



Managing Drought Risk in a Changing Climate: Moving from Managing Disasters to Managing Risks

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Defining Drought

-Hundreds of definitions—application and region specific

Drought is a deficiency of **precipitation** (intensity)

Effective drought management must be INTEGRATED across sectors and within and between levels of government as well as with NGOs.

activities and the environment (impacts).

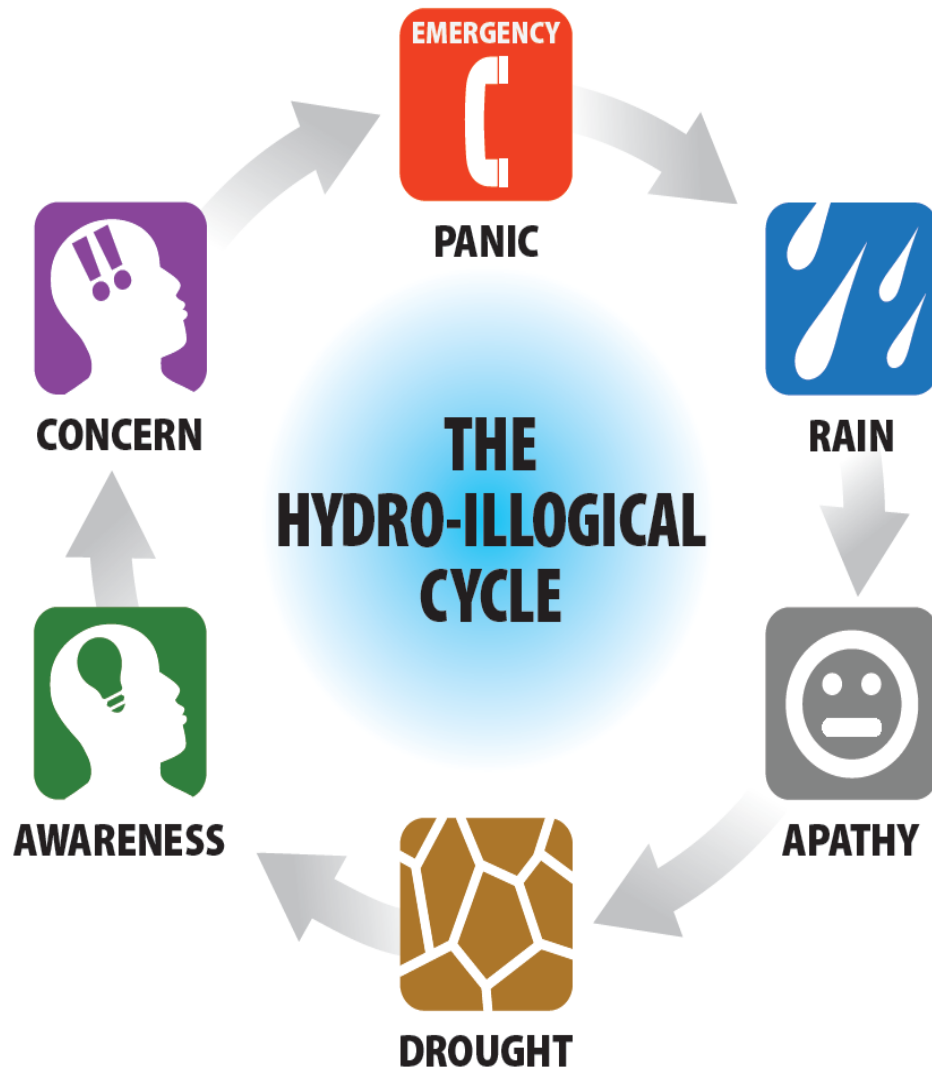


**Agricultural,
Hydrological,
Socio-economic &
Ecological Drought**



Breaking the Hydro-illogical Cycle:

An Institutional Challenge for Drought Management



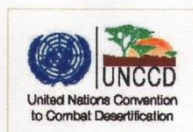
Crisis Management

If you do what you've always done, you'll get what you've always got.

