

# FORO ECONÓMICO DE PESCA Y ACUACULTURA 2018



Tendencias Mundiales en el  
Consumo de Pescados y  
Mariscos; su beneficio en la  
salud de los consumidores y la  
economía de los países.  
Global Trends of Seafood  
Consumption and its Benefit to  
the Countries Economy and  
Population Health

Association of International  
**seafood**  
Professionals

***Roy Palmer  
Association of  
International Seafood  
Professionals***



**Desde 2013 hemos discutido el papel que juegan los pescados y mariscos (capturar y cultivar) en la dieta y los roles que el gobierno y la industria deben desempeñar. Datos de la FAO y mis observaciones de participar en varios proyectos y Agradecimientos especiales a Albert G.J. Tacon & Marc Metian y otros colaboradores.**



Food and Agriculture  
Organization of the  
United Nations

[www.fao.org/cwp-on-fishery-statistics/handbook/socio-economic-data/food-balance-sheets](http://www.fao.org/cwp-on-fishery-statistics/handbook/socio-economic-data/food-balance-sheets)





Mexico since 2013 increased national per capita consumption by 4.3 kg, currently reaching 13.2 kg per year

**In aquaculture, Mexico is achieving average growth rate of 16% in the last four years compared to a world average of 6% in that same period**

**In 2017 Mexico recorded sales revenue of \$ 40 billion for the first time, with \$ 21 billion related to fishing (52%) and nearly \$19 billion to aquaculture (48%). The production value shows an increase of 8% in relation to the previous year.**

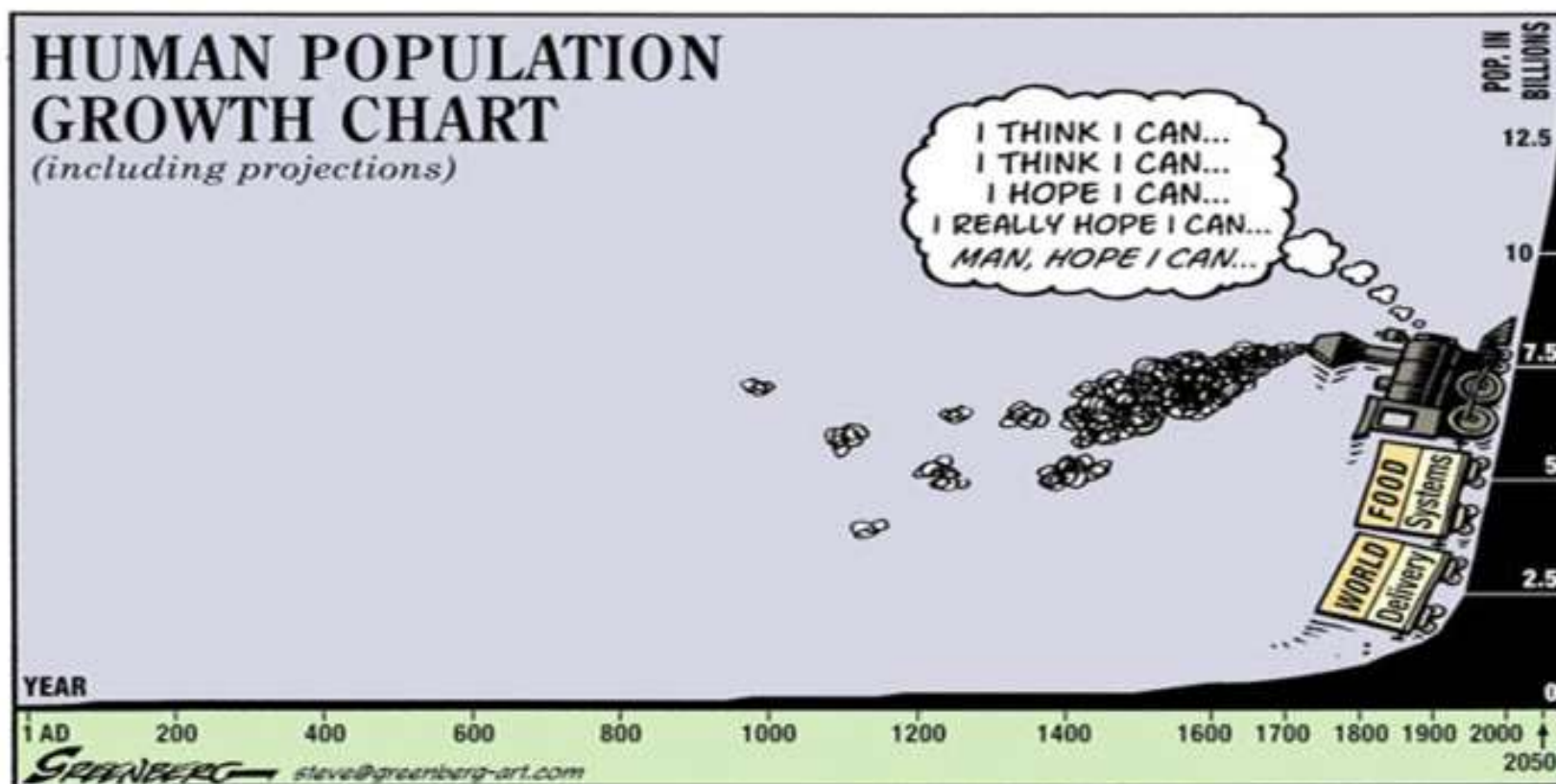




# Why Food Matters..... Por qué importa la comida.....

POPULATION EXPLOSION

OVERPOPULATION





## THE GLOBAL CRISIS IN POPULATION, FOOD AND MENTAL HEALTH

Council of the Royal Society of Medicine, London



- 2011 Think Tank on the Future of Food & Agric - not enough arable land to feed the 8 billion never mind the 10 billion in 2050.
- Failure of the food system to meet the nutrition of the brain and the heart.
- Human milk has the least amount of protein of any large mammal BUT it is rich in the essential fats needed to finalise brain growth and development.
- Rise in mental ill health now costing more than heart disease and cancer combined - UK 2007 £77 billion, 2010 £105 billion 2013 £113 billion 2016 £120 billion

**SOLUTION – Agriculturise the Oceans - Recast food production policy to serve brain specific nutrition**





# Global Nutrition Report

(<http://globalnutritionreport.org/>)



- **Malnutrition is a condition that directly affects one in three people globally.**
- **Malnutrition and diet are by far the biggest risk factors for the global burden of disease: Every country is facing a serious public health challenge from malnutrition.**
- **1.9 billion adults are overweight or obese**
- **2 billion suffer from micronutrient deficiency**
- **161 million children under 5 y.o are too short for their age**
- **795 million do not get the food they need to live a healthy life**
- **Serious economic consequences**

