Climate Change and Drought: a global perspective

Balaji Venkataraman
Commonwealth of Learning (COL), Metro Vancouver BC, Canada

CC BY SA 4.0 COL-IITK-NPTEL
At the end of this talk

You would have learnt about

- IPCC and its reports
- Increase in Extreme Events
- GIS as a tool in strategy planning for adaptation
Scientific Basis of Climate Change

Intergovernmental Panel on Climate Change (IPCC)
Assessment Reports of IPCC

Three Working Groups
Extreme Events Due to Climate Change

will have greater impacts on sectors with closer links to climate:

water

agriculture and food security, forestry, health, and tourism
Extreme Events - Temperature

IPCC projects substantial warming
Extreme Events- Rainfall

It is likely that the frequency of heavy precipitation will increase in the 21st century over many areas of the globe.
Extreme Events- Drought

Droughts will intensify in the 21st century in some seasons and areas, due to reduced precipitation and/or increased evapotranspiration.
Local Level Adaptation is Important

Stronger efforts at the international level
do not necessarily lead to
substantive and rapid results
at the local level (high confidence)
Integrate Local Knowledge with Sci and Tech Knowledge

This can improve disaster risk reduction and climate change adaptation

GIS Tools are thus critical
We now know about

IPCC Assessment Reports
Key assessments on which total agreement exists
Drought increasing in frequency