

# Drought Monitoring: a global perspective

**MOOC on GIS Applications in Agriculture**



# At the end of this talk ....

You will be able to tell

**Why information is important in drought management**

**Names of a few organizations that monitor drought globally or nationally**

**That micro-level monitoring is still not mainstream**

***Drought Preparedness is better than Drought Relief***

# **Information is the backbone of Drought Preparedness**

**Preparedness is founded on**

**Drought Monitoring**

**Vulnerability and Risk Assessment**

**GIS is a highly valuable tool**  
For  
*Drought Monitoring and  
Vulnerability and Risk Assessment*  
**On**  
***Any scale, global to micro***

# **Drought Preparedness is a Perspective**

**It is a way to look at drought management**

**Information is its backbone**

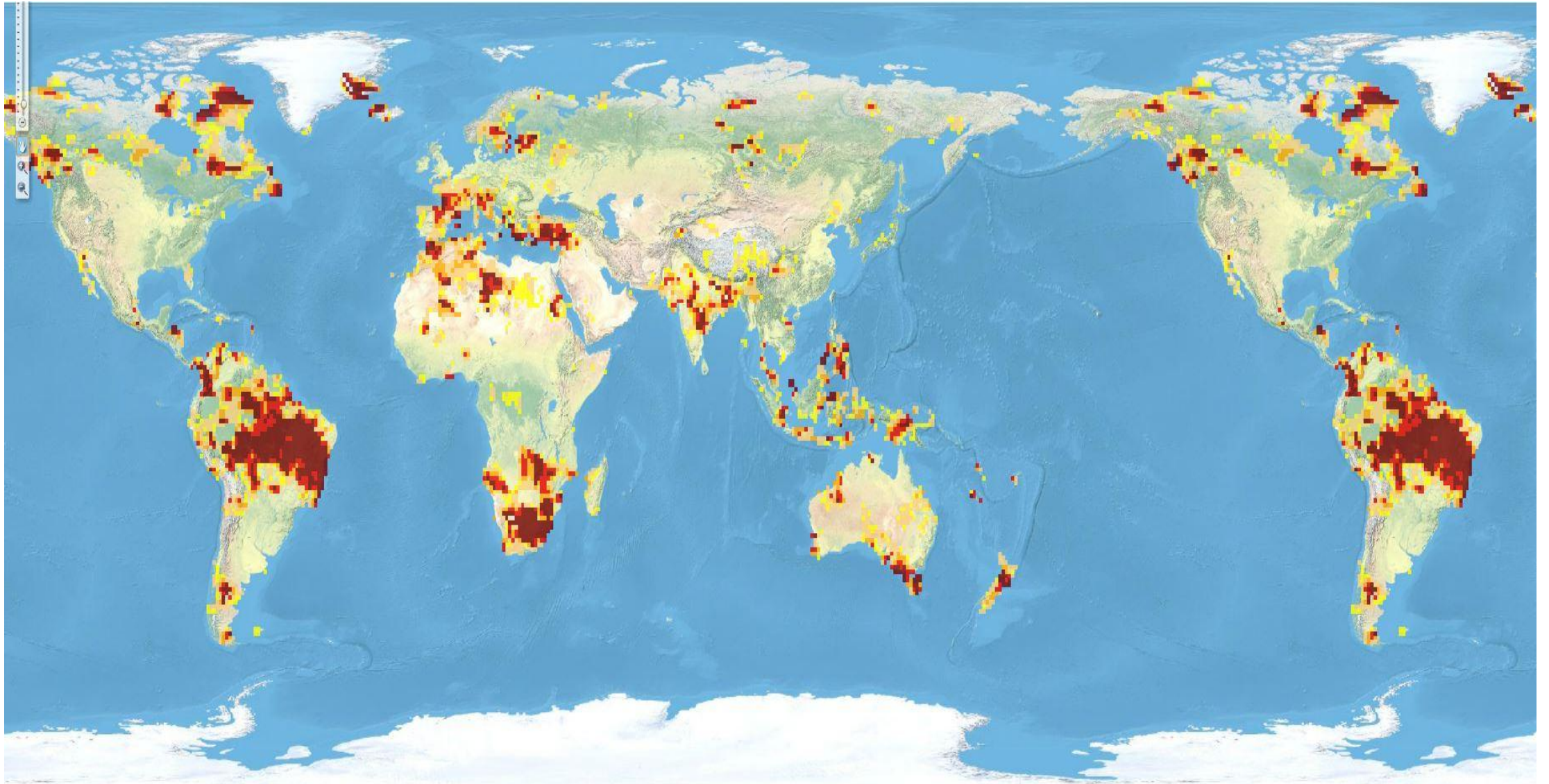
**GIS tools can play a critical role**

# Important Drought Monitoring Systems at Global Scale



# Global