

**“ Climate Change , Environmental  
Security and Regional  
Cooperation”**

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# HEADINGS IN PAPER

- **Introduction**
- **Theoretical Literature**
- **Why Not Much Has Been Achieved?**
- **Policy Suggestions**
- **South Asian University**

# Theoretical Literature-Institutions

- Lack of institutions. First is the concern which rests on scientific understanding . The second is the capacity and the third is cooperative environment
- For cooperation to take place , states need sufficient concerns about the issue, capacity to undertake domestic and international
- Get the science right to get the social science right.

# Theoretical Literature – Regionalism

- The most pressing need identified is a greater focus on particular regions and specific and more immediate threats, rather than extreme worst case scenarios. In the case of South Asia systems such as Tibet and Himalayas are the ones that fit the concept of case studies.
- Cooperation – summary of some seminars at Appendix to paper.

# Is climate science in danger of being drowned by noise of climate change controversies?

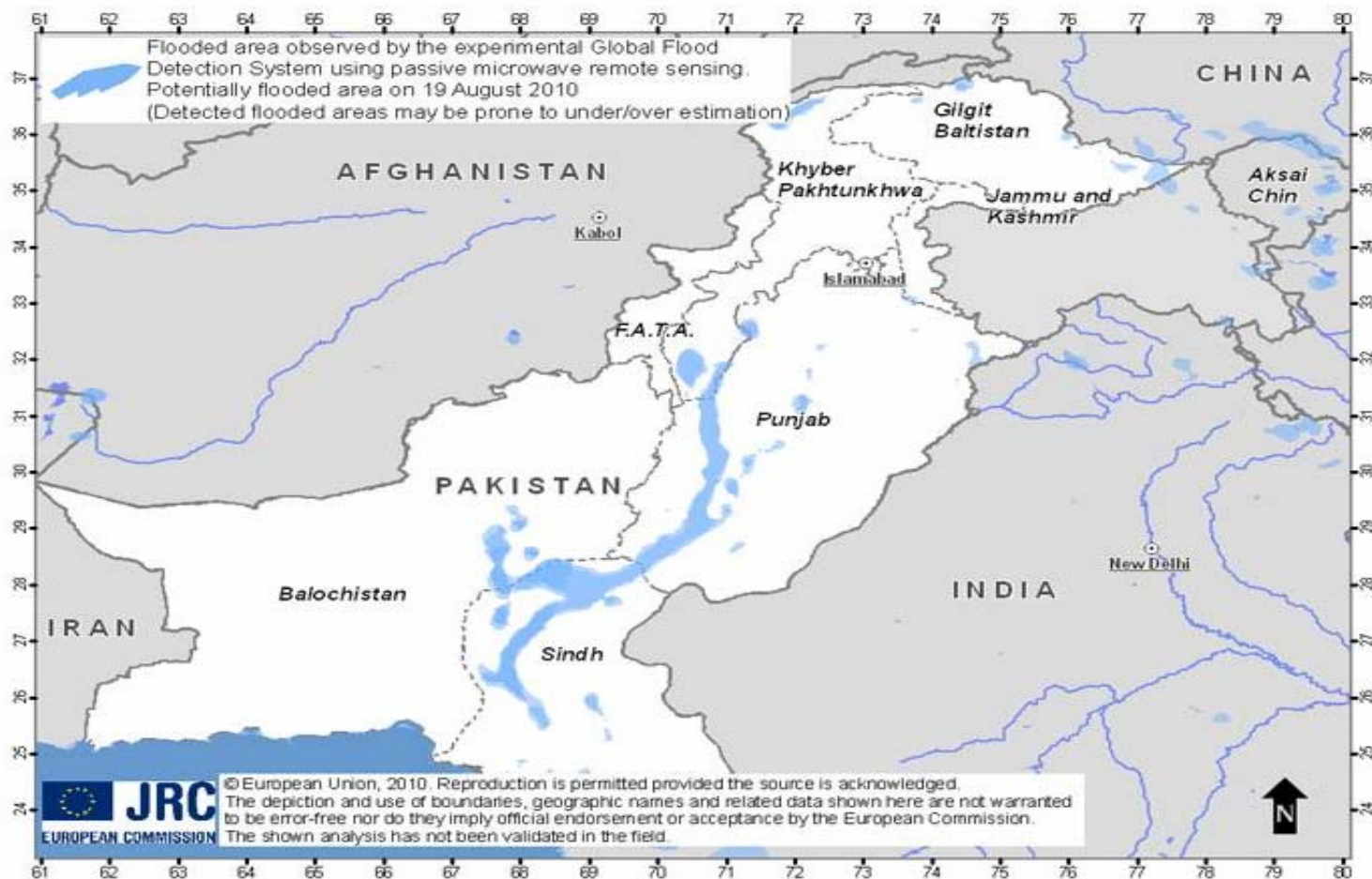
P. Balaram answers this question by quoting James Lovelock:

