

IDMP

Integrated Drought Management Programme



WORLD
METEOROLOGICAL
ORGANIZATION



Global Water
Partnership



**BUILDING
DROUGHT
RESILIENCE
TO REDUCE
POVERTY**



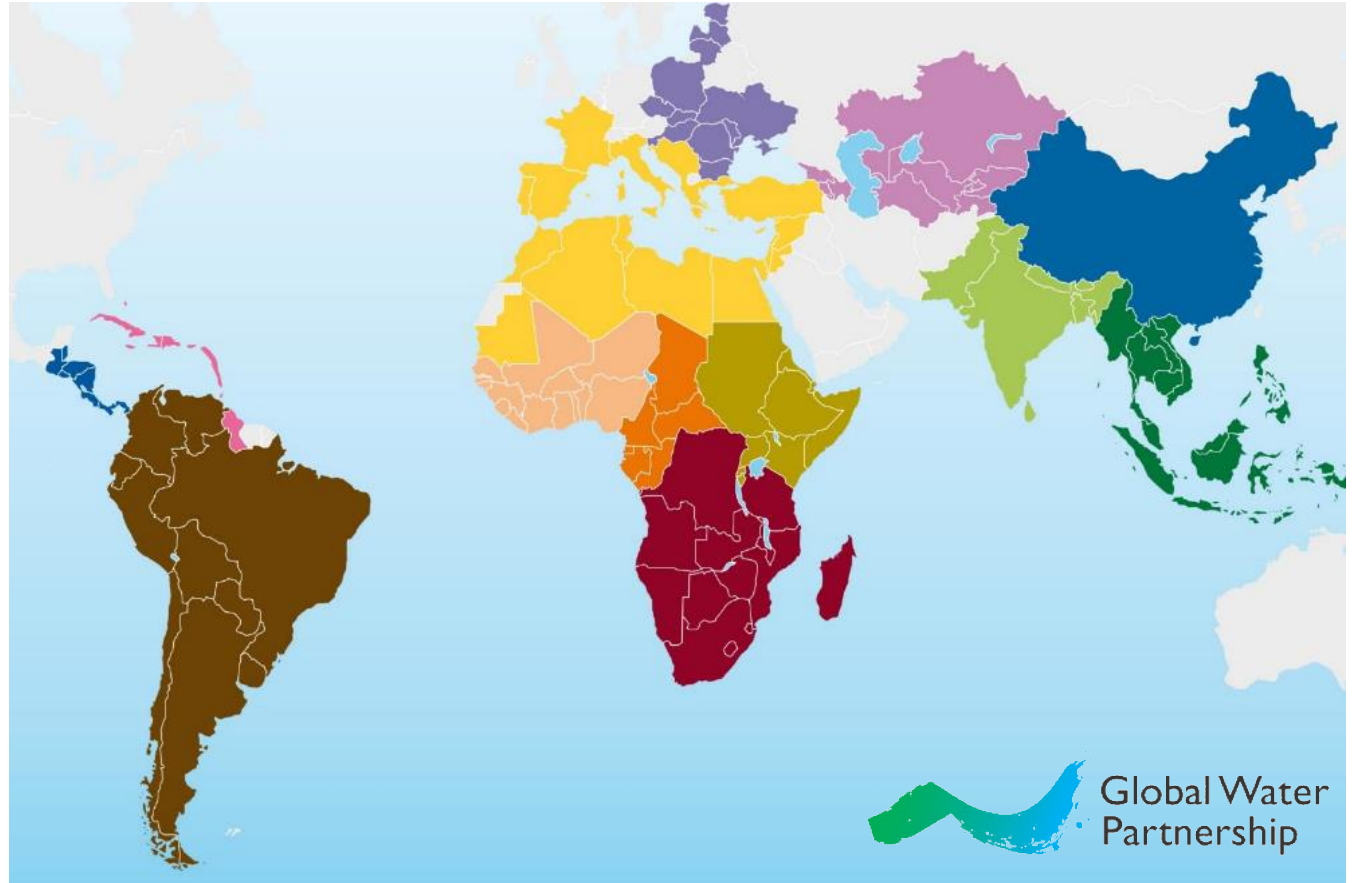
World Meteorological Organization

WMO is the United Nations system's authoritative voice on weather, climate and water

WMO has 191 Members and coordinates the activities of the National Meteorological and Hydrological Services (NMHSs) because weather, climate and water know no national or political boundaries.

Global Water Partnership

- A growing international network since 1996
- 13 Regional Water Partnerships
- 85 Country Water Partnerships
- 3000+ Partners in 178 countries



Managing Water Extremes

WMO/GWP Associated Programme on Flood Management (APFM) WMO/GWP Integrated Drought Management Programme (IDMP)

- APFM established in 2001
- IDMP established in 2013
- APFM and IDMP provide a technical resource for water management extremes through:
 - Expert Advice (Joint Technical Support Unit of GWP and WMO in Geneva)
 - Guidelines and Tools
 - Project Preparation support
 - Capacity Development
 - Over 20 partners in each programme

Droughts and Floods in the SDGs



IDMP

Integrated Drought Management Programme

IDMP Background

IDMP was launched by WMO and GWP in 2013 at the High-Level Meeting on National Drought Policies (HMNDP) to support implementation of the HMNDP outcomes

[Excerpt of HMNDP final declaration, emphasis added]

- 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**
- Consider, where possible [...] **risk reduction, risk sharing and risk transfer tools in drought management plans**
- **Link drought management plans to local/national development policies**

Approach

■ Proactive rather than Reactive:

- Focus on drought prevention, mitigation, vulnerability reduction, planning and preparedness (including monitoring and early warning)
- Consider all aspects of disaster risk management and shift the focus to Risk Management (rather than crisis management)

■ Horizontal Integration:

- Draws on the principles of Integrated Water Resources Management
- Bring together partners from different disciplines and sectors to find solutions (sectoral approaches from the past are limited in reducing drought impacts)
- Highlight approaches to Integrated Drought Management of its partners, with a spirit that more can be achieved working together

■ Vertical Integration:

- Connects and exchanges experiences among the global, regional, national and local level
- Principles of Integrated Drought Management are adapted to the context applied