**Losses of 11 percent of gross domestic product (GDP) every year in Africa and Asia,**

**whereas preventing malnutrition delivers \$16 in returns on investment for every \$1 spent.**

<http://advocate.gaalliance.org/new-normal-in-global-nutrition/#sthash.upnjWntd.dpuf>



## MALNUTRITION TAKES A TOLL ON FAMILY BUDGETS.

**8%** More money spent  
on healthcare when one  
person is obese



UNITED STATES

**16.3%** of income  
lost with a diagnosis  
of diabetes



CHINA

**30%** More money spent on  
healthcare with a cardiovascular  
disease diagnosis



INDIA





## Role of fish & fishery products in the national food balance sheets

### Papel de los productos pesqueros y pesqueros en las hojas de balance de alimentos nacionales

#### Global per capita fish supply

19.7 kg

2013 (FAO, 2016)

Central America

9.1 kg

Africa

9.9 kg

South America

10.0 kg

Northern America

21.7 kg

Europe

21.9 kg

Asia

23.1 kg

Oceania

24.8 kg



Low-income countries

7.9 kg (mean of 31 countries)

Lower-middle income countries

16.5 kg (mean of 51 countries)

Upper-middle income countries

18.7 kg (mean of 55 countries)

High-income countries

30.3 kg (mean 69 countries)





## Role of fish & fishery products in the national food balance sheets

## Papel de los productos pesqueros y pesqueros en las hojas de balance de alimentos nacionales

### Contribution of fish to animal protein supply

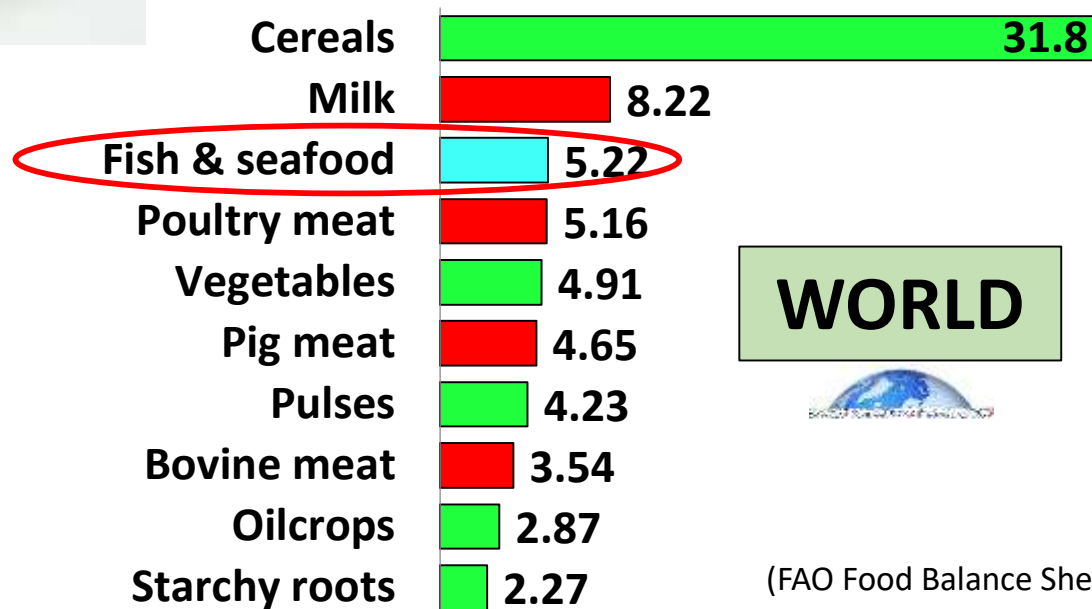
2013 (FAO, 2016)

<u>Global</u>	<u>16.8 %</u>
Africa	<u>18.1 %</u>
South America	6.7 %
Central America	7.3 %
Northern America	7.5 %
Europe	11.4 %
Asia	<u>22.9 %</u>
Oceania	10.4 %
Low-income countries	<u>21.6 %</u> (mean of 31 countries)
Lower-middle income countries	20.7 % (mean of 51 countries)
Upper-middle income countries	13.4 % (mean of 55 countries)
High income countries	15.1 % (mean of 60 countries)





## Protein Supply g/day - 2013



**WORLD**



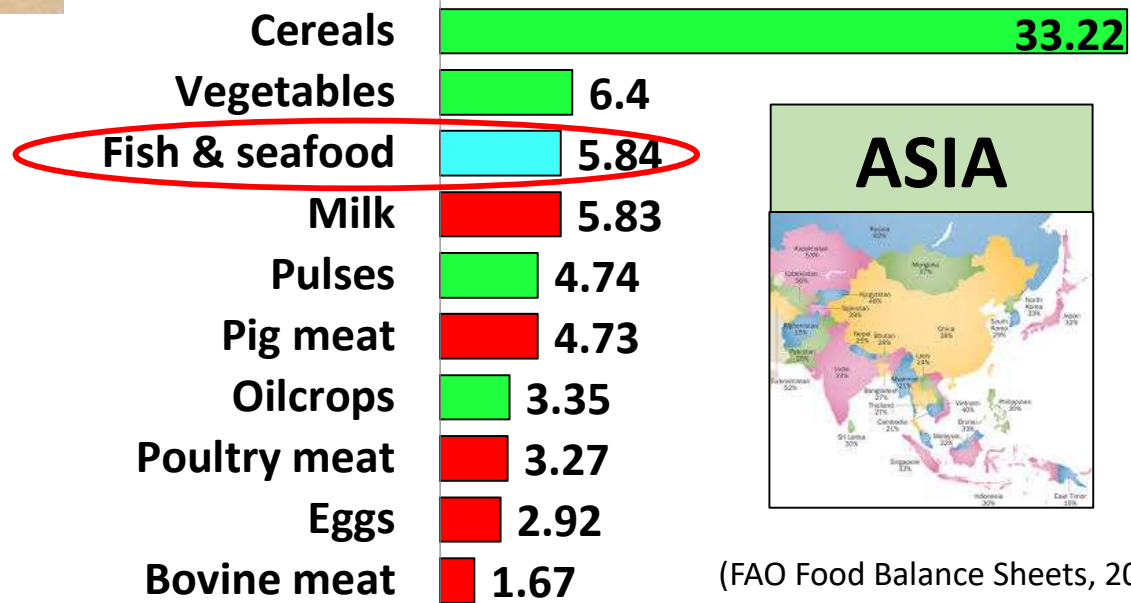
(FAO Food Balance Sheets, 2016)







