



# Drought Resilience

High-level Meeting  
on **National Drought Policy**

**#10**

World Water Week 2023  
*Sunday 20 August 11:00-12:30*

## Cooperation for Drought Resilience

-  
**Integrating Knowledge and Practice for  
Drought Resilience**



# Drought Resilience

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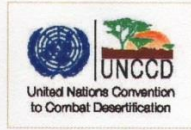
High-level Meeting  
on **National Drought Policy**

**Next Speaker:**

**Robert Stefanski**  
**Head, Applied Climate Services**  
**WMO, Geneva, Switzerland**



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# HIGH-LEVEL MEETING ON NATIONAL DROUGHT POLICY

(HMNDP)  
TOWARDS MORE DROUGHT RESILIENT SOCIETIES

11-15 March 2013  
CICG, Geneva

**Final Report**



**Over 414 participants from 87 countries**

**Key message:** Help countries move from reactive to proactive drought policies

**Representatives of UN agencies and international and regional organizations (UNU, IFRC, IOM, CBD, WFP, IAEA, UNECA, JRC, ICARDA, GWP, ACMAD, ISDR)**



# Scientific Segment

- 9 substantive sessions in the Scientific Segment plus 2 synthesis/reporting sessions (regional breakout groups and summary)
- 28 posters in three poster sessions. 16 Side events
- All sessions produced summaries and recommendations



# Science and Policy documents

## Essential elements of National Drought Management Policy include:

- Implementing Effective **Drought Monitoring and Early Warning Systems**
- Promoting Standard Approaches to **Risk and Impact Assessment**
- Enhancing **Preparedness and drought mitigation actions**
- Implementing Emergency response and relief measures that reinforce national drought policy goals



# Final Declaration (1/2)

- Develop proactive drought impact mitigation, preventive and planning measures, risk management, fostering of science, appropriate technology and innovation, public outreach and resource management as key elements of effective national drought policy.
- Promote greater collaboration to enhance the quality of local/national/regional/global observation networks and delivery systems.
- Improve public awareness of drought risk and preparedness for drought.



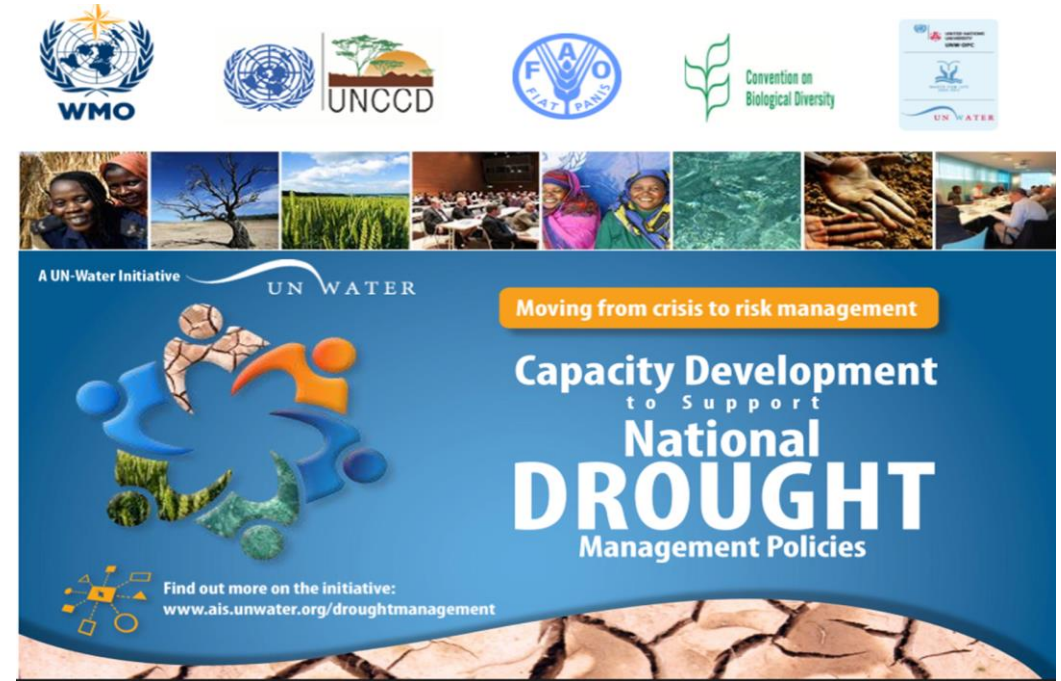
# Final Declaration (2/2)

- Consider, where possible within the legal framework of each country, economic instruments, and financial strategies, including risk reduction, risk sharing and risk transfer tools in drought management plans.
- Establish emergency relief plans based on sound management of natural resources and self-help at appropriate governance levels.
- Link drought management plans to local/national development policies.