Approach

■ Knowledge Sharing – “Clearinghouse of Information”:

- Connect knowledge providers with those seeking knowledge (IDM HelpDesk)
- Provide entry points to understand and apply the principles of Integrated Drought Management, pointing as much as possible to existing knowledge (see National Drought Management Policy Guidelines)
- Rather than producing new scientific/ highly technical knowledge, the IDMP closes gaps in knowledge and in communicating/applying existing knowledge

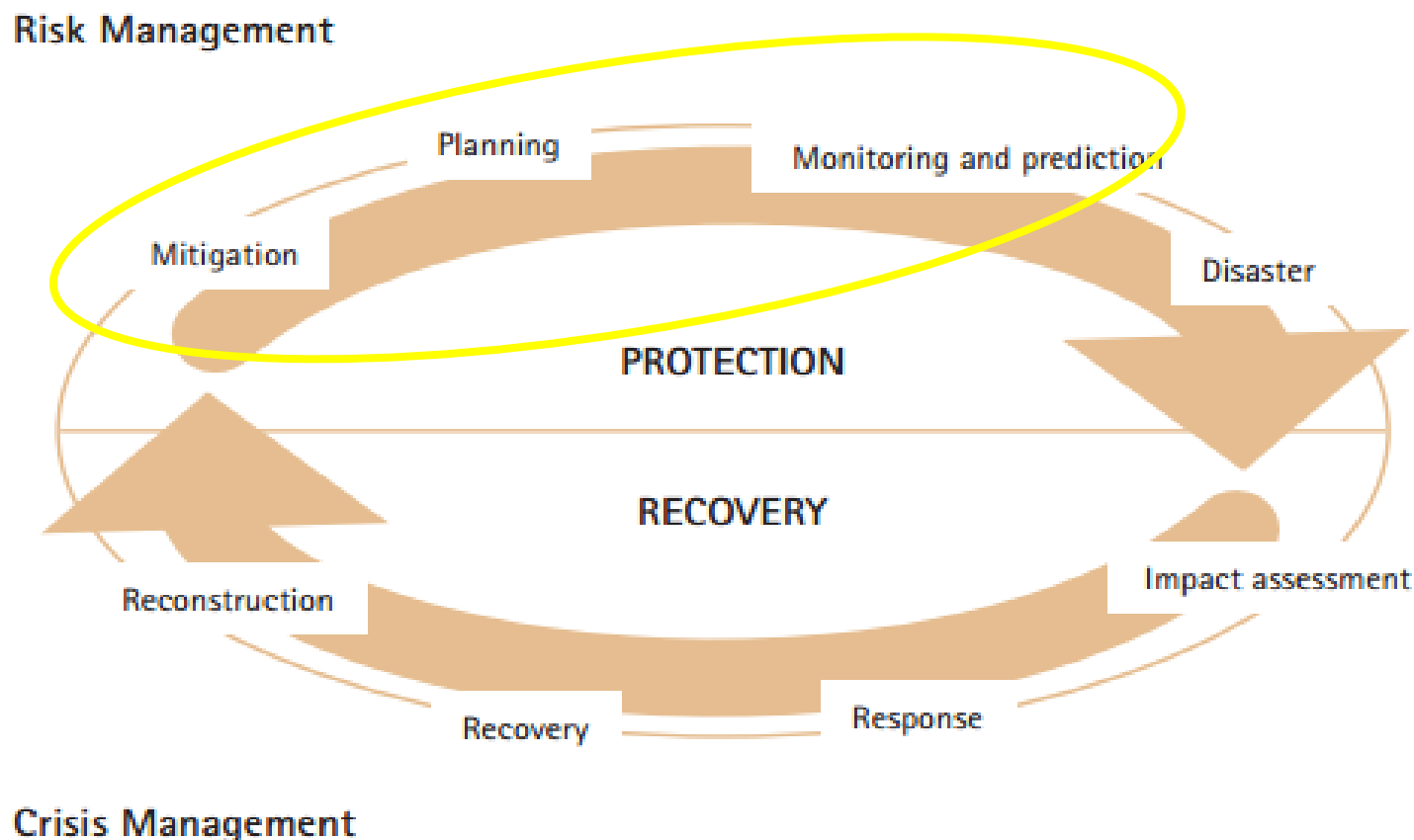
■ Demonstration Projects:

- Innovation - applying the principles of Integrated drought management
- Build on existing efforts that are scalable and make a significant contribution to building drought resilience through an integrated approach

■ Develop Capacities:

