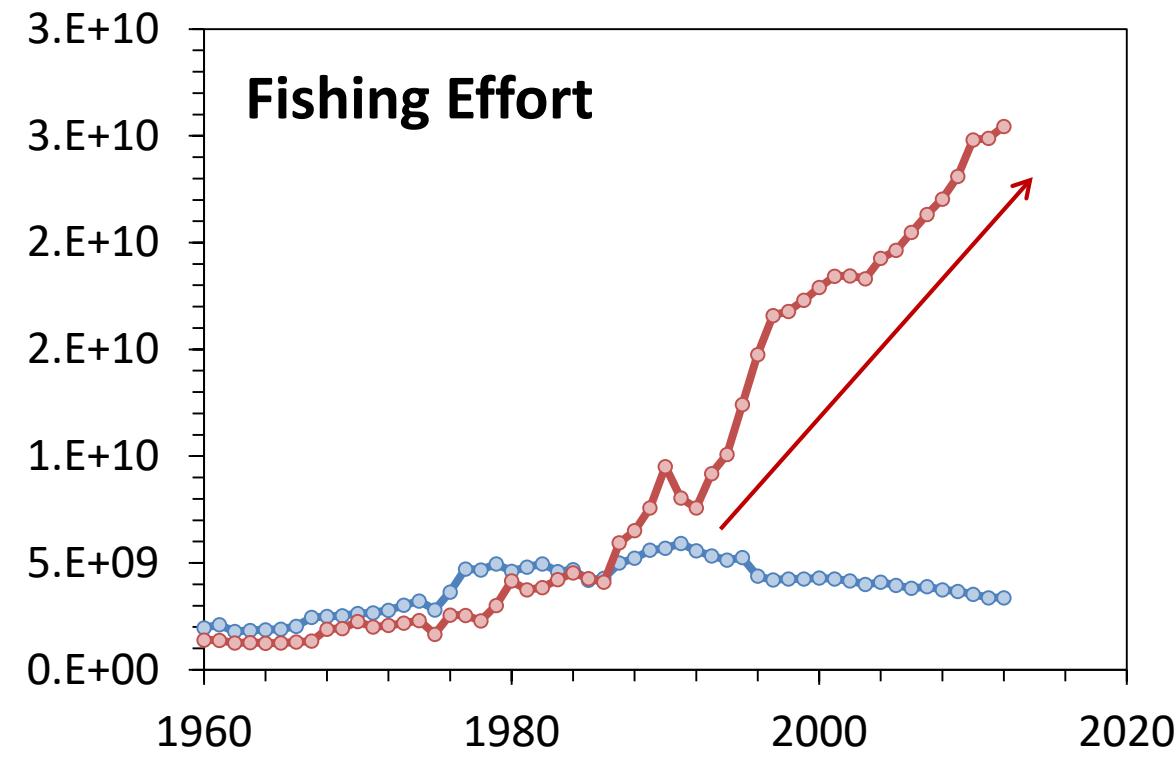
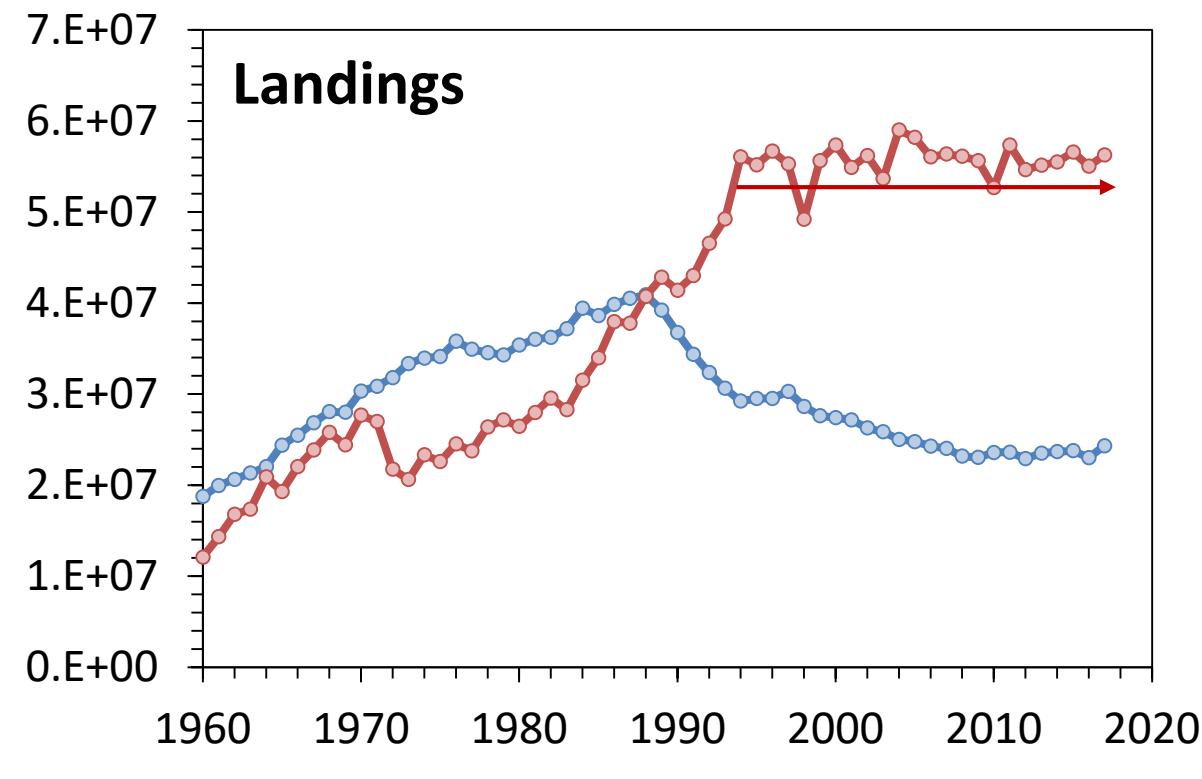