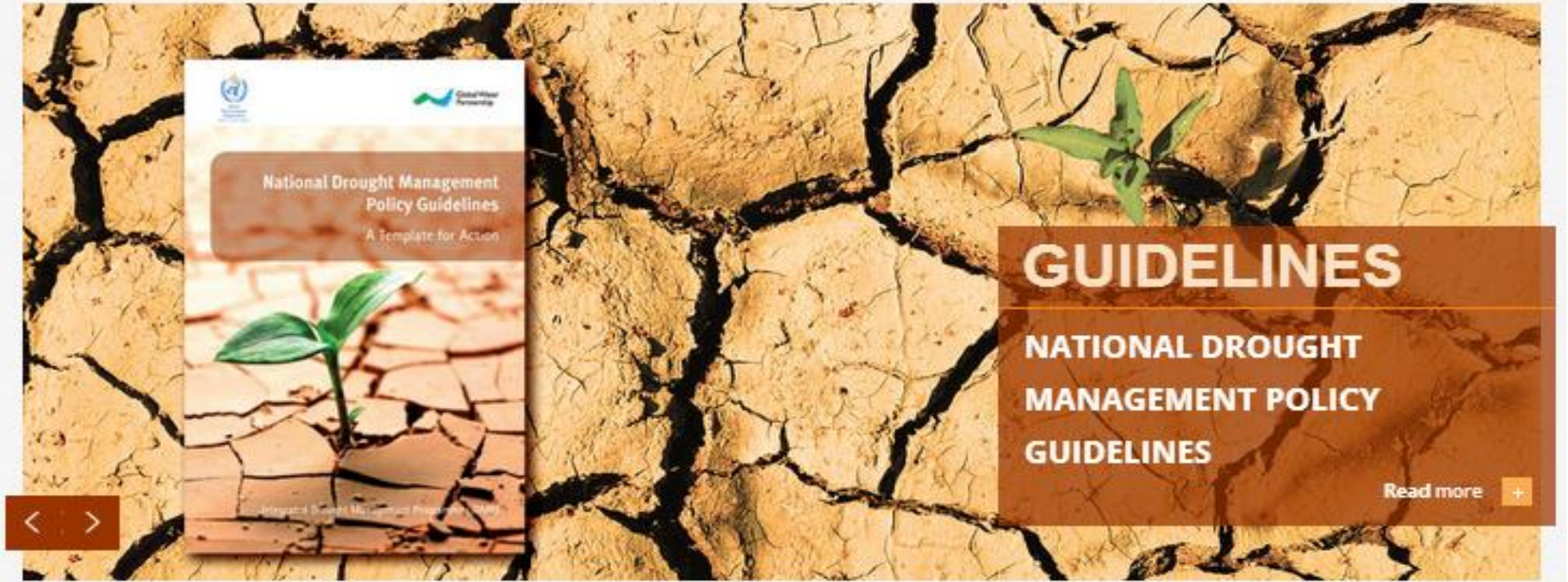


# Launch of initiatives (2013)

- Integrated Drought Management Programme (IDMP) with WMO & GWP
- National Drought Management Policies Initiative (NDMP) with UNW-DCP, FAO, UNCCD, & WMO
- 2013 World Day to Combat Desertification, UN Decade for Deserts and the Fight against Desertification, and UN Decade on Biodiversity







**Integrated Drought Management Programme - IDMP**  
**[www.idmp.info](http://www.idmp.info)**

# Drought Resilience +10

## High-Level Meeting on National Drought Policies

### April-May 2024

#### Integrating Knowledge and Action for Drought Resilience

International Organizing Committee (IOC) with the following organizations:

<b>UNCCD</b>	<b>FAO</b>	<b>WMO</b>	<b>GWP</b>	<b>IWMI</b>	<b>US NMDP</b>
<b>NOAA</b>	<b>UNDRR</b>	<b>UNESCO</b>	<b>IUCN</b>	<b>World Bank</b>	
<b>SPAIN</b>	<b>MOROCCO</b>				



# Drought Resilience +10 High-Level Meeting on National Drought Policies April-May 2024



**Drought  
Resilience** +10  
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N°	Workstream	Leading organizations
1	Drought resilience and global mechanisms	UNDRR/NOAA
2	Drought risk governance: The regional, national, and local challenges	UNCCD/UNESCO
3	Drought Impact monitoring, assessment and forecasting	WMO/NDMC
4	The need to turn drought policies into action	FAO/UNCCD
5	Ecosystems and drought	IWMI/IUCN/TNC
6	Social inclusion, climate justice and drought	GWP/IWMI
7	Drought risk finance	FAO
8	Public-Private-Civil society partnerships for integrated drought risk management	WMO/GWP/World Bank
9	<i>Health and Drought</i>	?