We MUST
adopt a new
paradigm for
drought
management!

Incentives for Changing the Paradigm

- Addresses spiraling impacts → multiple sectors
- Reduces conflicts between water users
- Promotes wise stewardship of natural resources—sustainable development
- Reduces need for governmental assistance—allows for resources to be invested more wisely
- More frequent and severe droughts (increased duration?) in association with climate change.
- **Cost of action vs. cost of inaction?**



HIGH-LEVEL MEETING ON NATIONAL DROUGHT POLICY

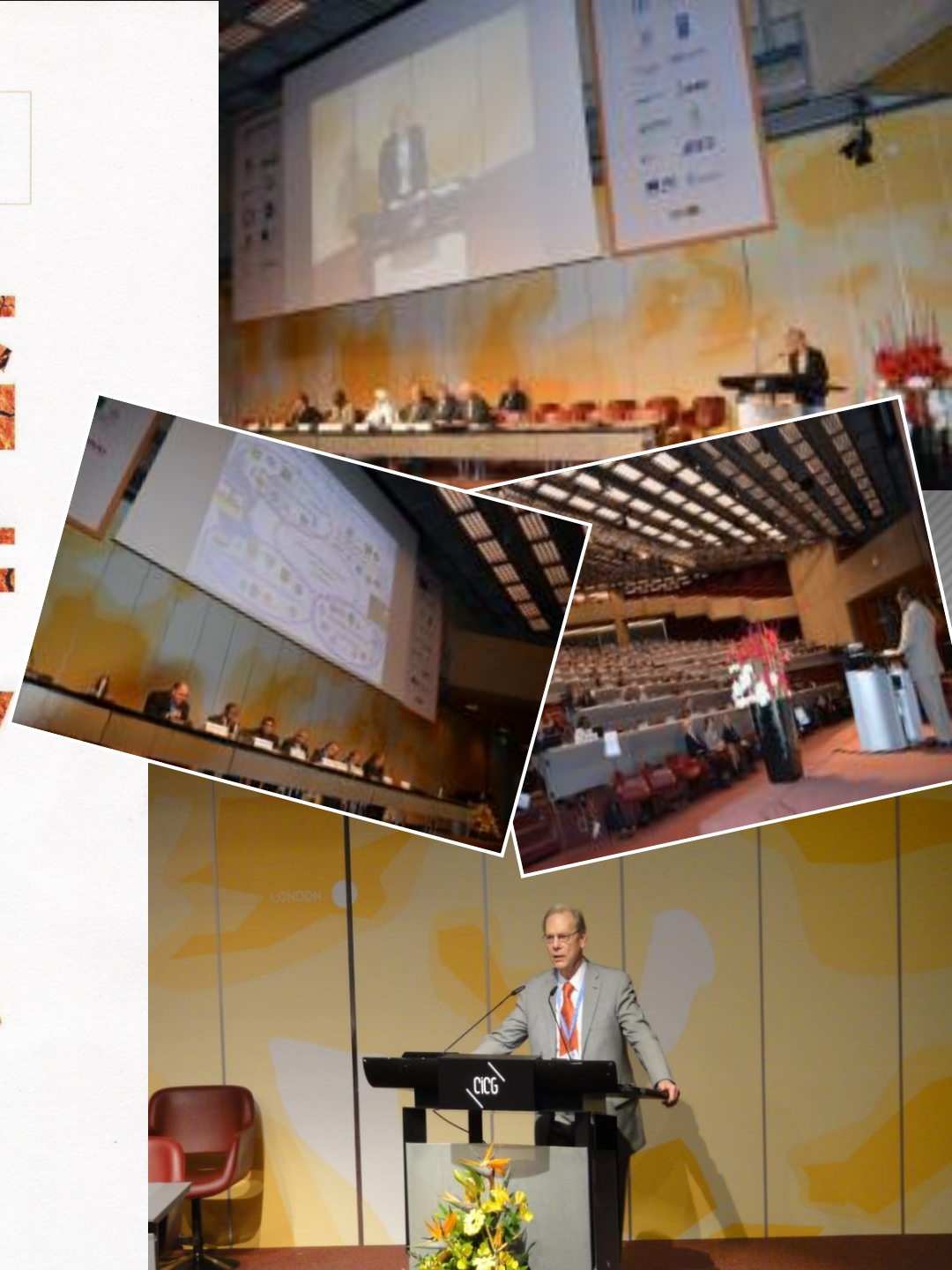
(HMNDP)