## Protein Supply g/day - 2013

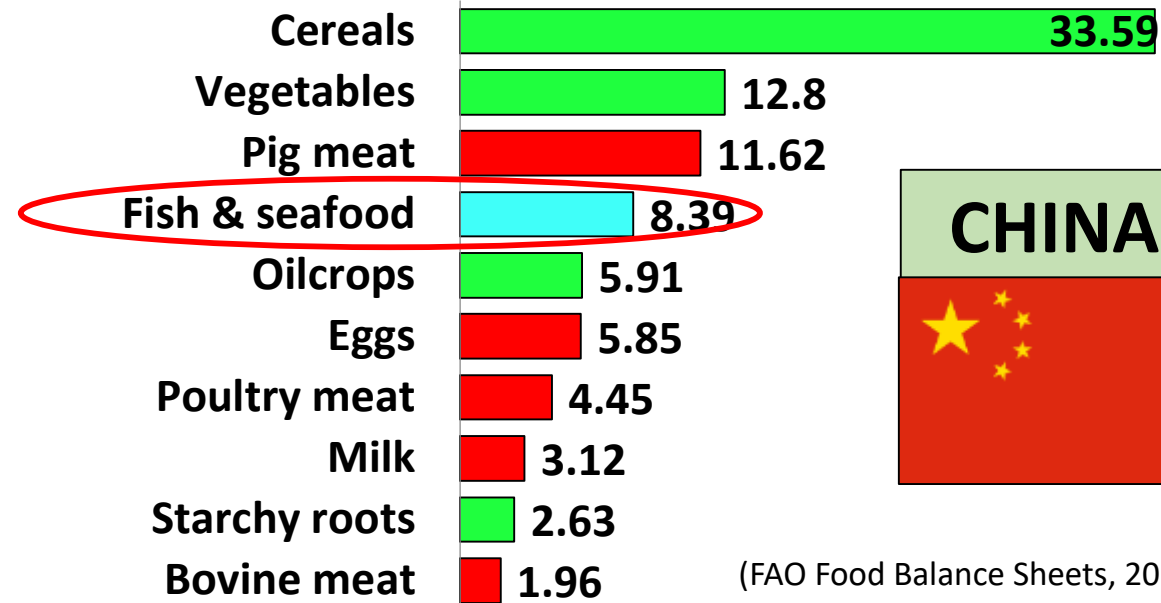


(FAO Food Balance Sheets, 2016)





### Protein Supply g/day - 2013

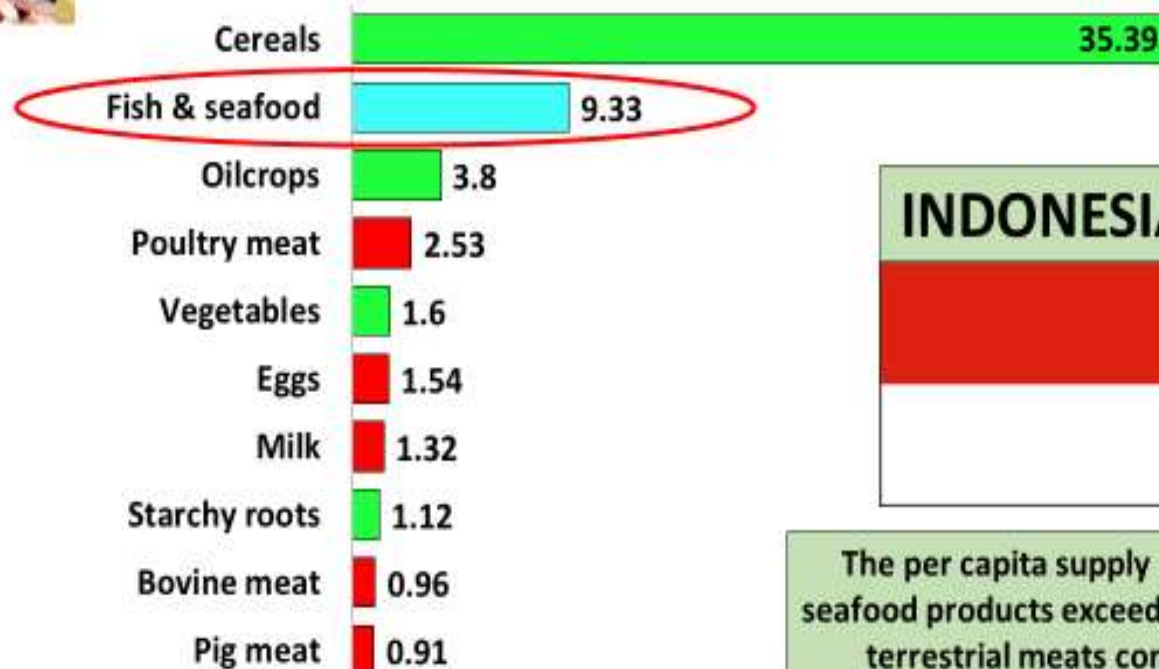


(FAO Food Balance Sheets, 2016)





## Protein Supply g/day - 2013



(FAO Food Balance Sheets, 2016)

INDONESIA

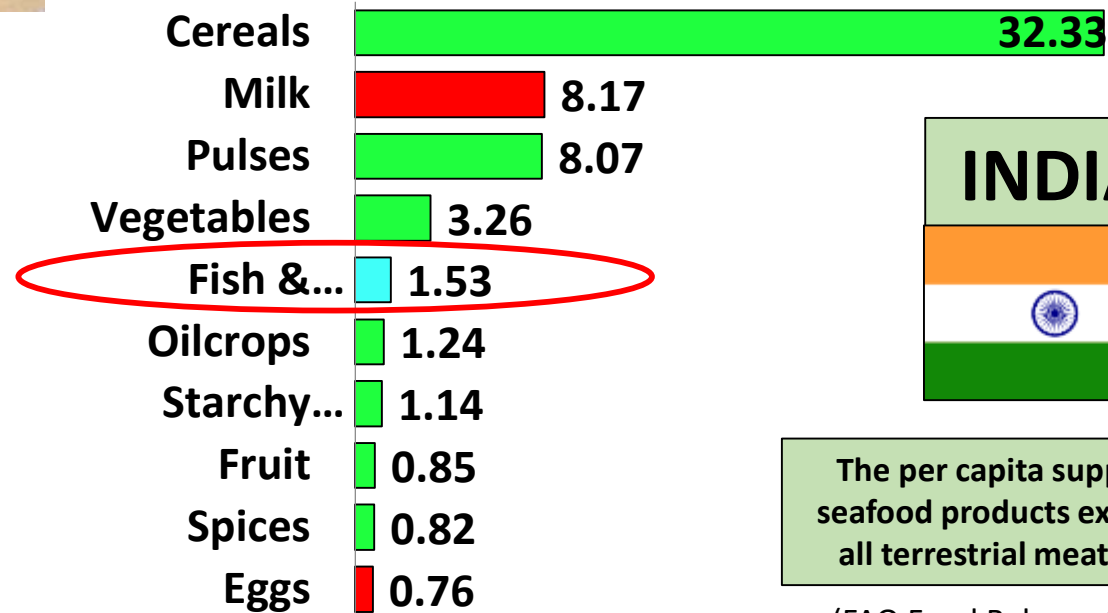
The per capita supply of fish & seafood products exceeds that of all terrestrial meats combined