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**Next Speaker:**

**Mr. Omar Chafki,  
Director General,  
National Weather Service Morocco**





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**Next Speaker:**

**Bob Stefanski**

**Head, Applied Climate Services**

**World Meteorological Organization**

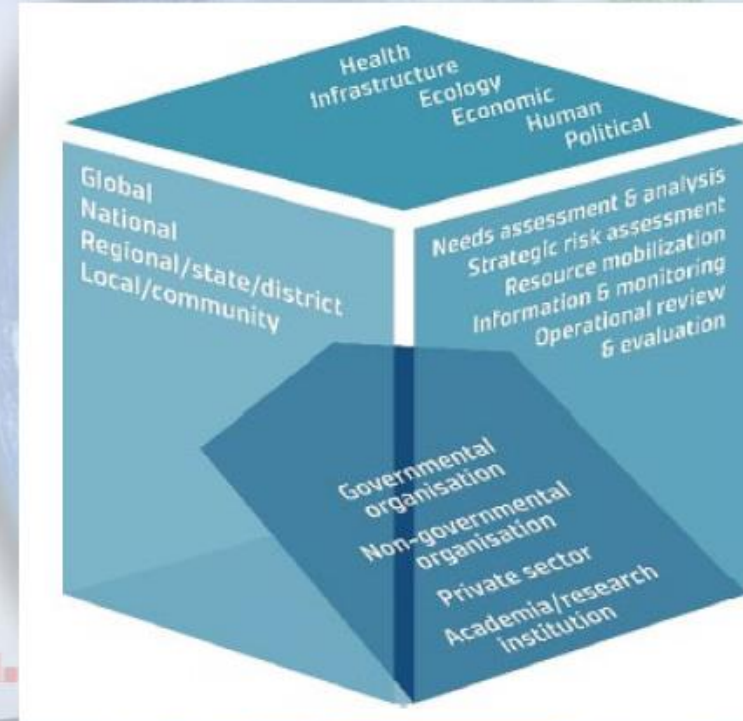
**Geneva, Switzerland**



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# Workstream 1: Drought resilience and global mechanisms

**Ongoing Challenge:**  
Sustaining collaborative networks across research, observations,  
services, and decision-making at different scales





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**Next Speaker:**

**Daniel Tsegai | Ph.D.**

**Programme Officer**

**United Nations Convention to  
Combat Desertification (UNCCD),**

**Bonn, Germany**



**United Nations**  
Convention to Combat  
Desertification

# Workstream 2: Drought risk governance: Regional, national & local challenges

## Objectives

- Provide up-to-date information on the latest research findings & trends regarding drought risk governance at all levels.
- Advocate for a comprehensive, multi-risk approach to drought risk governance that involves multiple stakeholders and adopts a systems-based, multilateral approach.
- Identify the main challenges encountered in achieving effective drought risk governance at different levels, including the global, regional, national, and local levels.
- Discuss how to overcome persistent challenges and rebuild better systems to strengthen the integrated governance of multi-dimensional/systemic drought risk within and across sectors and systems.
- Propose integrated approaches to enhance resilience at all levels, from local to global scales.
- Highlight examples of successful and emerging approaches, tools, and governance models that facilitate the transition to adaptive drought risk governance.







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## Next Speaker:

Mark Svoboda | Ph.D.

Director and Professor

National Drought Mitigation Center

University of Nebraska-Lincoln, USA



# Workstream 3: Drought Impact monitoring, assessment and forecasting

**Collection and Monitoring:** Need longitudinal *baseline* time series data. **Must prioritize collection of impacts** in the same way we do precipitation, temperature and other environmental indicators.

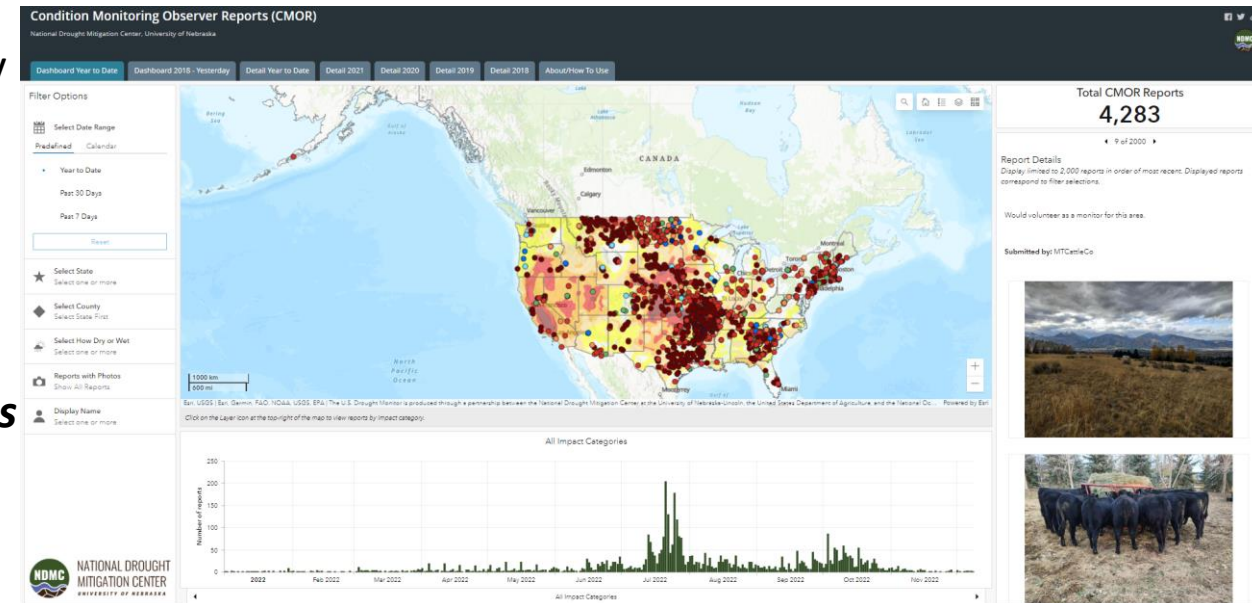
- **YOU CAN'T MEASURE WHAT YOU DON'T MONITOR!**
- **What were the effects of past droughts?**
- **What are the potential effects of future droughts?**
- **How is climate change altering impacts as a result of changes in drought frequency, intensity and duration?**
- **Costs and losses due to drought are not well documented.**

