

Ensuring food security in Africa through Sustainable aquaculture

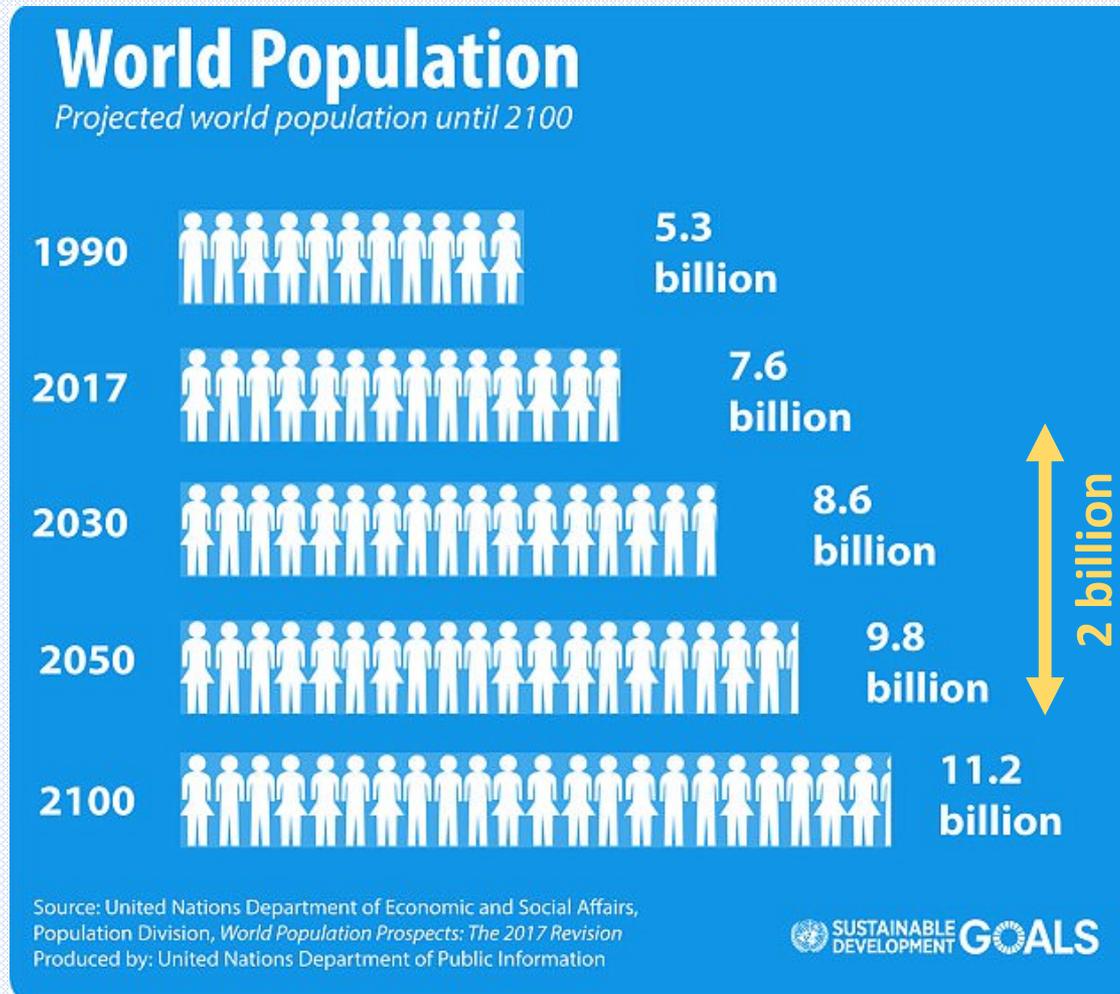
Dr Maria Darias
IRD

Aquaculture: an overview



Aquaculture: an overview

