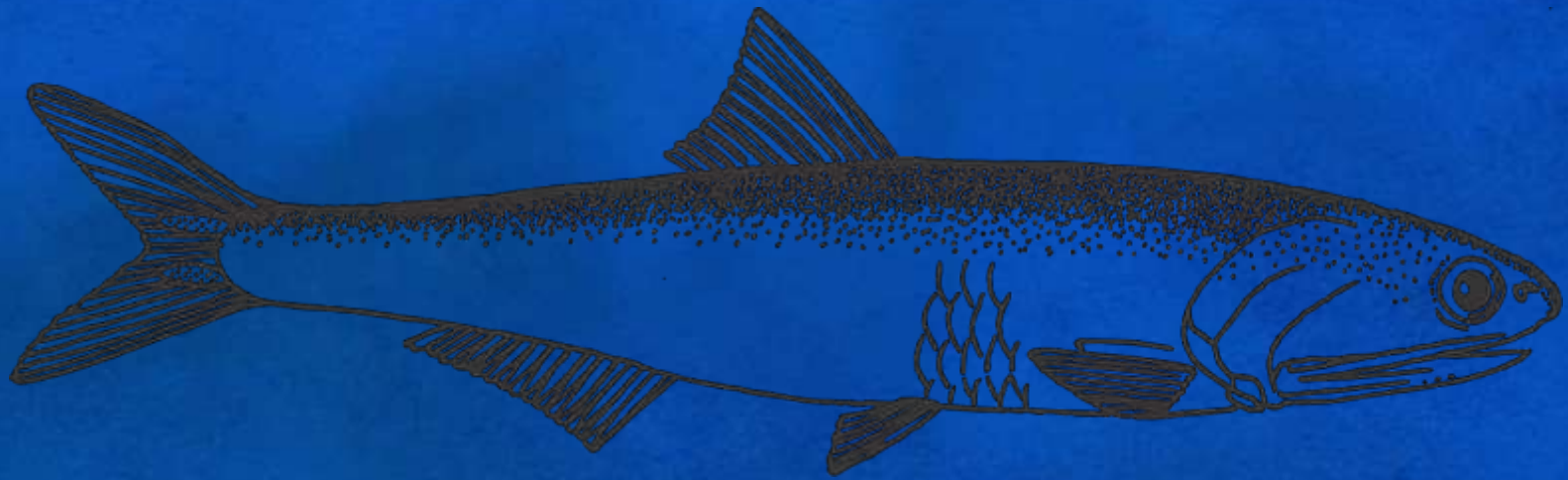




# The Little Fish that can Feed the World

Tess Geers, Patricia Majluf, Santiago de la Puente, Villy Christensen

*Global Workshop: Nutrition-Sensitive Fish Agri-Food Systems*

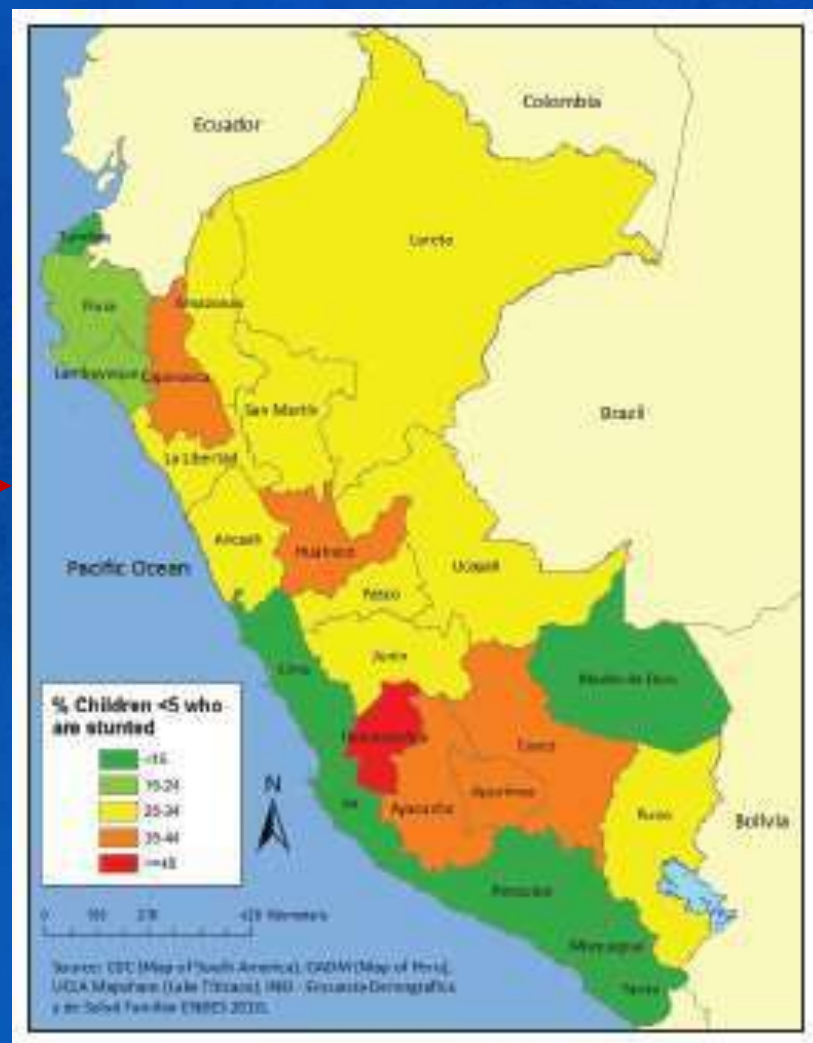
*5-8 December, 2017, Siem Reap, Cambodia*