**Research:** Improve our understanding of **how biophysical indicators relate to social and environmental indicators.**

**Response & Recovery:** To know **where to direct relief**

**Planning/Policy:** Impacts **point to underlying vulnerability.**

Tracking drought impacts can help decision makers figure out where to focus efforts to reduce vulnerability to the next drought.



Given increased drought incidence and upward spiraling impacts, **how can we convince policy makers that drought preparedness and the application of the principles of risk management are worthy of upfront investments?**





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Convention to Combat  
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## Challenges

- Political challenges: Most NDPs bemoan lack of political commitment hindering progress on drought resilience.
- Institutional challenges: Many countries report the general lack of synergies in policy & cooperation across sectors & stakeholders
- Technical challenges: Almost all drought-prone countries are confronted with the lack of technology to facilitate the efficient monitoring & forecasting
- Financial challenges: Countries lack financial resources to fund the necessary technology & the operations of monitoring and issuing early warning systems.
- Public engagement challenges: This constraint stems from the lack of sensitization & awareness amongst the population, plus the low participation of civil society.



## Opportunities

- Education & Sensitization: entail capacity building and training in addressing or coping with drought impacts, the integration of drought, and issues of desertification in curricula.
- Enhancing Water Supply: **Emphasis on improving water supply & availability**, plus commitment to improving agricultural practices, are particularly important
- Monitoring, Forecasting, and Early Warning: Countries recognize the **need for effective monitoring, forecasting and mitigation** as vital to drought preparedness and resilience—which calls for adequate technology, policy framework and expertise for effective drought monitoring.
- Further **emphasis on gender mainstreaming and age inclusiveness** is also encouraged.
- Considerations for driving health costs down through **cross-sector collaborations** to manage human health impacts.



# Workstream 4: The Need to turn drought policies into action

## Way forward

- Preparedness for drought necessitates greater institutional capacity at all levels of government & efficient coordination between different levels of government.
- Preparedness also implies increasing the coping capacity of individuals and communities to deal with drought events
- Drought management requires collaborative approach within & between levels of government, civil society & the private sector.
- International collaboration is needed to effectively manage drought & to allow transfer of knowledge & learning between countries.
- Increasing the understanding of the benefits of action & the costs of inaction.
- Mainstreaming gender in the National Drought Planning.





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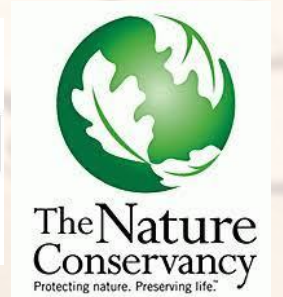
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**Chris Magero**, *Snr Programme Officer IUCN*  
**Rachael Mc Donnell**, *Deputy Director General –  
Research for Development Head of IWMI Rome  
Office*