World population growth



Aquaculture: an overview

High quality proteins and essential amino acids

Omega 3 essential fatty acids

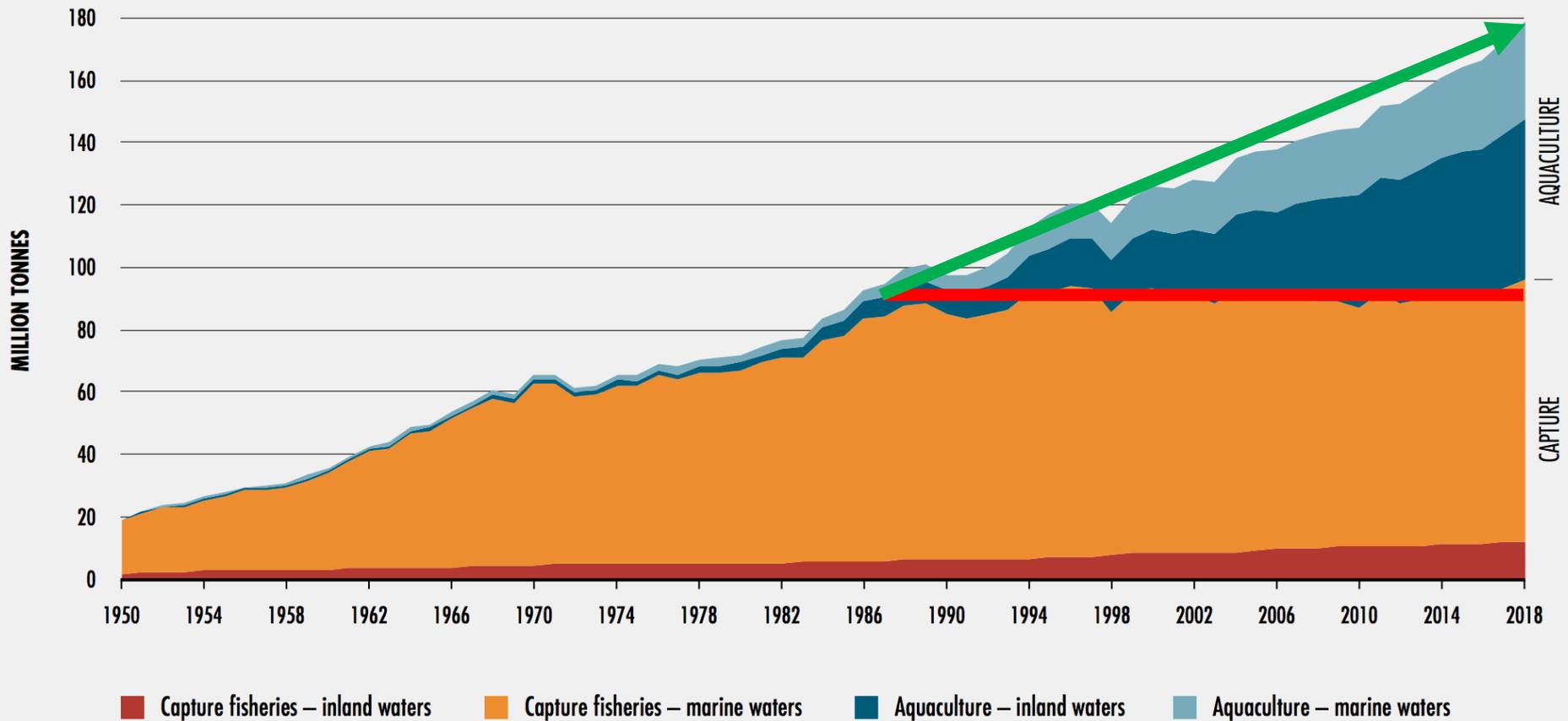