Drought Monitor, NOAA, USA

<http://gis.ncdc.noaa.gov/map/drought/Global.html#app=cdo>

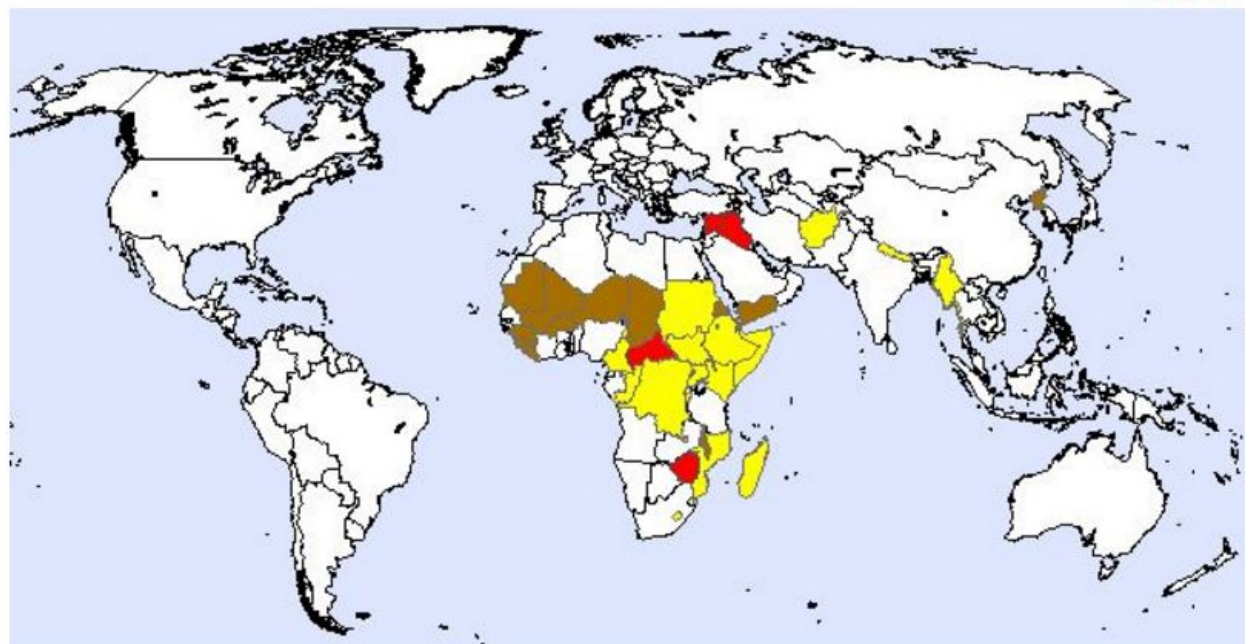




December 2015

## COUNTRIES REQUIRING EXTERNAL ASSISTANCE FOR FOOD (total: 33 countries)

Table View



■ Shortfall in aggregate food  
production/supplies

■ Widespread lack of access

■ Severe localized food insecurity

<http://www.fao.org/giews/english/index.htm>



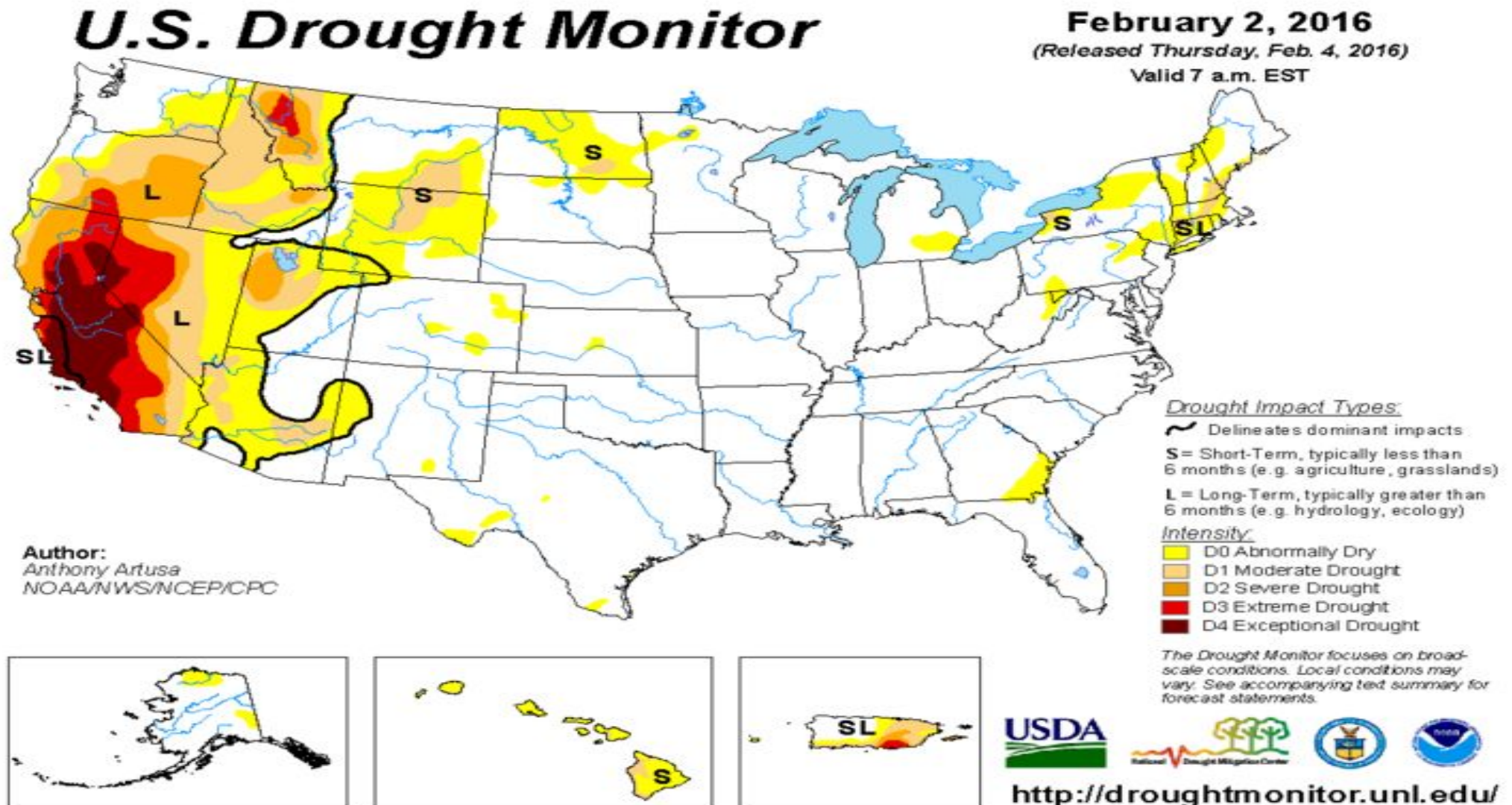


[www.unccd.int](http://www.unccd.int)

