



Adaptation and Climate Services

Gobeshona 4

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What do we mean by “Adaptation?”

- IPCC: adaptation is “Adjustment in systems in response to actual or expected climatic stimuli or their effects. . .”
 - Process of examining and understanding vulnerabilities
 - Responding in some way to reduce vulnerability, build resilience



What are “Climate Services?”

Climate services

- Production, translation, transfer, and use of climate knowledge and information to support decision making
- Ensure that the best available climate science is effectively communicated with agriculture, water, health, and other sectors, to develop and evaluate adaptation strategies.
- Information should
 - help society to cope with current climate variability and
 - limit the economic and social damage caused by climate-related disaster.
- Also allow society to build resilience to future change and take advantage of opportunities provided by favorable conditions.
- Require established technical capacities and active communication and exchange between information producers, translators, and user communities.



Context and Culture Matter

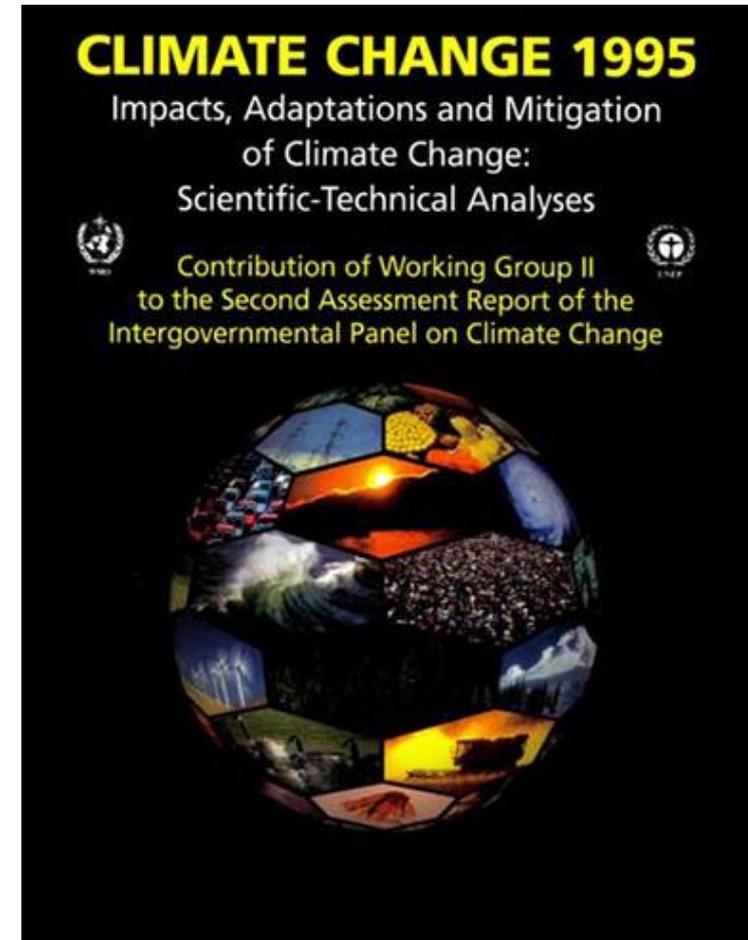
- Different actors bring different perspectives, mindsets, approaches, influence
- USA – wealthy, confident, technology savvy, problem solving, “failure is not an option”
- Bangladesh – poor but growing, emphasis on human resources, accustomed to climatic disruption
- How do we make the most of these differences?