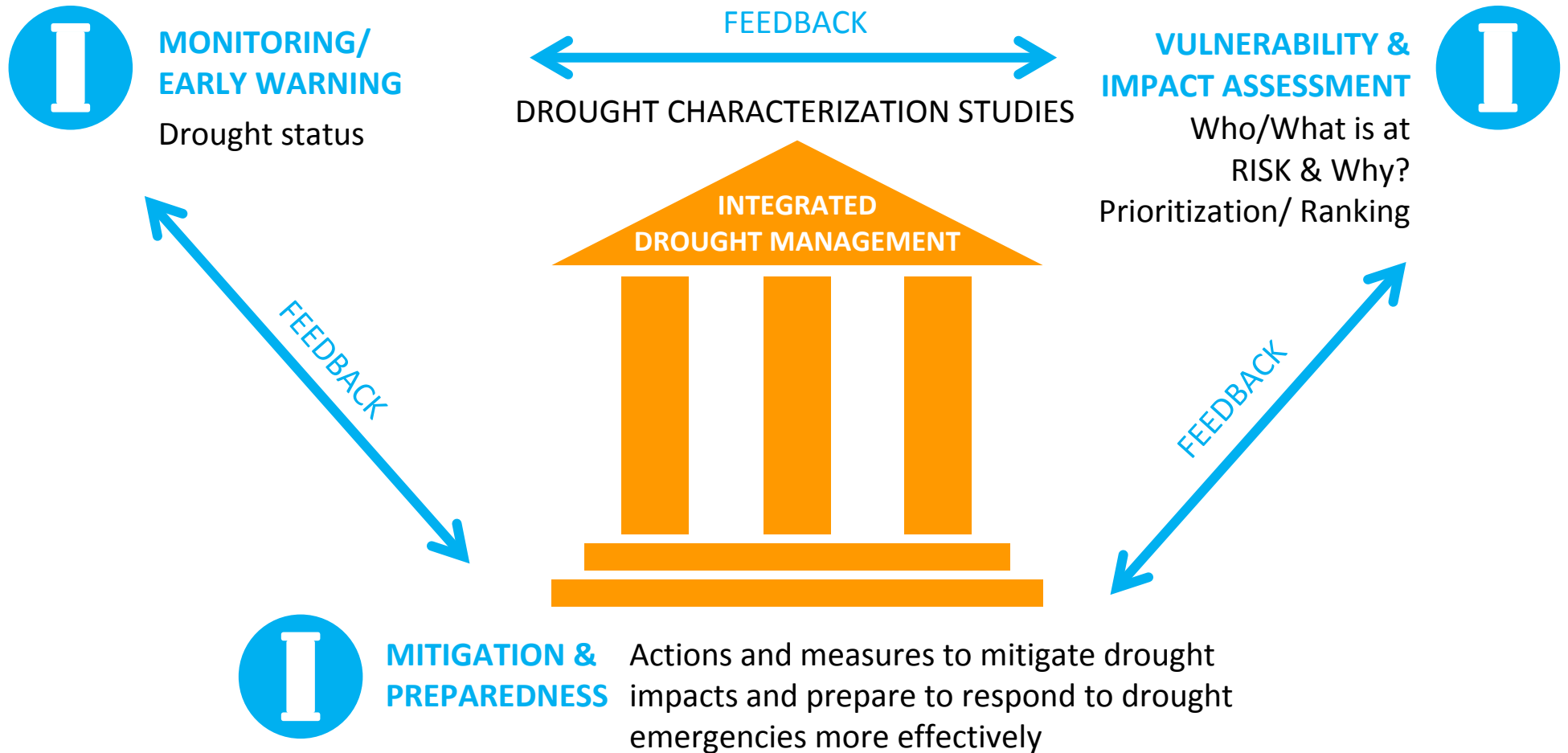
- Through the above and closing gaps where necessary through trainings that add value and collaboration with partners

The cycle of disaster management



Source: National Drought Mitigation Center, University of Nebraska-Lincoln

3 Pillars of IDM



Components

IDM at Regional and National Level

Knowledge and
Awareness

Innovative
Practices

Capacity
Development

Governance and Partner Engagement



Part of the Global Framework for Climate Services

GFCS Goal:

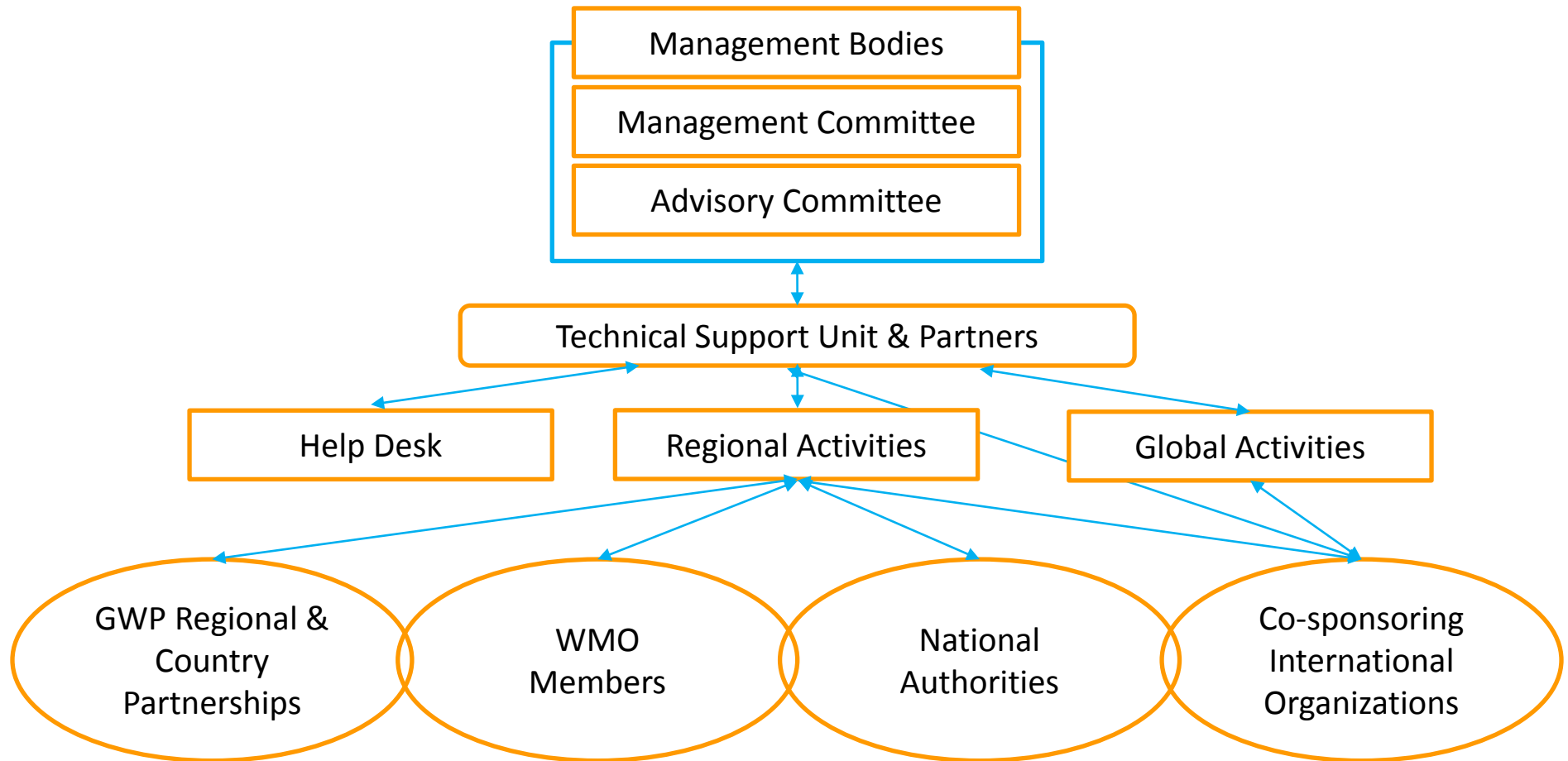
Enable better management of the risks of climate variability and change and adaptation to climate change at all levels, through development and incorporation of science-based climate information and prediction into planning, policy and practice.

