











### Regional Workshop

on

Assessing Drought Risks using Earth Observation Data

&

Launch of South Asia Drought Management System (SADMS)

Utility of SADMS tool for operational drought decision support across South Asia

Date: 31st August to 2nd September, 2022

Gandhinagar, Gujarat, India











## Session – III Drought Management efforts in South Asia

Country Name: Sri Lanka

# Drought Management efforts in South Asia











#### Management of drought: Current scenario

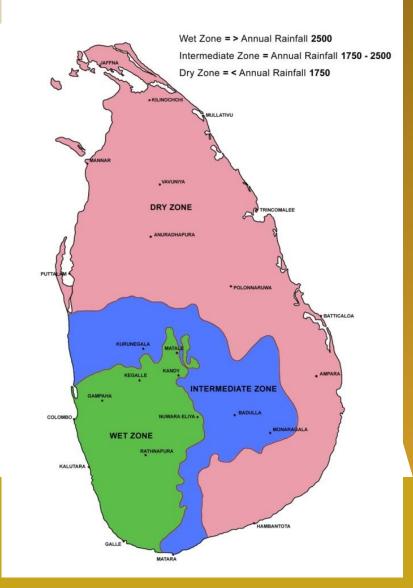
WET ZONE: receives more than 2,500 mm of annual rainfall

**INTERMEDIATE ZONE:** receives about 1,750 to 2,500 mm of annual rainfall

DRY ZONE: receives annual rainfall of less than 1,750 mm

No Arid Zones (Annual RF <1,275mm or 50")

#### Map 1: Climatic Zones of Sri Lanka







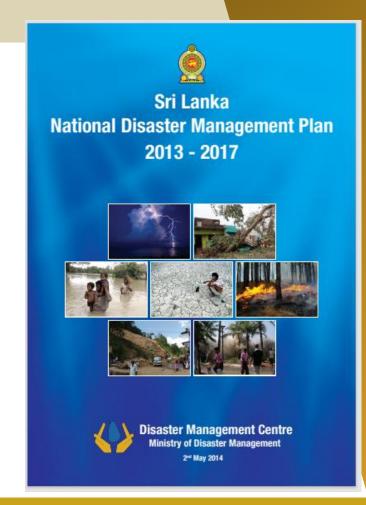






#### **Current policies for drought management**

- Sri Lanka National Disaster Management Plan 2013 2017
   Major natural disasters leading to loss of lives and property damage
  - Frequent: Floods, Landslides / slope failures, Lightning, Tornadoes
  - Intermediate: Drought, Cyclones, Storm Surges, Coastal Inundation, Epidemics
  - Rare: Earthquakes, Tsunami
- The Disaster Management Act of 2005 recognizes 21 natural and man-made hazards – including drought
- National Climate Change Adaptation Strategy (NCCAS) for Sri Lanka – 2011 to 2016
  - "highly vulnerable to the impacts of climate change, which include, Increases in the frequency and intensity of disasters such as droughts, floods and landslides;
     Variability and unpredictability of rainfall patterns; Increase in temperature; and Sea level rise, among others."













#### Drought resilience initiatives across multiple sectors

#### **Sectors**

- DMC (Disaster Management Center)
- DOM (Dept. of Meteorology)
- ID (Irrigation Department)
- DOA (Dept. of Agriculture)
- DAD (Dept. of Agrarian Development)
- NWSDB (National Water Supply and Drainage Board) etc.

Below average RF prediction (DoM) - Consider access of safe drinking water (Natural Disaster Reduction Service Center - NDRSC) — Availability of water for different sector (ID) — Hydropower generation (CEB) — Cultivation targets (DoA)









#### Current procedure to declare a drought

- DoM declare seasonal weather forecast
- Difficult to predict droughts
- January and February whole country experience dry period
- In agriculture sector 15 consecutive dry days (<0.3 mm) leads to dry spells





Consensus Seasonal Weather Outlook

December, January and February (DJF)

Seasonal Rainfall and Temperature for Sri Lanka













#### Current procedures & policies to promote timely contingency measures

## **Timely contingency measures – drought –** limited Timely procedures – reduce the risk of drought related to

- different sectors
  - Issuing drinking water
  - Temporary changes of policy decisions to reduce the risk
  - Eg. Priority sectors available water (Agriculture or CEB)











## **Future needs and expectations**

#### Related to two fields

- 1. Improve the methods of prediction of droughts
- 2. Drought resilience community
  - Risk reduction measures
  - Adaptation methods











#### **Additional information**

Improve the existing National agro-met advisory including drought related information



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Natural Resources Management Centre DEPARTMENT OF AGRICULTURE

මගේ අංකය | NRMC/Agro-met/Advisory/2021 ව පාලා සිත. | Your No. | Date | 07.12.2021

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hrough:

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Recomended & forwarded

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latural Resources Management Cen
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Agro-met Advisory: December to February (DJF) during

2021/22 Maha Season

The Department of Meteorology (DoM) has forecasted that during the month of December, Northern, North-central, Uva and Eastern provinces will receive near or slightly higher amount of rainfall compared to the long-term average. They did not forecast about the rainfall in the other areas during December. The forecast of DoM further mentioned that, there will be a probability to receive high rainfall due to low pressure systems and depressions, which occur during











## Thank you