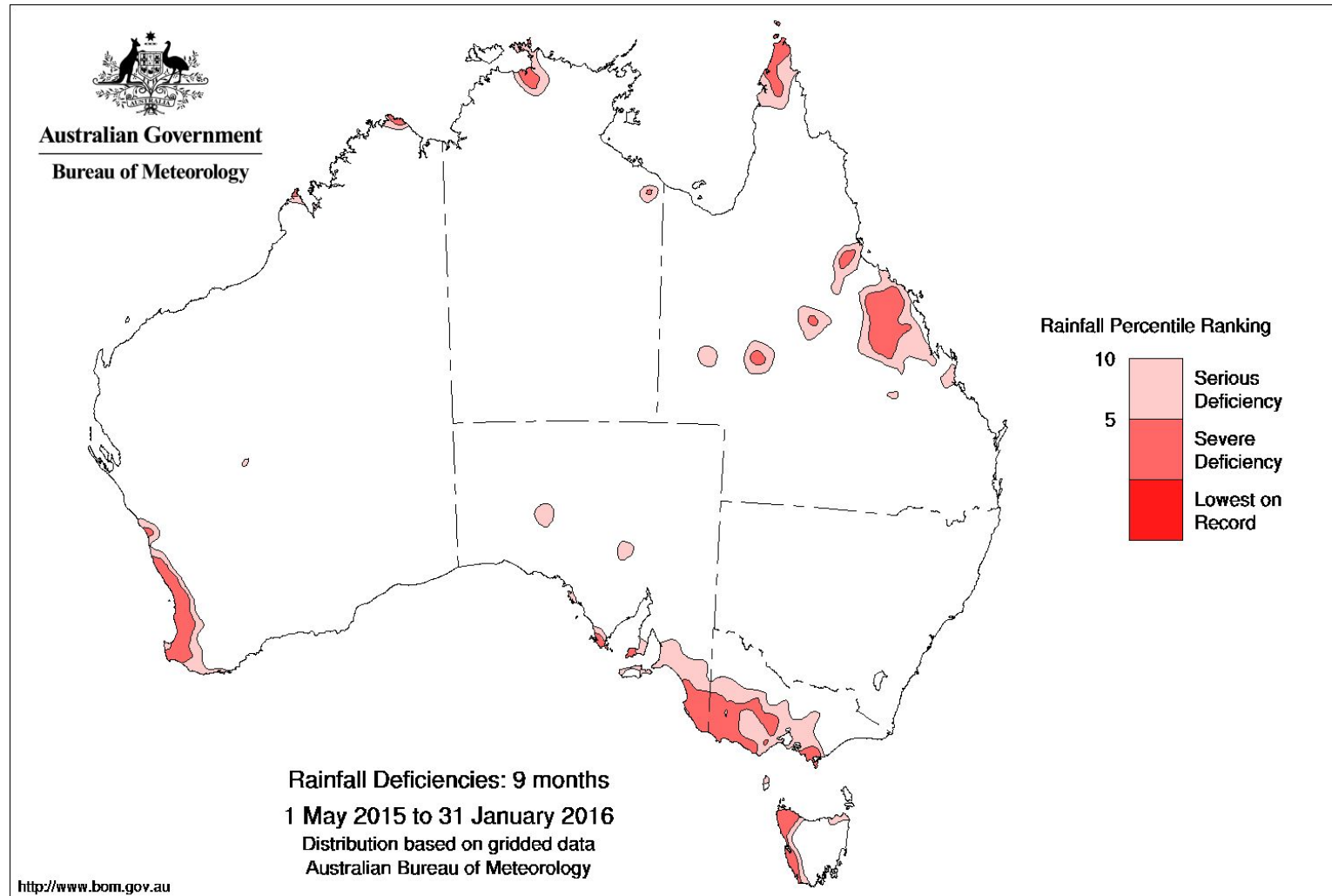
Monitoring and Assessment of desertification, land degradation and drought



