# CHAPTER 20

# GEOGRAPHY

# Doctoral Theses

192. ASHOK KUMAR

Climate Change Vulnerability and Its Impact on Sustainable Livelihood in the Kanara Coast.

Supervisor : Dr. Anju Singh Th 22530

## Contents

1. Introduction 2. Geographical profile of the study area 3. Climatic variability in Kanara coastal region 4. Assessment of livelihood options in the Kanara coast 5. Assessment of livelihood vulnerability to climate change 6. Mitigation and adaptation strategies for climate change vulnerability 7. Summary and conclusion. Bibliography and appendix.

193. KRISHNANAND

Interface of Geodiversity and Human Response : A Case Study of Lahaul and Spiti, Himachal Pradesh, India.

Supervisor : Dr. V. A. V. Raman Th 22532

# Abstract

Lahaul and Spiti district of Himachal Pradesh lies in the trans-Himalayan region and is home to one of the most enchanting spread of landscapes, natural beauty that accounts for its numerous geosites. In the present study, human response has been assessed in terms of agriculture (including horticulture and pastoralism), habitat construction and the seasonality in tourism and their management for living in this high altitude trans Himalayan district that gives a unique identity to this interface of geomorphology and cultural attributes. The adversity of living conditions, hostility of extreme climatic conditions and spirited people who have made it their home makes it an exotic tourist centre. The main objective of the study is to assess the human response to the stimuli of geo-climatic factors and prepare the geodiversity map of the area. The study is largely based on the field work conducted in the study area in May-June, 2012, October, 2013 and June 2014. The data has been collected through structured questionnaire survey regarding the human response to diversity of geoclimatic factors at various geoanthropic sites. Geodiversity Index has been prepared using Overlay Analysis of various physical attributes and SWOT analysis has been done accordingly. The locations of these geoanthropic sites have been marked using Global positioning System (GPS) and Google earth images have been used to demonstrate the physical setting. Overall, the major issue is inaccessibility that needs to be taken care with better management efforts. Keywords: Geodiversity, Human

Response, Trans-Himalaya, Geo-climatic factors, Lahaul and Spiti, SWOT analysis, Geoanthropic sites

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1. Introduction 2. Geographical profile of study area 3. Geodiversity in labaul and spiti. 4. Human response to geodiversity 5. Geoconservation : Issue and management 6. Summary and conclusion. Bibliography and annexure.

#### 194. MAURYA (Anuradha)

Disasters in the Indian Civil Aviation Sector : A Comparative Study of Indira Gandhi International Airport, (Delhi) and Chhatrapati Shivaji International Airport, (Mumbai).

Supervisor : Dr. Anshu <u>Th 22531</u>

#### Contents

1. Introduction. 2. Study area. 3. Conceptual framework and review of literature. 4. Disasters : Concept and typology. 5. Aviation disasters and vulnerability. 6. Facilities and amenities : IGIA, Delhi and CSIA, Mumbai. 7. Safety and security : IGIA, Delhi and CSIA, Mumbai. 8. Disaster management : Aviation sector. 9. Summary and conclusion. Bibliography and appendices.

## 195. RANJEET KAUR

# Geo-Environmental and Socio Economic analysis for Land Use Planning in Western Uttar Pradesh.

Supervisor : Dr. V A V Raman <u>Th 22269</u>

#### Abstract

Increasing demand for land, coupled with finite supply, is a major cause for conflicts over land use throughout the world. The study area has administratively three districts i.e Saharanpur, Muzaffarnagar and Meerut of western Uttar Pradesh. It was the seat of the green revolution in the country due to sufficient availability of irrigation water and chemical fertilizer. These agricultural activities degraded the land resources resulting in decreased factor productivity in the cropping system. There is a need to identify contemporary technology to sustain the productivity by maintaining equilibrium between the human needs and economic development. The objectives of the study are to generate the digital database of the various geo-environmental, socio-economic aspect and infrastructure availability; Evaluate the land use/cover changes in last 5 to 10 years; Analyse and interpret the existing and optimal land use. The analysis reveals that the geo-environmental and socio-economic condition of the study area is far better than the other parts of India and the farmers are much aware about the agricultural system. The analysis also reveals that there is decreasing trend in rabi and kharif crop area during 1998 to 2010, and area under settlement has more rapidly increased during this period. Finally, the geo-spatial analysis technique and InfoCrop model is applied to find the potential of the major crop in the study area i.e. rice,

wheat, sugarcane and maize. For bridging the actual-potential yield gap, using of irrigation water and NPK fertilizer requirements are suggested for each land units. The present study will contribute the required input for policy makers to improve the socio-economic and environmental conditions of the region as well as development of new policies and strategies for sustainable development.

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1. Introduction 2. Spatial distribution of geo-environmental characteristics 3. Socioeconomic and infrastructure status 4. dynamics of land use/cover 5. Crop modeling for optimum productivity 6. Summary and conclusions. Bibliography, appendices and plate.

### 196. SARKAR (Soma)

# Risk Assessment Model Using Fuzzy Approach for Integrated Development in East Kolkata wetland Area.

Supervisor : Dr. Seema Mehra Parihar <u>Th 22534</u>

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1. Introduction. 2. East Kolkata wetland area : The study site. 2. Conceptual framework of integrated development. 4. Wetland area dynamics assessment. 5. Wetland mapping and change detection analysis. 6. GIS based risk assessment model. 7. Model validation and discussion. 8. Recommendations and evolving strategies. 9. Summary and conclusion. Bibliography and annexure.

#### 197. SEILM JAHANGIR

Gender, Space and Ageing : Care Geographies of Elderly Men in Delhi and Kolkata.

Supervisors : Dr. Anindita Datta and Dr. Ajay Bailey <u>Th 22533</u>

Contents

1. Gender, space, ageing and care : Problematizing the research. 2. Mapping care geographies of Delhi and Kolkata. 3. Interpreting the landscapes of care and mapping careingscapes. 4. Issues of care exchanges altering gender performances of care receivers and care providers. 5. Care geographies of Delhi and Kolkata : An interpretation. References and appendix.

 SINGH (Swarnima)
Climate Change and Livelihood Security in Kangra district, Himachal Pradesh. Supervisor : Dr. R B Singh <u>Th 22271</u>

#### Contents

1. Introduction 2. Study area : Geographical profile 3. Climate and climate change scenario modeling 4. Dynamics of livelihood capitals security 5. Climate dynamics and livelihood vulnerability assessment 6. Mirroring reality : Sustainable livelihood adaptation and mitigation strategies 7. Summary and conclusions. Bibliography and appendices.

# 199. YADAV (Anjali) Resource Base and Livelihood Strategies in Selected Panchayats of Himachal Pradesh.

Supervisor : Dr. R B Singh <u>Th 22270</u>

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1. Introduction 2. Livelihood resource base 3. Concept and measurements of sustainable livelihoods 4. Household resources, Conditioning factors and livelihood strategies in the selected panchayats 5. Livelihood resource Indices 6. Vulnerability of livelihood : Principal component analysis 7. Institutions and programmes as tools for sustainable livelihood 8. Summary and conclusion. Bibliography and appendices.