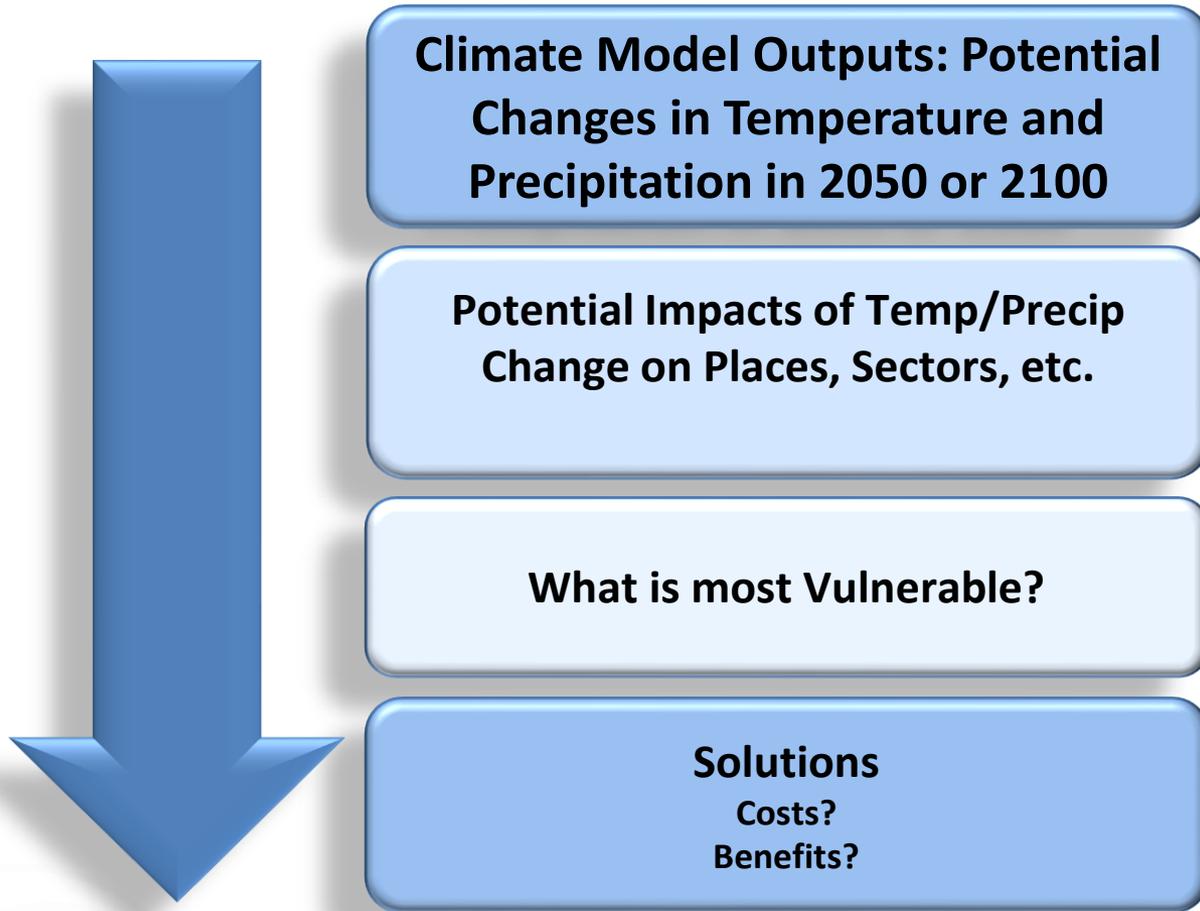
IPCC (and US National Climate Assessment)

- What was the question?
- Who was the audience?
- Who was making a decision?
- Did they want input?
- Who was engaged?

- Is this the best way to answer all adaptation questions?



