The Ecosystem Approach to Fisheries - its links to climate change

Cassandra De Young
FAO, Fisheries and Aquaculture Department

BCC regional project development inception workshop on building resilience in Benguela Fisheries and Aquaculture

Cape Town, South Africa
3-5 July 2013

Key features of the EAF - Principles

The EAF is the realization of sustainable development in fisheries – stressing holistic, integrated and participatory processes

The purpose of an EAF is to plan, develop and manage fisheries in a manner that addresses the multiple needs and desires of societies, without jeopardizing the options for future generations to benefit from the full range of goods and services provided by the aquatic ecosystems

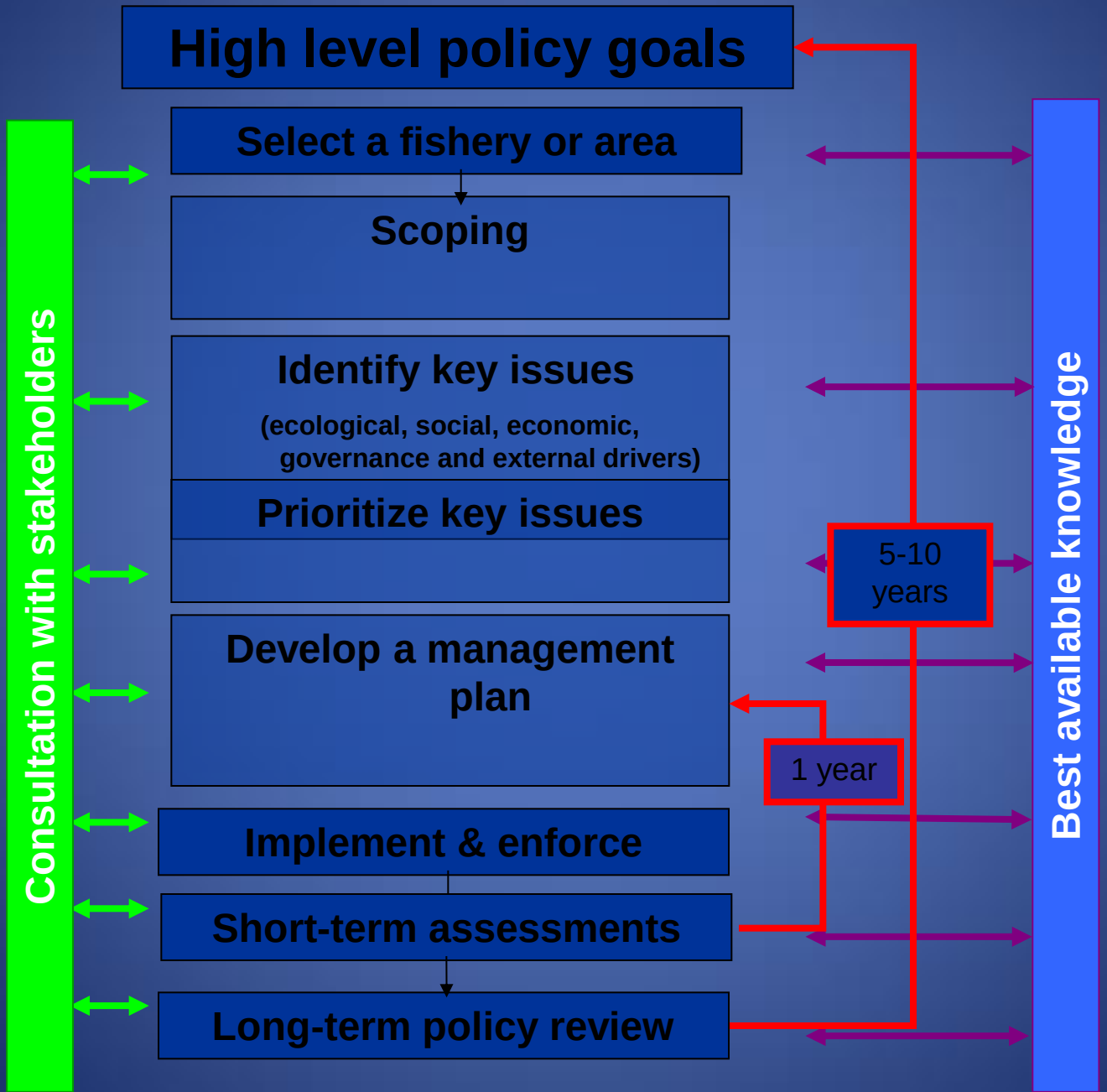
Key features of the EAF - Basic Objectives