GFCS Priority Areas:

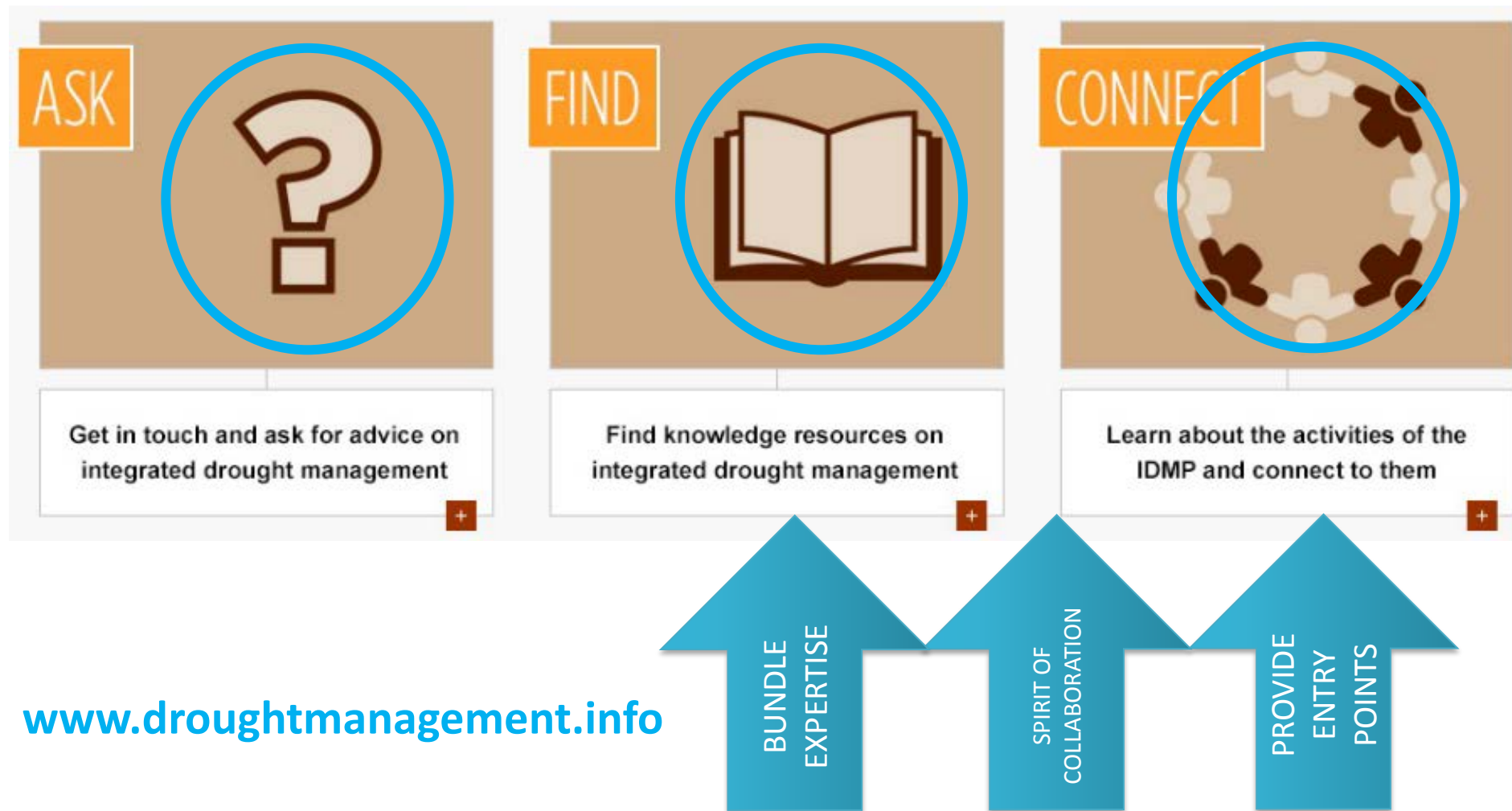
Agriculture; Disaster Risk Reduction; Water; Health; Energy

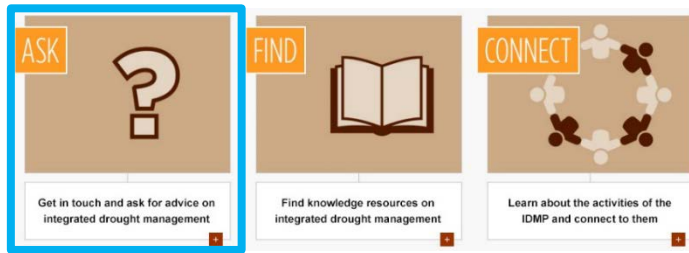


Governance Structure



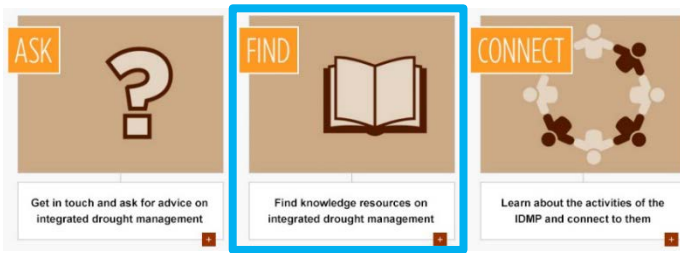
Integrated Drought Management Helpdesk





Partners

- AEMET Spanish Meteorological Agency
- Australian Bureau of Meteorology
- CONAGUA Mexico's National Water Commission
- FAO Food and Agriculture Organization of the United Nations
- FEWS NET Famine Early Warning Systems Network
- UNCCD United Nations Convention to Combat Desertification
- UN CBD UN Convention on Biological Diversity
- George Mason University Global Environment and Natural Resources Institute
- ICARDA International Center for Agricultural Research in the Dry Areas
- ICID International Commission for Irrigation and Drainage
- IMTA Mexican Institute of Water Technology
- IWMI International Water Management Institute
- JRC Joint Research Centre
- SEI Stockholm Environment Institute
- NDMC U.S. National Drought Mitigation Center
- NIDIS U.S. National Integrated Drought Information System
- UNDP Cap-Net
- UNDP United Nations Development Programme
- UNESCO United Nations Educational, Scientific and Cultural Organization
- UNEP United Nations Environment Programme
- UNISDR United Nations Office for Disaster Risk Reduction
- University of Nebraska Daugherty Water for Food Institute
- University of Southern Queensland
- UNU Flores
- World Bank