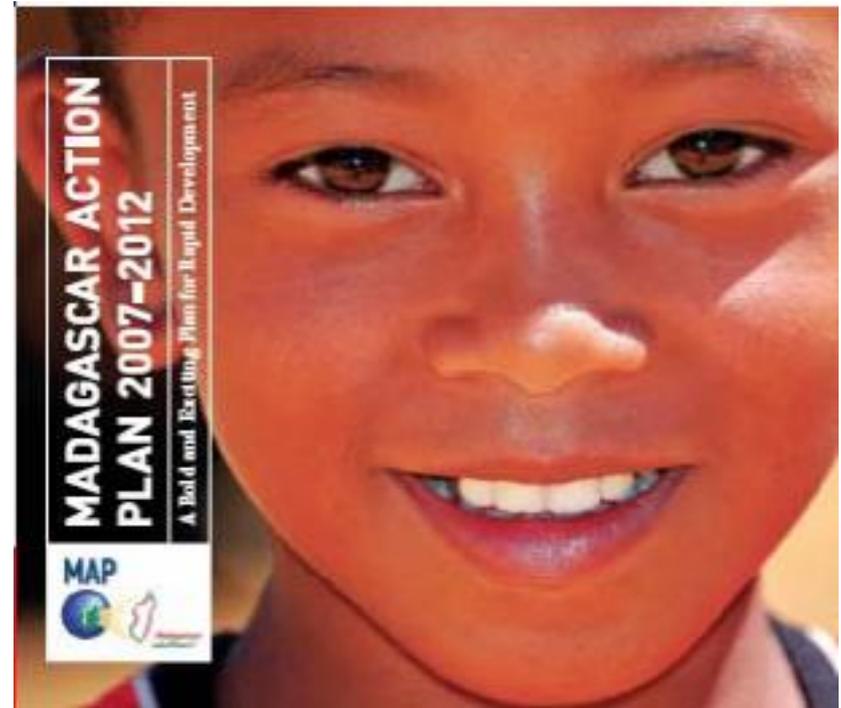
Climate First Adaptation



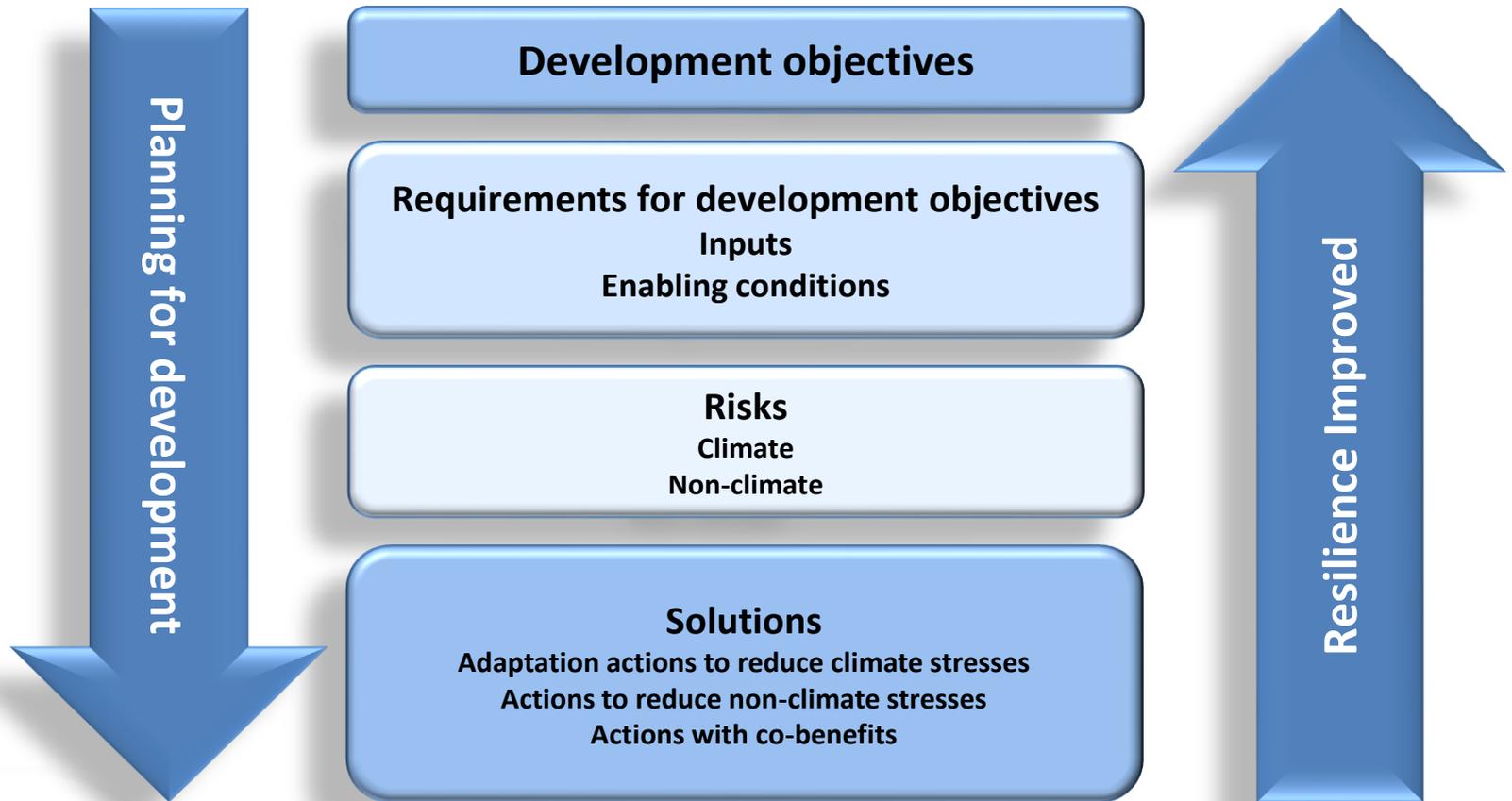
Madagascar: Planning in Isolation

2007-2012

- ~ 19 Million people
- ~ 15 Million working in ag, forests, fishing
- Goals of the Madagascar Action Plan (MAP):
 - **Boost GDP (USD) from \$5 Billion to \$12 Billion**
 - **Raise GDP Per Capita from \$309 to \$476**
 - Increase Households Having Land Title from 10% to 75%
 - **Increase Protected areas 3x**
 - **Increase road coverage ~10x**
 - Increase Tourist visits 50K
 - Double rice production



Development-First Adaptation?