## Protein Supply g/day - 2013



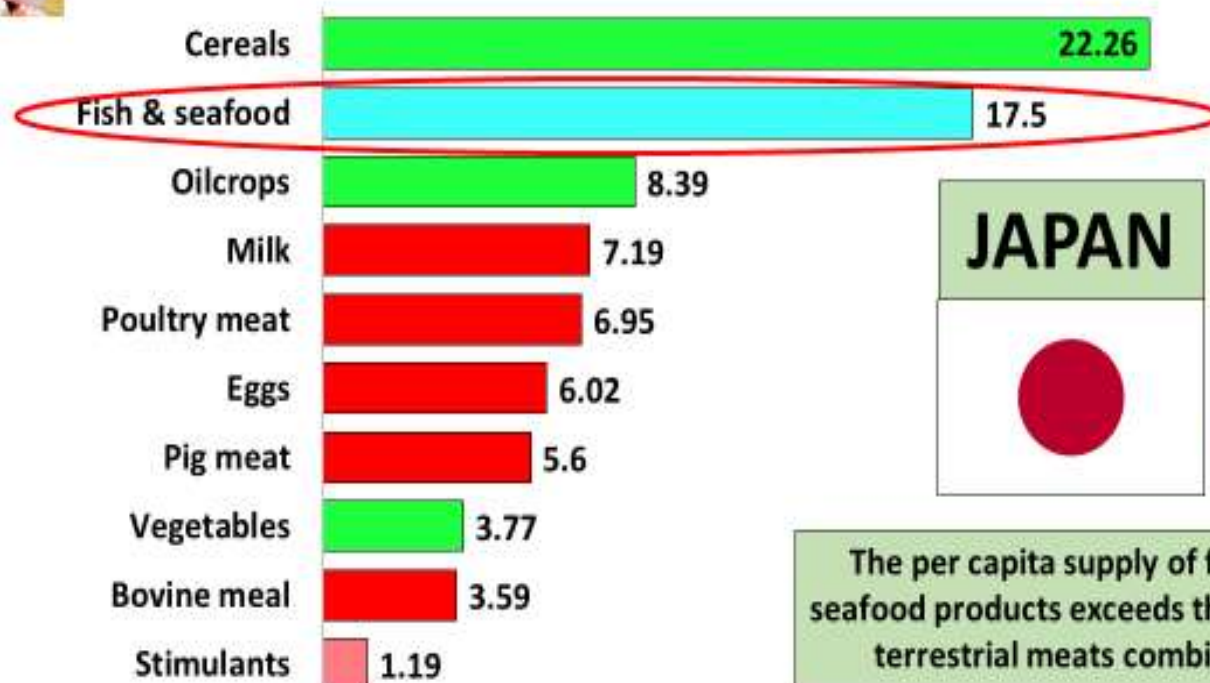
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(FAO Food Balance Sheets, 2016)





## Protein Supply g/day - 2013



(FAO Food Balance Sheets, 2016)

**JAPAN**



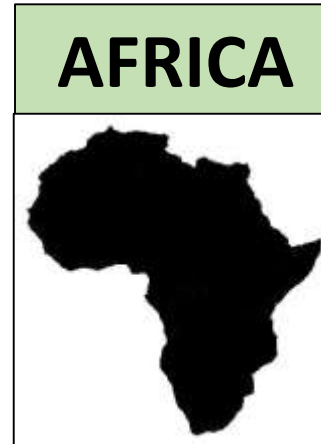
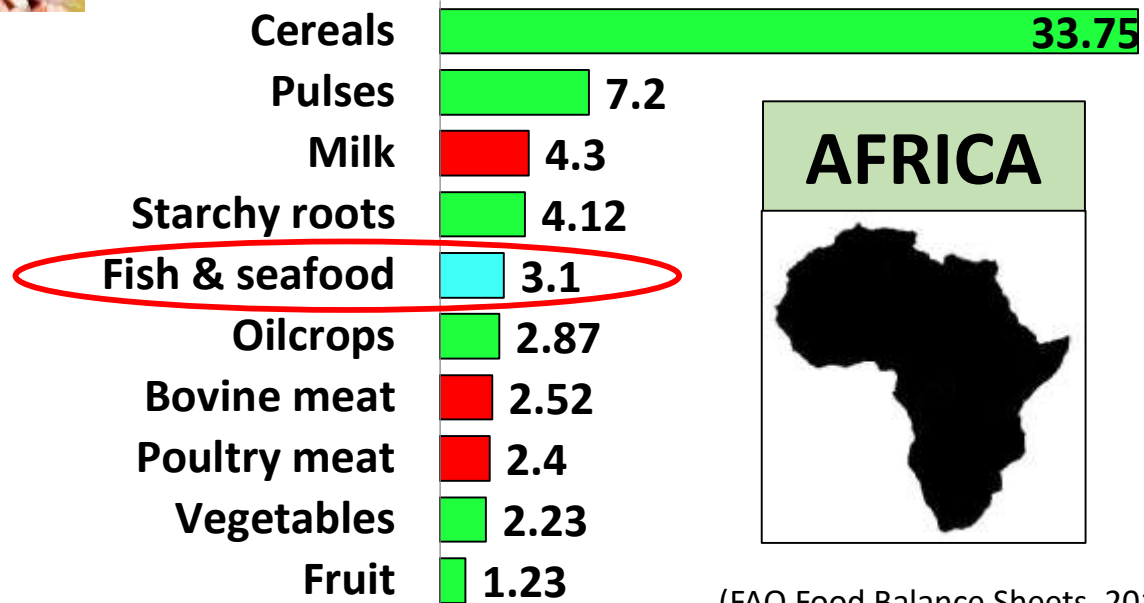
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AISP Tour – Japan Early December 2018 – in conjunction  
with <https://www.ispim-connects-fukuoka.com/>