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—●— Developed Countries —●— Developing Countries

[As per UN standard country codes for statistical use, @UNSTATS]

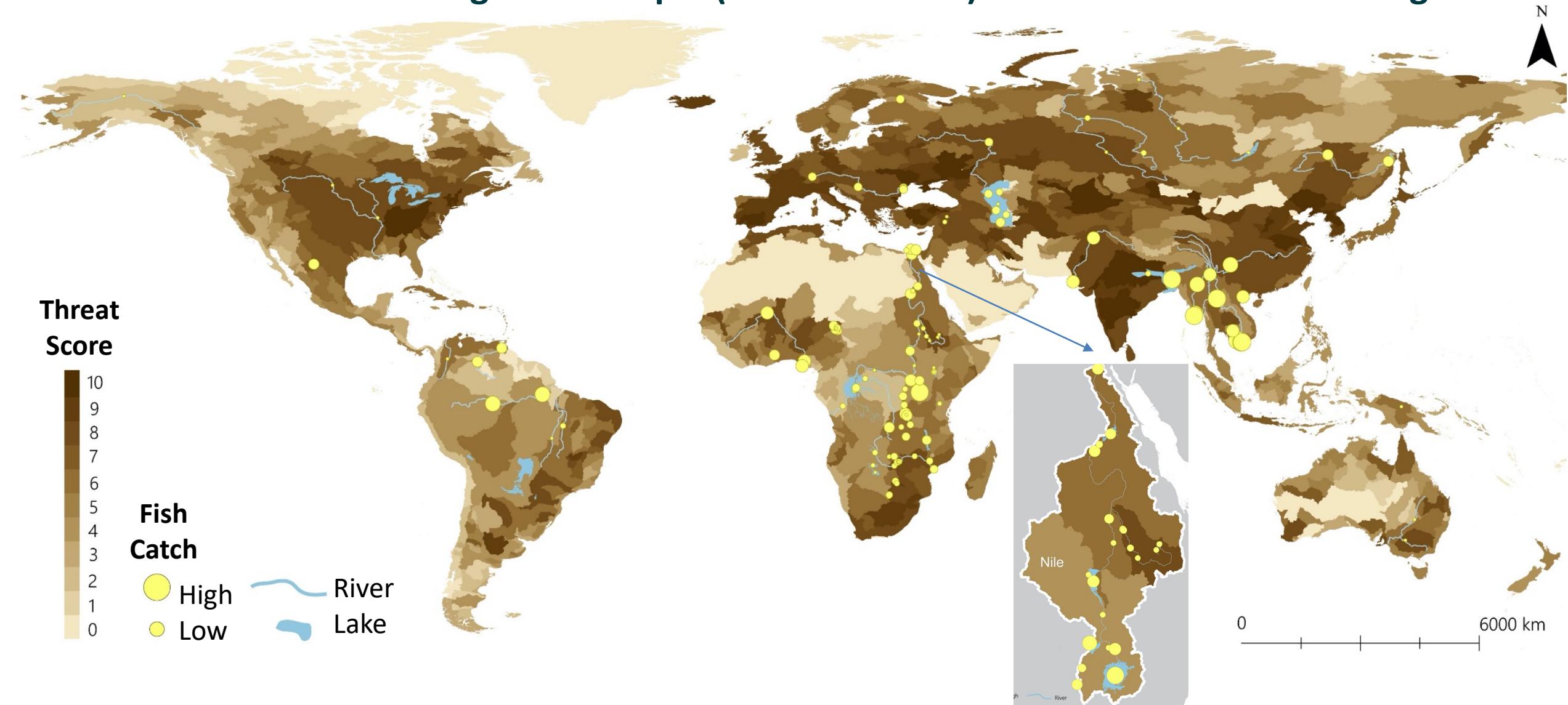


(updated) Ye and Gutierrez 2017

INLAND FISHERIES – UNCERTAIN, UNDervalued, UNSEEN

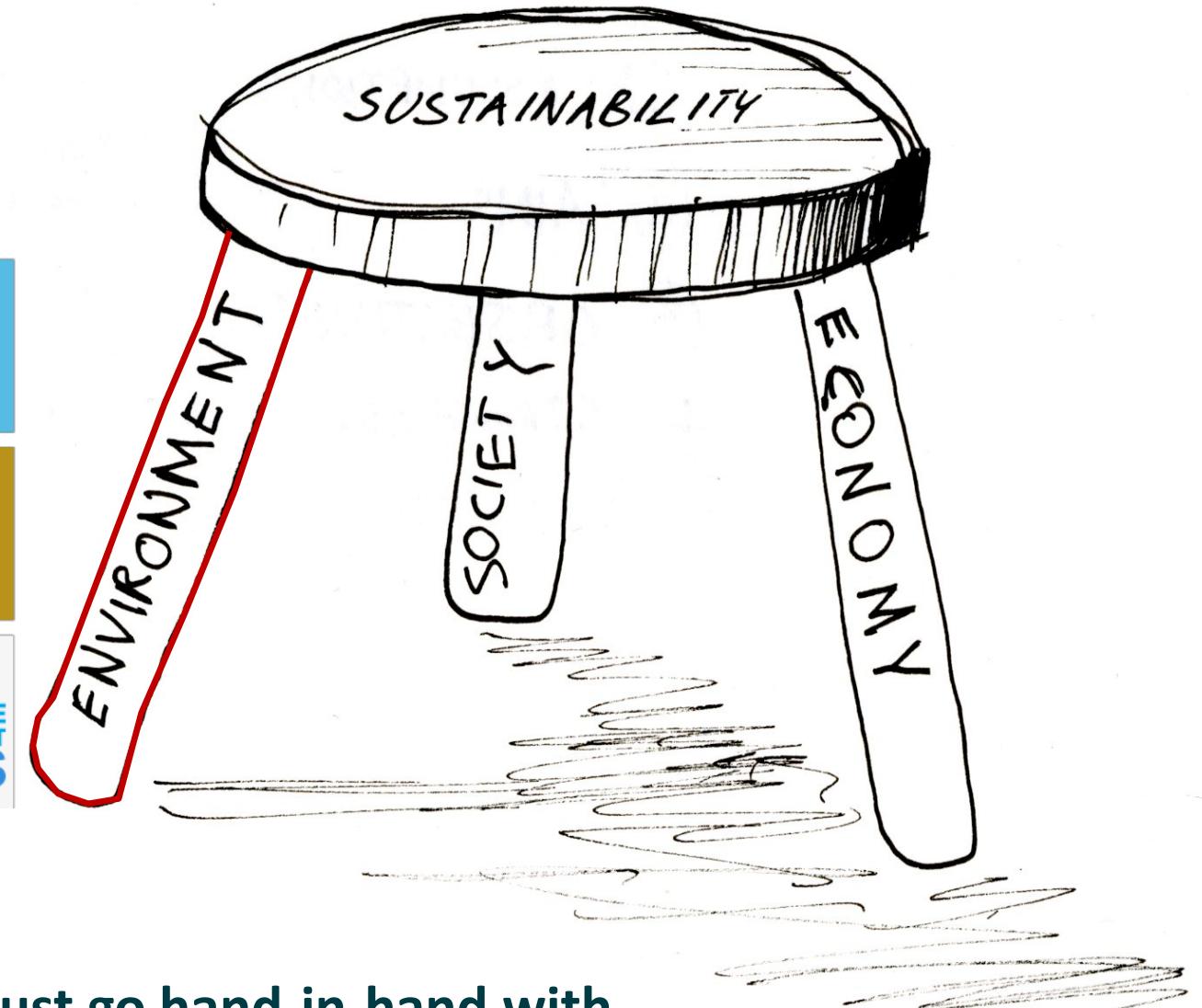


Limited monitoring and multiple (environmental) drivers unrelated to fishing



Source: Unpublished data US Geological Survey, Land and Water Lab at the University of Florida, Hull International Fisheries Institute

SUSTAINABILITY – A THREE LEGGED STOOL



The SDGs recognize that ending poverty must go hand-in-hand with strategies that build economic growth and addresses a range of social needs

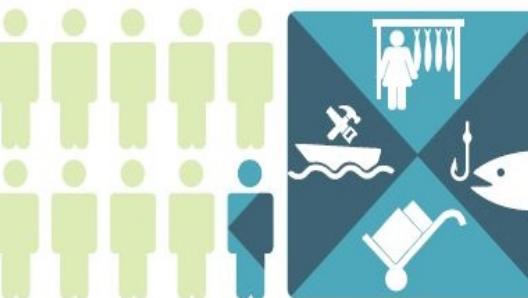
EASY TO UNDERRATE FISHERIES IF YOUR LIFE DOES NOT DEPEND ON IT



© FAO



Approximately
1 in 10
PEOPLE
rely on fisheries
and aquaculture for
their livelihoods.