Climate-Resilient Development Framework



CLIMATE-RESILIENT DEVELOPMENT

A FRAMEWORK FOR UNDERSTANDING AND ADDRESSING CLIMATE CHANGE



MARCH 2014



Establishes development context and focus

Identifies:

- Priority development goals and key inputs to achieving them
- Climate and non-climate stressors
- Needs and opportunities



Enhances understanding about vulnerability

- Defines vulnerability assessment questions
- Selects methods
- Assesses vulnerability
- Provides actionable information



Identifies, evaluates, and selects adaptation options

- Identifies adaptation options
- Selects evaluation criteria
- Evaluates adaptation options
- Selects an adaptation option or portfolio of options



Puts adaptation into practice

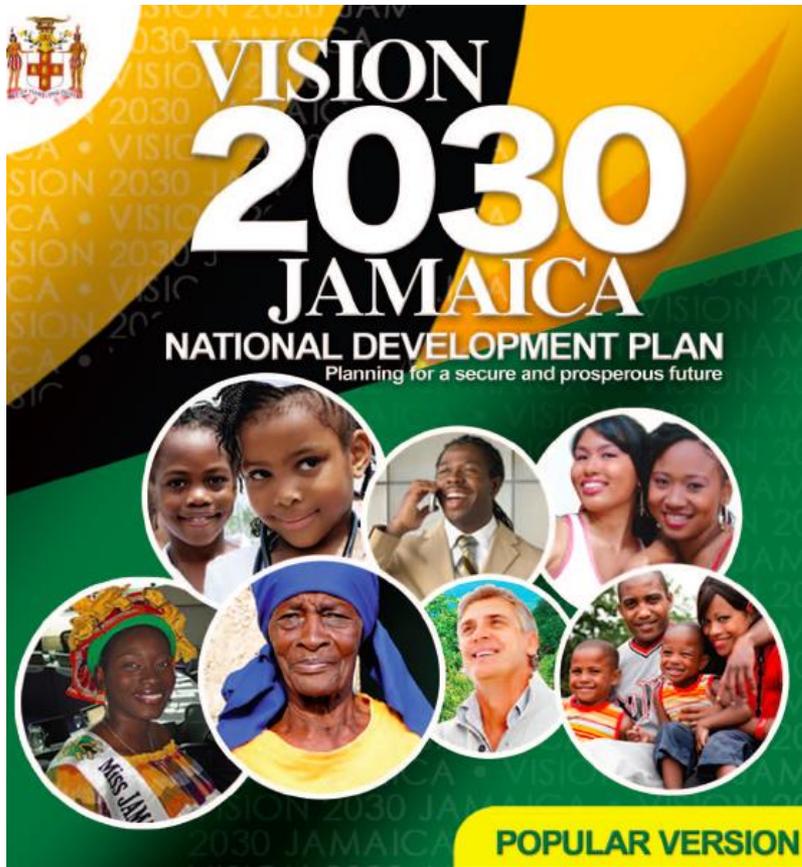
- Builds on established implementation and management practices
- Adopts a flexible approach to account for continuing change
- Incorporates climate information into baseline values and indicators



Tracks performance and impact

- Builds on established evaluation practices
- Measures performance
- Evaluates impacts of actions on vulnerability
- Informs adjustments to adaptation strategies

Development Plan → Climate Policy



National Goals	National Outcomes	
1 Jamaicans are empowered to achieve their fullest potential	1. A Healthy and Stable Population	
	2. World-Class Education and Training	
	3. Effective Social Protection	
	4. Authentic and Transformational Culture	
2 The Jamaican society is safe, cohesive and just	5. Security and Safety	
	6. Effective Governance	
3 Jamaica's economy is prosperous	7. A Stable Macroeconomy	
	8. An Enabling Business Environment	
	9. Strong Economic Infrastructure	
	10. Energy Security and Efficiency	
	11. A Technology-Enabled Society	
	12. Internationally Competitive Industry Structures <ul style="list-style-type: none"> • Agriculture • Manufacturing • Mining and Quarrying • Construction • Creative Industries • Sport • Information and Communications Technology • Services • Tourism 	
	4 Jamaica has a healthy natural environment	13. Sustainable Management and Use of Environmental and Natural Resources
		14. Hazard Risk Reduction and Adaptation to Climate Change
		15. Sustainable Urban and Rural Development

3

Jamaica's economy is prosperous

8. An Enabling Business Environment

9. Strong Economic Infrastructure

10. Energy Security and Efficiency

11. A Technology-Enabled Society

12. Internationally Competitive Industry Structures

- Agriculture
- Manufacturing
- Mining and Quarrying
- Construction
- Creative Industries
- Sport
- Information and Communications Technology
- Services
- Tourism

4

Jamaica has a healthy natural environment

13. Sustainable Management and Use of Environmental and Natural Resources

14. Hazard Risk Reduction and Adaptation to Climate Change

15. Sustainable Urban and Rural Development

Table 2: National Outcomes Linked to Goals

Toward a Climate Policy For Jamaica: Stakeholder Workshop

July 2012



CLIMATE CHANGE
TOWARDS THE DEVELOPMENT OF A POLICY FRAMEWORK FOR JAMAICA

Kingston, Jamaica / July 26-27, 2012

With Climate Change, We Must Change



ENVIRONMENTAL (INCL. LOW)