## Protein Supply g/day - 2013

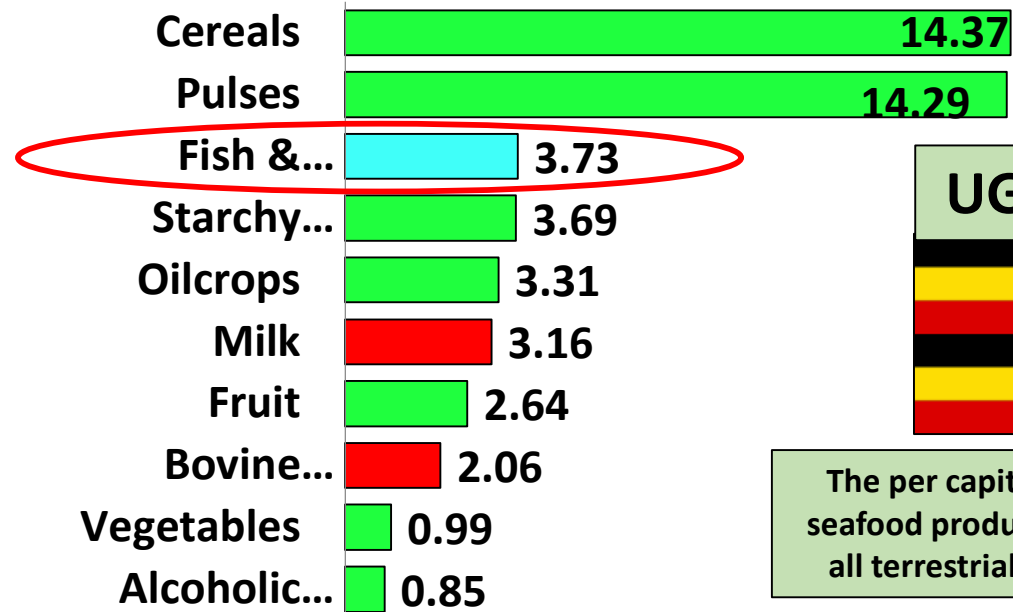


(FAO Food Balance Sheets, 2016)





## Protein Supply g/day - 2013



**UGANDA**

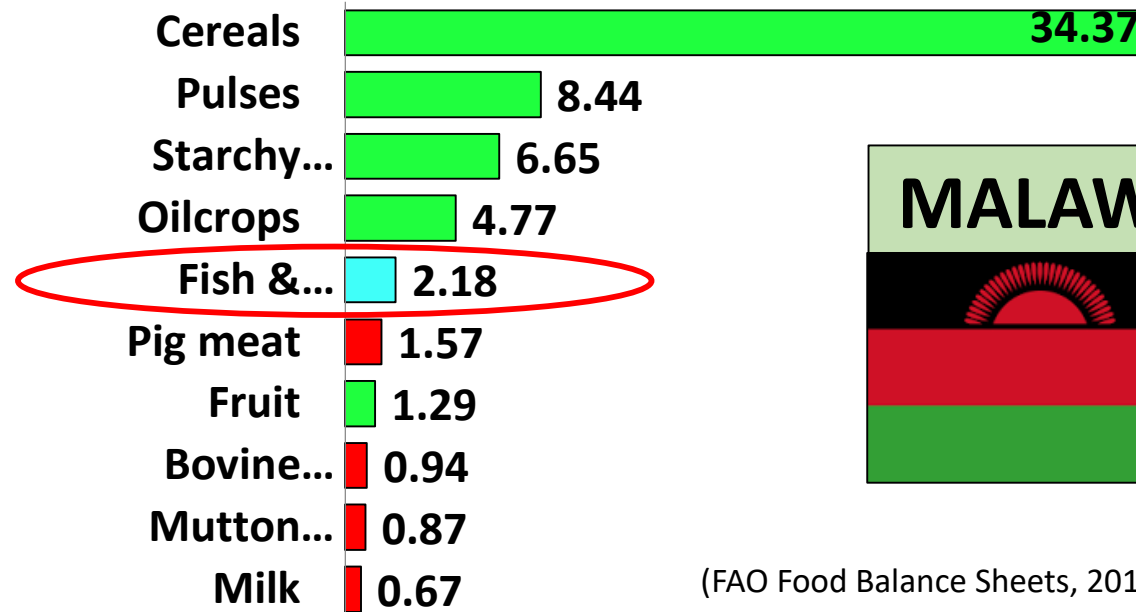


The per capita supply of fish & seafood products exceeds that of all terrestrial meats combined

(FAO Food Balance Sheets, 2016)



### Protein Supply g/day - 2013

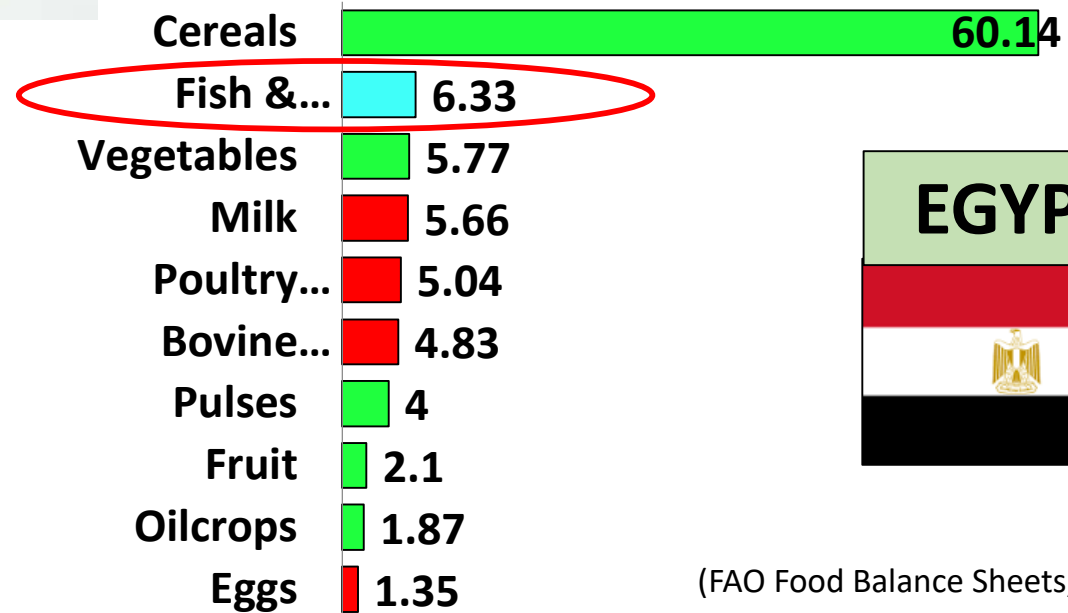


(FAO Food Balance Sheets, 2016)