Essential vitamins

Essential minerals



Aquaculture: an overview

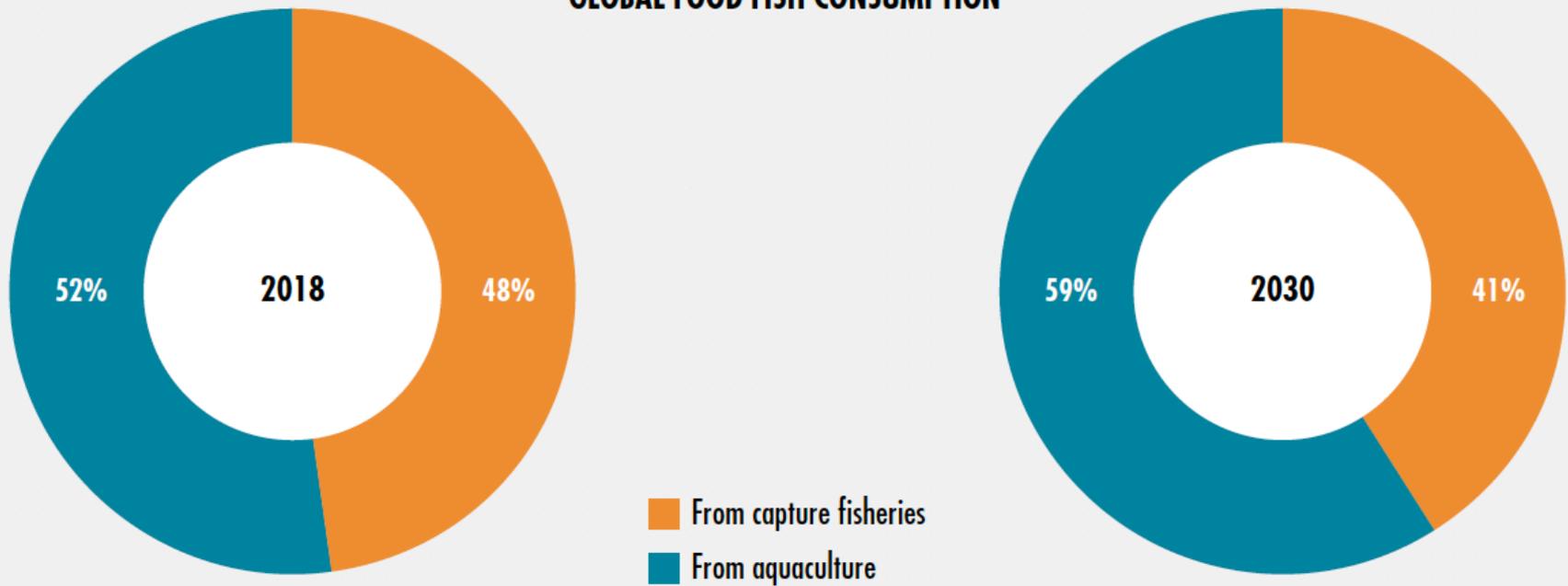
World capture fisheries and aquaculture production