Drought Management Library

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WHO Global Water Partnership

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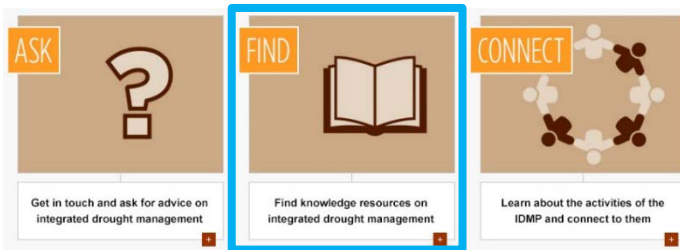
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Click [here](#) for a list of acronyms

Search: Show entries

Organization	Year	Title and Description	Preview
ADB	2012	Drying Up: What to do about Droughts in the People's Republic of China This publication addresses the issue of droughts and water management in the People's Republic of China (PRC) for environmentally sustainable development. It consolidates the highlights from several recent ADB strategic studies that relate to improving disaster risk management and water resources management in the PRC, and represents current policy direction in the Ministry of Water Resources, with whom ADB worked closely in developing this knowledge product. One interesting finding from these studies is that drought management in the PRC follows the reactive mode of its flood management system, which limits official uses of disaster relief funds until after an emergency is declared.	
ADB	2003	Kazakhstan - Issues and Approaches to Combat Desertification	

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Guidelines and Tools

IDMP
Integrated Drought Management Programme

WMO Global Water Partnership

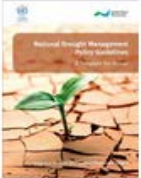
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HOME / FIND / GUIDELINES & TOOLS

Please click on the headings below to find IDMP guidelines, concepts, outcomes of expert meetings and the key documents of the High Level Meeting on National Drought Policy.

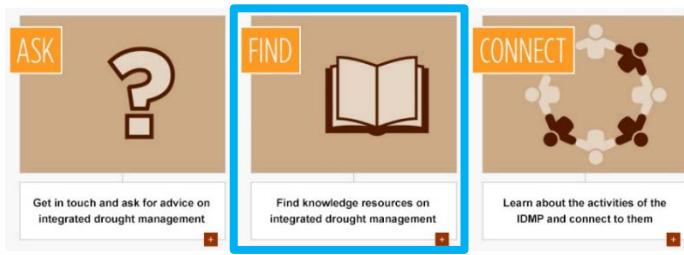
Guidelines

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National Drought Management Policy Guidelines – A Template for Action (Donald A. Wilhite). WMO/GWP Integrated Drought Management Programme (IDMP). 2014. Tools and Guidelines Series 1. WMO, Geneva, Switzerland and GWP, Stockholm, Sweden.
[English, Arabic]
- 

Standardized Precipitation Index User Guide. World Meteorological Organization. 2012. M. Svoboda, M. Hayes and D. Wood. (WMO-No. 1090), Geneva, Switzerland.
[English, Arabic, French, Russian, Spanish]

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Policy Guidelines

- Adapting of 10-step process by Don Wilhite (National Drought Mitigation Center at the University of Nebraska-Lincoln)
- Response to need articulated at High-level Meeting on National Drought Policy (HMNDP)
- **Template** that can be adapted to national realities and needs
- Building on **existing risk management capacities**



National Drought Management Policy Guidelines

A Template for Action



Integrated Drought Management Programme (IDMP)

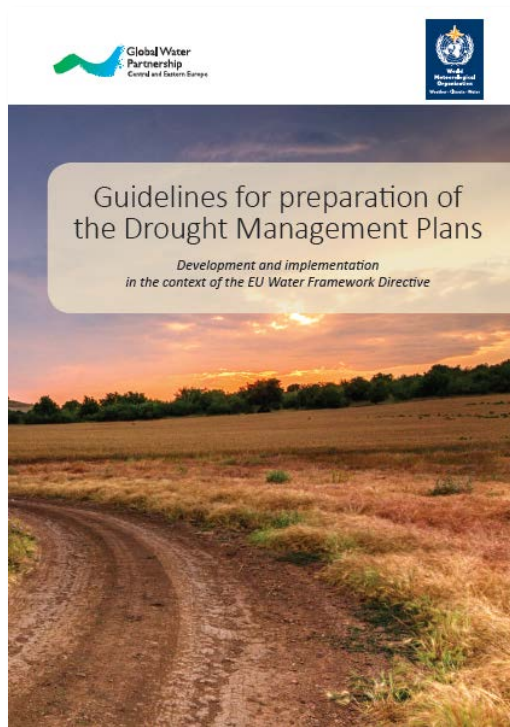
Objectives of National Drought Management Policies

- To encourage vulnerable economic sectors & population groups to adopt **self-reliant measures** that promote risk management
- To **promote sustainable use** of agricultural & natural resource base
- To facilitate **early recovery from drought** through actions consistent with national drought policy objectives
- It **can be a stand-alone policy or part of national policy for disaster risk reduction** that is centered on the principles of risk management (UNISDR, 2009)

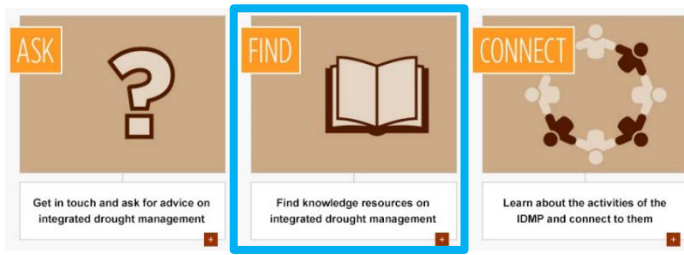
...and some pointers:

- It is **one approach** to assist nations with NDP process
- It **can/should be modified/adapted** according to local conditions
- Requires **political will and coordinated approach**; diverse stakeholders must be engaged in the process.
- It has been fundamental in guiding drought mitigation and preparedness plans in the USA, Brazil, Mexico, Morocco, among others.

