CHAPTER 18

GEOGRAPHY

Doctoral Thesis

150. KADAYAN (Mohinder Singh)

Impact of Energy Use on Agricultural Productivity in Rohtak District.

Supervisor: Prof. Noor Mohammad

Th 14770

Abstract

Attempt to highlight the patterns of energy consumption and agricultural productivity per hectare of cultivated land in the district of Rohtak in farms operated by different modes such as bullock operated and tractor operated. Besides this, an attempt has also been made to find out the variation in energy consumption at various levels, viz., at crop level, farm level, operation level, types of energy level and at spatial level in various blocks and zones. Emphasis has also been laid on finding the impact of socio-economic and personal household characteristics on the use of energy in agriculture and agricultural productivity. In order to analyse the above mentioned patterns, all the sources of energy such as direct sources including human power, animal power, mechanical power through their working hours and assigned power capacity, and indirect sources reconing fertilizer, manure, insecticides and pesticides through their amount employed, and designated energy capacity have been included. All such sources of energy are employed at various stages of agricultural production. The energy consumption data for all the main crops of rabi and kharif seasons have been collected through all the essential agricultural processes of crop production such as land preparation, sowing, irrigation, fertilizer and manure application, harvesting and transportation and marketing of the produce and it was converted into Kilo Calorie equivalents. For agricultural productivity, the total agricultural output of the crops have been accumulated and converted in K. Cal. equivalents at per hectare level.

Contents

1. Introduction. 2. The geographical profile of the study area. 3. Energy environment in Haryana. 4. Patterns of energy use in Rohtak District. 5. System of energy consumption in Rohtak District: A micro level analysis. 6. Patterns of agricultural productivity in Rohtak District. 7. Impact of energy use on agricultural productivity. 8. Conclusion and suggestions and Bibliography.

151. CAUSSY (Debasri) nee Debasri Mukherjee

Concentration of Arsenic in Drinking Water and Related Health Risk in 24 Parganas of West Bengal.

Supervisor : Prof. S. K. Aggarwal Th 14771

Abstract

The problem of arsenic contaminaion in the districts of 24 Parganas exemplifies and advrse interaction of man with his physical environment resulting in serious health outcomes. As such, it deserves to be tackled through an inter-disciplinary approach in order to get a holistic comprehension of the problem. Since arsentic contamination is prevalent in a number of contries within the Ganges-Brahmanputra river basin, an understanding of the process and mechanisms of arsenic contamination may help find a solution for mitigation the problem in 24 Parganas and other areas where arsenic contamination exists. This approach was undertaken after a systematic survey of the literature showed a stark demarcation between the tools and methods of physical and social geography in characterizing arsenic contamination in the districts of 24 Parganas.

Contents

1. Introduction. 2. Arsenic distribution, contamination and health risks. 3. Research desearch design and methodology. 4. Physical and anthropological determinations of arsenic-risk zones: block-level analysis. 5. Prevalence of arsenic diseases: village-level analysis. 6. Evaluation of arsenic mitigation strategies. 7. Conclusions. References

M.Phil Dissertations

152. DAS (Ujjaini)

Shrinkage of East Kolkata Wet Lands and Sustainability of the City.

Supervisor: Prof. S. K. Aggarwal

153. GOEL (Abhineety)

Human Impact and Indigenous Knowledge on Bioaiver City in Raja Ji National Park.

Supervisor: Dr. R. B. Singh

154. GOSWAMI (Rimi)

Voinerability to Blood Nazardin Majuli, Assam.

Supervisor: Dr. Anu Kapoor

155. MISHRA (Sangeeta)

Spatial Analysis of Gendered Crime: In Delhi

Supervisor: Dr. Anindita Datta

156. NANDA (Tina)

Urban Sprawl and Occupational Change in Raipur City (1971-2001)

Supervisor: Prof. Noor Mohammad

157. SHAHI (Basanti)

Ecotovrism in Pokhara Valley.

Supervisor: Dr. R. B. Singh

158. SHARMA (Sheetal)

Women's Education and Social Change: A Case Study of Two Village Communities.

Supervisor : Dr. Anindita Datta

159. SINHA (Rajeev Ranjan Kumar)

Spatio-temporal Study of and Cast Relations in There Ecological Region of Bihar.

Supervisor: Dr. B. Thakur

160. SURAJ MAL

Land Use/Cover Change, Land Slides and their Influence on Biodivertiy in Nannda Devi Biosphere Resource.

Supervisor: Dr. R. B. Singh