

# Fisheries and climate change: the elephant in the room?



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Photo: Vera Agostini

...finding “asylum”

**OCEAN  
SOLUTIONS**

**FISHERIES**

**CLIMATE &  
DISASTER RISK  
REDUCTION**

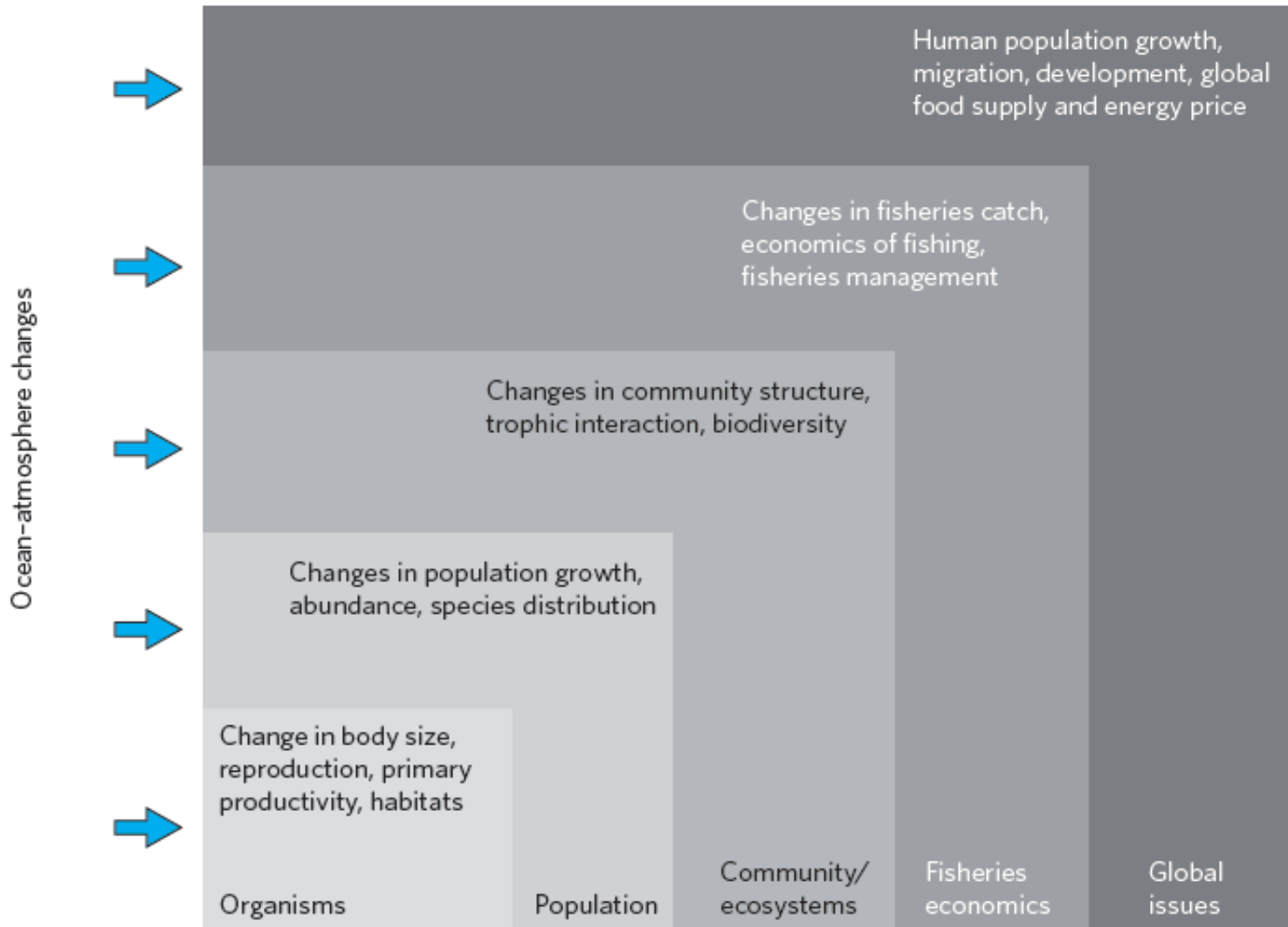
Fish habitats

Productivity

Distribution

Infrastructure

Fishing operations



From Sumaila et al, 2013

X – plans for

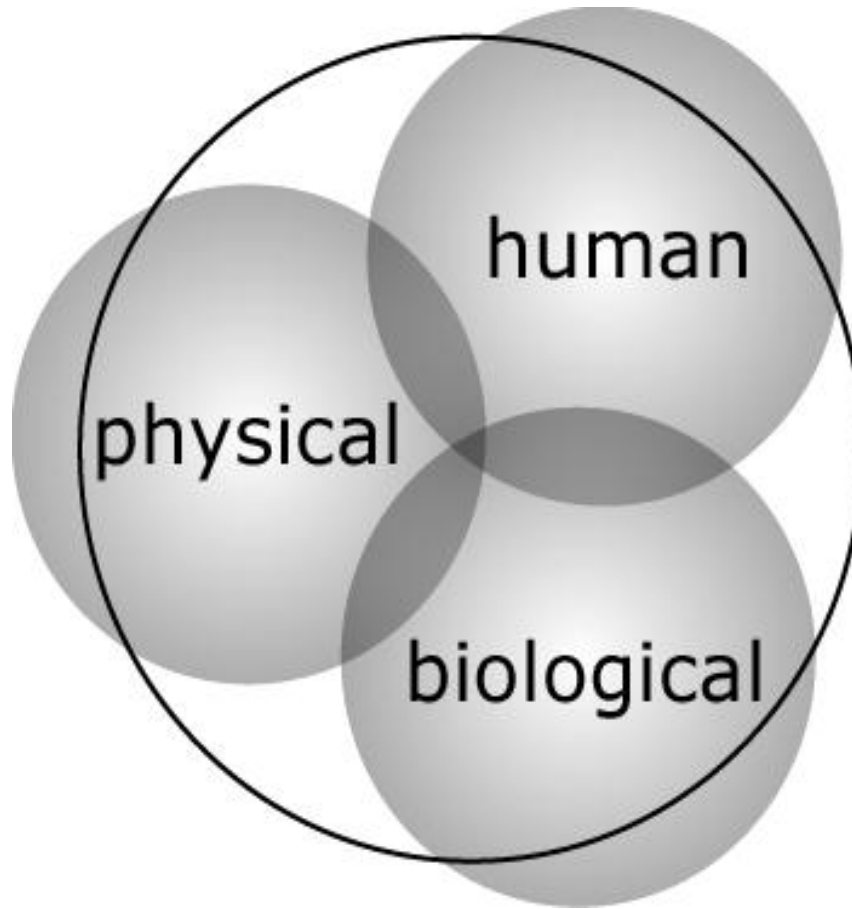
X – work in motion

| STRATEGY  | US - NORTHEAST | CORAL TRIANGLE | CARIBBEAN | GLOBAL |
|-----------|----------------|----------------|-----------|--------|
| IOM       | X              | X              |           |        |
| FISHERIES |                | X              |           |        |
| CDRR      |                | X              | X         | X      |

MAR/Belize, Seychelles, Coral Triangle



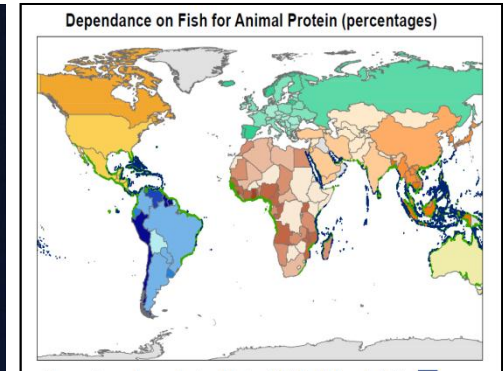
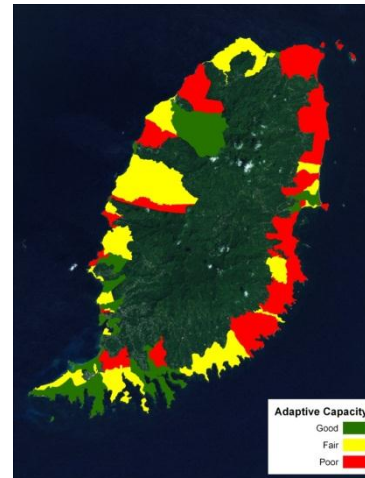
# Our approach



Livelihood Sensitivity Index Description and Rational of Variables

| Variable   | Measure of variable per enumeration district  | Reason  | Affect on Sensitivity              |
|--|---|---|------------------------------------|
| ED income from non natural resource related industries | Percentage of total workforce in ED who reported non-natural resource related industries as their primary industry of work                      | The higher the percent of total income derived from non natural resources vulnerable to climate change the less sensitive   | Higher percentage = less sensitive |
| ED income generated by fisheries                       | Percentage of total workforce in ED who reported fisheries as their primary industry of work  | The higher the percent of total income derived from natural resources vulnerable to climate change the more sensitive   | Higher percentage = more sensitive |