INT. COMP. INDUSTRY

Agriculture

Crops / Livestock

JAS/pests

INLAND FLOODING

MIGRATION

TROPICAL STORMS / HURRICANES

INCREASES IN TEMPERATURE

CHANGES IN THE TIMING OR AMOUNT OF PRECIPITATION

SEA LEVEL RISE

POLLUTION

COASTAL FLOODING

INCREASED INTENSITY OF RAINFALL

DROUGHT

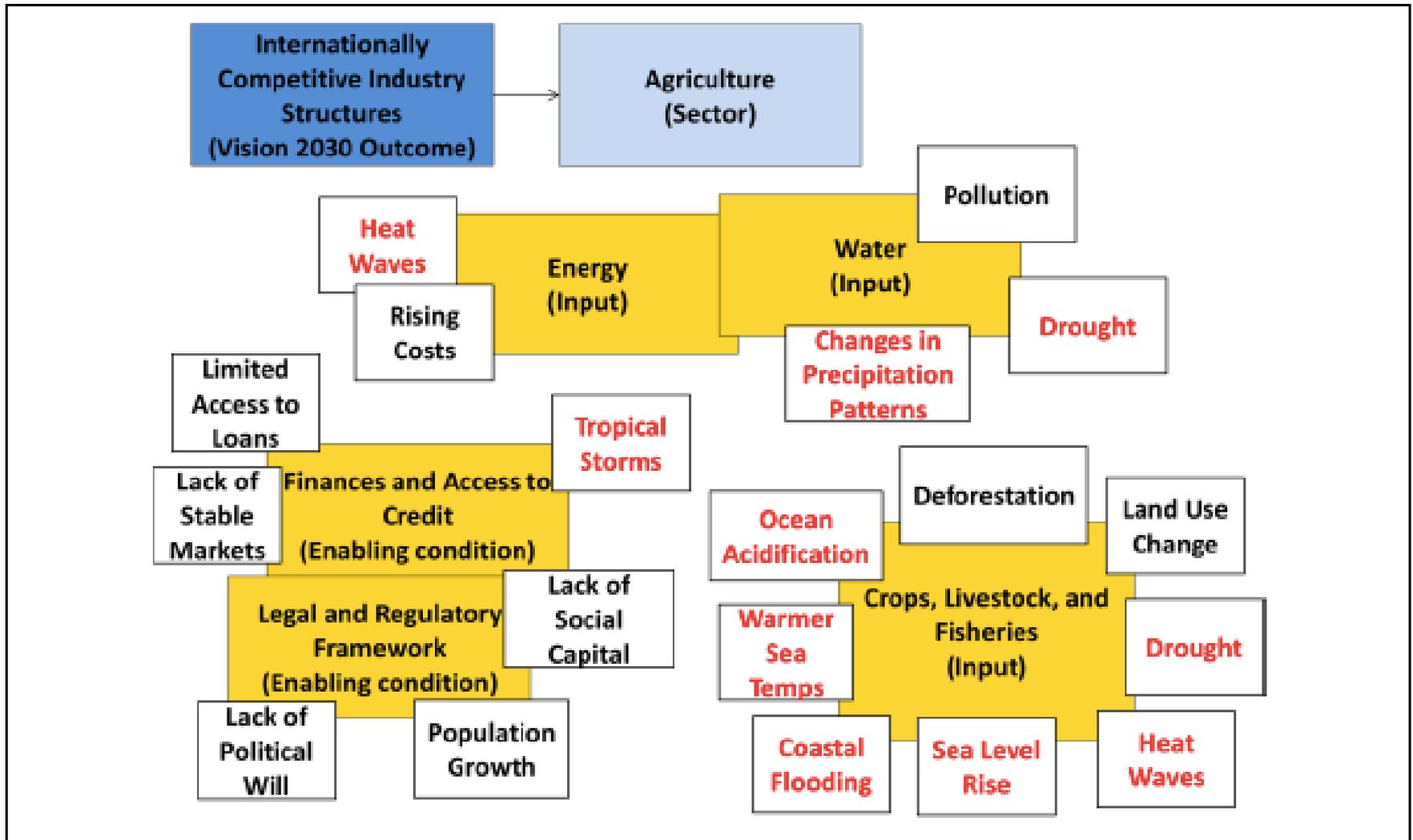
DEFORESTATION

JAS/pests

Crops / Livestock

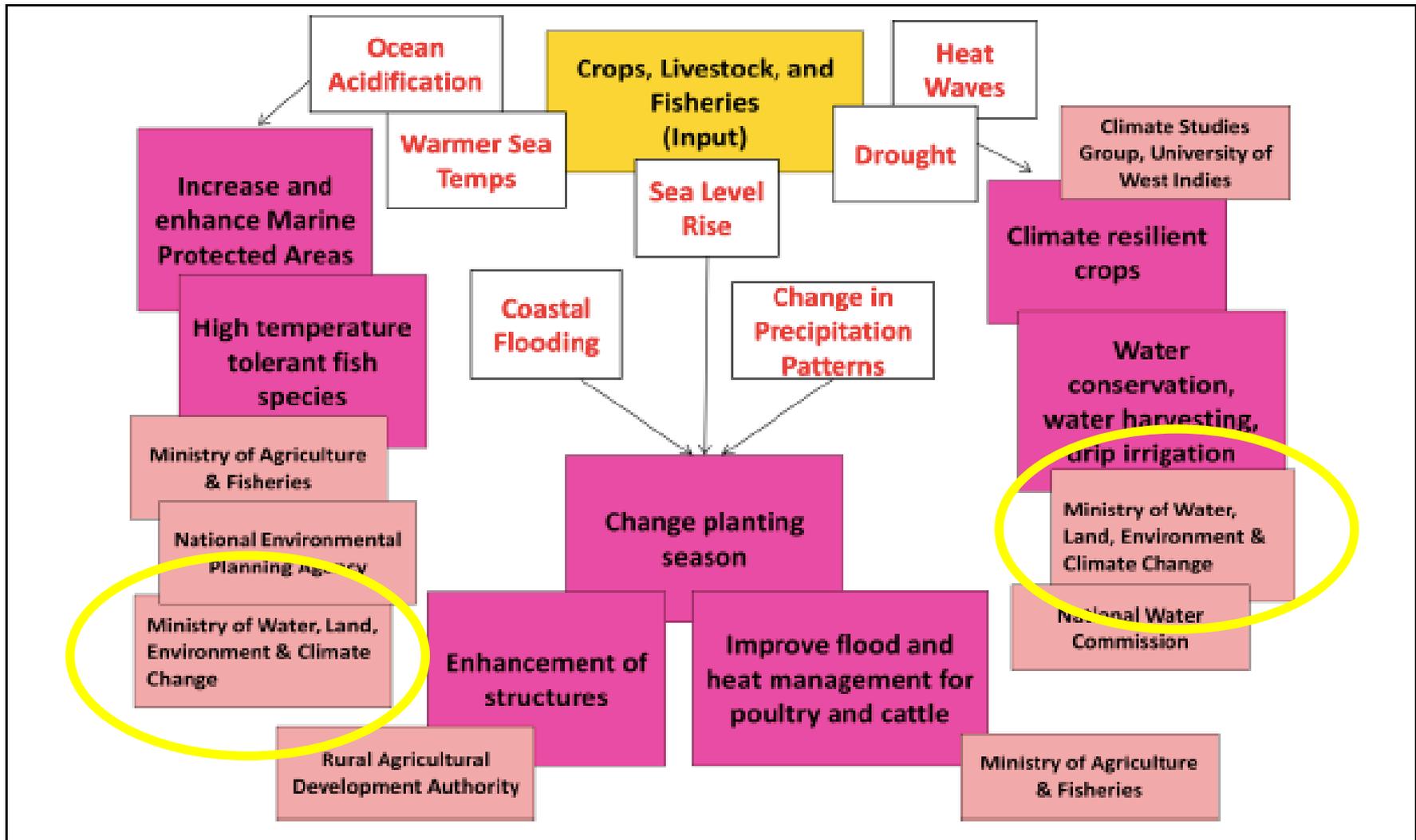
Objective → Input → Risk

Example for Agriculture

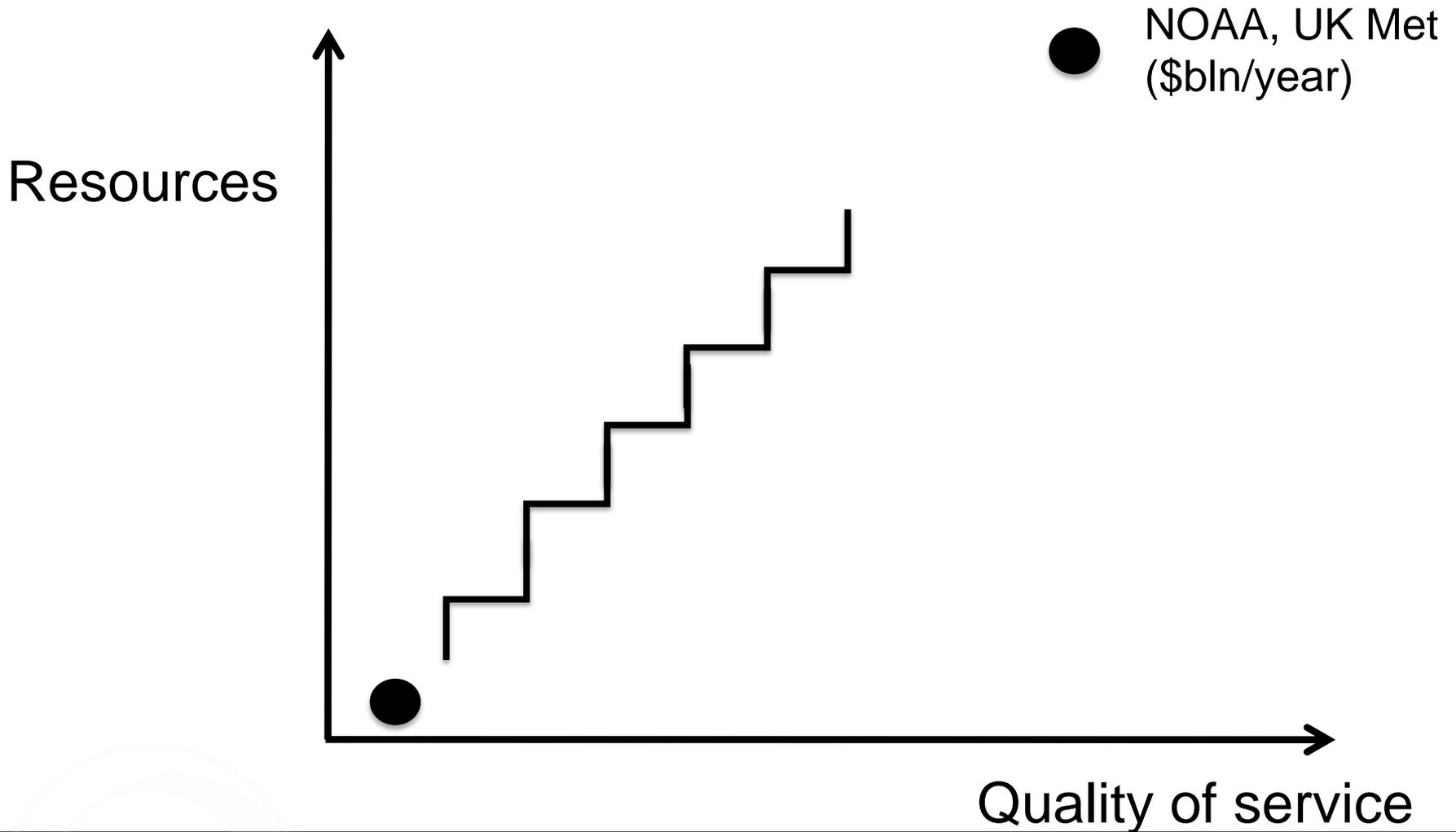


