



# Promoting Climate Resilient Development



## ICIMOD Side-Event

*Mountains in Peril: Mainstreaming the  
sustainable mountain development agenda into  
climate change agreements*

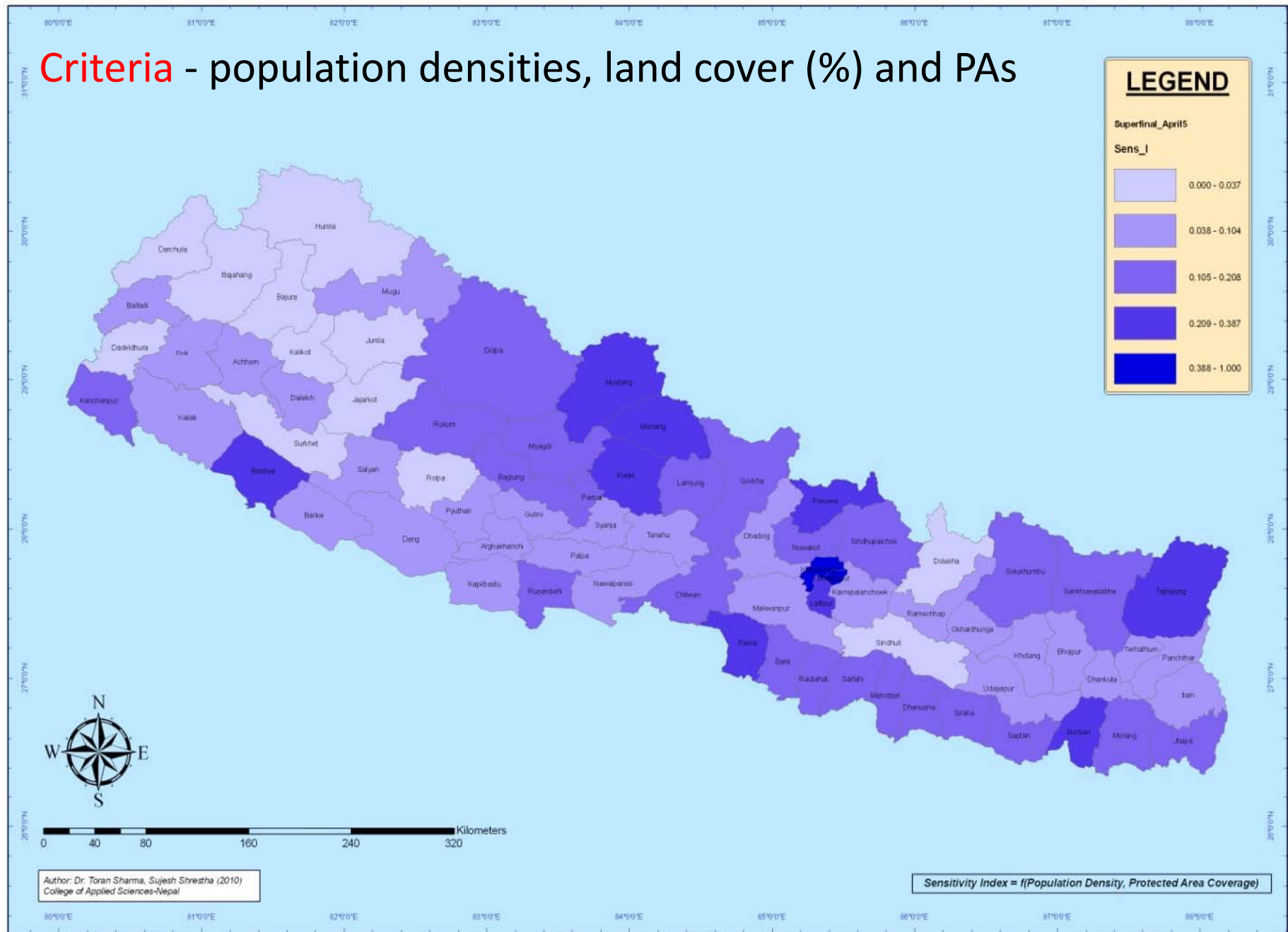
Batu Krishna Uprety  
Joint-Secretary and Head  
Climate Change Management Division  
Ministry of Environment, Government of Nepal  
2 December 2010, Thursday