Employment in fisheries and aquaculture

59.7 million people engaged in primary
sector of fisheries



- 85% Asia
- 10% Africa
- 4% Latin America and Caribbean
- 1% Rest of the world

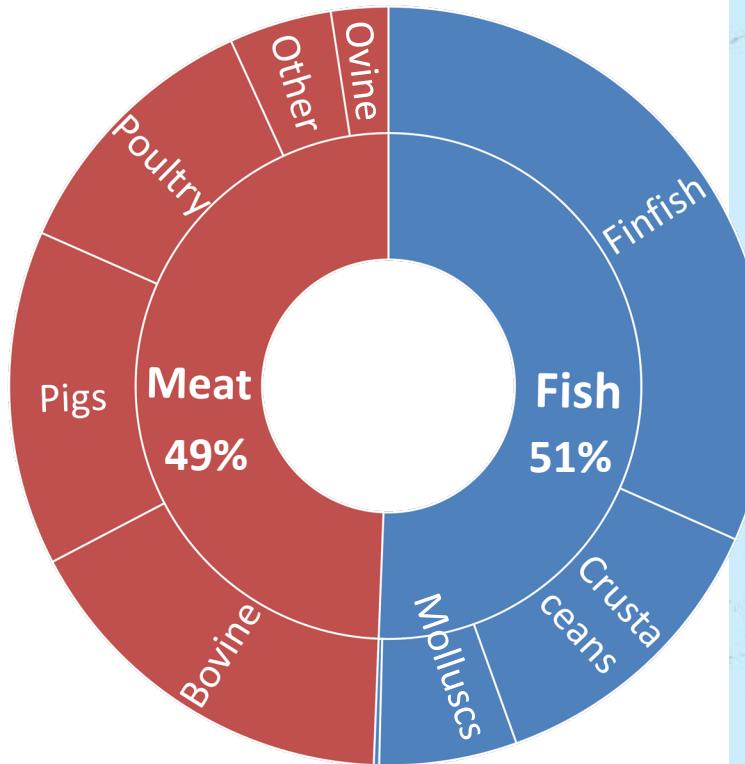