### Protein Supply g/day - 2013

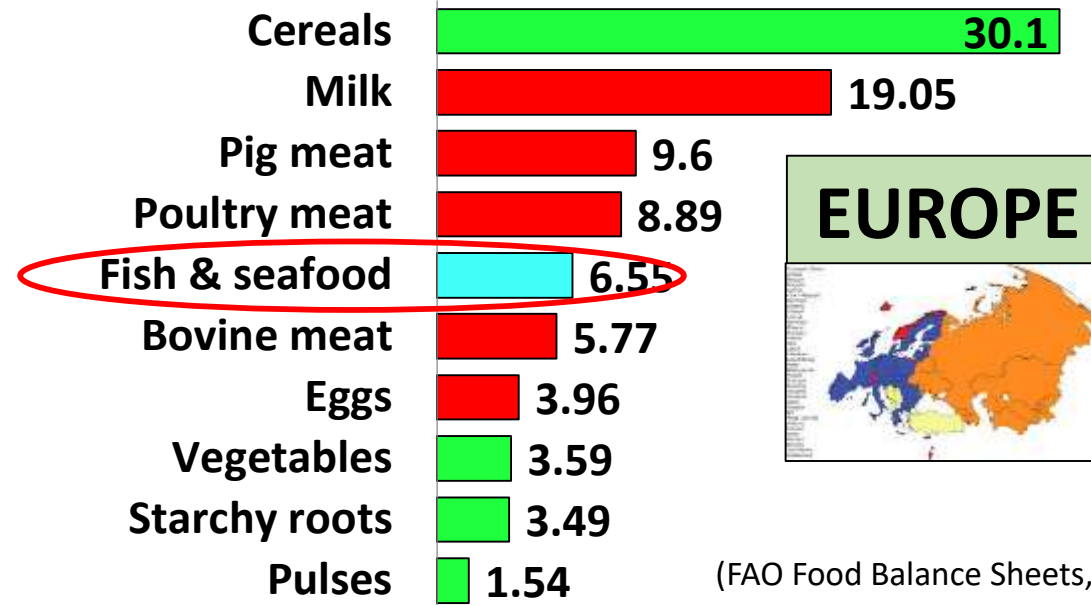


(FAO Food Balance Sheets, 2016)





## Protein Supply g/day - 2013

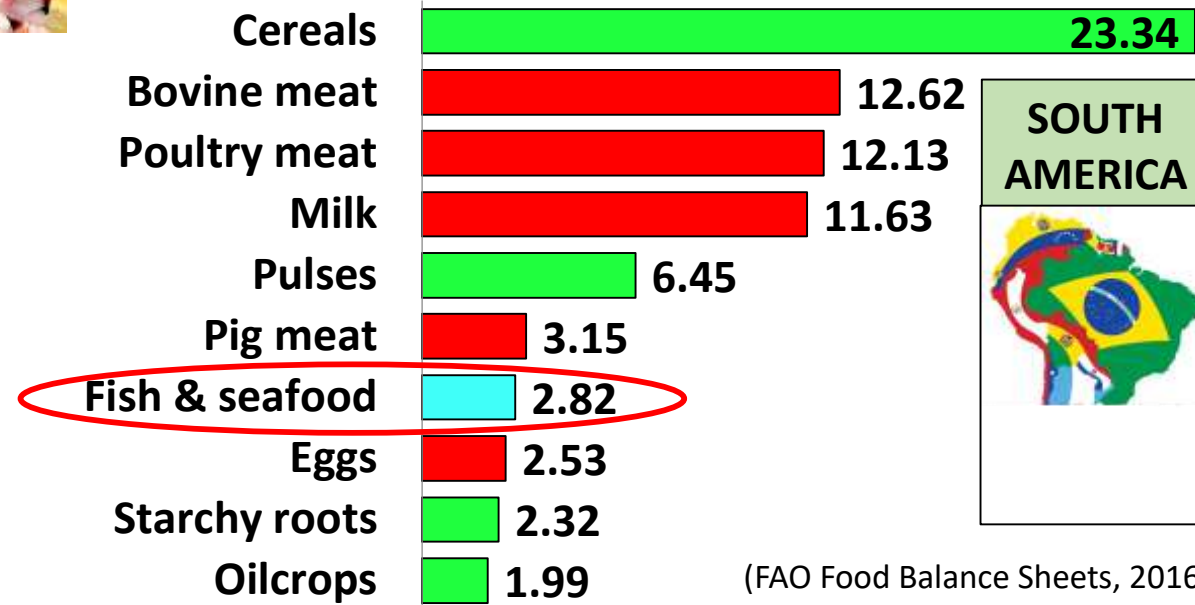


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### Protein Supply g/day - 2013

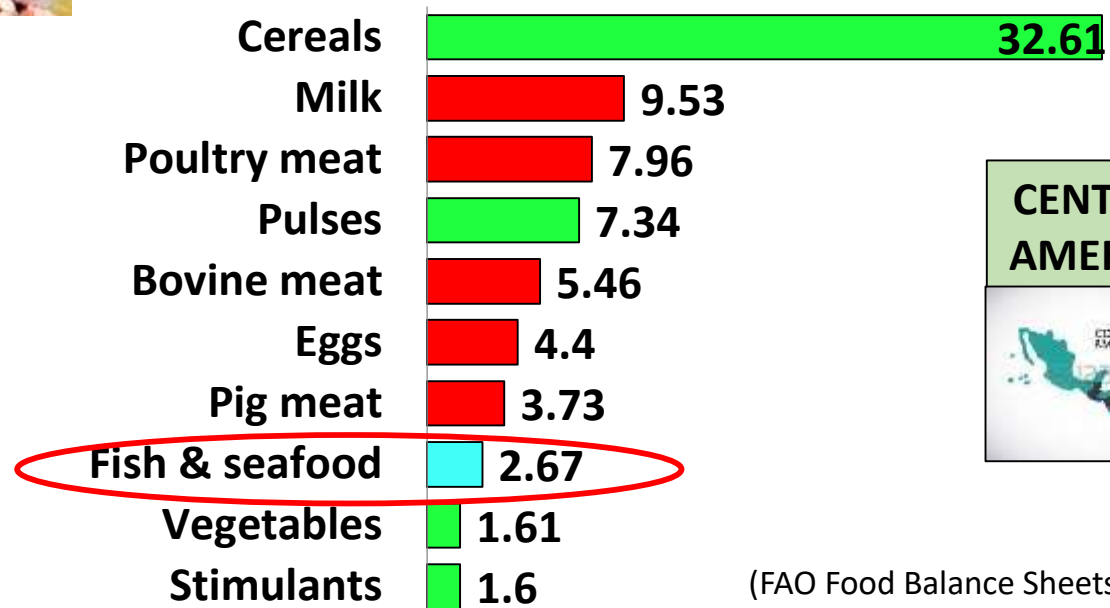


(FAO Food Balance Sheets, 2016)