# Climate Change Impacts in Mountains

- Average warming at an @  $0.06^{\circ}\text{C}/\text{year}$  in 49 stations from 1977 to 1994
  - Main Rongbuk Glacier experienced an average vertical loss of 330 feet between 1921 and 2007 (@ 4 ft/yr)
  - Rate of glaciers retreat is as high as 20 m/year with 20 potentially threatened glacier lakes - possibility of 'vertical Tsunami'
  - Water in Nepal's river system to be increased by about 5.7% till 2030, and decrease by 28% by the end of this century
  - Increasing number of 'climate refugees'
  - 1.9 million people vulnerable to climate change with additional 10 million people at climate risks
- > 7,000 people died in the last 10 years due to climate-induced disasters with economic losses of \$ 5.34 billion

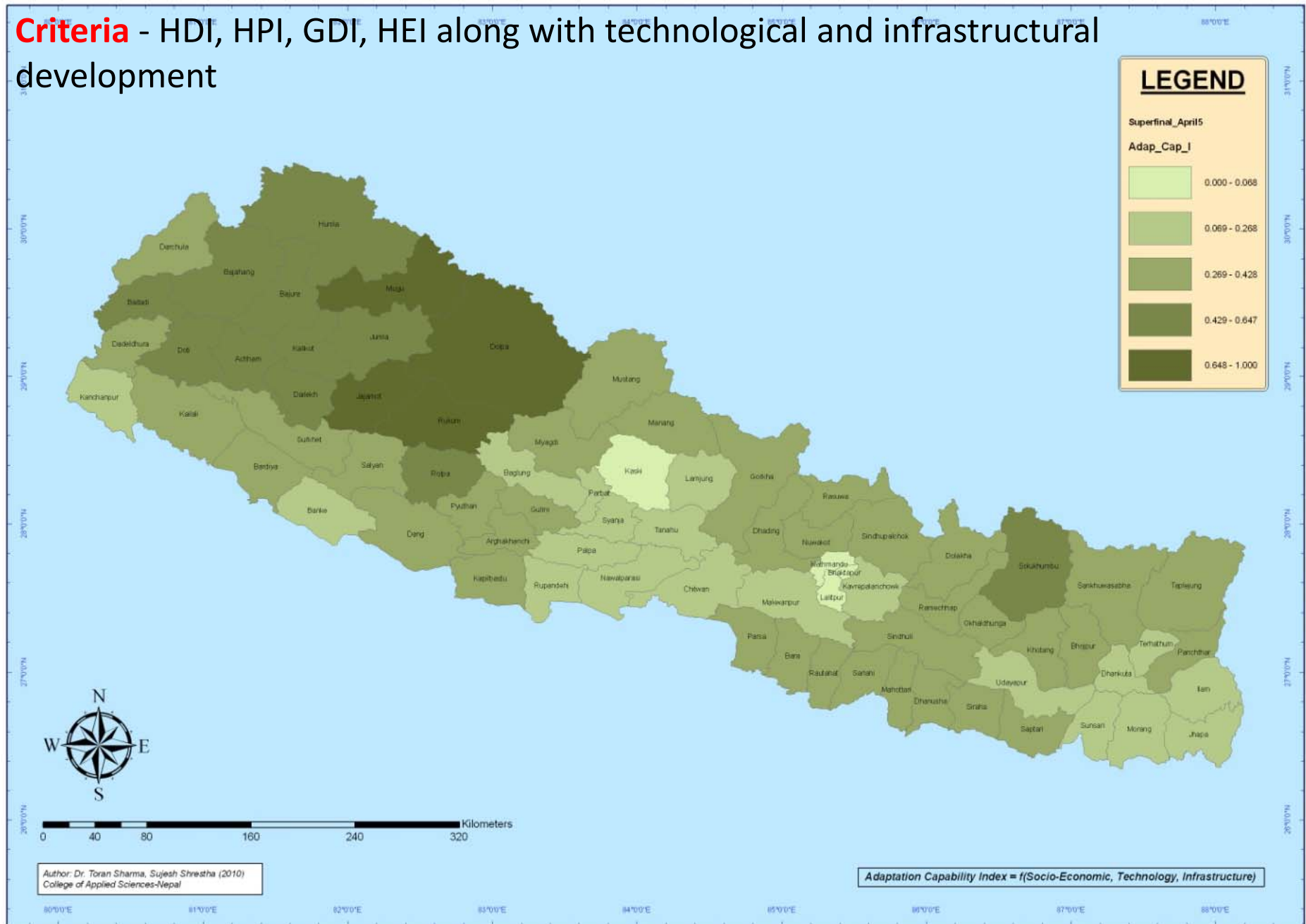
# COMBINED SENSITIVITY MAP OF NEPAL

**Criteria** - population densities, land cover (%) and PAs

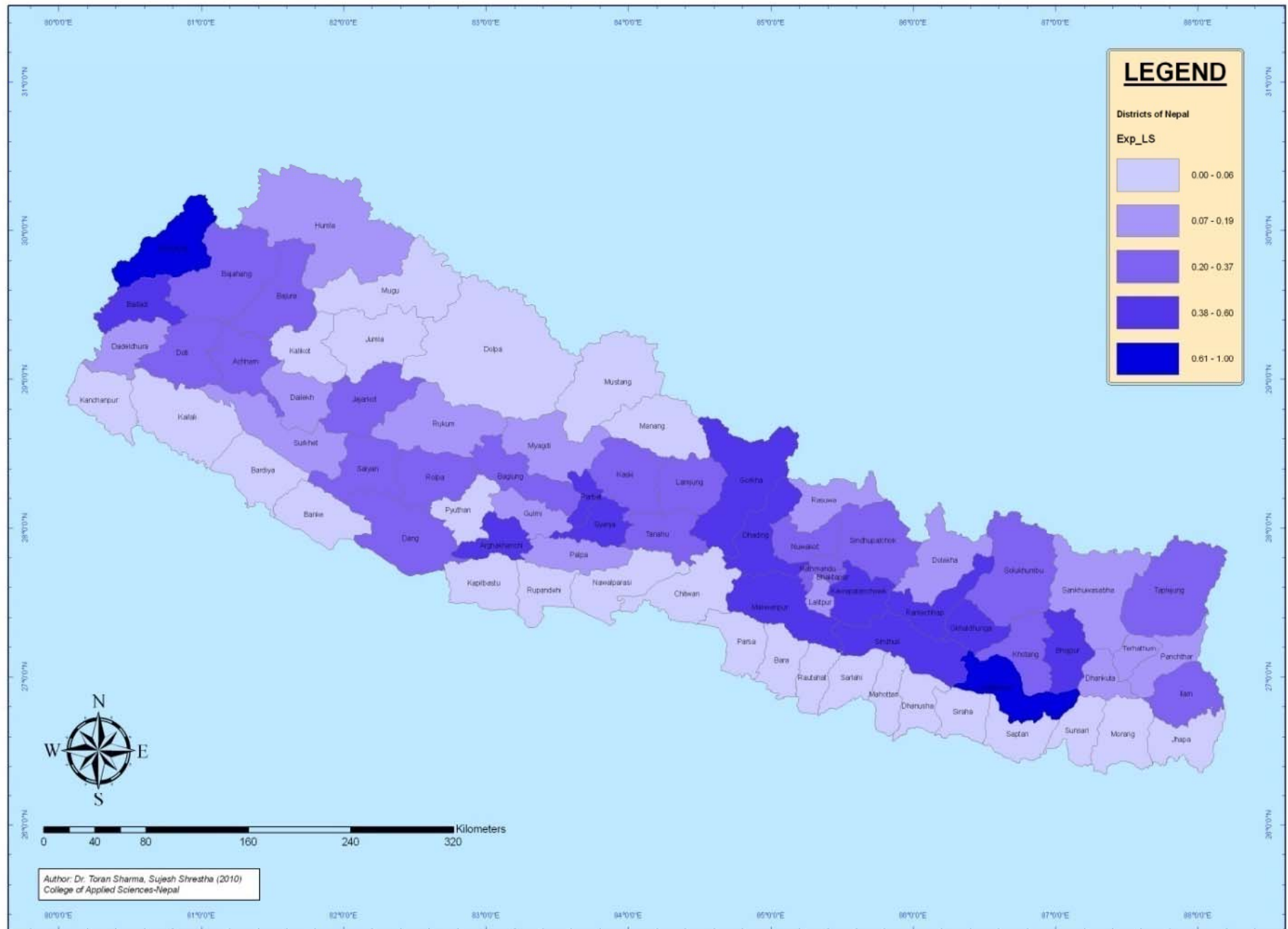


# COMBINED ADAPTATION CAPABILITY MAP OF NEPAL

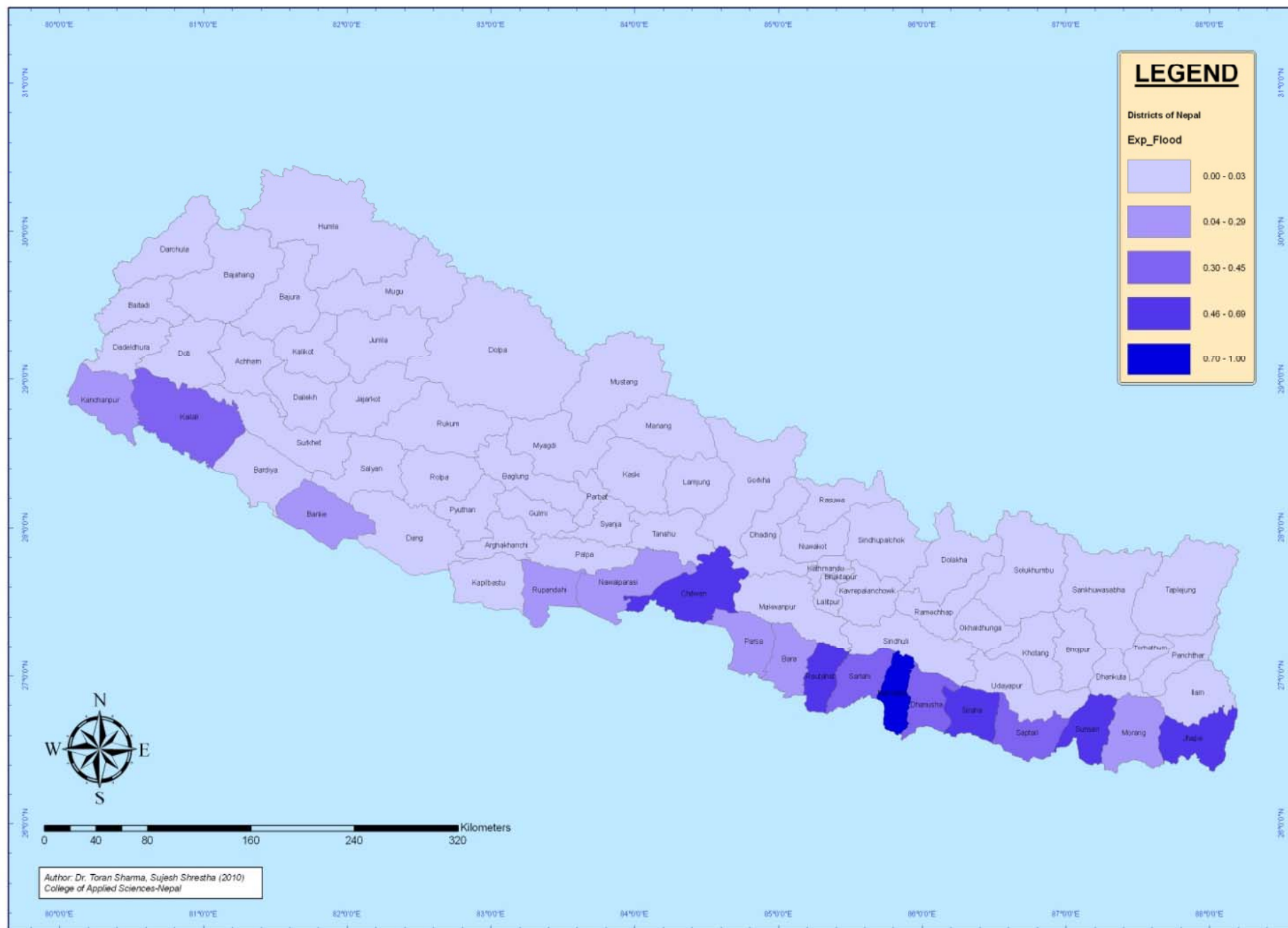
**Criteria** - HDI, HPI, GDI, HEI along with technological and infrastructural development