THE UNIVERSITY  
OF BRITISH COLUMBIA

**OCEANA** Protecting the  
World's Oceans

# PERU in CONTEXT



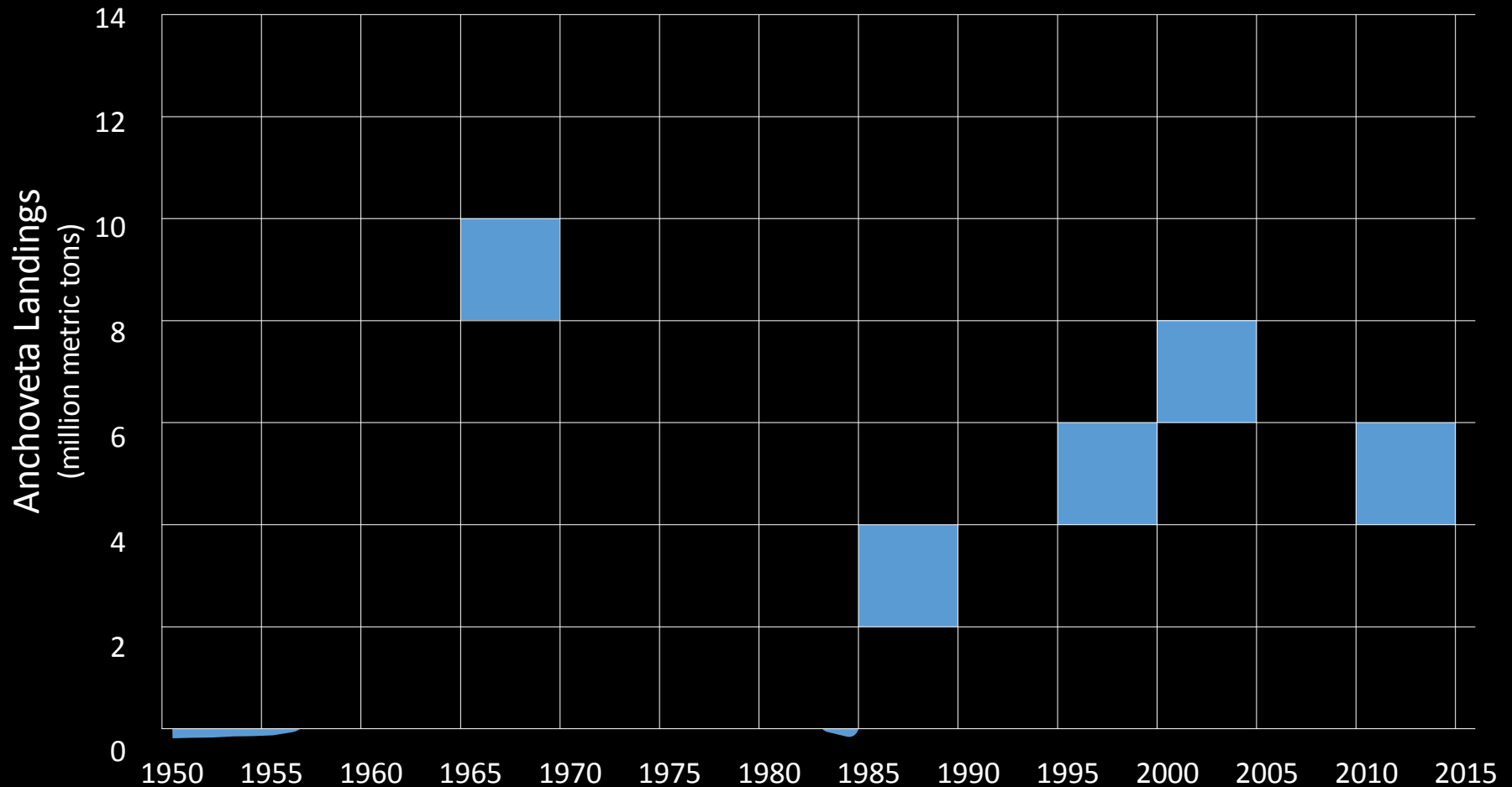