Aquaculture: an overview

Increasing role of aquaculture

GLOBAL FOOD FISH CONSUMPTION

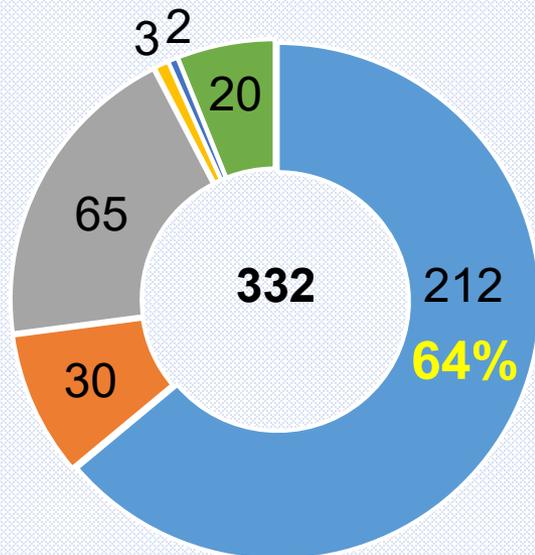


Aquaculture: an overview

World aquaculture production

Number of species globally produced in aquaculture and sorted by major groups

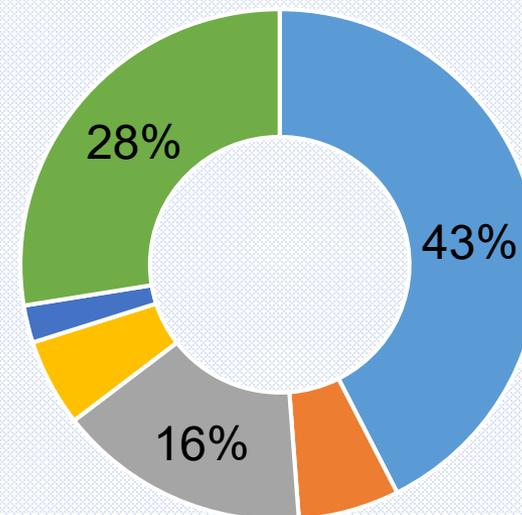
2017



- Fish
- Crustaceans
- Molluscs
- Amphibians and Reptiles
- Other invertebrates
- Aquatic plants