When including the
secondary sector, over
50%
ARE WOMEN

FISH – ONE OF THE MOST GLOBALLY TRADED FOOD COMMODITIES

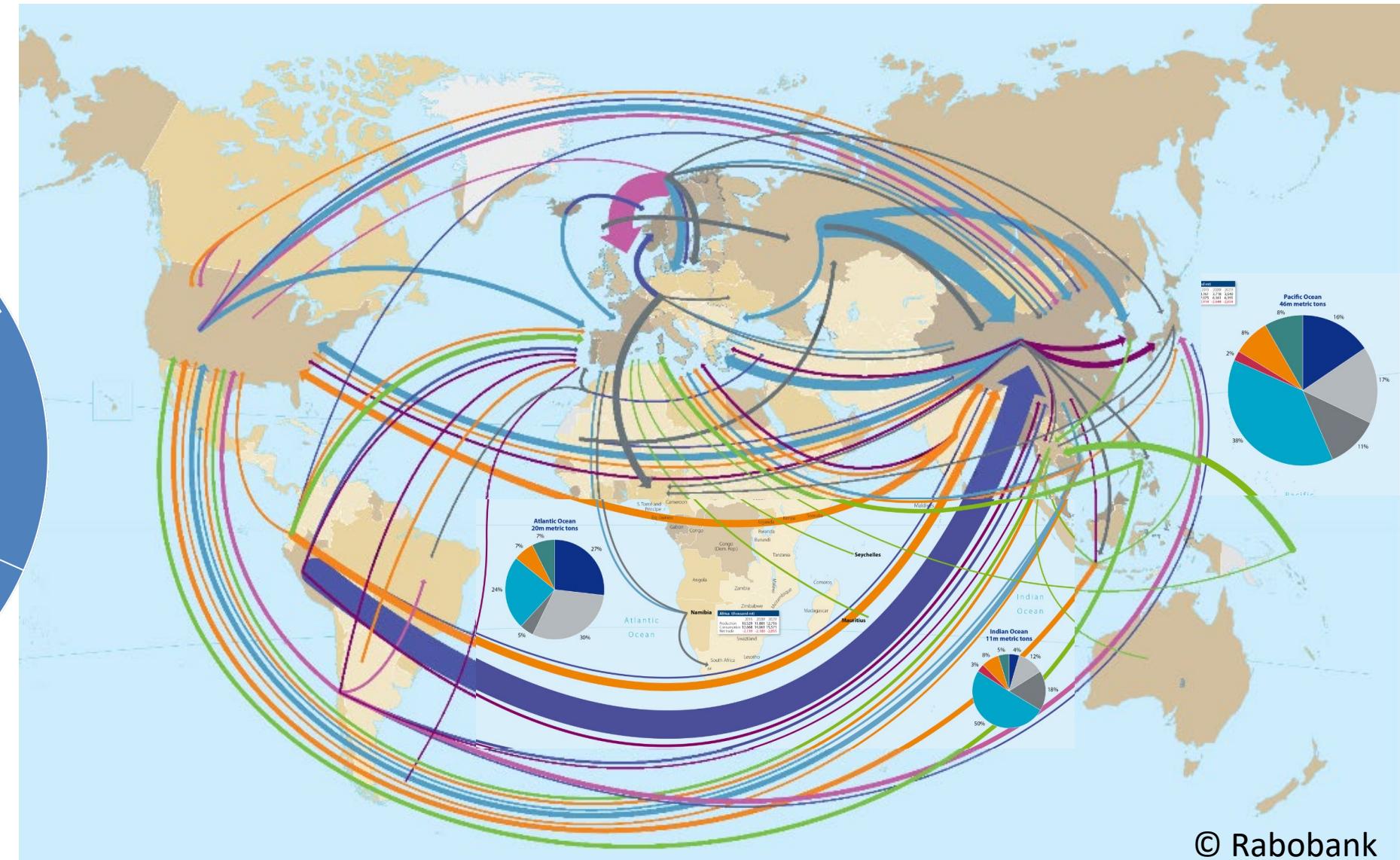


International food trade
value (%, 2017)