- Maintaining ecosystem integrity
- Improving human well-being and equity
- Promoting enabling governance

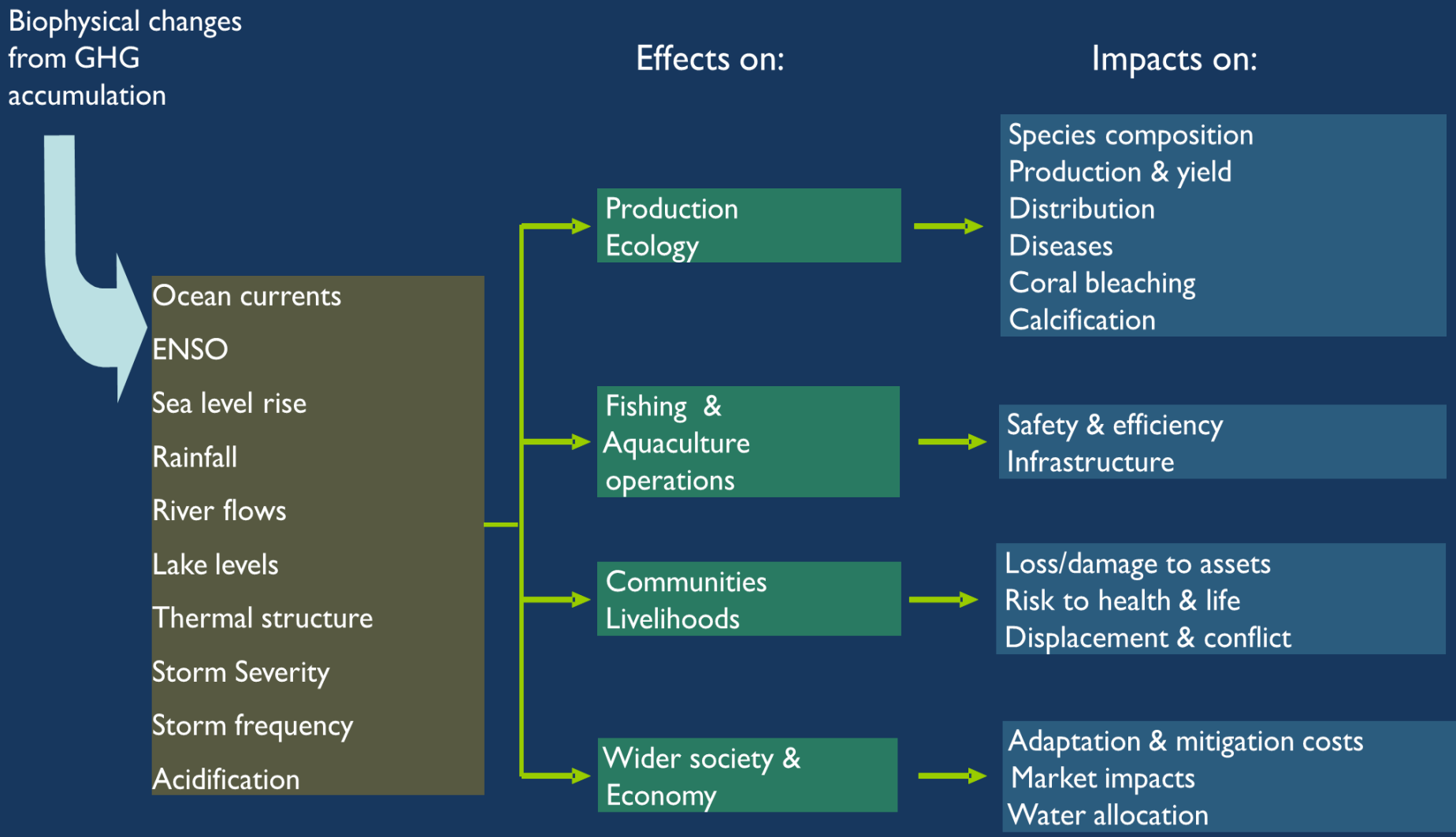
Key features of the EAF – principles in practice

- Apply the precautionary approach
- Use best available knowledge
- Acknowledge multiple objectives and values of ecosystem service
- Embrace adaptive management
- Broaden stakeholder participation
- Understand and use whole suite of management measures
- Promote sectoral integration and interdisciplinarity

