



The slide features a dark blue background with a large, stylized orange flower on the left side. At the top left, there is a logo for 'Too BIG To IGNORE' with the text 'Global Partnership for Small-Scale Fisheries Research'. To the right of this is the 'PLAAS' logo, which includes the text 'Institute for Poverty, Land and Agrarian Studies' and an illustration of a person plowing a field with a cow. Further right is the 'UNIVERSITY of the WESTERN CAPE' logo. The main title is 'I-ADApT a tool for coastal communities to respond to global environmental and food security challenges in Africa'. Below the title, the name 'Moenieba Isaacs' is displayed. In the bottom right corner, there is a circular logo with the letters 'I M B E R' and the tagline 'FROM HOPE TO ACTION THROUGH KNOWLEDGE.' at the very bottom.

Too BIG To IGNORE
Global Partnership for Small-Scale Fisheries Research

PLAAS
Institute for Poverty, Land and Agrarian Studies

UNIVERSITY of the WESTERN CAPE

I-ADApT a tool for coastal communities to respond to global environmental and food security challenges in Africa

Moenieba Isaacs

I M B E R

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

Why the crisis in global fisheries

- Poor governance
 - Scale mis-match between governance, users and resource
 - Top-down management
 - \$\$\$
 - Global markets
 - Competing interests/horse trading
 - Conflicting objectives/lack of clear objectives
 - Fisheries subsidies
 - Destructive fishing practises
 - Failure to follow scientific advice
 - Inadequate fisheries regulations
 - Complexity of fisheries underestimated/ignored
 - Overcapitalisation of fleets
 - Poor compliance with management
 - Fisheries expansion
 - IUU
- Inadequate science?
 - Single species, MSY driven approaches
 - Advice in favour of selective fishing

Global change is happening now, locally, regionally, globally

- Identifying the most appropriate response for a given system remains a challenge.
- **Climate change is just one of several local challenges facing marine ecosystems and resource dependent communities**
- Lack of coherent framework to identify what coping strategies have worked elsewhere and what adaptive/coping/preventative options are possible.



What about small-scale fisheries food security?

- Small-scale fisheries are highly vulnerable to global environmental change because of their geography, located in close proximity to low-lying or exposed coastal areas.
- They are likely to suffer from multiple simultaneous pressures, such as rising temperatures and sea levels.
- **Threats to small-scale fisheries go beyond climate change to globalization, competition from industrial fisheries and rapid market shifts.**
- The high dependency of coastal communities on fisheries for food and nutrition security and livelihoods adds to challenges in resource governance and environmental sustainability, especially when human rights and social justice issues are of concern.



Situating climate change at the centre of the food system



- As one of the most traded commodities in the world, the trade of fish is integrated into national economies and to the global economy through trade and investment rules and privatisation, and is supported by technological advances.
- Access to food includes the availability, affordability and consumption practices of food.
- Linking food security to the food system needs to address the issue of what the economic, social and environmental drivers are that affect the food security of the poor.
- How does the demand for high quality fish impact on the livelihoods and income of many small-scale fisheries around the world?
- Is there a need to protecting nutritionally-important species for local consumption, rather than reducing it to animal feed (small pelagic), would be a first step in addressing the malnutrition of many vulnerable poor in Africa and especially southern Africa (nutritional vs luxury consumption).
- The food and nutrition needs of the poor in developing countries are often compromise by the need for income from trade and foreign investment, especially with the higher-value species (money cannot be eaten, Indian Proverb).

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

Fish Consumption in Africa



- The consumption of fish contributes approximately 17% to the global intake of protein.
- In some countries in Africa, particularly West Africa, this can be significantly higher – up to 72% in Sierra Leone and 55% in Ghana and the Gambia.
- The fish often consumed by local populations in Africa is the small pelagic fish, often regarded as a lower-value fish in terms of international trade.