TOWARDS MORE DROUGHT RESILIENT SOCIETIES

11-15 March 2013

CICG, Geneva

Final Report



IDMP

Integrated Drought Management Programme

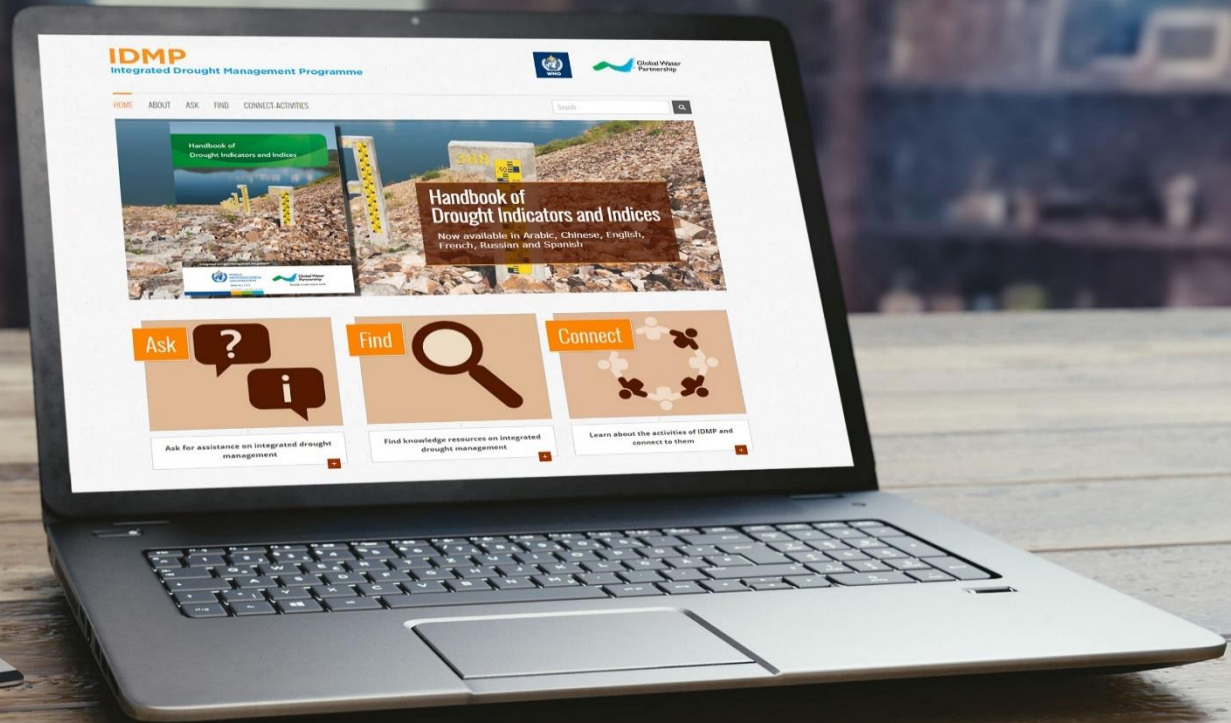


WORLD
METEOROLOGICAL
ORGANIZATION

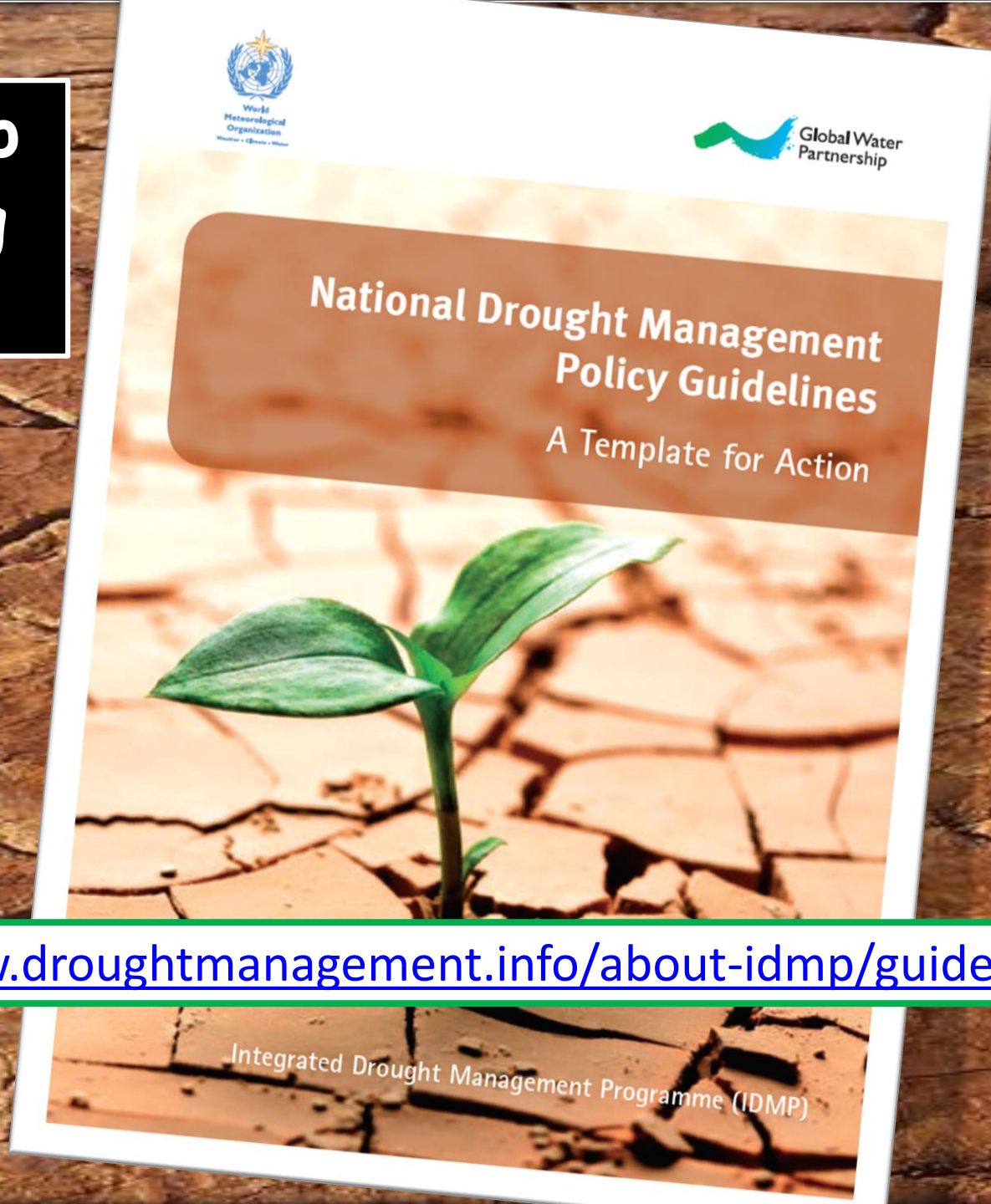


Global Water
Partnership

Integrated Drought Management HelpDesk



10-Step Planning Process



