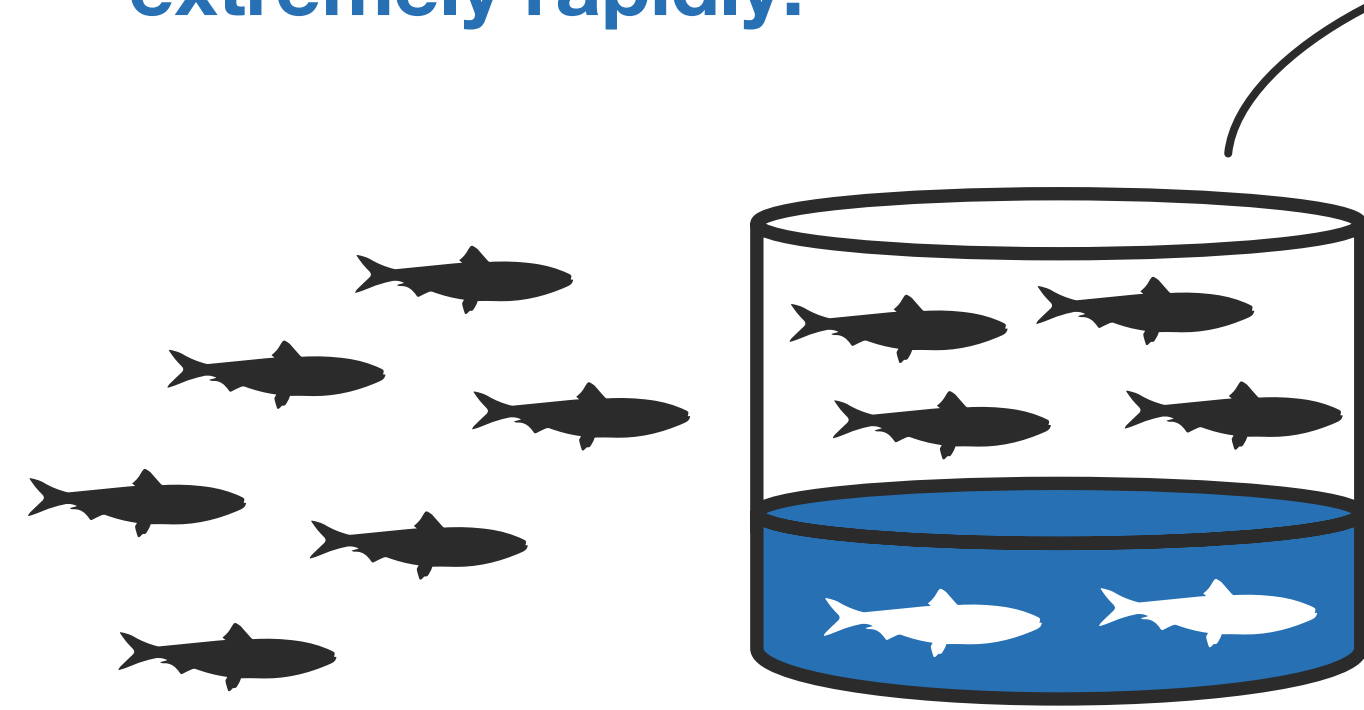


GLOBAL OPPORTUNITIES FOR MARICULTURE DEVELOPMENT TO PROMOTE HUMAN NUTRITION

IMPORTANCE OF SEAFOOD AND GROWTH OF MARICULTURE

Seafood is an important source of nutrition for billions of people. Can farming seafood help the two billion people around the world suffering from malnutrition?

Seafood farming is growing extremely rapidly:



More than half the world's **seafood is farmed**

Mariculture accounts for about a **third of global aquaculture**

Mariculture:
the subset of aquaculture done in salt or brackish water

WHERE MIGHT MARICULTURE HELP ALLEVIATE MALNUTRITION?

To ensure that the growth in mariculture also contributes to improving global nutrition, we first have to identify places where both an **economic and nutritional opportunity overlap**.

