

Overview of Climate Data Sharing Protocols in Africa

by

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Introduction

- Climate change: Human lives and countries economy are at stake
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- African countries must respond and tackle the adverse impacts

Introduction ...

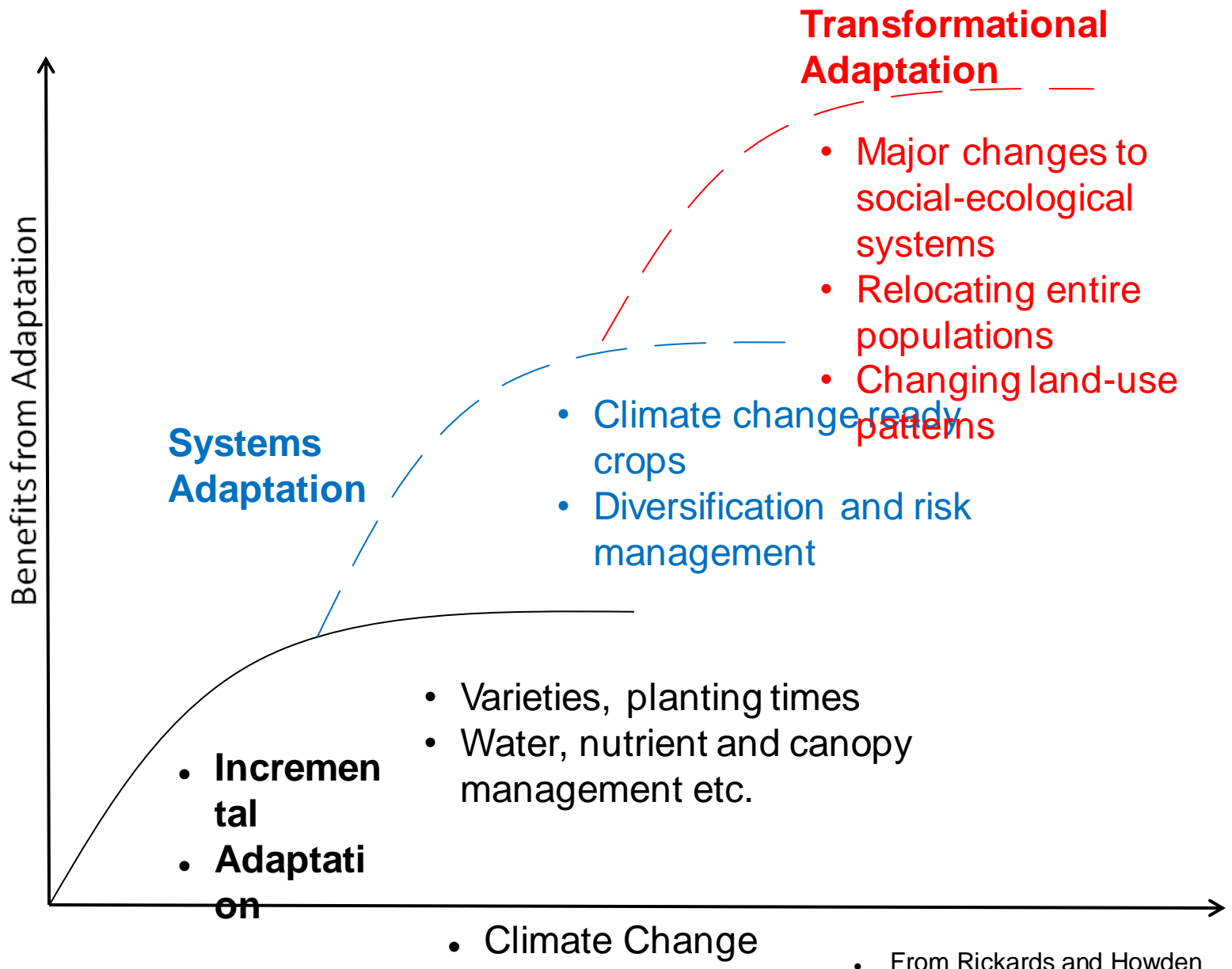
Timescales for adaptation



Changes for dealing with the more severe impacts of climate change further in the future

Medium-term adaptations, which deal with near-term climate change

- Short-term adaptations which enable better coping with current climate variability



Systems Adaptation

Transformational Adaptation

- Major changes to social-ecological systems
- Relocating entire populations
- Changing land-use patterns
- Climate change ready crops
- Diversification and risk management

- Incremental Adaptation
- Varieties, planting times
- Water, nutrient and canopy management etc.

• Climate Change

• From Rickards and Howden (2012)

Introduction ...

- CIS: rapidly expands in Africa to support climate adaptation and resilient development
- CIS Providers: NMHSs, research and service centers, private companies, firms
- Most of these producers/providers do not generate their own data – data are mostly owned by NMHSs
- Need of data sharing

Importance of data sharing ...

- Data is at the center of everything
- Monitoring and forecasting of severe weather: mesoscale disturbance – data/information needed beyond the national boundaries
- Develop and refine tools and/or methodologies to better understand weather and climate and to produce reliable information – from historical to near real-time data are needed from the NMHSs
- CIS providers can get data/information and add value (knowledge and expertise) – for specific users

Example of data sharing protocols

- WMO resolution 40 (Cg-XII, 1995)
- WMO resolution 25 (Cg-XIII, 1999)
- WMO resolution 60 (Cg-XVII, 2015)



WMO members

- Countries: NMHSs (leading role), other national agencies that measure data. What about intergovernmental organizations/institutes?

Different data sharing protocols can co-exist:

ICPAC, AGRHYMET, WASCAL, SADC, ACMAD

WMO resolution 40

- All members (primarily NMHSs) shall provide on a free and unrestricted basis essential data and products required to describe and forecast accurately weather and climate, necessary for the provision of services in support to protection of life, property etc...
- These essential : minimum set at the annex 1 includes surface synoptic data, all available in situ observations from the marine environment and all reports from the network of stations recommended by the regional associations (i.e. Africa, Asia, South America, North and Central America, South-West Pacific and Europe)
- Satellite data: concerns those data and products from operational meteorological satellites that are agreed between WMO and satellite operators and necessary for operations regarding severe weather warnings. These satellite operators can be public entities, private sectors and/or intergovernmental agencies.

WMO resolution 40 ...

- Free and unrestricted is here defined as non-discriminatory and without charge.
- Without charge refers to avoid charging for the data and products themselves, and to limit charges to the cost of reproduction and delivery.
- Same conditions apply for the provision of data to the research and education communities (researchers, teachers and students in academic and research institutions) for their non-commercial activities
- Additional data: subject to other conditions – charges may occur

Tasks

- Reviewing current practices of data exchange under the WMO Resolution 40
- Identifying best practices and success stories
- Highlighting barriers to data sharing
- And ultimately providing recommendations to promote their use to support CIS uptake in the African continent

Discussions

- Highlighting barriers to data sharing
- Identifying best practices and success stories

- Barriers: No legal obligation, National laws and legislation, National security, National attitude and protectionism, increased interest of NMHSs in charging for the data to cover some of costs of the infrastructure (ministerial letter)
- Best practices and success stories