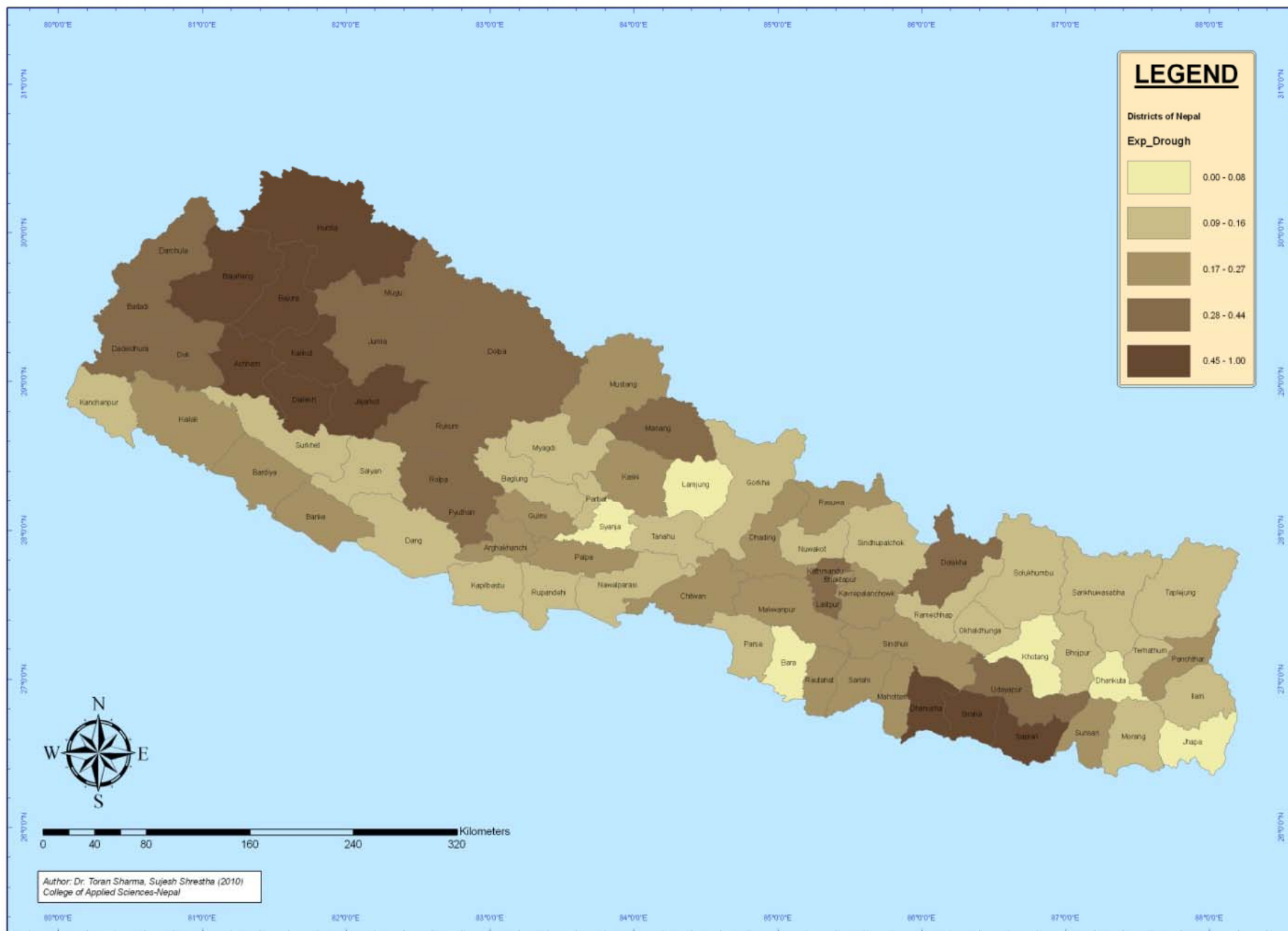
# LANDSLIDE RISK MAP OF NEPAL



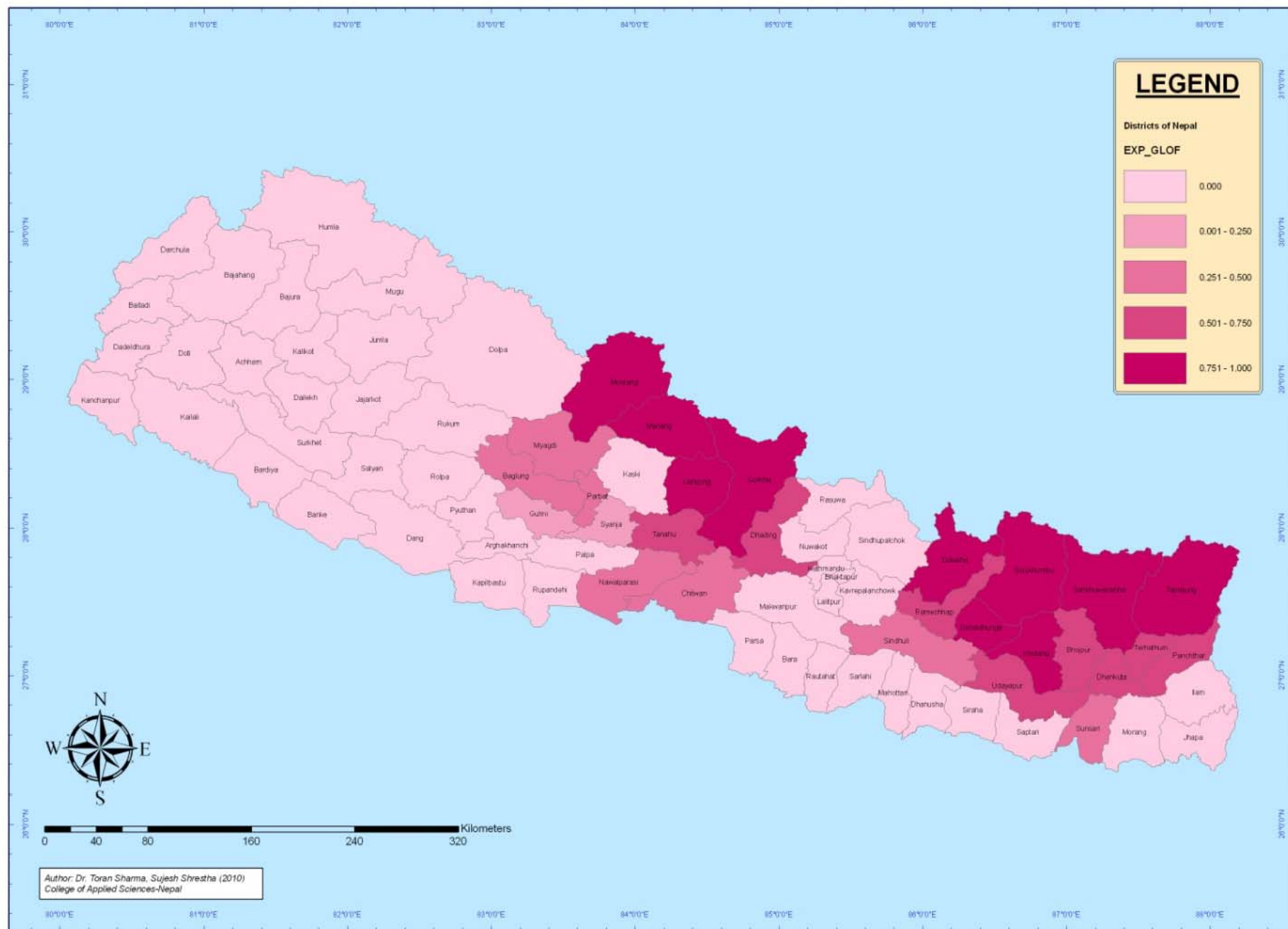
# FLOOD RISK MAP OF NEPAL



# DROUGHT RISK MAP OF NEPAL

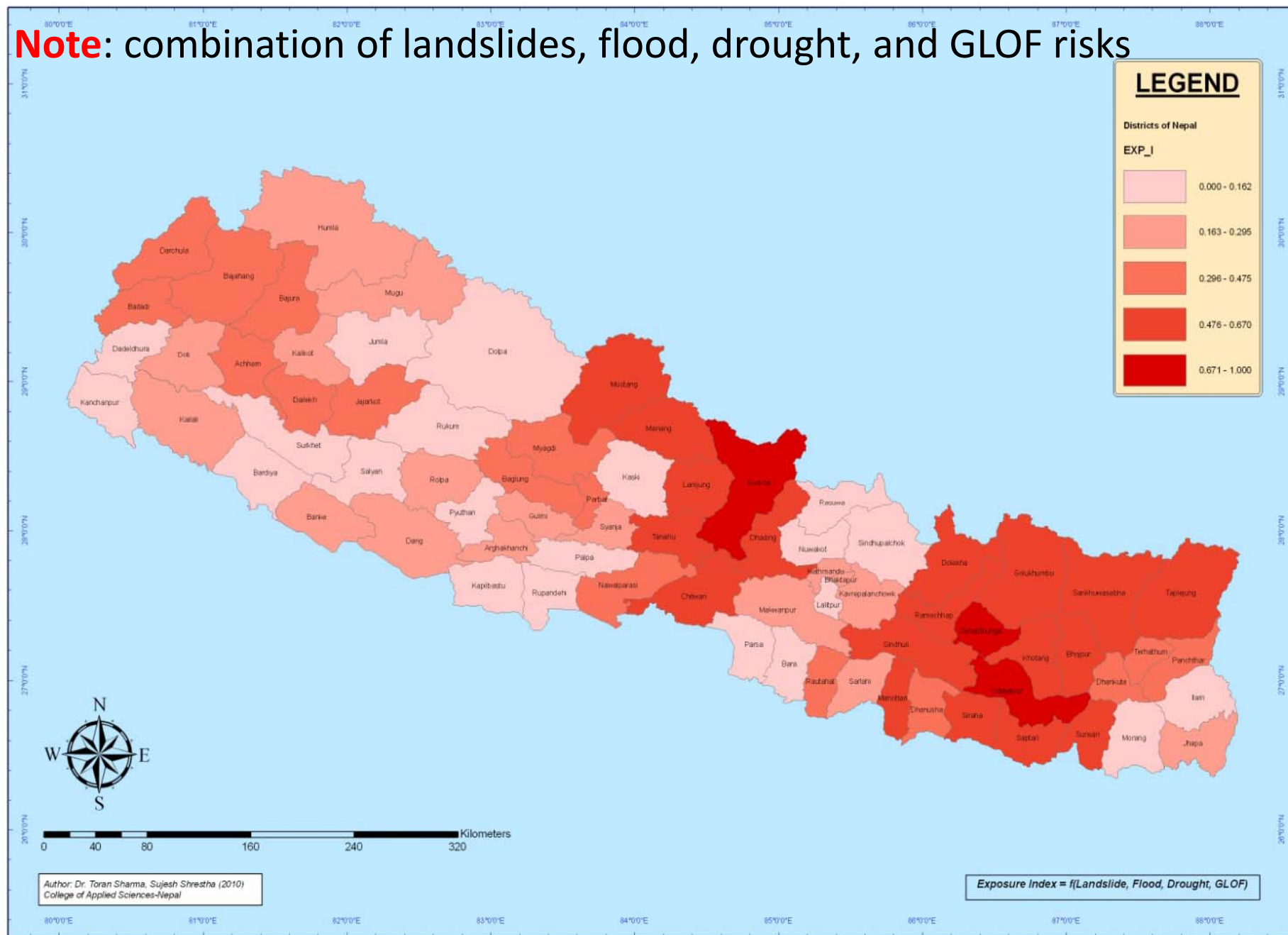


# GLOF RISK MAP OF NEPAL



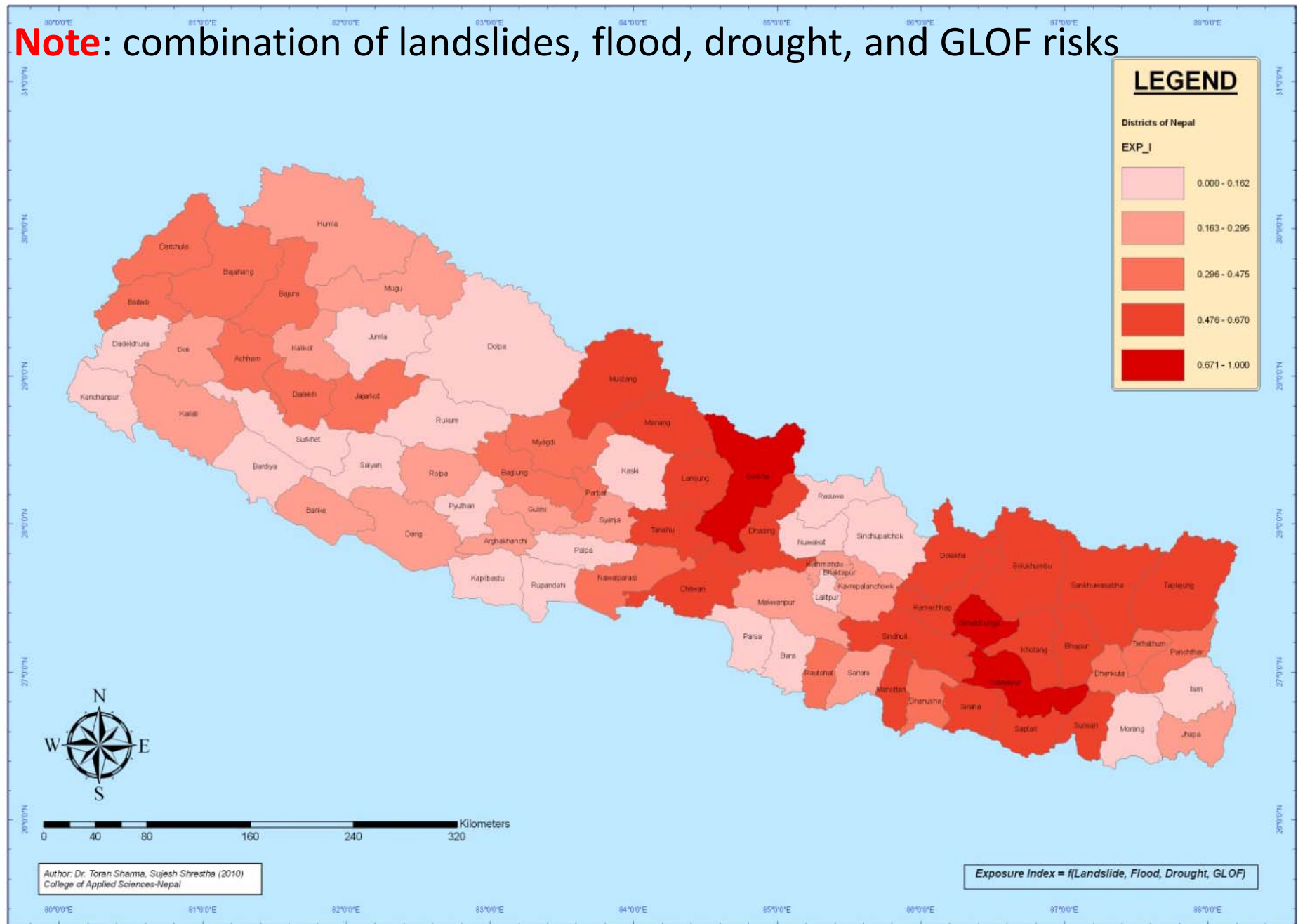
# COMBINED RISK MAP OF NEPAL

**Note:** combination of landslides, flood, drought, and GLOF risks



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# Current Initiatives

## Institutional Development

MioPE (1995) to MoE, (2009)  
CCM Division, 2010

**CCC, 2009 – policy coordination**

MCCICC, 2010 – functional coordination