Adapting to regional context – Step-by-step guidance towards a Drought Management Plan

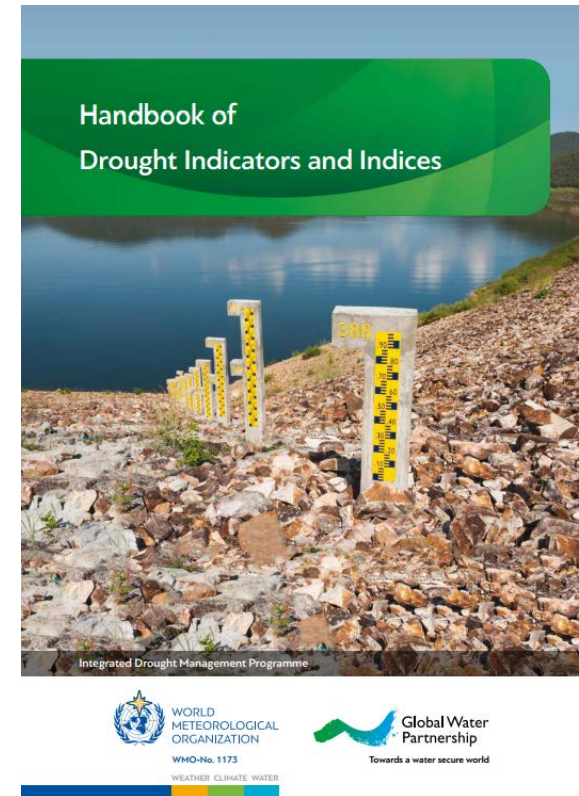


- Step 1** Develop a drought policy and establish a Drought management Committee
- Step 2** Define the objectives of a drought risk-based management policy
- Step 3** Inventory of data needed for Drought Management Plan development
- Step 4** Produce/update the Drought Management Plan
- Step 5** Publicize the DMP to the public for comments and active involvement
- Step 6** Develop a research and science programme
- Step 7** Develop an educational programme



Handbook of Drought Indicators and Indices

- Handbook is a resource to cover most commonly used drought indicators/indices
- A starting point to describe and characterize the most common indicators and indices and their applications
- Does not recommend a “best” set of indicators and indices, given research requirements for appropriate application in location in question.



Selecting drought indicators and indices

- Timely detection of drought to trigger appropriate communication and coordination to mitigate or respond
- Sensitivity to climate, space and time to determine drought onset and termination
- Responsive to reflect drought impacts occurring on the ground
- Which indicators/indices and triggers to use for going into and coming out of drought
- Data for indices/indicator available and record consistent
- Ease of implementation? (Human, institutional and financial capacity available)



Forthcoming: Integrated Drought Management Framework Document

- To serve as the intellectual framework of the concept of integrated drought management.
- Synthesis of existing publications around the topic to define the concept and explain approaches to integrated drought management
- Put the principles agreed at the High Level Meeting on National Drought Policies into practice
- First draft developed and comments from 16 partners received.



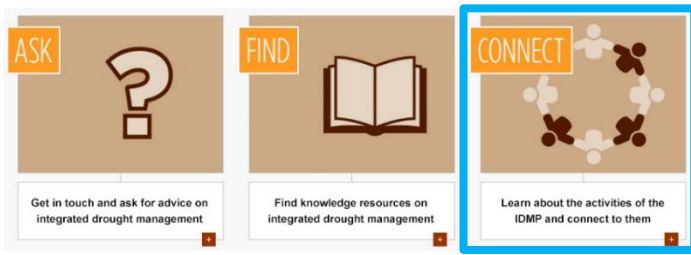
Benefits of Action vs Cost of Inaction for Drought Preparedness

- Work stream on the costs of inaction and benefits of action of drought preparedness, including an analysis of social and environmental losses.
- Explores how lessons on pro-active drought management have been learned (and which actions were taken) over time and in different sectors.
- Consideration of obstacles in the transition from crisis management to risk management, such as lack of resources and other more impelling short term problems.
- Not only focuses on the costs of inaction, but also more short term benefits that make a compelling case for taking preventive measures.
- Literature Review conducted – Expert Group Meeting held mid-September
- Working Paper planned

📍 Regional activities
📍 National activities
📍 WMO and GWP

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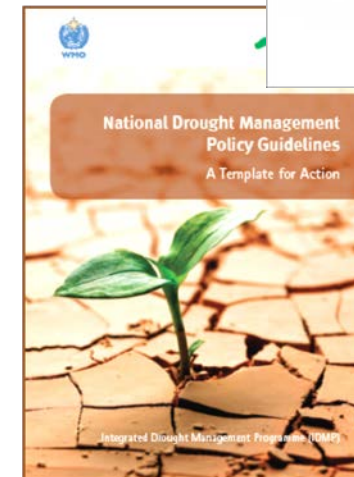
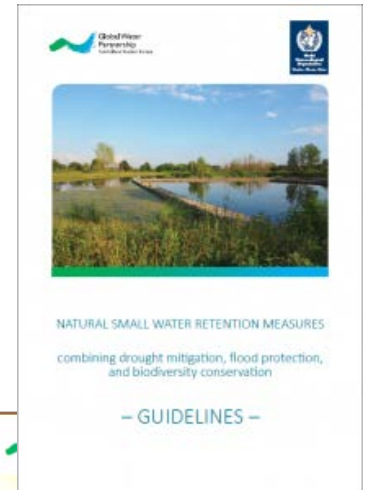