World Aquaculture production of aquatic animals and algae

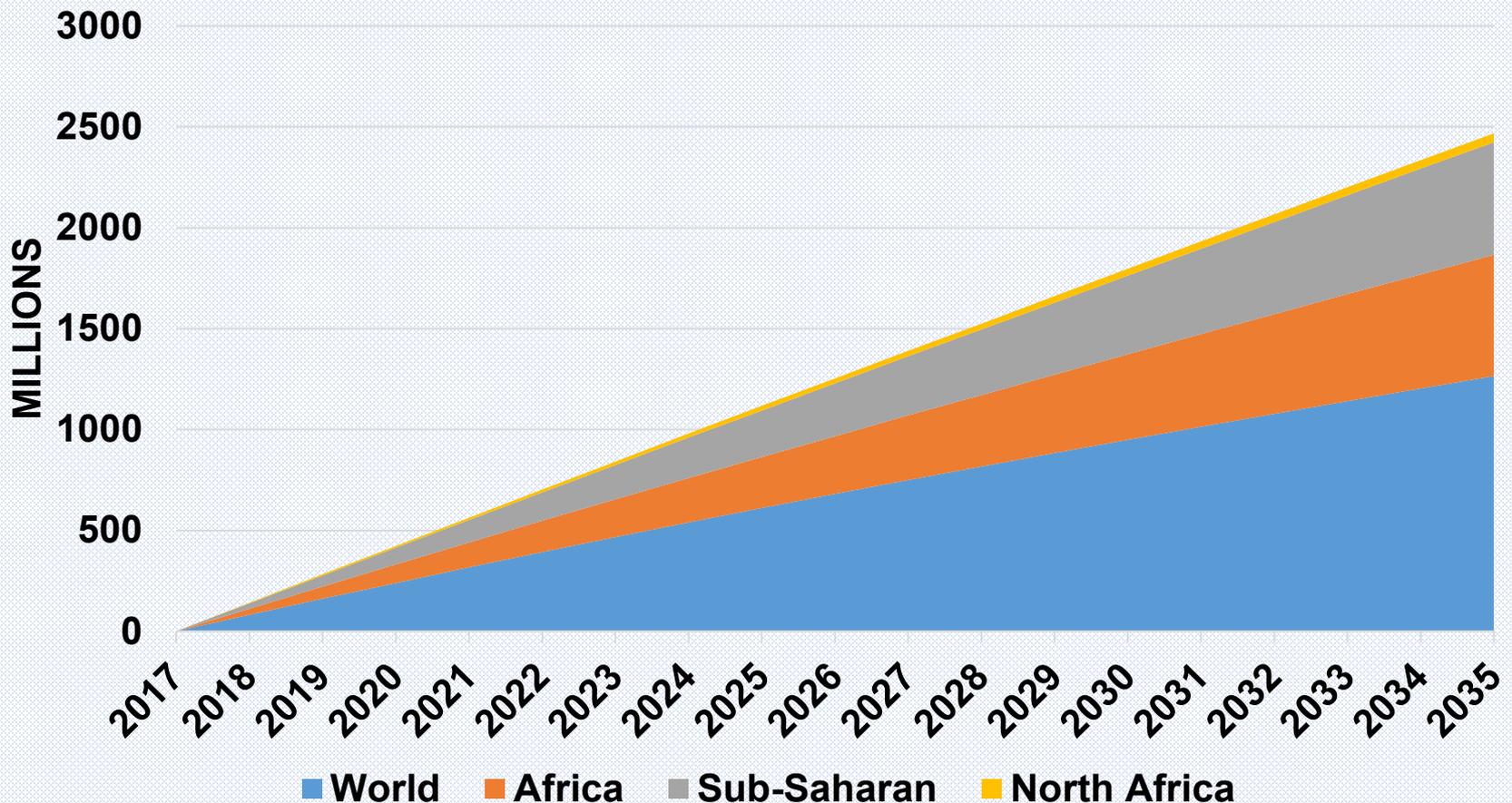
2018



- Finfish - Inland aquaculture
- Finfish - Marine and coastal aquaculture
- Molluscs
- Crustaceans - Marine and coastal aquaculture
- Crustaceans - Inland aquaculture
- Aquatic algae