<http://www.droughtmanagement.info/about-idmp/guidelines/>



Convention on
Biological Diversity



UNW-DPC



A UN-Water Initiative

UN WATER



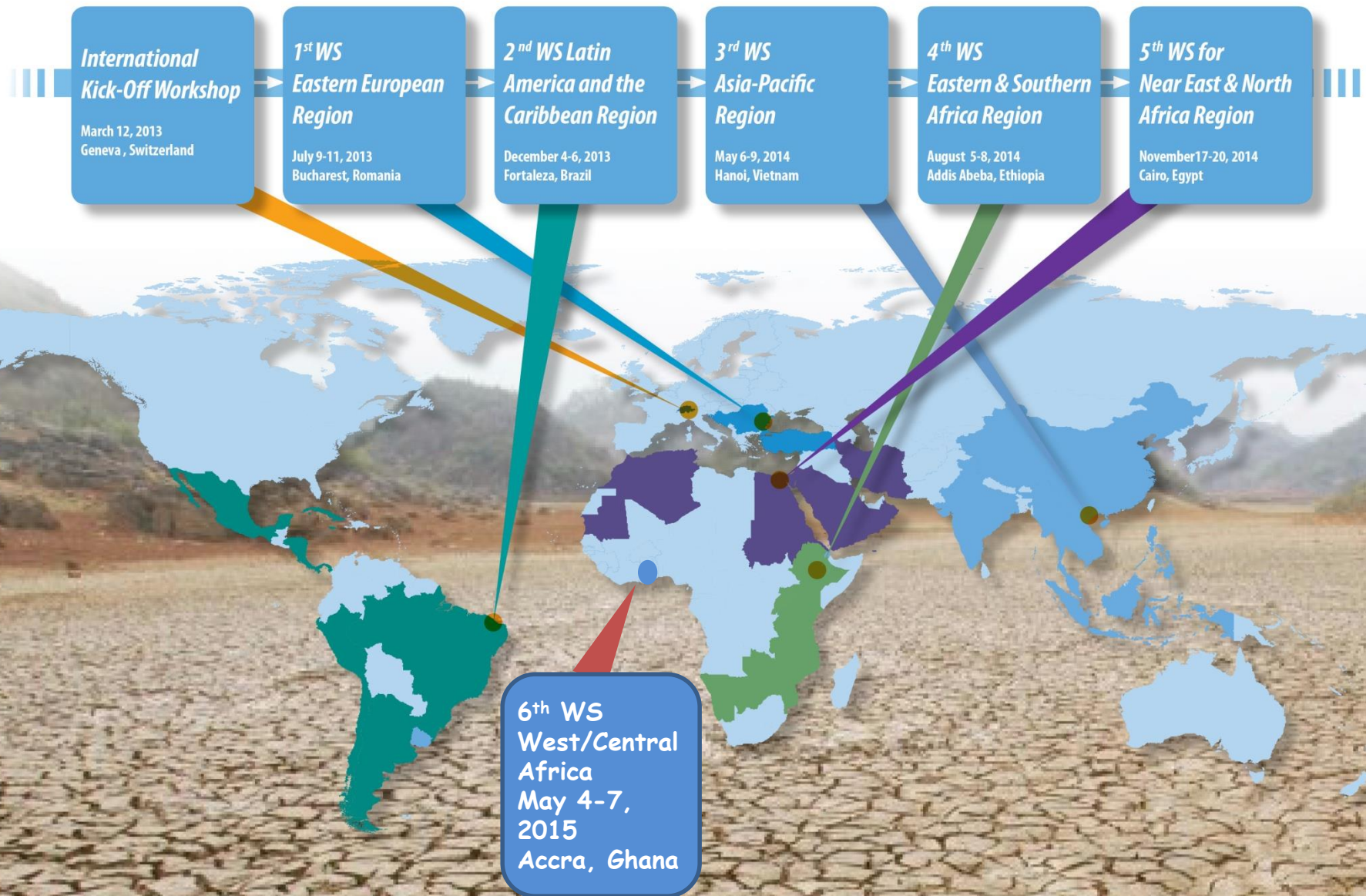
Moving from crisis to risk management

Capacity Development to Support National DROUGHT Management Policies



Find out more on the initiative:
www.ais.unwater.org/droughtmanagement

Timeline of the Workshops



The UNCCD Drought Initiative, National Drought Plans & Beyond: Updates

Drought Toolbox Validation Workshop, Antalya, Turkey, 02-04 May 2019



United Nations
Convention to Combat
Desertification

Daniel Tsegai, Ph.D
Programme Officer
Drought & Water Scarcity Portfolio
UNCCD, Bonn, Germany