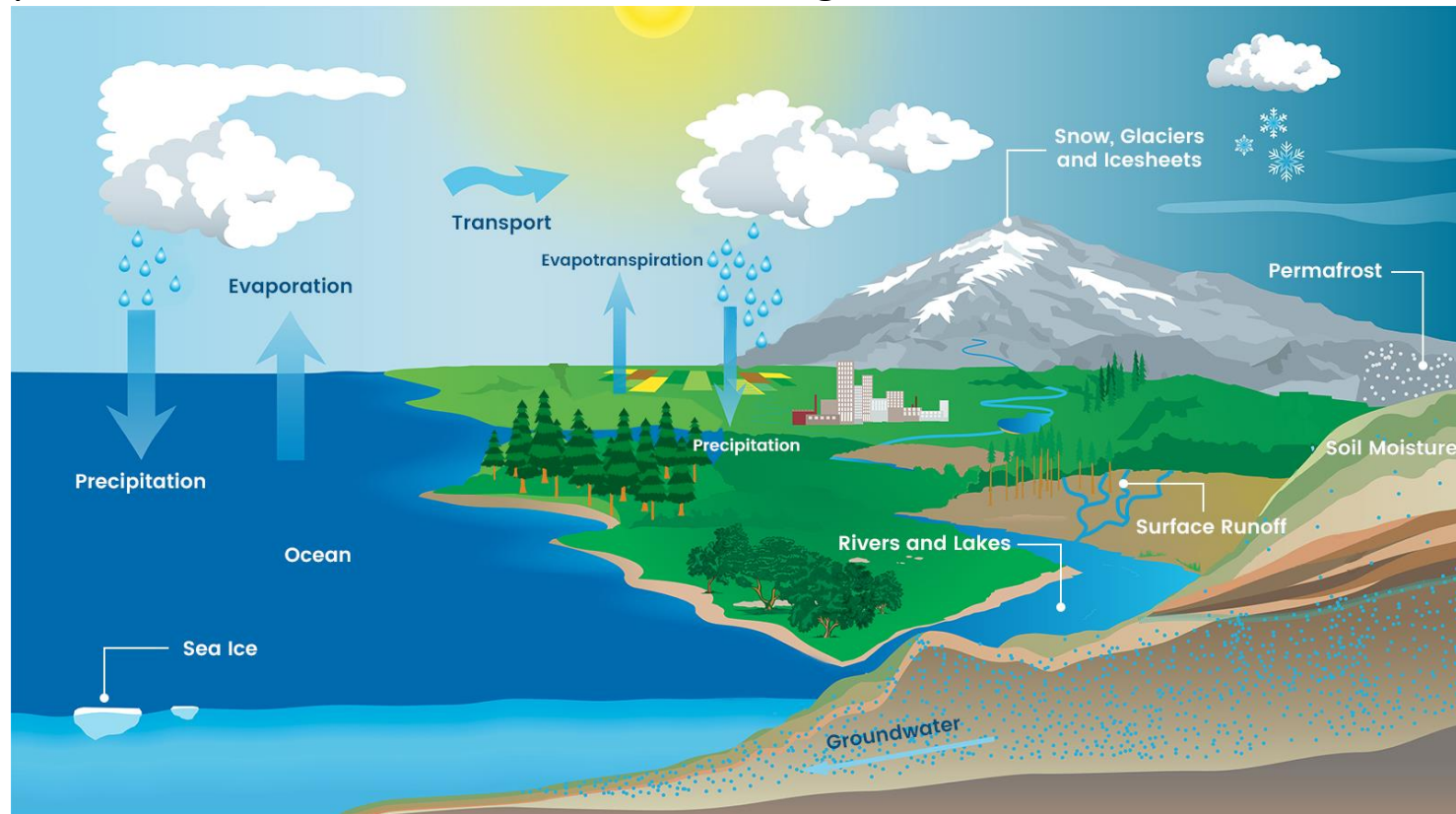
**Tom Iseman**, *Director Drought Resilience The  
Nature Conservancy*



# Workstream 5: Ecosystems and Drought

## Why Ecosystems and Drought?

- Drought is often defined in literature as a complex slow onset phenomenon, that has impacts across varying temporal and spatial scales with both short-term and long-term social, economic and ecological impacts.