Aquaculture: an overview

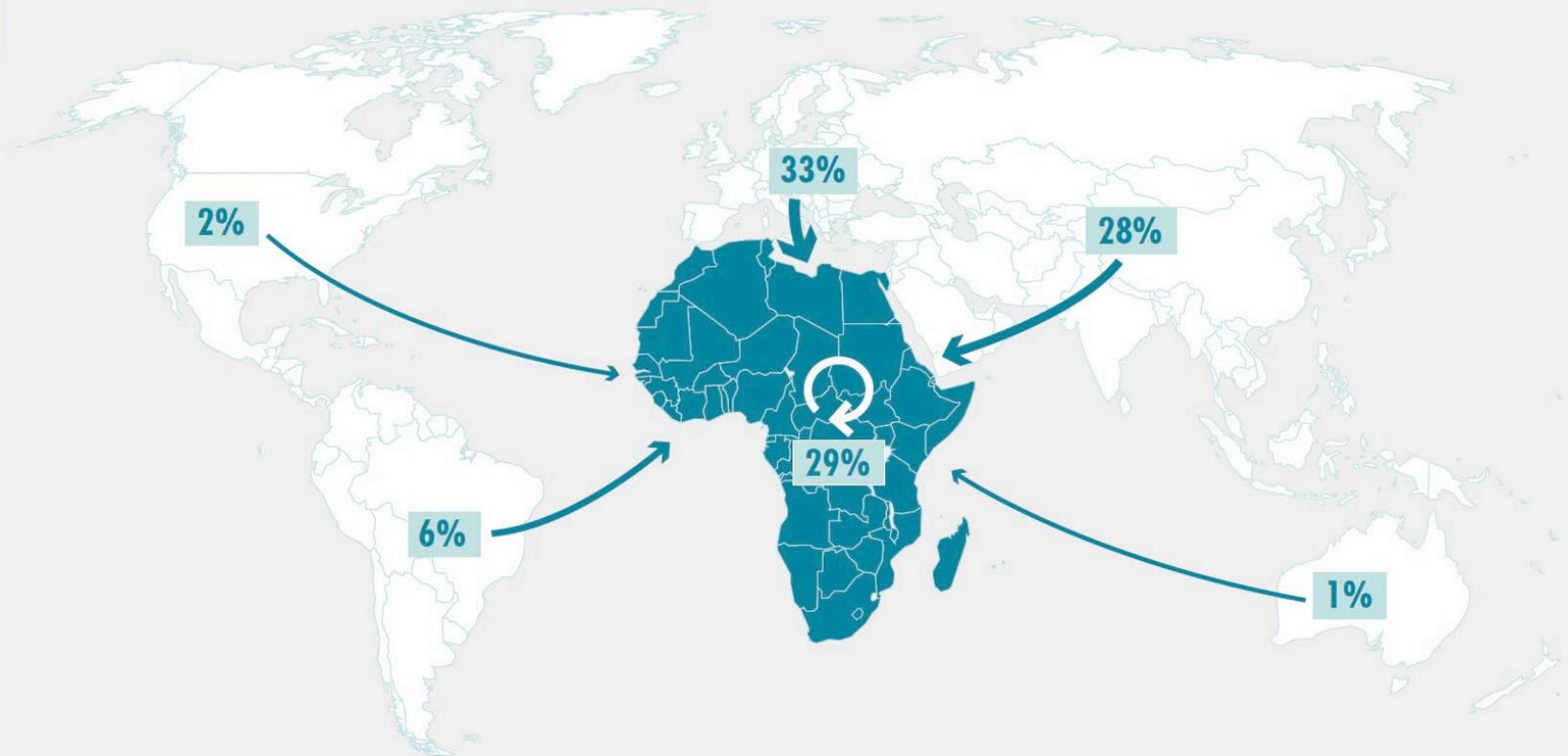
African population



Aquaculture: an overview

Trade flows of fish and fish products
(share in total imports, in terms of value)

AFRICA



Aquaculture: an overview



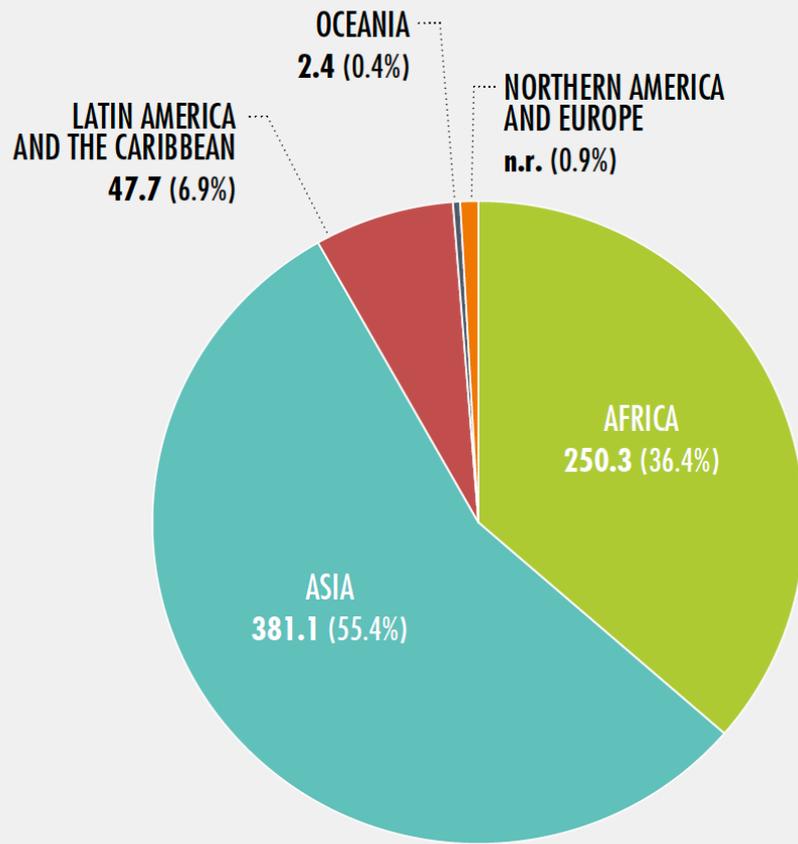
SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