© FAO

Exports of fish products reached a record USD156 billion in 2017

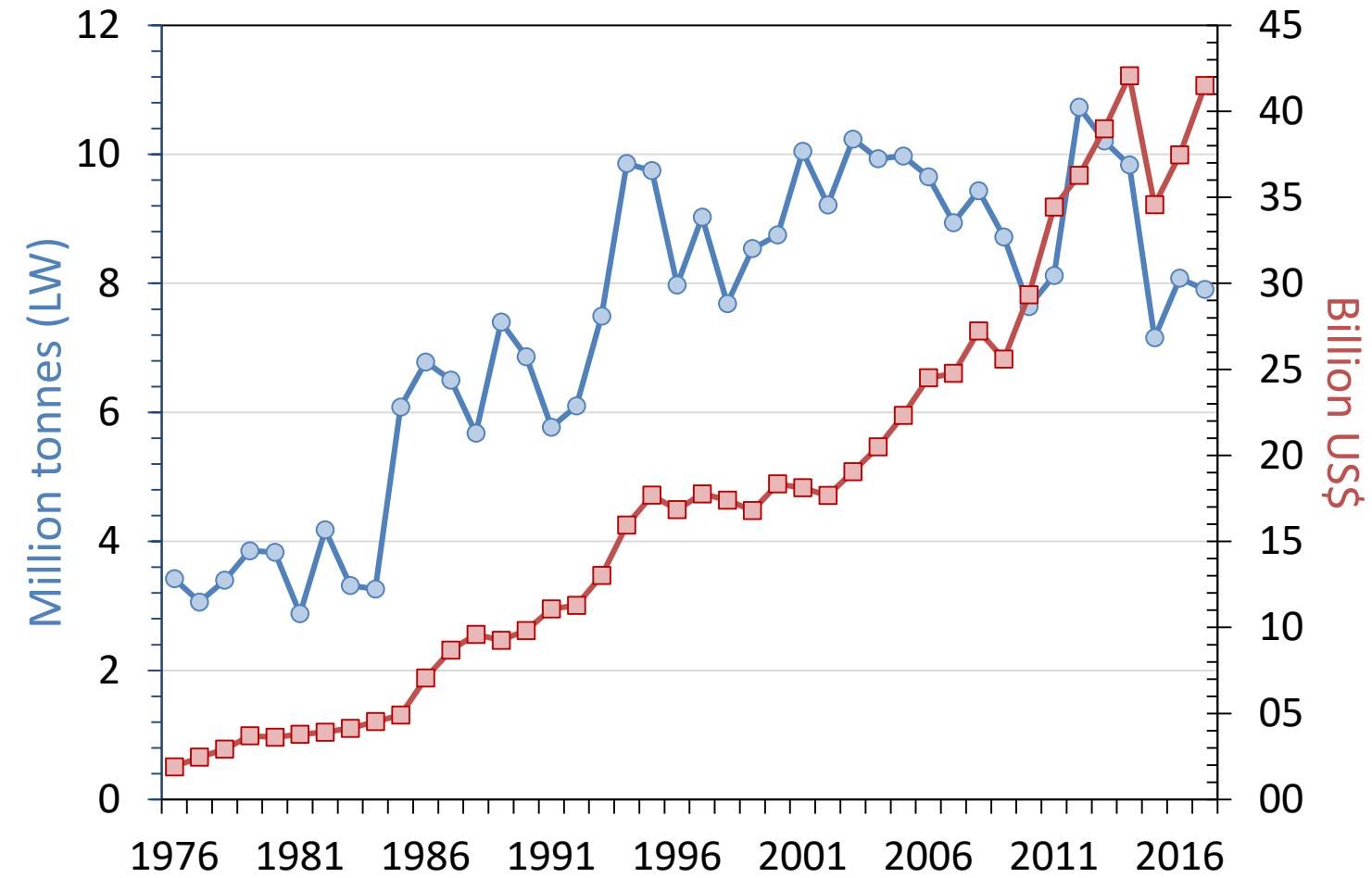


DEVELOPING COUNTRY EXPORTS ACCOUNT FOR 54% BY VALUE (2016)