| ED income generated by tourism                         | Percent of total workforce in ED who reported hotels and restaurants as their primary industry of work  | The higher the percent of total income derived from natural resources vulnerable to climate change the more sensitive   | Higher percentage = more sensitive |
| Critical fisheries facilities                          | Total number of critical fisheries facilities (landing sites, fish markets, ship-building, emergency gear storage, general gear storage) in ED. | Multiple fisheries facilities reduces an ED sensitivity (although it increases exposure)  | Higher number = less sensitive     |
| Critical tourism facilities                            | Total number of critical tourism facilities (hotels, marina, dive-shops) in ED.   | Multiple tourism facilities reduces an ED sensitivity (although it increases exposure)  | Higher number = less sensitive     |
| Types of fishing facilities                            | Number of types of fishing facilities in ED.  | The fewer types of fishing facilities the more sensitive to storm events  | Fewer types = more sensitive       |
| Types of tourism facilities                            | Number of types of tourism facilities in ED.  | The fewer types of fishing facilities the more sensitive to storm events  | Fewer types = more sensitive       |
| <b>TOTAL Livelihood Sensitivity Index</b>              | Sum of all scaled variables, scaled.  | Livelihoods are an important aspect of community structure. Natural resource based livelihoods can experience greater detrimental effects from climate change than non-natural resource based industries. |                                    |

Note: Adapted from Wongbusarakum and Loper 2011



## Developing indicators

## Mapping indicators



## Working with fishers



## Working within global policy fora



# Questions

- Is this a topic of interest to your program/region
- Given your needs on the ground on which strategy does this work touch down
- What are the opportunities and capacity gaps for this work in your region/programs