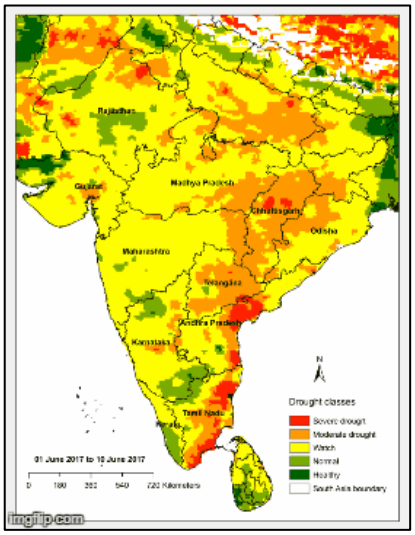
Drought Surveillance in Sri Lanka

User's reference:
South Asia Drought Monitoring System

Activity domain: *Agriculture, Drought*
Geographic area: *South Asia, Sri Lanka*



Soil Water Anomaly Drought Index (SWADI) for all of South Asia from 2007 to the present.

Benefits for the user

- SWI makes it possible to anticipate the impacts of drought on crop production.
- Enhances the ability of SADMS to support contingency planning at the national and regional levels.
- Enhances the resilience of agriculture in the face of multiple water-related risks.
- Governments can take steps to mitigate the impacts of drought, including targeted reinforcement of social safety nets and importation of staple grains

Data sources used

From the Copernicus service
- Soil Water Index

Other sources:
- Integrated Drought Severity Index (IDSI)
- Standardized Precipitation Index (SPI)
- EUMETSAT MetOp/ASCAT
- NASA MODIS
- NASA GPM

Overview

Prolonged drought in Sri Lanka during 2016 and 2017 resulted in serious undermining of farmers' livelihoods and putting the country's rice-based food system under pressure. The low soil moisture levels combined with the exceptionally high temperatures are heading to major disruptions to food systems throughout the country. In order for governments to implement measures and anticipate food shortages, they need ready access to near real-time data on moisture conditions. IWMI developed the South Asia Drought Monitoring System (SADMS) which was further improved by devising the Soil Water Anomaly Drought Index (SWADI) in order to forecast drought impacts on agriculture on a regular basis. Together with other tools, SADMS is able to support contingency planning at national and regional levels.

The knowledge products are regularly shared with the Disaster Management Centre, to mitigate drought risks and addressing improved food security.

Facts & key numbers

Low rainfall from May to September lead to soil moisture levels at 50-60% below normal in Northern areas.

Rice production estimated as 2.7 million tons in 2017 - almost 40% less compared to 2016, 35% below average of 5 previous years according to UN-FAO assessment.

About the user

Organization type: *Non-profit scientific research organization*

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CGIAR RESEARCH PROGRAM ON Water, Land and Ecosystems