Net trade (exports minus imports) Developing Countries[#]

[# As per UN standard country codes for statistical use, @UNSTATS]



PREDICTION IS DIFFICULT, ESPECIALLY ABOUT THE FUTURE



LOOKING INTO THE CRYSTAL BALL – 2050 SCENARIOS



	FAO 2018	OECD/FAO 2019	-----FAO FI (in progress)-----		
	2017	2028	2050 HIGH	2050 BAU	2050 LOW
Capture Fisheries (Mt)	93	94	115	95	81
Aquaculture (Mt)	80	102	146	140	127
Total Production (Mt)	173	196	261	235	208
...of which as food (Mt)	155	178	242	217	193



Full MSY
No IUU
Reduced GEC

Reduced catch
High GEC
Culture limited

Per Capita
consumption

24.8 kg/yr
11.8 from capture

22.3 kg/yr
9.7 from capture

19.8 kg/yr
8.4 from capture

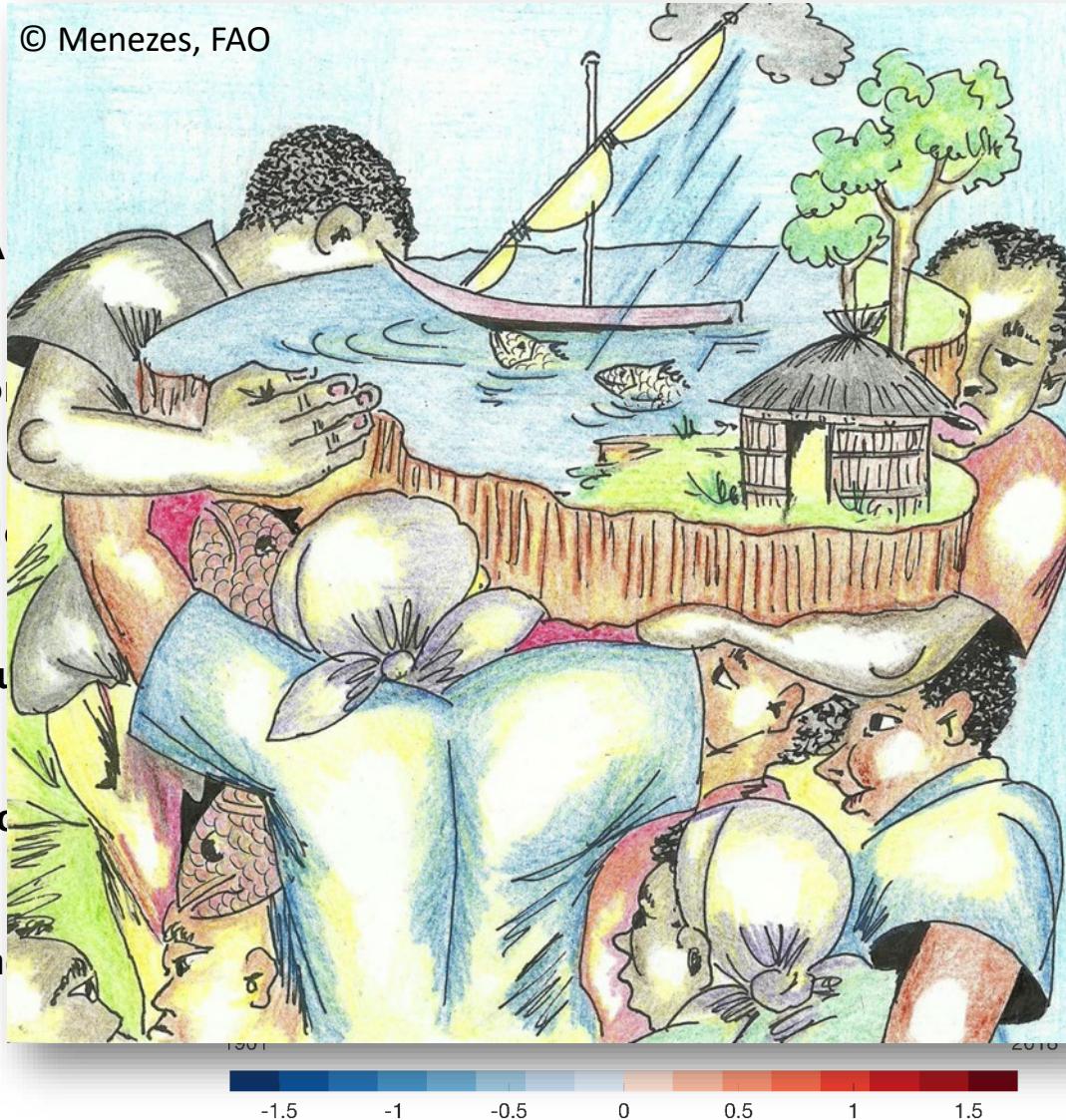
Current per capita consumption 20.3 kg/ yr