## Protein Supply g/day - 2013



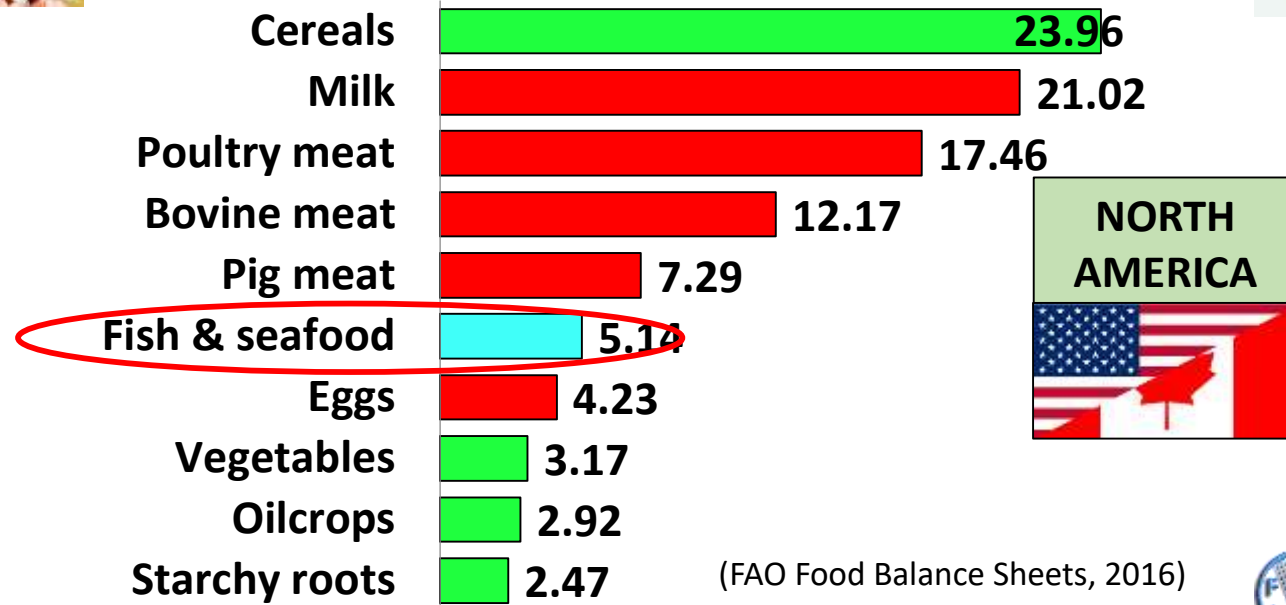
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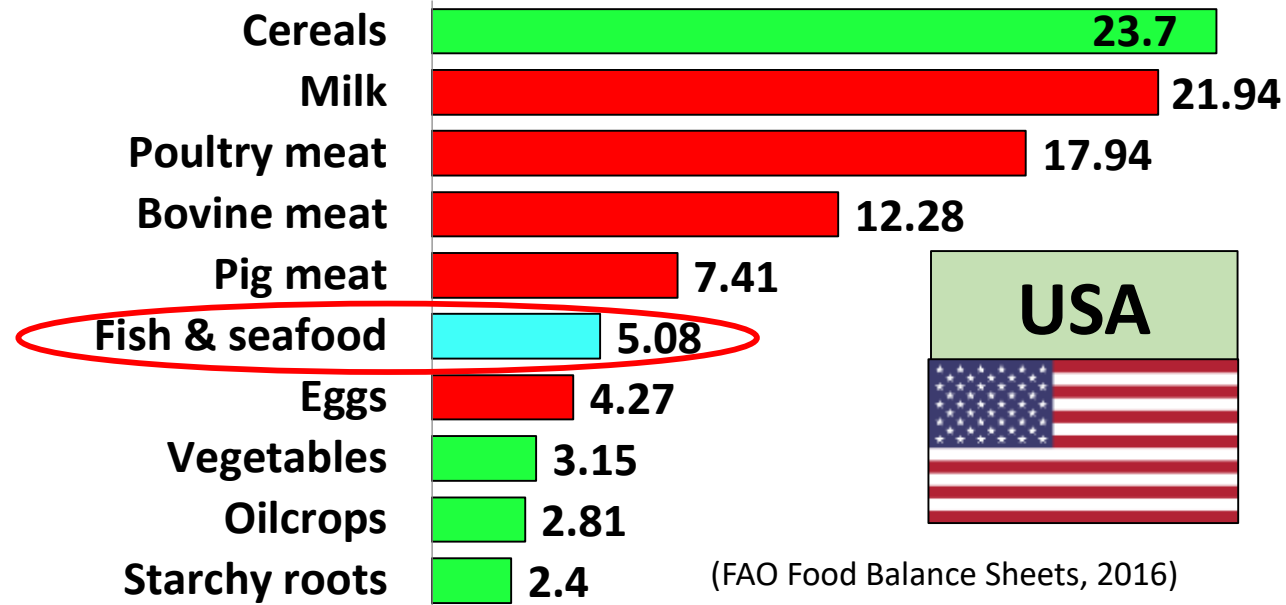
### Protein Supply g/day - 2013





Steve Ballmer – [www.USFacts.org](http://www.USFacts.org)

### Protein Supply g/day - 2013





## What does this show us?



The data clearly show that fish & seafood produce, whether derived from wild capture fisheries or produced through aquaculture, plays a major role as a source of dietary protein & other essential dietary nutrients. **On a global basis fish & seafood products constitute the third major source of dietary protein consumed by humans after cereals and milk, representing 6.5% of total protein supply or 16.4% of total animal protein supply.**

Moreover, it is also clear that fish & seafood plays **a greater role in the nutrition of low-income countries** within the **African** continent (primarily derived from capture fisheries) and within the **Asian** region in general (primarily derived from aquaculture).