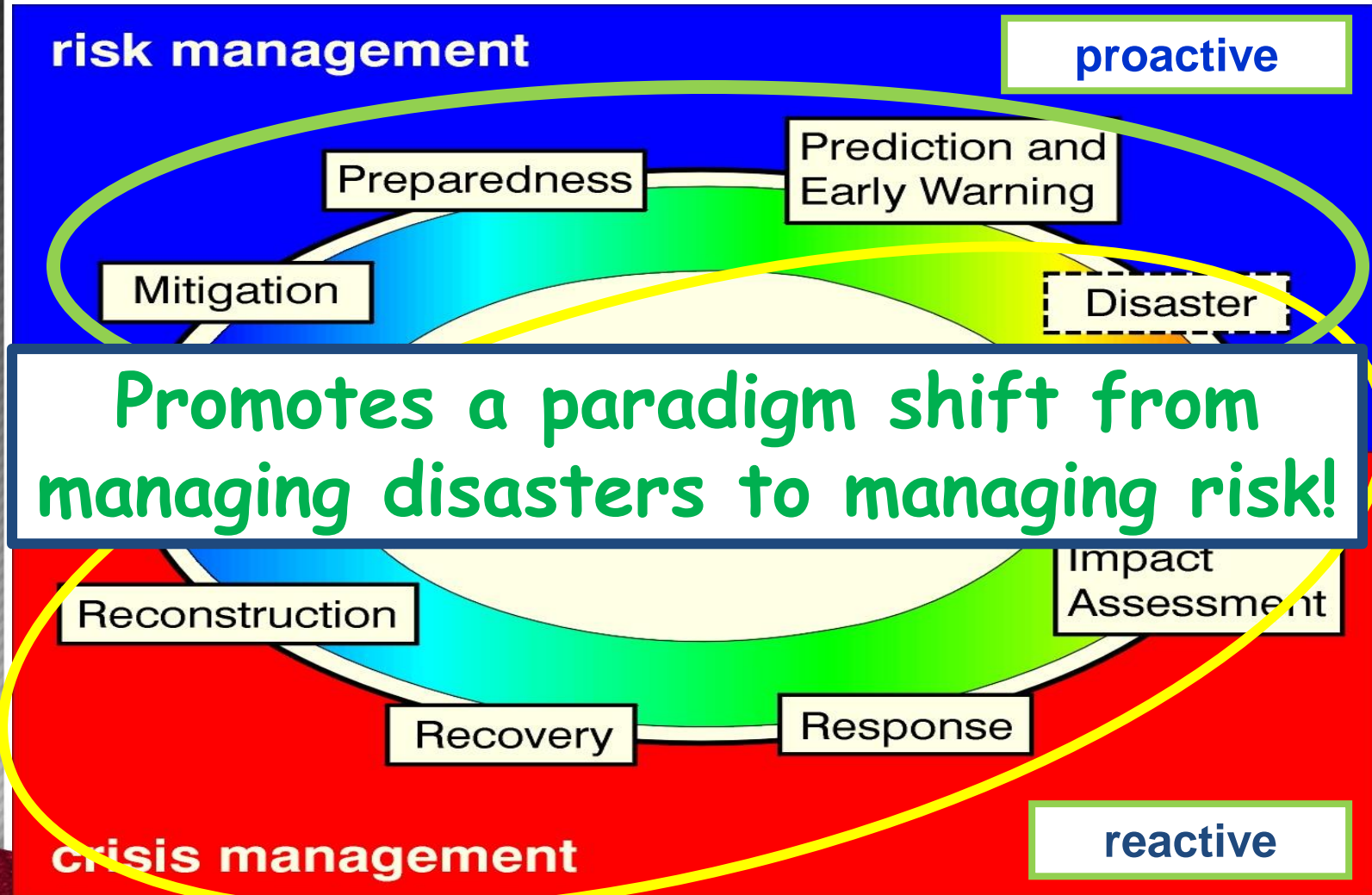
If you plan to move your country
from 'managing disasters' to
'managing risk'



Rationale for Drought Management Plans and Policies

The Cycle of Disaster Management

Risk management increases coping capacity, builds resilience.