1 in 6 children in Peru are malnourished

And it's not because there isn't ample food



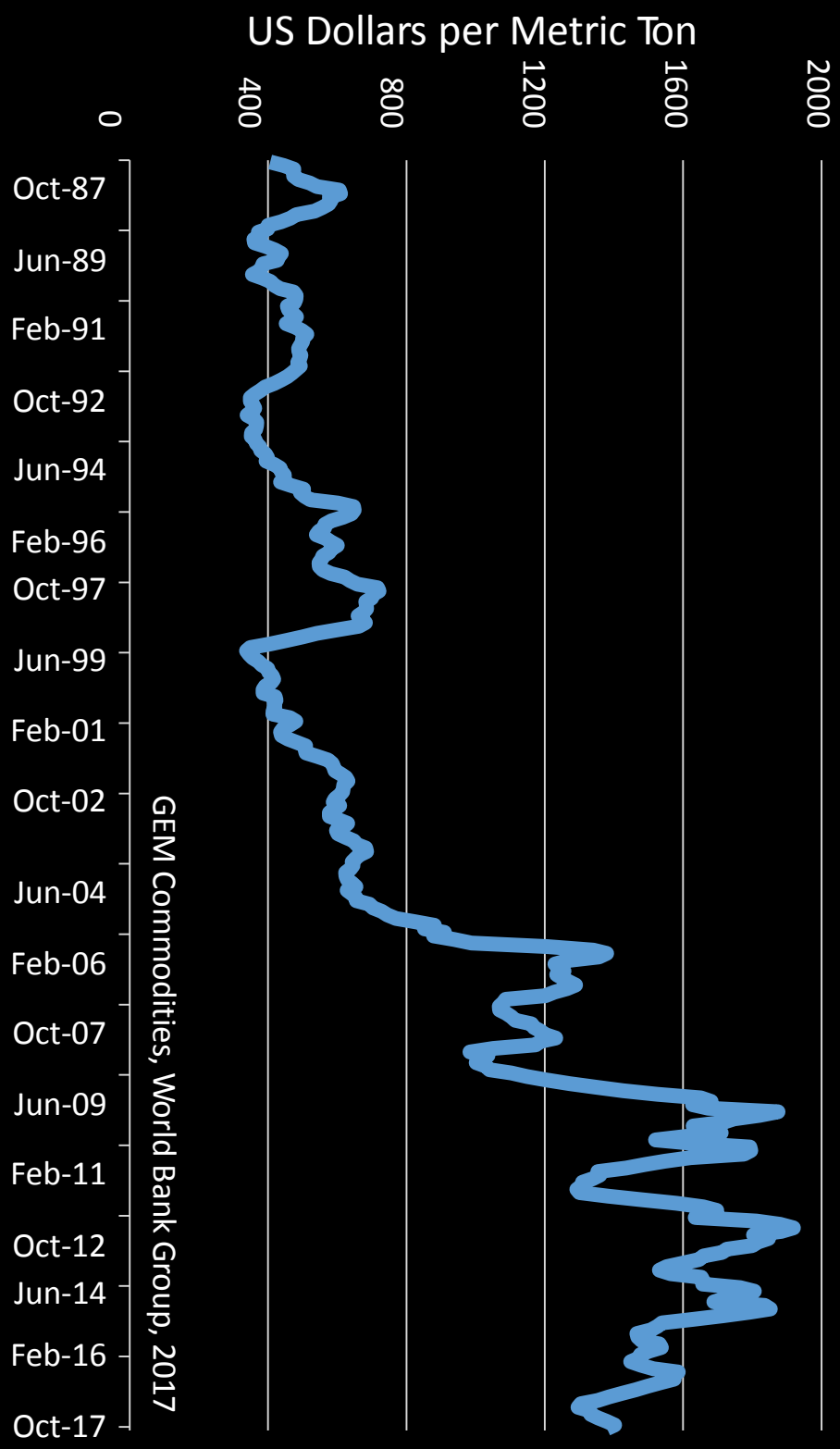
# LARGEST SINGLE-SPECIES FISHERY in the WORLD