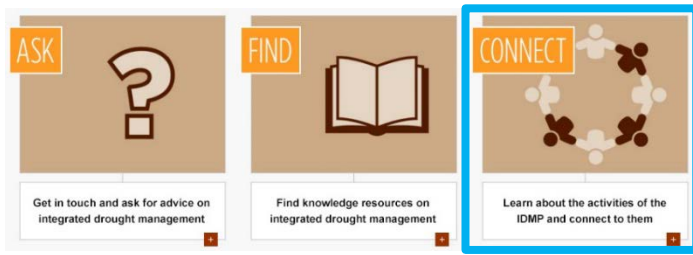
Case Studies

Under development to highlight actions that put an integrated approach to drought management into action

Case Study Guidelines available; Topics for case studies (from HMNDP Science Document):

- Promoting standard approaches to vulnerability and impact assessment
 - Implementing effective drought monitoring and early warning systems
 - Enhancing preparedness and mitigation actions
 - Implementing emergency response and recovery measures that reinforce national drought management policy goals
 - Understanding the cost of inaction
-
- Case studies on Natural Small Water Retention Measures and their application in Poland, Slovakia, Hungary, and Slovenia recently released by IDMP CEE
 - National Drought Management Policies in Brazil, Mexico, Morocco and USA
 - Currently under development are cases in Brazil, Ethiopia, India, Kenya, Philippines, Uganda

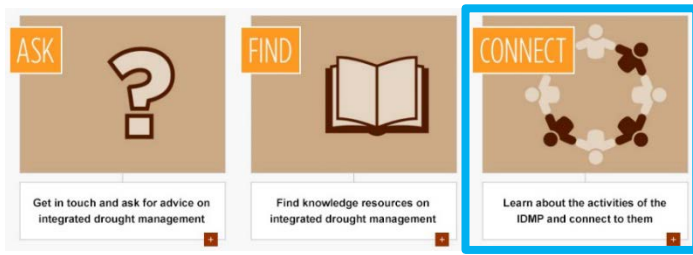




Regional programmes and initiatives

*Support action and implementation on the ground,
adding to existing efforts the strength of IDMP and its partners*

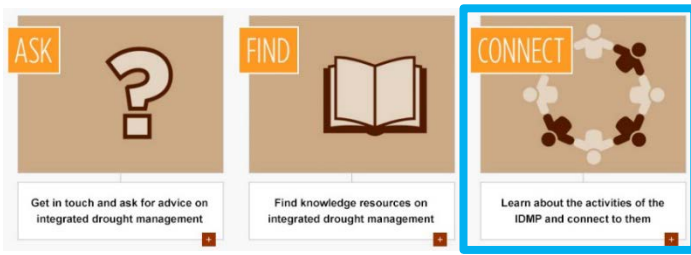
- **Central and Eastern Europe (2013):** Bulgaria, Czech Republic, Hungary, Lithuania, Moldova, Poland, Romania, Slovakia, Slovenia, Ukraine
- **Horn of Africa (2014):** Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda.
- **West Africa (2015):** First in Burkina Faso, Niger and Mali, and then share lessons learned with other neighbouring countries through the WMO partners, GWP Country Water Partnerships and other partners.
- **South Asia Drought Monitoring System (2014):** with IWMI in Afghanistan, Bhutan, Bangladesh, Nepal, India, Pakistan and Sri Lanka
- **Central America (2013):** Regional workshop leading to training on SPI and assessment of current drought.
- **South America (2015):** Regional workshop in Bolivia leading to follow-up activities with partners on drought management planning and monitoring.



Example: IDMP Central and Eastern Europe

- **Implementation:** executed by GWP CEE; started in June 2013; 64 agreements with 28 institutions. Fundraising for continuation beyond 2015 ongoing.
- **Focus:**
 - Awareness raising
 - National Drought Policies/ Action Plans:
 - Guidelines for preparation of the drought management plans within river basin management plans according to EU Water Framework Directive
 - National consultation dialogues to discuss preparation of drought management plans
 - Drought monitoring platform with information for the region on the status of drought (enhancing existing web-based platform)
 - Demonstration projects testing innovative solutions for better resilience to drought
 - Capacity building trainings and workshops on national and regional levels
 - Documentation: Compendium of good practices



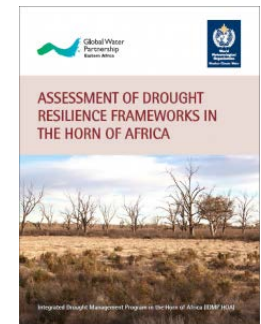


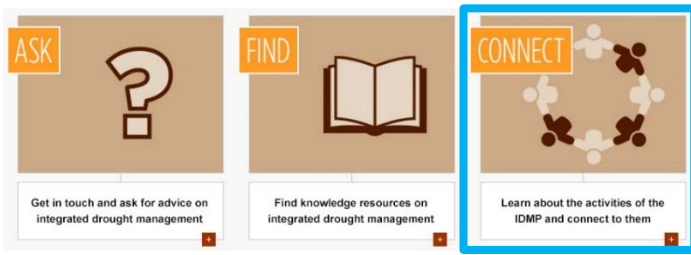
Example: IDMP Horn of Africa (IDMP HOA)



Implementation: executed by GWP Eastern Africa in 2015
MoU with IGAD with close links to IDDRSI

Impact/Goal	Improved drought resilience of communities and ecosystems in the Horn of Africa through managing water resources			
Outcome	1. Collaborative drought management programs and actions		2. High priority & commitment for implementing IDM as part of national development plans	
Outputs	c. Enhanced partnership for drought management in the HOA	a. Enhanced capacities for drought management in the HOA	b. Innovative approaches of drought management demonstrated and scaling-up plan developed	d. water resources management approaches integrated into drought management policies/programs in countries of the HOA