Inputs → Risks → Solutions → Key Actors

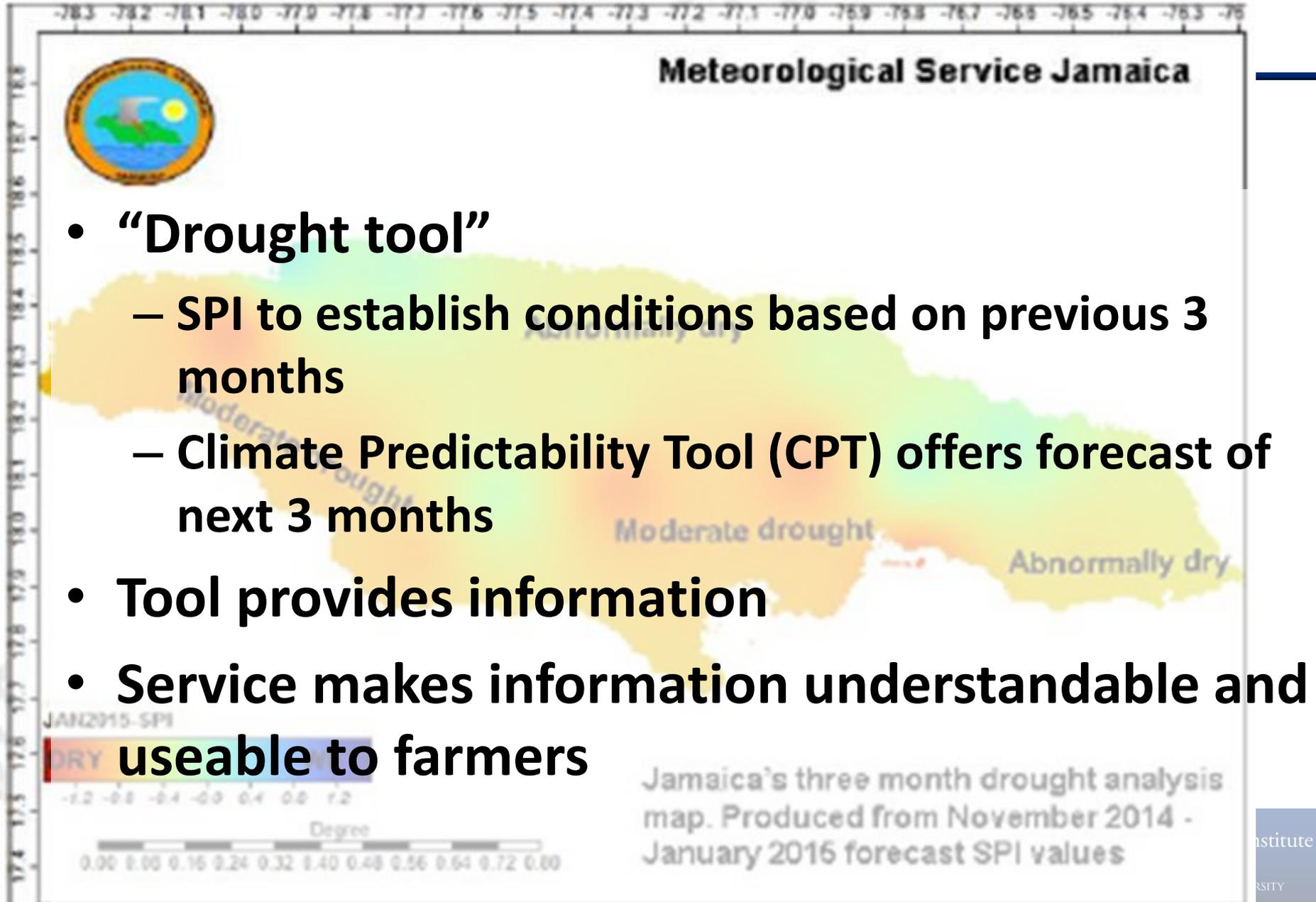
Example for Agriculture



Vicious Cycle vs. Growth Curve



Tool → Service



Harnessing Science for Adaptation

I'm announcing a new effort to deploy the scientific capabilities of the US, from climate data to early warning... to help vulnerable nations prepare for weather-related disasters and long term threats. . . .”

– President Barack Obama,
September, 2014



Columbia World Project: ACToday