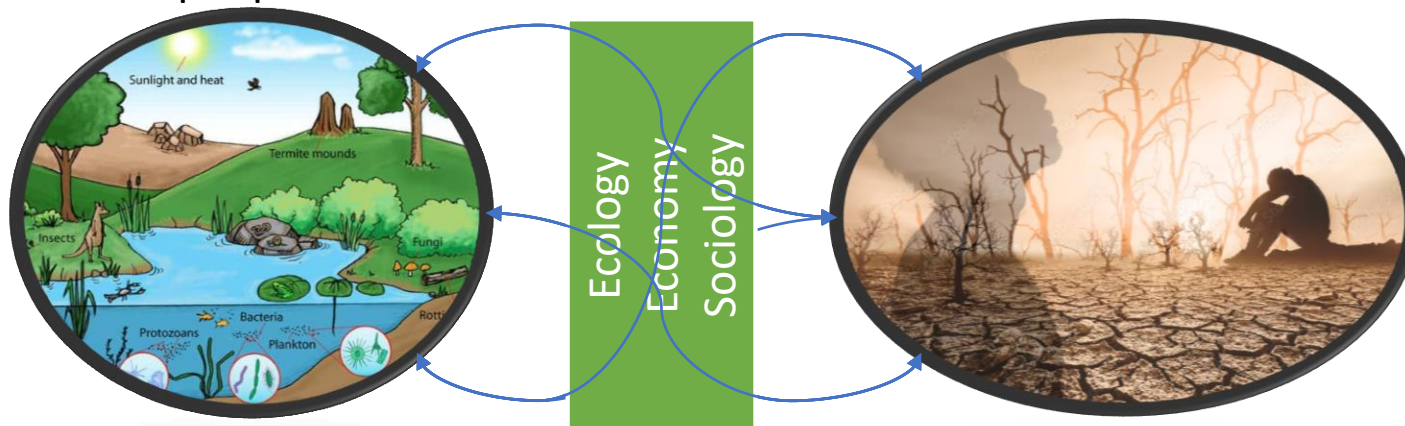




# Workstream 5: Ecosystems and Drought

## Drought responses and the role of Nature?

- Drought response is improving but still piecemeal
- Based on the emergency frameworks and without proper guidance - exacerbates the risk of further delinking drought from biodiversity, land and people.
- Nature is not only a strong ally for addressing drought.
- Holistic management of drought must necessarily consider the links with biodiversity, economy and people.



# Workstream 5: Ecosystems and Drought

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- Some goals
  - Enhance the adoption of land, ecosystem and biodiversity restoration in global drought management
  - Enhance investments and finance in sustainable land management and ecosystems restoration for drought management
- Some gaps and opportunities
  - Nature Based Solutions
  - Global Convention goals including Global biodiversity framework, UNFCCC, UNCCD
  - Regenerative Food Systems
  - ????

**It will be great to hear more ideas from you on how we could take this forward.**





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**Sabina Bokal (GWP CEE)**

## Gender transformative approaches, social inclusion and climate justice in integrated drought policies

- Reducing gender-based constraints
- Supporting initiatives mobilizing under-represented groups in drought management
- Increasing number of drought policies/strategies to include inclusive dimensions
- Including gender transformative approach into all activities increasing drought resilience
- Increasing digital inclusion design in climate information systems and services





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**Next Speaker:**

**Eva Pek |**

**Land and Water Officer**

**Land and Water Division**

**Food and Agriculture Organization**



# Workstream 7: Drought finance



- not yet on the political agenda
- limited to public finance
- traditional mechanisms



- leverage climate finance
- use tested modalities of development finance

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- private sector involvement
- feasible business cases
- improved risk-return profile