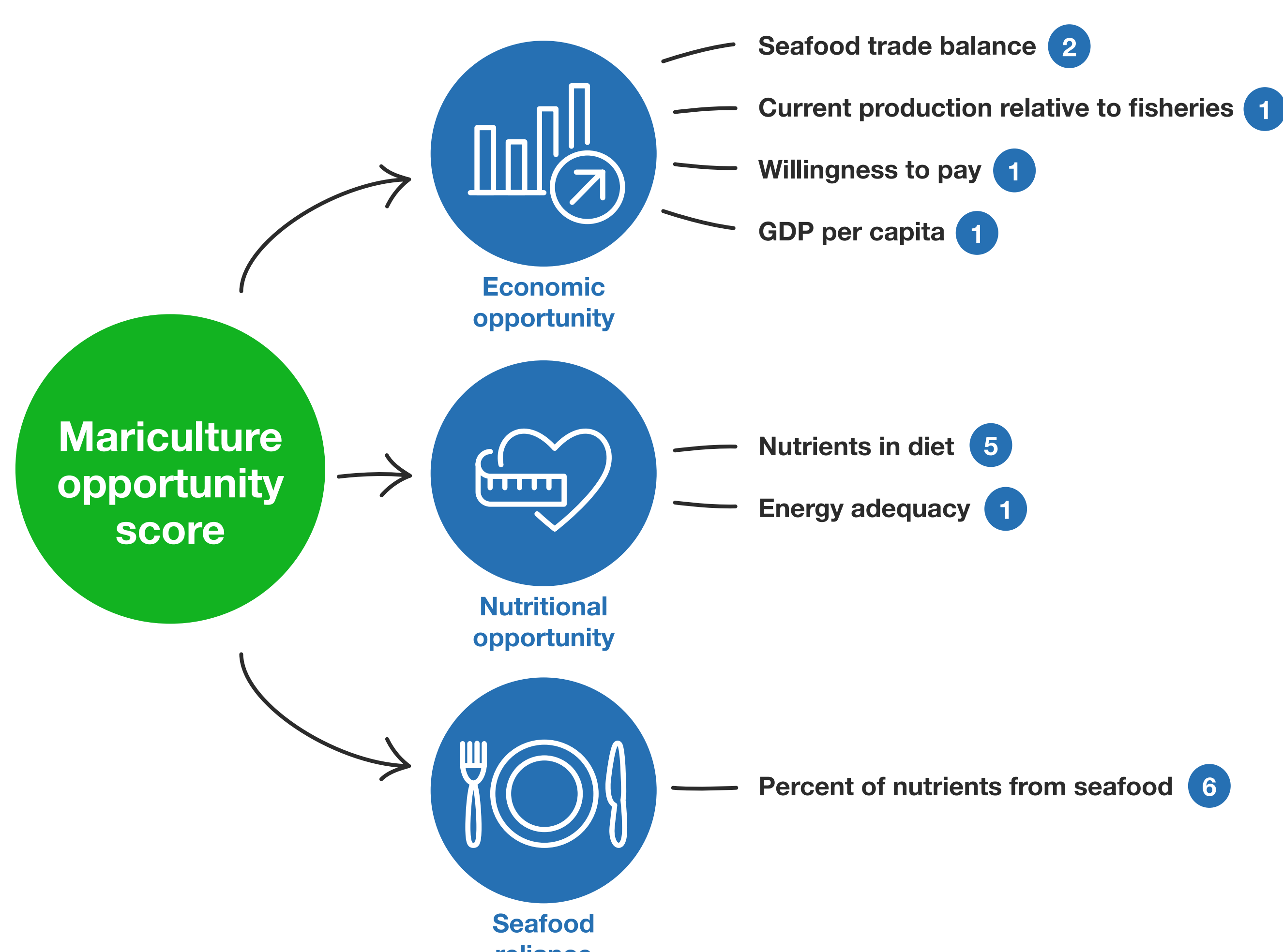


To have the most impact, these countries should also be placed where people have a **high reliance on seafood in their diets**, so that improving seafood production has a high chance of alleviating malnutrition.



