# Ocean Acidification Group

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### Experiences

- The link is relatively well established more CO2, more carbonic acid in the water that impacts marine life
  - So for shellfish, weaker shells that require more energy to make in stressed environments.
- It is effecting important fishing livelihoods
  - Example some islands/areas in Jamaica that are entirely reliant on shellfishing
- Impacts also include GDP, food security and indirectly, displacement

## Gaps and limitations

- We can still learn from other sectors like marine conservation and marine ecosystem management practises
  - This is a sector that hasn't been tapped into in a big way and there is more work to be done
- Targeted research on thresholds (when do marine ecosystems suffer X, Y and Z)
  - Where are existing adaptation approaches insufficient?
- What can we learn from other situations
  - Like migration how do you preserve heritage for example?
- What are the limits of diversification?

### Potential responses

- A strong mitigation target
  - The impact is a clear consequence of a poor mitigation target and should be at the forefront of efforts.
  - Analogy between ocean and atmosphere same need to stabilise situation.
  - Noting it still needs to be targeted (ie short-lived gases are the issue here)

#### Adaptation strategies

- Understanding the adaptation opportunities and limitations of responding to ocean acidification
- Addressing the non-climate stressors
- Economic and livelihood diversification
  - Develop new sectors
  - Orient efforts to facilitate the transition (WTO, OECD etc)

#### **Priorities**

- Transformational technologies:
  - Example -access to marine-based technologies to secure energy, reduce costs of importing it and build new techs of the future.
- Support to undertake transformation to new economies
  - The ownership of this support must be with the targeted individuals/communities.
  - Innovative approaches to climate finance such as, investment in risky but green sectors like tidal energy and to examine other approaches like debt relief.
  - Away from monoculture economies.