Crisis management treats the symptoms, not the causes.

Crisis vs. Risk Management: Characteristics, costs and benefits

Crisis Management

- Expensive
 - Costs + costs of inaction
 - Repeats past mistakes
- Post-impact
 - Drought relief/emergency assistance
- Rewards poor resource management
- Treats the symptoms of vulnerability, i.e., impacts
- Increases vulnerability, reliance on assistance from government & donors

Risk Management

- Investment
 - Short-term—EWS, building networks, collaborations, institutional capacity
 - Long-term—structural adjustments, policy shifts
- Pre-impact
 - Risk assessments, mitigation
- Identifies and addresses the root causes of vulnerability
- Promotes improved stewardship of natural resources
- Reduces vulnerability, builds self-reliance, reduces need for gov't. & donor interventions
- Assists w/climate change adaptation

Hazard **x** Vulnerability = Risk

EXPOSURE

- **Severity/Magnitude**
 - Intensity/Duration
- **Frequency**
- **Spatial extent**
- **Trends**
 - Historical
 - Future
- **Impacts**
- **Early warning**

SOCIAL FACTORS

- **Population growth**
- **Population shifts**
- **Urbanization**
- **Technology**
- **Land use changes**
- **Environmental degradation**
- **Water use trends**
- **Government policies**
- **Environmental awareness**

RISK

Necessary Ingredients for National Drought Policy Development

- Political will and leadership!
- Initial investment in building greater institutional capacity vs. **cost of inaction**
- Collaborative environment that supports and encourages coordination within and between levels of government/private sector
- Engaged and supportive stakeholders
- Engaged research community
- Strong outreach and media program



National Drought Policy

The image features a blue umbrella with a black handle and a black tip, positioned centrally over a background of dry, cracked, brown earth. Two yellow dashed arrows originate from the bottom edge of the umbrella's canopy, pointing downwards towards the text below. The text 'National Drought Policy' is written in white, sans-serif font across the upper part of the umbrella's canopy.

