South Asia Drought Monitoring System (SADMS)

International Water Management Institute (IWMI)

IDMP Virtual Exchange Meeting

13 December 2022

SADMS acknowledges the support of

Solution Platform "Integrated Drought Risk Management" Next generation of the SADMS Platform

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│ Weather         │   │ Drought Monitor │⟷  │ Drought Decision        │   │ Digital Dynamic         │
│ forecast        │   │ (Remote sensing │   │ Support                 │   │ Agriculture Contingency │
│ (Advisories,    │   │ + Modeling      │   │ (Trigger / Early        │   │ Plans (Activate) Water  │
│ Contingencies)  │   │ tools)          │   │ warning)                │   │ Management…..           │
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Drought Management Tools

- **Access near real time data** related drought
- **Identify and locate hazards** based on a wide range of indices
- **Forecast the development and onset** of growing season through indices linked to climate forecast
- **Establish user defined thresholds for warning** based on nationally selected indices
- **Assess the impact of future investments and external factors** through a basin planning tool
- **Disseminate information** through automated reporting

Early Action / Finance
Data services to weather Insurance

Drought Declaration

SADMS Components

SADMS — South Asia Drought Monitoring System

- Observation and Monitoring
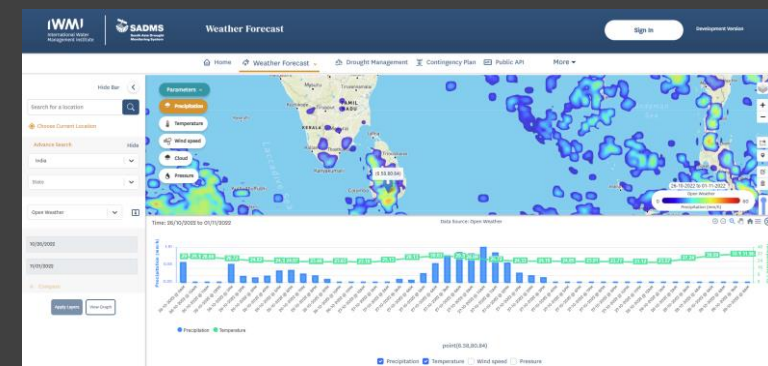- Prediction and Forecasting
- Planning and Preparedness
- Communication and Outreach
- De-Risk and Safety nets

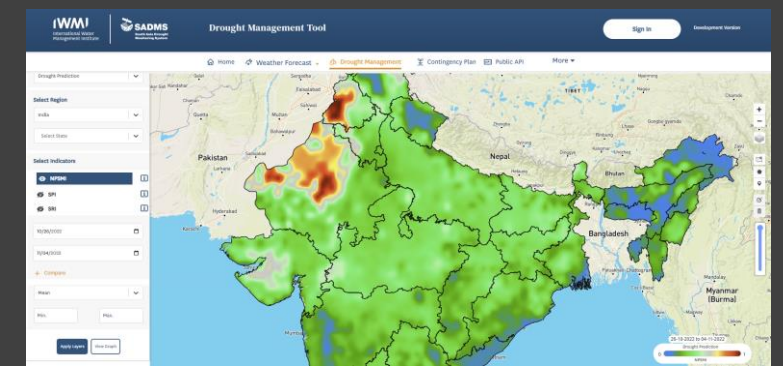WIPO — WORLD INTELLECTUAL PROPERTY ORGANIZATION

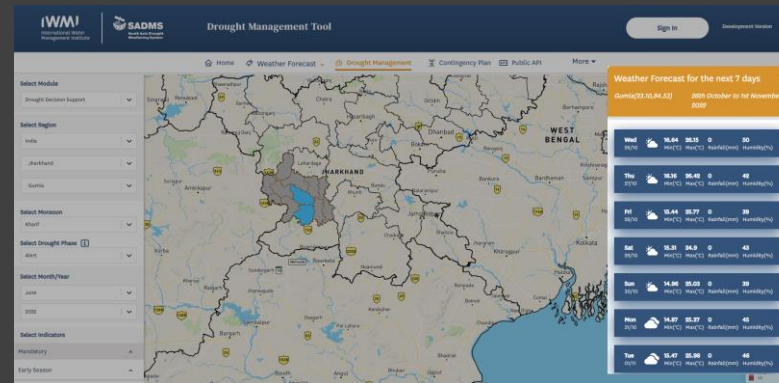# Weather and Climate Monitor

Products: (Sub)seasonal, short-term forecast
Source: IMD, IRI, ECMWF, NOAA
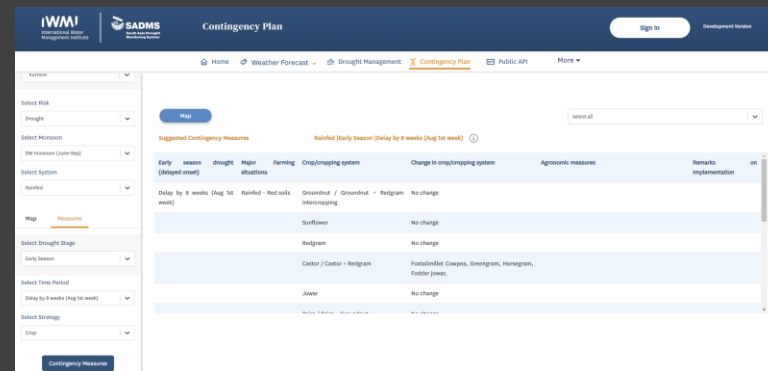
Drought Prediction