But we're fishing for feed, not food

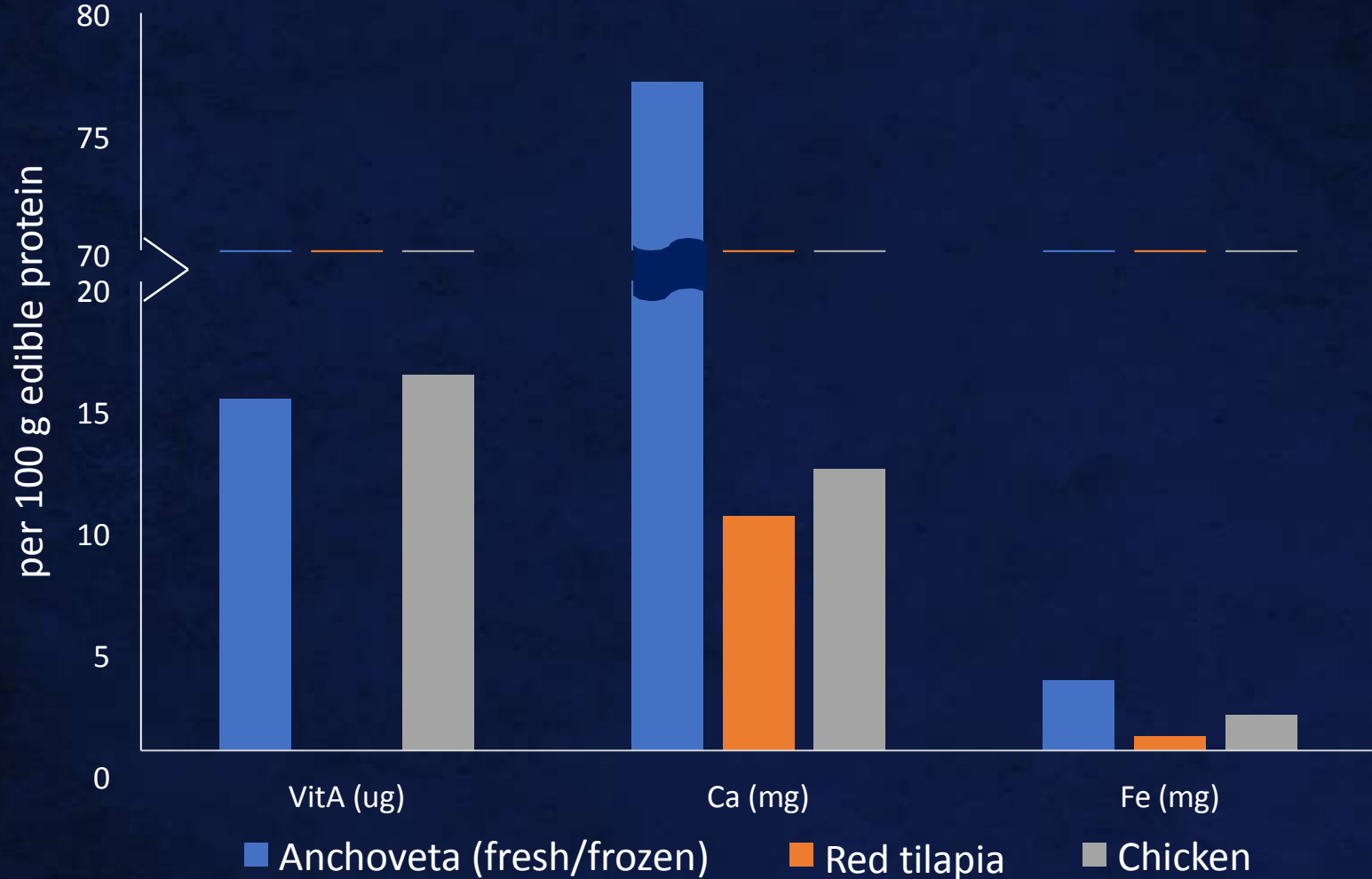
# PRICE of PERU FISHMEAL on the GLOBAL MARKET