# Workstream 7: Drought finance

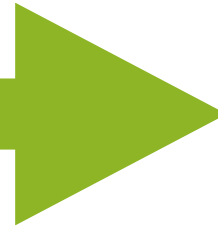


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WHAT'S NEXT



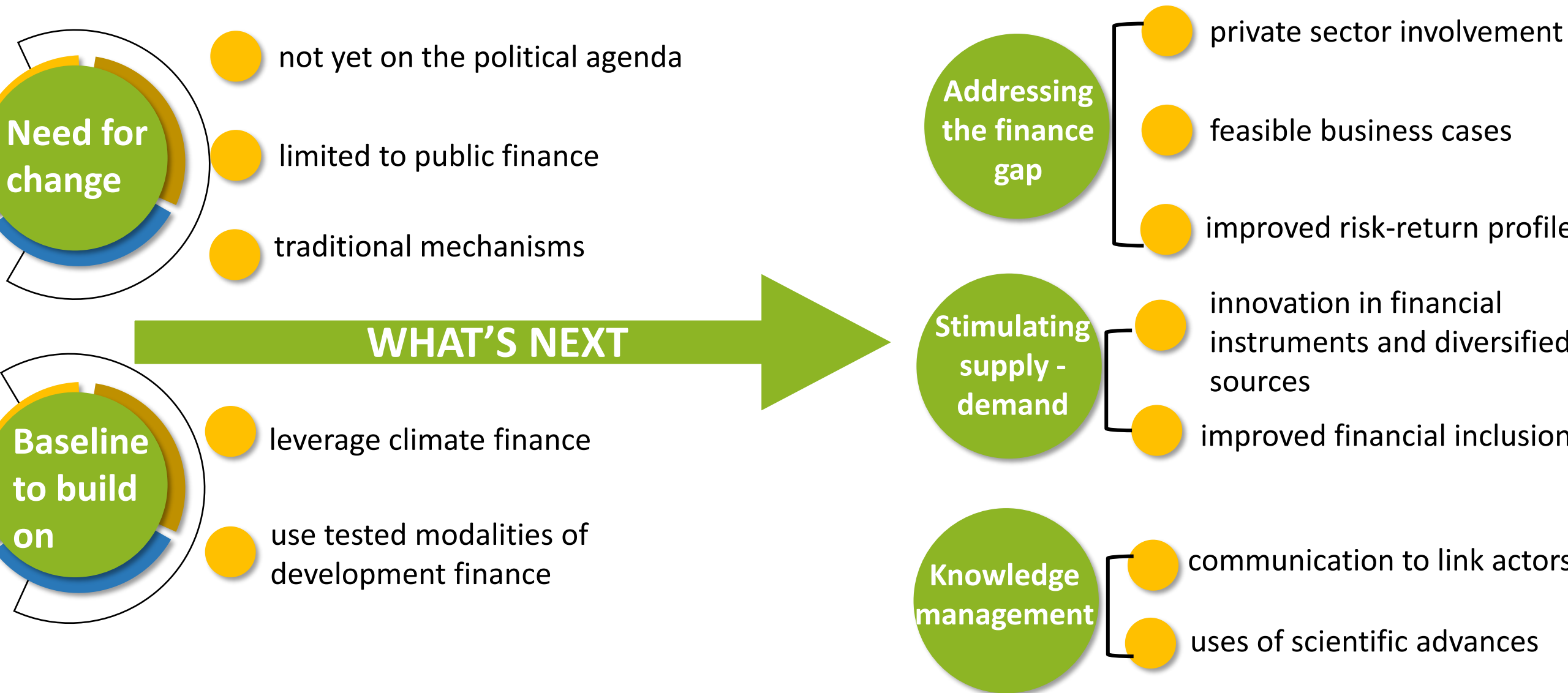
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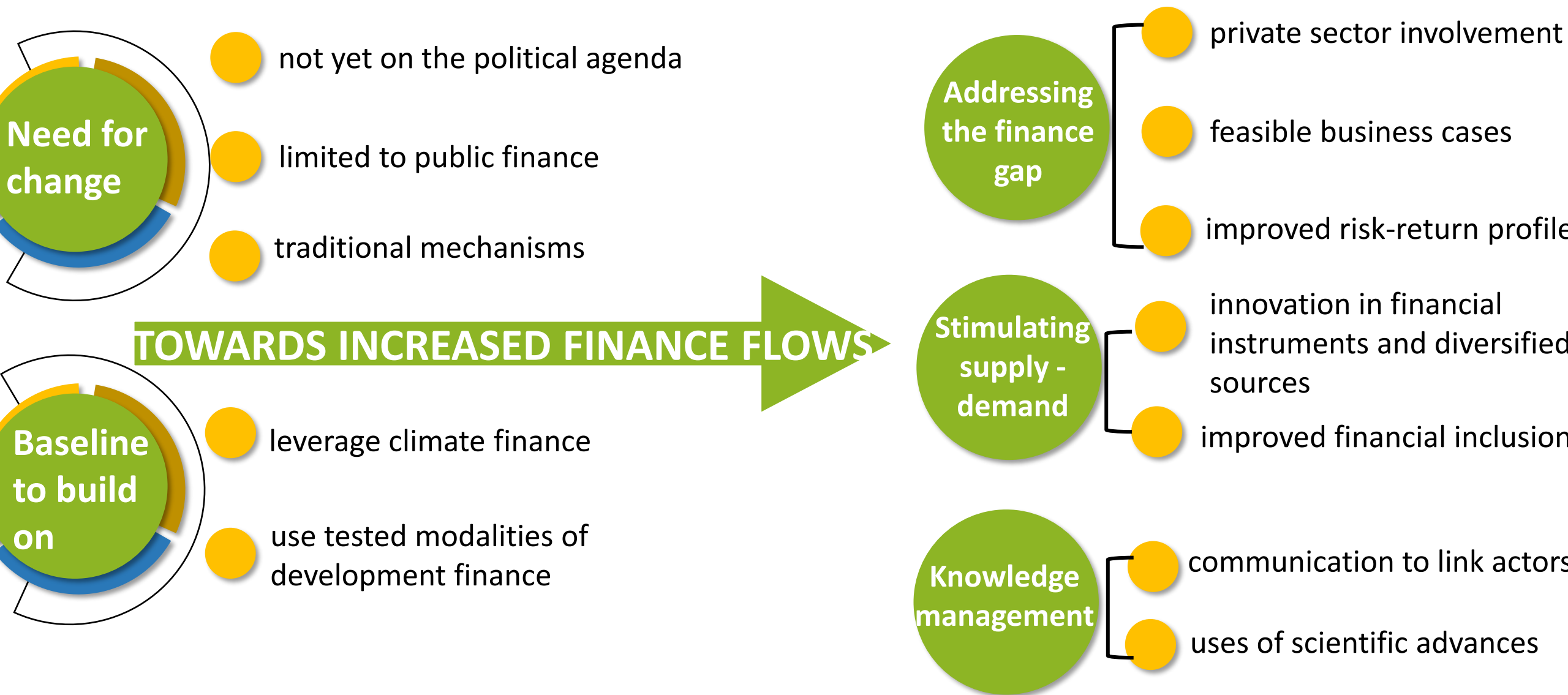
- innovation in financial instruments and diversified sources
- improved financial inclusion



# Workstream 7: Drought finance



# Workstream 7: Drought finance





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**Next Speaker:**

**Valentin Aich | Ph.D.**

**Senior Water and Climate Specialist**

**Global Water Partnership,**

**Stockholm, Sweden**



Global Water  
Partnership

# Workstream 8: Public-Private-Civil Society Partnerships for integrated drought risk management



Definition: “A public - private – civil society partnership is a contract between a government and/or a private company and/or a civil society entity under which the private company and/or a civil society entity finances, builds and/or operates some element of a service that was traditionally considered a government domain.”