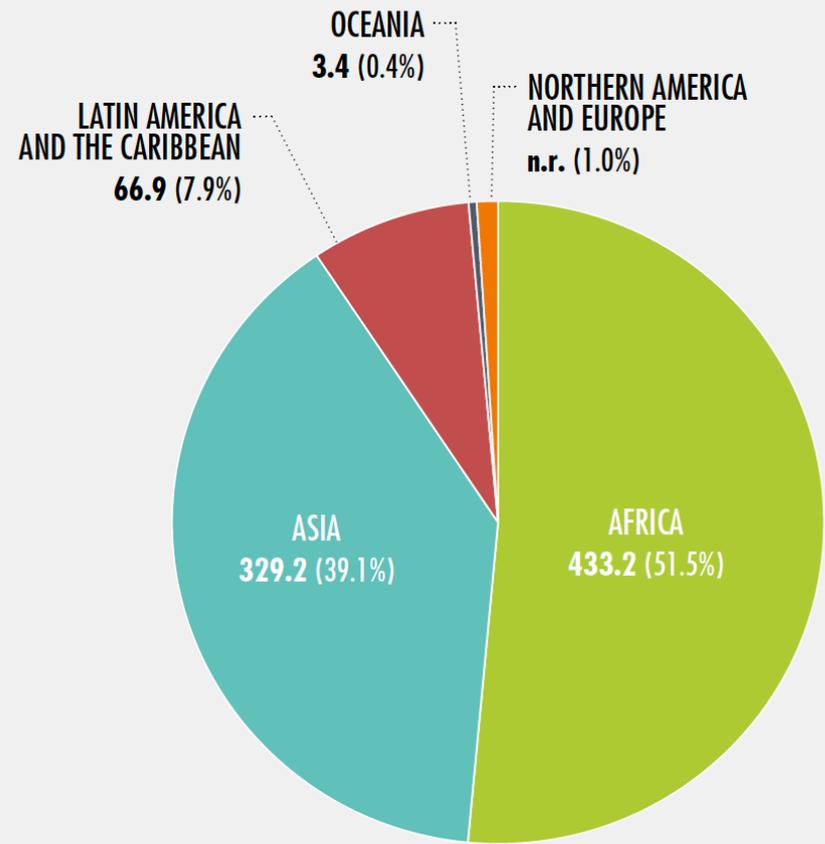


Aquaculture: an overview

Prevalence of undernourishment



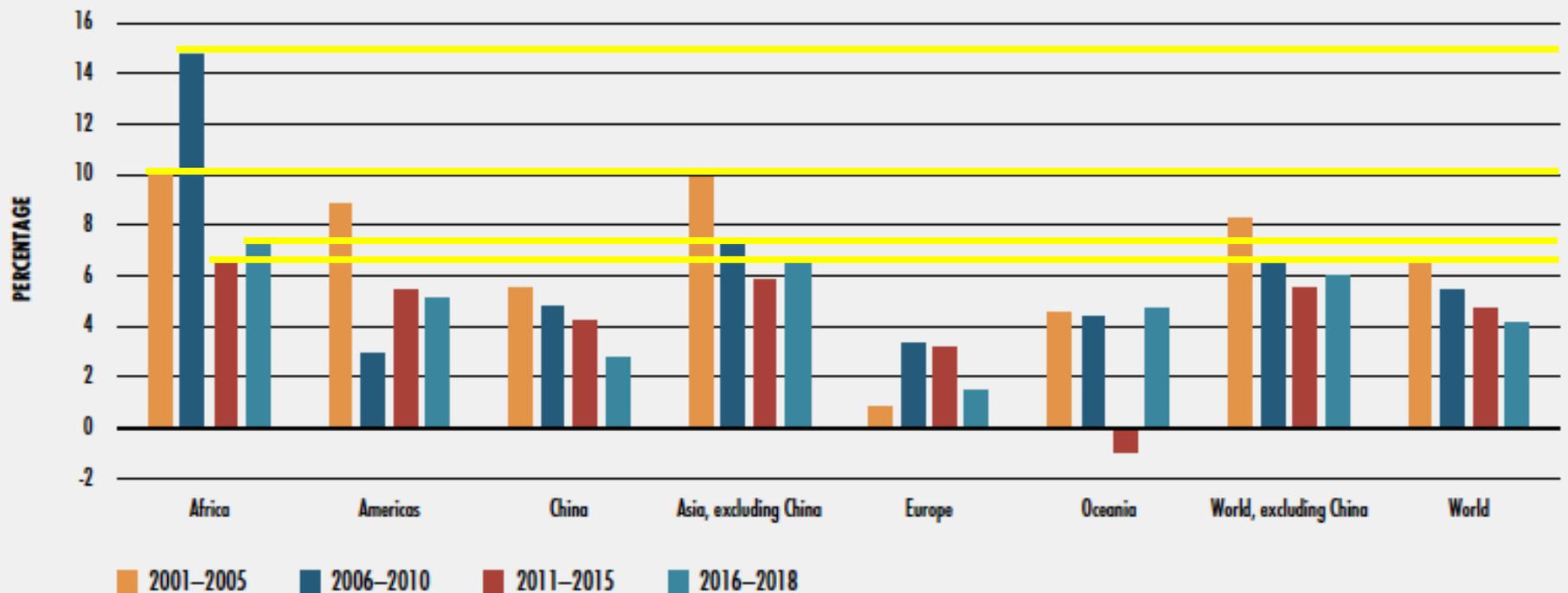
2019*: TOTAL 687.8 MILLION



2030**: TOTAL 841.4 MILLION

Aquaculture: an overview

Annual growth rate of aquaculture fish production



Aquaculture: an overview

Aquaculture fish production in Africa

(thousand tonnes;¹ percentage of world total)

Region/selected countries	1995	2000	2005	2010	2015	2018
Africa	110.2 (0.45%)	399.6 (1.23%)	646.4 (1.46%)	1 285.8 (2.23%)	1 777.6 (2.44%)	2 195.9 (2.67%)
Egypt	71.8 (0.29%)	340.1 (1.05%)	539.7 (1.22%)	919.6 (1.59%)	1 174.8 (1.61%)	1 561.5 (1.90%)
Northern Africa, excluding Egypt	4.4 (0.02%)	4.8 (0.01%)	7.2 (0.02%)	10.0 (0.02%)	23.8 (0.03%)	38.0 (0.05%)
Nigeria	16.6 (0.07%)	25.7 (0.08%)	56.4 (0.13%)	200.5 (0.35%)	316.7 (0.44%)	291.3 (0.35%)
Sub-Saharan Africa, excluding Nigeria	17.4 (0.07%)	29.0 (0.09%)	43.1 (0.10%)	155.6 (0.27%)	262.3 (0.36%)	305.1 (0.37%)



Aquaculture: an overview