“How do we connect the enormously valuable intellectual work of the university to have the greatest possible impact on the problems of our time?”

-- President Lee C. Bollinger
Columbia University

CWP Goal:

*Enable our partners to incorporate **Climate Services** to improve risk management in their work on **Food Systems** throughout the developing world at different scales (from local to global).*



Bangladesh: Climate Services Academy

The *Climate Services Academy*

- will be established under Bangladesh Gobeshona umbrella,
- Hosted at the Independent University of Bangladesh
- Could offer
 - Professional Training and Certification
 - Convene producers and users of information
 - Academic courses (e.g., climate science)



Thank You



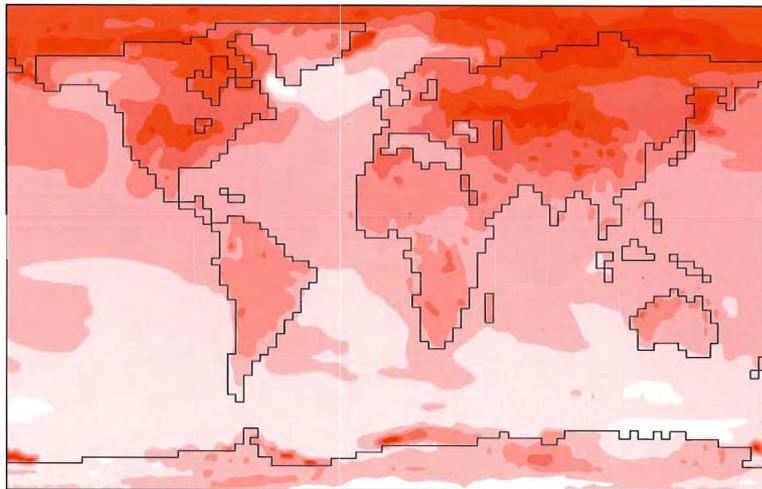
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Context matters

CLIMATE CHANGE IMPACTS AND ADAPTATIONS

*IPCC Technical Guidelines
for Assessing Climate Change
Impacts and Adaptations*



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