Products: Drought prediction using VIC model
Source: NOAA GEFS, GPM, ERA-5, IMD

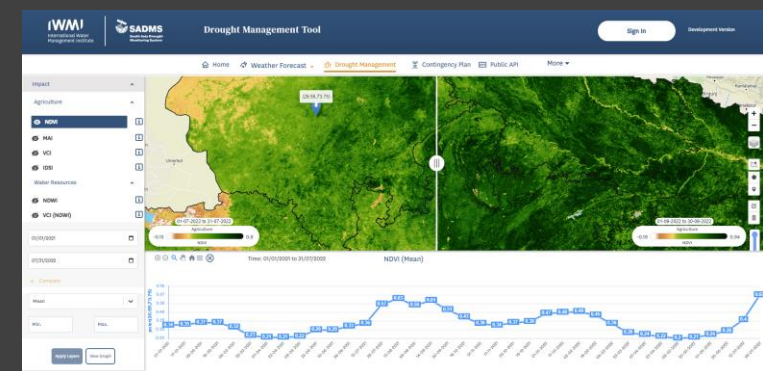# Drought Decision Support tool

Products: Drought alert and active phase
Source: NASA MODIS, GPM, SMAP
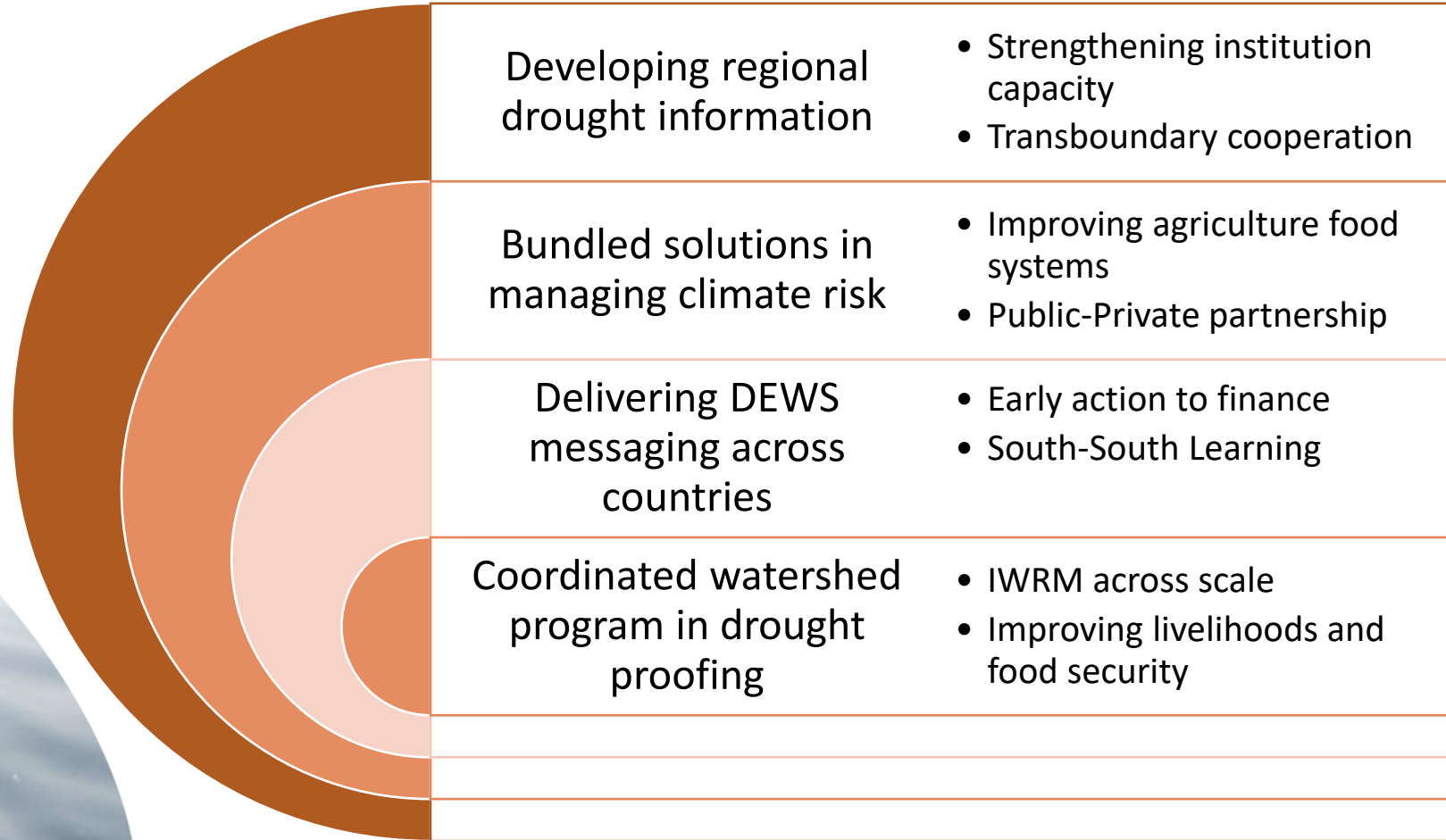
Dynamic Drought contingency plan

Products: Drought phase wise indices to activate
contingency plans
Source: NASA MODIS, GPM, SMAP

Drought Monitor

Products: Drought indices mandatory and impact
indicators e.g. SPI, VCI, VHI, IDIS
Source: NASA MODIS, GPM, SMAP

SADMS
South Asia Drought
Monitoring System

SADMS Value Chain

Developing regional drought information	• Strengthening institution capacity • Transboundary cooperation
Bundled solutions in managing climate risk	• Improving agriculture food systems • Public-Private partnership
Delivering DEWS messaging across countries	• Early action to finance • South-South Learning
Coordinated watershed program in drought proofing	• IWRM across scale • Improving livelihoods and food security

Thank you

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