- Crowdsourcing of impact data
- Hydromet data or other data from private company/households
- Insurance companies supporting resilience
- Water-intense industries investing in watershed health



## Challenges:

- Lack of mutual trust
- Lack of understanding
- Lack of legislative/institutional frameworks
- Insufficient Gov funding





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**Next Speaker:**

**Jesse E. Bell | Ph.D.**

**Director of Water, Climate and Health**

**Daugherty Water For Food Global Institute**

**University of Nebraska Medical Center, USA**



THE DAUGHERTY

**WATER** *for* **FOOD**

GLOBAL INSTITUTE

*at the University of Nebraska*

# Workstream 9: Drought and Health

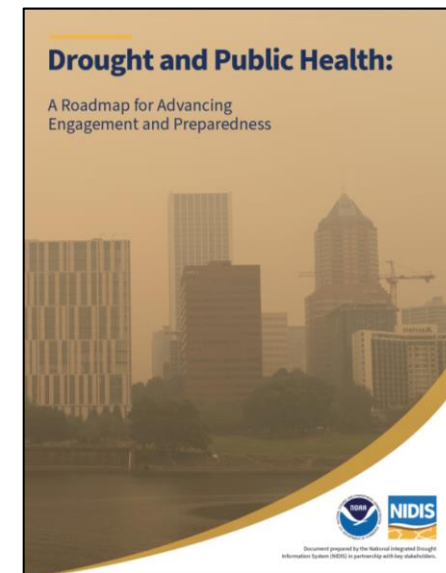
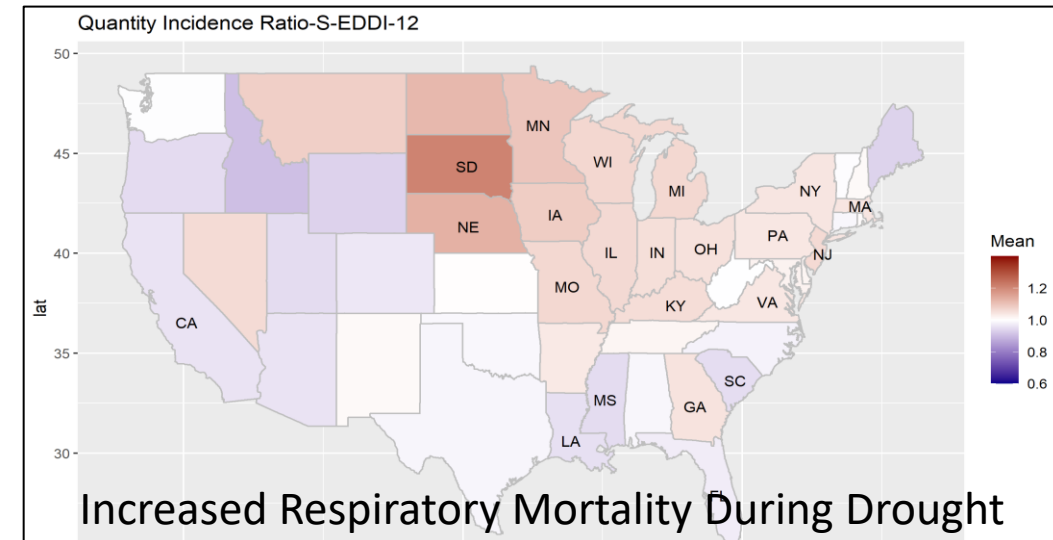
**Issue:** Drought has likely resulted in *more deaths over the last century* than any other climate- or weather-related disaster. However, the pathways between drought and health are complex and often overlooked.

- ***Drought is a threat multiplier.***
- ***Who are the populations most at risk?***
- ***What are the secondary health outcomes?***
- ***How do we effectively communicate and educate public health agencies and health ministries on these threats?***
- ***What resources are needed to reduce these risks and protect populations of concern?***

**Research:** Improve monitoring and evaluation of pathways leading to health outcomes from drought.

**Response and Recovery:** To ***provide effective communication and engagement strategies*** on health threats **before and during** a drought.

**Planning/Policy:** Health ministries and public health agencies are critical for ***monitoring, researching, engaging, and educating on these issues.***



Given that the health outcomes from drought are not as obvious as other disasters, ***how do we effectively engage with stakeholders and decision-makers to invest in this issue? The results can protect lives.***



In your view, what are the 3  
topics that need most  
attention?

<https://www.menti.com/algfbq3mprhz>

Menti Code: **4229 5720**



What are other aspects we need to address and act on for the Drought Resilience +10 and beyond?

<https://www.menti.com/algfbq3mprhz>

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**Thank you!**

<https://www.droughtmanagement.info/hmndp10/>