Anchoveta and sardine have been identified as the primary sources of protein for ancient Peruvians

# HOW NUTRITIOUS is ANCHOVETA?



Avadí, A and P. Fréon (2014) Ecol. Indic. 48: 518-532.



# Promoting anchoveta consumption is not a new idea

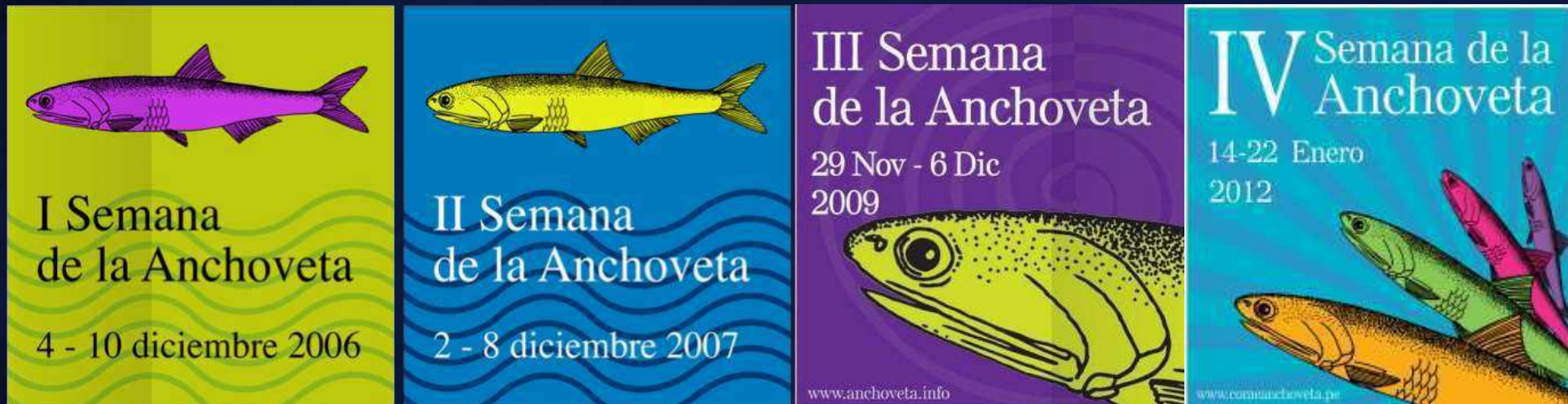


**MINISTRO RAFAEL REY  
COCINA ANCHOVETA PARA  
MADRES DEL CALLAO**

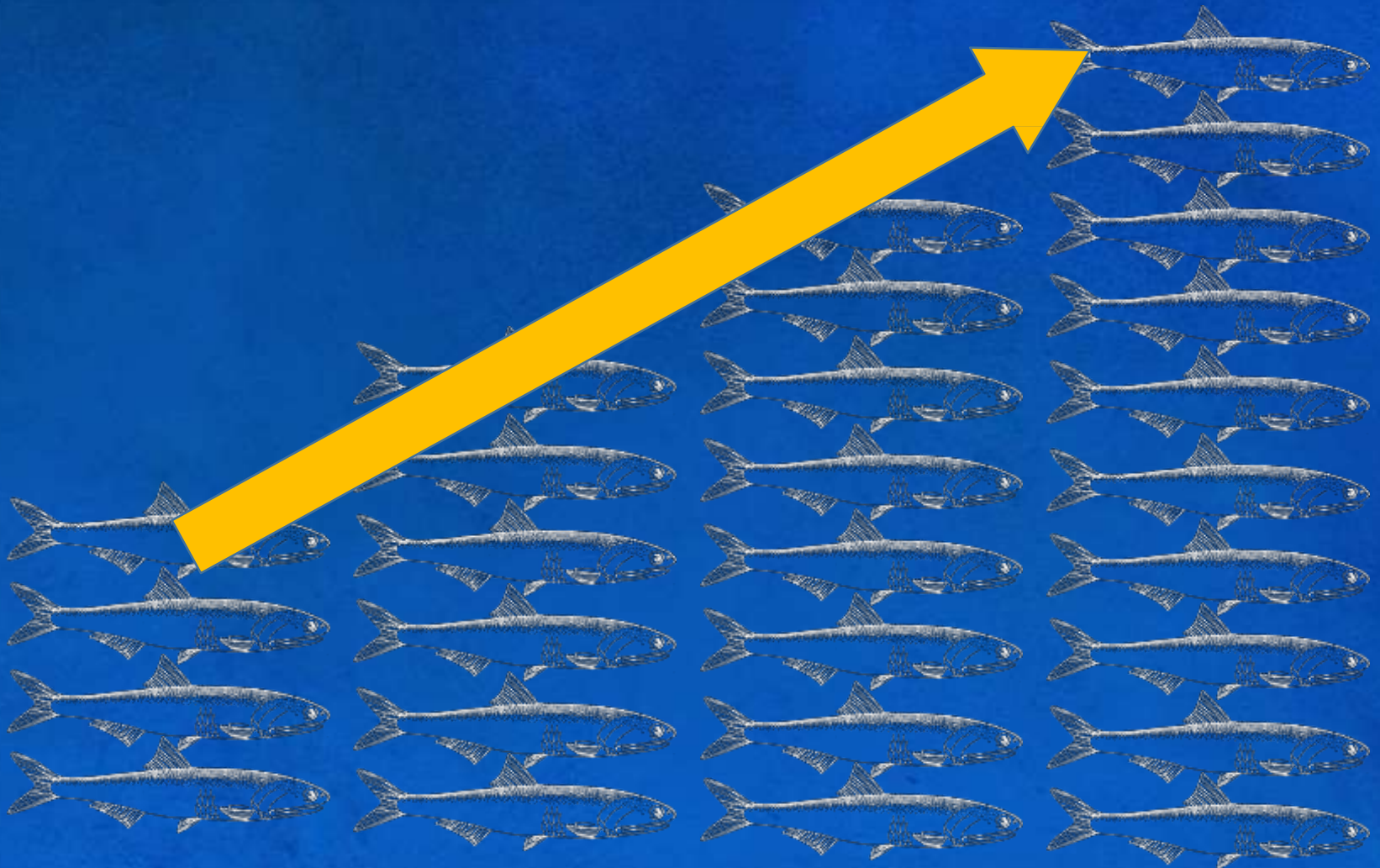


# ANCHOVETA WEEKS

- Elevated anchoveta in the eyes of chefs and consumers
- Landings for direct human consumption increased from 43,000 t to 105,000 t
- People associated anchoveta with “nutritious, delicious food”



What will it take to increase production for direct human consumption by 100,000 t?



# HINDRANCES

- The Fisheries Law
- Competitive pricing of fishmeal/fish oil
- Illegal diversion of fish to reduction
- Cold storage
- Creating accessible products



## A SIDE NOTE on FISHERIES MANAGEMENT in PERU

- Industrial fleets can land for reduction only
- Artisanal fleets can land for direct human consumption only
- Industrial fleet managed under quota system
- Artisanal fleet is largely unregulated



Proposal: Change management and develop public-private collaborations to change the industry and the market.



# A PROPOSAL – CHANGING MANAGEMENT

- Allow industrial fleet to land for direct human consumption
- Allow artisanal fleet to land for reduction
- Total quota must incorporate artisanal fleet
- Increased monitoring and enforcement



# A PROPOSAL – PUBLIC-PRIVATE COLLABORATION

- New products
- Marketing initiatives
- Engaging chefs
- Expansion to international markets



# A WINNING SOLUTION

- Increased employment
- Greater opportunities for women in the workforce
- Improved nutrition
- Opportunity for ecosystem-focused management
- Climate change resilience



THANK YOU!