South Asia Drought Monitoring System

A collaboration of GWP-WMO-IWMI as part of IDMP

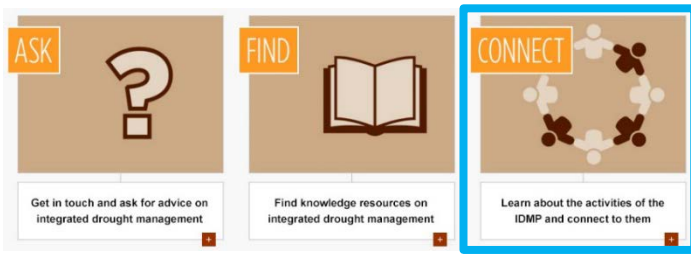
- Regional Drought Monitoring System to support regionally coordinated drought mitigation efforts that can be further tailored to the national level
- Moving from crisis management to risk management
- User ownership through GWP South Asian Regional Water Partnership with the Country Water Partnerships in Bangladesh, Bhutan, India, Nepal, Pakistan and Sri Lanka to work with relevant actors from Government, research and civil society in the region to ensure the system addresses needs.
- Technical development by CGIAR International Water Management Institute integrating remote sensing and ground truth data (vegetation indices, rainfall data, soil information, hydrological data)
- Government support through WMO Climate Outlook Fora, Regional Climate Centers and HydroMet Services as platforms for knowledge exchange and user involvement

SASCOF and User Consultation in SA DMS Development

- 5th, 6th and 7th South Asian Climate Outlook Forum in Pune, India; Dhaka, Bangladesh and Colombo, Sri Lanka

Recommendations

- Keep the **input data simple** and ensure that there is an understanding on what basis drought risks are being generated for SA DMS to gain acceptance by users
- **Involvement and ownership of government agencies and users** from the beginning in SA DMS development
- Include ground verification of the results – include **in-situ data**
- **Uncertainty** to be communicated clearly to users
- Efforts are made to include the **outputs of the SASCOF** as well as any National Climate Outlook Forums
- SADMS to have the potential to be used as a **South Asia Drought Early Warning System**



National initiatives

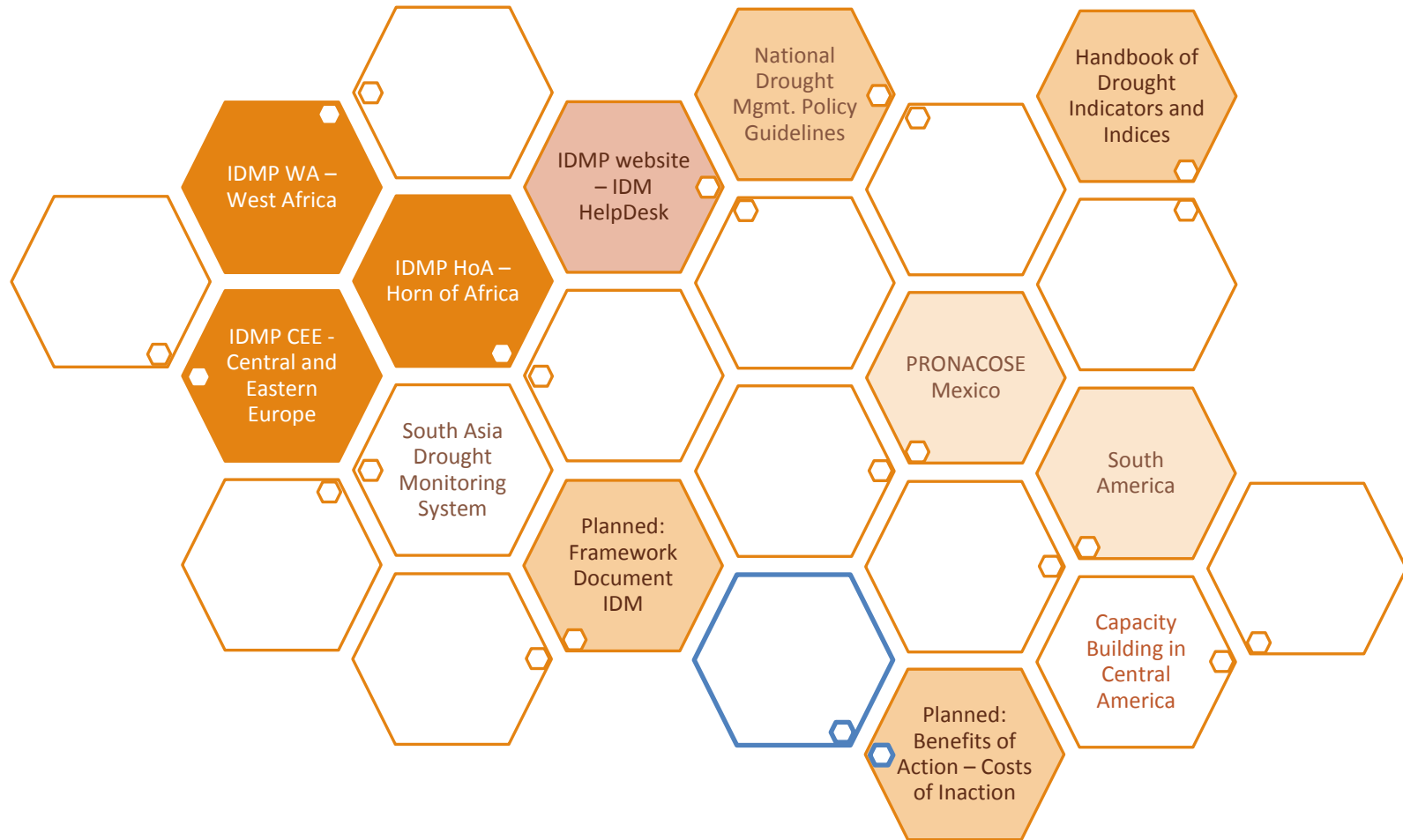
■ PRONACOSE Mexico:

- National Program against Drought (PRONACOSE) slated to run for the next 6 years in Mexico's 26 basin councils
- IDMP will provide technical advice, capacity building, project management and links to international expertise and platforms
- Work Programme has been developed as part of the WMO/CONAGUA PREMIA project.

■ Support to Turkish Government:

- In line with the recommendations of the HMNDP (March 2013), the Government of Turkey through the Turkish State Meteorological Service (TSMS) started a process to formulate a national policy on drought management
- IDMP requested to provide guidance and international expertise
- IDMP contributes technical guidance and experiences from the Mexican PRONACOSE and the IDMP Central and Eastern Europe.

Summary



For further information

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