Aquaculture production of main species groups by continent in 2018

Category	Africa	Americas	Asia (– Cyprus)	Europe (+ Cyprus)	Oceania	World
	<i>(thousand tonnes, live weight)</i>					
Inland aquaculture						
1. Finfish	1 893	1 139	43 406	508	5	46 951
2. Crustacea	0	73	3 579	0	0	3 653
3. Molluscs	207	207
4. Other aquatic animals	...	1	528	0	...	528
Subtotal	1 893	1 213	47 719	508	6	51 339
Marine and coastal aquaculture						
1. Finfish	291	1 059	3 995	1 892	92	7 328
2. Crustacea	6	888	4 834	0	6	5 734
3. Molluscs	6	640	15 876	680	102	17 304
4. Other aquatic animals	0	...	387	3	0	390
Subtotal	302	2 587	25 093	2 575	200	30 756
All aquaculture						
1. Finfish	2 184	2 197	47 400	2 399	97	54 279
2. Crustacea	6	961	8 414	0	6	9 387
3. Molluscs	6	640	16 083	680	102	17 511
4. Other aquatic animals	0	1	915	3	0	919
Total	2 196	3 799	72 812	3 083	205	82 095

Aquaculture: an overview

Sustainable aquaculture

Environmental sustainability

Social and community sustainability

Economic sustainability



Aquaculture: an overview