EAF in practice: developing a management plan

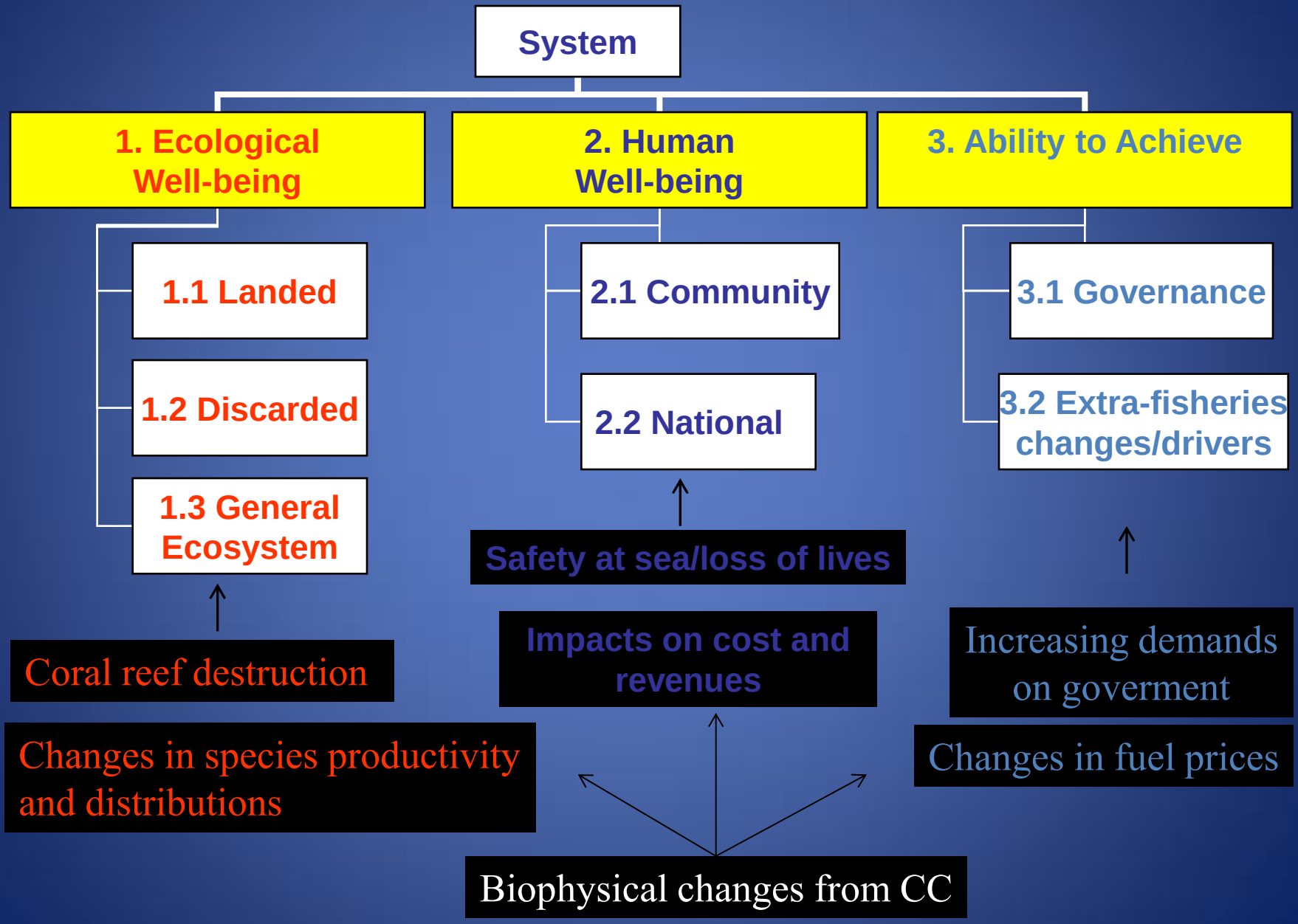


Potential CC and OA impact pathways for FI&AQ

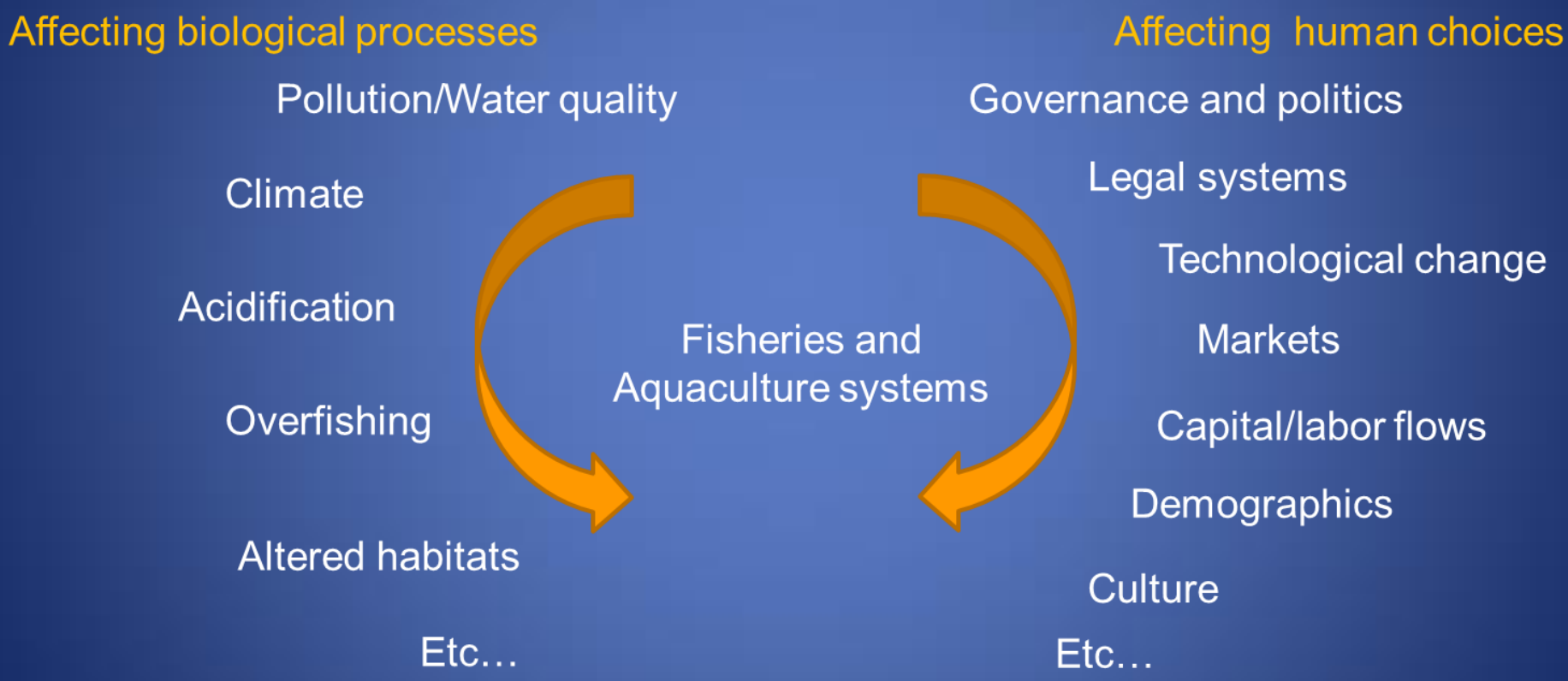


Badjeck et al, 2010

Using EAF to identify key climate change issues



Drivers of change



Using EAF to address climate change (1/3)

GHG Mitigation within FI&AQ (increased sequestration and decreased emissions)

1. Understanding the role of aquatic systems as natural carbon sinks and how FI&AQ impact this role
2. Encouraging sustainable biofuel production from fish wastes
3. Supporting a move to environmentally friendly and energy/fuel-efficient fishing/farming practices (harvest and post-harvest)

   Eliminating subsidies that promote overfishing and excess capacity

Using EAF to address climate change (2/3)

Adaptation within FI&AQ

1. Creating resilient communities (ecosystem, human, governance)
   - decreasing vulnerability (impacts, sensitivity, adaptive capacity)
2. Supporting inter-sectoral collaboration (e.g. integrating fisheries into nt'l adaptation and DRM strategies)
3. Improving general awareness of climate change within and without the sector
4. Promoting context specific and community-based adaptation strategies
5. Avoiding "mal-adaptation" (e.g. overly rigid access regimes, increased effort)
6. Allowing for quick adaptation to change
7. Promoting natural barriers and defenses

Using EAF to address climate change (3/3)

Mitigation and Adaptation - Understanding synergies and tradeoffs within FI&AQ and among sectors

1. Safeguarding the aquatic environment and its resources against adverse impacts of GHG mitigation strategies and measures from other sectors
2. Benefiting from win-win synergies (mangroves in REDD+, increase energy efficiency = fewer negative impacts on environment)
3. Avoiding “mal-adaptation” (e.g. construction of dams and canals for agriculture)

THANK YOU