<http://droughtmonitor.unl.edu/>



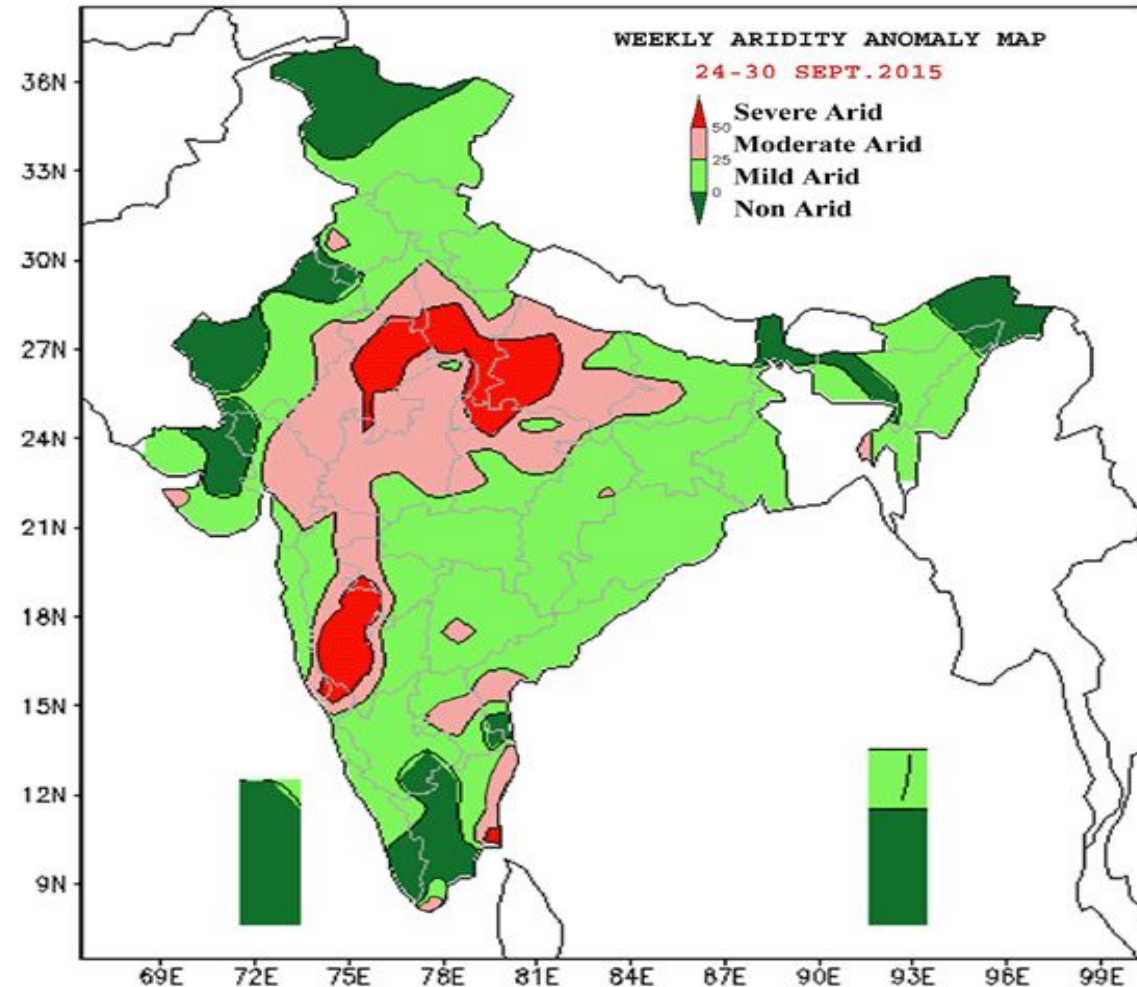
<http://www.bom.gov.au/climate/drought/>



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अनावृष्टि अनुसंधान अनुभाग - पुणे  
INDIA METEOROLOGICAL DEPARTMENT  
DROUGHT RESEARCH UNIT - PUNE



<http://www.imdpune.gov.in/research/drought/drought.html>

**Drought Monitoring on Global and National Scales  
Is  
Already Mainstream Activity  
  
GIS is a critical tool in it**



## IMD not to forecast 'drought', only predict 'deficient' rainfall

PTI Jan 12, 2016, 10.37PM IST

**Tags:** National Weather Forecast | Monsoon | Laxman Singh Rathore | IMD | Bramha Prakash Yadav

NEW DELHI: Amid a confusion over who is competent to declare "drought", the India Meteorological Department (IMD) has decided to drop the word and replace it with "deficient" to describe a bad monsoon.

Henceforth, based on the rainfall and its distribution across the country in a season, it will only declare a "deficient" or "largely deficient year".



[http://articles.economictimes.indiatimes.com/2016-01-12/news/69704627\\_1\\_rainfall-deficiency-drought-conditions-meteorological-drought](http://articles.economictimes.indiatimes.com/2016-01-12/news/69704627_1_rainfall-deficiency-drought-conditions-meteorological-drought)



<https://www.google.com/maps/place/Pudukkottai,+Tamil+Nadu+622001,+India>



# **To be effective....**

**Early Warning and Preparedness**  
through  
**Information Access**

**Relief**  
through  
**Vulnerability Assessment**

***GIS tools are available***

***We do need to build capacities  
for  
micro-level drought monitoring as well***

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