"We seem to have forgotten that science is not wholly based on theory and models: more tiresome and prosaic confirmation by experiments and observation plays just as important a part. Perhaps for social reasons, science has in recent years changed its way of working. Observation in the real world and small-scale experiments on Earth now take second place to expensive and ever-expanding theoretical models.... Our tank is near empty of data and we are running on theoretical vapor"

# **Why Not Much Has Been Achieved?**

- (a) Inadequacy Tools for Research on Social, Physical and Life Sciences in South Asia.**
- (b) Non Availability of Data.**
- (c) Lack of Early Warning and Response Capacity: Disaster Based Evidence.**
- (d) South Asia Specific Scientific Research not yet World Class.**
- (e) Ignoring Traditional Ecological Knowledge and Anecdotal Evidence at Our Peril.**

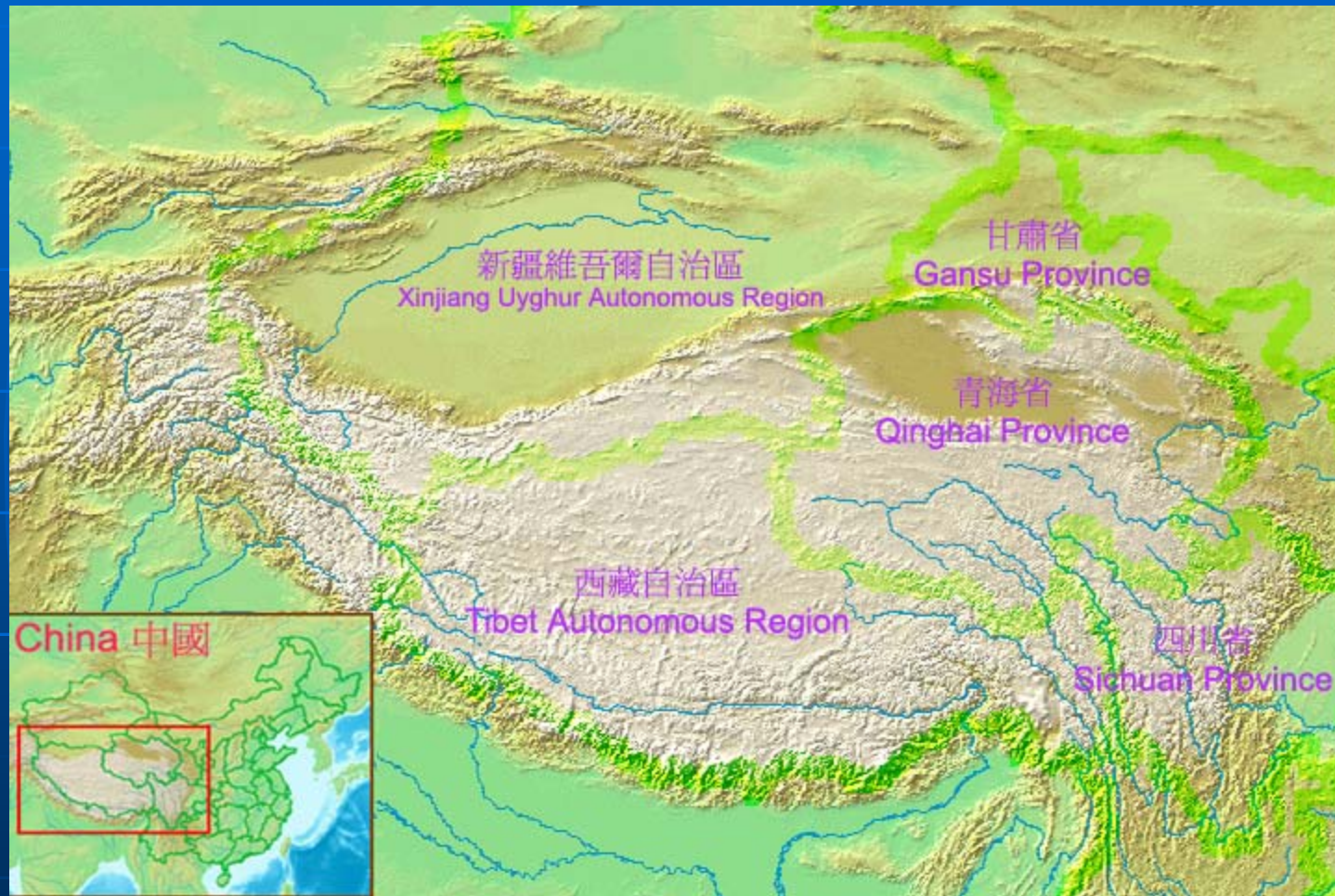
# FLOODS IN PAKISTAN – AUGUST 2010



# LEH CLOUD BURST AUGUST 6, 2010







新疆維吾爾自治區  
Xinjiang Uyghur Autonomous Region

甘肅省  
Gansu Province

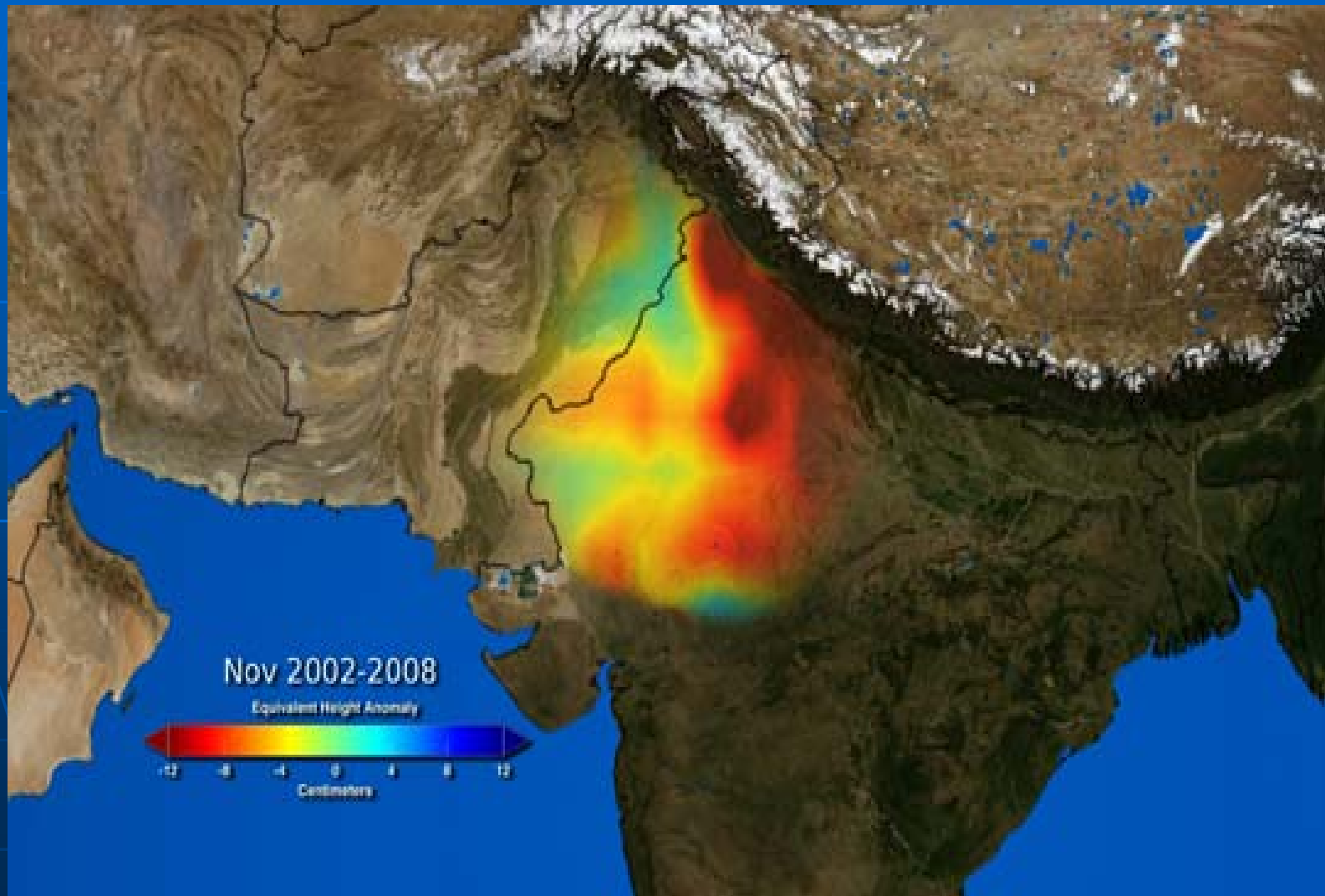
青海省  
Qinghai Province

西藏自治區  
Tibet Autonomous Region

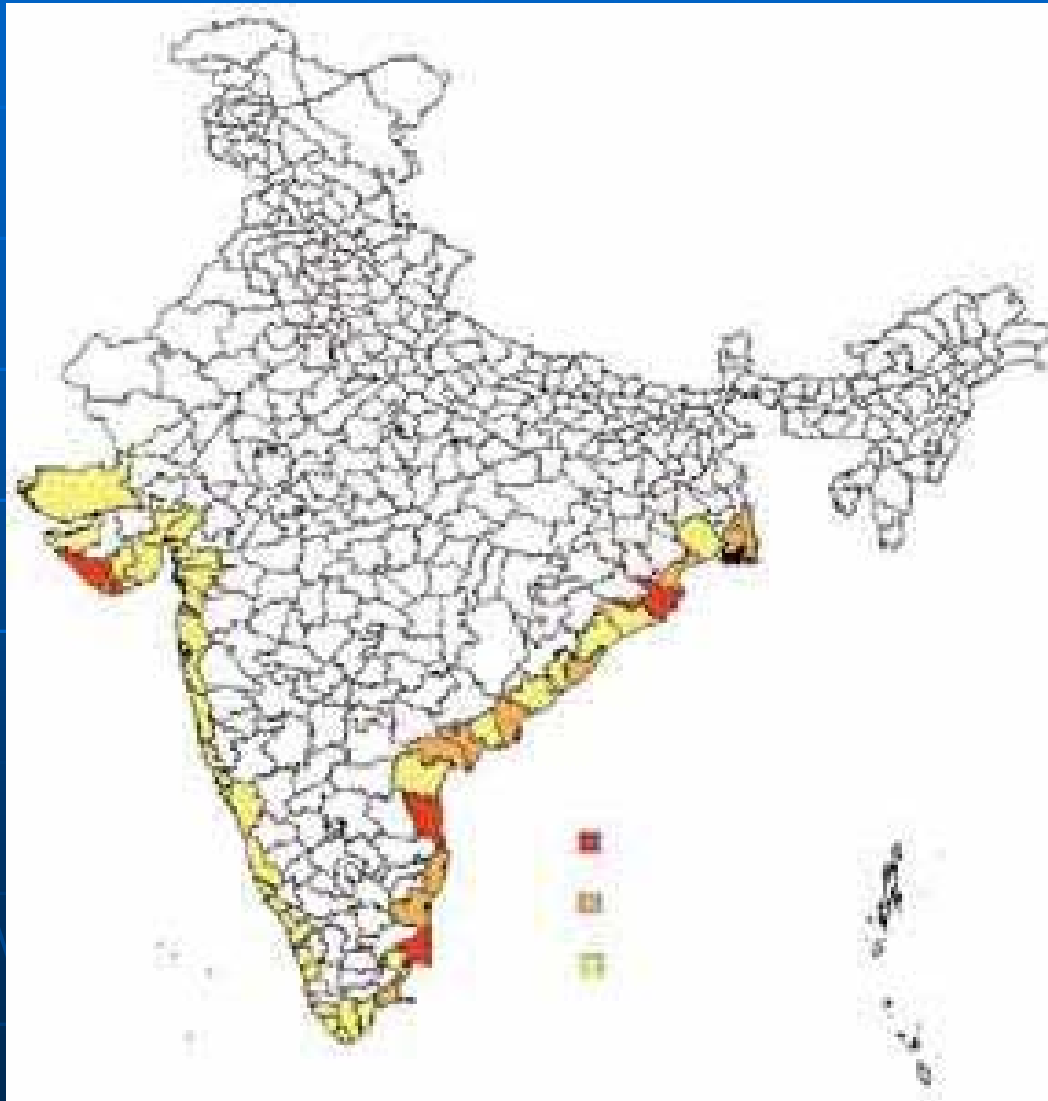
四川省  
Sichuan Province



ALARMING GROUND WATER DEPLETION. Each year 20 bcm in punjab, Haryana and east UP.



**SEA LEVEL RISE - COASTAL DISTRICTS VULNERABLE TO CLIMATE CHANGE ( RED HIGH, , BROWN MEDIUM AND YELLOW LOW VULNERABILITY)**



# Policy Suggestions

- **Expand on Recent Work Done on Science of Climate Change for the Region.**
- **Glacier Melting and Flow of Rivers.**
- **Climate Related Disasters and Extreme Weather Events.**
- **Generation and Sharing of Data.**

# Policy Suggestions

- **Climate Refugees**
- **Oral ecological history and TEK.** Turnabout is taking place.
  - (a) Local knowledge about climate change in eastern Himalayas - it has been found that local knowledge conforms to the findings generated by modern science in different parts of the world.
  - (b) Tibet. The need to preserve the health of glaciers, grasslands and the nomadic way of life, in a very delicately balanced ecology. Scientific knowledge is now challenging the earlier (and wrong) assumption that traditional lifestyles as practiced by Tibetans as backward, irrational and unsustainable.

# Policy Suggestions

- **South Asian University**

South Asian academic institutions are not generators of knowledge but rather are consumers. This self confidence as generators of knowledge has now to be established.

Thank You