## Programmes

- **PPCR**
- **NAPA – LAPA** implementation

## Climate change

## Other Initiatives

- **Climate Resilience** - friendly Planning
- Low emission development path
- Accessing fund – SREP
- **Mountain initiatives**



## Climate Resilience Objectives

- **Nepal accessed to CIF – PPCR**
- **Pilot and demonstrate** approaches for integrating climate resilience into development policies and planning
- **Strengthen capacities at the national level** to integrate climate resilience into development planning
- **Scale-up and leverage** climate resilient investment, building upon other ongoing initiatives
- **Enable learning-by-doing and sharing of lessons** at country, regional and global level

# Key Steps in SPCR Planning Process

- Assessment of climate change risks
- Identification of vulnerable communities
- Assessment of adaptation capacity
- Identification of priority interventions to address risks
- Resilience assessment
- Cost/benefit analysis + return on investment analysis for private sector loans

Consultative country-driven process and inputs from  
Thematic Working Groups

# Focus Areas

November 2010 - 4 interrelated (complimentary and reinforcing) components identified:

## Component 1

Building Climate  
Resilience of Watersheds  
and Water Resources in  
Mountain Eco-Regions

## Component 2

Building Resilience  
to Climate-Related  
Extreme Events

## Component 3

Mainstreaming  
Climate Change  
Risk Management  
in Development

## Component 4

**Building Climate Resilient Communities through  
Private Sector Participation**

Climate Resilience of Endangered Species

**Policy focus – climate screening**

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