Preparedness Plans based
on the principles of risk
reduction

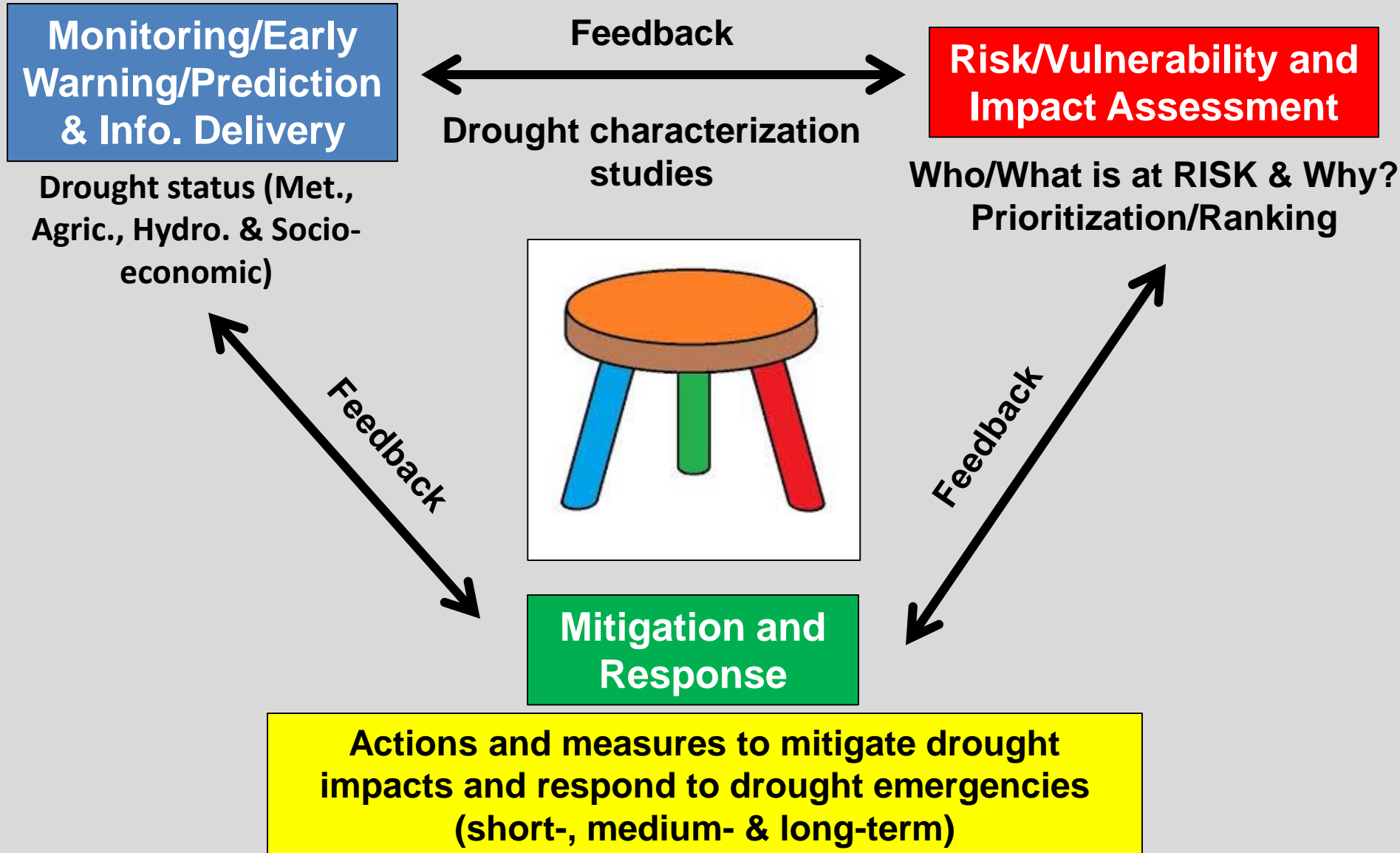
Drought Management Policy should be broadly stated and . . .

- Establish a clear set of risk-based principles or guidelines to govern drought management.
- Policy ***could*** be part of a disaster risk reduction or climate change adaptation framework
- Consistent and equitable for all regions, population groups, and economic/social sectors.
- Consistent with the goals of sustainable development.
- Reflect regional differences in drought characteristics, vulnerability and impacts.

A drought policy should (continued)

- Promote the principles of risk management by encouraging development of
 - **Early warning and delivery systems**;
 - Reliable seasonal forecasts;
 - **Preparedness plans** at all levels of government, within river basins, and the private sector;
 - **Risk/Vulnerability assessments** —who and what is at risk and why?
 - **Mitigation actions** that reduce drought impacts and the need for government intervention;
 - **Coordinated emergency response** that ensures targeted and timely relief, consistent with drought policy goals, during drought emergencies.

3 Pillars of Drought Policy & Preparedness: An Integrated Approach



Takeaway Messages

- Drought is a *normal* part of climate.
- **Changing precipitation** amounts, seasonal distribution, form
- **Increasing temperatures** will increase ET and demand for water resources → drought severity, frequency and duration.
- Past drought management efforts have been *reactive*—ineffective, poorly coordinated & poorly targeted (**crisis management**).
- Managing sector impacts—*increase resilience* to drought.
- **Integrated drought management** requires a collaborative approach **within and between levels** of government and with the private sector for monitoring and early warning, risk/vulnerability assessment and mitigation and response.
- Time is **NOW** to change the *paradigm* from crisis to **drought risk management** through **integrated drought management**.
- The '**cost of inaction**'!

Thanks for your attention!

A vibrant sunset scene with a bright sun low on the horizon, casting long, golden rays across a sky of deep orange and yellow. In the foreground, the dark silhouettes of corn plants with their characteristic tassels are visible, creating a layered effect against the glowing background.

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