## PREVENTION or CURE?

## We are what we eat!

With increasing income there has been shift away from the traditional high-fiber staple food based diet to a Western style diet with increased consumption of cheaper processed & refined foods, animal meats, dairy produce, eggs & refined vegetable oils & sugars;

From a health perspective, it is clear that the excess consumption of these products, in combination with a more sedentary lifestyle, can have a negative effect on human health & an increased risk of coronary heart disease, stroke & diabetes;

However, as in the case of Japan, the high consumption of fish & seafood products in combination with meat products in moderation, coupled with a restricted calorie intake, can have a beneficial effect on health and longevity.





## SMALL FISH NOURISHING BANGLADESH

- There are 164.7 million people in Bangladesh.
- They have achieved self-sufficiency in fish production, with an annual production of 4.05 million tons, in response to the annual demand of 4.03 million tons. Nutrient composition of 55 common fish species of Bangladesh showed that small indigenous fish species contain more micronutrients than large fish.
- Pregnant and lactating women and children under five years of age -- suffer from "hidden hunger," ie micronutrient deficiencies. Prevalence of stunting, underweight, and wasting among children under five years are reported to be 36.1%, 32.6%, and 14.3%, respectively. Vitamin A deficiency stands at 20.5% and 5.4% among children under five and pregnant and lactating women, respectively.







### Situation Analysis

Over 70kgs Meat pp pr

Agriculture contributes 3% to GDP and uses  
more than 85% of the country's consumed  
water



1kg fish will save 32 mill cu mt fresh water





## GAP ANALYSIS

# Factors Affecting Seafood Consumption

### • ECONOMIC FACTORS

- Income
- Prices

### • INDIVIDUAL FACTORS

- Dietary requirements
- Taste preferences
- Availability of product and time
- Lack of knowledge/confidence re seafood
- Awareness about safety and sustainability
- Allergies
- Lack of confidence in sector - **labeling**
- Poor presentation /service - **standards**



### • CULTURAL FACTORS

- Culture & tradition
- Religion

### • SOCIAL FACTORS

- Corporate social responsibility & public image
- Regulations







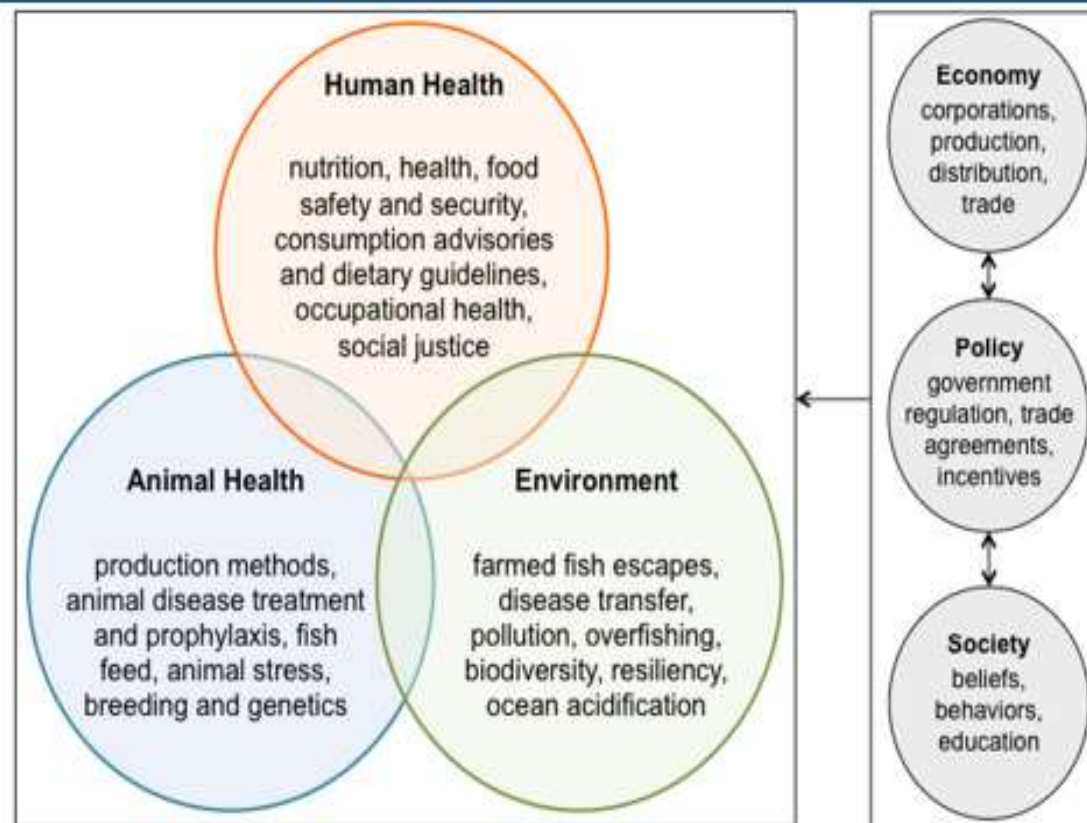
## Executive Summary

The Workshop determined the following over-arching and major Goals in order to achieve the transformation of the KSA national dietary habits to adapt to a better living and eating style through increased seafood consumption

- **Whole of Government - Full Value Chain Engagement** - Vision 2030 can only be attained if there is engagement and ownership by all stakeholders. In order to succeed in this, the following goals have been established:
  - **Create a Data Collection & Analysis Strategy - Approvals KPI's and Sign-off**  
Insufficient current information, so needs to be researched to determine baseline for evaluation
  - **Create Regulations & Standards - Based on KSA Responsible Best Practice for Aquaculture (RBPA); Fish Names and Labeling**  
To be recognized within food regulations in a manner that creates that as a minimum standard for KSA
  - **Engage Seafood Value Chain**  
Needs to be researched, identified and developed
  - **Create a Funding Strategy** - Determine Short-term and Long-term strategies
  - **Create an Education & Capacity Building Strategy to Achieve Goals**  
Essential at all levels
  - **Improve Health Outcomes for KSA Community**  
A Seafood and Health Conference to be held in KSA within one year to extend research and engage all health professionals
  - **Create an Export Strategy for KSA Seafood**  
Promote KSA as a brand



# One Health: A Role for the Health Community



\$  
\$  
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\$  
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\$







## Consumer Trends



Source: Datamonitor



**Muchas Gracias  
Mexico**

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