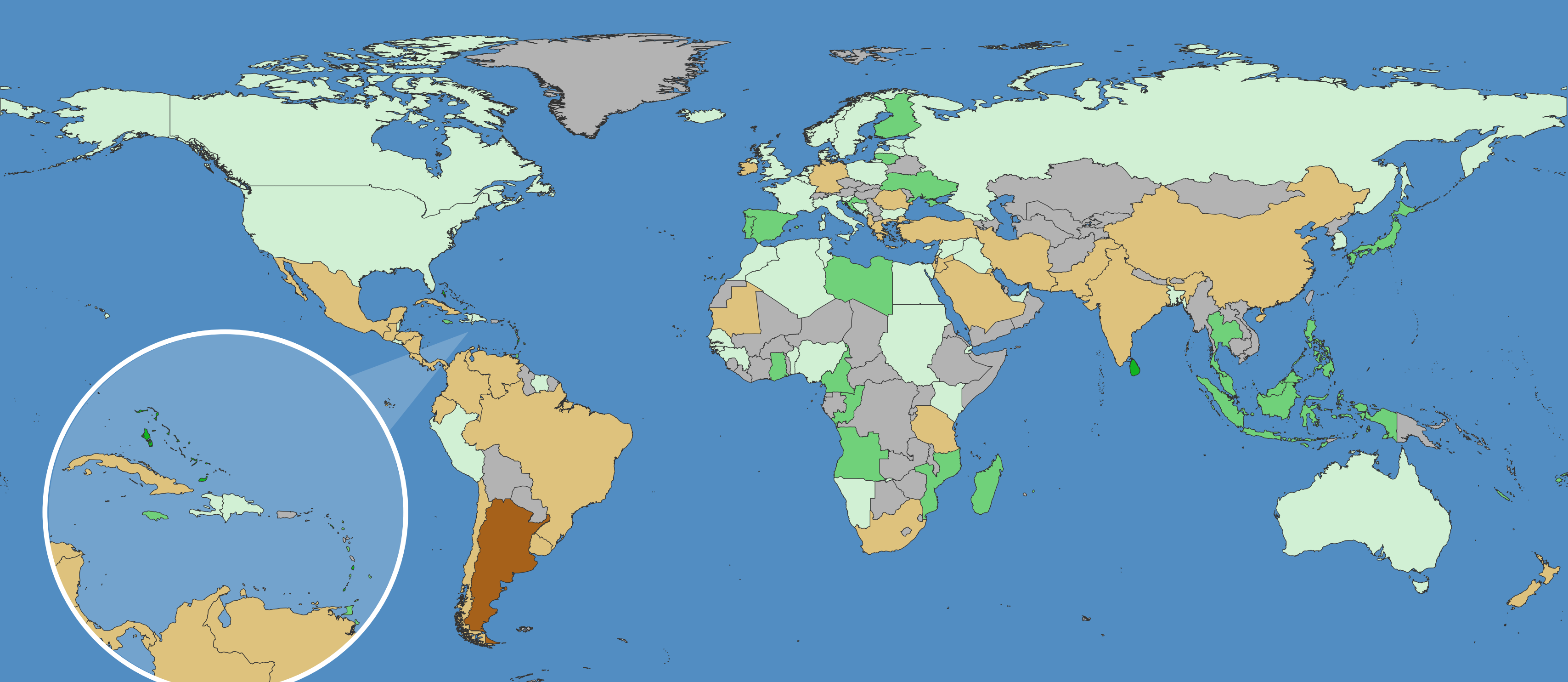
OUR APPROACH

We collected and analyzed publicly-available data on seafood production, trade, nutrition, and diets to produce **three indices for each nation**, which we termed “scores”: economic opportunity, nutrition opportunity, and seafood reliance. **Each score is a compilation of multiple metrics** (the blue circles show the amounts).



THE RESULTS

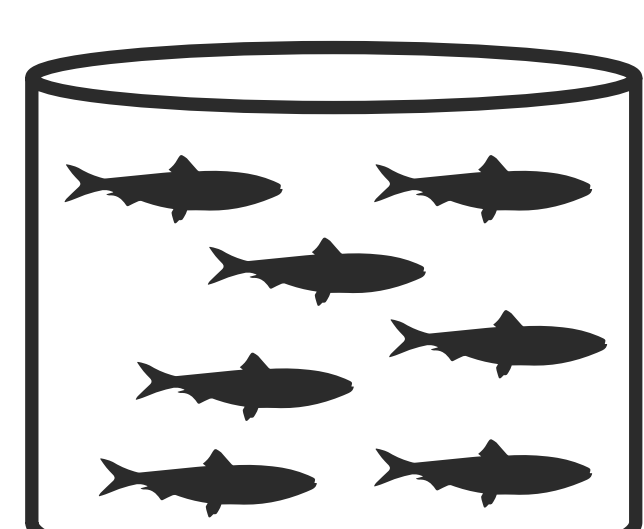
Once the scores were calculated, we could compare countries along these three axes, and see which **countries consistently showed the highest opportunity**:



Island nations have high opportunity in many categories.

Island nations in the Caribbean and Southeast Asia showed, in general, high dietary reliance on seafood, high economic opportunity for development, and high levels of malnutrition.

BARRIERS REMAIN



One major current trend is a **dominance of export-oriented mariculture** (that is, mariculture production of exclusively high valued species for export to other nations). Capturing the opportunities identified in our study will require **policy action, educational campaigns, and strong institutions** to ensure production of locally consumed, affordable, and nutritious products.