Nutrition and Malnutrition

Rich in macro and micro-nutrients
 Omega-fatty acids
 Vital for growth of children and nutrition pregnant and breastfeeding women

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

VOLUNTARY GUIDELINES ON THE Responsible Governance of Tenure OF LAND, FISHERIES AND FORESTS IN THE CONTEXT OF NATIONAL FOOD SECURITY

CFS

Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication

COFI

United Nations
General Assembly

Doc. General
26 December 2011
Original: English

Human Rights Council
Nineteenth session
Agenda item 3
Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development

Report submitted by the Special Rapporteur on the right to food, Olivier De Schutter

What is the Code of Conduct for Responsible Fisheries?

A report by
The High Level Panel of Experts on Food Security and Nutrition
June 2014

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

What is I-ADApT?

- The I-ADApT tool is designed to enable decision-makers, researchers, managers and local stakeholders to:
 - make decisions efficiently;
 - triage and improve their responses; and
 - evaluate where to most effectively allocate resources to reduce vulnerability and enhance resilience of coastal peoples to global change.

FISH and FISHERIES

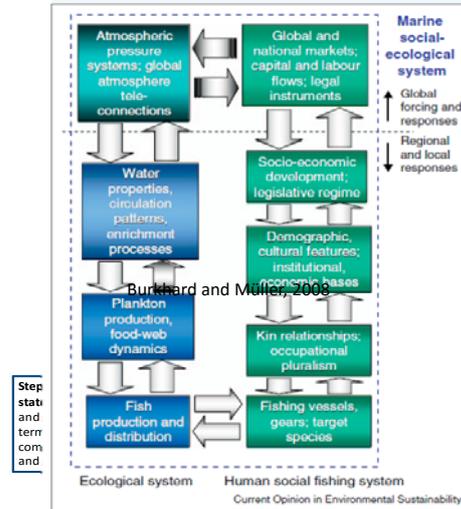
What is I-ADApT?

A decision support tool for response to global change in marine systems: the I-ADApT Framework

UNIVERSITY of the WESTERN CAPE

Theoretical Background

- Systems thinking approach, eg, linked social-ecological systems, human-environment systems, “humans-in-nature”, etc....
- DPSIR (Driver-Pressure-State-Impact-Response)
- Interactive Governance



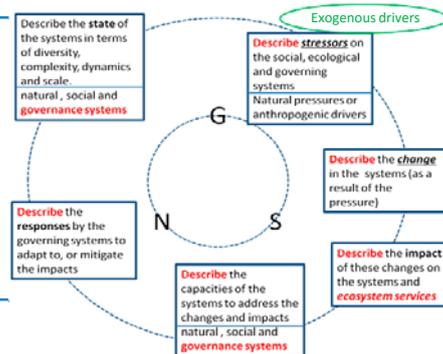
Perry RI, Ommer R, et al.. 2010. Interactions between changes in marine ecosystems and human communities. In Marine Ecosystems and Global Change. Edited by Barange M, et al., pp . 221-252

Kooiman et al. 2005, Chuenpagdee 2011

Three key elements of ADaPT

Description

- Issues (what’s going on?)
- Systems (natural, social, governing)
- Stressors (natural, anthropogenic)
- Change (caused by stressors)
- Impact (consequence of change)
- Responses (reaction to change)



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- Outputs (objectives of response achieved?)
- Outcomes (issues addressed, side effects?)

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Typology

- Tool for decision support and policy evaluation

IMBER ADApT Questionnaire

- A. BACKGROUND INFORMATION
- C. NATURAL SYSTEM
- D. SOCIAL SYSTEM
- E. GOVERNING SYSTEM
- F. CAPACITY-RESPONSE-APPRAISAL
- G. GLOSSARY
- I. NON-CONSENT FORM

Conclusion



- Adaptation :“making anticipatory adjustments to prepare for expected climate variability and changing average climate conditions, in order to moderate harm and exploit beneficial opportunities” (IPCC, 2007a).
- Shift to small-scale fisheries – both inland and marine capture fisheries.
- Creating an early warning system for small-scale fisheries via mobile technology?