CONSIDERATIONS WHEN TAKING THE HIGH ROAD



- 1. All food production systems have impacts – If fisheries fail, the environmental impacts of our food needs would be much larger. We need to incorporate fish in our food system strategies**
- 2. Achieving sustainability is difficult – Divestment in fisheries sustainability programmes has made things worse in developing regions. Conservation alone will not fix this. Our target should be 100% effectively managed seascapes**
- 3. We need a better science-policy interface – Evidence-based decision making has proven to be most effective in reaching sustainable solutions. But what constitutes evidence?**

CONSIDERATIONS WHEN TAKING THE HIGH ROAD



4. **Climate Change: the ultimate disruptor** – Distributional shifts and differential productivity patterns will challenge management systems, fisheries operations and consumer demand.
5. **Get toolboxes, not hammers** – Sustainability failures are governance failures, but the reasons that challenge sustainability are complex. Beware of simple solutions – seek the underlying causes

CONSIDERATIONS WHEN TAKING THE HIGH ROAD



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5. **Get toolboxes, not hammers** – Sustainability failures are governance failures, but the reasons that challenge sustainability are complex. Beware of simple solutions – seek the underlying causes
6. **Biodiversity –the ultimate enabler** – Without healthy ecosystems there is no food. We must do a better job at connecting biodiversity conservation with food security objectives

CONSIDERATIONS WHEN TAKING THE HIGH ROAD



© Ward, FAO



7. **If you want something new, you need to stop something old** – New technologies in water and on land, innovative science, adaptive management, value chain improvements, etc., will transform the fisheries sector.
8. **Without fishers there will not be fish to eat** – Social sustainability is paramount. Fishers (and particularly fisherwomen) must be considered, valued and supported.
9. **Hunger and good governance are poor partners** – If hunger, poverty and conflict continues – we can forget other global progress such as resource sustainability.
10. **Fish is food for the poor**. If we fail, we fail them



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www.aquaculture2020.org



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United Nations



中华人民共和国农业农村部
Ministry of Agriculture and Rural Affairs of the People's Republic of China



A NEW VISION FOR FISHERIES IN THE 21st CENTURY



SDG 14.2

By 2020, sustainably manage and protect marine and coastal ecosystems...

SDG 14.4

By 2020, effectively regulate harvesting and end overfishing...

SDG 14.5

By 2020, conserve at least 10 % of coastal and marine areas...

SDG 14.6

By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing...

FAO International Symposium on Fisheries Sustainability
Rome, Nov 2019



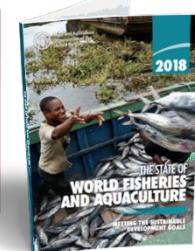
2020 UN Ocean Conference
Lisbon, June 2020



2020 FAO State of Fisheries and Aquaculture (SOFIA)
June 2020



COFI 34, 25th anniversary CCRF
Rome, July 2020



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Food and Agriculture
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Thank you



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SUSTAINABLE
DEVELOPMENT
GOALS

Partnering with FAO to make fisheries sustainable

Working for #ZeroHunger